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by

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Abbreviations and Conventions

The following abbreviations are used in interlinear glosses:

ADVZ	adverbializer
ANT	anterior
ASSOC.PL	associative plural
bec.	become (inchoative)
BEN	benefactive
CL	classifier
COMIT	comitative
COND	conditional
CONJ	conjunction
CONS	consequence clause
DEF	definite
DEM.DIST	demonstrative (distal)
DEM.PROX	demonstrative (proximal)
DIM	diminutive
DIR	direction / vicinity of
DUR	durative
EMPH	emphasis
F	feminine
FOC	focus
FOC.IRR	irrealis (focused)
FUT.CL	close future
FUT.DEF	definite future
FUT.IMM	immediate future
GEN	genitive
HAB	habitual
I	independent pronoun
IDEOPH	ideophone
INTERJ	interjection
INTERR	interrogative
IRR	irrealis
LOC	locative
LOC.ANAPH	locative anaphor
LOG.AD	logophoric (addressee)
LOG.SP	logophoric (speaker)
M	masculine

NEG	negation
NOMZ	nominalizer
O	object pronoun
OBLIG	obligative
ORD	ordinal number
PAST.CL	close past
PAST.REM	remote past
PAST.YEST	yesterday past
PERM	permissive
PL	plural
POSS	possessive
PRES	presentative
PROGR	progressive
PROH	prohibitive
PUR	purpose
REDUP	reduplication
RESULT	resultative
S	subject (intransitive and transitive) pronoun
SEQ	sequential
SG	singular
SPEC	specific-indefinite article

In addition to the abbreviations listed above, spatial nominals (e.g., *sék* ‘BODY’ (= location at the ‘body’ of an entity)) as well as clausal particles and conjunctions (e.g., *yìn* ‘SAY’ (= reported speech)) are glossed in small caps to remind the reader of their grammatical functions. Proper names are put in angular brackets and glossed in small caps, too (e.g., *Gòelóng* ‘<NAME>’).

Occasionally, constituents are overtly marked in example sentences. In such cases, the following abbreviations are used:

[...] _A	transitive subject
[...] _{ADV}	adverbial phrase
[...] _{COMP}	complement clause
[...] _{COND}	conditional clause
[...] _N	noun
[...] _{NOMZ}	nominalized clause
[...] _{NP}	noun phrase
[...] _O	direct object
[...] _S	intransitive subject
[...] _{SVC}	serial verb construction
[...] _V	verb

[...]VCC	verbless clause complement
[...]VCS	verbless clause subject
[...]VP	verb phrase

The following notation and transcription conventions are used in example sentences:

intonation break	/
omission of material (in middle or at end)	(...)
omission of material (at beginning)	example starts with small letter
capitalization and punctuation	only in natural and stimuli examples, not in elicited examples

The example source is added in brackets after the free translation. The following conventions apply:

Type	Conventions	Example
elicited examples	{speaker.code}-{recording.date}	A-17/02/00
natural and stimuli examples	{genre} b = video/photo elicitation c = conversation d = descriptive text f = folktale h = historical narrative m = matching game o = other (song, speech routine) p = procedural text q = questionnaire r = story retelling s = speech {year.of.recording} {speaker.code} {mnemonic}	D00JANIMAL9
example from literature	{citation}	TIEMSAN 1999: IV

Chapter 1

Introduction

This chapter introduces both the Goemai language and this grammar: it presents the language and its speakers (section 1), describes the fieldwork setting (section 2), outlines the main typological characteristics of the language (section 3), and summarizes the structure of the book (section 4).

1. The Goemai language and its speakers

Goemai is an Afroasiatic (Chadic, West Chadic A, Angas-Goemai group) language that is spoken in Central Nigeria by around 200,000 speakers. The name ‘Goemai’ [gə̀mâi] is used by the speakers themselves to refer to both their language and their ethnic group. To outsiders, they are better known under the name ‘Ankwe’ – a name that is also commonly found in the older linguistic, anthropological and historical literature.¹

This section summarizes information on the language (section 1.1) and its speakers (section 1.2).

1.1. Linguistic classification and history of documentation

Figure (1) illustrates the classification of Goemai, depicting its position relative to its closest relatives of the Southern and Northern branches of the Angas-Goemai group of West Chadic A.

Today, the Angas-Goemai group is firmly established as a subgroup of Chadic on the basis of regular sound correspondences and pronominal forms

-
1. The origins of the names *Goemai* and *Ankwe* are unknown. *Goemai* probably derives from the singular nominalizer *gòe-* (see chapter 3, section 4.2) and an unknown root *mái*. This root is otherwise only attested in the word *mòemâi* ‘people, strangers’ (containing the plural nominalizer *mòe-*). It is likely that these two words are diachronically related. Synchronically, however, they differ semantically, and the use of *Gòemâi* is no longer restricted to singular reference. The name *Ankwe* bears no similarity to any other Goemai word. Folk etymology attributes its origin to the Hausa word *àkwái* ‘there is, exists’. It is said that the land was so fertile that the Goemai answered *àkwái* ‘(yes), it exists’ whenever the early Europeans inquired whether a particular crop was farmed there.

(see Greenberg 1966; Hoffmann 1975; Jungraithmayr and Ibrizimow 1994; Jungraithmayr and Shimizu 1981; P Newman and Ma Newman 1966; P. Newman 1977a; Takács 2004). Initially, however, languages of this group proved difficult to classify: Westermann and Bryan (1952) left them unclassified (and included Fyam, a non-related Benue-Congo language, as part of this group); Greenberg (1955) subsumed Tarok (Benue-Congo) under Angas-Goemai; and other researchers explicitly commented on lexical and grammatical similarities to surrounding Benue-Congo languages (Hoffmann 1970; Jungraithmayr 1963b). Such difficulties in classification are not surprising given that these languages are spoken in a region that constitutes a linguistic area or *sprachbund* (see section 1.2).

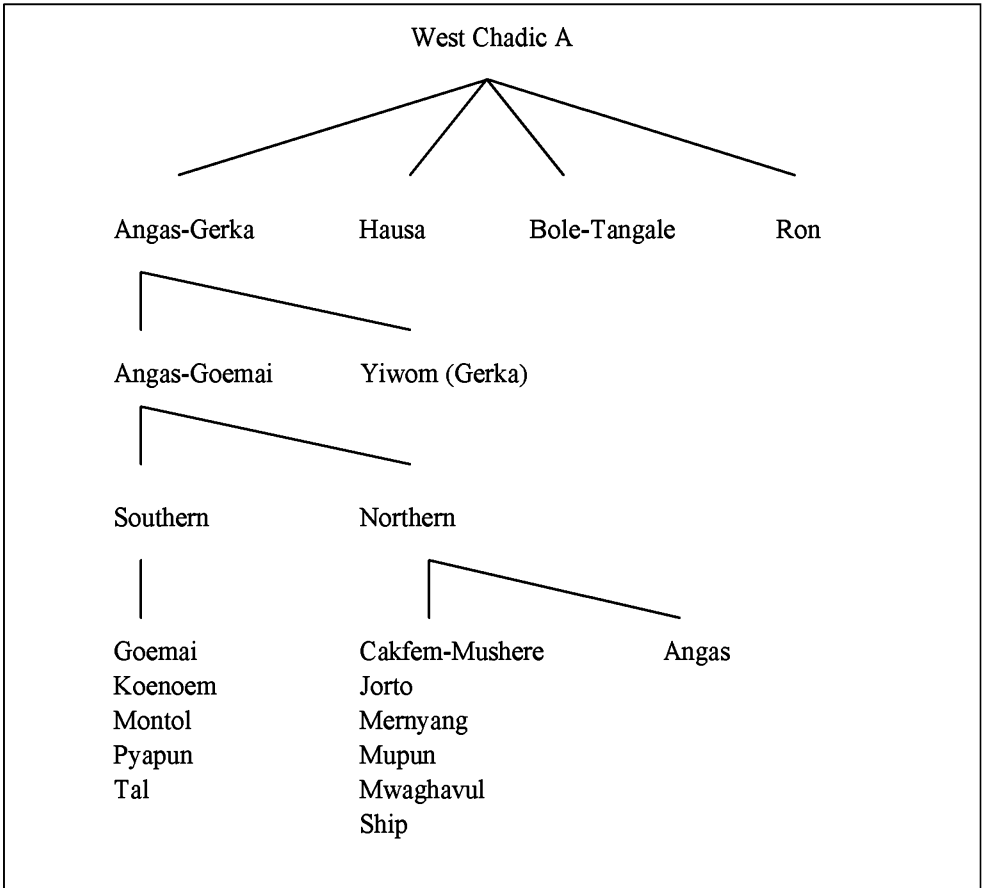


Figure 1. The linguistic classification of Goemai

The Angas-Goemai group is divided into a Northern and a Southern branch. Most of our knowledge is restricted to the Northern branch: there are extensive grammars and dictionaries of Angas (Burquest 1973; Foulkes 1915; Gochal 1994; Jungrathmayr 1964b; Ormsby 1912, 1913), Mupun (Frajzyngier 1991a, 1993) and Mwaghavul (Jungrathmayr 1963a); and some additional information is available on Ship (Hoffmann 1975; Jungrathmayr 1964a; Kraft 1981) and Mernyang (Hoffmann 1975; Netting 1967, 1977). All Northern languages are closely related, sharing many grammatical and lexical characteristics.

Our knowledge of the Southern branch, by contrast, is limited. With the exception of a short grammatical sketch of Montol (Jungrathmayr 1964a), only Goemai has received any documentation. Goemai itself is subdivided into four dialect areas that correspond to political and geographical units: Duut, East Ankwe (or Derteng), Dorok and K'wo (see map 1). These dialects are mutually intelligible, and their differences seem to be restricted to the phonological and lexical level. None of them is standardized at the expense of the others. However, both the Duut and the K'wo dialects have gained some wider currency due to the political supremacy of the town of Shendam (Duut) and the influence of the Goemai catechism (K'wo).

Hoffmann (1975) is a comparative phonological study of the Angas-Goemai group with Goemai (K'wo dialect) as the representative of the Southern branch; Kraft (1981) is a phonological sketch of Goemai that also includes a word list (possibly Dorok dialect); and H. Wolff (1959) is a phonological inventory of Goemai (Duut dialect). Furthermore, the missionary Eugene Sirlinger has compiled four unpublished documents of the language as it was spoken around 1930 (based on the K'wo dialect, but with additional information on other dialects): a catechism (Sirlinger 1931), two dictionaries (Sirlinger 1937, 1946) and a grammar (Sirlinger 1942). All manuscripts contain reliable lexical and grammatical information on an earlier stage of the language, revealing a number of interesting grammatical differences to the present-day language (which will be discussed in the relevant chapters). His catechism has played a major role in promoting literacy in the Goemai language among members of the older generation. In recent years, the Goemai Literacy and Bible Translation Committee, in cooperation with the Nigerian Bible Translation Trust, has started its translation work, has introduced a practical orthography (Ohikere and Tiemsan 1999) and has published a collection of folktales (Ohikere and Tiemsan 1998; Tiemsan 1999).

This grammar is part of a long-term project to describe and document the Goemai language. It focuses on the K'wo dialect, but contains additional information on the Dorok and Duut varieties. So far, it has resulted in a monograph and articles detailing the grammar, semantics and pragmatics of the language's postural-based system of nominal classification (Hellwig 2002, 2003, 2006c, 2007b, 2007c, 2009c), a grammatical sketch focusing on the open word classes

(Hellwig 2004), as well as descriptions of serial verb constructions (Hellwig 2006a, 2006e), pronouns (Hellwig 2008b), complementation (Hellwig 2006b), clause linking (Hellwig 2009a), property-denoting expressions (Hellwig 2007a, 2009d, 2009f), argument structure and lexical aspect (Hellwig 2006e, 2009b, 2009e), and aspects of Goemai syntax (Hellwig 2008a). This grammar represents my current state of knowledge of the Goemai language: new data were taken into account, additional parts of the grammar were investigated, and former analyses and underlying assumptions were extended further, refined and – sometimes – corrected. That is, in cases where a previous analysis differs from the one presented here, the latter should be taken as more accurate. In addition to the published work, there is a corpus of approximately 20 hours of naturally-occurring data as well as data generated with visual stimuli. All data are deposited in two electronic archives: data collected between 1998 and 2003 in the archive of the Max Planck Institute for Psycholinguistics (http://corpus1.mpi.nl/ds/imdi_browser/), and data collected between 2003 and 2005 in the Endangered Languages Archive (<http://www.hrhelp.org/archive/>).

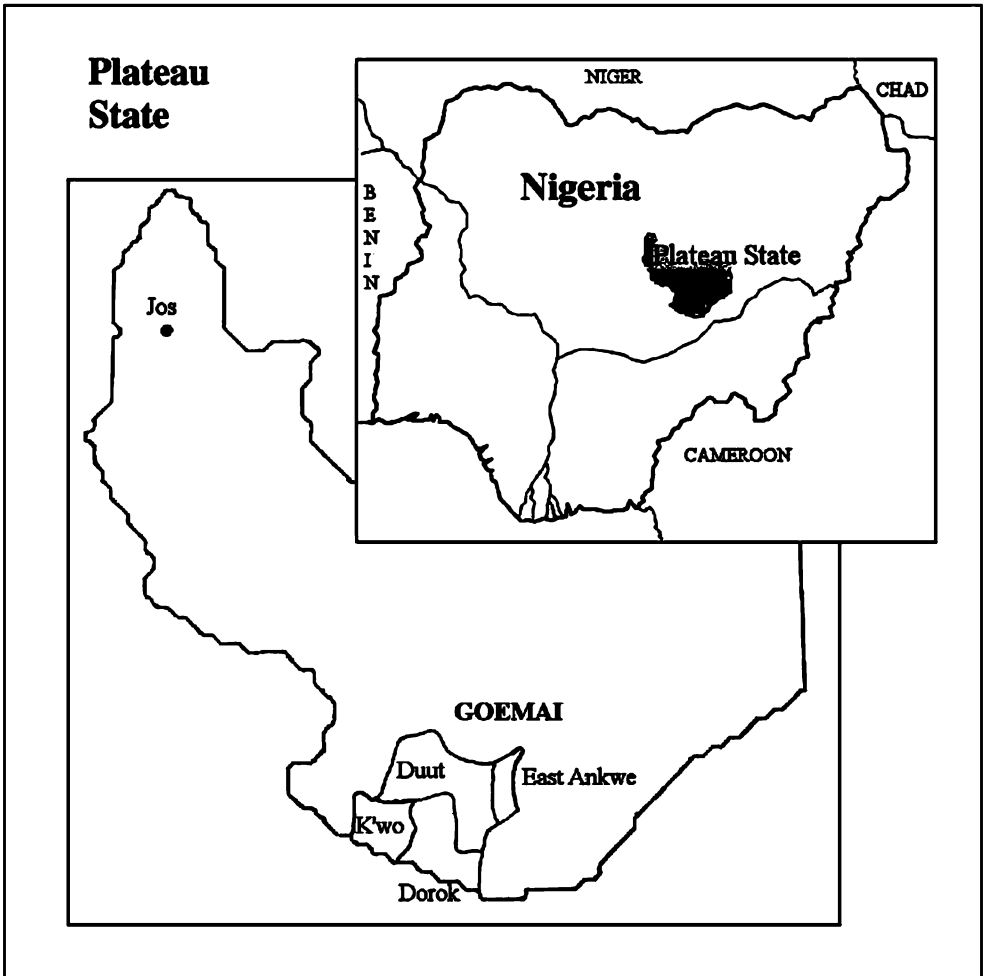
1.2. Historical and sociolinguistic background

The Goemai live as farmers, fishermen and hunters in villages throughout the lowland savannah region south of the Jos Plateau and north of the Benue River, an area that is known geographically as the Great Muri Plains (see map 1). The economy is based on agriculture (yam, millet, guineacorn, groundnut, beniseed) and is supplemented with fishing (in the Dorok area) and hunting (see also Monday 1989). Politically, the area belongs to Plateau State, and more specifically to the Local Government Areas Shendam and Qua'an Pan. Smaller Goemai speaking communities are found in surrounding Local Government Areas as well as in Jos, the capital of Plateau State.

Oral traditions suggest that speakers of Goemai migrated from the Jos Plateau to their present location in relatively recent times (see the contributions in Isichei 1982b; Yearwood 1981). It is generally assumed that the ancestors of the present-day inhabitants of the Jos Plateau did not arrive there before the 17th century. Presumably, the first speakers of Chadic languages arrived at an even later stage. They first settled on the Plateau, and later some of them, including the ancestors of the Goemai, migrated further south into the lowlands.

The history of the whole region is characterized by numerous small-scale migrations that are linked to the formation and expansion of powerful regional states: the Kororofa Empire of the Jukun (14th to 18th century) and several Emirates established in the wake of the Hausa/Fulani *jihad* (19th century) (Isichei 1981, 1982a; Morrison 1982). The lowland societies were incorporated into the newly established states, and the mountainous Plateau became a refuge.

While some refugees were integrated into the indigenous societies, others dispersed the original inhabitants, setting off a chain reaction of further migrations. As a result, new ethnic groups were formed, interethnic marriages took place, and trading networks were established (Agi 1982; Ames 1932; Banfa 1982; Danfulani 1995; Fitzpatrick 1910; Gunn 1953; Isichei 1981, 1982a; Meek 1931; Unomah 1982; Weingarten 1990). This continuous and frequent contact led to the establishment of a language (and culture) area in which unrelated Chadic and Benue-Congo languages share numerous lexical and grammatical features (Ballard 1971; Gerhardt 1983b; E. Wolff and Gerhardt 1977; Hoffmann 1970).



Map 1. Nigeria, Plateau State and the Goemai area (based on Kurungtiem 1991)

Like other groups in this region, the Goemai had (and still have) extensive contacts with speakers of different languages. As a lowland society, they were under the influence of first the Jukun Empire and later the Bauchi Emirate (Agi 1982). In both cases, they were integrated politically, culturally and economically into the regional states. In fact, many present-day Goemai speakers trace their origins back to the Jukun, i.e., to speakers of a Benue-Congo language. Despite this firm integration, they continued to maintain close personal and commercial ties to societies on the Jos Plateau (Unomah 1982).

The regional states disintegrated with the arrival of the British colonial authorities at the beginning of the 20th century (Isichei 1981, 1982a; Kurungtiem 1991; Onotu 1982). In 1901, the British established their headquarters in Shendam and, in 1908, centralized the Goemai chieftaincy under the leadership of the chief of Shendam. Around the same time, missionaries of the Roman Catholic Church arrived, settled in Shendam (in 1907), and later established secondary missionary centers in Demshin (in 1909) and Kwande (in 1931). In 1911, Shendam became headquarters for the Prefecture North-East; and from 1931 onwards, it hosted the Vernacular Training College, which supplied parts of Nigeria with trained teachers. Shendam was thus an early administrative, religious and educational center of Northern Nigeria. For the Goemai, this colonization process resulted in establishing their political and ethnic unity (under the authority of Shendam); and their education within the colonial system allowed many of them to assume leading roles throughout Nigeria.

The population of the present-day Goemai area is heterogeneous. Sizeable immigrant communities in search of fertile farmland have settled in and around all villages, including speakers of both closely-related Chadic and non-related Benue-Congo languages. Goemai is the major indigenous language in this area, but its importance is decreasing rapidly in favor of Hausa. Hausa is the language used in administrative, religious and educational settings as well as in everyday contacts with non-Goemai neighbors. Among the younger generation, Hausa has become the language of everyday communication even in intra-group contexts. And children in all larger settlements grow up with Hausa as their first, and often only, language. To date, there are an estimated 200.000 ethnic Goemai (SIL 2008), but the number of actual speakers is assumed to be less: while members of the older generation are still fluent speakers, the variety spoken by middle-aged speakers already shows considerable influence from Hausa; and those among the younger generation who still speak Goemai resort to extensive code-mixing and code-switching strategies. The growth of a regional lingua franca at the expense of a minority language is a common pattern all over Africa (see, e.g., Bamgbose 2000). The Nigerian national language English, by contrast, has not gained the same distribution as Hausa, although it encroaches on some official domains.

2. The fieldwork setting

The data for this grammar were collected during 14 months of fieldwork (between 1998 and 2005) among the K'wo Goemai in the village of Kwande (in the main Goemai area) and the city of Jos (to the north of this area). This distribution of fieldwork across two settings was partly motivated by choice, and partly by necessity. In the beginning, Kwande was the main fieldsite, as it was possible there to observe people speaking Goemai in their daily interactions. During this time, Jos was retained as a minor fieldsite, because it happened to be the residence of Mr. Louis Longpuan – a very gifted speaker of Goemai, who became more and more of a colleague in the course of the fieldwork. Towards the end, the political situation in the main Goemai area deteriorated, and civil strife made access difficult. Jos and its sizeable Goemai community now became the main host.

Throughout this time, a number of different speakers have contributed linguistic data to the project on a regular basis. Table (1) lists all major contributors, together with their (approximate) age in the year 2000, sex and dialect.

Table 1. Major contributors to this grammar

Code	Name	(Approximate) age in 2000	Sex	Dialect
A	Louis Longpuan	65	male	K'wo
B	Yusufu Sule	65	male	K'wo
C	Maria Miaphen	60	female	K'wo
D	Thomas Longpuan	52	male	K'wo
E	Philomena Njin Abau	32	female	K'wo
F	Moegaji	25	male	K'wo
G	Mesenji	25	male	K'wo
H	Tsoho	24	male	K'wo
I	Victor Longpuan	24	male	K'wo
J	Shalyen Mbai Nwang	23	male	K'wo
K	Naanshep Longpuan	18	male	K'wo
L	Immanuel Mbai Nwang	17	male	K'wo
M	Naantwaam Kwande	17	male	K'wo
N	Andreas Shakum	60	male	Dorok
O	Augustine Shakum	60	female	Dorok
P	Bibiana Loekur	60	female	Dorok
Q	Eugene Maigari Longnaan	24	male	K'wo

Each consultant is assigned a code letter, which appears as part of the identifier of example sentences, i.e., all examples in this grammar can be traced back to their speaker (see *Abbreviations and Conventions* for details). Most consultants are men, either in the age range between 15 and 30, or above 50 years; unfortunately, it proved difficult for many female and middle-aged speakers to find the necessary time. All speak Goemai as their first language – most speak the K'wo dialect, and some speak the Dorok dialect; data on the other dialects was obtained through consulting with the late Pastor Jimoh Ohikere who worked with the Goemai Literacy and Bible Translation Committee in Ajikamai and Shendam. All consulted speakers are bilingual in Hausa; most also speak other local languages and some also English.

The corpus collected with the help of these speakers contains about 20 hours of recorded texts (approximately 250.000 words), covering a variety of genres (including conversations, different types of narratives, descriptive texts, procedural texts, speeches, riddles, proverbs and songs). All recordings are computerized, transcribed, linked to the time axis, glossed and translated. Parts of these data were volunteered by the speakers, while other parts were prompted, i.e., speakers were asked to talk about specific topics (so-called “staged communicative events” in the terminology of Himmelmann 1998). These data were then supplemented with data from focused elicitation: to minimize the risk of misunderstanding that inevitably occurs when relying on translation equivalents, elicitation was based, whenever possible, on natural text examples and visual stimuli (see, e.g., the discussions in J. Lyons 1977; Samarin 1967: 205–217; Vaux and Cooper 1999: 37–43). In addition, responses to non-verbal stimuli and questionnaires were collected. All three types of data – natural, elicited and stimuli-based – were taken into account for the grammatical analysis presented in this book (see Hellwig 2006c, 2006d, 2007a, 2009c, 2009f for further discussions of Goemai fieldwork), and the identifier of each example sentence contains information about the type of data (see *Abbreviations and Conventions*).

3. Language profile

This section introduces the salient characteristics of the Goemai grammar (section 3.1), and highlights possible diachronic origins (section 3.2).

3.1. Typological sketch

Goemai is a tonal language with two level tones (high, low), two contour tones (falling, rising) plus a predictable downstep. The functional load of tone is restricted: most minimal pairs belong to different parts of speech, grammatical

tone often neutralizes lexical tone, and grammatical constructions are primarily marked by segmental morphemes rather than tone. Nevertheless, tone plays an important role in that many constructions also exhibit a distinctive tonal pattern. The segmental phonology is characterized by a complex consonant inventory that includes a three-way distinction in all obstruents (voiceless aspirated, voiceless non-aspirated and voiced), as well as implosives. The vowel system has undergone some recent changes, presumably triggered by the reanalysis or loss of consonants. In present-day Goemai, seven vowel phonemes are recognized, and there is evidence for vowel length being contrastive. The syllable structure is CV(V)(C), whereby the first consonant can be modified by the secondary features of labialization, palatalization or prenasalization. Morphemes tend to be monosyllabic, and words tend to be monomorphemic.

Goemai can thus be characterized as a predominantly isolating language. As such, it has retained only few remnants of the inherited Chadic verbal morphology (largely restricted to number marking on verbs). But notice that it is currently developing some nominal morphology (connected to marking the modifying function and number), and it makes use of cliticization (mostly of nominal modifiers and subject pronouns). Given its largely isolating nature, word classes are identified on the basis of syntactic criteria, i.e., on the basis of distributional and combinatorial possibilities. Their identification is aided by a certain syntactic rigidity: Goemai has fixed word and constituent order, its lexical expressions are usually not indeterminate as to their word class, and the syntactic functions of different classes usually do not overlap. As such, it is possible to identify word classes, and give evidence for the existence of phrasal units.

The open word classes are nouns, verbs and adverbs. Goemai does not have a word class of underived adjectives.

Nouns usually have concrete reference, and there is a scarcity of underived nouns that denote activity and abstract concepts. Overall, the nominal lexicon is characterized by a high degree of semantic generality: most nouns are compatible with singular, plural and collective interpretations, some also with mass interpretations; and many nouns can refer to both an entity and its natural or man-made produce (e.g., a single word is used for clay as well as for the bricks made from that clay, or for a plant, its leaves and its fruits). This type of semantic generality has probably motivated recent developments in the area of nominal morphology. More specifically, Goemai has innovated a system of nominal classification based on canonical postures (coded in deictic classifiers and classificatory verbs) as well as an elaborate system of modification and number marking (which derives number-marked modifiers and headless modifiers from all parts of speech). Both systems serve to restrict the reference of semantically-general nouns. But notice that classification, modification and number are usually expressed in different elements within the noun or verb phrase, while un-

derived nouns tend to be monomorphemic. Goemai has retained only remnants of Chadic number-marking morphology on the noun (in some kinship, bodypart and collective nouns), and it has largely lost the Chadic category of gender (only retained in speech act contexts); there is some evidence for remnants of a Benue-Congo noun class prefix that has entered the language through contact (marking nouns that denote insects, birds and small animals). Nouns are the only words that function underived as heads of noun phrases. They cannot function as modifiers within simple noun phrases, nor can they function as heads of predicates.

Verbs tend to express a change of state, and there are only very few unambiguous activity and stative verbs. This predominant type of lexicalization has probably motivated the innovation of structures to derive activity expressions (i.e., cognate object structures) and stative expressions (i.e., serialized and nominalized structures). In particular, Goemai employs its few stative verbs – the postural-based classificatory verbs – to derive stative expressions. Verbs tend to be morphologically simple: a subset of verbs has retained remnants of Chadic number-marking morphology (indicating participant number in one of their arguments), but there is no evidence for distinguishing verb classes on the basis of segmental or suprasegmental shape; nor has Goemai retained any of the verbal extensions that serve to indicate or change the thematic role or the transitivity of an expression. Instead, the language employs formally unmarked argument structure constructions (one intransitive, three transitive and one ditransitive construction). Many verbs participate underived in more than one of these constructions, and their possibilities are determined by their lexical participant structure and lexical aspect. Goemai has only limited possibilities for detransitivizing expressions, but it freely adds participants in adverbial function or through verb serialization and juxtaposition. Syntactically, verbs can only ever function as heads of verb phrases.

Adverbs express quantification (including numerals), space, time and aspect, and (less commonly) manner and evaluation. They are formally similar to nouns in that they can be modified by some nominal modifiers and conjoined by nominal conjunctions. Despite these similarities, the syntactic functions of nouns and adverbs are clearly distinct and do not overlap. Quantifying adverbs share also similarities with nominal modifiers in that they are not only event-oriented, but also participant-oriented (i.e., they are oriented towards a participant of the event), thus allowing them to semantically modify noun phrases. Syntactically, however, they still function as adverbials, and they need to be formally derived in order to function as nominal modifiers. Most present-day adverbs seem morphologically complex: it is very likely that they were derived from other word classes by means of prefixes and reduplication. But since their sources are no longer attested in present-day Goemai, they have to be analyzed synchronically as non-derived.

In addition to these three open word classes, Goemai has the following parts of speech:

- Pronouns. Their independent form constitutes a subset of nouns, while their dependent form is currently developing into a grammatical system for cross-referencing subject arguments on the verb. The pronouns include two sets of logophoric pronouns that indicate co-reference with the speaker and the addressee respectively. Both sets, as well as 2SG pronouns, distinguish gender – i.e., Goemai maintains remnants of the Chadic gender distinction in speech act contexts.
- Modifiers. These occur within noun and adverbial phrases, where they code the referential status of their head, qualify the head or (less commonly) quantify it.
- Ideophones. They are analyzed as a subset of adverbials. Interestingly, they do not only serve an expressive function, but also – or even predominantly – a lexical aspect function, in that their presence conveys an accomplished state-change. As such, they are largely restricted to co-occurrence with inchoative state-change verbs.
- (Spatial) prepositions, prefixes and nominals. All three parts of speech function as heads of prepositional phrases, marking spatio-temporal relations as well as peripheral arguments. Goemai has only one preposition and one prefix, but employs a large number of spatial nominals (which usually derive from bodypart nouns).
- Particles and coordinators (marking tense / aspect / mood, focus and emphasis, topic, question, negation and different clause types), interjections, and interrogatives.
- Some recently-developed proclitics, enclitics and prefixes.

Most lexical expressions belong to one word class only – only inherently locational nouns and spatial nominals can participate in more than one class (i.e., they function underived as nouns and adverbs, and are hence analyzed as ambiguous). Derivational mechanisms exist, but their possibilities are limited: the adverbialization of verbs derives adverbs that occur in some restricted environments; verbs cannot be derived from any other word class; and although nominalization is widespread, the resulting expressions often do not have the same syntactic possibilities as non-derived nouns. Goemai nominalizes verbs to create abstract nouns and activity nouns, and it nominalizes members of all word classes to create modifiers and headless modifiers. In both cases, the nominalization serves to close a gap in the lexicon: there are only few underived abstract and activity nouns; and there is no class of adjectives. Goemai further nominalizes verb phrases (to function as participles and as complements of auxiliary verbs) and clauses (to function as modifiers and adverbials).

Goemai clauses have strict AVO / SV constituent order, and grammatical relations are conveyed through this constituent order alone. But notice that there is an incipient system of cross-referencing A/S arguments on the verb. There is no case marking on nouns; and peripheral arguments are marked through prepositions and prefixes. Some core arguments (3SG A/S and inanimate O) are omitted if they are recoverable from the linguistic context. TAM categories are expressed by means of free particles and discontinuous constructions whose diachronic origins are often still transparent. The most common form is the verb unmarked for TAM, but the language allows for the grammaticalized expression of absolute tenses, different aspectual categories (progressive, habitual, durative, anterior, resultative) as well as different types of irrealis modalities. Some of these TAM categories can be expressed in both verbal and non-verbal clauses.

Verbal clauses are used for a great variety of states-of-affairs, including those that commonly receive non-verbal expressions in other Chadic languages: locative, existential and presentative concepts. And although there are non-verbal strategies for expressing equative, ascriptive and possessive concepts, these domains are gradually being taken over by verbal strategies as well. Again, it is the set of postural-based classificatory verbs that is used in all these domains.

Goemai has a variety of multiverb constructions that impose different types of restrictions on the expression of TAM, person and polarity. In particular, it makes extensive use of different types of serial verb constructions to express temporal relationships, lexical aspect and deictic concepts; and of juxtaposition to express logical relationships. In addition, there are overtly marked complex clauses: adverbial clauses that serve to indicate temporal relationships; two complement clauses that occur with verbs of attention and thinking, and verbs of starting and stopping respectively; one consequence clause; different types of purpose and sequential structures; a reason clause; reported speech structures; and a conditional clause. There are indications that many of these more specific clause types constitute recent innovations, and it is likely that Goemai originally made more extensive use of the formally unmarked strategies of verb serialization and juxtaposition. Furthermore, Goemai has borrowed many conjunctions from Hausa.

The paragraphs above have outlined some salient typological characteristics of Goemai. In particular, two predominant lexicalization patterns deserve to be highlighted. First, the verbal lexicon is characterized by a large number of state-change verbs, with only few activity and stative verbs. This includes the predominant lexicalization of property (or adjectival) concepts as state-change verbs. Second, both the verbal lexicon and the nominal lexicon are characterized by semantic generality: many nouns have neutralized number distinctions

and do not distinguish between entities and their produce; and many verbs allow for the expression of different thematic roles, transitivity values and lexical aspect categories. As a result, a large part of Goemai grammar consists of strategies that fill gaps in these lexicalization patterns (i.e., that create stative and activity expressions, or that derive abstract nouns) and that restrict the meaning potential of expressions (i.e., that allow for the categorization and classification of verbs and nouns). Given the typological profile of Goemai, these strategies are usually not expressed morphologically. Goemai is a predominantly isolating language that prefers to make use of syntactic strategies. In particular, it has developed a number of morphologically-unmarked constructions that allow for the co-occurrence of lexical items and that convey specific grammatical meanings. In all cases, there is evidence that these meanings do not derive directly from the individual meanings of the co-occurring items, but rather from the construction as a whole.² These very general semantic and formal characteristics underlie the following pervasive patterns:

- A large part of Goemai grammar obligatorily makes use of a contrastive set of five postural-based elements: locative, presentative, serial verb, progressive, ascriptive and demonstrative constructions. In all contexts, Goemai speakers are required to choose one of the five elements, and to thereby pay constant attention to the position of referents in space. The spread of these expressions throughout Goemai grammar is motivated by their lexical properties. They are among the very few stative verbs of the language, and Goemai employs them to create stative expressions. And they classify nominal concepts – i.e., they serve to pick out referents from among the many possible referents of a semantically-general noun.
- The modifying construction is another construction that has spread throughout Goemai grammar. This construction originally served to create stative predicates, in particular, to create stative property (or adjectival) expressions. In later developments, these stative expressions were first integrated as nominal modifiers into the noun phrase, and then the construction was extended to derive modifiers from all kinds of other expressions. As modifiers, they serve to restrict the reference of semantically-general nouns. Furthermore, the construction also distinguishes

2. Given this characterization, constructional approaches are considered most promising in analyzing Goemai grammar (e.g., Goldberg 1995). And although this grammar is not explicitly written within the framework of constructional grammar, it nevertheless subscribes to the view that constructions can be defined in terms of their form and their meaning; and it attempts to describe both the constructions and the integration of lexical items into constructions.

number and thus further restricts the reference. In fact, the modifying construction is currently being extended to mark nouns, i.e., to overtly mark number on nouns. Notice that this construction is one of the very few constructions that receives a morphological – and not a syntactic – expression.

- Verbal clauses instantiate one of five argument structure constructions that differ in their lexical aspect and in the linking of thematic roles to argument slots. Verbs usually have the potential to participate in several of these constructions (i.e., they are compatible with a number of different thematic roles and lexical aspect interpretations). The constructions serve to highlight specific thematic roles and aspectual properties (and downplay others), thus restricting the meaning potential of verbs.

Edward Sapir (1921) speaks about the “genius” of a language, i.e., the logic that underlies it, that makes it unique and that motivates its grammatical structures. For Goemai, it can be argued that its grammar is driven by the above verbal and nominal lexicalization patterns, combined with a scarcity of overt morphology.

3.2. Diachronic origins

The diachronic origins of present-day Goemai grammar can be traced to different sources. There is linguistic evidence for two types of language contact: an ancient contact with languages of the Jos Plateau area (including both closely-related Chadic and non-related Benue-Congo languages), and a more recent contact with the regional lingua franca Hausa.³ More specifically, Goemai shares many features that characterize the Jos Plateau *sprachbund* as a whole, including similarities in lexicon and non-productive morphology (e.g., formatives expressing verbal number and noun class), phonotactics (e.g., syllable types and the distribution of consonants within syllables), lexicalization patterns (e.g., a predominant lexicalization of property or adjectival concepts as state-change verbs) and syntax (e.g., verb serialization). Goemai – like many other Jos Plateau languages (including both Chadic and Benue-Congo languages) – has also lost most of its inherited morphology, and has developed isolating structures instead. The more recent contact with Hausa has led to extensive lexical borrowings and to the introduction of new categories (e.g., the categories of auxiliary verbs and of sentential and phrasal conjunctions). Currently, younger speakers are in the process of shifting towards Hausa. In the

3. In the first case, it is often not possible to trace the origins of a specific feature. In the second case, the direction of borrowing is clearly from Hausa to Goemai.

absence of detailed sociolinguistic studies, it is thus not always transparent whether a specific Hausa form or pattern has been integrated into the Goemai language, or whether it results from code-switching.

This widespread contact has shaped Goemai grammar to the extent that it has to be considered a fairly untypical Chadic language. Its initial classification was based largely on common lexical and pronominal forms, on regular sound correspondences and on the presence of implosive sounds (see section 1.1). Based on the discussions in this grammar, it is now also possible to add the following features to the list of Chadic retentions:

- remnants of a distinction in vowel length;
- presence of the widespread Afroasiatic prefix **ma-*: (i) some remnants in nouns of location, (ii) productive use in deriving (plural) nouns of agent, and (iii) further spread to mark the modifying function;
- unproductive remnants of Chadic number-marking morphology on verbs and a few nouns;
- remnants of verbal suffixes that occur as unanalyzable parts of a handful of present-day verbs;
- possible reflex of a sequential morpheme **k-*.

All of the above features can be traced to the phonology and morphology of a proto-language (Afroasiatic, Chadic or West Chadic), and thus constitute further evidence for classifying Goemai as Chadic. At the same time, this list also indicates that the loss of Chadic morphology has been considerable: morphologically, present-day Goemai looks very different from many other Chadic languages. With the loss of morphology, Goemai has also experienced a complete or partial loss of typical Chadic categories such as grammatical gender (retained in speech act contexts only), nominal number (retained in unproductive morphology; but being currently re-invented), or a perfective / imperfective dichotomy marked on the verb stem.

On the one hand, these differences are undeniable, and they are described in more detail throughout this grammar. On the other hand, however, Goemai shares considerable similarities with other Chadic languages – not in the area of morphology, but in the area of semantics. Possible similarities are pointed out in the relevant chapters, but given that our morphological knowledge is more advanced than our semantic knowledge, more research is needed to ascertain the extent and nature of such putative semantic similarities, and to distinguish reliably between inherited and contact-induced similarities. Two important candidates for inherited semantic patterns are (i) a sensitivity towards the lexical aspect and thematic roles of verbs (resulting in strategies that affect the semantics and syntax of verbs); and (ii) the predominant lexicalization of verbs as state-change verbs (resulting in strategies that derive activity and stative

expressions). That is, Goemai and other Chadic languages very likely share semantic patterns that motivate the existence of some grammatical strategies. But due to the typological characteristics of the languages involved, these strategies differ formally: Goemai, which is predominantly isolating, tends to have syntactic strategies, while other Chadic languages tend to have morphological strategies. The first semantic pattern seems to be restricted to Chadic languages, while the second pattern is probably attested in Benue-Congo languages, too. In-depth semantic studies of both Chadic and Benue-Congo languages are likely to reveal more such similarities as well as differences, thereby making an important contribution to comparative Chadic linguistics, as well as to the study of language contact on the Jos Plateau.

While many grammatical structures can be traced to either language contact or inheritance, there are other structures that seem to result from independent developments. Most importantly, Goemai has innovated a system of nominal classification based on postural information. And although the motivation for this system – the lack of underived stative expressions and the semantic generality of nouns – is probably shared with other Jos Plateau and/or Chadic languages, only Goemai is known to have developed such a system.

4. Structure of the grammar

This grammar is structured as follows: chapter 2 discusses the phonology and tonology; chapters 3 to 5 focus on the open word classes and their phrasal structure (nouns, verbs and adverbials); chapter 6 outlines the closed word classes and remaining parts of speech; chapter 7 summarizes the system of tense, aspect and modality; and chapter 8 describes the structure of simple and complex clauses.

Chapter 2

Phonology and tonology

This chapter describes the phonology and tonology of Goemai: section 1 discusses the inventory of phonemes and tonemes, and presents the practical orthography; sections 2 and 3 outline segmental and suprasegmental processes observed on the word and clause levels respectively; and section 4 summarizes the chapter.

1. Phonemes, tonemes and orthography

Table (2) summarizes the Goemai phonemes and tonemes (written between slashes //), non-phonemic sounds (written between square brackets []), and their orthographic representation (written without bracketing).

Table 2. Phonemes, tonemes and their orthographic representation

(1) Consonants

	Labial	Alveolar	Palatal	Velar	Glottal
Stops					
voiceless aspirated	/p ^h / p	/t ^h / t		/k ^h / k	[ʔ]
voiceless non-aspirated	/p/ p'	/t/ t'		/k/ k'	
voiced	/b/ b	/d/ d		/g/ g	
implosive	/ɓ/ b'	/ɗ/ d'			
Fricatives					
voiceless aspirated	/f ^h / f	/s ^h / s	/ʃ ^h / sh		/h/ h
voiceless non-aspirated	/f/ f'	/s/ s'	/ʃ/ sh'		
voiced	/v/ v	/z/ z	/ʒ/ j		
Nasals					
	/m/ m	/n/ n		/ŋ/ ngh ¹ , ng ²	
Liquids					
lateral		/l/ l			
trill		/r/ r			
Glides					
	/w/ w ¹ , u ²		/j/ y ¹ , i ²		

¹syllable-initial / -medial

²syllable-final

(2) Vowels

	Front unrounded		Central		Back rounded	
Short						
close	/i/	i	[ɨ]	<u>ɨ</u>	/u/	u
mid	[e]	e	/ə/	e ¹ , oe ²	[o], [ɔ]	o
open			/a/	a		
Long						
close	/i:/	ii	/ɨɨ/	<u>ɨɨ</u>	/uu/	uu
close-mid	/e:/	ee			/oo/	oo
open-mid					/ɔɔ/	<u>ɔɔ</u>
open			/a:/	aa		
¹ syllable-initial / -medial			² syllable-final			

(3) Tones

Level		Contour	
high	é	falling	ê
mid	ē	rising	ě
low	è		

Some phonemes are represented by more than one orthographic symbol: these mismatches reflect positional alternations, and result from an attempt to integrate speakers' wishes, dialectal variation and existing orthographies (Ohikere and Tiemsan 1999; Sirlinger 1937, 1942; 1946; Tiemsan 1999) (see sections 1.1 and 1.3). The table also contains additional non-phonemic sounds: a glottal stop and some short vowels. The glottal stop occurs in predictable environments (before vowel-initial morphemes), and is written in word-medial position only (see section 1.1). The distinction between short and long vowels is not always phonemic, but length is nevertheless represented in the orthography (see sections 1.2 and 1.3).

This section discusses in more detail the phonemes and tonemes, their distribution and their realization. Whenever possible, comparative Chadic data is taken into account. Section 1.1 focuses on consonants, section 1.2 on secondary articulation, section 1.3 on vowels, and section 1.4 on tones. Section 1.5 then summarizes the orthographic conventions adopted.

1.1. Consonants

The full consonant inventory, as depicted in table (2) above, is only attested in morpheme-initial position, and the discussions and illustrations in this section reflect this distribution (see section 2.1 for other positions).

The most striking and typologically unusual aspect of the Goemai consonant system is its contrast among the obstruents: between voiceless aspirated, voiceless non-aspirated, voiced and, in some places, implosive. Cross-linguistically, a contrast between aspirated and non-aspirated consonants is well-attested in stops, but rare in fricatives (Ladefoged and Maddieson 1996: 66–70, 176–179). In previous work on Goemai, this contrast was sometimes noted, but analyzed differently.⁴ H. Wolff (1959), for example, labels it as an opposition between fortis and lenis stops, but does not discuss its phonetic correlates further. Since these two labels are often used to subsume quite different features (see Ladefoged and Maddieson 1996: 95–99) and thus not very informative, they will not be used in this book.⁵ Hoffmann (1975), and possibly Sirlinger (1937, 1942, 1946) analyze the same contrast as an opposition between glottalized and non-glottalized obstruents. In my data, glottalization does play a role in the realization of the velar non-aspirated stop /k/, which is alternatively realized as non-aspirated [k] or as glottalized [k'] (see the discussion below). In all other cases, however, waveforms and spectrograms indicate a contrast in aspiration rather than glottalization (as illustrated in figure 2 below). For these reasons, I use the label 'aspiration' in the description of Goemai, not 'fortis / lenis' or 'glottalization'⁶

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4. Horvel (1985), Kraft (1981), Ohikere and Tiemsan (1998, 1999), and Tiemsan (1999) only note a contrast between plain /k/ and /s/, on the one hand, and glottalized /k'/ and /s'/, on the other. Their analyses are possibly influenced by comparing Goemai to Hausa, which has only /k'/ and /s'/ as glottalized consonants.
 5. Some Benue-Congo languages spoken on the Jos Plateau are said to have a fortis / lenis contrast among word-initial obstruents (in particular the languages of the Plateau-2 subgroup, including Kaje, Kagoro, Katab and Atakar, but excluding Zarek). These languages mark fortis consonants through lengthening and affrication. Gerhardt (1980) convincingly analyzes this opposition as a language-internal development, resulting from the loss of palatal noun class prefixes and verbal extensions. It is unlikely that this fortis / lenis contrast is related in any way to the aspirated / non-aspirated contrast in Goemai.
 6. Pawlak (2002: 56) notes that the variety of Hausa spoken on and around the Jos Plateau tends to replace the glottalized consonants with non-glottalized consonants. She suggests that this loss of glottalization may result from the lack of such consonants in the indigenous languages. Sirlinger (1937, 1942, 1946) possibly noticed the important role of aspiration (rather than glottalization) in Goemai: in his

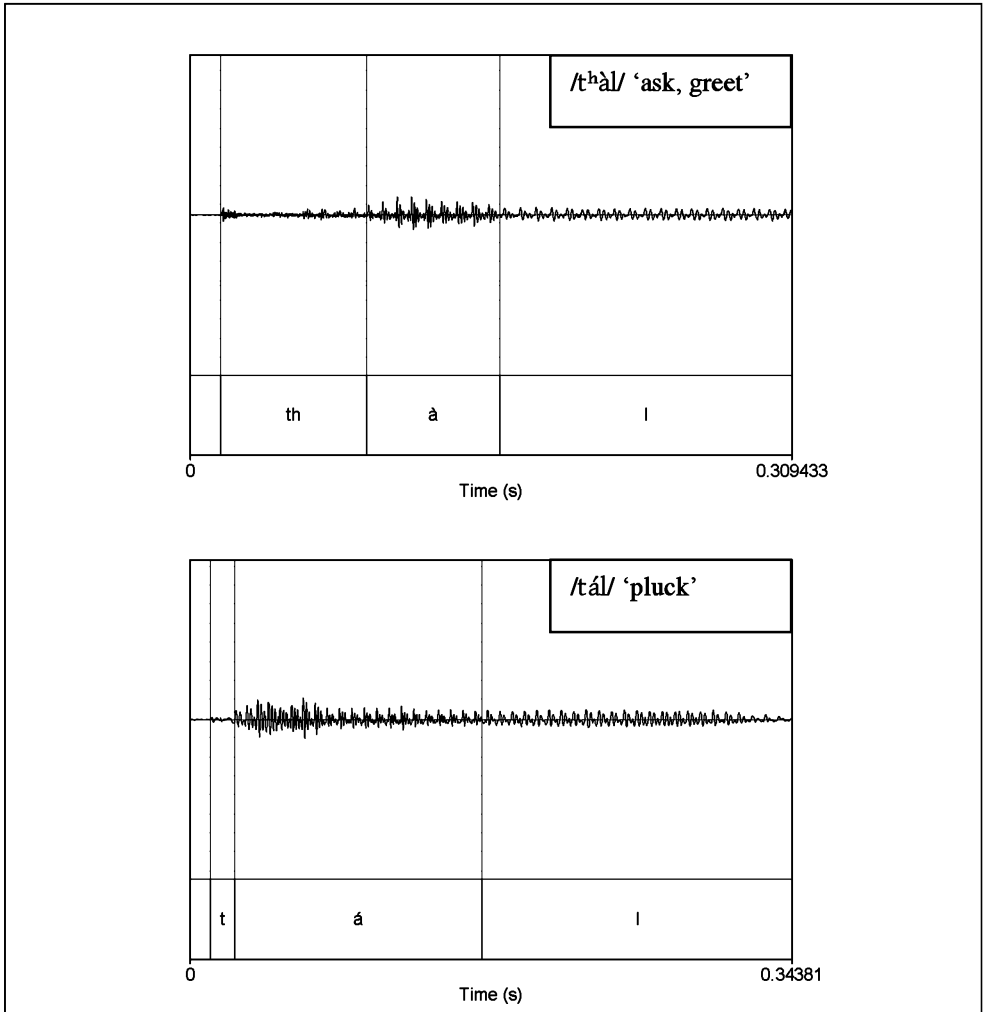


Figure 2a. Voiceless obstruents: Stops

orthography, he represents one of the fricatives as *sʰ* (corresponding to */sʰ/*); and he occasionally (but not systematically) represents stops as *ph* and *th* (corresponding to */pʰ/* and */tʰ/* respectively).

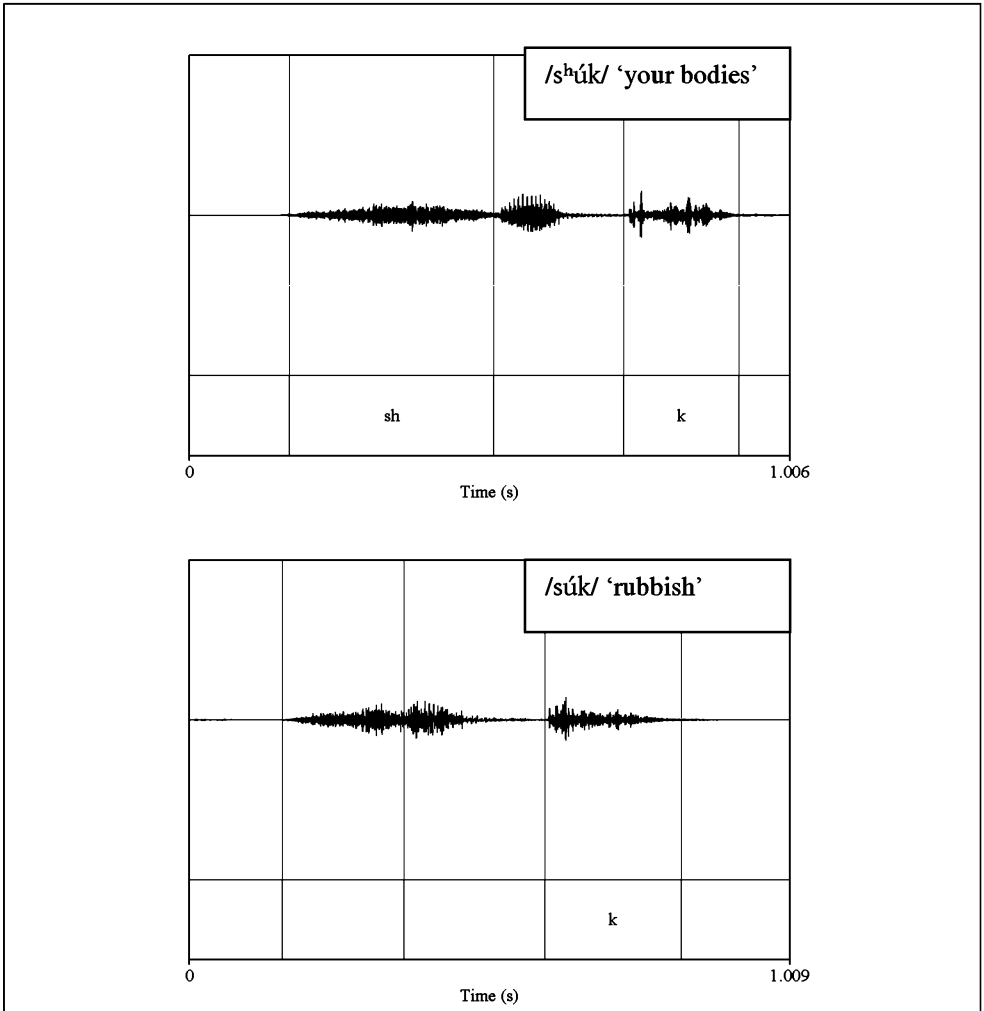


Figure 2b. Voiceless obstruents: Fricatives

In the case of aspirated stops (figure 2a), the release of the oral closure is followed by a period of aspiration (between 50 and 90 milliseconds in duration) before the onset of the voicing period of the following vowel. This period is absent with the non-aspirated stops: a weak release burst is followed immediately by the voicing period of the vowel, whose formants have not yet reached their target value. In the case of aspirated fricatives (figure 2b), the period of aspiration tends to be longer than that of their non-aspirated counterparts. During this period, formant transitions are often visible, and the formants are close to target-like value once the voicing period of the vowel starts. Non-aspirated

fricatives, by contrast, are shorter and are followed immediately by the voicing period of the vowel. Notice that the velar non-aspirated stop /k/ can be realized either as non-aspirated or as glottalized, occurring in free variation. Its glottalized realization could be the result of either of two factors: it could be a contact influence from Hausa (which has a velar ejective); or it could reflect the cross-linguistic tendency of glottalized consonants developing in the velar series before developing elsewhere (Ladefoged and Maddieson 1996: 78).

In addition to voiceless aspirated and non-aspirated obstruents, Goemai has voiced obstruents and implosives. The implosives are similar to the creaky voiced implosives of Hausa and other Chadic languages, i.e., they are characterized by a few irregular periods of voicing during the closure and an irregularity in the first few voicing periods at the onset of the vowel (as described in Ladefoged and Maddieson 1996: 85–86).

Table (3) illustrates these contrasts among obstruents with the help of some (near) minimal pairs.

Table 3. (Near) minimal pairs: Obstruents

/p ^h /		/p/		/b/		/β/	
p ^h ít	red monkey	pít	net	dí.bít	all	βít	day
p ^h úk	tree type	púk	calf	búk	return	βú	grass
p ^h èp	master	pét	exit	bá.bép	pigeon	βèp	fish type
p ^h ó:l	hide	pò:t	narrow	bô:i	cowrie	βó:t	tie
p ^h áj	puffadder	páj	stone	báj	calabash	βáj	red
/t ^h /		/t/		/d/		/ɗ/	
t ^h íp	press	tít	sprinkle	díp	all	ɗíp	hair
t ^h ù	kill	tú	bottle	dǔ	PL.LOG.SP	ɗú	smell
t ^h ép	black	tèp	next	dèp	penis	ɗèk	up/down
t ^h ók	practice	tóŋ	sit	dók	past	ɗók	quiet
t ^h áj	search	táj	bat	dáj	tail	ɗáj	lizard
/k ^h /		/k/		/g/			
k ^h ú	coil	kú:r	burn	gǔ	2PL		
k ^h èp	lake	kèp	short	gép	cut		
k ^h óŋ	stream	kóŋ	snake type	góŋ	nose		
k ^h áj	join	káj	guard/wait	gáj	palm		

Table 3 (continued). (Near) minimal pairs: Obstruents

/fʰ/		/f/		/v/	
fʰín	grinding stone	fím	cotton	ví.líŋ	circle
fʰúm	fold	fú	scatter	vú	tuber
fʰè	owner	fàl.fé	viper	vè.lú	grass type
?		fó:t	listen	vò:m	blind
fʰà.làk	liver	fàl.fé	viper	vá.rám	grass type
/sʰ/		/s/		/z/	
sʰúk	body.2PL.POSS	súk	rubbish	bè.zúŋ	chest
sʰóm	body.1PL.POSS	sóm	name	zəm	like
sʰó:l	iron	só:m	horn	zò:m	cold
sʰán	body.1SG.POSS	sán	slip	zàŋ	barren
/ʃʰ/		/ʃ/		/ʒ/	
ʃʰím	skin	ʃím	iguana	ʒim	ferment
ʃʰəl	game	ʃəl	wound	ʒəl	surround
ʃʰó:m	guineafowl	ʃó:l	locust	ʒó:m	chin
ʃʰáŋ	glance	ʃáŋ	hunt	ʒáŋ	careless

The diachronic status of the different types of Goemai obstruents is not quite clear. The existence of labial and alveolar – and possibly velar – implosives is a typical Chadic phenomenon, and can be traced back to Proto-Chadic (Jungraithmayr and Ibrizimow 1994; P Newman 1977a).⁷ Goemai does not have a velar implosive, but it is possible that it has merged with the alveolar implosive. The existence of two sets of voiceless obstruents, by contrast, has not been reconstructed for Proto-Chadic or any proto-language below this level. It has been suggested though that they may reflect an earlier voicing contrast. Greenberg (1958) was the first to argue that the Proto-Chadic contrast between voiced and voiceless bilabial stops was neutralized in the Northern Angas-Goemai group languages, but preserved in Goemai (and possibly the whole Southern group) in the form of voiceless and ejective bilabial stops (i.e., aspi-

7. Implosives have proved to be a stable feature in language contact situations: Chadic languages have tended to retain their implosives, while Benue-Congo languages have tended to not borrow them. Conversely, the co-articulated stops typical of Benue-Congo languages (such as /kɓ/) have usually not been borrowed into Chadic (H. Wolff 1959; E. Wolff and Gerhardt 1977).

rated and non-aspirated in my analysis).⁸ And Hoffmann (1975) posits parallel developments for all obstruents (see also Jungrauthmayr and Ibrizimow 1994: xx–xxix; P Newman 1977a: 15; P. Newman and Ma Newman 1966: 226). Under this scenario, the existence of voiced obstruents in the Angas-Goemai group does need an explanation. They may go back to either prenasalized voiced consonants (as suggested by Greenberg 1958; Jungrauthmayr and Ibrizimow 1994: xx–xxix), or they may have entered the languages through recent borrowings from Chadic Bole-Tangale languages (as suggested by Yalwa 1998). Table (4) illustrates the presumed sound shifts (adapted from the discussion in Greenberg 1958; Hoffmann 1975; Jungrauthmayr and Ibrizimow 1994; P Newman 1977a; P. Newman and Ma Newman 1966).

Table 4. Possible sound correspondences: Obstruents

Proto-Chadic	Northern Angas-Goemai	Goemai
voiceless {p, t, c, k; f, s}	voiceless {p, t, c, k ~ c; f, s}	voiceless non-aspirated {p, t, k; f, s, ʃ}
voiced {b, d, ɟ, g; v, z}		voiceless aspirated {p ^h , t ^h , k ^h ; f ^h , s ^h , ʃ ^h }
(?) voiced prenasalized { ⁿ b, ⁿ d, ⁿ ɟ, ⁿ g; ⁿ v, ⁿ z}	voiced {b, d, ɟ, g; v, z}	voiced {b, d, g; v, z, ʒ}
implosive {ɓ, ɗ, ɗ}	implosive {ɓ, ɗ, ɗ}	implosive {ɓ, ɗ}

If the diachronic scenario depicted in table (4) is true, then Goemai has retained contrasts that were neutralized in closely related languages, thereby making Goemai of special importance for the reconstruction of Proto-Chadic. However, there is an alternative scenario suggesting that the contrasts found within Goemai result from independent developments (Takács 2004: xxiii–xxiv). Under this scenario, the merger of Proto-Chadic voiced and voiceless obstruents

8. Greenberg (1958) bases his analysis on the assumption that Goemai contrasts voiceless and ejective stops. Phonetically, it is conceivable that Proto-Chadic voiced stops would become voiceless, while voiceless stops would become ejective. In the analysis adopted here, however, the contrast is in aspiration (and the lexical comparison suggests that his ‘ejective’ corresponds to my ‘non-aspirated’). That is, it would now be necessary to account for why Proto-Chadic voiced stops became voiceless aspirated, and why voiceless stops became voiceless non-aspirated.

already occurred at the level of Proto-Angas-Goemai. It is possible that, at this stage, the merged voiceless obstruents were realized aspirated, but had a non-aspirated allophone in some environments, notably at the onset of unstressed syllables. Such a situation is reported for present-day Angas (Burquest 1971: 37–39), and possibly also for Mwaghavul (Jungraithmayr 1963a: 16–17; H. Wolff 1959) and Cakfem-Mushere (Takács 2004: xxiii–xxiv). In Goemai, this conditioned variation could then have been reanalyzed as a phonemic contrast. Such a scenario would explain the fact that non-aspirated and aspirated obstruents only contrast in syllable-initial position. However, further comparative research is needed to determine the likelihood of either explanation.

Table (4) above indicates a further development: the development of Goemai palatal fricatives from the palatal stops of the proto-language. This diachronic development has its synchronic parallels in that Goemai speakers realize the voiced palatal fricative alternatively as a voiced palatal stop (in free variation). While some present-day palatal fricatives are reflexes of palatal stops, others probably result from a more recent development: a reanalysis of velar stops and alveolar fricatives (see below). Table (5) summarizes the two possible origins of palatal fricatives in Goemai.

Table 5. Two possible origins for palatal fricatives

Origins	Present-day Goemai
(1) Sound change affecting palatal stops {c, ɟ, ɲ} of Proto-Angas-Goemai	palatal fricative {ç, ʝ, ʒ}
(2) Language-internal reanalysis of:	
velar stop {k ^h , k, g} + {i, i:}	
alveolar fricative {s ^h , s, z} + {i, i:}	
alveolar fricative {s ^h , s, z} + palatalization	

Evidence for a language-internal reanalysis comes from the synchronic distribution of vowels: with very few exceptions, velar stops and alveolar fricatives are not followed by a close front vowel; and alveolar fricatives never occur with the secondary feature of palatalization.⁹ It is likely that the velar stops

9. I am only aware of the following two exceptions: /k^hɺɺp/ ('kitchen', which has a variant /t^hɺɺp/) and /k^hùrk^hɺ/ (an archaic word occurring in the context of riddle-telling). Palatalized velar stops are attested (unlike palatalized alveolar fricatives), but they are subject to a dialectal alternation: palatalized velar stops in K'wo corre-

and alveolar fricatives, in the specified environments, became reanalyzed as palatal fricatives. There are even some words that synchronically alternate between an alveolar plus /a/ and a palatal plus /i/, e.g., /zàráp/ ~ /zíráp/ 'girls'. A comparable type of palatalization has been described for Mupun (Frajzyngier 1993: 3–32).

The above analysis is further supported by the realization of palatal fricatives. The secondary feature of palatalization is often still audible in the case of the non-aspirated voiceless palatal fricative, occurring in free variation with the non-palatalized form, e.g., [βó:n] ~ [ʃó:n] 'nail', [βǎŋ] ~ [ʃǎŋ] 'hunt'. Furthermore, palatal fricatives do not allow for the secondary feature of labialization. This restriction presumably follows from the observations that labialization and palatalization are mutually exclusive and that labialization cannot occur in the environment of a close front vowel. That is, labialization could not have occurred in the environments that gave rise to the palatal fricatives (see section 1.2 for labialization and palatalization).

In addition to the obstruents discussed above, Goemai has a glottal stop and a glottal fricative. Their phonemic status is not entirely clear, and they are best discussed together with the two glides, as they may constitute allophones in certain environments, i.e., in the realization of vowel-initial syllables. P. Newman (1977a: 12, 14) assumes that Proto-Chadic allowed for vowel-initial syllables, although many present-day Chadic languages do not. He argues that phonetic variation in the realization of vowel-initial syllables gave rise to new phonemes in several Chadic languages, notably to a glottal stop, but also to a glottal fricative. It is possible that a similar development occurred in Goemai. In Goemai, all vowel-initial syllables are phonetically preceded by a glottal stop. As such, the occurrence of the glottal stop is predictable, and it is (tentatively) not analyzed as a phoneme. However, the analysis is complicated by the observation that there are no close front or back vowels in vowel-initial syllables. The glides, by contrast, show a complementary distribution in precisely this environment: /j/ precedes /i/, and /w/ precedes /u/. This distribution suggests that at least some glides are phonetically-conditioned variants, preceding close vowels in vowel-initial syllables. In other environments, however, glides do contrast, and are thus considered phonemes. A further complication is introduced by the glottal fricative: it is possible that it also plays a role in the realization of vowel-initial syllables, as it never precedes close front or back vowels. Nevertheless, it was not possible to determine any difference in its distribution compared to that of the glottal stop, and it is thus (tentatively) assigned phonemic status. The distribution of glottal stop, glottal fricative and the two glides is illustrated in table (6).

spond to palatalized alveolar stops in Duut and Dorok, e.g., /k'ák/ ~ /t'ák/ 'heart/neck', /k'àm/ ~ /t'àm/ 'blood'

Table 6. Distribution of [ʔ], /h/, /w/ and /j/

	[ʔ]		/h/		/w/		/j/	
i	-		-		-		jìn	say
u	-		-		wún	sweat	- ¹⁰	
ə	ʔá.rém	beans	hǎn	1SG	wén	search	jén	plenty
o	ʔó	yes	hó	greetings	wò	snake	jó	rise
a	ʔán	mind	háj	tree	wáj	pot	jáj	stalk

Finally, Goemai has nasals and liquids. In the case of nasals, Goemai contrasts three places of articulation (as shown in table 7). While the labial and alveolar nasals are frequently found in initial position, the velar nasal occurs only very rarely in this environment. In the case of liquids, Goemai contrasts a lateral and a trill (as shown in table 8). It is generally assumed that Proto-Chadic had a lateral fricative, which has become a simple lateral consonant in West Chadic (P Newman 1977a: 11, 13). Like other West Chadic languages, Goemai does not have a lateral fricative – although the plain lateral is occasionally realized as a lateral fricative (occurring in free variation), e.g., /là/ ~ /ʔà/ ‘produce’, /lí:s/ ~ /ʔí:s/ ‘tongue’

It should be noted that Goemai does not have any geminated consonants occurring in native Goemai words. Pawlak (2002: 62) also comments that the Hausa variety spoken on and around the Jos Plateau has lost its geminate consonants. Outside the Jos Plateau, by contrast, geminate consonants are common in Chadic (and Afroasiatic) languages.

Table 7. (Near) minimal pairs: Nasals

/m/		/n/		/ŋ/	
mì	be related	ní	elephant		
mù.rú	fig tree	nú	sea		
mǎ	1PL	nó	1SG.POSS		
móŋ	study			ŋóŋ	bells
màŋ	take	náj	DEM.DIST	ŋáj	monkey

10. The only attested counter-examples are /jù:t/ ‘accumulate’ and possibly /n’ú/ ~ /n’jú/ ‘chieftaincy title’

Table 8. (Near) minimal pairs: Liquids

/l/		/r/	
gə.líp	bird type	má.ríp	soul
lú	settlement	rú	enter
mé.lép	wink	rép	itch
k ^h ók.lók	small	ròk	sweet
láj	hang/move	rǎj	think

1.2. Secondary articulation

Most morpheme-initial consonants can occur with a secondary articulation of labialization, palatalization or prenasalization (as illustrated in table 9 below). Labialization and palatalization are common in all branches of Chadic, including the Angas-Goemai group. But despite their widespread distribution, there are many irregularities resulting from assimilation processes, and it proved almost impossible to reconstruct labialized and palatalized consonants (Jungraithmayr and Ibrizimow 1994: xix; P. Newman and Ma Newman 1966: 229). Only P. Newman (1977a: 11) reconstructs labialized and palatalized velar stops for Proto-Chadic. A similar picture emerges in the case of prenasalization (see also footnote 12).

In Goemai, labialization and palatalization are mutually exclusive, but prenasalization can co-occur with either of them. Since it was not always possible to find minimal pairs exemplifying all four oppositions, some of the words in table (9) simultaneously illustrate labialization / palatalization and prenasalization. Notice that there are some systematic gaps in the table (marked “-”) and that labialization is sometimes realized as [w] and sometimes as [ɸ].

Most gaps result from the diachronic process summarized in table (5) above: alveolar palatalized fricatives developed into palatal fricatives (thus accounting for the gap in the alveolar fricatives), and the new palatal fricatives cannot be palatalized again, nor can they be labialized since palatalization and labialization are mutually exclusive (thus accounting for the gap in the palatal fricatives). The gaps in /h/, /w/ and /j/ probably follow from their restricted occurrence (as summarized in table 6 above). Notice also that palatalization and labialization never occur before close vowels. It is likely that such sequences have been reanalyzed as long vowels, possibly [w^hu] as [u:], and [i] as either [ɸ:] or [i:] (see section 1.3 on long vowels).

Labialization is alternatively realized as [ɸ]: all labial and glottal consonants only ever occur with the variant [ɸ], thus forming the diphthongs [ɸə] and

[ua(a)]. The other logically possible diphthongs [ue(e)], [uo(o)] and [uɔ(ɔ)] are not attested. Given that the corresponding labialized sequences [ʷe(e)], [ʷo(o)] and [ʷɔ(ɔ)] are possible (albeit rare), I consider their absence an accidental gap in the data. With non-labial and non-glottal consonants, only the diphthong [uə] is attested as a free variant of [ʷə], e.g., [t^huə̃r] ~ [t^hʷə̃r] ‘fig tree’, [k^huə̃t] ~ [k^hʷə̃t] ‘adze’. Since the short vowel [u] only ever occurs as the first part of a diphthong in the environments above, I analyze it as a phonetic variant of labialization, not as a phoneme (see section 1.3 for diphthongs). It is, however, written without a tone mark to reflect its diachronic origin (and the tone is written on the second member of this diphthong instead).

Table 9. (Near) minimal pairs: Secondary articulation

Plain		Labialized		Palatalized		Prenasalized	
p ^h ár	lynx	p ^h uár	fish	p ^h ə̃r	stone	ˀp ^h uə̃	in mouth
párŋ	stone	puán	remove	p ^h án	break	ˀpárŋ	north
ḅét	belly	ḅuét	lay	b ^h ət	weak	ˀḅét	in belly
t ^h ó	okay	t ^h wò	kill	t ^h ó:p	health	ˀt ^h wò	killed
tá	fall	ˀnt ^h wá.láŋ	ant type	t ^h ák.láŋ	life	ˀnt ^h wá.láŋ	ant type
dàn	prevent	d ^h wǎn	PL.LOG	d ^h ón	past	ˀdǎ	CONJ
dám	fever	d ^h wám	crave	d ^h ám	stand	ˀdám	how
k ^h àt	find	k ^h wàt	hunt	ˀnk ^h hàt	straight	ˀnk ^h hàt	straight
kóŋ	snake	k ^h wò	dialect	k ^h òŋ	meal	ˀnkóŋ	back
bè.gá	well	g ^h wǎ	SG.LOG	g ^h à	dance	ˀng ^h á.rá	kite
ʔát	bite	ʔuás	grind	–	–	ˀnʔát	bitten
fór	four	f ^h uól	yeast	f ^h ól	light	ˀnf ^h ól	quick
vá.rám	grass	v ^h uáŋ	wash	v ^h áŋ	termite	ˀnv ^h uáŋ	washed
s ^h át	her body	s ^h wát	pull out	–	–	ˀns ^h át	at body
sá	hand	s ^h wà	drink	–	–	ˀnsá	at hand
zàŋ	barren	z ^h wám	viper	–	–	ˀnzàŋ	fish type
ʃì	thigh	–	–	–	–	ˀnʃì	bee
ʃá.ráp	fish	–	–	–	–	ˀnʃá.ráp	ant type
zà:n	twin	–	–	–	–	ˀnzà	ant type
hà:s	egg	huàs	pierce	–	–	ˀnhuàs	pierced
mà	surpass	muà	liquid	m ^h à	related	ˀnmà:n	mine
nǎ	see	n ^h wǎ	PL.LOG	n ^h à:l	slender	ˀnnà	granny
lát	finish	l ^h wát	afraid	l ^h àk	throw	ˀnl ^h àk	thrown
rǎŋ	think	r ^h wáŋ	mad	r ^h è	lie	ˀnrà	weaving
wám	wet	–	–	–	–	ˀnwám	fish type
jít	eye/face	–	–	–	–	ˀnjít	worm

Despite the existence of minimal pairs, consonants modified by secondary features are not analyzed as separate phonemes, but as a coalescence of two consonants. This analysis is supported by several observations, outlined below.

In the case of labialization and palatalization, the modified consonants [C^w] and [C^j] are realized as [Cu.w] and [Ci,j] in slow speech; although a [Cɥ] sequence is never broken up (illustrated in 10a). This variation suggests that the modification results from the loss of a syllable, which still surfaces in some contexts.¹¹ Another indication of their non-phonemic status is that they are not subject to partial reduplication. In partial reduplication (see section 2.1; see also chapter 5, section 2.3), the initial consonant is repeated to the left and the vowel [ə] is inserted. In the case of labialized and palatalized consonants, only the plain consonant is repeated (illustrated in 10b) – this pattern occurs regardless of whether labialization is realized as [w] or [ɥ]. As an aside, notice that (non-) aspiration is part of the repeated consonant (in 10b), thus indicating that it has to be analyzed differently from labialization and palatalization.

Table 10. Analyzing [C^w] and [C^j]

(10a)	t ^h wá:m ~ t ^h ú.wá:m		cause standing		
	mɯà:n		go		
	k ^l àŋ ~ k ⁱ .jàŋ		hoe		
(10b)	k ^h wàk	smooth (v.)	=>	k ^h ə.k ^h wàk	smooth (adv.)
	s ^h ɯè	long (v.)	=>	s ^h ə.s ^h ɯè	long (adv.)
	β ^h ér	big (v.)	=>	β ^h ə.β ^h ér	big (adv.)

There is furthermore evidence that prenasalization also resulted from a sequence of two consonants. Phonetically, prenasalization is realized either as a modification of the consonant or as a syllabic nasal, bearing its own tone (being in free variation) (see also Ladefoged and Maddieson 1996: 118–131 on the phonetic continuum between prenasalization and syllabic nasals). Furthermore, a nasal prefix *N-* (realized as [m], [n], [ɲ] or [ŋ]), assimilating to the place of articulation of the following consonant) can be posited in many cases of prenasalization. First, a prefix *N-* derives adverbs (from verbs) and locations (from nouns) (see chapter 5, sections 2.3 and 4). Many of the prenasalized examples in table (9) result from this productive process. Second, there are synchronic-

11. The diachronic status of such disyllabic words is not clear. The middle consonant (i.e., the glide) could either reflect a lost Proto-Angas-Goemai consonant, or it could have been inserted at a later stage to break up a sequence of two vowels (see chapter 2, section 1.3).

ally non-analyzable prenasalized consonants in many locative nouns (e.g., /ⁿdù:n/ ‘inside’) and adverbs (e.g., /ⁿp^huó/ ‘always’) – given that they occur in the same contexts as the analyzable forms, it is possible to assume that they also originated by the same processes. Third, prenasalization is found with many nouns denoting insects, birds and fish. In this case, the prenasalized form often occurs in free variation with a non-prenasalized form (e.g., /ⁿból/ ~ /ból/ ‘pigeon’). A number of authors have convincingly argued that some Chadic languages have borrowed a nasal noun class prefix (for a class of small animals) from their Benue-Congo neighbors (Frajzyngier and Koops 1989; Mieke 1991: 175–263; E. Wolff and Gerhardt 1977) (see also chapter 3, section 2.2).¹²

On the basis of the above discussion, labialized, palatalized and prenasalized consonants are not analyzed as phonemes but as resulting from a sequence of two consonants.

1.3. Vowels

The full inventory of short and long vowels, as summarized in table (2) above, only occurs in syllable-medial position. There are no vowel-initial syllables (see section 1.1), and the distinction between long and short vowels is neutralized in syllable-final position (see section 2.1). Some minimal pairs are shown below, illustrating the phonemic contrasts among short vowels in medial position (in 11.1), long vowels in medial position (in 11.2) and vowels in final position (in 11.3). Examples contrasting short and long vowels in medial position are discussed later in this section (see tables 12 and 13). It was not always possible to give minimal pairs involving all vowels, but care was taken to exemplify as many contrasts as possible. If a form was not found, the corresponding cell is left empty (and considered an accidental gap in the data); if a form is not possible, the cell is marked “–” Notice that table (11) does not exemplify the

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12. In any case, it is unlikely that prenasalized consonants of Goemai are retentions from Proto-Chadic. P. Newman and Ma Newman (1966: 223–225) and P. Newman (1977a: 11) do not reconstruct prenasalized consonants. Greenberg (1958) argues for the existence of prenasalized stops for Proto-Chadic, but assumes that these developed into voiced stops in the Angas-Goemai group. Jungrathmayr and Ibrizimow (1994: xix–xxx) reconstruct *b², *d², and *g², which may have been prenasalized, but they also assume that most synchronic prenasalized consonants have developed independently. Given that prenasalization in Goemai is found with all consonants, not just stops, it cannot be analyzed as a retention from the proto-language. Furthermore, some words that have a prenasalized consonant in Goemai were reconstructed for Proto-Chadic without this nasal element, e.g., /ⁿfhət/ ‘mosquito’ (< *b²) (Jungrathmayr and Ibrizimow 1994: 121).

phonetic variants [ɯ], [e], [o] and [ɔ]. The close central vowel [ɯ] is considered a variant of labialization (see section 1.2). And the short vowels [e], [o] and [ɔ] are considered variants of their long counterparts, occurring in specific environments only (see the discussion below). In fact, the Goemai vowel inventory is typologically unusual in that it contains more long vowels than short vowels. However, the phonemic status and the diachronic development of long vowels are not always clear, and further investigation is needed.

The realization of vowels shows considerable dialectal variation, but there is not always sufficient data to verify whether these variants are different realizations of one phoneme or representatives of separate phonemes. The discussion in this section is based on the K'wo dialect of Goemai, but data from the Duut and Dorok dialects are taken into account whenever possible.¹³

Table 11. (Near) minimal pairs: Vowels

(1) Medial position (short vowel)

/i/		/u/		/ə/		/a/	
t ^h il	worthless	t ^h ùl	limpet	t ^h ál	deep	t ^h àl	ask
tíŋ.gì.lí:t	hornbill	túŋ	fry	táy	tree	táy	bat
		dùm	bend	dám	overthrow	dám	spoil
dík	build	dúk	pulsate	dək	up/down	dək	care
fíŋ	mix					ǰáy	hunt
f ^h ín	do			f ^h án	beniseed	f ^h án	enlarge
zír	jealous			zól	surround	zár	straight
ník	effort	^h nùk	whip	nək	thick	nək	fetch
ví.líŋ	circle	k ^h ú.lúŋ	vine	léŋ	hang (PL)	láy	hang (SG)
jín	SAY	-		jén	plenty		

13. The K'wo data is taken from my own fieldwork; the Duut data from discussions with Ohikere, and from Ohikere and Tiemsan (1998, 1999) and Tiemsan (1999); and the Dorok data from Kraft (1981). Notice that my own Dorok data differs from the data reported in Kraft. It is possible that my data reflects influence from other dialects (as I have collected it from speakers who live in an urban environment and who interact on a daily basis with speakers of other dialects). Alternatively, Kraft's data may represent not Dorok, but a closely-related Southern Angas-Goemai language. I have decided to base the discussion of Dorok on Kraft, as his data shows the most differences. If future studies find that his data represents a different language, it will be easy to accommodate this finding within the presented analysis.

(2) Medial position (long vowel)

/i:/	/ɛ:/	/u:/	/e:/	/o:/	/ɔ:/	/a:/
	bû:r weed type	bû:r wealth	bê:r scrape	gá.bó:r hedgehog	6ó:t able	6ó:t tie
	gá.tá:n shore	tú:n hole				tá:n fall
			k ^h é:m tree type		k ^h ó:m season	k ^h à:m festival
	`nɔ̃:l.ká:n gecko		`nké:n thorn	kó:n face down	kò:n snake type	
fí:t perch fish		fú:t vomit			fó:t listen	
				ʃó:n nail		ʃá:n hoe
				ʃò:r duck	ʃó:r ashamed	
			hés sand		hò:s tooth	hà:s egg
			hèt move	hó:t grinding stone		
	mú:r steal			mò:r oily	mó:r patient	mà:r farm
lí:t lion		lú:t afraid				
	rú:n shade	rú:n insert				

(3) Final position¹⁴

/i, i:/	/u, u:/	/e:/	/ə/	/o:/	/a, a:/
tʰí.nì palm	tʰù kill	gʷà.tʰé yam dish	tʰə EMPH	tʰó okay	tʰá.ráp snap
ʰtí rabbit's son	tú bottle		té.rép lie (PL)	tó lie (SG)	tá fall
bú.lú.dí fish type	dǔ PL.LOG.SP	dé DIR	dá come	dò very	dà.bàk stomach
dí LOC.ANAPH	dú cause sitting	(ʰ)dě exist	də.dóŋ beautifully		dá FUT.CL
fʰí dry		fʰè owner	fʰə.rəm knee(s)		fʰà.làk liver
ʃí deny		ʃé foot/leg	ʃə.ʃáj pleasant		ʃá desire
mì be related	mú INTERR	mè barn	mǎ 1PL		mà surpass
zì.rì antelope	rú enter	kʰə.rè crow	rə.rək sweetly	bó.ró Fulani	rà weave
jí year	-		jǎ 2SGF	jó rise	jà catch

The distribution of close vowels is very restricted (see sections 1.1 and 1.2): the close front vowels /i/ and /i:/ cannot follow an alveolar fricative, a velar stop, a labial glide or a glottal; and the close back vowels /u/ and /u:/ cannot follow a palatal glide or a glottal. Furthermore, no close vowels are attested following labialized or palatalized consonants – making it likely that at least some of the long vowels /i:/, /u:/ and /u:/ have developed diachronically from sequences of labialized or palatalized consonants plus close vowels. The front and back vowels /i/, /i:/, /u/ and /u:/ are realized the same across the dialects; the central vowel /u:/ is realized as [u:]¹⁵ in K'wo and Duut, but as [ɨ] in Dorok.

14. No examples were found for /ɔ(:)/in final position; and /u(:)/was only found in /nàkʰé/ 'grandparent', /nàkʰé ʰfɨm/ 'chameleon', and /ʔá/ 'goat'
15. The long vowel [u:] has to be distinguished from the diphthong [uə] (a variant of [wə]), as shown by the following (near) minimal pairs: /pʰé:r/ 'boil leaves' vs. /pʰé:r/ 'fish'; /tú:r/ 'anthill' vs. /tʰuêr/ 'fig tree'

Generally, Dorok seems to have collapsed the distinction between long and short vowels: the three long close vowels of other dialects correspond here to the short vowels [i], [u] and [ɨ] or to the sequences [iC_{VELAR}i], [uC_{VELAR}u] and [ɨC_{VELAR}ɨ]. A similar pattern is observed with the mid back vowels /o:/ and /ɔ:/, which are realized as long vowels in K'wo and Duut, but as [o] and [ɔ] or [oCo] and [ɔCɔ] in Dorok (see also the Dorok examples in 12.3 below).

In all cases above, it is questionable whether vowel length is really distinctive in Goemai: there are no or only very few minimal pairs – table (12.1) is an exhaustive list of all attested pairs that involve close vowels and mid back vowels. In the case of /i:/ and /i/ and of /u:/ and /u/, vowel length is nevertheless assumed to be phonemic. This tentative analysis is adopted because it was not possible to account for their distribution otherwise. But further research may show that length is predictable. In particular, it is possible that /i:/ is a variant of /ɛ:/: /i:/ occurs very rarely; it never contrasts with /ɛ:/; and some words alternate between [ɛ:], [i:] and [iCi] (e.g., /jɛ:l/ ~ /jɨ:l/ ~ /jígíl/ 'rise'). In the case of /ɛ:/, /o:/ and /ɔ:/, no corresponding short vowels are posited. In medial position, the close central vowel /ɛ:/ is always realized long (excepting [ɛ] as a variant of labialization). And the mid back vowels /o:/ and /ɔ:/ are realized as short [o] only when preceding a velar consonant (see 12.2 for an illustration; and see footnote 16 for an explanation of the form /ʃ^hðm/ 'hyrax' in 12.1). Generally, there are no long vowels attested preceding velars; and there are instances where a long vowel is shortened in this environment, e.g., /a:/ in /hà:m/ 'water' is shortened when it occurs as part of the compound /hàŋ.gə.dè/ 'water (lit. water that exists)'

Table 12. Vowel length I: /i:/, /ɛ:/, /u:/, /o:/ and /ɔ:/

(1) (Near) minimal pairs (K'wo and Duut dialects)

Short		Long	
ʃ ^h t	grass type	ʃt	perch fish
kúr	tortoise	kú:r	burn
ʃ ^h ðm	hyrax	ʃ ^h ð:m	guineafowl

(2) Complementary distribution (K'wo and Duut dialects)

Short (preceding velar)			Long (elsewhere)	
[o]	–	–	kó:n	bush cow
[ɔ]	kóŋ	snake type	kò:n	snake type

(3) Comparative perspective

	K'wo; Duut (Ohikere and Tiemsan 1999)		Dorok (Kraft 1981)	Mwaghavul (Hoffmann 1975)
/ɛ:/	ká:n	salt	ki.gin	kəən ~ kə.gən
	nú:n	mother	ni.ɲin	nə.gən
	ˈnɔ̀:n	inside	ˈnɔ̀n	də.gən
	sá:r	old	sir	sə.ɣər
/u:/	sú:n	dream	su.wun	su.ɣun
/o:/	kó:n	bush cow	?	kə.bən ~ kə.gən
	ʃó:n	nail	?	ci.gin
	ʃò:r	duck	?	ˈcu.gur
/ɔ:/	só:m	horn	so.gom	so.ɣom
	zó:m	chin	zo.ʔom	za.ɣam
	vò:m	blind	vəm	vu.ɣum

A long vowel in K'wo and Duut Goemai (and in the Angas subgroup) often (but not always) corresponds to a sequence [VC_{VELAR}V] in Dorok Goemai (and in the Mwaghavul and Mernyang subgroups) (Frajzyngier 1993: 3–32; Hoffmann 1975; Jungraithmayr 1963a: 18; Shimizu 1974; Takács 2004). Some such correspondences are illustrated in (12.3). It is possible to argue that long vowels resulted from the loss of an intervocalic velar consonant of the proto-language. Alternatively, Dolgopolsky (1982) analyzes this consonant as an epenthetic consonant that was inserted to break up a long vowel having a falling tone. That is, he assumes that the velar consonants are innovations, while the long vowels reflect the older pattern of Proto-Angas-Goemai. This debate has not been settled yet, but he seems to be right in arguing that there is a general West Chadic and Angas-Goemai group pattern that disprefers contour tones (see section 1.4).

While the phonemic status of vowel length is unclear in the above cases, length is (or was) clearly distinctive in the cases of reconstructed */E/ and */E:/, and */a/ and */a:/. Some minimal pairs are given in (13a) and (13b), and the realization of the phonemes is discussed below.

Diachronically, Goemai probably distinguished between */E/ and */E:/. In the present-day dialects, this contrast surfaces as a contrast in both vowel quality and vowel length (as illustrated in table 14). The short vowel */E/ is realized as [ə] (in K'wo) or [ɛ] (in Duut and Dorok); in final position, [ɔ] occurs as a free variant of [ə] (in K'wo). The long vowel */E:/ is realized as [e:] in medial position, and as [e:] or [e] in final position (in K'wo and Duut); in Dorok, it is always realized as short [e] (see section 2.1 for final vowels). Based on the

K'wo and Duut data, it is possible to explain the synchronic variation by assuming the existence of */E/ and */E:/. Taking the Dorok data into account, it may become necessary to posit an additional phoneme */i/ that merged with */E/ in K'wo and Duut. Since the Dorok data may not be entirely reliable (see footnote 13), a systematic dialectal study is needed to investigate this question further. In the meantime, I assume that the proto-language only contrasted */E/ and */E:/.

Table 13. Vowel length II: */E:/, */a:/

(13a)	*/E/		*/E:/	
	p ^h ó	give	p ^h è	place
	ból	pigeon	bè:l	fish type
	sót	bush	sé:t	buy/sell
	hǎn	1SG	wàŋ.hèn	storage pot
	mǎn	1PL	mè:n	raw
	rép	itch	rè:p	mix
(13b)	*/a/		*/a:/	
	ǎl	hard	ǎ:l	stick
	k ^h ám	RESULT	k ^h ám	wide
	hám	carve	hám	water
	màn	know	` ⁿ mám	NOMZ. 1SG.POSS

Table 14. Comparing K'wo, Duut and Dorok: */E/, */E:/, */i/ (?)

		K'wo	Duut (Ohikere and Tiemsan 1999)	Dorok (Kraft 1981)
*/E/	black	t ^h óp	tep	tep
	assemble	təl	tel	tel
*/E:/	vein	vè:l	ve:l	vel
*/i/ (?)	wood	ǰép	ǰep	ǰip ~ ǰip
	two	vél	vel	vil

In medial position, K'wo and Duut distinguish between /a/ and /a:/ (see 13b above), but in final position this contrast is neutralized (see section 2.1). In

Dorok, this contrast surfaces as a contrast in vowel quality: the short vowel is realized as [ə], the long vowel as [a]. All realizations are summarized in table (15). Notice that they parallel the realizations of other vowels in that Dorok again reinterprets a distinction in vowel length as a distinction in vowel quality. Notice also that there is a tendency for speakers of all dialects to realize short [a] in loanwords as [ə], e.g., Hausa /t^háǎ̀:/ ‘have ever/never done’ is often realized as /t^həǎ̀/. This synchronic observation suggests that a similar development could account for the existence of [ə] in Dorok.

Table 15. Comparing K'wo, Duut and Dorok: */a/, */a:/

		K'wo	Duut (Ohikere and Tiemsan 1999)	Dorok (Kraft 1981)
*/a/	ear	k ^w ám	ƙ ^w am	ƙ ^w əm
	woman	màt	mat	mət
	beard	p ^h àp	pap	pəp
*/a:/	duiker	p ^h à:p	pa:p	pap

Summarizing the discussion so far, Goemai has four short (/i/, /u/, /ə/ and /a/) and seven long vowel phonemes (/i:/, /u:/, /e:/, /o:/, /ɔ:/ and /a:/). But although the language distinguishes vowel length, this distinction is not systematic. Taking K'wo Goemai as the point of reference, the distinction can be accompanied by a distinction in vowel quality (i.e., between short /ə/ and long /e:/). In some cases, the distribution is conditioned by the environment (i.e., /o:/ and /ɔ:/ are realized as short [ɔ] preceding velars; and /u:/ is realized long unless it is a variant of labialization). And in other cases, vowels are sometimes realized short and sometimes long, although there are neither minimal pairs nor apparent conditioning environments (i.e., /i/, /i:/, /u/ and /u:/). Only /a/ and /a:/ clearly contrast in vowel length. Moreover, this contrast is only attested in syllable-medial position. In syllable-final position, the realization of a vowel as long or short is conditioned by other factors (see section 2.1). The only partial exception here is the contrast between [ə] and [e] (in K'wo), which was analyzed as reflecting the diachronic contrast in length between */E/ and */E:/, and which is preserved in final position. Furthermore, vowel length interacts with labialization and palatalization: when following such a modified consonant, short and long vowels occur in free variation, e.g., [t^hwám] ~ [t^hwá:m] ‘cause standing’, [n^hák] ~ [n^há:k] ‘breathe’. The same pattern is observed with the mid back vowels. Recall that these vowels are only realized short if they precede a velar consonant. However, following a labialized or palatalized consonant, both

short and long variants are attested, regardless of the nature of the final consonant, e.g., [t^wót] ~ [t^wó:t] ‘sit’, [k^hóp] ~ [k^hó:p] ‘health’¹⁶

Phonetically, a long vowel is realized at least twice – sometimes three times – as long as a short vowel, contrasting 200 milliseconds and above (for a long vowel) with 100 milliseconds and below (for a short vowel) (illustrated in figure 3). This realization is attested regardless of whether or not vowel length is contrastive. It was therefore decided to analyze vowels as long even in those cases where there is no phonemic contrast in length.

Finally, Goemai has a limited set of diphthongs. One group originated as a variant of labialization: [ʉa(a)] and [ʉə] (see section 1.2). Phonetically, however, they are realized as vowels, and are quite distinct from labialization. A second group, occurring only very rarely, consists of [au], [ou], [ai], [ei] and [o:i] (illustrated in table 16). I assume that this second group of diphthongs originated in a sequence of [V(V)_{C_{GLIDE}}], since the second member can only ever be [u] or [i] (i.e., corresponding to the two glides), and since this group of diphthongs cannot occur with a consonant coda (i.e., unlike long vowels). Notice that short [o] and [e] are not attested in medial position otherwise; their occurrence in diphthongs probably results from an assimilation in vowel height (of [o] and [ə] to [u] and [i] respectively). The contrast between short [ou] and long [o:i] possibly mirrors the distribution of short and long mid back vowels discussed earlier in this section: short before a back consonant (i.e., a velar), but long elsewhere.

Table 16. Diphthongs

[au], [ou]		[ai], [ei], [o:i]	
gòu	small calabash	té.gái	middle-sized calabash
môu	NEG	gè.mâi	Goemai
òu	arrow	ˀnɔ̀ài.zwám	jackal
		bô:i	cowrie shell
t ^h àu	bow	téi	yet

16. The apparent counter-example /ʃ^həm/ ‘hyrax’ in table (12.1) possibly goes back to a form with a palatalized alveolar fricative */s^həm/ (see chapter 2, section 1.1 for the development of palatal fricatives). Such an origin would explain why [ə] is realized short, contrary to the expectation that a mid back vowel should be realized long preceding /m/.

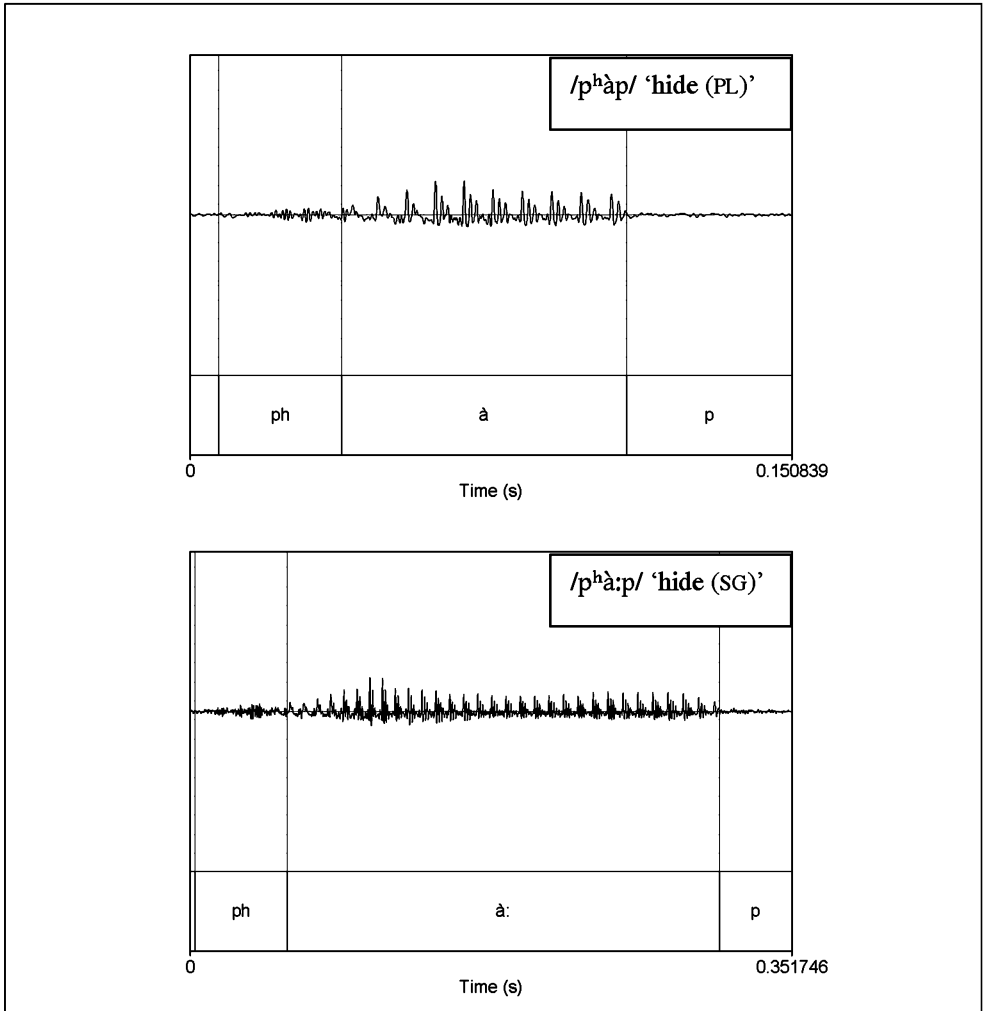


Figure 3. Vowel length

The two groups of diphthongs can co-occur. For example, the three vowels in the word /muàì/ ‘fellow’ result from labialization plus vowel plus final glide, i.e., */m^wàj/.

It is not clear how the Goemai vowel inventory compares to that of Proto-Chadic and of other Chadic languages. Chadic languages are known to distinguish vowel length (P Newman 1977a: 12; Takács 2004: xxi), but the Goemai pattern may not be inherited. One difficulty in relating Goemai to the proto-language is that reconstructions usually only take consonants into account, not vowels. But there are additional reservations that could argue against the long

vowels being inherited. As shown, vowel length is only clearly distinctive with very few vowels in restricted environments – other Chadic languages, by contrast, generally do not have such restrictions. Furthermore, some closely related languages of the Northern Angas-Goemai group do not seem to distinguish vowel length at all (see Burquest 1971: 12, 39–40, 48; Hoffmann 1975), and there is some evidence for the recent development of long vowels in Goemai through the loss of intervocalic consonants (see the discussion of table 12.3 above) and through the reanalysis of some instances of labialization and palatalization (see the discussion of table 11 above). Interestingly, Pawlak (2002: 55) remarks that the Hausa variety spoken on and around the Jos Plateau is characterized by the loss of vowel length as a distinctive feature – possibly reflecting the phonological systems of the various indigenous Jos Plateau languages. A similar pattern is observed with Hausa loanwords that have entered Goemai.

The reconstruction of vowel quality also poses problems, both for Chadic as a whole and for the Angas-Goemai group. A number of studies attribute this difficulty to the existence of only few vowel phonemes in Proto-Chadic, and the subsequent development of new phonemes in individual languages due to (i) the influence of affixes containing palatal or labial consonants (and the eventual loss of such affixes) (see Barreteau 1993; Mirt 1969; P. Newman and Schuh 1974; P. Newman 1975; Schuh 1984; E. Wolff 1983) and (ii) the development of mid vowels from diphthongs (P. Newman 1979, 1990b).¹⁷ Within the Angas-Goemai group, the vowels show considerable variation across the different languages (Hoffmann 1975; Takács 2004). Similarly, there is huge variation in the realization of vowels within individual languages: most authors explicitly comment on the fact that many vowels seem to occur in free variation, and others discuss the impossibility of determining which realization is to be considered an allophone of which phoneme (e.g., Frajzyngier 1993: 9–15 who discusses the status of schwa in Mupun; see also Burquest 1971: 39–40 for Angas).

17. But see also Jungraithmayr (1966, 1968a, 1968b, 1968c, 1974, 1975, 1979, 1980, 1989, 1992) who argues that Proto-Chadic had a number of stable vowels, which carried aspectual distinctions (similar to the consonantal roots and vowel patterns found in other Afroasiatic languages). Their variability only became possible when Chadic languages developed tone (due to language contact), and tones then took over aspectual functions, thereby taking the burden off the vowels. This assumption has been criticized by various authors, who argue that Proto-Chadic marked aspectual distinctions by separate affixes (Frajzyngier 1981; P. Newman 1977c; Schuh 1976, 1977; E. Wolff 1979, 1982).

1.4. Tones

Goemai is a tonal language, and all lexical items and almost all affixes and clitics have an inherent tonal pattern. There are two level tones (high H and low L) and one falling contour tone (high-low HL) that can surface on single syllables. Phonetically, a mid tone (M) is also present, which arises through assimilatory processes (see section 2.2), downdrift (see section 3) or downstep (see below). An underlying rising tone (low-high LH) is posited for some words, although it never surfaces on a single syllable (see below). Previous work on Goemai notes either two (H. Wolff 1959; Kraft 1981; Sirlinger 1937, 1942, 1946) or three level tones (Ohikere and Tiemsan 1999), plus one or more falling contour tones.

Tone serves both lexical and grammatical functions. Lexically, there are many tonal minimal pairs (as illustrated in table 17). Notice that most attested pairs belong to different parts of speech, i.e., the functional load of tone to disambiguate between lexical items is low. Table (17) only illustrates contrasts between level high and low tones, since the vast majority of lexical items have level tones. But there are also a handful of minimal pairs involving contour tones, e.g., /kǎt/ ‘measure’ vs. /kát/ ‘help’ or /ʃǎk/ ‘tell folktale (PL)’ vs. /ʃák/ ‘soak (PL)’

The falling contour tone can be analyzed as two level tones combining on a single syllable. This analysis is supported by the following two observations:

First, the presence of some low-tone morphemes triggers falling tones. For example, whenever the clause-final question tag /=à/ cliticizes to a word ending in a high-tone vowel, a falling tone results (as in 1). Similarly, a clause-final low tone triggers a falling tone in those words that end in a high tone (see section 3).

- (1) pú:s lá tʰó:p=ʔà ʰndâ: (< ʰndá=ʔà)?
 sun pain health=INTERR father:INTERR (< father=INTERR)
 ‘(Is) the hot sun (treating you) well, father?’ (004ANTALDAAS2)

Second, falling tones are predominantly found on long vowels – and long vowels often correspond to [V.CV] sequences in other Angas-Goemai group languages. This distribution could suggest that at least some falling tones arose through the loss of a syllable (see section 1.3).

Unlike falling tones, rising tones never surface on a single syllable – instead, they are distributed over several syllables. For example, the rising tone verb /nǎ/ ‘see’ in (2a) below is realized with a low tone, and its high tone spreads to the following noun /mà:r/ ‘farm’ (whose underlying low tone, in turn, surfaces on the toneless enclitic /=hək/ ‘DEF’). In environments where a rising tone can-

not spread, it is simplified to a level high tone. This is the case in (2b): the speaker first utters the pronoun /hǎn/ ‘1SG’ in its own intonation unit (realizing it high); following that, she realizes it low, and its high tone settles on the low-tone noun /bì/ ‘thing’ (see below for tone spreading in verbal clauses). On the basis of such behavior, underlying rising tones are posited for a small number of words.

Table 17. (Near) minimal pairs: Tone¹⁸

H		L	
ǎk	here (adv.)	ǎk	disregard (v.)
k ^h úm	foolish (v.)	k ^h ùm	masquerade (n.)
k ^w át	pay (v.)	k ^w át	coil (v.)
ʃ ^h ím	skin (n.)	ʃ ^h ím	yam (n.)
ʃé	foot/leg (n.)	ʃè	learn/teach (v.)
zík	come from (v.)	zík	tree type (n.)
há:s	flour (n.)	hà:s	egg (n.)
mán	PROH (part.)	màn	know (v.)
ré:p	girl (n.)	rè:p	mix (v.)
jí	year (n.)	jì	CONS (part.)
wún	sweat (v.)	wùm	bury (v.)
díp	all (adv.)	díp	hair (n.)
dá:t	spear (n.)	dà:t	support (v.)
dúŋ	whisper (v.)	dūŋ	ridge (n.)
dáp	raise ridge (v.)	dàp	penis (n.)
dó:r	gift (n.)	dò:r	limp (v.)

- (2) a. *dé-gà* *nà/* *má:r=hàk (...)*.
 PUR see farm(SG)=DEF
 ‘to see the farm (...)’ (F99Dshoom)

18. This table exemplifies monosyllabic morphemes only. Polysyllabic morphemes are rare (see chapter 2, section 2), and tonal minimal pairs even rarer. The only attested pairs are /ǎráp/ ‘bite (v.)’ vs. /ǎràp/ ‘ironwood (n.)’, and /hájàk/ ‘pregnancy (n.)’ vs. /hájàk/ ‘squirrel (n.)’ Despite the scarcity of minimal pairs, no restrictions on tonal patterns were observed: HH, LL, HL, and LH are all common; falling tones are not attested, but they are rare even in monosyllabic morphemes.

- b. *hǎn* / *hàn=zàm* *bí* *wà:p* (...).
 1SG.I 1SG.S=like thing borrow/lend
 ‘I, I want a loan.’ (F00CGOEBETLA)

Overall, the Goemai tonal inventory of two level tones is similar to that of more distantly related West Chadic languages such as Hausa (P Newman 2000: 597–599; Jaggat 2001: 12–15; E. Wolff 1993: 55–65), but differs from that of the more closely related Northern Angas-Goemai group languages, which have three level tones (high, mid, low) (Frajzyngier 1993: 32–42; Jungraithmayr 1963a: 19–22; Burquest 1971: 17–19, 1974). Despite this difference, at least one author comments explicitly on the restricted functional load of lexical tone (Burquest 1974). The limited distribution of contour tones is also common within West Chadic as a whole (Burquest 1971: 17–19, 1974; Jungraithmayr 1963a: 19–22): contour tones usually arise through the loss of syllables or through the addition of tone-bearing grammatical morphemes; and their occurrence is often restricted to heavy syllables. Similarly, the simplification of rising tones to high tones is well-attested in Hausa (Jaggat 2001: 12–15; Leben 1971; P Newman 2000: 597–599; E. Wolff 1993: 79–81).

Although tone serves to distinguish lexical items, lexical tone does not necessarily settle on the lexical item itself. This is largely due to a high-tone spreading rule originating in some subject pronouns and nouns. This section outlines the general phenomenon, while the full set of paradigms is given in chapter 7.

Unlike many West Chadic languages (Schuh 1976), including closely-related languages such as Angas (Burquest 1973, 1974; Jungraithmayr 1964b), Goemai does not mark TAM categories tonally on the subject pronoun. While the segmental shapes of most pronouns are cognate in Goemai and Angas, Goemai pronouns always have an invariant tone: high-tone /ní/ ‘3SG’, and rising tone on all other pronouns. In verbal clauses, the high tone of both high-tone and rising-tone subject pronouns (as well as nouns) spreads to the right, settling on the first syllable of the next word, and interacting with the lexical tones of TAM particles, verbs and nouns. As a result of this high-tone spreading, tonally distinct lexical items frequently occur with an identical pitch contour. Figure (4) illustrates this phenomenon with the help of the tonally distinct verbs /k^wál/ ‘talk’ and /k^hùt/ ‘talk’. In figure (4a), both verbs are realized with a low tone, while their cognate nouns are realized with a high tone (in the first person plural unmarked TAM paradigm). In figure (4b), the two verbs again receive identical tones, but this time the cognate nouns retain their lexical tones (in the first person singular irrealis paradigm). In fact, the lexical tone of a verb only rarely settles on the verb – one such instance is illustrated in figure (4c),

where the verb occurs within a consequence clause. That is, Goemai verbs and nouns frequently have identical contours despite different lexical tones.

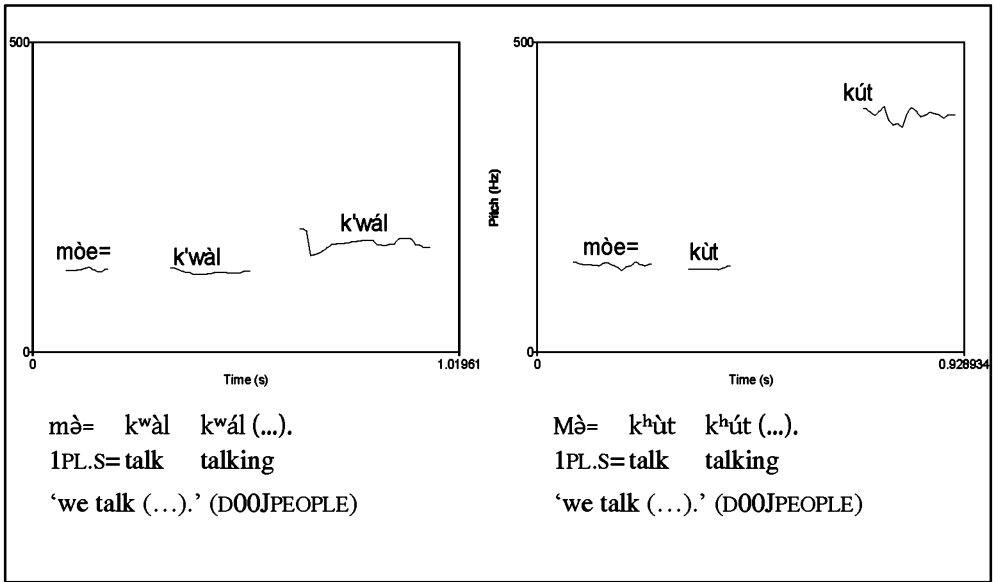


Figure 4a. Pitch contours of verbs: Identical contours

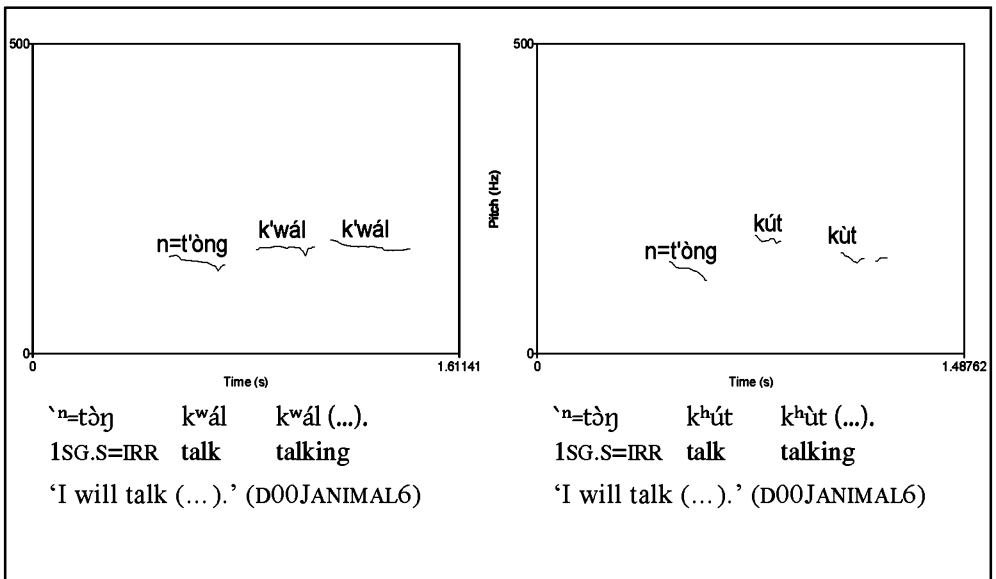


Figure 4b. Pitch contours of verbs: Lexical tone settles on noun

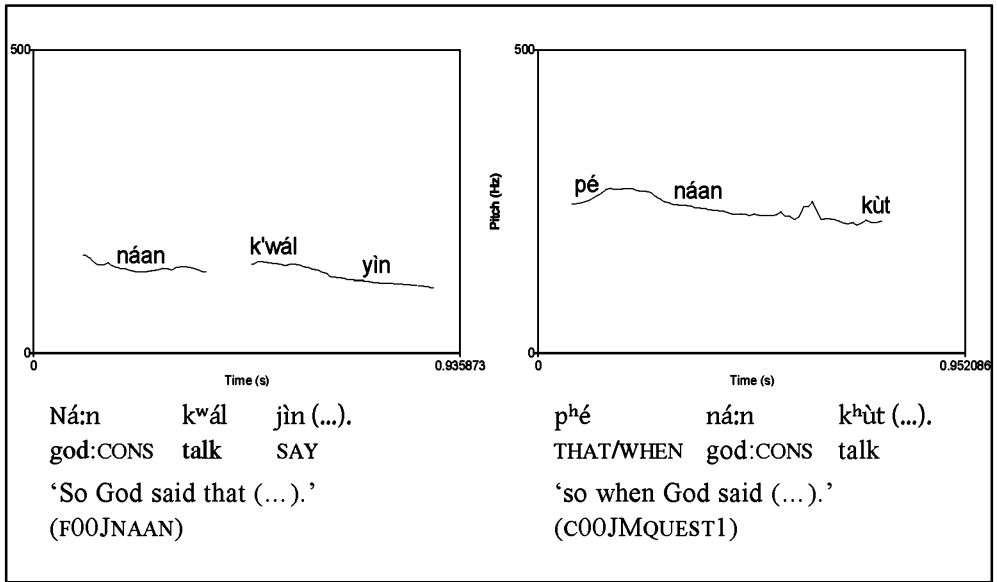


Figure 4c. Pitch contours of verbs: Lexical tone settles on verb

TAM paradigms tend to have a LH tonal pattern, with differences arising through (a) the different behavior of cliticized and non-cliticized pronouns and (b) the lexical tones of other elements. Table (18) below illustrates this pattern for the unmarked verb form, taking two tonally-distinct transitive verbs (/kát/ ‘help’ and /k^hàt/ ‘find’) and direct objects (/záp/ ‘children (PL)’ and /là/ ‘child (SG)’) as examples.

Table (18) allows for the following generalizations:

First, if a rising-tone pronoun cliticizes to the verb, the low tone settles on both the pronoun and the verb, and the high tone spreads to the noun. As a result, all underlying tonal differences are neutralized.

Second, if a rising-tone pronoun or noun does not cliticize to the verb, the low tone is confined to the (pro-) noun, and the verb receives a high tone. The following noun receives its lexical tone, although a low-tone verb will trigger a mid tone in a high-tone noun (i.e., a downstepped high tone, see below).

Third, a high-tone pronoun or noun spreads its high tone to the verb, and the following nouns behave as in the second case above. In some environments, the subject is realized phonetically with a mid tone, which results from a HH dissimilation rule (see section 2.2).

Fourth, Goemai has two constructions without overt subjects. In one case – the singular imperative – the tonal pattern is identical to that of a 2SG construction (i.e., LH). The use of a low tone pattern in imperative and subjunctive contexts is well attested in West Chadic languages (Burquest 1974; Frajzyngier

1993: 32–42; Jungraithmayr 1963a: 19–22; P Newman 2000: 262–269). In the other case, the pronoun /ní/ ‘3SG’ is omitted because it is recoverable from the linguistic context (see chapter 8, section 1.1). The tonal pattern, however, is not identical to that of a 3SG construction: instead, the verb receives its lexical tone. Similarly, it receives its lexical tone if the nominal subject has a low or falling tone.

Table 18. Paradigm for the verb unmarked for TAM

(1) Cliticized rising-tone pronouns:				
(1a) /hən/ ~ /ń/ 1SG				
(1b) /gǎ/ 2SGM, /jǐ/ 2SGF, /mǎ/ 1PL, /gǔ/ 2PL, /zǐ/ SGM.LOG.SP, /dǎ/ SGF.LOG.SP, /dǔ/ PL.LOG.SP				
e.g.	hən=kàt záp	hən=kàt lá	hən=k ^h àt záp	hən=k ^h àt lá
	gǎ=kàt záp	gǎ=kàt lá	gǎ=k ^h àt záp	gǎ=k ^h àt lá
(2) Non-cliticized rising-tone pronouns (and nouns): /mǔǎp/ 3PL, /g ^w ǎ/ SGM.LOG.AD, /pǎ/ SGF.LOG.AD, /n ^w ǎ/ PL.LOG.AD				
e.g.	mǔǎp kát záp	mǔǎp kát là	mǔǎp k ^h át zǎp	mǔǎp k ^h át là
(3) High-tone pronouns (and nouns): /ní/ 3SG				
e.g.	ní= ~ nī kát záp	ní= ~ nī kát là	ní= ~ nī k ^h át zǎp	ní= ~ nī k ^h át là
(4) Zero pronouns:				
(4a) Ø 2SG.IMPERATIVE				
(4b) Ø 3SG (also low-tone and falling-tone nouns)				
2SG	kàt záp	kàt lá	k ^h àt záp	k ^h àt lá
3SG	kát záp	kát là	k ^h àt záp	k ^h àt là

In addition to the patterns illustrated in table (18), a number of further observations can be made. The table only depicts verbs that have a level tone: verbs that have a falling tone behave correspondingly, but verbs that have a rising tone invariably trigger a high tone in the following noun (see the discussion of example 2a above). Furthermore, the table only depicts transitive verbs followed by direct objects. But the tone also spreads to particles, adverbs, prepositional phrases and conjunctions. Example (3a) illustrates its spread to the first syllable of the particle /gǎp^hé/ ‘THAT/WHEN’. Similarly, the pattern is

not constrained by pauses, i.e., it operates across pauses and intonation breaks (as in 3b). The only context where tone-spreading is blocked is in the case of verb serialization and juxtaposed clauses: e.g., the verb /nǎ/ ‘see’ would trigger a high tone in the following expression, yet the form /muəp/ ‘3PL’ in (3c) does not receive this expected high tone.

- (3) a. *Mə=màn gáp^{hə} ní s^wà hà:m bá.*
 1PL.S=know THAT/WHEN 3SG.S:CONS drink water NEG
 ‘We didn’t know that he drank water.’ (D01CLU)
- b. *k^húmá mə=màn / gáp^{hə} (...).*
 also 1PL.S=know THAT/WHEN
 ‘and we know that (...).’ (D00JPEOPLE)
- c. *nī ná muəp há:r muəp há:r (...).*
 3SG.S see 3PL.S gnaw 3PL.S gnaw
 ‘Okay, he saw (it): they ate (it), they ate (it) (...).’
 (D00EWITCH3)

Table (18) illustrates monosyllabic lexical items. While Goemai words preferably consist of one syllable (see section 2), there are also some disyllabic words. In the case of disyllabic verbs, both syllables are affected in the same way (as illustrated for /káləŋ/ ‘hear/smell’ in 4a and 4b).

- (4) a. *Hən=kələŋ bə=dè k^hút gá.*
 1SG.S=hear/smell HOW/WHERE=exist talking 2SGM.POSS
 ‘I heard the meaning of your talk.’ (C00JMQUEST3)
- b. *muəp káləŋ də̀ə (...).*
 3PL.S hear/smell voice:GEN
 ‘they heard the voice of (...).’ (C00ANYOUTH1)

In the case of disyllabic nouns and other expressions following the verb, the high tone spreads to the first syllable only, possibly triggering a downstep in the next syllable. For this reason, the LH-tone expression /látəŋ/ ‘fruit (SG)’ surfaces with a falling HM pattern in (5a). The same pattern holds regardless of the nature of the syllable, e.g., it is also observed in the case of prenasalized words such as /^hndá/ ‘father’ (as in 5b).

- (5) a. *dá nà lá-tāŋ gə̀-lāŋ.*
 come see child(SG)-tree NOMZ(SG)-hang/move(SG)
 ‘(He) saw here a fruit hanging.’ (R99DFROG)
- b. *Hən=màn ʼndā (...).*
 1SG.S=know father
 ‘I know the father (...).’ (D00JPEOPLE)

Finally, table (18) illustrates the verb unmarked for TAM. The other TAM paradigms operate in similar, yet slightly different, ways (see chapter 7 for the full paradigms), resulting in a general LH tone pattern for verbal clauses.

Subject pronouns and nouns are the most prominent triggers for high-tone spreading. Other common triggers are clause-initial conjunctions and particles that spread their high tone to the following expression (e.g., the particle combination /(*gə̀-*) *pʰé* ~ *fʰé*/ ‘THAT/WHEN’ in 6a and 6b; the particle /*dé*/ ‘SO.THAT’ in 6d; or the conjunction /*shái*/ ‘then/only’ in 6e). Similarly, consequence clauses receive an initial high tone (as in 6c) – even though there is no overt clause-initial conjunction that could have triggered such a high tone. In all cases, the first syllable of the clause receives a high tone: the first syllable of a subject pronoun (in 6a and 6b), a subject noun (in 6c), a TAM particle (in 6d), or a verb (in 6e). The spreading high tone then triggers further changes: if the expression was originally realized low, a following high tone is realized as mid (i.e., as a downstepped high tone) (as /*jóŋ*/ ‘call’ in 6a, and /*tóŋ*/ ‘sit’ in 6d). If the expression was originally realized high, no changes occur and the following words receive their lexical tones – this also holds true in the case of the high-tone pronoun /*ní*/ ‘3SG’ (in 6b), which would normally have spread its high tone to the following verb.

- (6) a. *pʰè gə̀pʰé muáp jōŋ zāp*
 place THAT/WHEN 3PL.S:CONS call children(PL)
mə̀-dà:s (...).
 NOMZ(PL)-men(PL)
 ‘the place where they call the male children (...).’ (D01CLU)
 (From: *Muə̀p jóŋ zāp mə̀dà:s.*)
- b. *Gə̀fʰé ní màn tʰásʰà=hòk (...).*
 THAT/WHEN 3SG.S:CONS take bowl=DEF
 ‘When she picked up the bowl (...).’ (C01FGHJARAM6)
 (From: *Ní máŋ tʰāsʰà=hòk.*)

- (8) a. *mán=dê* *dí (...)*.
 1PL.S=exist LOC.ANAPH
 ‘We are there.’ (D01CLU)
 (From: Măn=(^ˈ)dê dī.)
- b. *mát* *dà=gùrùm (...)*.
 woman(SG):GEN SPEC=person
 ‘the wife of someone (...).’ (N01ATIME)
 (From: Mát (^ˈ)dà=gùrùm.)

Summarizing this discussion, it can be said that tone serves an important grammatical function in that it marks person / TAM constructions and some complex clauses. In most cases, the tonal changes can be related to the lexical tone of the (pro-) noun and conjunction, and its interaction with the lexical tones of TAM particles, verbs and nouns. However, such an explanation is not always possible: as mentioned above, the origin of the high tone in consequence clauses cannot be explained in this way.

The grammatical importance of tone is also reported for other Angas-Goemai group languages (Burquest 1974; Frajzyngier 1993: 32–42; Jungraithmayr 1963a: 19–22), but the functions are not identical to those in Goemai: tone frequently serves TAM functions in other Angas-Goemai group languages – but it does not seem to distinguish verbal paradigms according to person / number categories; nor does it seem to play a role when forming complex clauses. Furthermore, a spreading of tone as discussed in this section has not been reported for other Angas-Goemai group languages. On the contrary, grammars report that tone is very stable in Northern Angas-Goemai (Burquest 1974). While it is true that grammatical tone plays an important role in Goemai, it also has to be noted that these constructions are usually not marked by tone alone: in most cases, tone complements a segmental marker. Furthermore, grammatical tone very frequently obscures lexical tone, and gives identical contours to tonally distinct lexical items, further restricting the importance of lexical tone.¹⁹

19. The stress patterns in Goemai are inadequately understood and need further research. Tone interacts with stress in that stress tends to fall on high-tone syllables (see Burquest 1971 for a similar observation in Angas). Furthermore, certain constructions (such as the presentative) require a pitch-register adjustment, realizing high tones much higher than usual.

1.5. A note on the orthography

This section briefly discusses the motivation for the orthographic conventions adopted throughout this book (see table 2 in section 1 above for a summary).

The contrast between aspiration and non-aspiration is indicated by adding an apostrophe to the non-aspirated consonants. This convention should not be taken to mean that the non-aspirated series is more marked than the aspirated one.²⁰ Instead, the convention was adopted to mirror Sirlinger's (1937, 1942, 1946) orthography (which marks most non-aspirated consonants with a dot or line under the letter). For the same reason, implosives are represented as voiced stops followed by an apostrophe. The apostrophe is further used to represent the glottal stop preceding vowels. It is only ever written in word-medial position (to avoid confusion about the syllable structure). At the request of the speakers, the velar nasal is written *ngh* in the very few cases where it occurs in initial position (to avoid confusion with a nasal plus stop sequence), but *ng* in final position. Notice also that the Hausa letters *k* and *ts* are used to represent the ejectives /k'/ and /s'/ in Hausa loans.

Secondary articulation is represented as illustrated in table (19). The sound [ɸ] is phonetically very distinct from labialization, and is therefore written with a distinct symbol, even though it occurs in predictable environments. But notice that it is not marked for tone to reflect its diachronic origin (the tone is marked on the following vowel instead). Prenasalization is alternatively realized as a syllabic nasal or as a modification of the following sound. In both cases, it is written with a simple *n* (subsuming the allophones [n], [ɲ] and [ŋ]) or *m* (subsuming the allophone [m]). Furthermore, such a nasal is always written with its own tone mark, thus distinguishing, e.g., prenasalized glides from labialized or palatalized nasals, or a sequence of nasal consonant plus vowel from a prenasalized vowel.

20. Phonetically, it can be argued that the aspirated series is marked (through aspiration). Notice also that older Goemai tend to realize both plain and glottalized consonants in Hausa loanwords as non-aspirated (see the examples under i). This pattern could suggest that the non-aspirated consonant is the unmarked variant. Younger Goemai speakers, by contrast, tend to realize loanwords with Hausa plain consonants as aspirated and Hausa ejective consonants as ejective, i.e., they adopt the Hausa realization.

(i)	Hausa	Older Goemai	Gloss
	<i>sáá</i> [sá:]	<i>s'á</i> [sá]	'make'
	<i>tsàkáání</i> [s'à.ká:.ní:]	<i>s'àk'áni</i> [sà.ká.ní]	'middle'
	<i>kúúsáá</i> [kú:.sá:]	<i>k'ús</i> [kús]	'near'
	<i>kúúsàà</i> [k'ú:.sà:]	<i>k'ús'à</i> [kú.sà]	'nail'

Table 19. Secondary articulation as represented in the orthography

labialization	[C ^w]	<i>C^w</i>	e.g., /n ^w ǎ/ = <i>nwǎ</i> ‘PL.LOG.AD’
	[C ^u]	<i>C^u</i>	e.g., /m ^u à/ = <i>m^uà</i> ‘liquid’
palatalization	[C ^J]	<i>C^y</i>	e.g., /n ^J ák/ = <i>nyák</i> ‘refuse’
prenasalization	[ⁿ C]	<i>nC</i>	e.g., / ⁿ hàt/ = <i>n^hàt</i> ‘wind’
	[ⁿ C _{GLIDE}]	<i>nC</i>	e.g., / ⁿ wàm/ = <i>n^wàm</i> ‘fish’
	[ⁿ ʔV]	<i>n^ʔV</i>	e.g., / ⁿ ʔát/ = <i>n^ʔát</i> ‘biting’

The vowels differ considerably across the three dialects, and thus pose difficulties for any orthography. The conventions adopted here are based on the K’wo and Duut dialects, as there is not enough data to verify the patterns reported for Dorok. Vowel length is rendered by single letters (representing short vowels) and by double letters (representing long vowels); vowels are always written short in the following two environments: when following a labialized or palatalized consonant, and when occurring in syllable-final position (to reflect the neutralization of vowel length in these environments). Vowel quality is represented as shown in table (2), but notice the following idiosyncrasies:²¹

- proto */E/ is written *e* in syllable-medial position, but *oe* in final position (to reflect its phonetic realization as [ə] in K’wo; and to contrast it with */E:/);
- /u:/ and [u] are written *uu* and *u* respectively;
- long /o:/ is written *oo* (to contrast it with /o:/); short [ɔ] and [o] are both written *o* (as the vowel quality is predictable).

Diphthongs are written as a sequence of vowels, although they are analyzed as either a variant of labialization or as a sequence of vowel plus glide.

Tone is represented as follows: high tone with an acute accent, low tone with a grave accent, falling tone with a circumflex, and rising tones with a caron. Whenever lexical and grammatical tone differ, the grammatical tone is written. Downstepped high tones are written as high; and tones arising from processes described in sections 2.2 and 3 below are not represented.

21. The symbols are adapted from the practical orthography developed by Sirlinger (1937, 1942, 1946), integrating some principles from a newer orthography (Ohikere and Tiemsan 1998, 1999; Tiemsan 1999). The adaptation is necessary because Sirlinger uses diacritics to represent some vowel qualities, which interferes with the marking of tone.

Throughout chapter 2, the IPA representation is used. From chapter 3 on, only the orthographical representation is used (unless stated otherwise).

2. Syllables, morphemes and words

This section describes the structure of syllables, morphemes and words, investigating both segmental (section 2.1) and suprasegmental processes (section 2.2). Many of these processes constitute phonological criteria for distinguishing free forms from affixes, clitics and members of compounds.

2.1. Segmental processes

The attested Goemai syllable structures are summarized in table (20). In patterns (i) to (iii), the initial consonant can be modified by secondary articulation. In pattern (iii), the VV sequence always consists of identical vowels, i.e., it represents a long vowel, thus contrasting with pattern (ii). This contrast in length is neutralized in cases of labialization and palatalization (see section 1.3); and it is neutralized in pattern (i) where vowel length depends on prosodic factors (see below). Pattern (iv) is a nasal consonant; it represents those cases where prenasalization is realized as a syllabic nasal (see section 1.2).

Table 20. Syllable structures in Goemai

	Syllable structure	Realized with secondary articulation				
(i)	CV	C ^w V	C ^j V	ⁿ CV	ⁿ C ^w V	ⁿ C ^j V
(ii)	CVC	C ^w VC	C ^j VC	ⁿ CVC	ⁿ C ^w VC	ⁿ C ^j VC
(iii)	CVVC			ⁿ CVVC		
(iv)	N					

The full consonant inventory occurs in initial position, and only a small subset is allowed in final position. Table (21) summarizes the attested consonants, and table (22) lists some minimal pairs. Notice that the distribution of fricatives and glides is limited: only the fricative /s/ is attested at all (albeit rarely); and the two glides occur infrequently. Recall that glides are realized as vowels in this environment, thus creating diphthongs (see section 1.3). Furthermore, a glide following a close vowel would result in a long vowel – and since vowel length in syllable-final position is neutralized (see below), such sequences then instantiate the CV syllable type.

Table 21. Syllable-final consonants

/p/	/t/	/k/
	/s/	
/m/	/n/	/ŋ/
	/l/	
	/r/	
/w/		/j/

Table 22. (Near) minimal pairs: Final consonant

	/i/		/u/		/a/	
/p/	ʃ ^h íp	tree type	k ^h ùp	lake	óáp	mix
/t/	dà.ʃ ^h ít	masquerade	k ^h ùt	talk	óát	able
/k/	ʃ ^h ík	body.2SGF.POSS	k ^h úk	bark	óák	here
/s/	?		k ^h ùs	rub	óàs	break off
/m/	ʃ ^h ím	skin	k ^h úm	foolish	óàm	stick
/n/	ʃ ^h ín	do	k ^h ún	count	ká.óán	face down
/ŋ/	ʃ ^h ínŋ	mortar	k ^h únŋ	leopard	óánŋ	red
/l/	ʃ ^h íl	shell	k ^h úl	left	óál	hard
/r/	gə.ʃ ^h ír	grave	k ^h úr	chieftaincy title	há.óár	wrap
/w/	?		?		óòu	arrow
/j/	?		?		ˈnóài.zwám	jackal

Following /u/, the labial stop /p/ is alternatively realized as the velar stop [k], e.g., /gúlùp/ ~ /gúlùk/ ‘bat type’. Since the converse pattern is not attested (i.e., there are many syllable-final velar stops that are never realized as labial stops), I assume /p/ to be the underlying consonant in these cases. Presumably, it assimilates to [k] in the environment of a back vowel. These assumptions are supported by the existence of derived forms that do not contain /u/ and, as a consequence, do not allow for the alternative forms, e.g., the plural of /súp/ ~ /súk/ ‘wash’ is /s^wáp/ (not */s^wák/).

The contrast between aspirated and non-aspirated obstruents is neutralized in final position. At the end of an intonational unit (often coinciding with a clause boundary in normal speech and a word boundary in slow speech), the obstruent is realized aspirated (as in example 9a). In other environments, it is realized non-aspirated and frequently also non-released. These environments include word boundaries in normal speech (as in 9b) as well as word-internal positions (as in 9c) (see Burquest 1971 for a comparable distribution in Angas).

- (9) a. *nī* *kʷál* *látʰ*
 3SG.S talk finish/ANT
 ‘he finished talking (lit. he talk finish)’ (A-02/02/99)
- b. *ní* *látʰ* *môu*
 3SG.S finish NEG
 ‘he didn’t finish (it)’ (A-02/02/99)
- c. *látʰkʷál*
 <NAME>
 ‘*Latkʷal* (lit. finish talking) (a name given to a child whose parents have been childless for a long time)’ (V04ANSEM1)

The attested syllable structures and the inventory of syllable-final consonants are both characteristic of the Jos Plateau area as a whole, occurring in Chadic and Benue-Congo languages alike (E. Wolff and Gerhardt 1977; see also Burquest 1971; Frajzyngier 1993: 3–32; Jungraithmayr 1963a). They are unlikely to be borrowings from either Chadic or Benue-Congo, as present-day languages of both families tend to have syllables that end in (long or short) vowels. For Proto-Chadic, P Newman (1977a) reconstructs some syllable-final consonants, but they differ from those attested on the Jos Plateau. It is therefore generally assumed that Jos Plateau languages have lost the final vowel of polysyllabic morphemes, resyllabified the remaining sounds and imposed restrictions on the consonants now occurring in final position. In particular, it is likely that a devoicing rule was applied: in most languages, no voiced obstruents are allowed in final position. The languages differ mainly in whether or not they allow for fricatives and glides in this position.

Goemai words predominantly consist of one morpheme, and morphemes predominantly consist of one syllable. And although there are polysyllabic words and morphemes, most of them result from one of the following processes: derivations with non-productive plural affixes, partial reduplication, prefixation, cliticization and compounding. The remainder of this section illustrates polysyllabic words and morphemes in more detail.

The largest group of polysyllabic words follows the pattern $^{(n)}C^{(w/j)}V.CVC$. The two vowels are – with very few exceptions – identical; the word-initial and -final consonants follow the same distribution as in monosyllabic words, but the medial consonant is nearly always a liquid (some instances of /b/, /b/, /w/ and /j/ are also attested). Semantically, all words denote plurality or intensity. This includes plural verbs that mark plurality in one of their arguments (as exemplified in 23a) as well as verbs that describe iterative states-of-affairs (in 23b). In addition, many verbs that denote property concepts follow the same pattern (in 23c). It is possible that these verbs (originally) coded intensity and

are related to ideophones – many of which occur in this group, too (in 23d). Finally, this group contains many nouns that refer to collectives and masses (in 23e). Given their consistent semantics, it is very likely that this group of polysyllabic words exhibits evidence for an old plural formative.²²

Table 23. An old plural formative

(23a)	/tʰ.ləŋ/ ‘pluck (PL)’, /kʰ.ʁán/ ‘face down (PL)’, /gʰ.ráp/ ‘divide (PL)’
(23b)	/ʁí.ríŋ/ ‘roll’, /hà.rám/ ‘harvest, cut with scythe’, /mʰ.á.láp/ ‘shine, flicker’
(23c)	/bá.lárŋ/ ‘hot’, /dú.lúk/ ‘blunt’, /sʷ.à.làk/ ‘pointed’
(23d)	/pʰ.á.rát/ ‘suddenly’, /ʃ.lím/ ‘very black’, /wʰ.rák/ ‘boiling hot’
(23e)	/fʰ.ó.rém/ ‘knee(s)’, /ʃ.á.ráp/ ‘fish’, /há.wàp/ ‘broth, pepper soup’

Another source for polysyllabic words is partial reduplication to derive adverbs from property verbs (see chapter 5, section 2.3).²³ In this case, the initial consonant is reduplicated to the left and a low-toned vowel /ə/ is inserted following it. The reduplicated consonant never occurs with any secondary articulation (see section 1.2), and implosives occur in free variation with voiceless non-aspirated stops in this environment (as in table 24).

Table 24. Partial reduplication

Simple form		Reduplicated form	
ḍŋ	be good, beautiful (v.)	ḍə.ḍŋ ~ tə.ḍŋ	beautifully (adv.)
ḅáj	become/make red (v.)	ḅə.ḅáj ~ pə.ḅáj	redly (adv.)

Finally, polysyllabic words arise from prefixation, cliticization and compounding. All prefixes have the shape CV (excepting a nasal prefix N). Pro- and enclitics tend to also have this shape: those that occur in cliticized form only have the shape CV; those that occur both cliticized and non-cliticized al-

22. It is possible that the different consonants and vowels carry different semantic nuances, e.g., /-ara-/ and /-ala-/ are most frequently attested with plural verbs; /-iriŋ/ and /-iliŋ/ seem to be connected to repetitive movement; and forms ending in /-k/ are usually found with property-denoting verbs and ideophones. Plural formatives are discussed in more detail in chapter 4, section 1.2.

23. Fully reduplicated forms are rare, and full reduplication is not a productive process. It usually occurs as a discourse strategy for reasons of emphasis.

low for different shapes, but in all cases, the cliticized form has lost some phonetic substance. Examples (10a) to (10c) illustrate some such clitics, together with their non-cliticized counterparts.

- (10) a. $\text{'n=t}\dot{\text{a}}\eta$ $k^h\dot{u}t$ $k^h\dot{u}t$ (...). cf. /hě́n/ ‘1SG’
 1SG.S=IRR talk talking
 ‘I will talk (...).’ (D00JANIMAL6)
- b. $g\dot{\text{a}}p^h\acute{\text{e}}=ʔ\acute{\text{a}}p$ $b\acute{\text{e}}$ (...). cf. /m\ddot{u}\check{\text{a}}p/ ‘3PL’
 THAT/WHEN=3PL.S:CONS produce(PL)
 ‘when they gave birth (...).’ (D00JLAZINESS)
- c. $m\ddot{u}\check{\text{a}}p$ $f\acute{u}$ $\text{u}\acute{\text{a}}s^h\acute{\text{a}}k$ $m\acute{\text{e}}:t$ $m\acute{\text{e}}:t$. cf. /h\text{ɔ}k/ ‘DEF’
 3PL.S scatter bone=DEF REDUP.aimless
 ‘they scattered the bones aimlessly.’ (H00JANCESTOR1)

In the case of compounds, all possible syllable structures are attested. Word-medial consonants are either syllable-initial (showing no restrictions) or syllable-final (following the restrictions outlined in table 21 above). In addition, the following two changes affect word-medial consonants:

First, consonant clusters tend to be simplified. If the first consonant is not a nasal, this consonant tends to be lost: it can sometimes only be reconstructed (as in 25a), but in some cases, it still surfaces in slow speech (in 25b and 25c). If the first consonant is a nasal, it tends to assimilate to the place of articulation of the following consonant (in 25d). There is variation in that the original nasal still surfaces in some cases (in 25e and 25f), while assimilation is absent altogether in other cases (in 25g). It is likely that this variation reflects a diachronic development, indicating the relative age of the compound. Finally, if an open syllable is followed by a prenasalized consonant, the nasal is realized as part of the first syllable (as in 25e).

Second, a process of lenition is observed that affects intervocalic consonants: aspirated and non-aspirated voiceless stops are alternatively realized as fricatives (as in 26a), while implosives tend to be realized as voiced stops (as in 26b). Similar processes are described for other languages of the Jos Plateau (Burquest 1971: 21–27; Frajzyngier 1993: 3–32).

The discussion so far has centered on the realization of consonants within words and morphemes. In addition, there are processes that affect vowel length and vowel quality.

Table 25. Word-medial consonants

	Polysyllabic word		Origins					
(a)	ʃhà.gàŋ	‘village name’	ʃhàk	‘select’	gàŋ	‘deleb palm’		
(b)	jì.s ^h á:m ~ jìt.s ^h á:m	‘sleep (n.)’	jít	‘eye/face’	s ^h á:m	‘sleep (v.)’		
(c)	mà.ʃhà ~ màt.ʃhà	‘friend, lady’	màt	‘woman’	ʃhà:r	‘friendship’		
(d)	hàŋ.gè.dě	‘water’	hà:m	‘water’	gè	‘NOMZ’	(‘)dě	‘exist’
(e)	p ^h èn.6át ~ p ^h èm.6át	‘intestines’	p ^h è	‘place’	‘LOC’	6át	‘belly’	
(f)	dēm.téi ~ dèn.téi	‘already’	dēm	‘this time’	téi	‘yet’		
(g)	hà:m.ʃíŋ	‘gruel’	hà:m	‘water’	ʃíŋ	‘mix’		

Table 26. Intervocalic consonants

(26a)	tà.ká.jà ~ tà.xá.jà	hat
	gè.p ^h é ~ gè.f ^h é	that/when
	kà.pá ~ kà.fá	rice
(26b)	pè.6ít ~ pè.bít	later, earlier

As mentioned several times throughout this chapter, vowel length is only contrastive in syllable-medial position. In syllable-final position, this contrast is neutralized: all such vowels are realized short when they occur within a word, but long when occurring word-finally. This difference in realization is illustrated with the help of the first syllable of the compounds in table (27a). The same pattern is found in the case of those vowel phonemes that do not have any short counterpart, i.e. /ɛ:/, /o:/ and /ɔ:/ (see section 1.3): in non-final open syllables, they are realized short, e.g., [ʰgól.ló.bé:] ‘fish type’ Aside from the change in vowel length, an occasional simplification of diphthongs is also observed in this environment (as illustrated in table 27b).

Table 27. Final vowels and diphthongs (compounds)

	Realization in compound		Realization in isolation			
(27a)	p ^h uə.p ^h in	door (lit. mouth of hut)	p ^h uə:	mouth	p ^h in	hut
	jà.gù.rùm	twenty (lit. catch person)	jà:	catch	gù.rùm	person
(27b)	p ^h ə.p ^h in ~	door (lit. mouth of hut)	p ^h uə:	mouth	p ^h in	hut
	p ^h uə.p ^h in					
	p ^h ə.góŋ	upper lip (lit. mouth nose)	p ^h uə:	mouth	góŋ	nose

This process of vowel shortening is also observed during cliticization. Some pronouns such as /ní/ ‘3SG’ can occur either as independent words or as proclitics to the verb. They are realized long in the first case (as in 11a), but short in the second (in 11b). Non-pronominal forms are always realized long in this environment (as the homophonous /ní/ ‘elephant’ in 11c).

- (11) a. *nī:* *s^hú*
 3SG.S run(SG)
 ‘he ran’ (A-02/02/99)
- b. *ní=s^hú*
 3SG.S=run(SG)
 ‘he ran’ (A-02/02/99)
- c. *nī:* *s^hú*
 elephant run(SG)
 ‘the elephant ran’ (A-02/02/99)

Another type of change affects vowel quality. In particular, short non-stressed vowels of polysyllabic words tend to be realized as [ə] (see Frajzyngier 1993: 9–15 for a corresponding neutralization of vowels in Mupun). Schwa is by far the most common vowel in polysyllabic words – and although the quality of the original vowel can no longer be determined, some observations suggest that it was not schwa. First, partial reduplication does not reduplicate the original vowel but invariably inserts schwa (see table 24 above). Second, there are many clitics that are realized with schwa, but that derive from a form containing a different vowel (as illustrated in examples 12a and 12b; the clitic is written in boldface, and the original form with underlining). And third, there are correspondences within the Angas-Goemai group where the Goemai form has schwa, while other languages have different vowels (in 12c). But notice that a

subsequent process in Goemai occasionally assimilates schwa to the following vowel (in 12d).

- (12) a. *rú:* *lǎ=múk*
 enter(SG) home=3SG.POSS
 ‘(he) went (to) his **home**’
 cf.: *rú:* *ˈn-lú:* *múk*
 enter(SG) LOC-settlement 3SG.POSS
 ‘(he) went into his house’
- b. *là:* *lǎ=là:* *múk*
 produce(SG) DIM(SG):GEN=child(SG) 3SG.POSS
 ‘(she) gave birth to her **little child**’
- c. /lǎ.ɓáj/ ‘oryx (Goemai)’, cf. /lu.ɓáj/ ‘gazelle (Mwaghavul)’
- d. /pʰǎ.kún/ ~ /pʰù.kún/ ‘eight (lit. plus three)’, from /pʰǎ/ ‘give (imperative)’ + /kún/ ‘three’

Vowel length and vowel quality furthermore interact with stress in that a stressed open syllable – independent of its position within a word – is realized long and never as schwa. Instead, schwa is realized as [ɔ:] in this environment. Such stressed syllables are illustrated in (13a) and (13b) (written in boldface); each sentence also contains its non-stressed counterpart (written with underlining).

- (13) a. *Ǔ:* / *ǔ* *ʔǎ* *ǔ-ǔák/* *ǔǎn.*
 2SGM.I 2SGM.I FOC NOMZ(SG)-heart/neck bec.warm
 ‘**You, you** are of hot temper.’ (C00JMQUEST1)
- b. *muǎp/* *tʷót* *kǎ* *ǔ* *ǔ-ǔ:*
 3PL.S sit(PL) HEAD(SG):GEN food NOMZ-ADVZ-eat
 ‘they sit at (= are occupied with) **eating food**.’ (F00CFUAN)

This section has described a number of phonetic processes that apply to syllables, morphemes and words. These processes are reflected in the practical orthography as follows:

- Consonants in final position are written as illustrated in table (21) above (i.e., the presence or absence of aspiration is not noted).
- Wherever sounds occur in free variation, the underlying sound is written. That is, the following processes are not represented: simplified con-

sonant clusters; lenition of intervocalic consonants and reduplicated implosives; changes in vowel length and vowel quality in unstressed syllables; and vowel lengthening in stressed syllables. Notice that this only applies to sounds in free variation: if only one variant is attested, this variant is written – even if the process resulting in this variant may still be recoverable.

- Since the assimilation of nasals to following consonants is not entirely predictable, the nasals are written as produced by the speaker. The only exception is a nasal followed by a velar, which is predictably realized as [ŋg], [ŋk^h] and [ŋk], and hence written as *ng*, *nk* and *nk'*
- Affixes and clitics are written as part of the word throughout this grammar. However, in material produced specifically for Goemai speakers, some affixes and clitics are written as separate words (following existing orthographies).

2.2. Suprasegmental processes

The realization of tone is affected by the tonological environment both within words and across word boundaries.

In particular, the tones of light unstressed syllables tend to be assimilated if their underlying tone differs from that of the surrounding syllables (as illustrated in 14). This observation holds irrespective of word boundaries: in fast speech, the process applies across word boundaries; while in slow speech, even light unstressed syllables receive their underlying tone. It is thus likely that the assimilation is due to speakers not having enough time to reach the intended target.

- (14) *T'hàmt^his nǎ / tǎ-tát*
 folktale 1SG.POSS REDUP-propel/tell.folktale(SG)
tǎ-tát (...)
 REDUP-propel/tell.folktale(SG)
 ‘My folktale (is) being told, being told (...).’ (F00CKE)

In addition, there are two processes that are sensitive to word boundaries.

First, the high-tone spreading discussed in section 1.4 is affected by word boundaries. To summarize the discussion, the tone is spread to the entire word, displacing lexical tones to settle on the first syllable of the following word. If a contour tone is involved, the first part settles on all syllables of the first word, while the second part settles on all syllables of the following word, again displacing lexical tones to the right.

Second, a sequence of two or more high tones is dissimilated to a sequence of mid tone(s) plus a final high tone. This process takes place across word boundaries only (i.e., not within the word), and it is insensitive to syntactic constituents. For example, it can have scope over the subject and the verbs of a serial verb construction (as in 15a), over object and verb of a serial verb construction (as in 15b), or over subject, verb and object (as in 15c). See also Frajzngier (1993: 32–42) for a similar phenomenon in Mupun.

- (15) a. *lī:t lāp ʋák ˈnʔóŋ zí.*
 lion receive throw BACK SGM.LOG.SP.POSS
 ‘the lion₁ received (it) (and) threw (it) behind him₁.’ (F99DLIT)
- b. *Màŋ uās ɔuást.*
 take bone cause.lying(SG)
 ‘(He) took the bone (and) lay (it) down.’ (F00CAAS)
- c. *nī nā gúlùŋ lú ˈnɛ̀ (...).*
 3SG.S see dark.corner:GEN settlement LOC.ANAPH
 ‘he saw the dark corner of this house (...).’ (D00EWITCH4)

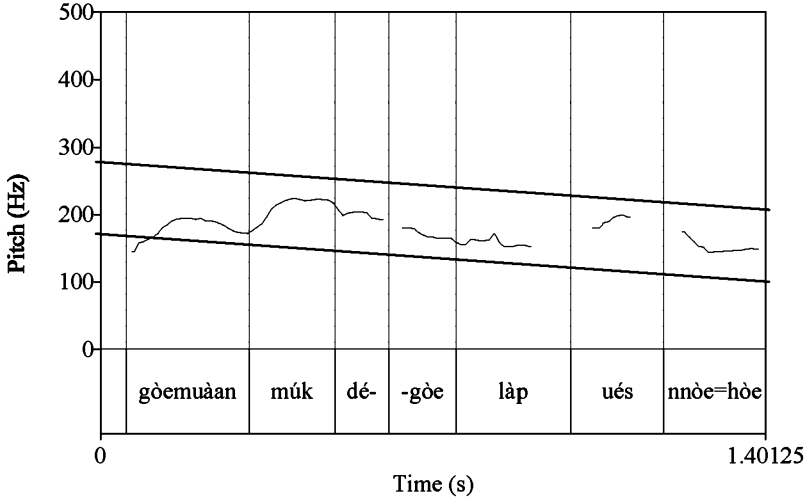
The suprasegmental processes described in this section are not reflected in the practical orthography: the lexical or constructional tone (if different) is written, but not the tone as it is realized phonetically.

3. Clauses

The clause is characterized by two phonetic processes: downdrift and changes at the final clause boundary. Notice that these two processes are characteristic features of the clause as a syntactic unit, and are not conditioned by intonation breaks or pauses. Although clauses are frequently demarcated by pauses, there are instances where the clausal unit does not coincide with a pause, suggesting that the clause is the relevant unit of analysis.

Downdrift in Goemai is triggered by low tones. That is, the immediately following high tone is realized lower, and the realization of all following high and low tones is adjusted accordingly. Frequently, a high tone is realized at the same level as a preceding low tone, and its height can only be determined by examining the following tones. Figure (5a) below illustrates such a downdrift contour. And figure (5b) illustrates the resetting of pitch at a clause boundary: the particle /gə̀tʰé/ ‘THAT/WHEN’ introduces a new clause (see chapter 8, section 4.1), and its initial low-tone syllable is realized at the same level as the final high-tone syllable of the preceding clause.

- a. *Gə-muà:n* *múk* *dé-gə* *láp* *uəs* *ʼnə=hə (...)*.
 NOMZ(SG)-go(SG) 3SG.POSS PUR receive bone LOC.ANAPH=exactly
 ‘When he went to take this very bone (...).’ (F00CAAS)



- b. *mútàné* *gəʰé (...)*.
 people(PL) THAT/WHEN
 ‘the people who (...).’ (D00EWITCH3)

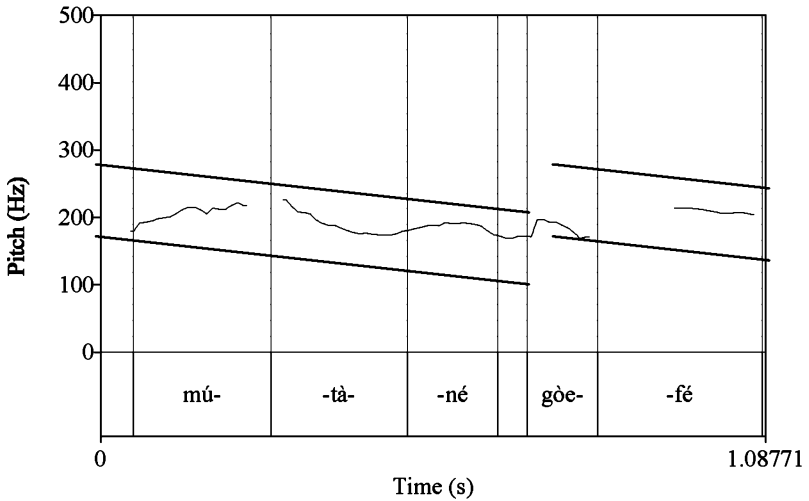


Figure 5. Downdrift contours

In addition to downdrift, the clause is marked by the following clause-final characteristics: if the last syllable ends in a vowel, it is realized long; if the last tone is high, it becomes falling; and if it is low, it becomes extra low. For example, (16a) illustrates the realization of the high-tone noun /uəs/ ‘bone’ as falling. In other environments, by contrast, the tone remains high: compare the realization of the same noun in (16b), occurring before a pause in mid-sentence (i.e., not at a clause boundary). Similar processes have been reported in more detail for Angas (Burquest 1971: 8, 1974).

- (16) a. *Gʷán* *dé-gà* *màŋ* *uəs*.
 howl:CONS PUR take bone
 ‘So (he) howled to take the bone.’ (F00CAAS)
- b. *Màŋ* *uəs* / *dá* *buât*.
 take bone come cause.lying(SG)
 ‘(He) took the bone (and) lay (it) down here.’ (F00CAAS)

The clause-level phenomena reported in this section are not reflected in the practical orthography.

4. Summary

This chapter has discussed aspects of Goemai phonology and tonology. Section 1 presented the inventory of phonemes and tonemes, illustrating consonants (1.1), secondary articulation (1.2), vowels (1.3) and tones (1.4), and introducing the practical orthography (1.5). Section 2 focused on segmental (2.1) and suprasegmental (2.2) processes involved in word formation, and section 3 outlined such processes for the level of the clause.

Goemai, like many other Chadic languages, has implosive consonants. In addition, the language has an unusual three-way contrast between voiceless aspirated, voiceless non-aspirated and voiced obstruents – unusual from both a Chadic and a typological perspective. It is not clear whether these consonants reflect a contrast in the proto-language or constitute independent developments. In morpheme-initial position, most consonants can occur with the secondary features of labialization, palatalization and prenasalization. These features result from the loss of a syllable, and consonants modified by them are not analyzed as separate phonemes. Unlike the consonants, the vowels show considerable variation across the three dialects as well as within the Angas-Goemai group. Generally, Goemai distinguishes between long and short vowels, but only the vowels /a/ and /a:/ provide clear minimal pairs. In other cases, vowel

length is either conflated with vowel quality (i.e., short /ə/ vs. long /e:/), or the vowels are basically long and only realized short in predictable environments (i.e., /ɛ:/, /o:/ and /ɔ:/), finally, both /i/ and /u/ have long counterparts, but minimal pairs are infrequent. It is assumed that at least some of the long vowels have developed recently in the environment of labialized or palatalized consonants, while others may have resulted from the loss of an intervocalic velar consonant. The syllable structure of Goemai is typical for Jos Plateau languages (but not for Chadic): it has mainly $^{(n)}C^{(w/j)}VC$ syllables, but also allows for $^{(n)}C^{(w/j)}VVC$ and $^{(n)}C^{(w/j)}V$ syllables. Similar to other Plateau languages, the full consonant inventory can only occur in initial position, while a limited inventory is attested in final position. The contrast in vowel length occurs in medial position, but is neutralized in final position: a final vowel is realized short when occurring within a word, but long when occurring word-finally; vowel length also interacts with stress in that a stressed open syllable is realized long.

Goemai has two level tones (high, low) and one contour tone (falling). The existence of a rising contour tone can be inferred, but it is generally not realized on a single syllable. Phonetically, a mid tone is present, but it does not have any phonemic status, as it results from downstep and assimilatory processes. Tone serves both lexical and grammatical functions. Nevertheless, its overall functional load is restricted: minimal pairs often belong to different parts of speech, grammatical tone obscures lexical tone (often to the extent that lexical tone is neutralized), and tone is usually not the only marker of a grammatical construction (but accompanies segmental markers).

Words predominantly consist of one morpheme, and morphemes of one syllable. With the exception of some synchronically non-analyzable words, most polysyllabic words result from one of the following processes: old derivations with non-productive plural affixes, partial reduplication, prefixation, cliticization, and compounding. In these cases, a number of phonetic processes are attested: simplification of consonant clusters, assimilation of nasals, lenition of intervocalic consonants and reduplicated implosives, and changes in the vowel length and vowel quality of unstressed syllables. Furthermore, some tonological processes are sensitive to word boundaries: the spreading of high tones, and the dissimilation of two high tones.

Finally, the clause as a syntactic unit is characterized by downdrift as well as suprasegmental changes at the clause boundary.

Chapter 3

Nouns and the noun phrase

This chapter discusses Goemai nouns and noun phrases. Section 1 introduces the structure of the noun phrase, and gives evidence for its existence as a phrasal unit. Section 2 focuses on nouns, i.e., on those elements that function as the heads of noun phrases. Section 3 describes the possibilities for conjoining nouns and noun phrases. Section 4 illustrates processes of nominalization, covering nominal expressions that function as heads of noun phrases as well as expressions that function as modifiers within noun phrases. Section 5 presents the non-nominal elements of the noun phrase. And section 6 summarizes the discussion.

1. Noun phrase

Goemai is a predominantly isolating language, and its nouns do not carry case-marking, nor are they (usually) marked for number, gender or noun class. Given their isolating nature, nouns thus cannot be identified on the basis of their morphology. Rather, they are identified by their ability to occur as heads of noun phrases, co-occurring with different types of modifiers. No other word class can occur in this function. In principle, all types of non-derived nouns can co-occur with all types of modifiers – in actual discourse, however, only common nouns are attested in this context with any frequency. (For the behavior of derived nouns, see section 4.) Table (28) illustrates the structure of the noun phrase, and cross-references to those sections that discuss the formal and semantic characteristics of each class of expressions in more detail. The table summarizes simple noun phrases only; complex nominal heads and conjoined phrases are discussed in section 3. The twelve subgroups in table (28) are identified on the basis of co-occurrence possibilities: members of one subgroup cannot co-occur, while members of different subgroups co-occur in the order depicted in the table. Examples of such co-occurrences are given throughout this chapter.

The existence of the noun phrase as a phrasal unit can be shown in two contexts (see section 1.1 in chapter 4 and section 1 in chapter 5 for other phrasal units). First, phrasal clitics always cliticize to the beginning or end of a phrase (see chapter 6, section 2.1 on clitics). For example, the enclitic *=hòe* ‘exactly’ cliticizes to the head noun in (1a), but to the locative anaphor in (1b). Conversely, the proclitic *kó=* ‘any/every’ cliticizes to the first element of the noun phrase (e.g., the specific-indefinite article *índòe=* in 1c).

Table 28. The structure of the noun phrase

Pre-head	1	quantifier	section 5.1
	2	associative plural	section 5.2
	3	diminutive	section 2.5
	4	specific-indefinite	section 5.3
Head	5	noun	sections 2 – 4
Post-head	6	nominalized verb phrase	section 4.3
	7	free possessive pronoun	section 2.4
	8	modifying construction	section 4.2
	9	nominalized clause	section 4.4
	10	demonstrative	section 5.4
	11	locative anaphor	section 5.5
	12	definite article	section 5.6

- (1) a. *Muèp shát [shát]_{NP}=hòe n-ní /*
 3PL.S knead porridge=exactly COMMIT-3SG.I
hén=s'òe yì / hén=k'óóm yì.
 1SG.S:CONS=eat CONS 1SG.S:CONS=bec.strong CONS
 'They make porridge with it, and so I eat (it), and so I become strong.' (C00JMQUEST6)
- b. *Áás ònòe t'ò t'óng / hààr [ués*
 dog LOC.ANAPH lie(SG) PROGR gnaw bone
ònòe]_{NP}=hòe yì.
 LOC.ANAPH=exactly PROGR
 'This dog lies chewing this bone.' (F00CAAS)
- c. *Hèn=màn kó=[òdòe=gòe-mì*
 1SG.S=know any/every=SPEC=NOMZ(SG)-be.related(SG)
mén]_{NP} d'è t'én s'úk sán yì
 1PL.POSS exist PROGR wash(SG) body.1SG.POSS PROGR
bá.
 NEG
 'I don't know any relative (of) us (who) was washing my body (when I was a child).' (C00JMQUEST3)

Second, Goemai has particles that overtly mark the final boundary of a direct object noun phrase or verbless clause complement noun phrase (see chapter

7, sections 4.1 and 4.2; and chapter 8, section 4.4). One such particle is the polysemous particle *yì*, coding consequence (in 2a) and progressive aspect (in 1b and 2b). Expressions that precede this particle are part of the noun phrase, while those that follow it are outside the noun phrase, e.g., adverbs (as *díp* ‘all’ in 2a) or prepositional phrases (as *nd'ùùn s'éít* ‘in the bush’ in 2a). The distribution of such particles is invariable, and Goemai speakers observe the rules for their placement even during complex utterances, hesitations and repairs. For example, the speaker in (2b) first utters a progressive clause without a direct object noun phrase, but then adds such a noun phrase as an afterthought – repeating the particle *yì* to indicate its direct object status.

- (2) a. *Liit / à tóe [lòng jàp lwá]_{NP}*
 lion FOC EMPH chief:GEN DIM(PL):GEN animal/meat
yì [díp]_{ADV} [nd'ùùn s'éít]_{ADV}.
 CONS all INSIDE:GEN bush
 ‘The lion (is the one who) is the chief of all the little animals in the bush.’ (F99DLIIT)
- b. *Màshà tóe d'yèm t'óng pil yì /*
 lady EMPH stand(SG) PROGR watch PROGR
[bì gòe-fàrú]_{NP} yì.
 thing NOMZ-happen PROGR
 ‘The lady stands watching (it), the thing that happens.’
 (R01NSTAGE)

Noun phrases are unmarked when occurring in the following syntactic functions: subject of intransitive, transitive and ditransitive constructions (in 3a, 3b and 3c respectively), direct object (in 3b and 3c), secondary object of ditransitive constructions (in 3c), and subject and complement of non-verbal clauses (in 3d). In all other functions, they have to be overtly marked by prefixes, prepositions or spatial nominals (as *lú* ‘settlement’ in 3e) (see chapter 5 on adverbials).

- (3) a. *[ndá=hók]_S míút.*
 father=DEF die(SG)
 ‘The father had died.’ (D00EWITCH1)
- b. *[Áás]_A kát [ngògàn=hòk]_O bá.*
 dog find ring=DEF NEG
 ‘The dog didn’t find the ring.’ (F00JNAAN)

- c. *Á bì gòe-sá tóe / [Náán]_A / póe*
 FOC thing NOMZ-make EMPH God give
[kó=wúròe]_O / [bì gòe-s'óe múk góe
 any/every=who thing NOMZ-eat 3SG.POSS COMMIT
puóe múk]_O.
 mouth 3SG.POSS

‘(This) is the reason (why) God gave each one (his own) things to eat with his (own) mouth.’ (D00JANIMAL7)

- d. *[Páng]_{VCS} / à [wò gòe-f'yér]_{VCC}.*
 puffadder FOC snake NOMZ(SG)-bec.big(SG)

‘The puffadder is a big snake.’ (F00JGOESEM)

- e. *Muèp búk [n-lú]_{ADV}.*
 3PL.S return(PL) LOC-settlement

‘They returned to the village.’ (D00EWITCH3)

2. Nouns

Nouns form the only word class that functions underived as the head of a noun phrase. They cannot function as modifiers within a simple noun phrase, nor can they function as the heads of predicates. They can, however, enter genitive constructions, forming complex heads (see section 3).

Most Goemai nouns have concrete reference (referring to humans, animates and inanimates), and there is a scarcity of nouns expressing activity concepts (such as *sh'it* ‘work’) and abstract concepts (such as *móós* ‘hospitality’). In fact, a large proportion of Hausa loanwords are abstract nouns, e.g., *ázáishé* ‘meaning’ (from Hausa *ázáncíí* ‘meaning, sense’) or *lókàshí* ‘time’ (from Hausa *lókàcítí* ‘time’). Language-internally, the nominalization of verbs is the major source for creating activity and abstract expressions (see section 4.1). Furthermore, Goemai noun semantics is characterized by a high degree of semantic generality: most nouns are compatible with singular, plural and collective interpretations, some also with mass interpretations (see section 2.1); and many nouns do not distinguish between entities and their produce (see section 2.2). This section focuses first on common nouns, discussing the semantic and grammatical categories relevant to them: nominal number (section 2.1) and noun class (section 2.2). It then illustrates the other subgroups of nouns: names and titles (section 2.3), personal pronouns (section 2.4) and the diminutive (section 2.5). In addition to the nouns discussed in this chapter, Goemai has groups

of locational nouns (see chapter 5, section 2.2.3) and relational nouns (see chapter 5, section 4), which function both as nouns and as adverbials.

2.1. Common nouns: Nominal number

Chadic languages often have an elaborate system of morphological plural marking (Frajzyngier 1977b, 1997; P. Newman 1990a; see also P. Newman 2000: 430–465 and Hellwig and McIntyre 2000 for Hausa). By contrast, Chadic languages on the Jos Plateau tend to mark plural by means of an invariant particle that was grammaticalized from a 3PL pronoun (Jungraithmayr 1963a; E. Wolff and Gerhardt 1977). Goemai differs further from this pattern in that it does not have a general and obligatory plural marker. As such, overt number marking is often absent – nevertheless, the category of nominal number is present and relevant. It can surface in the following environments: (i) on the noun, (ii) as an agreement feature, and (iii) in an associative plural marker. In all environments, Goemai distinguishes between two number categories – termed singular and plural – although their semantic extensions differ.

First, number can be specified on the noun itself. Goemai marks number lexically in a handful of non-derived nouns referring to human beings and bodyparts. But notice that the reverse does not hold true: most human and bodypart nouns are unmarked for number. An exhaustive list is given in table (29).

Table 29. Nouns marked for number

Singular	Plural
<i>kwárám</i> ‘slave’	<i>shárám</i> ‘slaves’
<i>k’én</i> ‘mother’s brother, sister’s child’	<i>k’án</i> ‘mother’s brothers, sister’s children’
<i>là</i> ‘child; DIM’; <i>yám</i> ‘son’	<i>jáp</i> ‘children; sons; DIM’
<i>mát</i> ‘woman, wife’	<i>shàràp</i> ‘women, wives’
<i>mìs</i> ‘man, husband’	<i>dààs</i> ‘men, husbands’
<i>réép</i> ‘girl, daughter’	<i>zàràp</i> ‘girls, daughters’
<i>k’á</i> ‘head’	<i>k’ék</i> ‘heads’
<i>yít</i> ‘eye, face; in the eye of’	<i>yát</i> ‘in the eyes of’

In addition, number is preserved in those nouns that are derived from verbs that lexically distinguish number (see section 4.1). In both cases, the forms are either suppletive or exhibit remnants of inherited plural morphology (see chapter 4, section 1.2 for the morphology). Notice also that all borrowed Hausa

nouns are specified for number, i.e., Goemai speaker would use both singular nouns (such as *mótò* ‘car’ from Hausa *móótò*) and plural nouns (such as *mótóshí* ‘cars’ from Hausa *móótóocíí*). In all cases, the singular noun refers to a single individual (as in 4a), while the plural noun refers to multiple individuals (in 4b) or collectives (in 4c). If a mass interpretation is possible (as with the diminutive morpheme that derives from the human noun *là* ‘child’ ~ *jáp* ‘children’), singular marking is observed (in 4d).

- (4) a. *Màt* *liit* *p'ét* / *dóe* *d'yém*.
 woman(SG):GEN lion exit(SG) come stand(SG)
 ‘The wife of the lion came out, (she) stood here.’ (F99DLIIT)
- b. *Muèp* *rwó* / *shàràp* *múk* *rwó* *òn-kilíp*.
 3PL.S enter(PL) women(PL) 3SG.POSS enter(PL) LOC-kitchen
 ‘They entered, his wives entered into the kitchen.’
 (F99OGOELONG)
- c. *Shàràp* *ná* *òn-t'óng*.
 women(PL) PRES PRES-sit(SG)
 ‘See the women sitting (as a collective).’ (C01FGHJARAM8)
- d. *zèm* *là=hààm* *gòe-d'wàng*.
 like DIM(SG):GEN=water NOMZ(SG)-bec.sour
 ‘he likes a little sour water (...).’ (F99DMATWO)

Furthermore, there are many nouns that probably contain an old plural formative: the sequence *-VrV-* (or, less commonly, another of the sequences introduced in chapter 2, section 2.1). These nouns are all compatible with collective or mass interpretations (e.g., *áráng* ‘ashes’, *gùrùm* ‘person, people’, *sh'áráp* ‘fish’), and it is likely that they were originally specified for number. Synchronically, however, this formative – at least when occurring in nouns – cannot be analyzed as coding a collective or a mass: most of the nouns are also compatible with count noun interpretations (for examples, see 6a and 6b); and conversely, many collective and mass nouns do not contain this formative (e.g., *hààm* ‘water’, *m̀p'ung* ‘dust’).

Aside from unproductive number-marking morphology, Goemai has a productive mechanism for deriving (pro-) nouns by means of the modifying prefixes *gòe-* (SG) and *mòe-* (PL) (see section 4.2). The resulting (pro-) nouns are thus overtly marked for number (as in 5). Their semantic extensions differ from the above examples in that singular marking – instead of plural marking – is observed for collectives (see the discussion of example 7b).

- (5) *ní à gòe-f'yér.*
 3SG.I FOC NOMZ(SG)-bec.big(SG)
 'it is a big one.' (D00JANIMAL11)

Speakers have extended the use of these two modifying prefixes to overtly mark some types of nouns. Example (6) illustrates this phenomenon: (6a) to (6c) show the unmarked noun *gùrùm* 'person, people' with reference to a single individual, multiple individuals and a collective respectively; while (6d) and (6e) exemplify the same noun overtly marked for number – the singular for a single individual and the plural for multiple individuals; a collective interpretation is not possible. This type of number marking is optional, and speakers prefer to mark only the plural (leaving the singular unmarked). This development is largely restricted to human nouns, but other types of nouns are attested, too, albeit infrequently (e.g., *t'éng* 'tree' in 6f).

- (6) a. *Ñdòe=gùrùm gòe-mìs ná ñ-d'é (...).*
 SPEC=person NOMZ(SG)-man(SG) PRES PRES-exist
 'See a male person is (there) (...).' (R01NSTAGE)
- b. *Tó / pè=hòk t'óng bì=múk / à dé*
 okay place=DEF sit(SG) thing=3SG.POSS FOC DIR
gùrùm mòe-dààs.
 person NOMZ(PL)-men(PL)
 'Okay, the place sits (= is) in its own way for male people (only).' (D01CLU)
- c. *d'ù gùrùm gòe-gám t'óng d'i*
 much/many person NOMZ-fill(SG) sit(SG) LOC.ANAPH
m-pè=hòk.
 LOC-place=DEF
 'many people sit (collectively) there assembled in the place.'
 (H01AJOS)
- d. *dé-gòe páár gòe-gùrùm*
 PUR send NOMZ(SG)-person
dé-gòe sh'è bòe=t'óng shín=hók.
 PUR learn/teach HOW/WHERE=IRR do=DEF
 'to send a person to teach (them) how to do (the work).' (TIEM-SAN 1999: III)

- e. *Á nyè-gòefé m̀òe-gùr̀ùm múk /*
 FOC because-THAT/WHEN NOMZ(PL)-person 3SG.POSS
muèp=muáráp díp.
 3PL.S=die(PL) all
 ‘(This) is because his people, they have all died.’ (D00EWITCH4)
- f. *d'á g̀òe=p'ét yì g̀òe=kàt*
 COND:CONS 2SGM.S=exit CONS 2SGM.S:CONS=find
gwén m̀òe-t'èng mùr̀ú=hòe d'yém
 ASSOC.PL NOMZ(PL)-tree:GEN fig.tree=exactly stand(SG)
d'i ñk'óng.
 LOC.ANAPH BACK
 ‘so when you go out, then you find kinds of fig trees (that)
 stand there in the back.’ (D01ALU)

Second, Goemai marks number on some elements within the noun phrase to agree with their head noun: in modifiers derived by the prefixes *g̀òe-* (SG) and *m̀òe-* (PL) (as *g̀òènk'óng* ‘young’ in 7a, *g̀òed'émèn* ‘good’ in 7b, *g̀òezòòm* ‘cold’ in 7c, and *m̀òenán* ‘big’ in 7d) (see section 4.2); and in the diminutive morpheme (as *jáp* in 7b) (see section 2.5). In addition, a recent development has seen the extension of the two modifying prefixes to optionally mark non-derived modifiers (see section 4.2). In all cases, the singular prefix is used for single individuals (in 7a), collectives (in 7b) and masses (in 7c), restricting the plural prefix to multiple individuals (in 7d). The semantic extensions of the diminutive, by contrast, pattern with those of nouns in that plural marking is also used for collectives. For example, the plural diminutive *jáp* and the singular modifying prefix *g̀òe-* co-occur in reference to the collective in (7b).

- (7) a. *Kúmá ní à yàm-núún nóe /*
 also 3SG.I FOC son(SG):GEN-mother 1SG.POSS
g̀òe-ñk'óng.
 NOMZ(SG)-bec.small/young(SG)
 ‘And he is my younger brother.’ (C01FGHJARAM3)
- b. *Jàp s'óe g̀òe-d'émèn ná ñ-d'è.*
 DIM(PL):GEN food NOMZ(SG)-good PRES PRES-exist
 ‘Little good food (items) are (there).’ (M00ANDISPOS12)

- c. *t'òng góe=zém gòe=s'úp góe hángòed'è*
 IRR 2SGM.S=like 2SGM.S=wash(SG) COMMIT water
gòe-zòòm bá.
 NOMZ(SG)-bec.cold NEG
 'you wouldn't like (to) wash (yourself) with cold water.'
 (C00ANJOS)
- d. *D'èmdè lwá mòe-nán / wúl*
 remainder:GEN animal/meat NOMZ(PL)-bec.big(PL) arrive
gòemé gòemé t'òng dóe tàl líit /
 one one IRR come ask/greet lion
t'òng búk yók.
 IRR return(PL) return.home(PL)
 'The remainder of the big animals arrived one after the other,
 would greet the lion here (and) would return home again.'
 (F99DLIIT)

Nominal number is also marked in the personal pronouns and hence in all pronominal reference to previously introduced nouns. Semantically, the pronouns pattern with the nouns in that the singular pronoun refers to single individuals and masses, and the plural pronoun to multiple individuals and collectives. Goemai usually does not permit a personal pronoun to refer back to a lexical noun phrase within the same clause. However, there is a recent development that allows for the co-occurrence of a lexical noun phrase with a cliticized 3SG or 3PL subject pronoun – suggesting that Goemai is developing a type of grammatical agreement (see section 2.4 for details on pronouns).

Third, Goemai marks nominal number by means of the associative plural marker. This marker originally marked associates of a person, but it has been extended to occur with inanimate and abstract entities. It is not (yet) a general or obligatory plural marker, and its use carries the semantic connotation of 'different kinds'. As such it can co-occur with any kind of plural count, mass or collective noun (see section 5.2 for details; see Corbett 2000: 101–111 for the dissociation of associative plural from number; see also Moravcsik 2003).

The discussion above shows that the semantic extensions of number marking differ across the different strategies. These differences are summarized in table (30).

Table 30. Semantics of number-marking strategies

	Reference to:			
	individual	mass	collective	individuals
Number-marking:				
- noun / pronoun	SG	SG	PL	PL
- modifying prefixes (<i>gòe-</i> , <i>mòe-</i>)	SG	SG	SG	PL

These semantic differences suggest that the following number categories are of grammatical relevance in Goemai: singular and plural, collective, and mass. A noun can be interpreted as a count noun (if it allows for singular and plural marking in reference to single and multiple individuals respectively), as a collective noun (if it allows for either singular or plural marking – depending on the strategy – in reference to groups), or as a mass noun (if it only allows for singular marking). In addition, mass nouns are distinguished from count nouns in enumeration contexts: they co-occur with measure terms (in 8a), while count nouns occur without them (in 8b).

- (8) a. *Muààn gòe s'éét k'úún=hók b̀hú g̀demé.*
 go(SG) SEQ buy/sell(SG) salt=DEF bag one
 ‘(He) went and bought the salt, one bag.’ (F99DSHOOM)
- b. *màt ndòe=g̀r̀ùm / b'è jáp*
 woman(SG):GEN SPEC=person produce(PL) children(PL)
vél / b'è jáp k'ún (...).
 two produce(PL) children(PL) three
 ‘the wife of someone gave birth to two children, gave birth to three children (...).’ (N01ATIME)

Despite the existence of four different number categories, Goemai nouns tend to be semantically general over these categories. For example, a noun like *lwá* ‘animal/meat’ can occur as a count noun with either singular reference to an individual animal (in 9a) or plural reference to two or more individual animals (in 9b), as a collective noun referring to a group of animals conceptualized as a unit (in 9c), and as a mass noun referring to the substance of meat or flesh (in 9d). Almost all Goemai nouns are compatible with both singular and plural reference (occurring in contexts 9a and 9b), many also with collective reference (occurring in contexts 9a to 9c) (including human nouns such as *g̀r̀ùm* ‘person, people’ in 6a to 6c), and some occur in all four contexts. In addition, there are nouns that exclusively denote substances (occurring in context 9d only). Given

this distribution, it is likely that most Goemai nouns are not lexically specified for the semantic features count (singular), count (plural), collective and mass. Instead, the other elements of the noun and verb phrase serve to restrict their interpretation (see also Allan 1980; see section 2.2).

- (9) a. *Díp / bá ñdòe=twá ñ-s'ét gòepé*
 all NEG SPEC=animal/meat LOC-bush THAT/WHEN
nyáng gòe kààt / bì bá.
 hate(SG) SEQ greet thing NEG
 ‘All (of them), there wasn’t a single animal in the bush who refused to greet the thing.’ (F00JFUAN)
- b. *Dé t'óng móe=twò ñdòe=jàp*
 SO.THAT IRR:CONS 1PL.S=kill(PL) SPEC=DIM(PL):GEN
twá mén yì ñ-ní.
 animal/meat 1PL.POSS CONS COMMIT-3SG.I
 ‘So that we would kill our little animals with it.’
 (C01FGHJARAM7)
- c. *muèp dók d'è ñ-tù lwá*
 3PL.S PAST.REM exist PROGR-kill(SG) animal/meat
à gòe mímòe?
 FOC COMMIT what
 ‘in the past, they used to kill animal(s) with what?’
 (C01FGHJARAM5)
- d. *Gúlùk sh'ài tép / sh'ài lwá (...).*
 bat.type show.pride blackness show.pride animal/meat
 ‘The *guluk* bat shows pride in (its) black (color), (it) shows pride in (its) flesh (...).’ (D00JANIMAL8)

In summary, Goemai has retained the category of nominal number – even though it has lost most Proto-Chadic number-marking morphology. The category is marked on some nouns, and it is visible in pronominal reference as well as in agreement within the noun phrase. Furthermore, a number of recent developments have taken place in this domain: the extension of the modifying prefixes to occur with nouns and modifiers (where they overtly mark number), the use of the 3SG and 3PL subject pronouns to cross-reference arguments on the verb, and the occurrence of the associative plural with inanimate and abstract referents. That is, Goemai seems to be in the process of redeveloping its lost Chadic number-marking morphology. In addition to the category of nomi-

nal number, Goemai has the category of verbal number. Verbal number marks the participant number of an event, thus interacting with nominal number (see chapter 4, section 1.2).

2.2. Common nouns: Noun classification

Many Chadic languages distinguish gender in their concordial agreement, and some have developed overt gender marking on the noun (see Jungraithmayr 1970 for Fyer; P Newman 2000: 200–215 for Hausa; Schuh 1998: 190–193 for Miya). Some West Chadic languages, by contrast, have largely lost this category (see Schuh 1989 for an overview). Goemai is one of these languages: it distinguishes gender neither in the noun nor in 3SG personal pronouns. But it does maintain a gender distinction in 2SG and logophoric pronouns (see section 2.4). In these cases, grammatical gender matches the natural gender, and personified animals in folktales are assigned to default genders (e.g., *fuán* ‘rabbit’ is male, but *shóóm* ‘guineafowl’ is female). Goemai also has a few derived and non-derived human nouns that have distinct feminine forms: in such cases, a neutral form (which refers to either gender) is opposed to a feminine form (which only refers to females). In the derived nouns, the feminine form is derived by means of the noun *màt* ‘woman’ (sometimes contracted to *mà*), e.g., *gòeshà* ‘friend (male or female)’ and *màshà* ‘female friend’ (from *shààr* ‘friendship’). In non-derived nouns, these are distinct lexemes, e.g., *là* ‘child (male or female)’ and *réép* ‘girl’. In addition, a few non-derived human nouns have distinct male and female forms (e.g., *ndá* ‘father’ and *núún* ‘mother’). But most human nouns are neutral, and speakers add the modifiers ‘male’ or ‘female’ if they intend to specify gender (as in 10).

- (10) *Tó / pè=hòk t'óng bì=múk / à dé*
 okay place=DEF sit(SG) thing=3SG.POSS FOC DIR
gùrùm m̀de-dààs.
 person NOMZ(PL)-men(PL)

‘Okay, the place sits (= is) in its own way for male people (only).’
 (D01CLU)

Goemai – like some closely-related languages (see Frajzyngier and Koops 1989; Mieke 1991) – shows evidence for remnants of unproductive Benue-Congo noun class prefixes that must have entered the language through language contact. More specifically, there is a large group of nouns that contains an initial nasal element, either a prenasalized consonant or an *nV*- morpheme (see also chapter 2, section 1.2). Semantically, such nouns tend to denote in-

sects, birds and other small animals (illustrated in table 31), but this pattern is also attested with some isolated kinship terms (e.g., *ndá* ‘father’, *nshik* ‘grand-child’), plant material (e.g., *m̄bái* ‘large calabash’, *nk'één* ‘thorn’), natural phenomena (e.g., *m̄p'ung* ‘dust’, *n̄hàt* ‘wind, air’) and terms for clothing and adornments (e.g., *m̄bànè* ‘loincloth’, *n̄gòegàn* ‘ring’).

Table 31. N- prefix in animal names

Semantic field	Some examples
Insects	<i>m̄fèt</i> , <i>m̄f'óop</i> , <i>n̄jálàng</i> , <i>n̄jír</i> , <i>n̄shì</i> ‘types of flies and bees’ <i>n̄gók</i> , <i>n̄gúút</i> ‘types of locust’ <i>n̄d̄īús̄n̄áán</i> , <i>n̄gyárák</i> ‘types of crickets’ <i>n̄d'yérkúm</i> , <i>n̄jà</i> , <i>n̄sh'aràp</i> , <i>n̄t'wálàng</i> , <i>n̄z̄īù̄m</i> ‘types of ants’ <i>n̄gét</i> , <i>n̄yít</i> ‘types of worms’ <i>n̄gúm</i> ‘beetle’, <i>n̄sh'am</i> ‘louse’ cf. also <i>n̄àsèr</i> ‘grasshopper; wife of rabbit (in folktales)’
Birds	<i>m̄bél</i> , <i>n̄gwáshù</i> ‘types of pigeons’ <i>n̄gyára</i> , <i>n̄kóelèng</i> , <i>n̄kyá</i> ‘types of birds of prey’ <i>n̄gúúl</i> ‘ground hornbill’, <i>n̄jòòn</i> ‘grey heron’, <i>n̄sh'óng</i> ‘sparrow type’, <i>n̄sh'óngkwáráp</i> ‘swift, swallow’, <i>n̄téng</i> ‘hoopoe’ cf. also <i>n̄àgú</i> ‘cattle egret’, <i>n̄ùk'úpsh'ip</i> ‘kingfisher’
Other animals	<i>m̄b'óólshàt</i> , <i>n̄d'in</i> ‘types of bats’ <i>n̄gólóbé</i> , <i>n̄gùmgóór</i> , <i>n̄wàm</i> , <i>n̄zàng</i> ‘types of fish’ <i>n̄dáp'ya</i> ‘rat type’ <i>m̄b'áizwám</i> ‘jackal’ <i>n̄d'òòlk'úún</i> ‘gecko’ cf. also <i>n̄àk'ù̄nsh'im</i> ‘chameleon’, <i>n̄óemuàt</i> ‘frog’

The origins of most of these words are unknown, and only some of them can clearly be traced back to Benue-Congo loans. Interestingly, some words were reconstructed for Proto-Chadic without an initial nasal, e.g., *m̄fèt* ‘mosquito’ (Proto-Chadic *brt) (Jungraitmayr and Ibrizimow 1994: 121). It is thus possible that – at some stage – Goemai borrowed patterns of noun categorization, not words.²⁴ But although the nasal element may be a remnant of a Benue-Congo

24. For a long time, a nasal prefix was assumed to be an innovation of Bantu languages, but researchers of the Benue-Congo Working Group and the Grassfields Working Group have established their existence outside of Bantu languages, and Mieke (1991) argues for their reconstructions for Proto-Benue-Congo.

noun class prefix, it does not constitute a productive system of noun classification in present-day Goemai: it does not trigger any concordial agreement, it is restricted to a few semantic domains, and present-day speakers often use prenasalized forms interchangeably with plain forms (e.g., *mbél* ~ *bél* ‘pigeon’). Closely related Chadic languages on the Jos Plateau make use of additional noun class prefixes (see Frajzyngier and Koops 1989), but their existence is not attested in Goemai.

The Chadic gender system and the Benue-Congo noun class system are of little or no importance in classifying present-day Goemai nouns. In recent times, however, Goemai has developed an elaborate system of nominal classification based on postural semantics. In this system, the nominal class is not marked on the noun itself but in deictic classifiers occurring obligatorily within the demonstrative word (see section 5.4) as well as in classificatory verbs occurring obligatorily in the progressive construction (see chapter 7, section 4.1), the locative construction (see chapter 8, section 1.2), the presentative construction (see chapter 8, section 1.3), the ascriptive construction (see chapter 8, section 2.2), and different types of serial verb constructions (see chapter 8, section 3). The deictic classifiers and classificatory verbs are used to categorize referents in terms of their canonical position,²⁵ regardless of their current position. For example, animates canonically take *láng* ‘hang/move’, and this form is used in reference to them even in those cases where they are currently in a different position. As such, they exhaustively categorize the nominal domain, assigning each nominal concept to a category. Speakers can shift away from the canonical classifier to another classifier in order to draw attention to certain aspects of the current position, but this second use is pragmatically marked and carries specific implicatures. The classificatory categories and their extensional uses are summarized in table (32). For details and extensive discussions, see Hellwig (2002, 2003, 2006c, 2007b, 2007c).

The existence of this classificatory system is possibly motivated by Goemai noun semantics: Goemai has a large number of semantically general nouns that do not differentiate between a natural source and its (natural or man-made) produce (as *nshì* ‘bee/honey’ in 11a and 11b), or between an individual and a collective (as *t’éng* ‘tree/forest’ in 11c and 11d). Some other nouns are illustrated in table (33).

25. Notice that Goemai does not classify according to parameters such as dimensionality, verticality or extendedness (as shown to be of relevance in other classification systems, see Aikhenvald 2000: 176–183).

Table 32. Typical referents of the classificatory verbs and classifiers

Category	Referent	Examples
<i>láng</i> (SG), <i>léng</i> (PL) '(cause to) hang/move'	has potential to move (... is attached to Ground) is located in a place	animates, natural forces, suspended leaves and fruits (doorknobs, stamps) houses or roads in landscape
<i>t'óng</i> (SG), <i>t'wót</i> (PL) 'sit'	projects from Ground & supports itself in a stable way	containers, chairs (cars, tables)
<i>d'ú</i> (SG), <i>d'wár</i> (PL) 'cause to sit'	remains / stays at a place occurs in large numbers fits well into the Ground	crops kept in a barn flock of birds in the sky shoes fitting tightly on feet
<i>d'yém</i> (SG), <i>d'yám</i> (PL) 'stand'	projects from Ground & is supported by Ground	trees, walls, holes
<i>twám</i> ~ <i>twèt</i> (SG), <i>twát</i> (PL) 'cause to stand'	(... projects from Ground and is supported by its <i>sh'é</i> 'legs') is stationary	(tables, cars) hovering birds in air
<i>t'ó</i> (SG), <i>t'óerép</i> (PL) 'lie'	does not project from Ground in a stable way	masses, collectives, flexible objects, unfeatured objects
<i>b'úét</i> (SG), <i>d'úóe</i> (PL) 'cause to lie'		
(<i>n</i>) <i>d'ě</i> 'exist'	is in any other position	abstract concepts
<i>lóe</i> 'cause to exist'		(attached objects)

Ground Entity with respect to which a referent is located (following Talmy 1985, 2000).

() Elements in parentheses hold for some speakers only.

- (11) a. *Áás zák* *d'yém* *bì=jí*
dog also/however stand(SG) thing=SGM.LOG.SP.POSS
t'óng kúk / nshì *gòe-léng* *nd'ùùn*
PROGR bark bee/honey NOMZ-hang/move(PL) INSIDE:GEN

- sháng dwén yì.*
 bag PL.LOG.SP.POSS PROGR
 ‘The dog₁, however, stood in its₁ own way barking at the bees₁ that moved around inside their₁ bag.’ (R00AFROG)
- b. *Jì=d’uòe nshì k’á.*
 SGM.LOG.SP.S=cause.lying(PL) bee/honey HEAD(SG)
 ‘(He₁ said) he₁ has poured honey on top.’ (F99AMOESHAAR)
- c. *byààp t’éng d’yém d’ì.*
 pumpkin:GEN tree stand(SG) LOC.ANAPH
 ‘a pawpaw tree (lit. pumpkin tree) stands there.’ (D01ALU)
- d. *T’éng yúút t’ó sèk p’áng.*
 tree bec.accumulated lie(SG) BODY:GEN stone
 ‘The forest lies vast at the hill.’ (B00ADRAW4.24)

Table 33. Semantically-general nouns

(1) Natural source and produce	
<i>d’á</i>	calabash plant, fruit, vessel
<i>gang</i>	palm tree, fruit, leaf, mat
<i>lwá</i>	animal, meat
<i>nshì</i>	bee, honey
<i>sóól</i>	metal, money
<i>wàn</i>	red clay, brick
(2) Individual and collective	
<i>gùrùm</i>	person, people
<i>lú</i>	compound / house, village
<i>mààr</i>	millet stalk, millet
<i>néng</i>	cow, cattle
<i>p’áng</i>	stone, hill
<i>t’éng</i>	tree, forest

This type of general noun semantics makes it possible to use the same noun in reference to many different entities in the world (see also section 2.1 for

number categories and number-marking restrictions).²⁶ In all cases, contextual information then serves to convey the intended reading. In addition, the language has developed three grammatical strategies that allow speakers to systematically restrict the reference. One strategy is the extension of the modifying construction to many different grammatical contexts (see section 4.2). A second strategy is the use of generic nouns in noun-noun compound – reminiscent of class terms or noun classifiers (see section 3.1). And a final strategy is the extensive use of classificatory postural elements, as illustrated in (11a) to (11d). This last type of categorization is based on the observation that different entities occur in different canonical positions: animate entities canonically ‘hang/move’ (as ‘bees’ in 11a), while masses canonically ‘lie’ (as ‘honey’ in 11b); entities that are supported in their position through the Ground canonically ‘stand’ (as ‘trees’ in 11c), but collectives canonically ‘lie’ (as ‘forests’ in 11d).

Cross-linguistically, such a type of general noun semantics tends to co-occur with certain types of nominal classification. Ameka and Levinson (2007) propose that semantically general nouns are characteristic for languages that employ some form of postural elements for purposes of classification (see also Wilkins 2000: 179–186; Merlan et al. 1997: 82). And Broschart (2000) argues that a similar type of noun semantics is found in noun, possessive and locative classifier systems. This type of general noun semantics differs from the noun semantics reported for many numeral classifier languages. Such languages are often said to be characterized by a large number of mass nouns, i.e., many common nouns and nouns denoting artifacts are treated as mass nouns, not as count nouns (see especially the discussion in Lucy 1992). One function of the numeral classifiers is then to create an individual, bounded and contoured, unit that can be counted (Broschart 2000; Denny 1986; Greenberg 1990 [1972]; Grinevald 2000; Lucy 2000; Lucy and Gaskins 2001; Seiler 1986: 94–110). In Goemai, by contrast, only nouns denoting substances are unambiguously mass

26. It is difficult to decide whether such nouns are ambiguous or semantically general. Currently, there is no clear evidence for either analysis, and further research is needed. However, based on the following two considerations, they are tentatively assumed to be semantically general. First, polysemy tests of the kind proposed by Zwicky and Sadock (1975) do not show that these readings constitute different senses. Second, to analyze the nouns as ambiguous would make it necessary to posit separate senses for a majority of Goemai nouns. It is at least questionable whether an analysis in terms of such a regular polysemy can adequately reflect the lexicalization patterns in the language. Many Australian languages seem to have a comparable type of noun semantics, and Wilkins (2000: 179–186) analyzes such nouns as semantically general, arguing that they reflect a worldview based on the persistence of entities through transformation.

nouns, while common nouns (including artifacts) are usually count nouns, although they commonly receive collective and sometimes even mass readings (see section 2.1 above).

The semantic generality that is characteristic of Goemai nouns has not been described elsewhere for Chadic languages, and comparable forms of nominal classification are not attested either. It is likely that the Goemai pattern constitutes an innovation that is restricted to this language.

2.3. Names and titles

Goemai has a large repertoire of names for human beings, ethnic groups, religious groups and topography. These are treated as a semantically-defined subset of common nouns: like common nouns, they occur as the head of a noun phrase and can be modified by nominal modifiers, e.g., by the definite article (in 12a). But although modification is possible, names and titles only rarely occur modified in natural texts. Personal names and titles are additionally used as address terms (in 12b).

- (12) a. *Tó / yí=màn réép=hók zèm ní sòsáí /*
 okay 2SGF.S:CONS=know girl(SG)=DEF like 3SG.O well
 [*Patience=hòk*]_{NP} / *zèm ní sòsáí.*
 <NAME>=DEF like 3SG.O well
 ‘Okay, and so you know the girl liked him a lot, (lit. the) Patience liked him a lot.’ (D00EWITCH4)
- b. *Tó / Shályén / gòe=gàmà mímak /*
 okay <NAME> 2SGM.S=finish NOMZ.2SGM.POSS
hèn=rù mímààn.
 1SG.S=enter(SG) NOMZ.1SG.POSS
 ‘Okay, Shalyen, you have finished yours, I enter mine.’
 (C00JMQUEST2)

Present-day Goemai makes use of Hausa and English names, but traditional names are often descriptive phrases that describe salient properties of a referent (as illustrated in table 34).

Table 34. Examples of proper names

Name	Literal Gloss	Explanation
Humans		
<i>Lóngp'úán</i>	<i>lóng</i> <i>p'úán</i> chief remove(PL) 'the chief has removed (us)'	this child was born on the day the chief removed the family from their home
<i>Náánzém</i>	<i>Náán</i> <i>zém</i> God like 'God agrees (to it)'	it was God's wish that the child should be born
<i>Sh'àkùm</i>	<i>sh'à</i> <i>kùm</i> rattle:GEN <MASQUERADE.NAME> 'rattle of the masquerade'	the child was born on the day the <i>kum</i> masquerade performed
Ethnic groups		
<i>Dúús</i> 'Tiv'	<i>dúús</i> cricket 'cricket'	Tiv are said to resemble crickets because they file their front teeth
<i>Mòes'òeháás</i> 'Igbo'	<i>mòe</i> <i>s'òe</i> <i>háás</i> NOMZ(PL) eat flour 'those who eat (cassava) flour'	cassava flour is used in the staple food of the Igbo
<i>Yárbúkyók</i> 'Yoruba'	<i>yár</i> <i>búk</i> <i>yók</i> bird return(PL) return.home(PL) 'the birds returned home again'	a play on the Hausa word for Yoruba – <i>Yarbawa</i> – which translates into Goemai as 'the bird (SG) returned home again'

Table 34 (continued). Examples of proper names

Religious groups				
<i>Mòeb'óólnáán</i> 'Christians'	<i>mòe</i> NOMZ(PL)	<i>b'óól</i> beg/appeal	<i>Náán</i> God	describes the different ways of worshipping God
		'those who pray to God'		
<i>Mòetókmúút</i> 'traditionalists'	<i>mòe</i> NOMZ(PL)	<i>tók</i> practice	<i>múút</i> trad.religion	
		'those who practice traditional religion'		
<i>Mòet'éknáán</i> 'Muslims'	<i>mòe</i> NOMZ(PL)	<i>t'ék</i> fall(PL)	<i>Náán</i> God	
		'those who fall before God'		
Toponyms				
<i>Lù Nyú</i> 'Bakin Ciyawa'	<i>lù</i> settlement:GEN	<i>nyú</i> <TITLE>		this village is governed by the Nyu chief
		'settlement of the Nyu chief'		
<i>Ngòòtlóng</i> 'Demshin'	<i>nì</i> LOC	<i>gòòt</i> cave:GEN	<i>lóng</i> chief	this village was a hide-out for chiefs
		'at the cave of the chief'		
<i>Puòesh'íp</i> 'Bakin Kogi'	<i>puòe</i> mouth:GEN	<i>sh'íp</i> river		this village is located at a river
		'bank of the river'		

In addition, Goemai has an abundance of names for masquerades (such as *Màngáp* in 13a) and political titles (such as *Nyú* in 13b), but their composition is non-transparent. Like other nouns, they can be modified (as shown in 13a).

- (13) a. *Kúmá Màngáp* *dók* *yòòl* *yít*
 also <MASQUERADE.NAME> PAST.REM rise(SG) again
zák *bì=jí (...)*.
 also/however thing=SGM.LOG.SP.POSS

[*Màngáp* *ń̀nòè*]_{NP}=*hòè*.
 <MASQUERADE.NAME> LOC.ANAPH=exactly

‘And *Mangap* rose again in its own way (...). This *Mangap*.’
 (C01FGHJARAM7)

b. *Lòng* *K'wò* *lá* *hès* *Nyú* (...).
 chief:GEN <ETHNIC.NAME> COND pierce(SG) <TITLE>

‘When the chief of the K'wo (Goemai) installs the *Nyu* chief
 (...).’ (H99BTARIHI)

2.4. Personal pronouns

The free personal pronouns are analyzed as a subset of nouns: they occur in the same syntactic functions as nouns and co-occur with the same types of modifiers. Other sets of personal pronouns, by contrast, do not constitute nouns. Nevertheless, they are discussed together in this section for ease of comparison.

The personal pronouns are summarized in table (35). They do not distinguish case, and their syntactic function is determined by constituent order. They also differ tonally in their various syntactic functions: the rising tones of the independent pronouns are simplified to high and the rising tones of the subject pronouns are distributed over the subject-plus-TAM-plus-verb complex (see chapter 2, section 1.4), the free object pronouns are toneless (receiving the opposite tone of the preceding verb), and the possessive modifiers have a high tone. By contrast, the segmental shapes of the free pronouns, the possessive modifiers and the dependent pronouns are largely identical (and table 35 illustrates their overlap by means of shading). Most segmental differences are restricted to the dependent form: they are reduced phonetically, and one form (*yĩ* ‘2SGF’) shows assimilation to the preceding consonant – their reduction and assimilation probably results from their realization as clitics (see chapter 2, section 2 for phonological processes within the word).²⁷ In addition, the 1SG and 3SG possessive modifiers have unique forms. The free possessive and reflexive forms possibly contain remnants of old possessive suffixes, which are fused in present-day Goemai with the words ‘own’ (*m(k)) and ‘body’ (*z(k)). Both serve grammatical functions: ‘own’ is used to form the independent pos-

27. Notice that Goemai differs from many West Chadic languages in that the subject pronouns are not fused with the TAM morphemes (for a general discussion, see P. Newman and Schuh 1974; for descriptions of closely-related languages, see Burquest 1973; Frajzyngier 1993; Jungraithmayr 1963a; P. Newman 2000: 476–487; Schuh 1998: 186–190).

sessive pronouns, and ‘body’ to form the reflexive pronouns. Notice that there is some syncretism: the addressee logophoric set borrows its free possessive pronouns from the non-logophoric set, and uses its possessive modifiers to form reflexive pronouns; 3SG and 3PL also use their possessive modifiers to form reflexive pronouns – possibly because the original 3SG form *sék* has been re-analyzed as the general lexeme ‘body’, while the original 3PL form *shák* has been re-analyzed as the reciprocal form (see chapter 4, section 4.3 for details on reflexive and reciprocal forms).

Table 35. Personal pronouns

	Free (independent, subject, object)	Possessive modifier in NP	‘own’ (free possessive)	‘body’ (reflexive)	Dependent (subject)
1SG	hě̃n	nóe	màmà̃n	sán	hě̃n ~ ñ
2SGM	gõe	góe	màmák	sák	gõe
2SGF	yõe ~ yĩ	yóe	mímik ~ mímít	shík	yĩ
3SG	ní	múk	mímúk	(sék múk)	ní ~ Ø ²⁸
1PL	mě̃n	mén	mímén	sém	mõe
2PL	gwě̃n	gwén	mímúk (< *mímúk)	súk	gũ
3PL	mü̃ɛp	mü̃ɛp	mímü̃ɛp	(sék mü̃ɛp)	mü̃ɛp ~ ü̃ɛp
Logophoric pronouns					
SGM.LOG.SP	jĩ	jí	mímù̃m	sù̃m	jĩ
SGF.LOG.SP	dõe	dóe	mímát	sát	dõe
PL.LOG.SP	dwě̃n	dwén	mímù̃t	sút	dũ
SGM.LOG.AD	gwá	gwá	(mímák)	(sék gwá)	–
SGF.LOG.AD	pá	pá	(mímik ~ mímít)	(sék pá)	–
PL.LOG.AD	nwá	nwá	(mímü̃ɛp)	(sék nwá)	–

The first and second person forms have cognates in other Chadic languages (see Blažek 1995; Burquest 1986; Dolgopolsky 1988; Gouffé 1978; Kraft 1974). The only exception is the 1SG form: the nasal is commonly found within Chadic, but the glottal is not attested. The 3SG form is also common, but its origin is contested: Kraft (1974) and P. Newman (2000: 153–154) argue for a Proto-Chadic origin, but Schuh (1983) argues for a later grammaticalization

28. The 3SG form can be realized as zero if its referent is recoverable from the discourse (see chapter 8, section 1.1).

from a demonstrative pronoun. And the 3PL form is possibly a borrowing from a Benue-Congo language (E. Wolff and Gerhardt 1977). Logophoric systems are attested in closely-related Angas-Goemai languages (Burquest 1973; Frajzyngier 1985a, 1985c, 1993: 105–118; Jungraithmayr 1963a); and in the more distantly-related languages Pero and Kera (Frajzyngier 1985a, 1985c, 1989). However, given their overall scarcity within Chadic, they are likely to be innovations. It is not clear if this innovation is contact-induced: although some branches of Niger-Congo have logophoric systems (Hagège 1974; von Roncador 1988), such systems have not been reported for Benue-Congo languages spoken on the Jos Plateau. In any case, the immediate source for the logophoric pronouns within the Angas-Goemai group are native elements: Frajzyngier (1993: 118) hypothesizes that the LOG.SP set may have developed from demonstrative pronouns, while the LOG.AD set has clearly developed from nouns (in Mupun, *gwar* is related to the word for ‘man’, *pa* to ‘young woman’, and only the origin of *nuwa* is non-transparent). Since Goemai has cognate forms, it is likely that this innovation has already occurred at the level of Proto-Angas-Goemai. Furthermore, the development of the LOG.AD set seems to be more recent than that of the LOG.SP set: its nominal origins are still discernable, and it does not have bound possessive suffixes (in the free possessive and reflexive sets), which are presumably reflexes of an older pronominal system.

Free pronouns occur in non-verbal clauses (as *hěn* in 14a), in prepositional phrases and focused constituents, in object function (of both transitive and ditransitive verbs) (as *hěn* in 14b), and in subject function (as *hěn* in 14c and 14d). The possessive forms occur as modifiers within the noun phrase (as *nóe* in 14b), or they are bound to either of the two nouns ‘own’ and ‘body’ (in which case the whole form functions as a noun) (as *m̀m̀d̀d̀n* in 14c and *sán* in 14d). And the dependent subject pronouns are cliticized to the verb phrase (see the discussion below).

- (14) a. [*Hén*]_{VCS} [*à là=gùrùm*]_{VCC} / *hèn=wúl*
 1SG.I FOC DIM(SG):GEN=person 1SG.S=arrive
góe wéél.
 COMMIT worrying
 ‘I am a poor person (and) I arrive with worries.’
 (F00CGOEBETLA)
- b. [*̀ǹd̀á nóe*]_A / *k'yáp [hèn]*_O.
 father 1SG.POSS instruct 1SG.O
 ‘My father instructed me.’ (C00JMQUEST3)

- c. *Kúmá* [hèn]_A=t'èm [mímààn]_O (...).
 also 1SG.S=tell NOMZ.1SG.POSS
 'And I tell mine (...).' (C01FGHJARAM7)
- d. [*Hèn*]_A=s'ùk [sán]_O.
 1SG.S=wash body.1SG.POSS
 'I wash myself ~ my body.' (C00JMQUEST3)

Free pronouns (except when occurring in subject function) can be modified or conjoined with other noun phrases, e.g., with the modifying construction (in 15a), demonstrative, anaphoric and definite expressions (in 15b), or the specific-indefinite article (in 15c). Such co-occurrences are rare, but possible. Cross-linguistically, languages tend not to allow for the modification of pronouns at all, or – if they do – tend to allow for interpretations that differ from those of modified nouns (see, e.g., Bhat 2004: 37–57). For Goemai, this tendency is possibly true in the case of demonstrative, anaphoric and definite expressions: they serve to add emphasis to a pronominal referent (but not to a nominal referent). In other cases, however, the attested interpretations are identical to those of modified nouns.

- (15) a. *ńdòe=bì lá t'óng shin / muèp yóng mèn /*
 SPEC=thing COND IRR do 3PL.S call 1PL.O
 [*mén Mòe-mòek'wò*]_{NP}.
 1PL.I NOMZ(PL)-<PLACE.NAME>
 'if something would happen, they call us, us (who are of)
 Kwande.' (H00JORIGIN)
- b. *Kàt là gòe=lyák [ni=hòk]*_{NP}.
 maybe COND 2SGM.S=throw 3SG.O=DEF
 'Or maybe if you (would) throw the very one (lit. the it).'
- (D04NTATMAT2)
- c. *à mímòe sá tóe múút nyáng yì*
 FOC what make EMPH death(SG) hate(SG) CONS
*gòe màng [ńdòe=dwén]*_{NP} (...).
 SEQ take(SG) SPEC=PL.LOG.SP.O
 'what made (it) that death refused to take one (of) them (...)?'
 (F99DLIIT)

The following characteristics of the Goemai pronominal system are of particular interest: (i) the expression of gender, (ii) the distribution of free and dependent forms, and (iii) logophoricity.

First, Goemai distinguishes gender only in 2SG, but not in 3SG. Many Chadic languages, by contrast, distinguish gender in both cases. Since this distinction is a common characteristic of Afroasiatic languages (Bhat 2004: 109–111; Blažek 1995; Burquest 1986; Dolgopolsky 1988; Gouffé 1978; Kraft 1974), it is likely that Goemai has lost an inherited distinction. But notice that it is typologically unusual for a language to mark gender in 2SG only (Siewierska 2004: 104–107).

Second, the subject function can be realized by free or dependent forms. The distribution of these two forms depends on two criteria: on the pronoun set (illustrated in table 36), and on pragmatic factors.

Table 36. Two sets of subject pronouns

Set 1	Set 2
1SG	1PL
3SG	2SGM, 2SGF
3PL	2PL
SGM.LOG.AD, SGF.LOG.AD, PL.LOG.AD	SGM.LOG.SP, SGF.LOG.SP, PL.LOG.SP

Subject pronouns of set 1 can occur either in their free form (in 16a) or in their dependent form (in 16b). In addition, a free and a dependent form can co-occur (in 16c and 16d). In the case of subject nouns, an additional third person pronoun is either absent (in 16e and 16f) or occurs in its dependent form (in 16g). In all cases, the dependent form is a proclitic that attaches to the initial boundary of the verb phrase, i.e., it precedes TAM particles (in 16b and 16d).

It is not entirely clear how to account for the distribution of the various possibilities. In utterances where only one pronoun is present (i.e., in 16a and 16b), all speakers prefer free forms (except for 1SG); dependent forms are mainly observed with younger speakers. This could suggest that the dependent pronouns are of a more recent origin. In any case, it is likely that they developed from the free forms. Cross-linguistically, such a development is especially common among subject pronouns (e.g., Siewierska 2004: 40–47). In Goemai, the dependent forms are often phonetically reduced, and both forms have similar restrictions in that they cannot be modified. That is, the free subject pronoun in (16a) cannot be modified – however, if a free and a dependent form co-occur, the free form can be modified (as in 16d). Notice also that the free form in such a case tends to occur in a separate intonation unit (in 16c and 16d). This distribution suggests that it occurs in apposition to the dependent pronoun, not

in an argument slot. Similar properties are attested in languages that have anaphoric agreement (in the sense of Bresnan and Mchombo 1987: 41). It seems that Goemai has the option to incorporate pronouns into the verb phrase, in which case a free form (in 16c and 16d) or a noun (in 16g) can be added in a peripheral slot. This free form then serves a pragmatic function in that it emphasizes the referent (in 16c and 16d). However, there are also indications of an incipient system of grammatical agreement: in the case of 3PL human referents, speakers preferably express both the noun and the dependent pronoun within the same intonation unit. In the case of 3SG human referents, this pattern is attested, too, albeit less frequently (see the first clause in 18c for a 3SG example). It is possible that this development is related to the restricted possibilities of expressing nominal number within the noun phrase (see section 2.1): the use of dependent subject pronouns can serve to unambiguously specify number (e.g., compare 16f with 16g, where number is specified in the pronoun).

- (16) a. *hèn màn Jôs tún nineteen-fifty-one.*
 1SG.S know <PLACE.NAME> since 1951
 ‘I have known Jos since 1951.’ (C00ANJOS)
- b. *n=t’òng shín àràm (...).*
 1SG.S=IRR do conversation
 ‘I will tell a story (...).’ (D00JANIMAL11)
- c. *hén / n=màn s’ém muép bá.*
 1SG.I 1SG.S=know name 3PL.POSS NEG
 ‘I, I don’t know their names.’ (F00JGOESEM)
- d. *mòe-nàkú mèn / muép*
 NOMZ(PL)-grandparent 1PL.POSS 3PL.I
h-d’è-ñnòe / muép=dók mààr
 ADVZ-CL:exist-DEM.PROX 3PL.S=PAST.REM farm
máár ñt’it bá.
 farm/farming well NEG
 ‘our ancestors, these very ones (lit. these they), they didn’t farm much in the past.’ (H99BTARIHI)
- e. *Mòe-nyé múk mán môu.*
 NOMZ(PL)-matter 3SG.POSS know NEG
 ‘His neighbors didn’t know (it).’ (F00CKE)
- f. *Gòemài lá b’uát t’óng.*
 <ETHNIC.NAME> HAB beat HAB
 ‘The Goemai (person / people) used to play (it).’ (C01ANHAND)

- g. *Gòemài* *muèp=yíl*
 <ETHNIC.NAME> 3PL.S=write
 ‘The Goemai, they write (on it).’ (C01ANHAND)

Subject pronouns of set 2, by contrast, obligatorily occur in their dependent form (in 17a), and optionally co-occur with their free form (in 17b). They co-occur for reasons of emphasis only (see also 18c below), and the free pronoun can be modified (in 17c) or conjoined with another noun phrase (in 17d). Again, the free pronouns usually occur in their own intonation unit (in 17c and 17d).

- (17) a. *Mòe=màn* *bá.*
 1PL.S=know NEG
 ‘We don’t know (it).’ (N00EWITCH3)
- b. *Àmmá mén mòe=màn bá.*
 but 1PL.I 1PL.S=know NEG
 ‘But we, we don’t know (it).’ (D00JPEOPLE)
- c. *Nyè-gòepé / mén Mòe-mòek’wò /*
 because-THAT/WHEN 1PL.I NOMZ(PL)-<PLACE.NAME>
mòe=zèm bí ñdòe=kùt bá / mòe=zèm
 1PL.S=like thing:GEN SPEC=talking NEG 1PL.S=like
bí ñdòe=k’wál bá.
 thing:GEN SPEC=talking NEG
 ‘Because we (who are of) Kwande, we don’t like any problems,
 we don’t like any problems.’ (H00JKWO)
- d. *Mén ñdòe Dórók / mòe=p’uàt / móekwáán.*
 1PL.I CONJ <ETHNIC.NAME> 1PL.S=exit(PL) south
 ‘We and the Dorok Goemai, we come from the south.’
 (C00ANDIALECT2)

Subject pronouns of set 1 differ from those of set 2 not only in the optionality of their dependent form, but also in their syntactic position. In many multi-verb and TAM constructions (see sections 3, 4.1, 4.2, 4.4, 4.5, 5.1 and 5.4 in chapter 7; and sections 3.1, 4.5, 4.7 and 4.8 in chapter 8), pronouns of set 1 occur only once, preceding the first verb or TAM particle. For example, the set 1 pronoun *pǎ* ‘SGF.LOG.AD’ in (18a) precedes the irrealis particle *t’óng* and is not repeated with the sequential particle *gòe*. This distribution is the same for both the free and the dependent forms; and it is also found with subject nouns.

Set 2 pronouns in their dependent form, by contrast, only optionally precede the TAM particle *t'òng* (as in the first occurrence of *gòe* '2SGM' in 18c), and obligatorily follow it (as *jĩ* 'SGM.LOG.SP' in 18b and the second occurrence of *gòe* '2SGM' in 18c); and they are obligatorily repeated with each verb phrase of a multiverb construction (as *jĩ* 'SGM.LOG.SP' in the sequential structure of 18d).²⁹

- (18) a. *Pà* *t'òng* *b'óót* *gòe* *shin* *sh'it*
 SGF.LOG.AD.S IRR gain.expertise(SG) SEQ do work
h̀nòe=à?
 LOC.ANAPH=INTERR
 '(He₁ asked her₂) would she₂ be able to do this work?'
 (F99DMATWO)
- b. *Gùrùm=hòk* *yì /* *t'òng* *jĩ=b'óót*
 person=DEF SAY IRR SGM.LOG.SP.S=gain.expertise(SG)
jĩ=góe *shin.*
 SGM.LOG.SP.S=SEQ do
 'The person₁ said, he₁ would be able to do (it).' (F99DMATWO)
- c. *Gùrùm=hòk* *ní=t'òng* *rú* *tóe* *yà* *dàkd'uòe*
 person=DEF 3SG.S=IRR enter(SG) EMPH catch MIDDLE:GEN
lú / *dé* *gógóe* *t'òng* *yì. (...)*
 settlement SO.THAT REDUP.OBLIG:CONS sit(SG) CONS
Gòe=t'òng *góe=rú* *d'ì* *dàkd'uòe*
 2SGM.S=IRR 2SGM.S=enter(SG) LOC.ANAPH MIDDLE:GEN
lú=hók *bá /* *nyè-pé* *sén*
 settlement=DEF NEG because-THAT/WHEN be.prohibited
gòe *gòe* *rú* *d'ì* *h̀d'uùn.*
 2SGM.O SEQ enter(SG) LOC.ANAPH INSIDE
 'The person he would enter (and) arrive in the middle of the compound, so that (he) eventually should sit (down). (...) You

29. The different positions of the two sets of dependent forms are probably not linked to differences in wordhood: both sets cliticize to the verb phrase, and are not bound to the verb. They only differ in their position relative to other elements within the verb phrase: set 1 pronouns always cliticize to the initial boundary; but set 2 pronouns vary – in some cases, they follow the TAM particle and cliticize to the verb (in 18c; in the first occurrence of *jĩ* 'SGM.LOG.SP' in 18b), and in other cases they are proclitics to the TAM particle (in the second occurrence of *jĩ* 'SGM.LOG.SP' in 18b) (the position is determined by the diachronic origins of the TAM construction; see chapter 7 for details).

(however), you would not enter there in the middle of the compound, because (it) is forbidden to you to enter there inside.’
(D04ADIK)

The closely-related language Mupun also distinguishes pronouns on the basis of their position in multiverb constructions. In this case, the split is between 3SG and 3PL, on the one hand, and all other persons, on the other (Frajzyngier 1993: 229–231). Cross-linguistically, a difference between first and second persons (i.e., speech act participants) and third persons is not unusual (see, e.g., Bhat 2004; J. Lyons 1977: 638; Siewierska 2004). In the case of Goemai, however, only set 2 contains exclusively speech act participants, while set 1 contains both participants (1SG, LOG.AD) and non-participants (3SG, 3PL). It is more likely that the syntactic distribution results from different diachronic origins. Set 1 pronouns seem to have a nominal origin: the LOG.AD set was recently grammaticalized from nouns; the origins of 1SG, 3SG and 3PL are not entirely clear (but Burquest 1973 explicitly comments on the nominal behavior of the cognate 3SG and 3PL forms in Angas). A nominal origin would explain their distribution in multiverb structures: they occur in the same slot as subject nouns. Set 2 pronouns, by contrast, do not have an obvious nominal origin: 2SG, 1PL and 2PL all have Chadic cognates; and the origins of the LOG.SP set are not clear.

Third, Goemai has two sets of logophoric pronouns: one set indicating co-reference with the speaker (LOG.SP), and the other co-reference with the addressee (LOG.AD). Both sets occur throughout reported speech, where they serve to track referents across clause and sentence boundaries (see chapter 8, section 4.7 for details). The LOG.SP set is additionally used in a second context: as possessors in noun phrases occurring in direct object (in 19a and 19c) and adverbial functions (in 19b). This use extends to all types of possessives: the possessive pronoun can either be a modifier within the noun phrase (in 19a and 19b) or a suffix bound to the root (in 19c). The pronoun serves to indicate local co-reference with the (expressed or non-expressed) subject antecedent, and it occurs independently of any speech act context. It is, however, restricted to possessive contexts. For example, in (19b), the possessive pronoun *ji* is taken from the logophoric set, but the object pronoun *ni* from the non-logophoric set – even though their referents are identical.

- (19) a. *Fuán b'uén nì / fuán b'uén nì.*
 rabbit watch 3SG.O rabbit watch 3SG.O
Dùm k'á jí n-yil.
 bend.forward head(SG) SGM.LOG.SP.POSS LOC-ground
 'The rabbit watched it, the rabbit watched it. (He₁) bent his₁ head to the ground.' (F00CFUAN)
- b. *gòepé góe-k'óón n-k'á*
 THAT/WHEN NOMZ:CONS-bec.face.down(SG) LOC-head(SG)
jí / t'óng d'èm / góe wákáám
 SGM.LOG.SP.POSS sit(SG) this.time PLACE way
gòepé líit t'óng t'án nì.
 THAT/WHEN lion IRR pursue 3SG.O
 'after (he₁) put (it) on his₁ head, (he₁) now sat on the road where the lion would pursue him₁.' (F99DLIIT)
- c. *Fuán láp nìmùùn (...).*
 rabbit receive NOMZ.SGM.LOG.SP.POSS
 'The rabbit₁ received his₁ own (...).' (F99DLIGYA)

In all possessive contexts above, the use of the logophoric pronoun is optional. Speakers merely point out that the use of non-logophoric pronouns could complicate reference-tracking (as in 20a). In cases where ambiguity is not likely to arise (e.g., due to pragmatic factors), non-logophoric pronouns are preferred (as in 20b).

- (20) a. *gùrùm=hòk muààn góe lé n-d'uùn*
 person=DEF go(SG) COMMIT goods/clothes INSIDE:GEN
mótò múk
 car 3SG.POSS
 'the person₁ went with a load in his₁ ~ his₂ car' (A-21/02/00)
- b. *gùrùm=hòk muààn góe lé n-k'á*
 person=DEF go(SG) COMMIT goods/clothes LOC-head(SG)
múk
 3SG.POSS
 'the person₁ went with a load on his₁ head' (A-21/02/00)

This variation could point to an incipient system of reference tracking that originated in speech act contexts, and that is gradually extended to other con-

texts to mark local co-reference between two arguments of the same predicate. So far, its usage is restricted to the possessive forms. Notice that, in this context, there is some overlap between logophoric possessive forms (as in 19a above) and reflexive forms following a head noun (as in 21 below) (see chapter 4, section 4.3 for the distribution and semantics of reflexives).

- (21) *Ɗdè kù má màn k'à sék múk / gòebi*
 one/other also take(SG) head(SG):GEN BODY 3SG.POSS AS.IF
ní à ńdòe=bì yì (...).
 3SG.I FOC SPEC=thing CONS
 ‘And another one, (he₁) sees himself₁ (lit. he₁ takes his₁ own head), as if he₁ were something (special) (...).’ (DOOJLAZINESS)

2.5. Diminutive

The form *là* (SG) ~ *jáp* (PL) ‘DIM’ functions either as a head noun or as a modifier to the head noun. Whenever it occurs as the head, it acts like any non-derived noun and can co-occur with all modifiers (such as (*kó*=) *góenàng* ‘which(ever)’ in 22a). Otherwise it functions as a pre-head modifier (in 22b).

- (22) a. *Liit t'óng tù kó=[là góenàng]_{NP}*
 lion IRR kill(SG) any/every=DIM(SG) which(SG)
b'ák hààr.
 here gnaw
 ‘The lion would kill every little one here (and) eat (him).’
 (F99DLIIT)
- b. *Yìn jì=màng [lá=p'áng*
 SAY SGM.LOG.SP.S=take(SG) DIM(SG):GEN=stone
ńdòe]_{NP} (...).
 LOC.ANAPH
 ‘(He₁) said he₁ (will) pick up this little stone (...).’ (F99ANTI)

Its nominal properties follow from its diachronic origins: it is derived from the noun *là* (SG) ~ *jáp* (PL) ‘child’³⁰ The original noun is still used with this

30. The Hausa diminutive has a similar source, and also occurs as a pre-head modifier (P. Newman 2000: 47). But notice that this type of grammaticalization is very common (Heine and Kuteva 2002: 65–67).

meaning (in 23a), and it is likely that the diminutive developed from a genitive construction similar to the one exemplified in (23b) (see section 3.1 on complex nominal heads).

- (23) a. *Sáí / màng [là=hòk]_{NP}.*
 then/only take(SG) child(SG)=DEF
 'Then (she) picked up the child.' (D00EWITCH3)
- b. *Dóe kàt [ńdòe=là ú=hók]_{NP.GENITIVE} sù*
 come find SPEC=child(SG):GEN goat=DEF run(SG)
kúút p'ét góe k'óóm múk ńt'ít.
 just exit(SG) COMMIT strength 3SG.POSS well
 '(She) found here a child of the goat (that) just ran (and) came out in his full strength.' (F99DPAAP)

Superficially, the diminutive construction in (22b) is identical to the genitive construction in (23b). There are, however, reasons to analyze the diminutive differently. First, the singular is often cliticized to the following noun, and tends to lose phonetic substance (as in 24a) (see chapter 2, section 2.1 on cliticization). Second, both the singular and the plural can co-occur with their diachronic sources (as in 24a). Finally, the two nouns in a genitive construction have some freedom in that both can occur with their own modifiers (see examples 28a and 28b in section 3.1). This is not the case for the diminutive. For example, the specific-indefinite article cannot precede the diminutive – it has to precede the noun (as in 24b). To reverse the order in (24b) to *ńdòe=là áás* would give a genitive reading (i.e., 'a certain puppy of the dog'), not a diminutive reading.

- (24) a. *Mángòrò ń-d'è-ńnòe=hòe / lá*
 mango ADVZ-CL:exist-DEM.PROX=exactly COND
là [là=là múk]_{NP}.
 produce(SG) DIM(SG):GEN=child(SG) 3SG.POSS
 'This mango (tree), when (it) gave birth to its little fruit.'
 (D01NTREE)
- b. *Sáí ń-t'át ńdòe=b'ít muààn gòe màng*
 then/only LOC-time:GEN SPEC=day go(SG) SEQ take(SG)
[là=ńdòe=áás]_{NP} (...).
 DIM(SG):GEN=SPEC=dog
 'Then on one day, (he) went and picked up a certain little dog (...).' (F00CAAS)

Semantically, *là* (SG) ~ *jáp* (PL) ‘DIM’ expresses both diminutive and quantifying readings, depending on the referent. It expresses the diminutive when not referring to a mass (in 25a), but quantification when referring to a mass (in 25b). Notice that it regularly co-occurs with other expressions coding similar concepts, e.g., with a modifier *mòed’yén* ‘small’ in (25a) and an adverb *tyòklók* ‘small’ in (25b). When referring to humans, its presence adds connotations of pity (as in 25c).

- (25) a. *Jáp* *lwá* *mòe-d'yén*
 DIM(PL):GEN animal/meat NOMZ(PL)-bec.small/young(PL)
n-s'ét *hndè* *zák.*
 LOC-bush LOC.ANAPH also/however
 ‘The small animals in this bush, too.’ (F99DLIIT)
- b. *Gòe=kàt* *lá=sóól=hók* *tyòklók.*
 2SGM.S=find DIM(SG):GEN=money=DEF small
 ‘You find a bit of money, a little bit.’ (C00ANYOUTH3)
- c. *Gwà* *góe* *bá* *góe* *sóól*
 SGM.LOG.AD.S OBLIG return(SG) COMIT money:GEN
là=gùrùm.
 DIM(SG):GEN=person
 ‘He should return with the money of the poor/pitiful person.’
 (F99AMOESHAAR)

3. Conjoining nouns and noun phrases

This section introduces the available possibilities for conjoining nouns (section 3.1) and noun phrases (section 3.2).

3.1. Complex nominal heads

Goemai joins nouns by means of either the genitive construction or the proprietary construction. In both constructions, the nouns have some independence with regard to modification. But despite this independence, they occur in the same syntactic slot, and function as the complex head of a single noun phrase.

Genitive constructions are formed by juxtaposing two (or more) nouns, with the possessed preceding the possessor (in 26a). The same order is found in possessive constructions containing free possessive pronouns (in 26b).

- (26) a. *muèp yóng [s'èm pè=hòk]_{NP.GENITIVE} à*
 3PL.S call name:GEN place=DEF FOC
Túdùn Wàdà.
 <PLACE.NAME>
 ‘they called the name of the place Tudun Wada.’ (C00ANJOS)
- b. *Muèp yóng [s'èm múk]_{NP} à Ànyà.*
 3PL.S call name 3SG.POSS FOC <NAME>
 ‘They called her name Anya.’ (C01FGHJARAM6)

In addition, the genitive construction is marked through low tones: non-final nouns receive low tones, while final nouns as well as non-final modifiers (provided that they are not derived from nouns) retain their lexical tones. For example, the high-tone noun *lóng* ‘chief’ receives a low tone in (27a). Similarly, the noun *lóng* ‘chief’ and the modifier *jáp* ‘DIM(PL)’ (derived from the noun *jáp* ‘children(PL)’) both receive low tones in (27b). Recall, however, that some environments trigger high-tone spreading, thus altering the surface tones (see chapter 2, section 1.4 for details).

- (27) a. *yìn jí tóe [lòng ñkyá]_{NP.GENITIVE} yì (...).*
 SAY SGM.LOG.SP.I EMPH chief:GEN vulture CONS
 ‘(he₁ said) he₁ is the chief of the vulture (...).’ (F00JDUUS)
- b. *Liít / à tóe [lòng jáp lwá]_{NP.GENITIVE}*
 lion FOC EMPH chief:GEN DIM(PL):GEN animal/meat
yì díp ñ-s'ét.
 CONS all LOC-bush
 ‘The lion (is the one who) is the chief of all the little animals in the bush.’ (F99DLIIT)

The nouns of the genitive construction can occur independently with all pre-head modifiers, i.e., with the quantifier *d'ù* ‘much/many’, the associative plural *gwén* (as in 28a and 28b), the diminutive and the specific-indefinite article.

- (28) a. *ndòe [s'èm gwén lwá]_{NP} ñ-s'ét.*
 CONJ name:GEN ASSOC.PL animal/meat LOC-bush
 ‘and the names of kinds of animals in the bush.’
 (C00ANDIALECT5)

- b. [*Gwén lù dààs*]_{NP} (...).
 ASSOC.PL settlement:GEN men(PL)
 ‘The kinds of men’s huts (...).’ (D01CLU)

In contrast to pre-head modifiers, post-head modifiers occur only once. This includes all types of nominalization (e.g., the modifying construction in 29a), the possessive modifiers (as in 29b), and all types of definite and demonstrative expressions (as the definite article in 29c). In all cases, the modifier has scope over the possessor only. For example, in (29a) and (29b), the modifiers cannot be taken to modify the possessee (i.e., ‘big compound’ or ‘his name’) – for such a reading, the speaker would need to use the proprietary construction (see below). Notice also the co-occurrence of the specific-indefinite article (modifying the first noun) and the definite article (modifying the second noun) in (29c).

- (29) a. *Gòebi là gòe=rú n-lù /*
 AS.IF COND 2SGM.S=enter(SG) LOC-settlement
 [*lù gùrùm gòe-f'yér*]_{NP} (...).
 settlement:GEN person NOMZ(SG)-bec.big(SG)
 ‘Like if you enter into a compound, the compound of a big person (...).’ (D01CLU)
- b. [*S'èm ñgwá múk*]_{NP} / *à ñgwà / Gòed'èr.*
 name:GEN suburb 3SG.POSS FOC suburb:GEN <PLACE.NAME>
 ‘The name of his (the district head’s) suburb is Goed'er suburb.’ (D00ROUTE)
- c. *Dóe kàt [ñdòe=là ù=hók]*_{NP} *sù kúút*
 come find SPEC=child(SG):GEN goat=DEF run(SG) just
p'ét gòe k'óóm múk ñt'it.
 exit(SG) COMIT strength 3SG.POSS well
 ‘(She) found here a child of the goat (that) just ran (and) came out in his full strength.’ (F99DPAAP)

The nouns form the complex head of a single noun phrase. As such, they occur in the same syntactic function. For example, when occurring in direct object function, both nouns precede particles that indicate the final boundary of a direct object noun phrase (such as the progressive particle *yì* in 30).

- (30) *K'áb'ál / d'è tóe t'óng k'áng / [hààs / sh'áráp]_{NP}*
 crab exist EMPH PROGR guard/wait egg:GEN fish
yì.
 PROGR

‘The crab is guarding the eggs of the fish.’ (F00JKABAL)

Speakers use the genitive construction to express any type of possessive relationship between a possessee and a possessor, including physical, temporary, permanent, abstract, inalienable and alienable possession (following the semantic types in Heine 1997b: 33–41). The construction is additionally used to restrict the reference of nouns. Recall that many Goemai nouns are semantically general, and that Goemai has developed different strategies to narrow down the intended referent (see section 2.2). One of these strategies is the genitive construction with a generic noun as its possessee (as illustrated in 31a and 31b).

- (31) a. *Àmmá gòe-ń-d'è-ńnòe=hòe / à*
 but NOMZ(SG)-ADVZ-CL:exist-DEM.PROX=exactly FOC
[sh'èp d'in]_{NP} tóe / [sh'èp d'in]_{NP}.
 wood:GEN sheabutter EMPH wood:GEN sheabutter
 ‘But this one is a sheabutter tree, a sheabutter tree (lit. wood of sheabutter).’ (D01JTREE1)
- b. *dé móe=s'óe [là d'in]_{NP} yì.*
 SO.THAT IPL.S:CONS=eat child(SG):GEN sheabutter CONS
 ‘so that we eat the sheabutter fruit (lit. child of sheabutter).’
 (D01JTREE1)

The use of the generic nouns *sh'èp* ‘wood’ and *là* ‘child’ in (31a) and (31b) shares similarities to that of noun classifiers and class terms (Aikhenvald 2000: 81–97; Grinevald 2000). However, they do not constitute a consistent system: the classification is neither exhaustive (i.e., it only covers a small subset of the nominal domain) nor obligatory, and speakers have considerable freedom in choosing how to restrict the reference. For example, speakers interchangeably use the nouns *sh'èp* ‘wood’ (in 31a above) and *t'éng* ‘tree’ (in 32a below); alternatively, they can choose to not restrict the reference at all, and to leave the interpretation open to contextual information (in 32b). For these reasons, I do not analyze the examples under (31) and (32) as either noun classifiers or class terms. Instead, Goemai speakers employ an existing mechanism – the genitive construction – to further restrict the reference of semantically general nouns.

- (32) a. *Gòe-ń-d'è-ńnòe / t'èng*
 NOMZ(SG)-ADVZ-CL:exist-DEM.PROX tree
ń-d'yém-ńnòe / s'ém múk à /
 ADVZ-CL:stand(SG)-DEM.PROX name 3SG.POSS FOC
t'èng d'ín.
 tree:GEN sheabutter
 'This one, this standing tree, its name is sheabutter tree (lit. tree of sheabutter).' (D01JTREE1)
- b. *Kyàp d'ín kúút.*
 cut.off sheabutter just
 'He just split the sheabutter (tree).' (F00AFUAN)

The genitive construction constitutes the source for many nominal compounds, such as *puòe-pìn* 'door (lit. mouth of hut)', *jàp-núún* 'siblings (lit. children of mother)' or *là-t'èng* 'fruit (lit. child of tree)' Unlike the genitive construction, nominal compounds constitute single phonological words (see chapter 2, section 2 for phonological criteria of wordhood), and the two nouns do not have the same independence with regard to pre-head modifiers.

The form of the genitive construction – juxtaposition and low-tone marking – is similar to that of other Angas-Goemai group languages (Burquest 1973; Frajzyngier 1993: 149–153; Jungrathmayr 1963a, 1963b). As in Goemai, the genitive construction is attested with any type of possessive relationship. However, closely-related Angas is reported to distinguish in some contexts between alienable and inalienable possession (Burquest 1973); and the use of the genitive construction to restrict the reference of semantically-general nouns has not been described elsewhere. More distantly-related languages generally form the genitive by means of a segmental marker (see also Greenberg 1966), but Pawlak (1994) and Schuh (1990) argue that these markers are the result of independent developments, and cannot be reconstructed for Proto-Chadic. They assume that Proto-Chadic marked the genitive by juxtaposition – most Chadic languages have then lost this strategy (or only retained it for the marking of inalienable possession). Jungrathmayr (1963b) assumes that the use of tone in this context may reflect a contact influence from Benue-Congo.

The second possibility for joining two nouns is the proprietary construction. This construction makes use of the form *ńmùk* 'NOMZ.3SG.POSS' (i.e., the free 3SG possessive pronoun; see table 35 in section 2.4 above). It indicates that a possessive relationship holds between a possessee (expressed in the first noun) and a possessor (expressed in the second noun) (as in 33a). The possessee can be omitted if it is recoverable from the context (in 33b).

- (33) a. *K'ànglú puánáng lú mén (...)* à / [*lóng*
 <TITLE> there/yonder settlement 1PL.POSS FOC chief
m̀m̀m̀k shàràp]_{NP}.
 NOMZ.3SG.POSS women(PL)
 ‘The *K'ànglú* (chief) over there in our village (...) is the chief
 belonging to the women (i.e., a chieftaincy title that belongs to
 the female side of the royal family).’ (C00ANDIALECT4)
- b. *Gòe-ń-d'è-ń̀nòe /* à [*m̀m̀m̀k*
 NOMZ(SG)-ADVZ-CL:exist-DEM.PROX FOC NOMZ.3SG.POSS
ń̀dà mén]_{NP} (...).
 father 1PL.POSS
 ‘This one is (the one) belonging to our father.’ (D01JLU)

The two nouns constitute a single noun phrase, and thus occur in the same syntactic function. For example, they both precede particles such as the consequence particle *yì* (as in 34a where it marks the final boundary of a verbless clause complement). Like nouns in the genitive construction, they can be independently modified by pre-head modifiers (as by the specific-indefinite article *ń̀dòe*= in 34b and 34c). But unlike nouns in the genitive construction, they can also be modified independently by post-head modifiers (as by the nominalizations in 34d and 34e).

- (34) a. *Nyè-gòepé mìs dóe pòe /*
 because-THAT/WHEN man(SG) SGF.LOG.SP.POSS give
k'á m̀k ń̀-đòe sòsáì gòebì
 head(SG) 3SG.POSS LOC-SGF.LOG.SP.I well AS.IF
*[m̀m̀m̀k / m̀e-jàr dóe]*_{NP}
 NOMZ.3SG.POSS NOMZ(PL)-bec.jealous(PL) SGF.LOG.SP.POSS
yì m̀ou.
 CONS NEG
 ‘Because her husband doesn’t put his attention to her as (he
 does to the things) belonging to her co-wives.’ (F99DMATWO)
- b. *d'á à gòed'áár / d'á à [m̀m̀m̀k*
 COND FOC tomorrow FUT.CL FOC NOMZ.3SG.POSS
*ń̀dòe=gúrùm]*_{NP}.
 SPEC=person
 ‘if it (is) tomorrow, tomorrow (it) is (on the farm) belonging to
 someone (else).’ (C00ANYOUTH3)

- b. *gòepé / gwábnà Lár / máng hèn dé-gòe*
 THAT/WHEN governor <NAME> take(SG) 1SG.O PUR
shín [counselor m̀m̀ùk education]_{NP} / òdòe /
 do counselor NOMZ.3SG.POSS education CONJ
[health / and social services]_{NP}.
 health and social services
 ‘when governor Lar appointed me to do (work as) the counselor
 of education, and of health and social services.’ (H01CJOS)

A proprietary construction has not been described in Chadic languages, but some of its functions in Goemai (in particular its use with property nouns) are similar to those of Hausa *mài* ‘having, with’; notice that Goemai does not have any equivalent to Hausa *márás* ‘not having, without’ (P. Newman 2000: 323–325).

3.2. Coordinated noun phrases

Present-day Goemai uses the conjunction *òdòe* ‘and’ and the disjunction *kó* ‘maybe, or’ to coordinate two or more noun phrases (in 36a and 36b), including pronouns (in 36c) and nominalized expressions (in 36d). Both are also used to coordinate adverbials (see chapter 5, section 2.1), and *kó* is used to coordinate clauses (see chapter 8, section 4.9). *Òdòe* ‘and’ triggers plural verb forms (as in 36c), while *kó* ‘maybe, or’ triggers singular verb forms.

- (36) a. [*Là gòe-kyòklók=hók*]_{NP} / *òdòe* [*núún mùk*]_{NP} /
 child(SG) NOMZ(SG)-small=DEF CONJ mother 3SG.POSS
òdòe [*òdá mùk*]_{NP}.
 CONJ father 3SG.POSS
 ‘The small boy, and his mother, and his father.’ (D00EWITCH2)
- b. *Náán gòe sá / yí=muààn / dé*
 God OBLIG make 2SGF.S:CONS=go(SG) SO.THAT
yí=wá yì dóe yí=kàt
 2SGF.S:CONS=return.home(SG) CONS come 2SGF.S:CONS=find
[hén]_{NP} / kó [Náanshép]_{NP} / kó [Victor]_{NP} (...).
 1SG.O maybe/or <NAME> maybe/or <NAME>
 ‘May God grant (it) (that) you go, so that you return back here
 and find me or Naanshep or Victor (...).’ (S00JFAREWELL2)

- c. [Mén]_{NP} *ńdòe* [Dórók]_{NP} / *mòe=p'ùàt* / *mòekwáán*.
 1PL.I CONJ <ETHNIC.NAME> 1PL.S=exit(PL) south
 ‘We and the Dorok Goemai, we come from the south.’
 (C00ANDIALECT2)
- d. *t'óng* *làngòedé* [gòe-ń-pál]_{NP} *ńdòe* [là
 IRR start NOMZ-ADVZ-blossom CONJ child(SG)
gòe-ń-là]_{NP}.
 NOMZ-ADVZ-produce(SG)
 ‘(it) would start to blossom and to produce fruit.’ (P00DCROPS)

The coordinated phrases are independent of each other, and can each take their own sets of pre-head and post-head modifiers (as in 36a above). Generally, it is not possible for them to share modifiers, but there are occasional examples where a single modifier seems to modify both phrases. For example, the diminutive modifier *là* occurs with the first phrase in (37a), and the possessive modifier *góe* occurs with the second in (37b) – but in both cases, they seem to have scope over both phrases. Such examples are rare, and their syntactic structure is not entirely clear. One possibility is that the two coordinated phrases form a single constituent that can be modified as a whole by a single modifier. In this case, prehead modifiers would precede the whole constituent (as diminutive *là* in 37a) and posthead modifiers would follow it (as possessive *góe* in 37b). An alternative possibility is that modifiers can be omitted (i.e., diminutive *là* is omitted from the second phrase in 37a, and possessive *góe* is omitted from the first phrase in 37b). As indicated by the bracketing in (37a) and (37b), I tentatively favor the second possibility. This decision is based on the obligatory use of singular modifiers in such cases (e.g., the singular form of the diminutive in 37a). If the modifier were to modify both phrases, plural marking would be expected. Similarly, a preposition or spatial nominal can be omitted in cases of coordinated adverbials – if the omitted element happens to be the number-sensitive *k'á* (SG) ~ *k'ék* (PL) ‘HEAD’, the singular form has to be used (in 37c).

- (37) a. *gòefé* *kó* *t'én* *kàt* [là=ńdòe=hààm]_{NP}
 THAT/WHEN maybe/or IRR find DIM(SG):GEN=SPEC=water
kó [ńdòe=s'óe]_{NP} *tóe* *góe* *s'wà*.
 maybe/or SPEC=food EMPH SEQ drink
 ‘that maybe (he) may find a bit of water or (a bit of) food (and) drink (it).’ (D00EWITCH2)

- b. *gòe=tù* [shítá]_{NP} *ńdòe* [k'úún góe]_{NP} *ńt'ít (...)*.
 2SGM.S=pound pepper CONJ salt 2SGM.POSS well
 'you thoroughly pound (your) pepper and your salt (...).'
 (P00DCROPS)
- c. *Hèn=t'òng k'wál k'wál / [k'à kè]_{ADV} / ńdòe*
 1SG.S=IRR talk talking HEAD(SG):GEN chicken CONJ
[sh'òòr]_{ADV} / ńdòe [áás]_{ADV}.
 duck CONJ dog
 'I will talk about the chicken and (about) the duck and (about) the dog.' (D00JANIMAL3)

While modifiers are only rarely omitted, heads tend to be omitted whenever they are co-referential (as in 38).

- (38) [*Múút gòe-tók mén*]_{NP} *ńdòe* [*gwén*]_{NP}
 trad.religion NOMZ-practice 1PL.POSS CONJ 2PL.POSS
gòe=nà / à múút gòe-gòemé.
 2SGM.S=see FOC trad.religion NOMZ(SG)-one
 'The traditional religion that we practice and (the traditional religion that) you (practice), you see, (it) is the same (type of) traditional religion.' (C00ANDIALECT6)

The coordinator usually occurs between phrases (as in all examples above), and forms a syntactic unit with the following phrase: it always patterns with this phrase in cases of intonation breaks (as in 36a, 36b and 37c above) and non-contiguity (see below). It is alternatively possible for the coordinator to precede each phrase (as in 41b and 42 below) – this is common in the case of *kó* 'maybe, or', but rare in the case of *ńdòe* 'and'. Its multiple occurrence does not add emphasis. Conversely, the omission of coordinators is attested only in one case: in a listing function, where each noun occurs within its own intonation unit (as in 39).

- (39) *Náántwáám / Shályén / K'wòzèm / móe=t'wót tóe*
 <NAME> <NAME> <NAME> 1PL.S:CONS=sit(PL) EMPH
b'ák pè ń-d'é-ńdòe=hòe.
 here place ADVZ-CL:exist-DEM.PROX=exactly
 'Naantwaam, Shalyen, K'wozem, and so we sit here in this very place.' (C00JMQUEST1)

Coordinated adverbials are always contiguous (as in 37c above); and so are coordinated noun phrases occurring in elliptical expressions (in 36a and 38) or in apposition to core arguments (in 36c). If the coordinated phrases function as core arguments, however, they occur in different positions. Their distribution can be illustrated in the environment of particles that mark the final boundary of a direct object noun phrase or a verbless clause complement (such as the consequence particle *yì*): the second and all subsequent coordinated phrases follow this particle (as in 40a and 40b below). This position is obligatory, regardless of whether the phrases are coordinated to an object or verbless clause complement (in 40a), or to a verbal or verbless clause subject (in 40b). But despite their non-contiguity, the coordinated phrases in (40a) and (40b) have to be analyzed as occurring in the same syntactic function. The evidence is provided by number marking: in (40b), the speaker uses the plural subject pronoun *gũ* ‘2PL’, reflecting the unit of 2SGM, the wife and the children. Notice that *gõe* ‘2SGM’ is not expressed as one of the coordinands – it is present in the preceding clause, and it occurs as possessive pronoun in the coordinated phrases *màt góe* ‘your wife’ and *jáp góe* ‘your children’. That is, the plural pronoun *gũ* ‘2PL’ includes the singular referent *gõe* ‘2SGM’. This usage is reminiscent of the inclusory constructions found in many Pacific languages (Bhat 2004: 103–105, Lichtenberk 2000; Haspelmath 2004: 25–16), but also attested in Chadic languages under the name of ‘asymmetric coordination’ (Abdoulaye 2004; P Newman 2000: 136–137; Schuh 1998: 277, 305–306; Schwartz 1989).

- (40) a. *Dúús / yín / jí* *tóe* [*lòng* *ńkyá*]_{NP}
 cricket SAY SGM.LOG.SP.I EMPH chief:GEN vulture
yì / ńdòe [*ńàgú*]_{NP}.
 CONS CONJ cattle egret
 ‘The cricket₁ said that he₁ is the chief of the vulture and (the chief of) the cattle egret.’ (F00JDUUS)
- b. *pè gòepé* *s’óe d’á* *d’è* *d’i / t’òng*
 place THAT/WHEN food COND exist LOC.ANAPH IRR
góe=kát *gòe=bá* *ń-ní* *dé lú /*
 2SGM.S=find 2SGM.S=return(SG) COMIT-3SG.I DIR settlement
dé *gú=s’óe* *yì / ńdòe* [*màt*
 SO.THAT 2PL.S:CONS=eat CONS CONJ woman(SG)
góe]_{NP} *ńdòe* [*jáp* *góe*]_{NP}.
 2SGM.POSS CONJ children(PL) 2SGM.POSS
 ‘the place where if there is food, you would find (it) (and) return with it to the house, so that you eat it, with (lit. and) your wife and your children.’ (F99ANTI)

The coordinate structures above – both with the conjunction *ndòe* and the disjunction *kó* – probably constitute recent developments that originated from two (or more) juxtaposed phrases.

The conjunction *ndòe* may have originated in the specific-indefinite article *ndòe*=, which introduces specific referents into discourse (see section 5.3). As such, it frequently occurs in structures such as (41a), where two noun phrases are juxtaposed, each marked with the specific-indefinite article. Together, they add information on a referent that was previously introduced in a core argument slot (e.g., the subject *gùrùm* ‘person’ in 41a). The two juxtaposed noun phrases can be analyzed as a type of natural coordination: it is not possible to coordinate any two phrases, but only “couples or pairs which are closely associated in the real world” (Haspelmath 2004: 13). Typologically, natural coordination is often conveyed by juxtaposition alone (Wälchli 2005). It is possible that the structure in (41a) allowed speakers to reanalyze the specific-indefinite article as a conjunction. Initially, each of the coordinated noun phrases would have been marked with a conjunction, thus mirroring the diachronic source in (41a). Such expressions are still attested in present-day Goemai (as in 41b). In a further development, the conjunction was retained before the second noun phrase only (as in 41c), and today the conjunction can even co-occur with its source, the specific-indefinite article (as in 41d). Structures like (41a) and (41b) are exclusively found in the speech of older speakers, thus supporting the diachronic analysis further.

- (41) a. *Sá ñgàm / gùrùm t’óng muèn dé mùk /*
 times much/many person IRR go(PL) DIR 3SG.POSS
[ndòe=shàràp]_{NP} [ndòe=dààs]_{NP} / dé-gòe ñ-tàng
 SPEC=women(PL) SPEC=men(PL) PUR ADVZ-search
s’óe.
 food
 ‘Many times, people would go to him, women (and) men, to search for food.’ (FOOCGOEBETLA)
- b. *Nyè-gòe-sék / ndòe [áás]_{NP} / ndòe [nàyít]_{NP} /*
 because-NOMZ(SG)-body CONJ dog CONJ mirror
muèp=zém t’óng nà yít shák môu.
 3PL.S=like IRR see eye/face each.other NEG
 ‘Because of this, the dog and the mirror, they don’t like (that they) would look at each other.’ (FOOCAAS)

- c. *Tô* / [*shàràp*]_{NP} *ńdòe* [*dààs*]_{NP} *gòepé* *muép*
 okay women(PL) CONJ men(PL) THAT/WHEN 3PL.S CONS
dók *kàt* *wàkáám* *muèn* *bì* *sh'è* *b'ák (...)*.
 PAST.REM find way go(PL) thing learn/teach here
 ‘Okay, women and men, who in the past found a way (and) go
 for education here (...).’ (H01CJOS)
- d. *Àkwáí* / [*ńdòe=màt*]_{NP} / *ńdòe* [*ńdòe=gùrùm*]_{NP}.
 there.is/are SPEC=woman(SG) CONJ SPEC=person
 ‘There was a certain woman and a certain person.’
 (D00JLAZINESS)

The disjunction *kó* is borrowed from Hausa *kóó* ‘or’. Younger speakers use this form as it is used in Hausa, i.e., they use it to join the second and all subsequent phrases to the first (illustrated in 36b above), and optionally also mark the first phrase with *kó*. Older speakers, by contrast, usually combine the disjunction with the clause- and phrase-final question particle *ò* (see chapter 6, section 1.3 for this and related particles). Usually, they mark each phrase with both the disjunction *kó* and the particle *ò* (as in 42).

- (42) *Kó=góenàng* *ń-ní* / *d'á* *góe=fit*
 any/every=which(SG) COMIT-3SG.I COND:CONS 2SGM.S=wear(SG)
gòedé *kó* [*gòe-f'yér*]_{NP}=*ò* *kó*
 BOTTOM maybe/or NOMZ(SG)-bec.big(SG)=INTERR maybe/or
 [*gòe-k'ép*]_{NP}=*ò* *kó* [*gòe-tyóklók*]_{NP}=*ò* /
 NOMZ(SG)-bec.short=INTERR maybe/or NOMZ(SG)-small=INTERR
mòe=yòng *ní* *shàlibì* *díp* / *ńdòe*
 1PL.S=call 3SG.O gown all CONJ
 [*gòe-nán=hók*]_{NP} *má*.
 NOMZ(SG)-bec.big(PL)=DEF also
 ‘Everyone among them, so when you wear (it) over the bottom,
 whether a big one, or a small one, or a little one, we call it *shalibi*,
 all, and also the big one.’ (C00ANDIALECT4)

To summarize, it is likely that Goemai originally made use of juxtaposed phrases: a conjoined reading in the case of unmarked noun phrases, and a dis-joint reading in the case of phrases marked with the particle *ò*. These structures parallel coordinated clauses: while present-day Goemai uses coordinators bor-

rowed from Hausa, it originally made use of juxtaposition and clause-final particles (see section 1.3 in chapter 6, and section 4.9 in chapter 8).

4. Nominalization

Goemai has several possibilities to create nominal expressions: it nominalizes verbs to create abstract nouns and activity nouns (section 4.1); it has a modifying construction that derives nominals and modifiers from property-denoting expressions (section 4.2); and it allows for the nominalization of verb phrases (section 4.3) and clauses (section 4.4).

4.1. Nominalization of verbs

Verbs are nominalized by one of four strategies: zero nominalization (section 4.1.1), nominalization by means of the noun *bì* ‘thing’ (section 4.1.2), nominalization by means of the prefix *nyè-* ‘matter’ (section 4.1.3), and noun-verb nominalization (section 4.1.4). The choice of strategy is largely dependent on verb semantics, although it is not entirely predictable. For example, there are instances where most verbs of a semantic field select one nominalization strategy, while individual verbs unpredictably select another; similarly, the derived nouns sometimes receive idiosyncratic interpretations. The following subsections discuss each strategy in more detail, and section 4.1.5 summarizes the discussion.

4.1.1. Zero nominalization

Zero nominalization is the most widespread pattern, attested with verbs of different lexical aspect classes and different lexical fields. Its distribution is summarized in table (37) below (see chapter 4, section 2.3 for details on lexical aspect).

Zero nominalization creates abstract nouns from stative and inchoative verbs denoting property concepts, emotions and experiences, as well as relations and comparisons. These abstract nouns distribute like non-derived nouns in that they can head a noun phrase and co-occur with nominal modifiers (as illustrated in 43a and 43b).

Table 37. The distribution of zero nominalization

Lexical aspect	Lexical field	Examples	
stative verbs and inchoative verbs => abstract nouns	property	<i>f'yér</i> 'become big' <i>b'áng</i> 'become red'	<i>f'yér</i> 'age, importance' <i>b'áng</i> 'redness'
	emotion & experience	<i>luút</i> 'be afraid' <i>nè</i> 'become tired'	<i>luút</i> 'fear' <i>nè</i> 'tiredness'
	relating & comparison	<i>mì</i> 'be related' <i>mà</i> 'surpass'	<i>mì</i> 'relationship' <i>mà</i> 'superiority'
result verbs and activity verbs => activity nouns	physical state- of-affairs (putting, taking, transfer, contact)	<i>màng</i> 'take, pick up' <i>vuét</i> 'take / leave a share' <i>hét</i> 'hit'	<i>màng</i> 'lifting' <i>vuét</i> 'taking / leaving a share' <i>hét</i> 'hitting'
	bodily process	<i>òòt</i> 'yawn'	<i>òòt</i> 'yawning'
	speech act	<i>gwààn</i> 'growl'	<i>gwààn</i> 'growling'
	cooking	<i>shàt</i> 'knead'	<i>shàt</i> 'kneading'
	consuming	<i>s'óe</i> 'eat'	<i>s'óe</i> 'eating'

- (43) a. *Àmmá à k'à [zèm múk]_{NP} bá.*
 but FOC HEAD(SG):GEN liking 3SG.POSS NEG
 'But (it) was not with his approval.' (D00EWITCH3)
- b. *dé gòe kàt / [f'yér]_O yì / k'à*
 SO.THAT OBLIG find bigness(SG) CONS HEAD(SG):GEN
gùrùm=hòk.
 person=DEF
 'so that (he) should find superiority over the (other) person.'
 (D00JPEOPLE)

Zero nominalization is also attested with result and activity verbs describing physical states-of-affairs (such as putting and taking, transfer and contact), bodily processes, and speech acts, as well as with some semantically-general verbs of cooking and consuming. In these cases, nominalization creates activity nouns. Activity nouns have fewer syntactic possibilities than non-derived nouns. Those that are derived from result verbs tend to occur as (cognate) objects to their lexical verbs (in 44a) or to the semantically-general verb *shin* 'do'

(in 44b). Both constructions serve lexical aspect functions in that they create activity expressions (see chapter 4, section 6.1). Furthermore, nouns derived from both result and activity verbs occur as complements of verbless clauses (in 44c); and they occur in possessive and genitive structures together with one of their notional arguments as possessor (in 44d) (see chapter 4, section 2.2).

- (44) a. *Gòe=shìn ñ-yí gòemé / gòe=nd'è t'òng*
 2SGM.S=do LOC-year one 2SGM.S=exist PROGR
góe=máár [mààr]_o yì.
 2SGM.S=farm farm/farming PROGR
 'You do (this) for one year, you are farming.' (C00ANYOUTH2)
- b. *t'òng góe=shìn [mààr góe]_o ñ-ní.*
 IRR 2SGM.S=do farm/farming 2SGM.POSS COMMIT-3SG.I
 'you would do your farming with it.' (C00ANYOUTH3)
- c. *gòe-ñndè à [b'áám]_{VCC} ài*
 NOMZ(SG)-LOC.ANAPH FOC seizing INTERJ
 'this one is seizing, hey' (A-22/04/04)
- d. *Kó kúmá / à [wún góe]_{VCC} (...).*
 maybe/or also FOC sweating 2SGM.POSS
 'Or maybe (it) is your sweating (...).' (C00JMQUEST1)

Generally, the derived activity nouns cannot occur in any other construction, nor can they be modified by any other modifier. There is, however, variation. On the one hand, there are some activity nouns that have even less possibilities, occurring only in the context exemplified under (44c) above, and speakers vary in accepting and producing them in other contexts. It is likely that this variation reflects pragmatic restrictions, i.e., the use of some derived nouns with a possessor noun phrase would result in pragmatically odd expressions. On the other hand, there are lexicalized expressions that describe salient high-frequency concepts, but their semantics are not entirely predictable. They usually code both the activity concept and a participant central to the activity, e.g., *s'óe* 'eating; food' (from *s'óe* 'eat'), *múúr* 'stealing; thief' (from *múúr* 'steal'), or *wús* 'roasting; fire' (from *wús* 'roast'). In a few cases, an activity reading co-occurs with an abstract reading, e.g., *múút* 'dying; death' (from *múút* 'die'); and in other cases, an activity reading is absent altogether, e.g., *s'àm* 'ground paste' (but not 'grinding') (from *s'àm* 'grind'). In all such cases, the derived concrete or abstract noun has the same possibilities as a non-derived noun: it can occur in all syntactic functions and with all nominal modifiers. Notice also that it can occur with either of its notional arguments as possessor. For example, the activ-

ity noun *mààr* ‘farming’ can only occur with the subject argument as possessor (as in the first translation of 45a) (see chapter 4, section 2.2 for restrictions on the expression of arguments). The concrete noun *mààr* ‘farm’, however, can occur either with the subject (as in the second translation of 45a) or the object (as in 45b).

- (45) a. *Mààr* [*máár* *góe*]_o / *góe=lóe*
 farm farm/farming 2SGM.POSS 2SGM.S:CONS=put
d’i.
 LOC.ANAPH
 ‘Do your farming, and put (it) there..
 Or: ‘Farm your farms, and put (it) there.’ (C00ANYOUTH4)
- b. *à* *pè* *gòepé* *dók* *là* *móe=máár*
 FOC place THAT/WHEN PAST.REM HAB 1PL.S=farm
 [*mààr* *s’ónk’wà*]_o *t’óng* *tóe*.
 farm/farming:GEN maize HAB EMPH
 ‘(it) is the place where we used to farm maize farms.’ (D01ALU)

For stative and inchoative verbs, zero nominalization is the only available strategy. For result and activity verbs, by contrast, there is some overlap with other nominalization strategies (see table 41 below): *bì* nominalization is found with verbs describing physical state-of-affairs; *nyè*- nominalization with verbs describing speech acts; and noun-verb nominalization with semantically more specific verbs of cooking and consuming, and with some verbs of contact. Sometimes the same verb allows for two strategies with no apparent difference in meaning (e.g., *wààp* ‘borrow, lend’ can nominalize as either *wààp* or *bì wààp* ‘borrowing, lending’).

Formally, the derived nouns are identical to their corresponding verbs, hence the label ‘zero nominalization’ In a few cases, the derived nouns differ tonally, but it was not possible to predict their distribution – they are subsumed under this section, pending further research. If the verb distinguishes number (see chapter 4, section 1.2), the nominalized form also distinguishes number: in the cognate object construction, verb and derived noun are obligatorily marked for the same number (as in 46a); and in other constructions, speakers use the plural form whenever plural reference is intended (as in 46b). The derived nouns trigger the same kinds of number agreement as non-derived nouns.

- (46) a. *mòe=muèn* [*muén*]_o (...).
 1PL.S=go(PL) going(PL)
 ‘we are traveling (...).’ (C00ANDIALECT6)

- b. *gòpé* *mùèp* *mán* [*f'yár* *mùép*]_o (...).
 THAT/WHEN 3PL.S know bigness(PL) 3PL.POSS
 ‘when they know their old age (...).’ (D01CLU)

Even though the verb and the noun are formally identical, it is assumed that the verb is basic (and the noun derived). This analysis is suggested by a number of indications. First, the verbal use is far more frequent than the nominal use – in many cases, the nominal forms are attested in elicitation contexts only. Second, the activity nouns have less distributional possibilities than the verbs: while the verbs occur in all verbal contexts, the activity nouns do not occur in all nominal contexts. In fact, they serve lexical aspect functions, i.e., they express a category that is commonly expressed in verbs. Third, if a verb is polysemous, the corresponding noun usually expresses one of the senses only. The other senses either cannot be expressed nominally or are expressed by a different type of nominalization (dependent on their semantics), e.g., compare *vúáng* ‘insulting’ with *bì vúáng* ‘washing, laundry’ (from *vúáng* ‘wash; insult’) (see also table 41 below for other examples).

4.1.2. *Bì nominalization*

The second type of nominalization makes use of the noun *bì* ‘thing’ plus a verb. It is found with transitive verbs of all lexical aspect classes, provided that they can be recruited to denote typical activities, occupations and character traits (see table 38).

The nominalized forms denote activities. These activities are invariably typical activities. That is, the derived nouns usually only express a subset of the activities expressed by the corresponding verbs. For example, the noun *bì d'èk* describes the activity of winnowing – while the corresponding verb *d'èk* describes different kinds of up-and-down movements, including winnowing grains, but also nodding heads, winking eyes, moving hands etc. As activity nouns, they serve the same aspectual functions and have the same distributional restrictions as activity nouns derived by zero nominalization. The main syntactic difference is that only few nouns derived by *bì* nominalization can occur in possessive and genitive constructions, while most nouns derived by zero nominalization can.

Table 38. The distribution of *bi* nominalization

Lexical aspect	Lexical field	Examples	
transitive verbs denoting typical activities, occupations and character traits => activity nouns	creating and cooking	<i>rà</i> ‘weave’ <i>d’án</i> ‘cook’	<i>bì rà</i> ‘weaving’ <i>bì d’án</i> ‘cooking’
	harvesting, hunting and farmwork	<i>hàrà̀m</i> ‘harvest (with scythe)’ <i>gún</i> ‘stuff into’ <i>d’èk</i> ‘move up/down’	<i>bì hàrà̀m</i> ‘harvesting (with scythe)’ <i>bì gún</i> ‘spearing’ <i>bì d’èk</i> ‘winnowing’
	other typical activities and occupations	<i>sh’è</i> ‘learn, teach’ <i>kún</i> ‘count’ <i>d’ám</i> ‘sink’	<i>bì sh’è</i> ‘learning, teaching’ <i>bì kún</i> ‘counting’ <i>bì d’ám</i> ‘diving’
	habits or character traits	<i>b’óót</i> ‘gain experience’ <i>sh’á</i> ‘desire’	<i>bì b’óót</i> ‘being a rascal’ <i>bì sh’á</i> ‘being a wishful thinker’

It is likely that this type of nominalization originated in the use of the noun *bì* ‘thing’ as the direct object of a transitive verb. In present-day Goemai, this structure is used whenever a speaker focuses on a generic activity, without intending to specify the direct object participant further (see chapter 8, section 1.1 for details). Example (47) illustrates such a structure. *Bi* nominalization would then consist of the nominalization of the verb together with its direct object (see also section 4.1.4 below). This origin would explain its restriction to transitive verbs (since only transitive verbs have direct objects); and it explains its semantic restriction to typical activities (the use of generic nouns in non-typical contexts would cause misunderstandings).

- (47) *Mòe=d’wò̀òl* [bì]_o / *à góe puóe*.
 1PL.S=chew thing FOC COMMIT mouth
 ‘We chew (lit. chew things) with the mouth.’ (DOOJPEOPLE)

As in the case of zero nominalization, there are some instances of lexicalization. These nouns then do not describe the activity, but a participant central to the activity, e.g., *bì d’ík* ‘a building’ (from *d’ík* ‘build’) or *bì s’óe* ‘food ingredients’ (from *s’óe* ‘eat’). Some also denote abstract concepts, e.g., *bì kà̀t* ‘wealth’

(from *kàt* ‘find’) or *bì màn* ‘knowledge’ (from *màn* ‘know’). All lexicalized forms have the full syntactic possibilities of non-derived nouns.

4.1.3. *Nyè-* nominalization

The third type of nominalization uses the prefix *nyè-* (grammaticalized from the noun *nyè* ‘matter, word’) plus a verb. It is largely restricted to speech act verbs, but also attested with a few cognitive verbs (as illustrated in table 39).

Table 39. The distribution of *nyè-* nominalization

Lexical aspect	Lexical field	Examples	
result and activity verbs => activity	speaking	<i>t'ém</i> ‘tell’	<i>nyèt'ém</i> ‘telling, report’
		<i>d'úk</i> ‘pulsate’	<i>nyèd'úk</i> ‘stammering, stammer’
nouns, objective nouns	cognition	<i>rǎng</i> ‘think’	<i>nyèrǎng</i> ‘thinking, thought’
		<i>lál</i> ‘err’	<i>nyèlál</i> ‘erring, mistake’

The nominalized forms have two interpretations. On the one hand, they describe an activity, and serve the same lexical aspect functions as activity nouns derived by zero nominalization. On the other hand, they describe the result of an action, and serve as objective nouns. In the latter case, they have the same syntactic possibilities as non-derived nouns and can, e.g., occur with modifiers (as in 48). Their interpretation is largely context-dependent: the presence of modifiers triggers a result interpretation (as in 48), while all other contexts trigger an activity interpretation.

- (48) *P'ét / dóe t'ém tóe [nyè-ryè=hòk]_{NP} póe muèp.*
 exit(SG) come tell EMPH matter-lie=DEF give 3PL.O
 ‘(He) came out (and) told them here the lie.’ (FOOCFUAN)

As in the case of *bì* nominalization, *nyè-* nominalization is semantically restricted: it is found in few lexical fields only. For example, the noun *nyèd'úk* can only denote the stammering of speech, while the corresponding verb *d'úk* describes any activity that occurs in quick succession, including stammering, beating of the heart, blinking of the eye etc. This semantic restriction is again a result of its diachronic origin: whenever speakers wish to focus on the activity (without specifying the actual content), they use a speech act or cognitive verb together with the generic noun *nyè* ‘matter, word’ as its direct object (as in 49)

(see also chapter 8, section 1.1). It is likely that *nyè*- nominalization – like *bì* nominalization – then developed from the nominalization of the verb and its direct object. But while *bì* constitutes a phonologically separate word (realized as [bì:], i.e. with a long vowel), *nyè*- has become a prefix (realized as [nʲè], i.e., with a short vowel) (see chapter 2, section 2 on phonological words).

- (49) *Móe=ràng* [nyé]ₒ yì.
 1PL.S:CONS=think matter CONS
 ‘And so we were thinking.’ (C00ANYOUTH4)

4.1.4. Noun-verb nominalization

Noun-verb nominalization is illustrated in table 40.

Table 40. The distribution of noun-verb nominalization

Noun-verb nominalization	Verbal source (exemplified with 3SG)		
a SV-nominalization: <i>k'á b'ál</i> ‘hardheadedness’	<i>k'á</i> head(SG)	<i>múk</i> 3SG.POSS	<i>b'ál</i> be.hard
	‘he is hardheaded (lit. his head has become hard)’		
b AV-nominalization: <i>hààm tù</i> ‘thirst’	<i>hààm</i> water	<i>tù</i> kill(SG)	<i>ní</i> 3SG.O
	‘he is thirsty (lit. water killed him)’		
c OV-nominalization: <i>k'wàm t'úng</i> ‘fried bambara nuts’	<i>ní</i> 3SG.S	<i>t'úng</i> fry	<i>k'wàm</i> bambara.nut
	‘he fried bambara nuts’		
d PrepV-nominalization: <i>hààm d'ám</i> ‘water-diving (a type of children’s water game)’	<i>ní</i> 3SG.S	<i>d'ám</i> sink	<i>(n-hààm)</i> (LOC-water)
	‘he sank (into water)’		

This type of nominalization possibly subsumes a number of different types. They are discussed together because of their identical form (noun plus verb), their common semantic restrictions (they have highly specific unpredictable meanings), and their occurrence with specific nouns only. In all cases, the noun is a typical participant of the verb action. This participant can occur in any syntactic function to the verb, e.g., as its S argument (in table 40a), A argument (in 40b) or O argument (in 40c). It can even be a participant that is lexicalized or implied in the verb meaning, but not overtly expressed as a core argument (in 40d).

The derived nouns are usually either abstract or concrete nouns, but activity readings sometimes co-exist, e.g., *hààm s'wà* 'a drink; drinking (lit. water drink)'. Concrete and abstract nouns distribute like non-derived nouns, while activity nouns follow the same syntactic restrictions as other derived activity nouns.

4.1.5. *Summary and discussion*

The majority of verbs belonging to the lexical fields mentioned in the preceding subsections allow for some form of nominalization. However, there are individual verbs that cannot be nominalized, and it is not always clear why not. For example, compare *k'áng* 'become confused' (no nominalization) with *rwáng* 'become mad' (nominalization *rwáng* 'madness'), *kwàk* 'become smooth' (no nominalization) with *dóelék* 'become rough' (nominalization *dóelék* 'roughness'), or *k'wák* 'knock' (no nominalization) with *kwàp* 'knock' (nominalization *kwàp* 'knocking'). In some cases, the existence of semantically similar forms could preempt nominalization, e.g., *rèng* 'become astonished' may not nominalize because of the existence of *fèn* 'surprise' (derived from *fèn* 'be surprised'). Similarly, Goemai has many verbs of bodily emission that have corresponding non-cognate nouns (e.g., *d'i* 'urinate' may not nominalize because of the existence of *gòes'éng* 'urine'), while verbs that have no corresponding nouns do nominalize (e.g., *wún* 'sweating' from *wún* 'sweat'). In addition, nominalization is absent from entire semantic fields: stative locative verbs and their suppletive causative counterparts (e.g., *t'óng* 'sit' and *d'ú* 'cause to sit'), inchoative verbs of disposition (e.g., *k'óón* 'become face down') and of rotational movement (e.g., *d'ààr* 'start to tremble'), many result verbs of perception and cognition (e.g., *nǎ* 'see'), of cutting and breaking (e.g., *táp* 'snap'), and of transforming (e.g., *s'ék* 'soak').

Generally, verbs seem to only allow for one type of nominalization, and the existence of a semantically more specific type of nominalization (i.e., *bi*, *nyè*-, or noun-verb) preempts the existence of zero nominalization. The exceptions are polysemous verbs, where the different senses are associated with different

types of nominalizations, or where some senses may not receive a nominal expression at all.³¹ There are also a few examples of monosemous verbs, where different types of nominalization co-exist, picking out different aspects of their meaning potential (although the semantic differences are not always entirely clear). Some examples for both types are illustrated in table (41) below.

Table 41. Nominalization strategies

Verb	Nominalization			
	zero	<i>bì</i>	<i>nyè-</i>	noun-verb
<i>k'óón</i> face down; bake	–	<i>bì k'óón</i> baking	–	–
<i>d'ík</i> build; marry	<i>d'ík</i> marriage	<i>bì d'ík</i> building	–	–
<i>tàl</i> ask; greet	<i>tàl</i> greeting	–	<i>nyètàl</i> question, asking	–
<i>sh'á</i> desire	–	<i>bì sh'á</i> being a wishful thinker	<i>nyèsh'á</i> desire, desiring	–
<i>d'wòòl</i> chew	<i>d'wòòl</i> chewing	<i>bì d'wòòl</i> constantly eating	–	–
<i>d'ám</i> sink	–	<i>bì d'ám</i> diving	–	<i>háám d'ám</i> children's water game

The structures of *bì*, *nyè-* and noun-verb nominalizations are similar: a noun (*bì* ‘thing’, *nyè* ‘matter’ or another noun) preceding an element that can either be analyzed as a verb or as a deverbal noun derived by zero nominalization. Such structures are also attested in other Angas-Goemai languages, and

31. In table (41), the verbs *k'óón*, *d'ík* and *tàl* are analyzed as polysemous (and not as homonymous) because in each case there exist contexts that illustrate a relationship between the two senses: *k'óón* ‘bake’ refers to the activity of baking root crops by placing them under a face-down (= *k'óón* ‘face down’) pot and lighting a fire on top of the pot; *d'ík* ‘marry’ is often conceptualized as building up (= *d'ík* ‘build’) a household; and *tàl* ‘greet’ involves asking (= *tàl* ‘ask’) questions about other people’s health.

Burquest (1981) assumes that they are the last remnant of an older OV constituent order. In the case of Goemai, this analysis is unlikely. It is true that the nouns *bi* ‘thing’ and *nyè* ‘matter’ invariably occur in object function of the corresponding verbs – however, other nouns can occur in any function, and need not even be an argument of the verb. Alternatively, the existence of zero nominalization makes it possible that the other three types of nominalization originated in a genitive construction, i.e., their present-day structure could reflect two nouns in a genitive construction (*bi* ‘thing’, *nyè* ‘matter’ or another noun plus a noun derived by zero nominalization), not a verbal OV structure. At this stage of research, either explanation is possible.

The cases of nominalization discussed above serve two major functions. First, nominalization is a prominent mechanism to derive abstract nouns. Recall that Goemai has only very few non-derived abstract nouns (see section 2) – instead, nominalized verbs constitute the majority of such expressions. Second, nominalization creates activity nouns. Goemai has only very few non-derived activity nouns, and instead uses the derived nouns to express such concepts. In addition, these derived activity nouns fulfill lexical aspect functions (see chapter 4, section 6.1 for details). The use of nominalization to create abstract and activity expressions is possibly an innovation of Goemai (or the Angas-Goemai group in general). They are attested in Angas-Goemai group languages, but their distribution seems to be less common in other West Chadic languages. For example, Hausa has a large number of abstract nouns that are either underived or derived from common nouns (P Newman 2000: 5–18, 377–378); it also has a large inventory of non-derived activity nouns (Abdoulaye 1992: 187–190; P Newman 2000: 377–378). In other Chadic languages, nominalization primarily serves to create expressions that function in those environments that require the use of non-finite forms: in nominal TAM categories (usually those having a continuous-type of semantics), and as complements of auxiliary or aspectual verbs (see, e.g., P. Newman 2000: 699–717 for Hausa; Schuh 1998: 77–120 for Miya). Goemai, by contrast, does not have equivalent nominal TAM categories (see chapter 7), and it has only recently borrowed the category of auxiliary verb from Hausa (see chapter 8, section 4.3).

4.2. Modifying construction

The modifying construction uses the prefixes *gòe-* (SG) and *mòe-* (PL) to derive both (pro-) nouns and modifiers from a number of different word classes. This includes agentive nouns from verbs denoting occupations (in 50a) and from nouns denoting abstract concepts (in 50b); pronouns from demonstrative, anaphoric and definite modifiers (in 50c); and headless modifiers from property-denoting expressions (in 50d). These derived expressions are distributed like

non-derived nouns: they occur in the same syntactic functions (e.g., as possessor in the genitive constructions in 50a and 50b; as subject in 50c; in apposition to a direct object in 50d), and they occur with nominal modifiers (e.g., with the definite article =*hok* in 50d).

- (50) a. *Á* [gɻà *mòe-sh'áng*]_{NP.GENITIVE} *tóe*.
FOC performance:GEN NOMZ(SG)-hunt EMPH
'(This) is the dance of the hunters.' (C01ANHAND)
- b. *Muààn* [lù *mòe-shààr*]_{NP.GENITIVE}.
go(SG) settlement:GEN NOMZ(PL)-friendship
'(He) went to the compound of the friends.' (C00ANDIALECT6)
- c. [*Gòe-ńńòe*]_{NP} *ráng* / [*gòe-ńńòe*]_{NP} *ráng*.
NOMZ(SG)-LOC.ANAPH think NOMZ(SG)-LOC.ANAPH think
'This one thought (it), that one thought (it).' (TIEMSAN 1999: 3)
- d. [*Mòe-nán=hók*]_{NP} / *gòe=wàr* *ní* /
NOMZ(PL)-bec.big(PL)=DEF 2SGM.S=collect 3SG.O
góe=wá *ń-ńí*.
2SGM.S:CONS=return.home(SG) COMMIT-3SG.I
'The big ones (i.e., fish), you collect them, and so you return home with them (collectively).' (P00NFISHING)

The same expressions function furthermore as derived modifiers within the noun phrase, having the same number specification as their heads (as in 51a). This number agreement distinguishes the modifying construction from the genitive construction: the two nouns in the genitive constructions refer to different entities in the world, and hence do not necessarily have the same number specification (as in 51b) (see section 3.1 for the genitive construction).

- (51) a. *Yìn / tó / muèp kát* [*là gòe-b'árák*]_{NP} *à*
SAY okay 3PL.S find child(SG) NOMZ(SG)-bec.wet FOC
ńnàng?
where
'(He) said, okay, where do they get a newborn child?'
(D00EWITCH3)

- b. [*Mòe-gùrùm* *màt* *ńdòe*]_{NP.GENITIVE}
 NOMZ(PL)-person:GEN woman(SG) LOC.ANAPH
yók (...).
 return.home(PL)
 ‘The people of this woman returned home (...).’ (F99DLA)

The derived modifiers occur in a fixed slot within the noun phrase (see table 28 in section 1), and it is not possible for two derived modifiers to co-occur within a single noun phrase. If two properties are to be expressed, speakers usually express them as headless modifiers and coordinate them by means of the conjunction *ńdòe* (in 52a). Alternatively, the first property concept is expressed by a modifier within a noun phrase, and the second by a headless modifier – both noun phrases are then coordinated by the conjunction *ńdòe* (in 52b). As discussed in section 3.2, examples such as (52b) are analyzed as instances of omitted head nouns, not as complex modifiers (such as *gòetép ńdòe gòeb'áng* ‘black and red’) modifying a single nominal head (*tóóm* ‘chair’). There are also a few examples where speakers seem to juxtapose two modifiers (in 52c). Syntactic tests, however, show that the second modifier is not part of the first noun phrase, but rather a noun phrase in apposition (i.e., in the environment of particles that mark the final boundary of a phrase – e.g., the consequence particle *yi* – the second modifier occurs following this particle).

- (52) a. [*Tóóm / gòe-dàp* [*gòe-tép*]_{NP} / *ńdòe*
 chair NOMZ-mix NOMZ(SG)-bec.black CONJ
 [*gòe-b'áng*]_{NP}]_{NP} (...).
 NOMZ(SG)-bec.red
 ‘A chair that (is of) mixed black (color) and red (color) (...).’
 (M00MJCOMP)
- b. [*Tóóm / gòe-tép*]_{NP} / *ńdòe* [*gòe-b'áng*]_{NP} (...).
 chair NOMZ(SG)-bec.black CONJ NOMZ(SG)-bec.red
 ‘A black chair, and a red (chair) (i.e., a black-and-red chair).’
 (M00MJCOMP)
- c. *gòe=tàng* [*yi* *gòe-d'émèn*]_{NP} [*gòe-tép*]_{NP}.
 2SGM.S=search ground NOMZ(SG)-good NOMZ(SG)-bec.black
 ‘you search for good land, black (land).’ (P00DCROPS)

Given that the modifying construction derives both nouns and modifiers, expressions such as (51a) above are potentially ambiguous between a genitive

reading ('the child of the wet one') and a modifier reading ('the wet child'). Out of context, speakers prefer the modifying reading for all property-denoting expressions (in 51a), but the genitive reading for all agentive nouns (in 50a and 50b) and demonstrative, anaphoric and definite pronouns (see also below).

The nominalizing function presumably preceded the modifying function: it is likely that the prefix *mòe-* (PL) is a reflex of the common Afroasiatic prefix **ma-* that derives nouns of agent (Greenberg 1966).³² Its further extension to modifiers is attested in other Chadic languages, too. For example, Hausa uses *mà-* to derive nouns of agent, which alternatively function as adjectival modifiers (P Newman 2000: 24–25, 51–60). And it uses *màì* 'characterized by, having, doer of' to derive adjectival modifiers (from nouns) and agent nouns (from verbs). Its origin is unknown, but one hypothesis is a development from the prefix *má-* plus the verb *yí* 'do', i.e., **má-yí* 'doer (of)' (P Newman 2000: 323–325). Similar developments are reported for Miya (Schuh 1998: 260–276). Goemai differs in that the inherited prefix *mòe-* has acquired additional plural semantics. It is possible that these semantics were developed in contrast to the invariant nominalizing prefix *gòe-*. This invariant prefix is used to nominalize clauses that then occur as modifiers to a head noun (see section 4.4). That is, the nominalized clauses occur with a similar function and in a similar position as the derived modifiers. In this context, the invariant nominalizing prefix *gòe-* may have been reinterpreted as the modifying prefix *gòe-*, setting up a contrast with *mòe-*. Presumably, this contrast was then reinterpreted as a contrast in number. In present-day Goemai, the invariant nominalizing prefix and the modifying prefixes are clearly distinct.

It is likely that the spread of the two prefixes to code the modifying function is semantically motivated by the absence of a word class of adjectives. Generally, most present-day Chadic languages have either a separate word class of adjectives (which shows formal similarities to that of nouns), or they use a nominal coding strategy (for West Chadic languages, see Frajzyngier 1989: 136–138, 201–205; Haruna 2003: 36, 53–54; Jaggar 2001: 48–147, 310–400; Jungrauthmayr 1991: 30–31; P Newman 1974: 35–37, 2000: 22–33; Schuh 1981: xviii, 1998: 203–205, 257–258, 319; Shimizu 1975: 14, 22; E. Wolff 1993: 213–215). In Goemai, by contrast, the largest group of property-denoting

32. Some Goemai place names contain a (synchronically unanalyzable) prefix *mòe-* that is a possible remnant of the Afroasiatic prefix **ma-* deriving nouns of location, e.g., *Mòek'wò* 'Kwande' (cf. *K'wò* 'the K'wo Goemai'), *Mùdùùt* (<= **Mòedùùt*) 'Shendam' (cf. *Dùùt* 'the Duut Goemai'), *Mòekwáán* 'south, place of the Jukun' (cf. *Kwáán* 'Jukun'). Goemai does not have any remnants of the prefix **ma-* deriving nouns of instrument.

expressions are verbs.³³ Most of them are inchoative verbs, covering the following semantic types (based on Dixon 1982): dimension (e.g., *suòè* ‘become long’), physical property (e.g., *zòòm* ‘become cold’), color (e.g., *b’áng* ‘become red’), age (e.g., *gyá* ‘become old’), and human propensities that are seen as changeable (e.g., *b’áán* ‘become hot-tempered’). Only very few property concepts are coded in stative verbs – these are restricted to values (e.g., *d’óng* ‘be good’) and natural properties (*màlàk* ‘be a troublesome character’, *nyààl* ‘be naturally thin’). In addition, some property concepts are coded in nouns. This includes material (e.g., *sh’ép* ‘wood; wooden’), gender (e.g., *mát* ‘woman; female’), and non-core colors that receive descriptive expressions (e.g., *hààm yím* ‘green, lit. color/water of leaves’ and all other colors except for *b’áng* ‘become red’, *tép* ‘become black’ and *pyá* ‘become white’).³⁴ All such nouns denote primarily concrete entities – not properties. Cross-linguistically, material and gender are often based on comparable concrete nouns (Stassen 1997: 155–206). The non-core color terms constitute ad-hoc formations that are based on the typical color of a concrete entity: speakers productively create new color terms,

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33. Despite the present-day Chadic pattern of adjectival word classes or nominal coding strategies, Stassen (1997: 507–512, 518–519) argues for the possibility that Chadic languages originally made use of stative / inchoative verbs to code property concepts. The stative verbs were then lost, and nominal forms were developed to express the stative concepts. The inchoative verbs were also lost in most languages, but were retained by some to express a dynamic state change. Such a diachronic scenario would support his hypothesis that non-tensed languages (i.e., languages that do not have the grammatical category of tense) tend to pursue a verbal coding strategy – since Chadic languages count as non-tensed, their non-verbal coding of property concepts is unexpected, but could be explained by the above scenario. It is possible that this scenario is true, and that Goemai therefore retains an older Proto-Chadic pattern. However, our knowledge of diachronic processes in Chadic is limited: this is already true for the phonological and lexical domains, and even more so for the syntactic and semantic domains. Given that most present-day Chadic languages make use of adjectival or nominal strategies, I consider the Goemai verbal strategy unexpected. Interestingly, it shares this strategy with other languages spoken on the Jos Plateau, both Chadic languages (Burquest 1973; Foulkes 1915: 26–27; Frajzyngier 1993: 66–73, 157–159; Seibert 1997: 36–37, 49–50, 83) and Benue-Congo languages (Nettle 1998: 21–22, 45–47; Shimizu 1980: 158–159, 182–184, 200–214; Sibomana 1980: 204, 1981a: 29–30, 1981b: 242; Storch 1999: 117–119, 160–161, 242–244). That is, this strategy possibly constitutes an areal pattern. Further research into the diachronic aspects of this question is needed (see also Hellwig 2006e).
34. It is possible that such forms are calques of the common Hausa construction *rúwán X* ‘water/color of X’ (P. Newman 2000: 29).

and they frequently disagree on their reference. Finally, Goemai has many adverbs denoting quantities, which are alternatively used to describe dimensions (e.g., *kyôklók* ‘small amount, small size’).

Irrespective of their word class, all property-denoting expressions can occur in the modifying construction. In all cases, the derived forms occur both as modifiers within the noun phrase and as heads of noun phrases. The two possibilities are illustrated for inchoative verbs (as *b'árák* ‘become wet’ in 51a and *nán* ‘become big’ in 50d above), for stative verbs (as *d'óng* ‘be good’ in 53a and 53b), for nouns (as *dààs* ‘men’ in 54a and 54b), and for adverbs (as *kyôklók* ‘small’ in 55a and 55b).

- (53) a. *hèn=t'òng tú à n-[wàkáám gòe-d'óng]_{NP}.*
 1SG.S=IRR kill(SG) FOC LOC-way NOMZ(SG)-be.good
 ‘I will spend (it) in a good way.’ (C00ANYOUTH2)
- b. *Hèn=là kút bì / gòe=làp /*
 1SG.S=COND talk thing 2SGM.S:CONS=receive
[gòe-d'óng]_{NP} gòe=pòe hèn.
 NOMZ(SG)-be.good 2SGM.S:CONS=give 1SG.O
 ‘When I talk (about) something, and so you answer truthfully
 (lit. answer the good one) to me.’ (C00JMQUEST5)
- (54) a. *m-pè gòepé muép yóng [jáp*
 LOC-place THAT/WHEN 3PL.S:CONS call children(PL)
mòe-dààs]_{NP} (...).
 NOMZ(PL)-men(PL)
 ‘at the place to where they call the male children (...).’
 (D01CLU)
- b. *kàfin dé / [mòe-dààs=hòk]_{NP}*
 before SO.THAT NOMZ(PL):CONS-men(PL)=DEF
yók yì (...).
 return.home(PL) CONS
 ‘so before the male ones return home (...).’ (D01CLU)
- (55) a. *muép yúúl mànng [réep gòe-kyôklók=hók]_{NP}.*
 3PL.S rise(PL) take(SG) girl(SG) NOMZ(SG)-small=DEF
 ‘they rose (and) picked up the small girl.’ (D00EWITCH1)
- b. *ní à [gòe-kyôklók]_{NP}.*
 3SG.I FOC NOMZ(SG)-small
 ‘he is a small one.’ (F00JMUSU)

In the case of (inchoative and stative) verbs, the modifying construction is the only mechanism available to derive forms that can function as modifiers and head nouns. In the case of property-denoting nouns and adverbs, speakers use the derived modifier interchangeably with the non-derived noun or adverb occurring in the proprietary construction (as in 56a) (see section 3.1 for this construction). In the case of property-denoting nouns, speakers interchangeably use the derived nouns (as *gòehààm yím* ‘green one’ in 56b) and the non-derived nouns (as *hààm hààskè* ‘yellow’ in 56c).

- (56) a. [D'á=hók òmùk **hààm** **yím**]_{NP} t'óng
calabash=DEF NOMZ.3SG.POSS water:GEN leaf sit(SG)
d'i k'à tébùl=hòk.
LOC.ANAPH HEAD(SG):GEN table=DEF
‘A calabash of green color sits there on the table.’
(M00ANCOMP1)
- b. *h̀d̀òe=sh̀èl* *sh'è / g̀òe-d̀àp* *g̀òe-t̀ép /* *h̀d̀òe*
SPEC=game:GEN foot NOMZ-mix NOMZ(SG)-bec.black CONJ
[*g̀òe-h̀ààm* **yím**]_{NP}.
NOMZ(SG)-water:GEN leaf
‘A football that mixes black (color) and green color.’
(M00MJCOMP)
- c. *h̀d̀òe=sh̀èl* *sh'è / g̀òe-d̀àp* *h̀ààm* *yím-- /*
SPEC=game:GEN foot NOMZ-mix water:GEN leaf
g̀òe-d̀àp [***h̀ààm*** ***h̀ààs-k̀è***]_{NP} *h̀d̀òe*
NOMZ-mix water:GEN egg:GEN-chicken CONJ
g̀òe-t̀ép.
NOMZ(SG)-bec.black
‘A football that has mixed green color--, that has mixed yellow color and black.’ (M00MJCOMP1)

The availability of alternative strategies for nouns and adverbs (as in 56a to 56c) could suggest that the modifying construction was originally restricted to verbs, and was only later extended to nouns and adverbs. Such a diachronic development is furthermore suggested by the semantics of the construction: the modifying construction creates a stative expression that characterizes a referent in terms of a specific property. As such, it differs from the semantics coded by the overwhelming majority of property-denoting expressions: the inchoative verbs. Such verbs can only ever describe the state change of getting into a property. That is, the modifying construction creates a possibility for state-

change verbs to occur in reference to a state (see also section 6.3 in chapter 4, and section 2.2 in chapter 8).

In natural texts, the distribution of individual items differs considerably: some occur predominantly in derived form (e.g., *d'yén* ‘become small, young’, *b'áng* ‘become red’), while others occur predominantly in their non-derived verbal form (e.g., *fyér* ‘become big’, *pyá* ‘become white’). Their different distribution can be explained by resorting to the distinction between individual-level terms (i.e., terms describing inherent properties) and stage-level terms (i.e., terms describing changeable properties) (Carlson 1980). Goemai generally does not make this distinction on the lexical level – it is true that there are some stative verbs and nouns that code permanent or inherent properties, but most property concepts are coded by inchoative verbs. Instead, Goemai makes this distinction in the distribution of derived and non-derived forms: some concepts are more likely to be construed as describing a permanent state (and thus occur in derived form), while others are more likely to be construed as a changeable state change (and thus occur as inchoative verbs). For example, *d'yén* ‘become small, young’ is usually used in derived form to characterize young people – it would be difficult to imagine a situation where animates grow younger. By contrast, *fyér* ‘become big’ is usually used in verbal form to describe people growing up. Similarly, *b'áng* ‘become red’ is preferably used in derived form with color reference only, while *pyá* ‘become white’ is predominantly used in verbal form to metaphorically describe people becoming happy. Notice that some elements only ever occur in the modifying construction, e.g., *gòe- ~ mòed'émèn* ‘good one(s)’ or *gòe- ~ mòep'úóe* ‘new one(s)’ do not have a corresponding non-derived form **d'émèn* or **p'úóe* synchronically.

The distribution and functions described above are already attested in the manuscripts of Sirlinger (1937, 1942, 1946). Subsequently, the modifying construction was extended to other types of lexical fillers. These are not attested in Sirlinger. In addition, their semantics as well as considerable speaker variation point to a more recent development.

One new development is the occurrence of other state-change verbs in the modifying construction – of verbs that characterize their referents not in terms of a property but in terms of a transitory configuration (in 57a) or transformation (in 57b). Not all speakers produce and accept these forms.

- (57) a. *Sh'ép=hók à [gòe-gòròng]_{NP}.*
 wood=DEF FOC NOMZ(SG)-bec.crooked
 ‘The (piece of) wood is a crooked one.’ (M00ANDISPOS10)
- b. *lú múk / à [gòe-rúúp]_{NP}.*
 settlement 3SG.POSS FOC NOMZ(SG)-collapse
 ‘his house is a collapsed one.’ (R00ABUSY)

Another recent development is the derivation of agentive nouns characterizing humans from a large number of different parts of speech, including verbs (as *múúr* ‘steal’ in 58a), verb phrases (as *yát ñshì* ‘advertise honey’ in 58b), abstract nouns (as *móós* ‘hospitality’ in 58c), adverbials (as *dók pòeb’ít* ‘old times’ in 58d), prepositional phrases (as *góe ìlmi* ‘with an education’ in 58e), and even entire clauses (as the clause introduced by *pé* ‘THAT/WHEN’ in 58f). This function is already attested in Sirlinger’s manuscripts (see examples 50a and 50b above), but its pervasiveness is a new phenomenon. In particular, Sirlinger only gives examples of derived agentive nouns occurring as head nouns – never as modifiers.

- (58) a. *Muèp k’wál muèp yí góe à [gòe-múúr]_{NP}.*
 3PL.S talk 3PL.S SAY 2SGM.I FOC NOMZ(SG)-steal
 ‘They talk (and) they say (that) you are a thief.’ (D00JLAZINESS)
- b. *Yóng / [gùrùm mòe-yát ñshì]_{NP} / dip.*
 call person NOMZ(PL)-advertize bee/honey all
 ‘(He) called all the people who trade honey.’ (F99AMOESHAAR)
- c. *[gùrùm mòe-móós]_{NP} / muèp=t’óng wúl /*
 person:CONS NOMZ(PL)-hospitality 3PL.S=IRR arrive
muèp=láp nì ná.
 3PL.S=receive 3SG.O see
 ‘and then the guests (lit. people guests), they would arrive, they take it (and) see (it).’ (C01ANHAND)
- d. *Mòe-gùrùm mén dók à [gùrùm*
 NOMZ(PL)-person 1PL.POSS PAST.REM FOC person
mòe-dók pòeb’ít]_{NP} (...).
 NOMZ(PL)-past remote
 ‘Our people were people of old times (i.e., traditionalists) (...).’ (C00ANYOUTH3)
- e. *muèp à [gùrùm mòe-góe ìlmi]_{NP}.*
 3PL.I FOC person NOMZ(PL)-COMIT education
 ‘they are people having education.’ (C00ANYOUTH4)

- f. *Gòe=ràng pé / ñd'ùùn / [jáp*
 2SGM.S=think THAT/WHEN INSIDE:GEN children(PL)
mòe-pé muép d'è t'óng muèn /
 NOMZ(PL)-THAT/WHEN 3PL.S exist PROGR go(PL)
*bì sh'è yì ñd'àsòende]*_{NP} (...).
 thing learn/teach PROGR now
 'You think that among the children who are going for an education now (...).' (C00ANYOUTH1)

Furthermore, the modifying construction was extended to include all types of spatial expressions characterizing referents in terms of their spatial properties (see section 5.4). And speakers use it to integrate adverbial numerals into the noun phrase (see chapter 5, section 2.1).

In addition to its derivational functions described above, speakers use the modifying construction to overtly mark two types of expressions. First, it overtly marks some (human) nouns for number (see section 2.1). Second, it overtly marks demonstrative, anaphoric and definite modifiers: these modifiers usually occur underived as modifiers, but they can be overtly marked with the modifying prefixes (in 59) (some factors governing the distribution of marked and unmarked expressions are discussed in section 5.4).

- (59) *ñ-[yì gòe-ñnde]*_{NP} / *ñdòe=yì wá*
 LOC-year NOMZ(SG)-LOC.ANAPH SPEC=year return.home(SG)
wúl / hààm t'èkgòed'i t'ó ñgwà Réés.
 arrive water already/still lie(SG) suburb:GEN <PLACE.NAME>
 'In that year, (and) (in) the year (that) has come, water was still lying in the suburb of Rees.' (D00AKWANDE)

To summarize the discussion, the modifying construction was originally used with a derivational function to create agentive nouns, modifiers and headless modifiers from verbs. In recent times, it has been extended to create expressions that characterize referents in terms of their properties (coded in property-denoting verbs, nouns and adverbs), in terms of their human characteristics (coded in all parts of speech), in terms of their configuration or transformation (coded in state-change verbs), in terms of their discourse status (coded in demonstrative, anaphoric and definite expressions), in terms of their spatial properties (coded in spatial expressions), and in terms of their number (coded in numerals). In some cases, the modifying construction no longer serves a derivational function, and Goemai seems to be in the process of developing an overt marking of the modifying function within the noun phrase.

4.3. Nominalization of verb phrases

Goemai has two possibilities for nominalizing verb phrases, i.e., a verb together with its direct or cognate object: participle nominalization (section 4.3.1) and action nominalization (section 4.3.2). Other elements of the verb phrase (e.g., TAM particles and the second object of a ditransitive verb) cannot occur in these contexts. In both cases, there are restrictions on the resulting noun phrases: the head noun has to be the direct or cognate object of the verb; and the noun phrase only rarely contains further modifiers.

4.3.1. *Participle nominalization*

Participle nominalization is attested with transitive verbs only. In this case, the resulting expression consists of a head noun (corresponding to the direct object of the transitive verb) plus the nominalized transitive verb occurring as a modifier to this head noun. The nominalized verb is formed by means of the invariant nominalizing prefix *gòe-* combining with the adverbializing prefix *N-*. The expression as a whole can occur in all nominal slots, e.g., as direct object in (60a), as subject in (60b) and (60c), or as verbless clause complement in (60d). Preferably, the noun phrase consists of the head noun and the nominalized verb only, although there are occasional examples that contain other modifiers (as the locative anaphor *ínòè* in 60b).

- (60) a. *Fuán láp [shim gòe-n-d'án]_{NP} (...).*
 rabbit receive yam NOMZ-ADVZ-cook/warm
 ‘The rabbit took the cooked yam (...) (lit. yam of being cooked).’ (F99DLIGYA)
- b. *Gòe=nà / [yít gòe-n-ááp ínòè]_{NP} /*
 2SGM.S=see eye/face NOMZ-ADVZ-open(PL) LOC.ANAPH
d'óng p'ùúr.
 be.good very
 ‘You see, this eye-opening is very good (lit. eyes of being open).’ (C00ANJOS)
- c. *[t'yák gòe-n-dám]_{NP} d'è d'í.*
 heart/neck NOMZ-ADVZ-spoil exist LOC.ANAPH
 ‘there is anger (lit. heart of being spoiled).’ (N01NTIME)

- d. *Tó / d'ík gòe-dók pòeb'it / à [d'ík*
 okay marrying NOMZ(SG)-past remote FOC marrying
gòe-n-tù]_{NP} bá.
 NOMZ-ADVZ-kill(SG) NEG
 ‘Okay, the marriage of old times was not a marriage to be divorced (lit. marriage of being killed).’ (F99OGOELONG)

Alternatively, speakers occasionally use a non-verbal clause instead: the notional direct object occurs as subject, and the nominalized transitive verb as complement (in 61). In this structure, the nominalized transitive verb cannot be modified, and all modifiers have to occur with the verbless clause subject.

- (61) *K'yáng=hók à [gòe-n-b'óót]_{NP}. (...) Kó=wúròe shín*
 rope=DEF FOC NOMZ-ADVZ-tie any/every=who do
tóe=wò?
 EMPH=INTERR
 ‘The rope is a tied one (lit. of being tied). (...) Whoever could have done (it)?’ (Q01APROG1.64)

Semantically, participle nominalization functions as a stative or adjectival passive: it expresses an endstate that results from an unspecified agent carrying out a verb action. Syntactically, the nominalized verb modifies its notional direct object (and characterizes it in terms of this endstate). The subject argument is demoted in the sense that it cannot be expressed at all – although an external agent is understood (as illustrated by the continuation of 61 above). Its passive-like function is furthermore evident in its distribution: it is largely restricted to transitive verbs occurring in the patient / theme construction (in 60b to 60d) or the range construction (in 60a). Ditransitive verbs cannot be nominalized in this way, but their transitive alternant can (in 62a). Intransitive verbs cannot occur either, nor can verbs entering the causative construction. The only exception are verbs of transfer: they co-occur with either their patient / theme object (in 62b) or with their causative object (in 62c) (see chapter 4, section 3 for details on argument structure constructions; see Haspelmath 1994 for a typological overview of passive participles).³⁵

35. This variability suggests that both constitute core participants of the verb – although at any time only one can be expressed as a syntactic direct object, while the other is expressed as an adverbial. Cross-linguistically, verbs of transfer often allow for the possibility to link either of the two roles to direct object (see Van Valin and LaPolla 1997: 270–272, 326–352).

- (62) a. A: *Hàngòed'è ònòe dók d'à móe=s'wá*
 water LOC.ANAPH PAST.REM HAB 1PL.S=drink
t'óng à shínd'óng.
 HAB FOC present
 'The water, in the past we used to drink (it) as a free gift.'
- N: *Tó / òd'àsòenòe / à [bì gòe-n-k'wát]_{NP}.*
 okay now FOC thing NOMZ-ADVZ-pay
 'Okay, nowadays, (it) is a paid-for-thing (lit. thing of being paid for).' (C00ANJOS)
- b. *hèn=màn [lwá gòe-n-vuét]_{NP}*
 1SG.S=know animal/meat NOMZ-ADVZ-take/give.share
 'I recognize the seized meat (lit. meat of being taken)' (A-21/04/04)
- c. *hèn=màn [gùrùm gòe-n-vuét]_{NP}*
 1SG.S=know person NOMZ-ADVZ-take/give.share
 'I recognize the person given (it)' (lit. person of being made to take (it))' (A-21/04/04)

Chadic languages generally have multiple mechanisms for deriving comparable stative forms, e.g., Hausa deverbal adverbial statives (Jaggar 2001: 651–656; P. Newman 2000: 549–554; E. Wolff 1993: 217–218) and adjectival past participles (P. Newman 2000: 19–21); or Miya attributive and predicate statives (Schuh 1998: 111, 116). But notice that these mechanisms differ from Goemai in their formal means of derivation (formed by suffixes) and their distribution (not restricted to transitive verbs).

The participle construction is currently developing into a complement of auxiliary verbs (see chapter 8, section 4.3).

4.3.2. Action nominalization

Action nominalization derives an expression that consists of a head noun and a nominalized verb. The head noun is cognate to the verb (i.e., derived by means of zero nominalization, see section 4.1.1); and the nominalized verb is formed by means of the invariant nominalizing prefix *gòe-* (illustrated in 63a and 63b). The resulting expression functions as a noun phrase, and can occur in all relevant syntactic functions (e.g., as prepositional object in 63a, as subject in 63b).

Usually, no further modification is observed, although modifiers can be added (e.g., the free possessive pronoun and the locative anaphor in 63a).

- (63) a. *nd'àsòenòe nd'ùùn [kùt gòe-kùt góe*
 now INSIDE:GEN talking NOMZ-talk 2SGM.POSS
*hònòe]*_{NP} = *hòe (...)*.
 LOC.ANAPH=exactly
 'Now, in this your talking (...).' (C00JMQUEST1)
- b. [*muààn gòe-muààn*]_{NP} *à bì gòe-d'émèn bá*
 going(SG) NOMZ-go(SG) FOC thing NOMZ(SG)-good NEG
 'traveling isn't a good thing' (A-16/02/00)

Unlike participle nominalization, action nominalization is attested with verbs of all transitivity classes (e.g., with a transitive verb in 63a, and with an intransitive verb in 63b). It is likely that this construction is the nominalized form of the cognate object construction (see chapter 4, section 6.1): speakers use cognate objects to focus on an activity, and cognate objects are attested with both transitive and intransitive verbs. Nominalizing a verb and its cognate object then results in the nominalized action interpretation illustrated in (63a) and (63b).

4.4. Nominalization of clauses

Goemai has two possibilities for nominalizing entire clauses (i.e., including TAM particles, adverbials and different clause types): clausal nominalization (section 4.4.1) and manner / locative nominalization (section 4.4.2). Both possibilities are illustrated in this section.

4.4.1. Clausal nominalization

The most common strategy makes use of the invariant nominalizing prefix *gòe-*. The resulting expression then has two functions: when occurring without a head noun, it functions as an adverbial clause (see chapter 8, section 4.1 for this function); when occurring with a head noun, it functions as a modifier within the noun phrase. In the latter case, its function is comparable to that of relative clauses attested in many other languages. The nominalized clause contains all elements that were present in the corresponding verbal clause. Depending on the nature of the head noun, it allows for the following three patterns:

First, if the head noun corresponds to the clausal subject (such as *gùrùm* ‘person’ in 64), it is followed by the nominalizing prefix *gòe-*, the verb (and TAM particles, if any), the direct object (if any) and adverbials (if any).

- (64) *bá* [*gùrùm gòe-nà ní*]_{NP}.
 NEG person NOMZ-see 3SG.O

‘There isn’t anybody who looks after him (lit. person of looking after him).’ (D00EWITCH1)

Second, if the head noun corresponds to the clausal object (such as *bì* ‘thing’ in 65a and 65b), the subject occurs as a possessor within the nominalized clause. In the case of nominalized simple clauses, the possessor (such as *múk* ‘3SG.POSS’ in 65a) is preceded by the verb (and its TAM particles), but followed by the adverbials. In the case of multiverb constructions, the possessor (such as *muép* ‘3PL.POSS’ in 65b) is preceded by the first verb (and its TAM particles), but followed by all other verbs. Notice that the possessor is always realized with a high tone: e.g., the low-tone noun *mìs* ‘man(SG)’ receives a high tone in (65c).

- (65) a. [*Bì gòe-t’óng kàt múk gòe lúún*]_{NP} (...).
 thing NOMZ-IRR find 3SG.POSS PLACE dry.season

‘The things that he would find in the dry season (...) (lit. the things of his finding in the dry season ...).’ (C00ANYOUTH4)

- b. *B’èp dù=k’óeléng* [*bì gòe-d’è*
 do.again PL.LOG.SP.S=hear/smell thing NOMZ-exist
muép t’óng k’wál yì]_{NP}.
 3PL.POSS PROGR talk PROGR

‘They (should) again hear the thing that they are saying (lit. the thing of their saying).’ (F99DLIIT)

- c. *dé ní k’óerék* [*bì gòe-k’wál*
 SO.THAT 3SG.S remember/remind thing NOMZ-talk
mìs=hòk]_{NP} *yì* (...).
 man(SG):POSS=DEF CONS

‘so that she remembers the thing that the man said (...).’ (F99DMATWO)

Third, instruments and locations can occur as head nouns, even though they function as adverbials in the corresponding verbal clauses. No other adverbial

can occur in this context. If the head noun is an instrument, the original subject is not expressed, and the direct object (if any) follows the verb (in 66a). If the head noun is a location, the original subject is expressed as a possessor, preceded by the verb and direct object (if any) (in 66b). It is possible, but not necessary, for an anaphoric adverb referring back to the location to occur in the nominalized clause (in 66c).

- (66) a. [*D'á gòe-s'wà ní*]_{NP} *wán*.
calabash NOMZ-drink 3SG.O lack
'There isn't a calabash for drinking it (with).' (F99DLIGYA)
- b. *Nyè-gòepé* [*pè gòe-s'wà hààm múk*]_{NP} /
because-THAT/WHEN place NOMZ-drink water 3SG.POSS
t'òng góe=mán bá.
IRR 2SGM.S=know NEG
'Because the place where he drinks water (lit. of his drinking water), you wouldn't know (it).' (D01CLU)
- c. [*lú gòe-t'óng rú góe d'i* /
settlement NOMZ-IRR enter(SG) 2SGM.POSS LOC.ANAPH
gòedégòekàng]_{NP}=*hòe* (...).
first=exactly
'the compound where you would enter there (lit. of you entering there), the first one (...).' (D01CLU)

The nominalized clause occurs in a fixed slot within the noun phrase (see table 28 in section 1). As such, it need not follow its head noun directly, but can be preceded by, e.g., free possessive pronouns (in 67a). Notice that this example contains two possessive pronouns: the first pronoun functions as a modifier to the head noun (i.e., *sh'it múk* 'his work'), but the second functions as a subject within the nominalized clause (i.e., *gòet'óng shín múk* 'that he would do'). That is, the potential ambiguity is resolved by the different positions of the possessive pronouns. In the case of demonstrative, anaphoric and definite modifiers, however, a real ambiguity arises: since such modifiers always follow the nominalized clause, they can be interpreted either as modifiers to the head noun, or as modifiers to a noun occurring within the nominalized clause (as illustrated by the two free translations in 67b). In such cases, the ambiguity can only be resolved through contextual information.

- (67) a. *Ni t'óng màn bòe=muààn góe [sh'ít*
 3SG.S IRR know HOW/WHERE=go(SG) COMIT work
múk / [gòe-t'óng shín múk]_{NOMZ}NP.
 3SG.POSS NOMZ-IRR do 3SG.POSS
 'He would know how to go (on) with his work that he would do
 (lit. work of his doing).' (C00ANYOUTH1)
- b. *Muèp muén t'én kàt*
 3PL.S go(PL) IRR find
[gùrùm [gòe-shín uén=hók]_{NOMZ}NP (...).
[gùrùm [gòe-shín uén]_{NOMZ}=hók]_{NP} (...).
 person NOMZ(SG)-do medicine=DEF
 'They went (and) would find a person who makes the medicine
 (...).'
 Or: '(...) the person who makes medicine (...).' (D00EWITCH4)

It is not possible for two nominalized clauses to co-occur as modifiers. In such cases, speakers express one proposition in a nominalized clause, and the second proposition in an adverbial (*gòe-*) *pé ~ fè* clause (in 68) (see chapter 8, section 4.1).

- (68) *Ndòe=àrààm ná n-d'è / k'à [wò /*
 SPEC=conversation PRES PRES-exist HEAD(SG):GEN snake
gòe-t'ó / n-hààm'd'è]_{NP} / [gòepé muép yóng
 NOMZ-lie(SG) LOC-water THAT/WHEN 3PL.S:CONS call
nì / k'wàkták / góe yil Gòemâi]_{ADV}.
 3SG.O watersnake PLACE ground:GEN <ETHNIC.NAME>
 'See, here's a story about a snake that lies in water, that they call
k'waktak in the land of the Goemai.' (D99DGWAKTAK)

Nominalized clauses cannot occur pronominally in place of the head noun. If they occur without a head noun, they function as adverbial clauses and receive a temporal interpretation (see chapter 8, section 4.1).

4.4.2. *Manner / locative nominalization*

The second type of clausal nominalization is a type of manner / locative nominalization, which nominalizes both verbal (in 69a and 69b) and non-verbal (in 69c) clauses by means of the proclitic *bòe=*. Unlike the clausal nominalization

discussed above, manner / locative nominalization does not require the notional subject to be expressed (in 69a) – if it is expressed, it occurs as a possessor (as *góe* ‘2SGM.POSS’ in 69b). The resulting expressions describe manner (i.e., how something is done) or location (i.e., where something is done). The interpretation depends on its interaction with other elements in the clause, in particular, the verb semantics.

- (69) a. *Tó / à [bòe=t'óng tàngòedé]_{NP}.*
 okay FOC HOW/WHERE=IRR start
 ‘Okay, (this) is how/where (it) would start.’ (D01ALU)
- b. *Tó / [bòe=t'óng tàngòedé góe]_{NP} / là*
 okay HOW/WHERE-IRR start 2SGM.POSS COND
góe=d'yém k'à wàkám / t'òng
 2SGM.S=stand(SG) HEAD(SG):GEN way IRR
góe=kát à zòrì d'yém tóe bàntyèm
 2SGM.S=find FOC entrance stand(SG) EMPH FRONT
góe.
 2SGM.POSS
 ‘Okay, how/where you would start, when you stand on the way, you would find an entrance hut (that) stands in front of you.’ (D01ALU)
- c. *Lá [bòe=à gáskiyá]_{NP} (...).*
 COND HOW/WHERE=FOC truth:POSS
 ‘If (this is) how/where the truth is (...).’ (N00EWITCH5)

Generally, the resulting expression cannot occur as either a modifier or a head noun. Instead, it occurs as an adverbial (as in 69a to 69c), specifying how or where an event took place. However, there are examples where the nominalized clause occurs as an argument to a verb (in 70a and 70b). Such uses are rare, and the semantic and syntactic restrictions are only imperfectly understood. It is possible that the examples reflect lexicalizations – such as *bòelát* ‘end (lit. how/where it finishes)’ or *bòed'ě* ‘whereabouts; meaning (lit. how/where it is)’

- (70) a. *Tó / gòe=màn [gwén bóe=d'è*
 okay 2SGM.S=know ASSOC.PL HOW/WHERE-exist
*jímáár]*_{NP}=*hòe=à?*
 fish.type:POSS=exactly=INTERR
 ‘Okay, do you know the kinds of whereabouts of the *jimaar*
 fish?’ (C00ANDIALECT2)
- b. *Hèn=k'òelèng [bóe=d'è kút góe]*_{NP}.
 1SG.S=hear/smell HOW/WHERE=exist talking:POSS 2SGM.POSS
 ‘I hear the meaning of your talk.’ (C00JMQUEST3)

5. Other elements of the noun phrase

This section describes the non-nominal expressions occurring within the noun phrase. It first introduces the pre-head quantifier (section 5.1), associative plural (section 5.2) and specific-indefinite article (section 5.3). The fourth type of pre-head modifier, the diminutive, has already been discussed in section 2.5. The section then goes on to present the post-head modifiers. Goemai has a large group of such modifiers, occurring in the following order: nominalized verb phrase (see section 4.3 above), free possessive pronoun (see section 2.4), modifying construction (see section 4.2), nominalized clause (see section 4.4), demonstrative, locative anaphor and definite article. Some co-occurrences of such post-head modifiers are illustrated below: a nominalized verb phrase and a definite article co-occur in (71a); a possessive modifier and a modifying construction co-occur in (71b); and a modifying construction and a nominalized clause co-occur in (71c).

- (71) a. *sái gòe=nàk [ndòe=háás*
 then/only 2SGM.S=fetch SPEC=flour
*gòe-ñ-d'èk=hòk]*_{NP} (...).
 NOMZ-ADVZ-move.up/down=DEF
 ‘then you fetch some of the winnowed flour (...).’ (P00DCROPS)
- b. *à [mùk yàm-núún nóe*
 FOC NOMZ.3SG.POSS son(SG):GEN-mother 1SG.POSS
*gòe-mìsk'óóm]*_{NP}.
 NOMZ(SG)-elder(SG)
 ‘(it) is (the one) of my elder brother.’ (D01JLU)

- c. *mòe=k'òelèng* [k'wál *mòe-d'émèn* [gòe-t'óng
 1PL.S=hear/smell talking NOMZ(PL)-good NOMZ-IRR
*p'uát m-puòe muép]_{NOMZ}]_{NP} gòepé muèp
 exit(PL) LOC-mouth 3PL.POSS THAT/WHEN 3PL.S
zém mèn.
 like 1PL.O
 'we hear good advice that would come from their mouths (of those) that love us.' (D00JPEOPLE)*

Most post-head modifiers have already been discussed in previous sections. This section focuses only on those elements that mark the referential status of an entity: the demonstratives (section 5.4), the locative anaphor (section 5.5) and the definite article (section 5.6) (see also Hellwig 2002 and 2003: 239–284 for more detailed grammatical, semantic, and pragmatic information on these expressions).

5.1. Quantifier

The quantifier *d'ù* 'much/many' indicates that the referent of the head noun occurs in great quantity. There are no restrictions on the types of entities that can be quantified, covering both count nouns (in 72a) and mass nouns (in 72b). In the first case, there may be plural morphemes elsewhere in the noun phrase or clause; in the second case, singular marking is observed (corresponding to the mass interpretation; see section 2.1 for the semantics of number marking).

- (72) a. *muèp nyét [d'ù t'éng]_{NP} yúúl d'yám*
 3PL.S leave much/many tree rise(PL) stand(PL)
d'i ngàm.
 LOC.ANAPH much/many
 'they let many trees rise (and) stand there.' (D01CLU)
- b. [*D'ù hàngòed'è*]_{NP} *t'ò b'ák t'óng sù*
 much/many water lie(SG) here PROGR run(SG)
yì n-yíl.
 PROGR LOC-ground
 'Much water lies here running on the ground.' (H01AJOS)

The corresponding concept of 'few/little' can be expressed by the diminutive – but recall that it receives this interpretation only when modifying a mass

noun (see section 2.5). In its quantifying use, the diminutive is mutually exclusive with the quantifier (for semantic reasons), but in its diminutive use, the two can co-occur (as in 73).

- (73) *[d'ù jàp bì góe-d'è m-b'èt*
 much/many DIM(PL):GEN thing NOMZ-exist LOC-belly:GEN
néng=hók]_{NP} / muèp yóng nì bèng.
 cow=DEF 3PL.S call 3SG.O stomach
 ‘the many little things that are in the belly of the cow, they call them *bèng*.’ (C00ANDIALECT3)

Notice that Goemai preferably codes quantification in adverbs (see chapter 5, section 2.2.1). The diminutive-cum-quantifier *là* (SG) ~ *jáp* (PL) and the quantifier *d'ù* are the only exceptions to this generalization. Both are likely to be of recent origin. The diminutive was derived from a noun (see section 2.5), and the quantifier was possibly derived from the verb *d'ù* (SG) ‘put sitting, cause to sit’. Both the causative verb and its intransitive counterpart *t'óng* (SG) ‘sit’ have secondary senses of ‘put much/many’ and ‘be much/many’ respectively (see Hellwig 2003: 124–129, 142). Example (74a) illustrates this verb in its secondary sense, and (74b) is a parallel example that illustrates the corresponding quantifier. It is possible that the quantifier originated as the second verb in a serial verb construction (see chapter 8, section 3 on serialization), but in present-day Goemai, the verb and the quantifier occur in different syntactic functions.

- (74) a. *t'òng góe=ná muèp [d'ù]_V lú*
 IRR 2SGM.S=see 3PL.S cause.sitting(SG) settlement
ngàm wá d'ì n-Túdùn Wàdà=hòk.
 much/many AREA LOC.ANAPH LOC-<PLACE.NAME>=DEF
 ‘you would see (that) they have put up many houses in the area there of Tudun Wada.’ (H01AJOS)
- b. *t'òng góe=ná muèp lóe [d'ù kèntí]_{NP}*
 IRR 2SGM.S=see 3PL.S put much/many store
léng d'ì.
 hang/move(PL) LOC.ANAPH
 ‘you would see (that) they have put up many stores (that) hang there.’ (H01AJOS)

5.2. Associative plural

The associative plural *gwén* is prototypically used to denote a unit comprising a single person (in 75a) or folktale character (in 75b and 75c) (expressed in the head noun) and its associates. In these cases, it triggers the use of plural morphemes elsewhere in the phrase or clause (e.g., the plural verb *yók* ‘return home’ in 75b, or the plural spatial relator *k'ék* ‘HEADS’ in 75c). The plural noun phrase can occur in any syntactic function.

- (75) a. *lú mén tóe d'i / [lù*
 settlement IPL.POSS EMPH LOC.ANAPH settlement:GEN
*gwén Shályén]*_{NP}.
 ASSOC.PL <NAME>
 ‘our compound (is) there, the compound of Shalyen and his people.’ (D00JROUTE)
- b. *Lókàshí gòepé [gwén Náán]*_{NP} *yók*
 time THAT/WHENASSOC.PL:CONS God return.home(PL)
n-zàm ñdòe shàràp jí (...).
 LOC-field CONJ women(PL) SGM.LOG.SP.POSS
 ‘(At) the time when God and his people returned home from the farm (together) with his wives (...).’ (F99OGOELONG)
- c. *ñdòe=àrà m ná ñ-d'é / k'ék*
 SPEC=conversation PRES PRES-exist HEADS(PL):GEN
*[gwén fuán]*_{NP} / *ñdòe ñt'i / ñdòe lìgyà.*
 ASSOC.PL rabbit CONJ son.of.rabbit CONJ nightjar
 ‘Here is a story about the people of the rabbit (together) with the son of the rabbit and the nightjar.’ (F99DLIGYA)

More recently, speakers have extended its use to express a plurality of entities of the same kind. These entities can be people (in 76a), but also inanimate objects (in 76b), abstract entities (in 76c), and even masses (in 76d). In the latter case, it can co-occur with singular marking elsewhere in the phrase or clause (e.g., with the singular verb *d'ú* ‘cause sitting’ in 76d). It is not obligatory in any of these cases, and its presence rather stresses that the entities occur in different types or kinds.

- (76) a. *gòebí [gwén dàsk'óóm]*_{NP} *má muèp s'wá.*
 AS.IF ASSOC.PL elders(PL) also 3PL.S drink
 ‘like those kinds of elders, too, they drink (it).’ (D01NTREE)

- b. *Màng* [gwén / d'á gòe-t'wót d'i]_{NP} (...).
 take(SG) ASSOC.PL calabash NOMZ-sit(PL) LOC.ANAPH
 ' (He) took those kinds of calabashes that sat there (...).'
 (F99DLIIT)
- c. *Jáp* t'él t'wót d'i /
 children(PL) assemble sit(PL) LOC.ANAPH
 t'át [gwén tàmtis]_{NP} d'i.
 propel/tell.folktale(SG) ASSOC.PL folktale LOC.ANAPH
 'The children sit assembled there, (they) tell different kinds of
 folktales there.' (D01CLU)
- d. *muèp* d'ú [gwén hàngòed'è]_{NP} òd'ùùn.
 3PL.S cause.sitting(SG) ASSOC.PL water INSIDE
 'they set kinds of water inside.' (D01JHAND)

The associative plural can co-occur in the same noun phrase with other modifiers, including the quantifier *d'ú* (in 77a) or the diminutive *là* (SG) ~ *jáp* (PL) (in 77b).

- (77) a. *Gòebi* góe [d'ú gwén vitamins]_{NP} d'è
 AS.IF COMIT much/many ASSOC.PL vitamins exist
 òd'ùùn múk (...).
 INSIDE 3SG.POSS
 'As if (it) has these many kinds of vitamins (that) are inside it
 (...).' (D01ATREE)
- b. *Muèp* shín [gwén jáp bì]_{NP} díp.
 3PL.S do ASSOC.PL DIM(PL) thing all
 'They do all these kinds of little things.' (C00ANYOUTH1)

The associative plural probably originated from the pronoun *gwěn* '2PL', which was (and still is) used as a stylistic device in narrative texts. In present-day Goemai, it is common for narrators to step outside their narration and to directly address the protagonists of a story (in 78a) or their audiences (in 78b). In such contexts, narrators often use a second person pronoun in juxtaposition to a name – superficially in the same position as the present-day associative plural, i.e., preceding the name (as in 78b). In the course of grammaticalization, this pronoun probably became integrated into the noun phrase, co-occurring first with human and animal protagonists, and later with all other types of entities.

- (78) a. *Muèp kát là-t'éng dé-gòe n-s'òe bá. Tó /*
 3PL.S find child(SG):GEN-tree PUR ADVZ-eat NEG okay
fuán / d'in góe=ndòe bì=góe nd'ùùn /
 rabbit PAST.CL 2SGM.S=come thing=2SGM.POSS INSIDE:GEN
núng góe. Sái yó kúút p'èt /
 maturity(SG) 2SGM.POSS then/only rise(SG) just exit(SG)
góe sh'é múk.
 COMMIT foot/leg 3SG.POSS

'They didn't find any fruit to eat. Okay, rabbit, **you** have just come in **your** own way in **your** own cleverness (= what are you going to do?). Then (he = rabbit) just rose (and) went out on his feet.' (F99ANTI)

- b. *Só hèn=b'òòl [gwén]_{NP} [dàsk'óóm]_{NP} /*
 so 1SG.S=beg/appeal 2PL.O elders(PL)
hèn=b'òòl [gwén]_{NP} [mòe-ndá]_{NP} / ndòe
 1SG.S=beg/appeal 2PL.O NOMZ(PL)-father CONJ
jáp / t'wòt mpuóe-mpuóe / t'òng gú=sh'é /
 children(PL) sit(PL) REDUP.always PROGR 2PL.S=learn/teach
d'ùòe Gòemâi=hòk yi.
 voice:GEN <ETHNIC.NAME>=DEF PROGR

'So I ask you, elders, I ask you, fathers and children, always sit learning the Goemai language.' (D00NSPEAKING)

5.3. Specific-indefinite article

The specific-indefinite article *ndòe*= introduces a specific entity into discourse, i.e., an entity whose existence and unique identifiability is presupposed. As such, the referent is identifiable by the speaker, but not yet by the hearer. The article frequently occurs in existential statements, with both singular (in 79a) and plural referents (in 79b). In subsequent occurrences, the new entity is then overtly marked as definite, e.g., by using a possessive pronoun (in 79a) or a definite article (in 79c). Phonetically, the article has to be analyzed as a proclitic, forming a tight unit with the following noun.

- (79) a. [*ŋdòe=là*]_{NP} *d'è d'i. S'ém múk à*
 SPEC=child(SG) exist LOC.ANAPH name 3SG.POSS FOC
Ìmá.
 <NAME>
 'There was a certain boy. His name was Ima.' (D00EWITCH1)
- b. *Àkwáí [ńdòe=jáp mòe-b'ák pé]*_{NP}
 there.is/are SPEC=children(PL) NOMZ(PL)-disregard place
d'è d'i.
 exist LOC.ANAPH
 'There were some disrespectful children.' (F99OGOELONG)
- c. *ní / lóe án múk d'ém't'èi k'à*
 3SG.S put mind 3SG.POSS already HEAD(SG)
 [*ńdòe=réép*]_{NP}. *Ní zém dé-gòe ñ-làp /*
 SPEC=girl(SG) 3SG.S like PUR ADVZ-receive
réép=hók.
 girl(SG)=DEF
 'he has already put his mind onto a certain girl. He wants to
 marry the girl.' (F99DLA)

Notice that this morpheme is not a general indefinite article. There are therefore many instances where non-specific referents are introduced into discourse with a bare noun phrase (as *t'éng* 'tree' in 80 below).

- (80) *Dóe kàt / [gòedè t'éng gòe-f'yér]*_{NP}.
 come find bottom:GEN tree NOMZ(SG)-bec.big(SG)
 '(He) found here the bottom of a big tree.' (F99ANTI)

The specific-indefinite article co-occurs with the definite article in those cases where the new entity forms a subset of those entities that are already known from previous discourse. For example, in (81a), the speaker has previously discussed the economic uses of different trees; he now asks himself if he should discuss any other trees – he uses the definite article =*hok* to mark the trees as known from discourse, but the specific article *ńdòe=* to refer to a subset of these trees (those that he has not yet discussed). Under similar conditions, the specific-indefinite article co-occurs with the locative anaphor *ńndòe* (introducing a subset of anaphoric referents, as in 81b) and the demonstratives (introducing a subset of spatial referents, as in 81c) (see sections 5.4 to 5.6 for the semantics of demonstrative, anaphoric and definite modifiers).

- (81) a. [*Ńdòe=t'èng=hók*]_{NP} *d'yám* *d'i*
 SPEC=tree=DEF stand(PL) LOC.ANAPH
zák-yìt=à?
 also/however-again=INTERR
 'Do any other trees stand there again?' (D01ATREE)
- b. *kó kúmá [ńdòe=yí ńndòe]_{NP} *gòe-k'wál*
 maybe/or also SPEC=year LOC.ANAPH NOMZ-talk
múk ńndòe.
 3SG.POSS LOC.ANAPH
 'or maybe one of these years, these (ones) that she has named.'
 (S00JFAREWELL1)*
- c. *Sái / bá góe ués ńndòe kiút /*
 then/only return(SG) COMIT bone LOC.ANAPH just
*póe [ńdòe=áás gòe-ń-d'è-ńáng]_{NP}=*hòe.*
 give SPEC=dog NOMZ(SG)-ADVZ-CL:exist-DEM.DIST=exactly
 'Then (he) just returned with this bone, (and) so (he) gave (it
 to) (one of) those dogs.' (F00CAAS)*

Many Chadic languages have comparable specific-indefinite forms that introduce referents into discourse whose existence is presupposed (Frajzyngier 1993: 138–140; P. Newman 2000: 153–154; Schuh 1998: 217–221). Usually, these forms function both as pronouns and as modifiers to a noun; and they often convey the additional semantics of non-identity between two referents. The Goemai specific-indefinite article, by contrast, can only be used as a modifier, and it cannot express non-identity. However, Goemai has a nominal form *ńdè* that is used to individuate referents (as in 82a), stressing their non-identity (as in 82b). This nominal form does not have the same semantic extensions as the specific-indefinite article (see also chapter 5, section 2.1), but it is possible that the two are diachronically related: recall that the specific-indefinite article is a proclitic to the noun – and within phonological words, [e] (as in *ńdè* /'ndè/) could have lost some of its phonetic substance, being realized as [ə] (as in *ńdòe* /'ndà/).

(82) a. *Muèp yúúl ñk'wák muèp / dé ñdè*
 3PL.S rise(PL) all 3PL.POSS SO.THAT one/other
màng ñgòegàn=hòk.
 take(SG) ring=DEF
 'They rose among themselves, so that one (may) pick up the ring.' (F00JNAAN)

b. *Fridge=hòk gùdá f'ér. Ñdè d'yém b'ák /*
 fridge=DEF unit four one/other stand(SG) here
ñdè d'yém b'ák / ñdè d'yém
 one/other stand(SG) here one/other stand(SG)
puánáng / ñdè d'yém pòénoé=hòé.
 there/yonder one/other stand(SG) thus=exactly
 'The fridges (are) four. One stands here, one stands here, one stands there, one stands like this.' (D00EWITC2)

The specific-indefinite article *ñdè*= occurs in a second context: it co-occurs with generic nouns to express indefiniteness. As such, it is attested in many of the functional domains that cross-linguistically trigger the use of indefinite pronouns (Haspelmath 1997):³⁶ specific contexts (in 83a), irrealis contexts (in 83b), questions (in 83c), conditionals (in 83d) and comparatives (in 83e). Negation is expressed by using the general sentence-final negative particle (in 83f and 83g). The available data indicates that these phrases express true indefinite readings ('some'). Notice, however, that all data come from textual data (translated by native speakers into Hausa and English), i.e., in the absence of detailed semantic investigations, it is not possible to determine their exact semantics. Notice also that Goemai has borrowed the Hausa form *kóó*- 'any; every/each' to convey both free choice ('any') and universal quantification ('every/each'). This form is intruding into some of the domains illustrated in (83a) to (83g) (see chapter 6, section 2.1 for details). Other Chadic languages exhibit similar patterns (see especially Schuh 1998: 217–221; Frajzyngier 1993: 141–143): they use a native form for expressing indefiniteness, but have borrowed Hausa

36. Many Chadic languages have a set of indefinite pronouns that occur in environments similar (but not necessarily identical) to those exemplified in (83a) to (83g) (Haspelmath 1997: 300–301; P. Newman 2000: 153–154; Schuh 1998: 217–221). For Goemai, examples such as (83a) to (83g) should probably not be analyzed as instances of indefinite pronouns, but rather as instances of specific-indefinite noun phrases, since they do not seem to exhibit any prosodic, morphological or syntactic differences (but see Haspelmath 1997: 10–11, 52–54, 56–57, 182–183 on difficulties to distinguish between the two).

kóó- for universal quantification and free choice (overlapping with the native indefinite forms in some contexts). The native expressions either make use of generic nouns or of indefinite pronouns grammaticalized from generic nouns (see also Haspelmath 1997: 241 who suggests that this coding strategy is a widespread areal pattern in Africa).

- (83) a. [*Ndòe=bi*]_{NP} *d'è t'én pàrú yì b'ák.*
 SPEC=thing exist PROGR happen PROGR here
 'Something is happening here.' (D00EWITCH4)
- b. *Ní t'én tù góe tóe [t'át ndòe=b'ít]_{ADV}/*
 3SG.S IRR kill(SG) 2SGM.O EMPH time:GEN SPEC=day
ní t'én tù yí tóe [t'át ndòe=b'ít]_{ADV}.
 3SG.S IRR kill(SG) 2SGF.O EMPH time:GEN SPEC=day
 'She will kill you someday, she will kill you someday.'
 (N00EFRIENDS1)
- c. *Gòe (...) kàt [ndòe=bi]_{NP}=à?*
 2SGM.S find SPEC=thing=INTERR
 'Have you found something?' (C00ANYOUTH3)
- d. *lá mu'àn [ndòe=pè]_{ADV} / wó t'óng bí*
 COND go(SG) SPEC=place snake:CONS IRR follow
nì.
 3SG.O
 'when (it) goes somewhere, the snake would then follow it.'
 (F00JGOESEM)
- e. *yìn là góe / núng gòe=má*
 SAY COND 2SGM.S bec.mature(SG) 2SGM.S=surpass
[ndòe=gùrùm]_{NP} mé / t'òng góe=núng
 SPEC=person really IRR 2SGM.S=bec.mature(SG)
gòe=má [ndòe=gùrùm]_{NP} zák=à?
 2SGM.S=surpass SPEC=person also/however=INTERR
 '(he) said, if you really are more clever than someone, will you
 also be more clever than someone (else)?' (F99DLIGYA)

- f. *Muài yìn hâi jì=kàt [ńdòe=bì]_{NP}*
 fellow SAY INTERJ SGM.LOG.SP.S=find SPEC=thing
d'ì bá.
 LOC.ANAPH NEG
 ‘The fellow₁ said, hey, he₁ found nothing there.’
 (F99AMOESHAAR)
- g. [*ńdòe=gùrùm*]_{NP} *b'óót dé-gòe sùshè*
 SPEC=person gain.expertise(SG) PUR cheat
góe-nyé bá.
 NOMZ(SG)-matter NEG
 ‘No-one can cheat (his) neighbor.’ (H99BTARIHI)

Finally, the specific-indefinite article obligatorily occurs in all cases of natural coordination (see section 3.2 for details).

5.4. Demonstratives

Demonstratives occur both as modifiers and as pronouns. They constitute morphologically complex words that contain a nominalizing prefix (optional in the case of the demonstrative modifier, but obligatory in the case of the demonstrative pronoun), an adverbializing prefix, a deictic classifier and a deictic root. This structure is summarized in table (42). The internal structure of the demonstrative word seems to be unique within Chadic; in particular, no other Chadic language is known to have deictic classifiers.

Table 42. The demonstrative word

Nominalizer	Adverbializer	Deictic classifier	Deictic root
<i>gòe-</i> (SG)	<i>ń-</i>	<i>láng-</i> (SG), <i>léng-</i> (PL) ‘hang/move’	<i>ńnòe</i> ‘PROXIMAL’
<i>mòe-</i> (PL)		<i>t'óng-</i> (SG), <i>t'wót-</i> (PL) ‘sit’	<i>náng</i> ‘DISTAL’
		<i>d'yém-</i> (SG), <i>d'yám-</i> (PL) ‘stand’	
		<i>t'ó-</i> (SG), <i>t'óerép-</i> (PL) ‘lie’	
		<i>d'é-</i> ‘exist’	

The first element of the demonstrative word is the nominalizing prefix *gòe-* (SG) or *mòe-* (PL). These prefixes are identical to those of the modifying construction (see section 4.2): they specify the number of noun phrase referents

prefix *N-*. Example (85d) illustrates the context that might have triggered the reanalysis of adverbialized verbs as modifiers within the noun phrase: it is easy to see how an adverb such as *m̀b'árák* 'freshly' could have become reanalyzed as a modifier such as *m̀b'árák* 'fresh'

- (85) a. *Gòe=nà* [pín *gòe-f'yér*
 2SGM.S=see hut NOMZ(SG)-bec.big(SG)
ń-d'é-ń̀ndè]_{NP}=*hòe=à?*
 ADVZ-CL:exist-DEM.PROX=exactly=INTERR
 'Do you see this big hut?' (M00ANDISPOS11)
- b. *Wùt / wùt / [wùt*
 custard.apple custard.apple custard.apple
ń-d'yém-náng]_{NP} / *mòe=d'è m̀è=s'òe*
 ADVZ-CL:stand(SG)-DEM.DIST 1PL.S=exist 1PL.S=eat
là wùt yì.
 child(SG):GEN custard.apple CONS
 'The custard apple, the custard apple, that standing custard apple, we are eating the fruit of the custard apple.' (D01JTREE4)
- c. [*d'à m̀è- ń̀gégék*]_{NP}
 [*d'à ń̀gégék*]_{NP}
 calabash NOMZ(PL)- bec.round
 'round calabashes' (D-06/01/00)
- d. *gòe=tàràp* [*s'ónk'wà*]_{NP} [*m̀- b'árák*]_{ADV.}
 2SGM.S=snapp(PL) maize ADVZ-bec.wet
 'you break the maize freshly/in a fresh condition.' (P00DCROPS)

Typically (but not necessarily), the nominalizing prefix is omitted from the demonstrative modifier whenever number information is expressed elsewhere. This phenomenon is illustrated with the parallel examples below. In (86a), number information is coded only in the nominalizing prefix. In the last two examples, by contrast, number is coded elsewhere (in the diminutive modifier in 86b and in the deictic classifier in 86c) – and the nominalizing prefix does not occur.

- (86) a. [T'èng gòe-ń-d'è-ńnòe]_{NP} b'ém
 tree NOMZ(SG)-ADVZ-CL:exist-DEM.PROX touch
 k'à / pìn=hòk.
 head(SG):GEN hut=DEF
 'This tree touches the top of the hut.' (R01NCONTR)
- b. ńd'ùùn [jàp t'èng ń-d'è-ńnòe]_{NP} (...).
 INSIDE:GEN DIM(PL):GEN tree ADVZ-CL:exist-DEM.PROX
 'Among these little trees (...).' (D01NTREE)
- c. Gòe-ń-d'è-ńnòe / [t'èng
 NOMZ(SG)-ADVZ-CL:exist-DEM.PROX tree
 ń-d'yém-ńnòe]_{NP} / s'ém múk à /
 ADVZ-CL:stand(SG)-DEM.PROX name 3SG.POSS FOC
 t'èng d'in.
 tree:GEN sheabutter
 'This one, this standing tree, its name is sheabutter tree.'
 (D01JTREE1)

The semantics of number marking is identical to that attested in the modifying construction: the singular prefix is used with individual, collective and mass referents, and the plural prefix is used with multiple individuals (see the discussion in section 2.1). However, speakers sometimes use the singular prefix *gòe-* in place of the plural prefix *mòe-*, e.g., it can co-occur with a plural deictic classifier (and plural marking elsewhere in the clause, as in 87). This variation could reflect the recent diachronic origin of the demonstratives. They presumably originated in a nominalized presentative construction of the following form: the invariant prefix *gòe-* nominalized the entire construction (see section 4.4), the presentative prefix *N-* (originating in the adverbializing prefix *N-*) coded the presentative function, and a locative verb plus a deictic adverb gave spatial information (see chapter 8, section 1.3 for the presentative). In the course of grammaticalization, all elements have been reanalyzed – including the use of the modifying prefixes *gòe-* (SG) and *mòe-* (PL) in place of the invariant prefix *gòe-* (see Hellwig 2003: 273–283 for details of this analysis).

- (87) Gòe-ń-t'óerép-ńnòe / à hààm
 NOMZ(SG)-ADVZ-CL:lie(PL)-DEM.PROX FOC water
 mòe-tép.
 NOMZ(PL)-bec.black
 'These lying ones are black ones.' (Q01JDEM)

- b. *K'èpmàng ñdòe gòe-ń-d'é-ńndè=hòe.*
 different CONJ NOMZ(SG)-ADVZ-CL:exist-DEM.PROX=exactly
Yìm mángòrò ń-d'é-ńndè=hòe k'èpmàng
 leaf:GEN mango ADVZ-CL:exist-DEM.PROX=exactly different
ñdòe shák. (...) Ámmá k'èpmàng ñdòe
 CONJ each.other but different CONJ
gòe-ń-d'é-náng=hòe.
 NOMZ(SG)-ADVZ-CL:exist-DEM.DIST=exactly
 '(It) is different from this one (= referent 7). These green pa-
 pers (= referents 9 & 6) are different from each other. (...) But
 (they) are different from that one (= referent 8).' (Q01NDEM)
- c. *Bì ń-d'é-náng t'óng k'à*
 thing ADVZ-CL:exist-DEM.DIST sit(SG) HEAD(SG):GEN
ñdè.
 one/other
 'That thing sits on another one.' (Q01JDEM)
- d. *Zòrì ń-d'yém-ńndè=hòe*
 entrance ADVZ-CL:stand(SG)-DEM.PROX-exactly
d'yém dàkd'uòe lú tóe.
 stand(SG) MIDDLE:GEN settlement EMPH
 'This standing entrance hut stands in the middle of the com-
 pound.' (D01ALU)

The occurrence of deictic classifiers is restricted to the demonstrative word. However, there are some examples of them occurring with the definite article =*hok* (in 89a) and with numerals (in 89b). All examples were produced spontaneously, but later rejected by a different speaker. Such variation could foreshadow a possible extension of the classifying function beyond the spatial domain of the demonstratives.

- (89) a. [*B'àl ń-tó-hók*]_{NP}.
 stick ADVZ-CL:lie(SG)-DEF
 'The lying stick.' (Q01NDEM35)

- b. *Jiráp m̀òe-ń-d'yám-vél (...)*
 girls(PL) NOMZ(PL)-ADVZ-CL:stand(PL)-two
muép=d'yám t'óng píl pè yì.
 3PL.S=stand(PL) PROGR watch place PROGR
 'The two standing girls (...)
 they stand watching the place.' (R01NSTAGE)

The final element of the demonstrative word is the deictic root (*ń̀nòe* 'proximal' and *náng* 'distal'). The proximal root is diachronically related to the locative anaphor *ń̀nòe*, but the two forms now occur in different morphological environments, syntactic slots and paradigmatic sets; and they serve different functions. The distal root shows similarities to the distal adverb *puánáng*, and both probably originated from the same source (the distal adverb **náng*; see chapter 5, section 2.2.3). The semantic extensions of the deictic roots were investigated by means of a set of stimuli (Wilkins 1999), and verified by observational data (see Hellwig 2003: 255–262 for details).

The deictic roots distinguish two grades of distance from the deictic center, comprising the unit of speaker and addressee.³⁹ Speakers use the proximal root *ń̀nòe* with objects that are physically close to this unit. They use it regardless of whether the object is located closer to the speaker, or closer to the addressee, and also regardless of whether or not it touches one of the participants. It is used even in cases where the referent is located close to the addressee who himself is far away from the speaker (e.g., at the other side of a large field). In such contexts, speakers recognize a conflict between the referent being close to the unit of speaker and addressee and at the same time being far away from the speaker. They usually resolve this conflict by using the proximal demonstrative together with the distal adverb (e.g., *gòènd'ènnòe puánáng* 'this one over there') or a locative phrase (e.g., *k'wàlám yim ń̀d'ènnòe ń̀k'óng góe* 'this leaf behind you'). Only some speakers would use the distal demonstrative together with such a locative phrase (e.g., *gòènd'énáng bànt̀yèm góe* 'that one in front of you'). Most speakers, by contrast, restrict the distal demonstratives to objects that are beyond the reach of both speaker and addressee.

39. The definition of the deictic center as including both speaker and addressee is typologically unusual: with the exception of Brazilian Portuguese, such a demonstrative system has not been described in the literature (Meira and Guirardello-Damian 2002). Closely-related Angas-Goemai group languages seem to distinguish two grades of distance from the speaker only (Frajzyngier 1993: 88–90). But notice that Hausa has a person-oriented element in its deictic system, as it has a special term for proximity to the addressee (P. Newman 2000: 36–38, 147–155).

- b. [*Gòe-dákd'ùòe=hòk*]_{NP} (...) / à *m̀mààn*.
 NOMZ(SG)-MIDDLE=DEF FOC NOMZ.1SG.POSS
 ‘The middle one (...) is mine.’ (D01JLU)

The demonstrative words have primarily gestural exophoric uses, i.e., they require a gesture and cannot be interpreted without monitoring physical aspects of the speech situation.⁴⁰ They are used to establish joint attention to a spatial referent, and are therefore a common means to introduce such referents into discourse. As such, they are used as long as the identity of the referent is questioned, asserted or corrected (illustrated by the dialogue in 91a). Once the referent is correctly identified and becomes background knowledge, the speakers resort to the locative anaphor (in 91b).

- (91) a. N: *B'èp gòe=éép*
 do.again 2SGM.S=open(SG)
gòe-ń-t'óng-ńndè.
 NOMZ(SG)-ADVZ-CL:sit(SG)-DEM.PROX
 ‘Open this sitting one again (= referent 14).’
- A: *m̀m / gòe-ń-d'è-ńndè=hòe=à?*
 yes NOMZ(SG)-ADVZ-CL:exist-DEM.PROX=exactly=INTERR
 ‘Yes, this one (= referent 14)?’
- N: *m̀m*.
 yes
 ‘Yes.’ (M01ANCOLOR)
- b. A: *Gòe-ń-d'è-ńndè=hòe=à?*
 NOMZ(SG)-ADVZ-CL:exist-DEM.PROX=exactly=INTERR
 ‘(Is it) this one (= referent 7)?’
- N: *m̀m*.
 yes
 ‘Yes.’

40. My analysis of the functions of demonstratives, locative anaphor and definite article was influenced by discussions in Diessel (1999), Dixon (2003), Fillmore (1975), Halliday and Hasan (1976: 31–87), Hanks (1992), Himmelmann (1996), Klein (2001), Levinson (i2004), C. Lyons (1999) and J. Lyons (1977: 646–677). See Hellwig (2003: 262–273) for more details.

- A: *Gòe-ń̀ndòe* / *yìm* *lò̀n.*
 NOMZ(SG)-LOC.ANAPH leaf:GEN cloud
 ‘This one is a blue paper (= referent 7).’ (M01ANCOLOR)

The demonstratives are used in the same way to redirect attention to an already known but backgrounded referent. And they are used to contrast individual members from among a set of referents.

In all cases, demonstratives are only used to draw attention to referents located in physical space. The only exception is the form (*gòe-*) *ń̀d'èń̀ndòe* (i.e., the form with the existential classifier and the proximal root). This form introduces stories (in 92a), has non-gestural symbolic uses (e.g., it refers to the spatial setting of an event in 92b), and more generally intrudes into the domain of the locative anaphor (see section 5.5).

- (92) a. *Gòe-ń̀-d'è-ń̀ndòe* *à* *à̀rà̀m*
 NOMZ(SG)-ADVZ-CL:exist-DEM.PROX FOC conversation
k'à *pá̀ng (...).*
 HEAD(SG):GEN puffadder
 ‘This one is a story about a snake.’ (D99DPANG)
- b. *Nyè-gòe-sék* *bì* *gòepé* *lá*
 because-NOMZ(SG)-body thing THAT/WHEN COND:CONS
gòe=shín *b'ák* *ń̀-dùń̀iyà*
 2SGM.S=do here LOC-world
ń̀-d'è-ń̀ndòe=hòe (...).
 ADVZ-CL:exist-DEM.PROX=exactly
 ‘Because of this, the things which you do here in this world (...).’ (N01ATIME)

To summarize, the demonstratives are morphologically-complex words that are primarily used to single out referents that are physically present. As such, they give information that is necessary for identifying this referent. This information is primarily postural information, and only secondarily deictic information. In non-exophoric contexts, by contrast, the locative anaphor is used.

5.5. Locative anaphor

The locative anaphor *ń̀ndòe* occurs as a modifier within the noun phrase (in 93c and 93d); and a pronominal form is derived by means of the nominalizing pre-

fixes *gòe-* (SG) and *mòe-* (PL) (in 93a and 93b). Both the modifier and the pronoun are used for non-exophoric reference only, covering discourse deictic, anaphoric, contrastive and recognitional contexts.

The locative anaphor has discourse deictic uses in that it refers to propositions (in 93a) and points in time. It also has anaphoric uses, i.e., it occurs after a referent has been successfully identified (as in 91b above). In this case, it neutralizes all information on distance and posture: it can be used for objects introduced by all deictic classifiers and all deictic roots. Furthermore, it has contrastive uses, referring to ‘the other one’ (which can be the more proximal referent, as in 93b; but also the more distal referent). In fact, both contrasted referents can be marked with the locative anaphor: each anaphor occurs in a separate clause and the two clauses are exactly parallel in structure (in 93c). Finally, the locative anaphor has recognitional uses (in 93d), i.e., it activates knowledge shared by the speaker and the addressee.

- (93) a. *À bí dé-gòe kàt à sòól.*
 FOC AS.IF PUR find FOC money
Àmmá Gòemâi b'óót
 but <ETHNIC.NAME> gain.expertise(SG)
[gòe-ńńòe]_{NP} bá âi.
 NOMZ(SG)-LOC.ANAPH NEG INTERJ
 ‘(It) is as if (you aim) to earn money, but the Goemai are not able (to do) this.’ (C00ANYOUTH4)
- b. *Hén=zèm d'á /*
 1SG.S:CONS=like calabash
gòe-ń-d'é-ńńòe / mà
 NOMZ(SG)-ADVZ-CL:exist-DEM.PROX surpass
[gòe-ńńòe]_{NP}.
 NOMZ(SG)-LOC.ANAPH
 ‘And so I like this existing calabash (= distal) better than this (other) one (= proximal).’ (R01JCONTR)
- c. *[Màt ńńòe]_{NP} yìn / tô / t'òng móe=shín*
 woman(SG) LOC.ANAPH SAY okay IRR 1PL.S=do
à ńd'àng ńd'àsòenòe? [Là ńńòe]_{NP} yìn tó /
 FOC how now child(SG) LOC.ANAPH SAY okay
jì=màn bí gòe-t'óng shín jí. (...)
 SGM.LOG.SP.S=know thing NOMZ-IRR do SGM.LOG.SP.POSS

[*Màt* *ń̀ndè*]_{NP} *yìn* *t'òng*
 woman(SG) LOC.ANAPH SAY IRR

dóe=b'óót.

SGF.LOG.SP.S=gain.expertise(SG)

‘This woman said okay, how shall we do (it)? This boy₁ said okay, he₁ knew the thing he₁ would do. (...) This woman₁ (said) that she₁ would be able (to do it).’ (F99DLA)

- d. *dé-gòe* *dé* *góe=kàt* [*Hill Station Junction*
 PUR SO.THAT 2SGM.S:CONS=find <PLACE.NAME>
ń̀ndè]_{NP} (...).
 LOC.ANAPH
 ‘in order that you find this Hill Station Junction (...).’
 (H01AJOS)

Demonstratives cannot be used in any of the contexts above. The only exception is the demonstrative that contains the existential classifier *d'è-* and the proximal root *ń̀ndè*: it can be used for anaphoric reference (i.e., in the context illustrated in 91b) and for contrastive reference (i.e., in the contexts illustrated in 93b and 93c). Its non-exophoric uses are probably a development of its distribution in exophoric contexts: recall that the existential classifier is used at the second mention of referents, and that the proximal root has a much wider distribution than the distal root. Interestingly, there are even examples where the form *ń̀nd'èń̀ndè* replaces the form *ń̀ndè* in the demonstrative word itself (in 94a), and in lexicalized expressions containing the form *ń̀ndè* (as in 94b).

- (94) a. *Mòe-ń-t'óerép-ń-d'è-ń̀ndè.*
 NOMZ(PL)-ADVZ-CL:lie(PL)-ADVZ-CL:exist-DEM.PROX
 ‘These lying ones.’ (instead of *mòe-ń-t'óerép-ń̀ndè*) (Q01NDEM)
- b. *Tó / ń̀nd'àsóe-ń-d'è-ń̀ndè* *à* *lú*
 okay now-ADVZ-CL:exist-DEM.PROX FOC settlement
d'yém *d'èm* *bì=jí* *tóe.*
 stand(SG) this.time thing=SGM.LOG.SP.POSS EMPH
 ‘Right now a house₁ stands (there) on its₁ own.’ (instead of
ń̀nd'àsóeń̀ndè) (C00ANJOS)

Given its distribution, it is likely that the demonstrative form *ń̀nd'èń̀ndè* ‘this existing’ is in the process of being reanalyzed as an invariant form ‘this’

5.6. Definite article

The definite article =*hok* is used as a modifier within the noun phrase (in 95a); if marked by the nominalizing prefixes *gòe-* (SG) or *mòe-* (PL) it occurs pronominally (in 95b). The definite article is a toneless enclitic, receiving the same tone as its host.

- (95) a. *Yóng* [*áás=hók*]_{NP} (...).
 call dog=DEF
 ‘(He) called the dog (...). (FOOCAAS)
- b. *Kwài / mòe=yòng* [*góe-hók*]_{NP} *à wàndó kúút* (...).
 no 1PL.S=call NOMZ(SG)-DEF FOC trousers just
 ‘No, we call the one just “trousers” (...).’ (C00ANDIALECT4)

The definite article is used for unique referents that are identifiable from previous discourse, i.e., its use indicates a previous mention.⁴¹ Such referents are introduced either by means of the specific-indefinite article *ndòe=* (in 96a), or by a bare noun phrase (in 96b), but never by a demonstrative. Referents introduced by a demonstrative are always referred to with the locative anaphor in subsequent utterances.

- (96) a. *Sái ndòe / kààm / t’á / òd’ùùn lú*
 then/only SPEC festival fall(SG) INSIDE:GEN settlement
kús muép. Muèp yóng muèp dé muép
 NEAR 3PLPOSS 3PL.S call 3PL.O SO.THAT 3PL.S:CONS
muèn yì / góe pé kààm=hòk. (...) Muèp
 go(PL) CONS PLACE place:GEN festival=DEF 3PL.S
wúl à kààm=hòk.
 arrive FOC festival=DEF
 ‘Then a festival came to a town near them. They called them so that hey should go to the place of the festival. (...) They had arrived for the festival.’ (F99DLIGYA)

41. Similar semantics are attested in Hausa (P. Newman 2000: 143–146) and Mupun (Frajzyngier 1993: 169–173). But while Hausa <-h> and Mupun /nə/ are possibly cognate, Goemai =*hok* is not. Instead, the Goemai locative anaphor *ndòe* [‘ⁿnə] seems to be cognate to the Hausa and Mupun definite article.

- b. *Muèp pòe muèp hààm. (...). Fuán yín t'òng*
 3PL.S give 3PL.O water rabbit SAY IRR
ji=s'wá hààm=hòk zák-yít bá.
 SGM.LOG.SP.S=drink water=DEF also/however-again NEG
Lígyá máng hààm=hòk s'wá
 nightjar:CONS take(SG) water=DEF drink
bì=jí.
 thing=SGM.LOG.SP.POSS

'They gave them water. (...). The rabbit₁ said he₁ wouldn't drink the water again. So the nightjar₁ took the water (and) drank (it) in its₁ own way.' (F99DLIGYA)

Once a referent is known from discourse, speakers generally mark it with the definite article. It is also possible for it to co-occur with other markers of referential status (e.g., the possessive pronoun in 97).

- (97) *Tô / [mìs nóe=hók]_{NP} shín à bi mímòe?*
 okay man(SG) 1SG.POSS=DEF do FOC thing what
 'Okay, this my husband has done what?' (F99DLA)

There are instances where specific referents are not introduced by the specific-indefinite article, nor later referred to by the definite article. Most such examples come from folktales, concerning personified animals (in 98). It is very likely that the nouns are used as personal names in such contexts.

- (98) *Sái / yár / láp d'ì puánáng nd'ùùn*
 then/only bird receive LOC.ANAPH there/yonder INSIDE:GEN
t'èng=hók (...). Fuán máng p'áng (...). Yár
 tree=DEF rabbit:CONS take(SG) stone bird
zák shát muàlám ngám nd'ùùn t'óegái.
 also/however knead tuber much/many INSIDE:GEN calabash
 'Then **Bird** answered over there in the tree (...). So **Rabbit** picked up a stone (...). **Bird**, however, had made a lot of *mualam* food inside a calabash.' (F99ANTI)

As shown in sections 5.4 to 5.6, demonstrative, locative anaphor and definite article have different uses. The demonstratives are used with exophoric reference to draw attention to referents that are physically present and identifi-

able. The locative anaphor *ń̀ndè* is used immediately after such a reference has been successfully established; and it is used for discourse deictic, anaphoric, contrastive and recognitional reference. And the definite article =*hok* is used for referents that are identifiable from the previous discourse.

Given their different uses, they can co-occur within a single noun phrase. For example, in (99a), the speaker first introduces a referent with the demonstrative *ń̀d'énáng* 'that existing', but then makes a mistake in choosing the wrong postural verb (*t'óng* 'sit' instead of *t'ó* 'lie'). In his subsequent utterance, he corrects his mistake by using the demonstrative *ń̀t'ónáng* 'that lying'. But since the referent had been previously introduced and identified, he adds the locative anaphor *ń̀ndè*. In (99b), the demonstrative co-occurs with the definite article: the referent has been introduced in the previous discourse with a bare noun phrase, and is referred to in subsequent discourse with the definite article. Later on, the speaker shifts to direct speech, and marks the referent both for exophoric reference (coded in the demonstrative *ń̀d'énń̀ndè* 'this existing') and as identifiable from the discourse (coded in the definite article =*hok*). Finally, in (99c), both the locative anaphor and the definite article occur. The anaphor marks the referent as contrastive (to the previously mentioned women), and the definite article marks it as identifiable from the previous discourse.

- (99) a. *Bì ń̀d'é-náng zák-yìt t'óng*
 thing ADVZ-CL:exist-DEM.DIST also/however-again sit(SG)
k'à ń̀ndè. Bì ń̀t'ó-náng
 HEAD(SG):GEN one/other thing ADVZ-CL:lie(SG)-DEM.DIST
ń̀ndè t'óng-- / t'ó k'à ń̀ndè.
 LOC.ANAPH sit(SG) lie(SG) HEAD(SG):GEN one/other
 'That thing also sits on another one.
 That lying thing sits--, lies on another one.' (Q01JDEM)
- b. *Sái Ìmá muáán gòe nà fridge. Fridge=hòk*
 then/only <NAME> go(SG) SEQ see fridge fridge=DEF
gùdá f'ér. (...) K'yàp ní. À wúròe t'ém tóe
 unit four instruct 3SG.O FOC who tell EMPH
póe gòe dé góe=éép gwén
 give 2SGM.O SO.THAT 2SGM.S:CONS=open(SG) ASSOC.PL
fridge ń̀d'é-ń̀ndè=hòk yì?
 fridge ADVZ-CL:exist-DEM.PROX=DEF CONS
 'Then Ima went and looked at the fridge. The fridges (were)
 four. (...) (She) berated him. Who told you that you (can) open
 these fridges?' (D00EWITCH2&3)

- c. *Shàràp ná ò-t'óng. Sái réép*
 women(PL) PRES PRES-sit(SG) then/only girl(SG)
ń̀ndè=hòk dóe.
 LOC.ANAPH=DEF come
 'See the women sitting (here). Then this girl came.'
 (C01FGHJARAM8)

Comparable patterns are attested in the closely related Chadic language Mupun, where different functions are expressed in different forms that can co-occur (Frajzyngier 1993: 81–105). Cross-linguistically, the co-occurrence of determiners seems to be rare as languages tend to unite different functions such as exophoric usage, anaphor or previous mention within a single morpheme or within a single paradigmatic set (Diessel 1999: 93–114; J. Lyons 1977: 646–657).

6. Summary

This chapter has focused on nouns and noun phrases – it has discussed the noun phrase as a phrasal unit (section 1), the expressions that occur as the heads of noun phrases (section 2), the possibilities for conjoining nouns and noun phrases (section 3), the derivation of nominal expressions (section 4), and the expressions that serve as pre-head and post-head modifiers (section 5). This section summarizes some of the more pervasive patterns.

Goemai is largely isolating, and has only little morphology that could distinguish between the word classes. Instead, word classes are differentiated and identified on the basis of syntactic criteria, i.e., on the basis of their distributional and combinatorial possibilities. This identification process is aided by a certain syntactic rigidity: Goemai has fixed word and constituent order, its lexical items are usually not indeterminate as to their word class, and the syntactic functions of different word classes do not overlap. As such, it was possible to identify nouns by their ability to head a noun phrase, and to give evidence for the existence of the noun phrase as a phrasal unit (section 1). Comparable criteria are presented in chapters 4 to 6 for identifying other word classes and phrasal units.

Most Goemai nouns are unmarked for number, gender and noun class (section 2). Chadic languages, by contrast, tend to mark the first two categories on the noun or on noun phrase elements. Goemai has retained such remnants of Chadic number-marking morphology (in some kinship, bodypart and collective nouns), and it has retained the Chadic gender distinction in 2SG pronouns (but not in 3SG). There is also evidence for remnants of a Benue-Congo noun class

prefix that has entered the language through contact (marking nouns that denote insects, birds and small animals). Notice also that the variety of Hausa spoken on the Jos Plateau is characterized by the loss of gender and the reorganization of number – presumably reflecting the structure of the indigenous languages (Pawlak 2002: 81–82). Counteracting the loss of productive nominal morphology, Goemai is currently in the process of developing new morphology. The first development is linked to the gradual extension of the two modifying prefixes *gòe-* (SG) and *mòe-* (PL) (section 4.2). Goemai does not have a word class of adjectives, and instead codes most property concepts in inchoative verbs – the two modifying prefixes were originally used to derive modifiers and headless modifiers from such verbs. In recent times, however, their derivational function has been extended (to derive modifiers from a large number of different types of words), and they are increasingly used to overtly mark the modifying function on non-derived modifiers, as well as to overtly mark number on non-derived human nouns. The second morphological development concerns the deictic classifiers that occur within the demonstrative word (section 5.4). Goemai has recently developed an elaborate system of nominal classification based on postural semantics, and coded in classificatory verbs and deictic classifiers. The deictic classifiers gradually extend to other types of modifiers. This second development is of recent origin, and there is much variation between speakers and age groups. Both these developments are possibly motivated by a specific type of noun semantics (sections 2.1 and 2.2): Goemai has a large number of semantically general nouns that can be used in reference to singular, plural and collective referents, as well as in reference to both an entity and its produce. The classificatory elements serve to specify the nominal class, and thus restrict the reference of such semantically-general nouns. Similarly, the modifying prefixes serve to create expressions that characterize referents in terms of different types of properties, i.e., they again restrict the reference of nouns. These developments seem to be restricted to Goemai: although closely-related Angas-Goemai group languages have also lost most of their inherited nominal morphology, they do not seem to redevelop comparable morphology. It is not known whether they share Goemai noun semantics.

Another interesting aspect of the language is its use of two sets of logophoric pronouns to indicate co-reference with either the speaker or the addressee (section 2.4). Their use is largely restricted to speech act contexts, but there exists an incipient system of reference tracking outside speech act contexts. Notice that these logophoric pronouns distinguish gender, although the category of gender is largely absent elsewhere in the language. Goemai shares this system with closely-related Angas-Goemai group languages.

Both nouns and noun phrases can be conjoined (section 3). Conjoined nouns are juxtaposed in a genitive construction that expresses all kinds of possessive relations. In other Chadic languages, by contrast, such a construction is usually

restricted to code inalienable possession only. In addition, Goemai joins nouns by means of a proprietary construction (which overlaps with the modifying construction). In the case of coordinated noun phrases, present-day Goemai uses overt conjunctions. However, these conjunctions are possibly a new phenomenon that developed under the influence of Hausa. Originally, Goemai probably made use of juxtaposition only.

Goemai allows for different types of nominalization, and the resulting expressions function as head nouns or as modifiers to a head noun. The nominalization of verbs (section 4.1) creates abstract nouns and activity nouns – both concepts are only rarely coded in non-derived nouns. The derived abstract nouns have the same syntactic possibilities as non-derived nouns, but the activity nouns occur in restricted contexts only (fulfilling lexical aspect functions). Another type of nominalization, the modifying construction (section 4.2), creates expressions that function as modifiers and headless modifiers – recall that Goemai does not have a word class of non-derived adjectives. The lexicalization patterns above seem to differ from those attested in other Chadic languages. There is only little information for most languages, but at least Hausa has a large number of abstract and activity nouns, as well as a word class of adjectives. Other Chadic languages are known to also have word classes of adjectives, or to have subclasses of nouns that fulfill a modifying function. There are, however, indications that Chadic and Benue-Congo languages on the Jos Plateau share some of the Goemai lexicalization patterns – that is, these patterns may be an areal phenomenon. Other nominalization strategies are the nominalization of verb phrases (section 4.3) and of clauses (section 4.4).

In addition to the head noun, the noun phrase has 11 slots available for modifiers. The elements occurring before the head are mostly recent grammaticalizations whose origins are still transparent. In most cases, they express some type of quantification: a quantifier (section 5.1), a diminutive that allows for a quantifier reading (section 2.5), and an associative plural (section 5.2). Generally, Goemai codes quantification in adverbs, but there is a tendency to integrate quantifying expressions into the noun phrase (see chapter 5, section 2 for details). The fourth pre-head modifier is the specific-indefinite article (section 5.3), which is part of the system for marking the referential status of an entity. The other markers within this system all occur post-head: demonstratives (section 5.4), locative anaphor (section 5.5) and definite article (section 5.6). Like other Chadic languages, Goemai uses different forms to code different types of reference, allowing the forms to co-occur. The remaining post-head elements are the free possessive pronouns (section 2.4) and the various types of nominalizations that can occur as modifiers to a head noun (section 4).

Chapter 4

Verbs and the verb phrase

This chapter discusses Goemai verbs and verb phrases. It first introduces the verb morphology and the structure of the verb phrase (section 1), and then focuses on verb classes and constructional alternations: it outlines the position of Goemai within Chadic and illustrates issues in argument structure and lexical aspect (section 2), presents the different argument structure constructions (section 3), and describes the strategies for detransitivization (section 4), for adding participants to an event (section 5), and for changing the lexical aspect of a verb (section 6). Section 7 summarizes the discussion.

1. Verbs and the verb phrase: An overview

This section introduces the criteria for identifying verbs and verb phrases (section 1.1), illustrates the morphological characteristics of verbs (section 1.2), and summarizes common verbal lexicalization patterns (section 1.3). Notice that Goemai does not have any mechanism for deriving verbs from other word classes, i.e., all Goemai verbs are non-derived.

1.1. Identifying verbs and the verb phrase

Verbs are primarily identified by means of syntactic criteria, more specifically, by their ability to occur as heads of intransitive, transitive and ditransitive verb phrases. No other word class can occur in this function. Generally, verbs do not carry any productive inflectional or derivational morphology. The only exceptions are (i) an incipient system of cross-referencing some S/A arguments on the verb (see chapter 3, section 2.4) and (ii) remnants of Chadic number-marking morphology in a subset of verbs (see section 1.2).

The verb phrase contains the verb, the TAM particle(s) (if any), the direct object(s) (if any), and the adverbials (if any). This phrase is the relevant unit for a number of multiverb constructions, including verb serialization, but also purpose and sequential clauses (see chapter 8). Example (1) illustrates two verb phrases within the coordinate serial verb construction: the first verb *kàt* ‘find’ is followed by its direct object and its own adverbial, and the second verb (*h*)*d’ě* ‘exist’ is followed by another three adverbials. The adverbials have scope over

the preceding verb, while negation has scope over the entire multiverb construction.

- (1) *Mán gòe*=[*kàt lú gòe yíl*]_{VP} [*d'è d'í*
 PROH 2SGM.S=find settlement PLACE ground exist LOC.ANAPH
zák-yít òd'àsóenòe]_{VP} *bá*.
 also/however-again now NEG
 'You would not find houses on the ground (and they don't) exist
 there any longer nowadays.' (H01AJOS)

The individual words of the verb phrase occur in the order depicted in table (43). For reasons of emphasis, it is possible to front direct objects (see chapter 6, section 1.2) and adverbials (see chapter 5, section 1). Subject nouns and independent pronouns precede the verb phrase; and dependent subject pronouns (such as *gòe* = '2SGM.S' in 1 above) cliticize to the verb phrase: depending on the construction and the pronoun set, they cliticize either to the TAM particle (thus preceding the verb phrase) or to the verb (thus occurring between the TAM particle and the verb); this latter option is only available for set 2 pronouns (see chapter 3, section 2.4 for details). The dependent set 2 pronouns could possibly be analyzed as part of the verb phrase (see below).

Table 43. The structure of the verb phrase

(S=)	TAM	(S=)	V	O	O	TAM	ADV
	tenses						
	modalities						
	durative aspect						
						anterior aspect	
						resultative aspect	
	habitual aspect +					+ habitual aspect	
	progressive aspect +					+ progressive aspect	

Verb phrases can be marked for all TAM categories. This property sets them apart from verbless clauses: verbless clauses can only co-occur with a subset of the available TAM particles (see chapter 7). Furthermore, the occurrence of all dependent subject pronouns is restricted to verbs and verb phrases. For example, the verb in (2a) is preceded by the dependent pronoun *dú* 'PL.LOG.SP', but the verbless clause in (2b) uses the corresponding free pronoun *dwën* 'PL.LOG.SP'. In addition, dependent pronouns of set 2 are repeated with each verb phrase of a multiverb construction (as *jĩ* 'SGM.LOG.SP' preceding both

mùdàn ‘go’ and *kàt* ‘find’ in 2c). They cannot be repeated with any other word class or phrase: e.g., the set 2 pronoun *dù* ‘PL.LOG.SP’ in (2d) precedes the verb *k’àng* ‘wait; guard’, but not the particle *kàt* ‘maybe’ (which grammaticalized from the verb *kàt* ‘find’).

- (2) a. *Yìn dù=màng.*
 SAY PL.LOG.SP.S=take(SG)
 ‘(He₁) said they₁ (should) take (it).’ (F99DLIGYA)
- b. *Á ñd’àng ní t’óng k’wál yì / wái dwén*
 FOC how 3SG.S IRR talk CONS SAY PL.LOG.SP.I
à mòe-s’òòt?
 FOC NOMZ(PL)-witchcraft
 ‘How (come) that she₁ would say that they₁ are witches?’
 (N00EWITCH5)
- c. *D’à jì=mùdán jì=kát pè*
 COND SGM.LOG.SP.S=go(SG) SGM.LOG.SP.S=find place
gòe-t’ó páng (...).
 NOMZ-lie(SG) puffadder:POSS
 ‘(He₁ said) when he₁ goes (and) finds the place where the puff-
 adder lies (...).’ (D99DPANG)
- d. *muèp yìn dù=k’àng lé kát*
 3PL.S SAY PL.LOG.SP.S=guard/wait goods/clothes maybe
gòe-múúr=hók t’óng p’ét=ò.
 NOMZ(SG)-steal=DEF IRR exit(SG)=INTERR
 ‘they₁ said they₁ (will) guard the goods in case the thief will
 come out (again).’ (TIEMSAN 1999: 14)

The two pronoun sets also behave differently in the environment of the proclitic *bòe*= ‘FOC.IRR’, which precedes dependent pronouns of set 2 (as *yì* ‘2SGF’ in 3a), but follows all other pronouns (as *pǎ* ‘SGF.LOG.AD’ in 3b).

- (3) a. *mán bòe=yì=lúút môu.*
 PROH FOC.IRR=2SGF.S=be.afraid(SG) NEG
 ‘don’t be afraid.’ (F99DMATWO)
- b. *Yìn kédè pà bóe=wál bá (...).*
 SAY PROH SGF.LOG.AD.S FOC.IRR=cry(SG) NEG
 ‘(He₁) said, she₂ shouldn’t cry (...).’ (F99DREEP)

Given their distribution, it could be argued that the dependent set 2 pronouns form part of the verb complex: they occur between TAM particle and verb in some constructions (as in table 43), they are repeated with each verb phrase of a multiverb construction (as in 2c), and they follow the proclitic *bòe*=‘FOC.IRR’ (as in 3a).

Furthermore, there are reasons to assume that the verb and its arguments and TAM marking form a tight unit, excluding the adverbials. This unit cannot be interrupted by any other element (aside from dependent set 2 pronouns in some constructions). And its right boundary can be formally delimited by means of the consequence particle *yì*: this particle follows an intransitive verb (in 4a), the direct object of a transitive verb (in 4b), or the second object of a ditransitive verb (in 4c). In all cases, it precedes adverbials (as *k'à yil* ‘on the land’ and *dip* ‘all’ in 4a) and particles (as *bá* ‘NEG’ in 4b). If the consequence particle marks a multiverb construction, only the first verb phrase (minus its adverbials) precedes it, while all others follow it (in 4d).

- (4) a. *Nèèn* [*dók* *t'à*]_{VP} *yí* / *k'à* *yil*
 hunger PAST.REM fall(SG) CONS HEAD(SG):GEN ground
dip / *nyè-pé* *fuáán* *wán*.
 all because-THAT/WHEN rain lack
 ‘And so hunger fell on the whole land, because there was no rain.’ (F99ANTI)
- b. *Á* *nd'àng* *gòe*=[*tù* [*ní*]_O]_{VP} *yì* *bá?*
 FOC how 2SGM.S=kill(SG) 3SG.O CONS NEG
 ‘How (come) that you didn’t kill him?’ (D00EWITCH3)
- c. *dé* [*gòe* *pòe* [*mèn*]_O [*k'óóm*=*hók*]_O]_{VP} *yì* (...).
 SO.THAT OBLIG:CONS give 1PL.O strength=DEF CONS
 ‘so that (he) should give us the strength (...).’ (D00EWITCH4)
- d. *Fép* [*t'óng* *kóerém*]_{VP1} *yì* [*t'óng* *p'úát*]_{VP2}.
 dirtiness IRR bec.large.amount CONS IRR exit(PL)
 ‘So dirt would exist in large amounts (and) would come out.’
 (F99OGOELONG)

In a similar way, this unit is delimited by the enclitic *=hòe* ‘exactly’, which follows an intransitive verb (in 5a), the direct object of a transitive verb (in 5b) and the second object of a ditransitive verb (in 5c). Its scope can be vague: either over the entire verb phrase (in 5b) or over the object noun phrase only (in 5c). Usually, its scope is determined on the basis of contextual information. In the case of discontinuous TAM constructions (as in 5b, 5d and 5e), however,

there is also a formal indication: if its scope is over the verb phrase, it cliticizes to the final TAM particle (in 5d) or optionally replaces this final particle (as in 5b, where the expected progressive particle *yì* is replaced by *=hòe*); but if its scope is over the object noun phrase only, it cliticizes to this phrase preceding the final TAM particle (in 5e).

- (5) a. *Tó / yìn uén jí [lát]_{VP}=hòe.*
 okay SAY medicine SGM.LOG.SP.POSS finish=exactly
 ‘Okay, (he₁) said, his₁ medicine has really finished.’
 (F99DMATWO)
- b. *muép [d’è]_{VP1} [h-k’wál [k’wál]_O]_{VP2}=hòe (...).*
 3PL.S exist PROGR-talk talking=exactly
 ‘they are really talking the talk (...).’ (F00CFUAN)
- c. *Góe=làngòedé ñd’àng /*
 2SGM.S:CONS=start how
ní [póe [gòe]_O [sól ñnòe]_O]_{VP}=hòe yì?
 3SG.S give 2SGM.O money LOC.ANAPH=exactly CONS
 ‘So how did you start (it) so that he gave you this very money?’
 (F00CGOEBETLA)
- d. *Só / jàp gók gòe-[dók lá*
 so DIM(PL):GEN illness NOMZ-PAST.REM HAB
wèèl pè t’óng]_{VP}=hòe (...).
 bec.worried place HAB=exactly
 ‘So, the little illnesses that in the past really used to worry the
 place (...).’ (H01CJOS)
- e. *gùrùm góe-[d’è]_{VP1} [t’óng múúr / [óerém*
 person NOMZ-exist PROGR steal beans
jí ñnòe]_O=hòe yì]_{VP2}.
 SGM.LOG.SP.POSS LOC.ANAPH=exactly PROGR
 ‘the person who is stealing these his very beans.’ (F00AFUAN)

1.2. Verb morphology

Most verbs are morphologically unmarked. Unlike many Chadic languages, Goemai does not distinguish verb classes on the basis of their segmental or suprasegmental shape; and it has not retained any of the verbal extensions that serve to indicate thematic roles or change transitivity. Instead it uses unmarked

constructional alternations (discussed throughout this chapter). In addition to these alternations, there is a small number of verbs that have suppletive intransitive and transitive forms (some such verbs are illustrated in table 44).

Table 44. Suppletive verbs (intransitive and transitive)

Intransitive	Transitive
<i>fʏál</i> ‘boil’	<i>d’án</i> ‘boil’
<i>múút</i> (SG) ~ <i>muáráp</i> (PL) ‘die’	<i>tù</i> (SG) ~ <i>twò</i> (PL) ‘kill’
<i>pààp</i> (SG) ~ <i>pàp</i> (PL) ‘get hidden, lost’	<i>s’ók</i> (SG) ~ <i>s’wák</i> (PL) ‘hide, lose’
<i>t’óng</i> (SG) ~ <i>t’wót</i> (PL) ‘sit’	<i>d’ú</i> (SG) ~ <i>d’wár</i> (PL) ‘cause sitting’
<i>yóól</i> (SG) ~ <i>yúúl</i> (PL) ‘rise’	<i>éép</i> (SG) ~ <i>ááp</i> (PL) ‘raise’

Goemai has retained unproductive remnants of Chadic number marking morphology: approximately 10% of the verbal lexicon marks number on the verb stem. Such verbs are found in most semantic domains, but are especially frequent in some domains (such as posture, motion, caused motion, transformation), and largely absent in others (such as cognition, perception, speaking, consumption) (similar distributions are attested in many other languages; see Corbett 2000: 257–259). For example, in (6), the verbs *yóól* ‘rise’, *rú* ‘enter’, *áráp* ‘bite’ and *tù* ‘kill’ are all specified for number, while the verb *kàt* ‘find’ is not.

- (6) [K’áb’ál]_S [yóól]_{VP} yì [rú n-hàngòed’è]_{VP}. Lá
 crab rise(SG) CONS enter(SG) LOC-water COND
 [kàt [sh’áráp]_O]_{VP} / [áráp [sh’áráp]_O]_{VP} / [tù]_{VP}.
 find fish bite(PL) fish kill(SG)

‘So the crab rises (and) enters into the water. If (it) encounters fish, (it) bites the fish (many times), (it) kills (them).’ (F00JKABAL)

Semantically, number marking on Goemai verbs does not code nominal number and hence does not constitute an agreement phenomenon (see chapter 3, section 2.1 on nominal number). Instead, it codes verbal number (see Frajzyngier 1977b, 1997; and P Newman 1990a for verbal number in Chadic; see Corbett 2000: 243–264 for a typology). As such, it marks the participant number of an event: the subject argument of intransitive verbs (e.g., the singular verbs *yóól* ‘rise’ and *rú* ‘enter’ specify the number of *k’áb’ál* ‘crab’ in 6 above), the subject argument of some types of transitive verbs, the object argument of

other transitive types (e.g., the singular verb *tù* ‘kill’ specifies the number of *sh’áráp* ‘fish’ in 6), and the comitative phrase of yet other transitive types. Corbett (2000: 252–254) suggests that verbal number is always sensitive to grammatical relations, and more specifically, that it marks the subject argument of intransitive verbs and the object argument of transitive verbs. In the case of Goemai, it is true that verbal number “depends on the entity most directly affected” (Corbett 2000: 254), but this entity is determined on the basis of the thematic role – not the grammatical relation (see sections 2.2 and 3 for details on argument structure and verbal number). In addition, some verbs mark both participant number and event number. This possibility is restricted to verbs that express a punctual change of state (see sections 2.3 and 3 for details on lexical aspect). For example, the plural verb *áráp* ‘bite (many times)’ in (6) specifies the event number (i.e., plurality of action). The coding of event number is very common throughout Chadic, but plays only a marginal role in Goemai.

The two categories of verbal number are singular (subsuming single, collective and mass interpretations in the case of participant number, and single acts in the case of event number) and plural (i.e., more than one participant or event). Number marking is obligatory in the sense that singular marking entails a singular, collective or mass referent, while plural marking entails a plural referent; it is not pragmatically determined.

Morphologically, it is not possible to predict the form of the plural verb on the basis of its corresponding singular form (or vice versa). Given that plural formation is not productive, it can be assumed that many present-day forms are phonetically eroded, thus obscuring the original formatives. In any case, there are too few tokens available to formulate rules about plural morphemes and allomorphs. Nevertheless, a number of formatives recur, and are summarized in table (45).

The following discussion of plural formatives is based on the examples in table (45).

The largest group of plurals contains an infix $-(w/j)a-$, which almost always co-occurs with a preceding labialized or palatalized consonant. In some cases, the singular is already labialized or palatalized; and in other cases, the singular contains a close back vowel (leading to labialization in the plural) or a close front or mid central vowel (leading to palatalization). In addition, there are pairs where the occurrence of secondary articulation is not predictable, e.g., *p’ét* (SG) ~ *p’uát* (< **p’wát*) (PL) ‘exit’ Such unexpected forms possibly reflect diachronic changes: in the above case, Mwaghavul has a cognate form containing a close back vowel: *pùt* (SG) ~ *pwāt* (PL) ‘exit’ (Jungrauthmayr 1963a).

Table 45. Number-marking morphology

Formative	Singular	Plural	Gloss	
-(^w / _j)a-	<i>fjér</i>	<i>fjár</i>	'become big, important'	
	<i>lúút</i>	<i>lwát</i>	'be afraid'	
	<i>s'ék</i>	<i>sh'ák</i> (< *s'yák)	'soak'	
-(^w / _j)aCa-	-(^w / _j)ara-	<i>táp</i>	<i>táráp</i>	'snap'
		<i>kyàp</i>	<i>kyàlàp</i>	'cut / chip off'
	-(^w / _j)aáa-	<i>k'óón</i>	<i>k'áb'an</i>	'become face down'
	-(^w / _j)ar	<i>d'ú</i>	<i>d'wár</i>	'cause sitting'
	-(^w / _j)a- ap	<i>múút</i>	<i>muáráp</i> (< *mwáráp)	'die'
	-ə-	<i>láng</i>	<i>léng</i>	'hang / move'
-əCə-	-əṛə-	<i>gép</i>	<i>góerép</i>	'cut'
	-ə- ə-	<i>d'aláng</i>	<i>d'óeléng</i>	'pass'
	-ə- əp	<i>t'ó</i> (< *t'óór)	<i>t'óerép</i>	'lie'
	-ə- əŋ	<i>d'al</i>	<i>d'yóeléng</i>	'swallow'
-(^w)o	<i>rú</i>	<i>rwó</i>	'enter'	
-k ~ -ŋ	<i>dùm</i>	<i>dúk</i>	'become upside down'	
-t	<i>twáám</i>	<i>twàt</i>	'cause standing'	
-r	<i>d'óng</i>	<i>d'óór</i>	'be beautiful'	

The formative $-(^w/_j)a-$ is also present within the formative $-(^w/_j)aCa-$. In most cases, the medial consonant is a liquid ($-(^w/_j)ara-$ and $-(^w/_j)ala-$): these forms are not in free variation, but it was not possible to predict their distribution. There is a variant $-(^w/_j)aáa-$ (sometimes weakening to $-(^w/_j)aba-$ or $-(^w/_j)awa-$), which occurs if the singular contains a long mid back vowel. In addition, some plurals are probably based on this formative, but have then lost their final syllable (resulting in the present-day suffix $-(^w/_j)ar-$). This formative is labeled $-(^w/_j)aCa-$, but the following factors make it impossible to determine the exact relationship between the singular and plural forms, and hence to determine the exact shape of the formative and its allomorphs:

(i) Many – but not all – singular forms already contain a vowel $-a-$. The plural formative thus could have been $-(^w/_j)aC-$ or $-Ca-$ (instead of $-(^w/_j)aCa-$).

(ii) Many singular and plural forms end in the consonant $-p$. In present-day Goemai, this consonant is best analyzed as the lexical consonant of the verb.

However, there are two indications that – at least in some cases – it may be the remnant of yet another number-marking suffix *-ap*. One indication is its frequency: it is by far the most frequent final consonant of the $-(w/\beta)aCa-$ plurals. Another indication comes from a group of verbs whose plural ends in *-p* but whose singular does not, e.g., *múú́t* (SG) ~ *múáráp* (< **mwáráp*) (PL) ‘die’ P Newman (1990a) has argued that comparable verbs in other West Chadic languages are formed by means of an infix *-a-* together with a suffix **-tV* (which became dissimilated to *-p*), and a final lexical consonant *-t* (which weakened to *-r-* in intervocalic position) (but see Gerhardt 1983a for an alternative analysis).

(iii) It is possible that the medial consonant in $-(w/\beta)a\beta a-$ plurals is the original consonant, which was lost in the singular form (see chapter 2, section 1.3).

Despite these uncertainties, it can be assumed that the major plural formative is an infix *-a-*. In addition, there are formatives that occur less frequently. The $-(w/\beta)a-$ and $-(w/\beta)aCa-$ formatives have corresponding *-ə-* and *-əCə-* formatives (recall that the practical orthography renders /ə/ either as ‘e’ or ‘oe’; see chapter 2, section 1.5); and there are a number of suffixes ($-(w)0$, *-k* ~ *-ŋ*, *-t*, and *-r*). In some cases, singular and plural forms differ in vowel length, e.g., *pààp* (SG) ~ *pàp* (PL) ‘hide’ These plurals are tentatively analyzed as containing the (short) vowel infix $-(w/\beta)a-$ (not as vowel shortening). They are parallel to examples such as *b’óót* (SG) ~ *b’át* (PL) ‘able’ or *rées* (SG) ~ *rás* (PL) ‘become lean’ In yet other cases, differences in vowel length result from phonological processes, e.g., in the pair *d’óng* (SG) ~ *d’óór* (PL) ‘beautiful’, the velar nasal in the singular necessitates a short vowel (see chapter 2, section 1.3).

Both Chadic and Benue-Congo languages on the Jos Plateau make use of similar formatives for expressing verbal number, and it has to be assumed that extensive language contact has taken place in this part of the grammar. Some formatives are of Chadic, or even Afroasiatic, origin: the infix *-a-*, and possibly the suffixes *-k* and *-t* (Frajzyngier 1977b, 1997; P Newman 1990a). But notice that common Chadic formatives such as *-n* and reduplication are absent in Goemai. Other formatives, including especially *-r-* and *-r*, can be traced back to Benue-Congo verbal extensions that became reanalyzed as plural formatives (Gerhardt 1983a; see also Gerhardt 1971, 1984; McKinney 1979; E. Wolff and Gerhardt 1977; E. Wolff and Meyer-Bahlburg 1979).

Goemai has an additional group of approximately 20 plurals that bear no morphological relationship to their singular counterparts. It is likely that such suppletive pairs were formed on the basis of two non-related co-existing verbs that shared semantic similarities, which then became associated with a number distinction. Such processes can still be observed in present-day Goemai. For example, the two distinct lexemes *dàp* ‘slap’ and *b’uát* ‘beat repeatedly, flog, play a drum or string instrument’ are increasingly used by speakers as a suppletive singular / plural pair. A similar development is currently taking place in the case of *lyàk* ‘throw away’ and *kwán* ‘spill (liquids); throw away (many)’

Unlike morphologically derived plurals, suppletive plurals usually do not have the same semantic extensions as their corresponding singulars. For example, *sh'ák* 'tell folktale' is the plural of only one of the senses of the polysemous verb *t'át* 'shoot; tell folktale'; similarly, the plural verb *nán* 'become big' picks out only one possible interpretation of the semantically general verb *fyér* 'become big / important'. Alternatively, E. Wolff and Gerhardt (1977) suggest that the existence of suppletive forms can be analyzed as a contact phenomenon: the languages borrowed words that were semantically similar to pre-existing words, and then reinterpreted them as singulars or plurals to the native words. This is a possible scenario, but none of the suppletive Goemai forms can be traced to Benue-Congo languages. In the absence of such evidence, the suppletive pairs are therefore assumed to result from the language-internal developments outlined above.

Finally, Goemai has a large number of verbs that seem to contain one of the above plural formatives. Semantically, these verbs either describe iterative states-of-affairs (e.g., *b'iring* 'roll', *myáláp* 'shine, flicker') or properties (e.g., *dúlúk* 'blunt', *s'wàlàk* 'pointed'). Given their semantics, it is likely that they exhibit remnants of the Chadic category of event number, i.e., of plural verbs denoting the plurality of an action (Frajzyngier 1977b, 1997; P. Newman 1990a; see also P. Newman 2000: 423–429 for Hausa): repetition in the first case, and intensity in the second. The present-day Goemai forms, however, do not have any corresponding non-derived counterparts: these verbs are used in reference to both singular and plural entities, and they distribute like all other verbs that are unspecified for number. That is, these verbs can be analyzed morphologically and semantically as plural, but not syntactically (see also the discussion in chapter 2, section 2.1).

1.3. Verb semantics

The distribution of Goemai verbs across different argument structure and TAM constructions is largely predictable on the basis of their semantics, more specifically, on the basis of their participant structure and lexical aspect. This section summarizes some of the more predominant lexicalization patterns that characterize the language as a whole, and that motivate the existence of grammatical structures discussed elsewhere in this grammar.

In terms of their lexical aspect, most Goemai verbs code a state change, i.e., (i) unambiguous activity verbs and (ii) unambiguous stative verbs are rare.

(i) Verbs that can express activity readings are usually semantically general over state-change and activity readings. The intended reading is then determined by other elements of the clause. In particular, the presence of a cognate object or of the semantically-general or 'light' verb *shin* 'do' forces an activity

reading. This scarcity of activity verbs may be characteristic of Chadic languages in general; and it is likely that their scarcity motivates the widespread use of cognate object and light verb constructions (see sections 2.3 and 6.1).

(ii) Goemai uses inchoative verbs to express concepts that tend to be coded by stative verbs or nominal predicates in many other languages (including especially property concepts, but also others). This lexicalization pattern motivates the development and spread of strategies to create stative expressions – including some subtypes of serial verb constructions, the modifying construction and the ascriptive construction. This pattern is probably shared by Chadic and Benue-Congo languages on the Jos Plateau, but it does not seem to be characteristic of Chadic languages in general (see sections 2.3, 6.2 and 6.3).

Although Goemai has only few stative verbs, most of them are high-frequency verbs that occur in contexts where other Chadic languages commonly use a copula or verbless expression (see Frajzyngier 1987a and Pawlak 1994 for a general discussion; see also Burquest 1973; Frajzyngier 1993: 259–263; P. Newman 2000: 178–182; Schuh 1998: 316–325; Seibert 1997: 98–102 for other West Chadic languages): locative (in 7a), presentative (in 7b), ascriptive and equative (in 7c), existential (in 7d and 7e) and negative possessive contexts (in 7f) (see sections 1 and 2 in chapter 8 for details). In particular, Goemai has stative postural verbs that – in their basic use – denote a location (as in 7a). Cross-linguistically, comparable verbs tend to be stative if they occur in locative contexts (J. Newman 2002a; Levin and Rappaport Hovav 1995: 126–133); and Stassen (1997: 55–61) argues that a majority of languages worldwide employs postural-based stative verbs in locative contexts. In some languages, such verbs were further grammaticalized to express various other functions (see especially the contributions in J. Newman 2002b). In Goemai, they constitute the source for an elaborate system of nominal classification based on postural semantics and coded in different parts of speech (see chapter 2, section 2.2). Their stative lexical aspect is one of the factors that motivated their spread throughout the language: in a language that has only few stative verbs – and almost no derivational morphology – stative verbs constitute a major resource for creating stative expressions, thus allowing non-stative verbs to occur in reference to states (see sections 6.2 and 6.3).

- (7) a. *Hàngòed'è t'ó ñ-gòedè gùng.*
 water lie(SG) LOC-bottom:GEN forest
 'Water lies at the bottom of the forest.' (M00ANDISPOS11)
- b. *Gák ná ñ-d'yám kó=à ñnàng.*
 wall PRES PRES-stand(PL) any/every=FOC where
 'See, walls stand everywhere.' (C00ANJOS)

- c. *Kùt ònóe d'è góe-k'ém.*
 talking LOC.ANAPH exist NOMZ(SG)-different
 'This talk is different.' (C00ANDIALECT3)
- d. *Byààp t'éng gòe-mát d'è d'i (...).*
 pumpkin:GEN tree NOMZ(SG)-woman(SG) exist LOC.ANAPH
 'There are female pawpaw trees.' (D01NTREE)
- e. *Nèèn dók t'à yí / k'à yíl*
 hunger PAST.REM fall(SG) CONS HEAD(SG):GEN ground
díp / nyè-pé fuáán wán.
 all because-THAT/WHEN rain lack
 'So that hunger fell on the whole land, because there was no rain.' (F99ANTI)
- f. *à sóól wán mèn tóe.*
 FOC money lack IPL.O EMPH
 'we don't have money.' (lit. 'money is lacking to us')
 (H01AJOS)

Another common lexicalization pattern motivates the extensive use of serial verb constructions in Goemai (see chapter 8, section 3). Talmy (1985, 2000) distinguishes between the schematic core of an event (e.g., the path in the case of a motion event, the changed property in the case of a state-change event) and supporting co-events that elaborate on the schematic core (e.g., manner of motion or change). He distinguishes between verb-framed languages (which code the schematic core in verbs) and satellite-framed languages (which code it in satellites to the verb, e.g., in particles). For serializing languages, this clear distinction has proved problematic, because they tend to code both components in verbs (see Ameka and Essegbey 2001; Schaefer 1986, 1997; Schaefer and Gaines 1997; van Staden and Reesink 2008). Similarly, Goemai expresses both the schematic core (e.g., path of motion in 8a) and the co-event (e.g., manner of motion in 8b) in verbs. To express both components, Goemai resorts to serial verb constructions (as in 8c). The lexicalization of both components in verbs makes it furthermore possible for prepositions to be semantically general over location, source and goal – since the necessary information is contributed by the verb (see chapter 5, section 4). This lexicalization pattern is characteristic of Chadic languages in general (Frajzyngier 1987a, 1987b, 1987c).

- (8) a. *Muèp p'úát ñk'òng lú.*
 3PL.S exit(PL) BACK:GEN settlement
 'They went out behind the village.' (F99OGOELONG)
- b. *Muèp swó.*
 3PL.S run(PL)
 'They ran.' (C01FGHJARAM8)
- c. *Muèp swó p'úát.*
 3PL.S run(PL) exit(PL)
 'They ran out (lit. they ran and went out).' (F00CGOERWANG)

2. Argument structure and lexical aspect

Grammars of Chadic languages often describe the existence of basic verb classes (which are marked by segmental or suprasegmental means) and of derivational and inflectional verbal extensions (which allow basic verbs to occur in different syntactic and semantic configurations). These classes and verbal extensions tend to have a semantic basis, as they interact with the lexical properties of verbs (in particular, their participant structure and lexical aspect). Goemai, by contrast, has neither morphologically-marked verb classes nor verbal extensions. Instead, it makes use of syntactic strategies to express comparable concepts: constructional alternations (discussed in detail throughout section 3). This section serves as an introduction into the topic: it summarizes common Chadic patterns (section 2.1), and outlines issues relevant to Goemai argument structure (section 2.2) and lexical aspect (section 2.3).⁴²

42. Verbal extensions are widespread in all African language families, but their reconstruction to the various proto-languages remains problematic (see Hyman 2007 for a summary; see, e.g., Voeltz 1977, Williamson and Blench 2000 for Niger-Congo). In particular, they are not common in Jos Plateau languages: Chadic languages usually do not have them; and neighboring Benue-Congo languages seem to have lost those extensions that serve syntactic functions, but have retained (or reinterpreted) those that serve aspectual functions (Gerhardt 1971, 1984, 1988; E. Wolff and Meyer-Bahlburg 1979). The variety of Hausa spoken on the Jos Plateau also experiences a reorganization of its grade system (i.e., the Hausa-type verbal extensions): some grades have been lost altogether, but others are still common (Pawlak 2002: 63, 78–80).

2.1. A Chadic perspective

Chadic languages tend to overtly mark a variety of functions by means of verbal extensions. These extensions occur in the form of affixes to the verb, often accompanied by changes to its tonal pattern or by particles. Throughout Chadic, such extensions are used to (de-) transitivity and causativize verbs, to indicate or change the type of thematic role linked to an argument slot, to express the affectedness of the object (e.g., totally or partially affected; or a subject trying to affect an object), and to specify the directionality of the verb action (e.g., towards or away from the speaker) (see Frajzyngier 1985b, 1987a, 1987b; Jaggar 1988; P Newman 1973, 1977b, 1983; E. Wolff 1984).

Goemai has retained only one possible remnant of such a Chadic verbal extension: a transitivity suffix *-n* that is attested in a number of Chadic languages (Frajzyngier 1985b; P Newman 1977b). This extension is not productive, and it is only found with the two verbs illustrated in table (46).

Table 46. Possible remnants of a Chadic suffix *-n*

Intransitive		Transitive	
'exit'	<i>p'ét</i> (SG) <i>p'uát</i> (PL)	'remove'	<i>p'éⁿ</i> (SG) <i>p'uán</i> (PL)
'enter'	<i>rú</i> (SG) <i>rwó</i> (PL)	'insert'	<i>riún</i> (SG) <i>rwán</i> (PL)

Within Chadic linguistics, there is some discussion about the status of basic verbs and their semantics. Some present-day Chadic languages have formally unmarked verbs (considered to be basic) as well as verbs that are formally marked by verbal extensions (considered to serve derivational and inflectional functions). But other languages mark all verbs overtly, i.e., in these languages, the existence of basic verbs cannot be posited on morphological grounds (e.g., Hausa, see P Newman 2000: 627–682). Various researchers argue for the existence of two basic Proto-Chadic verb classes that were marked segmentally by the final vowels **-a* and **-ə* respectively. And most authors assume that these two morphological patterns did not correlate with any specific semantics or syntax (Frajzyngier 1982a, 1982b; Jungraithmayr 1979; P Newman 1973, 1975, 1977c; P Newman and Schuh 1974; Schuh 1976, 1977; E. Wolff 1977, 1979). For example, P. Newman (2000: 641) states for Hausa that “[m]any transitive verbs belong to gr2 [i.e., grade 2, a possible reflex of the Proto-Chadic class **-ə*; BH] because they happen to have the inherent lexical shape that puts them in that class. They do not necessarily share common semantic

characteristics.” Other authors, however, attribute meaning to these basic classes (see especially Abdoulaye 1992).

A second discussion centers on the question of whether verbal extensions can be reconstructed for Proto-Chadic. This discussion was partly triggered by the observation that some isolating Chadic languages do not have any verbal extensions, or remnants of such verbal extensions – including West Chadic languages closely related to Goemai. On the one hand, P Newman (1973, 1977b, 1983) reconstructs several such extensions: he assumes that Proto-Chadic was characterized by a system of adverbial-like extensions that became fused with the verb stem in some languages (see also P Newman 2000: 627–682). On the other hand, Frajzyngier (1985b, 1987a, 1987b) argues for the independent development of verbal extensions from lexical sources (e.g., benefactive- and causative-type extensions from 3rd person pronouns, directional-type extensions from motion verbs).

Both discussions above are of relevance to the analysis of Goemai: the language makes use of different argument structure constructions that correlate with different meanings, and that are comparable to some of the morphologically-marked basic verbs and verbal extensions found elsewhere in Chadic. That is, Goemai seems to differ considerably from other more isolating West Chadic languages, despite some superficial similarities. Like Goemai, these isolating languages have a large class of verbs that occur unmarked in both intransitive and transitive configurations. But unlike Goemai, they have only one transitive construction that allows for the linking of different thematic roles to its two arguments. For example, Frajzyngier (1993: 178) states for Mupun that “[t]here is no single semantic characteristic or role that can be attached to the grammatical notions of subject and object.” The criteria that distinguish different types of transitive constructions in Goemai – i.e., number marking and nominalization (see section 2.2) – do not seem to reveal comparable differences in other more isolating West Chadic languages. In these languages, number marking does not depend on grammatical factors, but on discourse-pragmatic factors: it indicates event number (i.e., an iterative, distributive, repeated, habitual action); if it indicates participant number at all, transitive verbs show the same pattern as attested for one of the Goemai constructions (the transitive patient / theme construction). Similarly, nominalization patterns are usually comparable to those of the Goemai patient / theme construction (see section 3.2).

Despite these differences between Goemai and closely-related West Chadic languages, two observations suggest that further comparative research could prove promising. First, grammars mostly confine the explicit discussion of argument structure properties – including an interaction with number marking and nominalization – to prototypical transitive verbs (in the sense of Hopper and Thompson 1980): and it is these verbs that occur in the Goemai patient /

theme construction. Our comparative knowledge about other types of verbs, by contrast, is limited. Second, although grammars may not systematically discuss less-prototypical transitive verbs, they often devote sections to selected verbs that show some peculiarities in the coding of their arguments and the linking of their thematic roles. These idiosyncrasies are sometimes reminiscent of the Goemai range construction (see section 3.3) or its causative construction (see section 3.4). Similarities and differences are pointed out throughout this chapter.

Given the above discussion, it is possible that present-day Chadic languages share patterns of lexicalization that go back to Proto-Chadic – despite considerable differences in the available coding strategies: while Goemai (and possibly other more isolating West Chadic languages) use syntactic strategies, other languages use morphological strategies. For the moment, this assumption is impressionistic, and it is possible that at least some similarities result from cross-linguistic tendencies rather than common Chadic heritage. However, the available data indicate that comparative studies in lexical semantics and argument structure are likely to reveal more systematic similarities.⁴³ This chapter describes the patterns attested for one Chadic language, integrating comparative West Chadic data wherever possible.⁴⁴

2.2. Argument structure

The predominantly isolating nature of Goemai is visible in the marking of arguments: constituent order is the main means for marking grammatical relations (point i), and there is generally no cross-referencing of arguments on the verb and no marking of case relations on the noun (point ii). While constituent order thus helps to narrow down the syntactic status of a noun phrase, it is not sufficient because some core arguments (3SG subject and inanimate direct objects) are omitted if they are recoverable from the linguistic context (see chapter 8, section 1.1). Although their omission follows a predictable pattern, it causes

43. Verbal morphology has received much attention within Chadic linguistics, but there is no comparable discussion (outside of Hausa) about verbal semantics, especially about the semantic types of verbs that can occur with each verbal extension.

44. Comparative data was taken from grammatical descriptions of the following West Chadic languages: Hausa (Abdoulaye 1993; Jaggar 2001; P. Newman 2000; E. Wolff 1993); the Angas-Goemai group languages Angas (Burquest 1973; Foulkes 1915), Mupun (Frajzyngier 1993), and Mwaghavul (Jungraithmayr 1963a); the Ron group languages (Jungraithmayr 1970; Seibert 1997); the Bole-Tangale group languages Pero (Frajzyngier 1989) and Dera (P. Newman 1974); and the West Chadic B languages Miya (Schuh 1998) and Guruntum (Haruna 2003).

problems for determining the argument structure solely on the basis of the number of noun phrases and their order. This issue is further complicated by the fact that Goemai has verbs that occur in both intransitive and transitive contexts. It is therefore not always straightforward to decide whether a specific verb is used intransitively or transitively (with an omitted O argument),⁴⁵ and conversely, whether a present noun phrase functions as an argument of the verb.

Fortunately, there are a number of language-internal contexts and strategies that are sensitive to issues of argument structure and that treat core and non-core arguments differently. Taken together, they reveal the transitivity of a verb and the syntactic status of the occurring noun phrases: arguments (but not non-core arguments) are obligatorily present in some syntactic contexts (point iii), non-core arguments are almost always overtly marked (point iv), there are particles and clitics that reliably occur between objects and non-core arguments (point v), and there are detransitivizing strategies that only apply to objects (point vi). Furthermore, number marking and nominalization are always sensitive to one of the core arguments, but never to a non-core argument (point vii). These contexts are discussed in more detail elsewhere in the grammar, but are summarized here. Throughout this study, they serve as diagnostics for determining the transitivity of an expression.

(i) Constituent order (see chapter 8, section 1.1)

Goemai has strict AVO(O) / SV constituent order in all clauses that contain a single predicate, including both main and dependent clauses. Example (9a) illustrates the intransitive pattern, (9b) the transitive pattern, and (9c) the ditransitive pattern. Non-core arguments show some syntactic freedom, either preceding or following these core constituents. Notice also that the verb and its core arguments form a contiguous unit, i.e., non-core arguments cannot occur inside this unit.

- (9) a. *Fuán swár.*
 S V
 rabbit laugh
 ‘The rabbit laughed.’ (F99DLIT)

45. I use the following abbreviations to mark core arguments: S = intransitive subject, A = transitive subject, O = direct object.

- b. *Fuán máng p'áng.*
 A V O
 rabbit take stone
 'The rabbit took a stone.' (F99ANTI)
- c. *Muèp p'óe muèp hààm.*
 A V O O
 3PL.S give 3PL.O water
 'They gave them water.' (F99DLIGYA)

(ii) Subject arguments (see chapter 3, section 2.4)

The subject and object noun phrases are not morphologically marked for their grammatical relations, i.e., Goemai does not have case marking. Pronouns, however, constitute a partial exception to this generalization, allowing us to distinguish between subjects and objects. Goemai has both free and dependent pronouns: the free pronouns are identical for all core arguments (S, A and O), but the dependent forms can only be used for subjects (S and A). If present, these dependent pronouns then cliticize to the verb phrase, i.e., Goemai allows for the cross-referencing of subject arguments in certain contexts.

(iii) Clausal nominalization (see chapter 3, section 4.4) and purpose clauses (see chapter 8, section 4.5)

Core arguments can be omitted in verbal clauses, but they cannot be omitted in nominalized clauses. Example (10) illustrates this difference: the referent *d'á* 'calabash' is introduced in the first clause, and is omitted in all subsequent verbal clauses – the final nominalized clause, however, refers to it by means of the pronoun *ní* '3SG'. Since all core arguments are overtly expressed, clausal nominalization is one context that reliably distinguishes intransitive from transitive expressions.

- (10) *Yin [d'á]_S ná n-d'é b'è / [mòe]_A=màng mú? (...)*
 SAY calabash PRES PRES-exist EMPH 1PL.S=take(SG) INTERR
Fuán yí hâi / kwài. [Gwà]_A g'óe nyét. Là
 rabbit SAY INTERJ no SGM.LOG.AD.S OBLIG leave COND
dú=yók dú=rwó / t'òng
 PL.LOG.SP.S=return.home(PL) PL.LOG.SP.S=enter(PL) IRR

dú=kát *gùrùm* [*gòe-póe* *nì* *n-dwén*]_{NOMZ.}
 PL.LOG.SP.S=find person NOMZ-give 3SG.O BEN-PL.LOG.SP.I
 ‘(He) said, see, (there) is a calabash, we take (it), right? (...) The
 rabbit₁ said, hey, no. He₂ should leave (it). When they₁ return back,
 they₁ will find someone who gives it (= the calabash) to them₁.’
 (F99DLIGYA)

In a similar way, a transitive expression within a purpose clause has to overtly express its direct object – unless it is marked by the adverbializing prefix *N-*. An intransitive expression, by contrast, can occur without this prefix. All three possibilities are illustrated by means of the complex structure in (11a): *màng* ‘take’ is transitive (occurring with a direct object noun phrase), *p’ét* ‘exit’ is intransitive, and *s’éét* ‘buy/sell’ is transitive (occurring without a direct object but with the adverbializing prefix). Unfortunately, this diagnostic is problematic as this prefix also occurs in two other contexts: it is found whenever a semantic participant is omitted (e.g. the locative adverbial of an intransitive locative verb; see section 5.1); and it serves a pragmatic function stressing that an intended result was not achieved (as in 11b).

- (11) a. *dé-gòe* *màng* [*là=ndòe=bì*]_O / *dé-gòe* *p’ét* /
 PUR take(SG) DIM(SG):GEN=SPEC=thing PUR exit(SG)
 dé-gòe *n-s’éét* *bá*.
 PUR ADVZ-buy/sell(SG) NEG
 ‘not to take a little bit, to go out (and) to sell (it).’
 (C00ANYOUTH4)
- b. *yóól* *dé-gòe* *n-kyák* *sh’ép* / *sàp* *s’ál*
 rise(SG) PUR ADVZ-split wood axe slip
 ‘(he) rose to split the wood, (but) the axe slipped’ (A-10/11/00)

(iv) Overt marking of constituents (see section 5.1)

Core arguments tend to be unmarked, while non-core arguments tend to be marked by prefixes or prepositions. However, this statement only reflects a tendency as some core arguments are marked (as *ndòe gòe* ‘to you’ in 12a), while some non-core arguments are unmarked (as *lú=góe* ‘your house’ in 12b). In the first case, the difficulty always arises through the re-analysis of conjunctions and prepositions – in certain contexts – as markers of core arguments (see section 5.1). In the second case, it arises through the development of adverbs and spatial nominals from nouns (see sections 2 and 4 in chapter 5). That is,

other diagnostics discussed in this section are needed to decide on the transitivity of such expressions.

- (12) a. *dé* *góe* *k'wál* [*ńdòe* *góe*]_o *yì* (...).
 SO.THAT OBLIG:CONS talk CONJ 2SGM.I CONS
 ‘so that (he) should talk to you (...).’ (C00ANYOUTH1)
- b. *hén=d'è* *t'óng* *wúl* *yì* [*lú=góe*]_{ADV}
 1SG.S=exist PROGR arrive PROGR settlement=2SGM.POSS
 ‘I often come to your house’ (A-20/12/99)

- (v) Particles and clitics that indicate the final boundary of a phrase (see chapter 6, section 2.1; chapter 7, sections 4.1 and 4.2; chapter 8, section 4.4)

Goemai has some particles and clitics that mark the final boundary of the unit containing the verb and its core arguments. As such, they occur immediately after the intransitive verb, the direct object of a transitive verb, and the second object of a ditransitive verb (and also after the verbless clause complement): e.g., the polysemous particle *yì* coding consequence (in 12a) and progressive aspect (in 12b). Using this distributional diagnostic, it is possible to determine that the verb in (12a) is used transitively (despite the fact that it is followed by a noun phrase marked by a conjunction), while that in (12b) is used intransitively (despite the fact that it is followed by an unmarked noun phrase).

- (vi) Detransitivizing strategies (see section 4)

Only ditransitive and transitive expressions can participate in detransitivizing structures.

- (vii) Number marking (see sections 1.2 and 3) and nominalization (see chapter 3, section 4.1)

A subset of the verb lexicon has distinct singular / plural forms that indicate the participant number, i.e., they mark number in one of the verb's arguments. The relevant argument depends on the argument structure construction: the intransitive construction marks the S argument (in 13a), the transitive range construction the A argument (in 13b), the transitive patient / theme construction the O argument (in 13c), and the transitive causative construction does not mark any

core argument. This diagnostic is not applicable to the ditransitive construction (as no participating verb distinguishes number). Notice that number-marking is observed even if the relevant argument is omitted. For example, the singular verb *tù* ‘kill’ is used in the transitive patient / theme construction in (13d), although its O argument is not present.

- (13) a. *Mòe-gùrùm* *ji* *kúmá* / *muèp=muáráp*.
 NOMZ(PL)-person SGM.LOG.SP.POSS also 3PL.S=die(PL)
 ‘And his people, they have died.’ (D00EWITCH1)
- b. *Mòe=nyàk* *yí* *bá*.
 1PL.S=hate(PL) 2SGF.O NEG
 ‘We don’t hate you.’ (C01FGHJARAM10)
- c. *Sái* *muép* / *gép* *réép=hók*.
 then/only 3PL.S:CONS cut(SG) girl(SG)=DEF
 ‘Then they cut the girl.’ (D00EWITCH3)
- d. *Làp* *dé* *dú=p’uát* *yí*
 receive SO.THAT PL.LOG.SP.S:CONS=exit(PL) CONS
òn-ní *òk’òng* *lú* / *tù*.
 COMMIT-3SG.I BACK:GEN settlement kill(SG)
 ‘Take (him) so that they go out with him behind the house,
 (and) kill (him).’ (F99ATYAKLANG)

In addition, there are corresponding differences in verbal nominalization. A subset of verbs derives nouns that can occur in possessive and genitive structures. These derived nouns can only ever occur with one of their notional arguments as possessor: intransitive verbs with their S argument (in 14a), transitive range verbs with their A argument (in 14b), and transitive patient / theme verbs with their O argument (in 14c);⁴⁶ verbs in the transitive causative construction and in the ditransitive construction cannot be nominalized.

46. It is known from, e.g., English that derived nouns differ in the types of possessors they allow. This difference is often explained with reference to either thematic roles (i.e., only affected or experienced entities can occur as possessors) or lexical aspect (i.e., possessive nominalization is only possible if the situation can be construed as accomplished and perfective) (see Taylor 1996: 146–183 for a summary). For Goemai, an explanation in terms of thematic roles seems to be more promising, but there is not enough data available to determine the exact contribution of either thematic roles or lexical aspect or both.

- (14) a. *múút* *múk* *sh'in*
dying(SG) 3SG.POSS be.pitiful
‘his death was pitiful’ (A-21/05/04)
- b. *Kùt* *nóe* / *à* *k'à* *nyè* *ndòe=bì*
talking 1SG.POSS FOC HEAD(SG):GEN matter:GEN SPEC=thing
bá.
NEG
‘My talk (is) not (just) about anything.’ (F00JDUUS)
- c. *mùùr* *ú* *à* *sh'it* *múk*
stealing:GEN goat FOC work 3SG.POSS
gòe-d'yén
NOMZ(SG)-bec.small/young
‘the stealing of goats is (only) small work (for) him’ (A-22/04/04)

Differences in number marking and nominalization thus serve to determine the focal argument of a verb.

A combination of the seven diagnostics above was used to systematically test the argument structure possibilities of 176 Goemai verbs in elicitation sessions with two speakers. The elicited data were cross-checked and supplemented with data from the corpus of natural texts, taking into account information on another 300 verbs. On this basis, it was possible to establish five different construction types (summarized in table 47), describe their characteristic properties and membership (section 3), and discover the available valence-changing and lexical-aspect-changing operations (sections 4 to 6).

Notice that not all diagnostics can be applied to all expressions. In particular, number marking and verbal nominalization only occur with a subset of verbs. But since each semantic field usually contains at least some verbs that allow for one or both of these possibilities, it was possible to discern systematic patterns. All patterns were established on the basis of these verbs alone. Following that, verbs that do not mark for number and that do not nominalize were grouped together with semantically similar verbs, i.e., with verbs that (seem to) link the same thematic roles to the same syntactic arguments. While this procedure may have led to the wrong classification of some individual verbs, the overall analysis is assumed to be accurate.

Table 47. Five Goemai argument structure constructions

Constructions	Core arguments (= diagnostics i, ii, iii, iv, v, vi)	Focal argument (= diagnostic vii)
ditransitive	A O ₁ O ₂	– (not applicable) ⁴⁷
transitive patient / theme	A O	O
transitive range	A O	A
transitive causative	A O	no core argument
intransitive	S	S

2.3. Lexical aspect

Goemai verbs participate in one or more of the five argument structure constructions summarized in table (47) above. Their distribution can partly be explained with reference to their lexical aspect. Cross-linguistically, it is often assumed that the syntactic behavior of verbs is determined by their lexical semantics, and more specifically by their lexical aspect (e.g., Dowty 1979, 1991; Foley and Van Valin 1984; Levin 1995; Rappaport Hovav and Levin 1998, 2000; Van Valin and LaPolla 1997). In describing the aspectual properties of Goemai verbs, I follow Rappaport Hovav and Levin who distinguish between stative and dynamic events, and – within the dynamic events – between the presence of a state change and its absence, and the presence of an external cause and its absence. These features result in a classification of Goemai verbs into stative, activity, inchoative and result verbs.⁴⁸ The aspectual properties of

47. On the basis of other criteria, it can be argued that O₁ is the focal argument (see chapter 4, section 3.1).

48. I do not entirely follow the well-known aspectual classification into ‘states’, ‘activities’, ‘achievements’ and ‘accomplishments’ (see, e.g., Dowty 1979; Van Valin and LaPolla 1997; Vendler 1967). Studies have shown that the feature of telicity (and possibly also the feature of punctuality / durativity, see Bohmeyer 2001, 2004) is not determined by the lexical semantics of the verb alone, but also contributed by the clause, e.g., by the presence of quantification (Dowty 1991; Verkuyl 1972) or degree of change (Rappaport Hovav and Levin 2000). In particular, studies discuss problems in the classification of incremental theme verbs (i.e., verbs that behave differently when they occur with a quantized theme, e.g., ‘drink a glass of whisky’ vs. ‘drink whisky’), and change-of-state verbs that do not proceed towards a discrete endstate (i.e., degree achievements such as ‘grow’, and verbs of

these four covert classes are summarized in table (48) below, anticipating the discussion in the remainder of this section. The overall discussion is inspired by two case studies of African languages: Abdoulaye (1992) on the Chadic language Hausa, and Lüpke (2005) on the Mande language Jalonke.

Table 48. Diagnostics for determining Goemai lexical aspect classes

	Stative	Activity	Inchoative	Result
interpretation in progressive	habitual	on-going	on-going	on-going / iterative
interpretation of unmarked form	present	past	past	past
degree adverb can modify state change	no	no	yes	yes
progressive entails event has happened	n/a	yes	yes / no	no
time specification	duration	duration	duration / completion	completion
resultative aspect	no	no	yes: continued	yes: completed

Like other Chadic languages, Goemai does not mark lexical aspect overtly on the verb. Instead, the aspectual properties can be inferred from the occurrence of verbs in specific contexts. The literature suggests a number of possible tests (see, e.g., Dowty 1979; Van Valin and LaPolla 1997; Vendler 1967), which were adapted for Goemai in the following ways:

inherently directed motion such as ‘rise’). In the classification adopted throughout this chapter, stative verbs correspond to ‘states’, activity and inchoative verbs to ‘activities’, and result verbs to ‘achievements’ and ‘accomplishments’ (allowing for both punctual and durative interpretations). It is beyond the scope of this grammar to attempt a more detailed classification. This chapter is intended as a first approximation towards lexical aspect in Goemai: it is the first such study for a Chadic language (with the exception of Abdoulaye 1992 on Hausa), and more detailed further research is needed.

(i) Diagnostics for stative verbs

Goemai has a progressive aspect construction that expresses either an on-going action or state change, an iterative action, or a habitual action (see chapter 7, section 4.1). Its interpretation depends on the lexical aspect of the main verb, in combination with other elements of the clause. An on-going action or state change interpretation is the preferred interpretation with all activity verbs and expressions (as in the highlighted expression in 15a), inchoative verbs (in 15b), and result verbs occurring in durative contexts (in 15c). An iterative interpretation is only possible with result verbs occurring in punctual contexts; if the result verb marks for number, the plural form has to be used (in 15d). Finally, a habitual interpretation is possible – albeit dispreferred – with all expressions above (as illustrated in 15e). With stative verbs, however, the habitual interpretation is the only available interpretation (as in 15f). The Goemai progressive – like the Hausa continuative (see Abdoulaye 1992: 166–172) – thereby helps to single out stative verbs (as in 15f) and some result verbs (as in 15d). Similar to the Hausa continuative, the Goemai progressive is ambiguous in that it allows for different interpretations. But the available interpretations differ: Hausa states cannot occur in the continuative at all, and Hausa punctual contexts trigger a habitual interpretation (not an iterative interpretation).

- (15) a. *Muèp ná muèp d'è t'óng s'óe s'óe yi.*
 3PL.S see 3PL.S exist PROGR eat food PROGR
 'They saw them (and they) were eating food.' (F00CFUAN)
- b. *Hàngòed'è=hók d'è t'óng b'áng yi òd'ùùn*
 water=DEF exist PROGR bec.red PROGR INSIDE:GEN
cup.
cup
 'The water is turning red inside the cup.' (Said while speaker observed water turning red.) (B01ADPPROG40)
- c. *Liit d'è ò-p'èt yi / d'è ò-tàl*
 lion exist PROGR-exit(SG) PROGR exist PROGR-ask/greet
yi sèk puòe muèp. Á nímòe sá tóe
 PROGR BODY:GEN mouth 3PL.POSS FOC what make EMPH
gú=d'è gú / wál yi (...)?
 2PL.S=exist 2PL.S:CONS cry(SG) CONS
 'The lion was coming out, (he) was asking them: what makes (it that) you cry (...)?' (F00JFUAN)

- d. *Gòemâi ná n-lèng t'óng muáráp*
 <ETHNIC.NAME> PRES PRES-hang/move(PL) PROGR die(PL)
yì gòemé gòemé nyè nèèn.
 PROGR one one because hunger
 ‘See the Goemai people moving about (there) dying one after
 the other because of hunger.’ (F00AFUAN)
- e. *T'òng góe=ná gòe-tép / t'òng góe=ná*
 IRR 2SGM.S=see NOMZ(SG)-bec.black IRR 2SGM.S=see
gòe-pyá. (...) D'èmdè gùrùm d'è d'i /
 NOMZ(SG)-bec.white remainder:GEN person exist LOC.ANAPH
muép d'è t'óng s'óe s'óe yì. D'èmdè
 3PL.S exist PROGR eat food PROGR remainder:GEN
gùrùm muép góe s'óe bá.
 person 3PL.I COMIT food NEG
 ‘You will see bad (times), you will see good (times). (...)’
 Some people are there, they are eating food.
 Some people are (there) without food..’ (N01ATIME)
- f. *tún / sóe gòe-sék / fuán d'è t'óng t'óng*
 since time NOMZ(SG)-body rabbit exist PROGR sit(SG)
yì n-gòedè yím.
 PROGR LOC-bottom:GEN leaf
 ‘from that time on, the rabbit was (always) sitting under the
 leaves.’ (F00CFUAN)

Stative verbs also behave differently in a second context: whenever they are unmarked for TAM, they express the current state (thus receiving a default present tense interpretation, as in 16a). All other verbs, by contrast, receive a default past tense interpretation (as in 16b) (see chapter 7, section 2).

- (16) a. *Ndè d'yám puánáng ñk'óng mén (...).*
 one/other stand(PL) there/yonder BACK 1PL.POSS
 ‘Others stand over there behind us (...).’ (D01NTRREE)

- b. *Kàt là góe=ná lá-t'éng=hók b'áng*
 maybe COND 2SGM.S=see child(SG):GEN-tree=DEF bec.red
h't'it (...)
 well
 'If you see (that) the fruit has become thoroughly red (...).'
- (P00DCROPS)

Furthermore, the occurrence of quantifying degree adverbs such as *ndùní* 'much/many' (see chapter 5, section 2) is largely restricted to inchoative and result verbs, since only these verbs express a gradable change of state. This diagnostic is problematic, however, as such adverbs receive two different interpretations: as modifying the state change (of a state-change verb), or as modifying one of the noun phrases (of a stative or activity verb). The first possibility is illustrated with the inchoative verb in (17a), and the second possibility with the stative verb in (17b).

- (17) a. *Àmmá kán ndùní bá.*
 but bec.inclined much/many NEG
 'But (it) didn't incline much.' (M00ANDISPOS5)
- b. *Nyè-pé sh'it d'è d'i ndùní.*
 because-THAT/WHEN work exist LOC.ANAPH much/many
 'Because there is a lot of work.' (F00CFUAN)

Other typical characteristics of stative verbs include their inability to occur with dynamic adverbs, in the imperative or as complement of the verb 'force'. They cannot occur in these contexts because they describe non-dynamic continuous states-of-affairs that have no beginning or endpoint, and that are non-volitional. These tests are not entirely reliable as they are not only sensitive to the lexical aspect of verbs, but also to their individual lexical semantics. In the interpretation of the Goemai data, the results of these tests were not taken into account.

(ii) Diagnostics for result and activity verbs

As shown under (i) above, verbs with different lexical aspect properties can receive an on-going action or state change interpretation in the progressive construction. They differ, however, in that some verbs describe events that change over time and proceed towards a discrete endstate (and are thus telic), while

others do not (and are thus atelic). Result verbs describe events that have such a discrete endstate – therefore, a progressively expressed state-change event entails that the event has not yet happened (because it has not yet reached its natural endpoint) (as illustrated in 18a). Activity verbs, by contrast, do not describe a change over time, and a progressively expressed activity event therefore entails that the event has already happened (as in 18b) (the so-called imperfective paradox; see Dowty 1979). The third group, inchoative verbs, shows a variable behavior in this context: these verbs describe a change over time, but not towards a discrete endstate (i.e., something can become red, and can then redden even further). Therefore, if an endstate is specified or implied elsewhere in the clause, they behave like result verbs: e.g., *f'yér* ‘become big’ receives a default interpretation of ‘become grown up’ whenever it is predicated of humans (i.e., it implies old age) (as in 18c). If there is no endpoint, by contrast, they behave like activity verbs (as in 18d).

- (18) a. *d'è t'óng b'ám sòól yì / àmmá b'ám*
 exist PROGR seize metal/money PROGR but seize
t'èi bá
 yet NEG
 ‘(he) is seizing the money, but (he) hasn’t seized (it) yet’ (A-20/04/04)
- b. *d'è t'óng b'uén jáp yì / à bì*
 exist PROGR watch children(PL) PROGR FOC thing
gòe-sá tóe ní b'uén muèp d'èmt'èi
 NOMZ-make EMPH 3SG.S watch 3PL.O already
 ‘(she) is watching the children – that’s the reason (why) she has already watched them’ (A-23/04/04)
- c. *là múk d'è t'óng f'yér yì / àmmá*
 child(SG) 3SG.POSS exist PROGR bec.big(SG) PROGR but
f'yér t'èi bá
 bec.big(SG) yet NEG
 ‘her son is growing, but (he) hasn’t grown up yet’ (A-25/05/04)
- d. *d'è t'óng b'áng yì / só b'áng d'èmt'èi*
 exist PROGR bec.red PROGR so bec.red already
 ‘(it) is turning red, that means (it) has already turned red’ (A-25/05/04)

These differences are confirmed by a second diagnostic: result verbs that occur in telic contexts are compatible with time specifications indicating completion (as in 19a), but not with those indicating duration (as in the ungrammatical example 19b). Activity verbs (and also stative verbs) in atelic contexts, by contrast, occur with the latter type of time specification (as in 19c). But notice that some verbs are ambiguous in that they can receive both telic and atelic readings, depending on the presence of other elements in the clause: e.g., the presence of a cognate object conveys an atelic reading (as in 19c), while the presence of a goal phrase conveys a telic reading (as in 19d) (see especially the discussion in section 6.1). Inchoative verbs, again, receive a variable interpretation.

- (19) a. *sh'è* *bì=hòk* *nd'ùùn* *áwà* *gòemé*
 learn/teach thing=DEF INSIDE:GEN hour one
 '(she) learned the thing in one hour' (A-18/02/00)
- * b. *ní* *sh'è* *bì=hòk* *áwà* *gòemé*
 3SG.S learn/teach thing=DEF hour one
 *'she learned the thing for one hour' (A-18/02/00)
- c. *mù̀dàn* *mù̀dàn* *áwà* *gòemé*
 go(SG) going(SG) hour one
 '(he) traveled for one hour' (A-18/02/00)
- d. *mù̀dàn* *n-Jòs* *nd'ùùn* *áwà* *gòemé*
 go(SG) LOC-<PLACE.NAME> INSIDE:GEN hour one
 '(he) traveled to Jos in one hour' (A-18/02/00)

To summarize, inchoative verbs show a variable behavior under both diagnostics above, but unambiguous result and unambiguous activity verbs occur in one context only. That is, the diagnostics help to single out result and activity verbs. The same two tests are applied by Abdoulaye (1992: 176–177, 184–185, 187, 191–192) in his study of Hausa.

(iii) Diagnostics for inchoative verbs⁴⁹

Goemai has a resultative aspect construction that occurs with state-change verbs, and that is sensitive to different phases of the state-change event: the inchoative phase and the result state (see chapter 7, section 4.5). When an inchoative verb occurs in it (as *sù* ‘start to run’ in 20a) the resulting interpretation is a continuation of the state. Since inchoative verbs lexicalize the initial boundary of an event (i.e., getting into a state), the resultative aspect particle focuses on the termination of this initial boundary. With result verbs (as *páár* ‘send’ in 20b), by contrast, the resulting interpretation is a completion of the event. Since these verbs lexicalize the final boundary, the resultative aspect particle focuses on the termination of this boundary. This diagnostic serves to single out inchoative and result verbs, and to distinguish them from each other. Notice, however, that it is not fully reliable because the resultative aspect particle retains some of the locational properties of its lexical source, making it semantically incompatible with some state-change verbs.

- (20) a. *Yár=hók zák sù kàm.*
 bird=DEF also/however run(SG) RESULT
 ‘And the bird also runs (i.e., it has started to run and is now in the state of running).’ (R99DFROG)
- b. *muèp páár ni kàm n-Jôs*
 3PL.S send 3SG.O RESULT LOC-<PLACE.NAME>
 ‘they have sent her to Jos (i.e., the sending event is over, and she is in Jos now)’ (A-14/02/00)

A combination of the diagnostics above resulted in the establishment of four verb classes: stative, activity, inchoative and result. Most verbs belong unambiguously to one of these classes, and their syntactic possibilities are partly determined by this membership. The verbs differ further in their causation properties: an event can be brought about externally (i.e., by some external causer) or internally (i.e., by some internal property of the argument) (see Levin and Rap-

49. Throughout this chapter, the term ‘inchoative’ is used in its original sense of ‘beginning, inceptive’, and it corresponds to the term ‘degree achievement’ (which is commonly found in the theoretical literature on lexical aspect). It should not be confused with the use of ‘inchoative’ in the ‘inchoative / causative alternation’, i.e., in verbs that alternate between an intransitive state-change use (e.g., ‘the pot broke’) and a transitive causative use (e.g., ‘he broke the pot’) (see also Haspelmath 1993).

paoport Hovav 1995). These differences are reflected in the constructional alternations a verb can undergo, which are discussed in the following sections.

3. Argument structure constructions

This section illustrates the five argument structure constructions of Goemai (formed on the basis of the criteria outlined in section 2.2): the ditransitive construction (section 3.1), the transitive patient / theme construction (section 3.2), the transitive range construction (section 3.3), the transitive causative construction (section 3.4), and the intransitive construction (section 3.5). For each construction, its formal and semantic characteristics are presented, followed by a discussion of the semantic properties of verbs that allow them to participate in this construction.

This section shows that Goemai argument structure is characterized by a sensitivity to thematic roles and an absence of morphological marking. From a Chadic perspective, the former is expected, but the latter is not (see section 2.1). Typologically, the Goemai situation is of particular interest because of the interaction of the following two factors (see e.g. Comrie 1985b; Dixon and Aikhenvald 1997, 2000):

(i) Most Goemai verbs have the possibility to occur unmarked in different argument structure constructions, receiving a concomitant change in their semantics (i.e., thematic roles) and syntax (i.e., transitivity). A comparable situation is attested in other morphologically less-complex languages. For example, many English verbs can occur underived in intransitive and transitive structures (e.g. ‘the pot broke’ and ‘he broke the pot’), as well as in different transitive structures with a different arrangement of arguments (e.g., ‘he sprayed paint on the wall’ and ‘he sprayed the wall with paint’). It would be possible to assign the different argument structure possibilities of Goemai verbs to the lexical level, e.g., to recognize the existence of ambitransitive verbs (participating in both intransitive and transitive constructions). This alternative analysis would make it necessary to recognize at least three distinct types of ambitransitive verbs: those that alternate between intransitive and transitive range uses (i.e., S = A ambitransitive verbs), those that alternate between intransitive and transitive patient / theme uses (i.e., S = O ambitransitive verbs), and those that alternate between intransitive and transitive causative uses (i.e., a second type of S = O ambitransitive verbs).⁵⁰ In addition, there are ambitransitive verbs that allow for intransitive plus two or even three transitive uses; as well as transitive-

50. In the first case, the intransitive subject (S) corresponds to the transitive subject (A), and in the second and third case, the intransitive subject (S) corresponds to the transitive object (O).

only verbs that occur in different transitive structures (rearranging their arguments in different ways).

(ii) The argument structure constructions express distinct semantics, and they show formal differences in those contexts that allow for number marking and verbal nominalization. As such, they are similar to derivational mechanisms that change the valency of a verb, or that arrange its arguments differently. Such a perspective would be justifiable on semantic grounds, given that the different constructions fulfill functions that are similar to causative- and applicative-type derivations in many other languages. It is also supported by some language- and language-family-internal observations (discussed in more detail throughout the following sections). First, the semantic and syntactic properties of the different constructions are very similar to those of the verbal extensions in other Chadic languages – i.e., other Chadic languages use overt derivational morphology to convey comparable information. Second, there is at least one clear case where an argument structure construction has to be analyzed as serving derivational functions: the causative construction. And third, speakers use the different constructions productively to create novel idiomatic expressions. Overall, such behavior is suggestive of the existence of derivational mechanisms, rather than lexical specifications. However, a serious counter-argument against this perspective is the fact that there is no overt marking of the derivational process: the constructions constitute unmarked alternations.

Given the interaction of the two factors above, this chapter adopts a constructional approach to argument structure (e.g., Goldberg 1995). It is assumed that the constructions carry meanings, and that their constructional semantics interacts with the lexical (verbal) semantics, allowing verbs to participate in different constructions. The following sections describe the semantic and formal characteristics of each construction, and discuss the semantic types of verbs occurring in it (focusing on those that can occur in more than one construction). This focus allows us to (a) characterize the constructional semantics, illustrate variations and capture generalization, and to (b) discuss changes in transitivity (between intransitive and transitive verbs) together with changes to thematic roles (in transitive-only verbs). Notice that this constructional perspective does not deny the existence of lexical transitivity. There are cases where a verb occurs only in one construction (which can then be interpreted as being indicative of its basic transitivity); and it can be argued that the causative construction is not a basic construction. Aside from these clear cases, however, it proved difficult to determine which of the available constructions is basic to a specific verb. Recall that morphologically more complex Chadic languages have similar difficulties in distinguishing between basic and derived verbs (see section 2.1).

This study should be read as an exploration into the semantic factors that characterize Goemai argument structure constructions and that allow verbs to participate in certain constructions, but not in others. Future investigations would probably benefit from a frame semantic perspective (as illustrated in Fillmore 1971, 1977; Fillmore and Atkins 1992): a verb can evoke a semantic frame with frame-semantic participant roles, and the different constructions select different roles (and ignore others), distributing them over the different grammatical relations.

3.1. Ditransitive construction

The ditransitive construction is illustrated in figure (6). It is a minor construction in the sense that only two verbs are attested in it: *póe* ‘give’ and *k’wát* ‘pay’

In terms of their lexical aspect, both participating verbs are result verbs. And in terms of their argument structure, both occur with three unmarked arguments: an A argument preceding the verb, and two O arguments following it (in 21a and 21b). Notice that both arguments are preceded by the polysemous particle *yì*, which marks the final boundary of the unit of verb-plus-object(s).

Syntactic function	A	V	O ₁	O ₂
Thematic role ⁵¹	effector		recipient	theme
Semantics	A transfers O ₂ to O ₁			
Verbs	two verbs of transfer (<i>póe</i> ‘give’, <i>k’wát</i> ‘pay’)			

Figure 6. Ditransitive construction

- (21) a. *dé* *góe* *póe* [*mèn*]_O [*k’óóm=hók*]_O *yì* (...).
 SO.THAT OBLIG:CONS give 1PL.O strength=DEF CONS
 ‘so that (he) should give us the strength (...).’ (D00EWITCH4)
- b. [*hén*]_A=*d’è* *t’óng* *k’wát* [*nì*]_O [*sóól*]_O *yì*
 1SG.S=exist PROGR pay 3SG.O metal/money PROGR
kó=t’átnàng
 any/every=when
 ‘I regularly pay you money’ (A-16/04/04)

51. In characterizing the thematic roles, I used the terminology as summarized in Van Valin and LaPolla (1997).

The A argument expresses the effector, the first O argument the recipient, and the second one the theme. The theme can be omitted, provided that it is recoverable from the context (as *mà̀r* ‘farm’ in 22). The recipient, by contrast, cannot be omitted, since it is animate (see chapter 8, section 1.1 for the omission of arguments).

- (22) *Sábò ñdòe gòe-sék muèp b'ám / mà̀r=hòk /*
 reason CONJ NOMZ(SG)-body 3PL.S seize farm/farming=DEF
[muèp]_A pòe [fuán]_O.
 3PL.S:CONS give rabbit
 ‘Because of this, they seized the farm, so that they gave (it to) the rabbit.’ (F99DSHOOM)

Both verbs alternatively occur in the transitive patient / theme construction, linking only their effector and theme participants to core arguments (in 23a). A recipient can be added in a prepositional phrase, i.e., in adverbial function. Notice, however, that this preposition does not necessarily introduce a recipient: it introduces a benefactive that can be construed as a recipient (as illustrated by the two free translations). Furthermore, *k'wát* ‘pay’ can occur in the transitive range construction, linking a benefactive role to its one direct object (conveying the reading of ‘pay for someone’s benefit, pay for goods’). Whenever these verbs occur in either of the transitive constructions, they focus on the act of transfer itself – not on the recipient (as in 23b where the speaker talks about marriage customs that involve an act of giving away mats). Alternations between a ditransitive or double object construction, on the one hand, and a transitive construction, on the other, are cross-linguistically common (Margetts and Austin 2007; J. Newman 1998).

- (23) a. *[ñdòe=gurùm]_A pòe [sóól]_O [ñ-gòe]_{ADV}.*
 SPEC=person give money BEN-2SGM.I
 ‘someone gave away money to you.’
 ~ ‘someone gave away money on your behalf’ (C00ANYOUTH2)
- b. *D'à [gú]_A=pòe [k'aràm]_O gù=lát / tó /*
 COND 2PL.S=give mat 2PL.S=ANT okay
gù=lèng d'ém gù=shín tàl yì.
 2PL.S=hang/move(PL) this.time 2PL.S:CONS=do greeting CONS
 ‘When you have finished giving away the mat, okay, and then you move around performing greetings.’ (C00ANDIALECT5)

In the ditransitive construction, both recipient and theme constitute core arguments. But there are some indications that the recipient is more prominent. First, it is obligatory in nominalized clauses where it occurs either as head noun (as *mát* ‘woman’ in 24a) or as direct object within it (as *ní* ‘3SG’ in 24b). The theme, by contrast, is not obligatory: it can never occur as head noun, and it is optional as direct object within the nominalized clause (as indicated by the bracketing in 24a and 24b). For the theme to occur as head noun, speakers have to use an adverbial clause instead (in 24c) (see chapter 8, section 4.1). Alternatively, speakers shift to the transitive patient / theme construction (in 24d and 24e); in this case, a beneficiary (which can be interpreted as a recipient) can optionally be added in a prepositional phrase (in 24e).

- (24) a. *hèn=màn māt* [gòe-póe *múk*
1SG.S=know woman(SG) NOMZ-give 3SG.POSS
(*shind'óng=hók*)]_{NOMZ}
present=DEF
‘I know the woman whom he gave (the present)’ (A-16/04/04)
- b. *hèn=màn gúrùm* [gòe-póe *nì* (*shind'óng=hók*)]_{NOMZ}
1SG.S=know person NOMZ-give 3SG.O present=DEF
‘I know the person who gave her (the present)’ (A-16/04/04)
- c. *à [sóól]*_{VCC} [gòepé *muép* *póe muèp* (...)]_{ADV.}
FOC metal/money THAT/WHEN 3PL.S:CONS give 3PL.O
‘(it) is money that they gave them (...).’ (C00ANYOUTH2)
- d. *hèn-zàm* [gòe-póe *nóe*]_{NOMZ} *múmú?*
LOC-field NOMZ-give 1SG.POSS REDUP.INTERR
‘in the field that I gave away, right?’ (C00ANYOUTH4)
- e. *hèn=màn bí* [gòe-póe *múk* (*h-góe*)]_{NOMZ}
1SG.S=know thing NOMZ-give 3SG.POSS BEN-2SGM.I
‘I know the thing that he gave away (to you ~ on your behalf)’
(A-16/02/00)

Second, only the recipient – but not the theme – can occur as the head noun in participle nominalization (as *là* ‘child’ in 25) (see chapter 3, section 4.3).

- (25) [*hèn*]_A=*màn* [*lá* *gòe-h-póe*]_O
1SG.S=know child(SG) NOMZ-ADVZ-give
‘I know the boy who was given (it)’ (A-26/10/05)

Goemai has many other verbs of transfer, but none of them can occur in the ditransitive construction: such verbs link their theme role either to the direct object (of the transitive patient / theme construction) or to the adverbial (of the transitive causative construction). Closely related Angas-Goemai group languages do not have a ditransitive construction at all, always coding recipients in prepositional phrases (Frajzyngier 1993: 201–204). Other West Chadic languages, by contrast, make use of a special set of indirect object markers that allow a large number of verbs to occur (optionally or obligatorily) with three arguments (Jaggar 2001: 480–486; P Newman 2000: 276–287, 682–693; Schuh 1998: 294–300; Seibert 1997: 31, 57, 93–96; E. Wolff 1993: 114–117).

3.2. Transitive patient / theme construction

The characteristics of the transitive patient / theme construction are summarized in figure (7).

Syntactic function	A	V	O
Thematic role	effector		patient, theme
Semantics	A changes the state or location of O		
Verbs	(i) verbs of putting and throwing, taking, transfer, impact, creating, harvesting and hunting		
	(ii) verbs of transforming, starting and stopping, directed motion, property concepts, disposition		

Figure 7. Transitive patient / theme construction

The transitive patient / theme construction expresses a change of state or location. In terms of lexical aspect, the participating verbs code a (result or inchoative) state change. In terms of argument structure, the construction links a patient or theme role to the O argument, and an effector role to the A argument. The effector is the dynamic participant of the event – frequently, it can be characterized as an agent who willfully and purposefully brings about the event, but it can alternatively be a force (in 26a), an instrument (in 26b), or even an inanimate effector that is construed as agentive (in 26c) (see the discussion in Van Valin and Wilkins 1996). Its exact role is specified through the lexical semantics of the verb together with the properties of the clause.

- (26) a. [Hàngòed'è]_A **màng** [ní]_O wá [n-ní]_{ADV}.
 water take(SG) 3SG.O return.home(SG) COMMIT-3SG.I
 'The water took him (and) returned back with him.' (F00JFUAN)
- b. [bóól]_A **p'yán** [wáng=hók]_O
 ball break(SG) pot=DEF
 'the ball broke the pot' (D-26/01/00)
- c. [Bì n-k'yák]_A / shòòt / **b'uét** [k'á
 thing LOC-heart/neck bec.coiled cause.lying(SG) head(SG)
 múk]_O [wá dàkd'uòe lú]_{ADV}.
 3SG.POSS AREA MIDDLE:GEN settlement
 'The necklace became coiled, (it) laid its head in the area to-
 wards the town center.' (M99JIMT1)

Formally, the patient / theme construction differs from the other two transitive constructions in the focal role of its O argument: number-marking on the verb indicates number in the O argument (as illustrated in 27a and 27b); and verbal nominalization allows the notional O argument to occur as possessor (in 28a), but not the A argument (as illustrated by the ungrammatical example 28b).

- (27) a. àkwái mòe-gòepé / muèp t'óng tù
 there.is/are NOMZ(PL)-THAT/WHEN 3PL.S IRR kill(SG)
góe (...).
 2SGM.O
 'there are those that will kill you (...).' (D00JANIMAL7)
- b. Tó / ní twó muèp díp.
 okay 3SG.S kill(PL) 3PL.O all
 'Okay, he killed them all.' (D00EWITCH4)
- (28) a. gòe-ñndè à b'ám ái / b'ààm
 NOMZ(SG)-LOC.ANAPH FOC seizing INTERJ seizing:GEN
lwá
 animal/meat
 'this is seizing, hey, seizing of animals' (A-22/04/04)
- * b. b'ààm lóng
 seizing:GEN chief
 *'the seizing of the chief (i.e., the seizing done by the chief)'
 (A-22/04/04)

The Goemai patient / theme construction is a prototypical transitive construction (see, e.g., Hopper and Thompson 1980): its A argument exhibits prototypical agent-like properties, and the O argument is maximally affected in that it is created, transformed or moved by the verb action.

The participating verbs can be divided into two groups: (i) those that only occur in transitive constructions, and (ii) those that occur in both transitive and intransitive constructions.

(i) The first group includes result verbs of putting and throwing (such as *d'ú* 'cause to sit' in 29a), taking (such as *màng* 'take'), transfer (such as *s'éét* 'buy/sell'), impact (such as *tù* 'kill' in 29b), and creating (such as *là* 'give birth'), as well as inchoative verbs of hunting and harvesting (such as *d'ip* 'reap' in 29c). Although these verbs only ever occur transitively, most of them occur in two different transitive constructions (see the following sections for details).

- (29) a. *kúmá* [*muèp*]_A *d'ú* [*hèn*]_O *k'à* *tóóm*.
 also 3PL.S cause.sitting(SG) 1SG.O HEAD(SG):GEN chair
 'and they sat me on the chair.' (C00JMQUEST5)
- b. *Sái* *muèp* *shín* *kókárí* / [*muèp*]_A *tú* [*wò*
 then/only 3PL.S do effort 3PL.S kill(SG) snake
hndè]_O.
 LOC.ANAPH
 'Then they made an effort, they killed this snake.' (F99DREEP)
- c. [*gòe*]_A=*d'ip* [*s'wá* *góe*]_O (...).
 2SGM.S=reap(SG) guineacorn 2SGM.POSS
 'you reap your guineacorn (...).' (C00ANYOUTH2)

(ii) The second group contains verbs that occur both transitively and intransitively. In the transitive patient / theme construction, they link their patient or theme role to the O argument, and express an effector as the A argument (in 30a and 31a). In the intransitive construction, they link their patient or theme role to the S argument (in 30b and 31b). These verbs cover the following lexical fields: result verbs of transforming (such as *p'yán* and *p'yáram* 'break' in 30a and 30b), of starting and stopping (i.e., bringing about or ending a state-of-affairs) (such as *lát* 'finish') and of directed motion (such as *d'am* 'sink'); as well as inchoative verbs that code property concepts (such as *b'áng* 'become/make red' in 31a and 31b) and dispositions (such as *k'óón* 'become/put face down'). Again, individual verbs additionally occur in other transitive constructions.

- (30) a. [Gòelóng]_A (...) *p'yárám* [wàng shàt muép]_O
 <NAME> break(PL) pot:GEN porridge 3PL.POSS
dibít (...).
 all
 ‘Goelong (...) broke their pots of porridge, all (of them).’
 (F99OGOELONG)
- b. *Fuán kwáp t'á / kwàp t'á Màng*
 rabbit knock(SG) fall(SG) knock(SG) fall(SG) take(SG)
kùk. P'èt t'á n-yil. [Wàng]_S p'yán.
 stump exit(SG) fall(SG) LOC-ground pot break(SG)
 ‘The rabbit knocked (against something) (and) fell, (he)
 knocked (and) fell. (He) stumbled. (He) fell onto the ground.
 The pot broke.’ (F00JFUAN)
- (31) a. [*p'úús*]_A *b'áng* [*shik*]_O
 sun bec.red body.2SGF.POSS
 ‘the sun has made your body red’ (A-22/05/04)
- b. [*dáng*]_S=*hòk b'àng* (...).
 tail=DEF bec.red
 ‘the tail has become red (...).’ (C00ANDIALECT2)

Such alternations between transitive and intransitive uses are discussed in the literature as the causative / inchoative alternation. It is generally assumed that the transitive (or causative) alternant portrays an event as externally caused (as in the A examples above), while the intransitive alternant construes the event as uncaused or spontaneously occurring – even though an external cause may be attributed to the event in the real world (as in the B examples above) (see Haspelmath 1993; Levin and Rappaport Hovav 1995: 79–133). For Goemai, there are some language-internal indications that the transitive use may be more basic for verbs of transforming: their transitive use is more frequent, and it expresses a wider range of meanings. For the other verbs, however, the reverse pattern seems to hold. Only a systematic corpus study, together with a detailed semantic analysis, could clarify this issue. For the moment, I therefore prefer to follow authors such as Haspelmath who treat this alternation as non-directed, and do not consider one of the alternants as more basic.

It is not entirely transparent why some verbs occur only transitively, while other – semantically similar – verbs occur both transitively and intransitively. Two observations can be offered at this point. First, a number of transitive-only verbs have suppletive intransitive forms, e.g., *d'ú* ‘cause to sit’ (in 29a) has the

intransitive counterpart *t'óng* 'sit'; and *tù* 'kill' (in 29b) has the intransitive counterpart *miút* 'die'. It is possible that the existence of suppletive forms blocks their occurrence in different constructions. Second, Rappaport Hovav and Levin (1998) suggest that different argument structure configurations are sensitive to the presence or absence of a manner component in the verb semantics. In Goemai, many transitive-only verbs lexicalize the manner by which the event was brought about. For example, transitive-only verbs that describe cutting and breaking events often lexicalize the instrument: *d'ip* 'reap with fingers, cut with small knife', *hàrà'm* 'cut with scythe or sickle', *k'àp* 'cut with hoe' etc. Verbs of cutting and breaking that occur both transitively and intransitively, by contrast, often lexicalize the endstate only, e.g., *gép* 'cut', *sh'àn* 'break (of ropes)', *táp* 'break (of bones and sticks)' etc. It is possible that transitive-only verbs are characterized by such a manner component.

The patterns described for the Goemai patient / theme construction are well attested across Chadic: transitive verbs mark number in their O argument (Frajzyngier 1993: 58–62; Schuh 1998: 175–178; Seibert 1997: 40; see also Frajzyngier 1977b, 1997; P. Newman 1990a: 54–58), and derived nouns occur with their notional O argument as possessor (Frajzyngier 1993: 182–186). Grammars of isolating Chadic languages also report the existence of many verbs that occur in both intransitive and transitive configurations (Frajzyngier 1993: 180–181; Schuh 1998: 178–183). Grammars of languages that have verbal extensions, by contrast, describe the necessity to overtly mark any change in transitivity (Frajzyngier 1989: 157–185; P. Newman 1974: 23–25; Seibert 1997: 30–35, 96–98).

3.3. Transitive range construction

The second transitive construction in Goemai is the range construction (figure 8).

The thematic role of the A argument is underspecified. In most cases it can be characterized as an effector – receiving further specification through the lexical semantics of the verbs and the properties of the clause. In a small number of cases, it can be characterized as a theme (as in example 37a below). The O argument expresses a number of different thematic roles – depending on the lexical semantics of the verb: location, stimulus, topic, addressee, emitted or created substance, comparative standard, and instrument (but never a patient or theme role). These different roles can be subsumed under the term of 'range' (as used in functional grammar, see Halliday 1985), i.e., a participant through which the process is actualized, but which is not central to it. As such, it can be argued that the range construction is lower on the transitivity scale than the patient / theme construction (see Hopper and Thompson 1980). The range con-

struction also differs from the patient / theme construction in the lexical aspect of its participating verbs: it admits verbs of all lexical aspect classes, but the majority are ambiguous between activity and result readings. Their interpretation depends on the presence or absence of quantized expressions (see the discussion in footnote 48) or cognate objects (see section 6.1). In fact, most participating verbs belong to semantic fields that cross-linguistically show comparable ambiguities. Notice that such ambiguities are not attested in the patient / theme construction: verbs in this construction cannot receive an activity reading.

Syntactic function	A	V	O
Thematic role	effector, theme		range (including location, stimulus, topic, addressee, emitted substance, comparative standard, instrument)
Semantics	A <i>verbs</i> (i.e., does something, experiences something or is in a condition) in relation to O		
Verbs	(i) verbs of relating, bodily movement, doing, experiencing, speaking and speech acts, emission (of sound, smell, light and bodily fluids), attending and presenting, contact, consuming and cooking (ii) verbs of internal experience, evaluation, fitting and comparison (iii) idiomatic expressions		

Figure 8. Transitive range construction

Formally, the range construction differs from the other transitive constructions in the central role of its A argument: number-marking on the verb indicates number in the A argument (as in 32a and 32b); and verbal nominalization allows the notional A argument to occur as possessor (as in 33a), but not the O argument (as in the rejected example 33b).

- (32) a. *hèn=mì* *muép*
 1SG.S=be.related(SG) 3PL.O
 ‘I am related to them’ (A-28/04/04)
- b. *muép myá* *hèn*
 3PL.S be.related(PL) 1SG.O
 ‘they are related to me’ (A-28/04/04)

- (33) a. *dàp* *teacher* *lá* *p'ùùr*
 slapping:GEN teacher pain very
 'the slapping of the teacher (i.e., that the teacher did) is very painful' (A-25/05/04)
- * b. *dàp* *là=hòk* *sh'áng* *hèn* *p'ùùr*
 slapping:GEN child(SG)=DEF be.pleasant 1SG.O very
 *'the slapping of the child pleases me a lot' (A-25/05/04)

As in the case of the patient / theme construction, different groups of verbs participate in the range construction: (i) those that only occur transitively, and (ii) those that occur both transitively and intransitively; additionally, there are (iii) some idiomatic expressions that make use of the range construction.

(i) The first group includes stative verbs of relating (such as *mì* 'be related to' in 32a and 32b above), inchoative verbs of bodily movement (such as *móelép* 'wink' in 34a), and activity verbs of doing (such as *shín* 'do' in 34b); as well as verbs that are ambiguous⁵² between activity and result readings, including verbs of experiencing (such as *k'óelèng* 'hear/smell' in 34c), speaking and speech acts (such as *t'ém* 'tell'), emission (such as *kèn* 'excrete'), attending and presenting (such as *nín* 'point/show'), contact (such as *dàp* 'slap'), and consuming and cooking (such as *táp* 'brew'). Some of these verbs additionally occur in other transitive constructions.

- (34) a. [*ní*]_A *móelép* [*yít* *múk*]_O *hèn-k'á* *nóe*
 3SG.S wink eye/face 3SG.POSS LOC-head(SG) 1SG.POSS
dé *hèn=d'òk* *yì*
 SO.THAT 1SG.S =bec.quiet CONS
 'he winked his eyes at me, so that I become quiet' (A-11/05/04)
- b. *Yì* *àsé* / [*gwá*]_A *d'è* *tóe* *t'óng* *shín*
 SAY INTERJ SGM.LOG.AD.S exist EMPH PROGR do
 [*bì* *h-d'é-hnòe*]_O=*hòe* *yì* *hòe*
 thing ADVZ-CL:exist-DEM.PROX=exactly PROGR CONJ
jí=à?
 SGM.LOG.SP.I=INTERR
 '(He₁) said, surprise, is he₂ doing this thing to him₁?'
 (F00AFUAN)

52. This ambiguity is resolved by other elements in the clause (see chapter 4, sections 2.3 and 6.1).

- c. [*Muèp*]_A *k'óeléng* [*d'uòe fuán*]_O.
 3PL.S hear/smell voice:GEN rabbit
 ‘They heard the voice of the rabbit.’ (F99DLIIT)

(ii) The second group contains verbs that occur both transitively (as in the A examples below) and intransitively (as in the B examples). They include verbs of internal experience and sound emission, both stative (such as *líút* and *lwát* ‘be afraid’ in 35a and 35b) and inchoative (such as *swár* ‘laugh’ in 36a and 36b). These verbs have an experiencer as their S/A argument, and add an object in their transitive use; most can additionally occur in the causative construction. It also includes stative verbs of evaluation, fitting and comparison (as *sh'áng* ‘be pleasant’ in 37a and 37b) – these verbs differ from the other verbs described in this section in that they have a theme as their S/A argument (and add a comparative standard or location in their transitive use).

- (35) a. [*muèp*]_A *lwát* [*mèn*]_O *díp*.
 3PL.S be.afraid(PL) 1PL.O all
 ‘they are afraid of us all.’ (C00ANYOUTH1)
- b. *mán* [*yì*]_S=*lùút* *môu*.
 PROH 2SGF.S=be.afraid(SG) NEG
 ‘don’t be afraid.’ (F99DMATWO)
- (36) a. *mán* [*gòe*]_A=*swàr* [*gúrùm*]_O *góe bí n-wán môu*
 PROH 2SGM.S=laugh person COMMIT thing ADVZ-lack NEG
 ‘don’t laugh about poor people (lit. with things lacking)’ (A-15/05/04)
- b. [*Fuán*]_S *swár*.
 rabbit laugh
 ‘The rabbit laughed.’ (F99DLIIT)
- (37) a. [*bì=hòk*]_A *sh'áng* [*nì*]_O.
 thing=DEF be.pleasant 3SG.O
 ‘the thing pleased him.’ (F00CAAS)
- b. *tàmtìs d'à d'áláng k'à fuán*
 folktale COND pass(SG) HEAD(SG):GEN rabbit
 [*tàmtìs=hòk*]_S *sh'áng bá*.
 folktale=DEF be.pleasant NEG
 ‘if the folktale passes over the rabbit (i.e., is about the rabbit),
 the folktale is not nice.’ (F99ANTI)

It is not always straightforward to distinguish between groups (i) and (ii): verbs in group (i) can omit their O argument if it is recoverable from the context, and then look similar to verbs in group (ii) used intransitively. Nevertheless, a small group of verbs regularly occurs in contexts where an O argument is neither present nor recoverable. These verbs are therefore analyzed as belonging to group (ii). All of them describe a state-of-affairs that is internal to the S/A argument, but that can be related to another participant. Their intransitive use is much more common, and their behavior in the causative construction suggests that they are basically intransitive.

(iii) A considerable number of additional verbs occur in the transitive range construction. Currently, about 50 such examples are attested, but the list is certainly not exhaustive. These are treated as a separate group because they are subject to very specific restrictions: only few verbs of a semantic field can occur with a range object; only few nouns can fill the object slot; and the resulting interpretation is usually not entirely predictable. In particular, this possibility seems to be restricted to events that are culturally salient and that are typically done at a certain location or with a certain instrument. Less salient or typical events, by contrast, are not attested here. Despite their idiomatic character,⁵³ some generalizations can be made. First, many transitive verbs that express occupations can alternatively occur with a range object that specifies the location of this occupation. For example, *uás* ‘grind’ and *d’án* ‘cook’ usually occur with an object expressing the material that is ground or cooked – but alternatively, they can occur with a location. The resulting interpretation is compositional in the first case (in 38a), but not in the second (in 38b). Second, some intransitive verbs of motion and posture occur with range objects that specify a typical location (in 38c and 38d), a typical activity (in 38e), or a typical instrument (in 38f). Similarly, transitive verbs of perception – which normally link the stimulus role to their O argument – can occur with the instrument of perception (in 38g).

53. There is an on-going debate about the place of idiomaticity in grammar. This debate arises because of the existence of fixed expressions (which traditionally belong to the lexicon) that are based on productive grammatical patterns (which traditionally belong to the grammar) (see, e.g. Fillmore et al. 1988; Kay and Fillmore 1999; Pawley 1993; Schultze-Berndt 2000).

- (38) a. [*Muèp*]_A *uás* [*fín*]_O / *à k'à*
 3PL.S grind(PL) grinding.stone FOC HEAD(SG):GEN
fin.
 grinding.stone
 ‘They grind (lit. grind the grinding stone) on the grinding stone.’ (C01FGHJARAM3)
- b. [*Là=hók*]_A *t'òng t'óng d'án* [*wús*]_O *yì.*
 child(SG)=DEF sit(SG) PROGR cook/warm fire PROGR
 ‘The boy sits warming (himself) at the fire (lit. cook fire).’
 (B00NPROGGO175)
- c. *Yàm Kùrki / háán* [*t'éng*]_O *góe dáláng.*
 son(SG):GEN <NAME> climb(SG) tree COMMIT jar
 ‘Son of Kurki, (it) climbs a tree with a jar.’ (C01FGHJARAM2)
- d. *T'ó* [*pìn*]_O.
 lie(SG) hut
 ‘(He) lies in the hut (lit. lies hut) (i.e., he passes the night).’
 (SIRLINGER 1937: 181)
- e. *Muèp láng zóri* [*muèp*]_A *d'è t'óng*
 3PL.S hang/move(SG) entrance 3PL.S exist PROGR
t'wót [àrànm muép]_O yì / kó fuáán
 sit(PL) conversation 3PL.POSS PROGR maybe/or rain
lá t'áán.
 COND fall
 ‘They erected an entrance hut, (so that) they (can) sit at their conversations (lit. sit conversation), even if rain falls.’
 (D01CLU)
- f. [*Muèp*]_A *muén* [*sh'é muép*]_O *gòemé.*
 3PL.S go(PL) foot/leg 3PL.POSS one
 ‘They went by foot (lit. go foot) together.’ (F00CFUAN)
- g. *Dé / [móe]_A=k'óelèng* [*k'wàm sém*]_O *yì.*
 SO.THAT 1PL.S:CONS=hear/smell ear:GEN body.1PL.POSS CONS
 ‘So that we hear with our own ears (lit. hear ear).’
 (C00ANYOUTH4)

Finally, many transitive verbs can occur in both the patient / theme and the range construction. In particular, two patterns are attested. One large group

contains verbs that allow for both theme and location participants (such as *lyàk* ‘throw’): they occur in the patient / theme construction to link their theme role to the O argument (in 39a), and in the range construction to link their location role to the O argument (in 39b). The second large group contains verbs that have both physical uses (in the patient / theme construction, as in 39c) and metaphorical non-physical uses (in the range construction, as in 39d). In the first case, it is not possible to decide which use is basic. In the second case, it is likely that the physical use is basic.

- (39) a. *Lyàk* [fàlàk lwá=hók]_O d’i (...).
 throw liver:GEN meat/animal=DEF LOC.ANAPH
 ‘(She) threw the liver of the animal there (...).’ (F99DMATWO)
- b. *muèp máng gòe lyàk* / [màshà=hòk]_O n-ní.
 3PL.S take(SG) SEQ throw lady=DEF COMMIT-3SG.I
 ‘they pick (it) up and throw at the lady with it.’
 (C00ANDIALECT5)
- c. [*Muèp*]_A *láp* [k’àrà̀m=hòk]_O t’èi bá.
 3PL.S receive mat=DEF yet NEG
 ‘They haven’t received the mat yet.’ (C00ANDIALECT5)
- d. *Dé* [mòe]_A=láp [d’uòe sèm]_O yì.
 SO.THAT 1PL.S:CONS=receive voice:GEN BODY.1PL.POSS CONS
 ‘So that we answer in our own language.’ (C00ANYOUTH4)

When comparing the distribution of the range construction to the distribution of verbal extensions in other Chadic languages, a number of parallels can be found. For example, the Ron languages make use of verbal extensions to indicate different thematic roles. More specifically, some Ron languages have an extension *-ay* whose distribution is similar to that of the Goemai range construction (Jungrathmayr 1970: 185–188, 269–270; Seibert 1997: 39–41). Seibert analyzes it as a derivational extension serving different functions, including an applicative function that adds, e.g., a location argument to intransitive motion verbs. He goes on to list some verbs that only ever occur with this extension, including especially experiencer, speech act and contact verbs – i.e., verbs that regularly occur in the Goemai range construction. The similarities even extend to the semantics of individual lexical items: e.g., the Goemai verb *láp* has an interpretation of either ‘receive’ (in the patient / theme construction) or ‘answer’ (in the range construction) (illustrated in 39c and 39d) – similarly, Ron distinguishes between (underived) *mât* ‘receive’ and (derived) *mátà̀y* ‘answer’. Notice that the verbs in Goemai and Ron are not cognate, i.e., the seman-

tic similarities are not due to having inherited the same lexeme. Instead, their similarities seem to follow from lexicalization patterns that are shared across Chadic. These patterns are conveyed through different transitive constructions in Goemai, but through verbal extensions in Ron.⁵⁴ In a similar way, Abdoulaye's discussion of the Hausa grade system suggests that grade 2 has semantic extensions corresponding partly to those of the Goemai range construction (Abdoulaye 1992: 208–232): contact verbs, speaking verbs and perception verbs; as well as emotion verbs, fitting verbs and comparative verbs.⁵⁵

When comparing Goemai to other isolating West Chadic languages, however, Goemai seems to be unique in having two distinct types of transitive constructions. In most cases, grammars only give information on prototypical transitive verbs, i.e., those occurring in the Goemai patient / theme construction. Those grammars that explicitly discuss verbs from other semantic fields posit a single transitive type, linking both the patient / theme- and the range-type of roles to the O argument. Nevertheless, they also comment on the unexpected behavior of some verbs, in particular, verbs of cognition such as 'think' (linking their topic to O argument, not to adverbial) and verbs of contact such as 'throw' (coding their location in their O argument, not their theme) (see e.g., Frajzyngier 1993: 58–62, 178, 182–186 for the closely related language Mupun). It is possible that such comments reflect lexicalization patterns that are shared across Chadic, but further research is needed. So far, the Goemai pattern of using two distinct transitive constructions is not attested elsewhere.

3.4. Causative construction

The third transitive construction is a causative construction. It differs from the other two constructions in that all participating verbs occur basically in other constructions. This construction has two subtypes that are sensitive to the basic

54. The similarities can of course also be explained with cognitive tendencies. For example, a possible bridging context is illustrated in (i) (see also the comparable English use of 'receive ~ answer a phone call'). However, there are a number of parallel examples, thus making an explanation in terms of inherited lexicalization patterns more likely.

(i) *láp* *gòe-láp* *k'wál* *sèk* *puòe* *misk'óóm* *à*
 receiving NOMZ-receive talking BODY:GEN mouth elder(SG) FOC
bì *gòe-nyán*
 thing NOMZ(SG)-be.bad
 'receiving / taking away speech from an elder is a bad thing' (A-11/05/04)

55. But notice that Hausa uses grade 1 (not grade 2) to add locative objects to intransitive verbs (Abdoulaye 1992: 204–206).

transitivity of verbs: if a verb is intransitive, it occurs in this construction with two core arguments (A and O); if it is transitive (of either the patient / theme or range type), it occurs with two core arguments (A and O) plus an oblique argument. Figure (9) below summarizes the attested patterns.

Syntactic function	A	V	O	(Oblique)
Thematic role	causer		causee	theme, range
Semantics	A induces O to <i>verb</i> (Oblique)			
Verbs	(i) verbs of internal experiences, natural states, bodily processes and movements; some verbs of sound emission			
	(ii) verbs of transfer, attending and presenting, bodily emission			

Figure 9. Causative construction

The causative construction is a transitive structure, i.e., it occurs with two unmarked arguments. As such, the O argument precedes particles such as the habitual particle *t'óng* (in 40a, exemplifying a structure with the lexically intransitive verb *lúút* 'be afraid') or the progressive particle *yì* (in 40b, exemplifying a structure with the lexically transitive verb *sh'è* 'learn/teach') (see section 2.2, point v). In all cases, the O argument is animate and hence cannot be omitted (see section 2.2).

- (40) a. [ní]_A *dók* *lá* *lúút* [hèn]_O *t'óng* /
 elephant PAST.REM HAB be.afraid(SG) 1SG.O HAB
nd'àsóenòè *hèn=nà* *ndòè=ní* *zák-yìt*
 now 1SG.S=see SPEC=elephant also/however-again
bá
 NEG
 'in the past, elephants used to make me be afraid, (but) now I don't see any elephants any more' (A-23/04/04)
- b. [ní]_A *d'è* *t'óng* *sh'è* [muép]_O *yì* [góe
 3SG.S exist PROGR learn/teach 3PL.O PROGR COMMIT
d'uóe *Gòemâi*]_{ADV}
 voice:GEN <ETHNIC.NAME>
 'he is teaching them the Goemai language (lit. makes them learn)' (A-16/04/04)

The oblique argument occurring with lexically transitive verbs, by contrast, is not a core argument: it functions as an adverbial (see section 2.2, point iv), and it is not obligatory in nominalized clauses (see section 2.2, point iii). The oblique is expressed in a comitative phrase (see section 5.1): a noun is preceded by the preposition *góe* (in 41a) and a pronoun by the prefix *N-* (in 41b). Given the right context, this adverbial phrase can be interpreted as a simple comitative phrase – not as part of the causative construction (as indicated by the two possible translations in 41c).

- (41) a. *tó* / [*ní*]_A *nín* [*ní*]_O [*góe wákáám*]_{ADV} (...).
 okay 3SG.S point/show 3SG.O COMIT road
 ‘okay, she showed him the road (...).’ (D00EWITCH2)
- b. [*Muèp*]_A *nín* [*mòe-k’án*]_O
 3PL.S point/show NOMZ(PL)-maternal.relative(PL)
 [*ñ-ní*]_{ADV}.
 COMIT-3SG.I
 ‘They showed it (to) the maternal uncles.’ (C00ANDIALECT5)
- c. [*ní*]_A *s’éét* [*hèn*]_O [*góe shím*]_{ADV}
 3SG.S buy/sell(SG) 1SG.O COMIT yam
 ‘he sold me yam’
 Or: ‘he bought me (over) with yam’ (A-17/02/00)

The presence of the comitative phrase thus cannot be considered a formal marking of the causative construction: it is absent in the case of lexically intransitive verbs, and it is structurally ambiguous in the case of lexically transitive verbs.

Formally, this ambiguity can be resolved with reference to number marking (see section 2.2, point vii). Unlike the other two transitive structures, number-marking on the verb does not indicate number in any of the core arguments. Instead, lexically intransitive verbs use their invariant singular form – even if both core arguments are plural (as in 42a). And lexically transitive verbs indicate the number of the comitative phrase, i.e., of the non-core argument (as in 42b and 42c).⁵⁶

56. It is possible that the singular marking with basic intransitive verbs indicates the presence of an understood (singular) abstract noun and that example (42a) could be rephrased as ‘they made us be afraid with their appearance’ (or something similar). However, it is ungrammatical to add such an abstract noun. Furthermore, Goemai only allows for the omission of arguments that are recoverable from the linguistic

- (42) a. *muèp lúút mèn*
 3PL.S be.afraid(SG) 1PL.O
 ‘they made us be afraid’ (A-23/04/04)
- b. *mòe=s'èèt muép góe lá=kè*
 1PL.S=buy/sell(SG) 3PL.O COMIT DIM(SG):GEN=chicken
 ‘we sold them the little chicken’ (A-16/04/04)
- c. *hèn=s'àràp ní góe jáp kè*
 1SG.S=buy/sell(PL) 3SG.O COMIT DIM(PL):GEN chicken
 ‘I sold him the little chickens’ (A-16/04/04)

Number marking as in (42a) to (42c) can only provide the necessary information if the verb distinguishes number and if the relevant arguments happen to differ in number. In most cases, there is therefore no indication that a clause instantiates the causative construction. In the absence of such an indication, the most important disambiguating factor is animacy. The O argument is always animate, thus making its interpretation in terms of a theme unlikely – but not impossible (as illustrated in the alternative translation in 41c above). Furthermore, the A argument is preferably inanimate (excepting verbs of transfer and of attending and presenting). Again, this is not a semantic restriction, as there are contextual examples with an animate A argument (as in all examples above, and as in the intended interpretation of 43a). Out of context, however, speakers tend to only accept the alternative interpretation of (43a). Examples such as (43b), by contrast, are readily volunteered – because the alternative interpretation of (43b) is pragmatically not acceptable.

context – but such abstract nouns were never observed to occur in the preceding or following context. I therefore prefer to not posit such an underlying abstract noun, and to instead analyze the construction as having two distinct subtypes, depending on the basic transitivity of the participating verb. It is possible that the two subtypes reflect a diachronic development, with the transitive type preceding the transitive-plus-oblique type: Sirlinger’s (1937) dictionary contains examples like (i); in present-day Goemai, such examples are ungrammatical, and speakers use the structure in (ii) instead.

- (i) *t'óesék hák ní*
 hiccup expel 3SG.O
 ‘he hiccupped (lit. the hiccup made him hiccup)’ (SIRLINGER 1937: 252)
- (ii) *s'óe hák ní góe t'óesék*
 food expel 3SG.O COMIT hiccup
 ‘the food made him hiccup’ (A-15/01/04)

- (43) a. *gùrùm gòefé lá tàp nì (...).*
 person THAT/WHEN COND show.ignorance 3SG.O
 ‘the person that he ignores (...).’ (lit. that makes him show his
 ignorance)
 Or: ‘the person that ignores him (...).’ (C01FGHJARAM9)
- b. *Hâi / gòe-sék / tàp hèn bá.*
 INTERJ NOMZ(SG)-body show.ignorance 1SG.O NEG
 ‘Hey, this doesn’t make me show my ignorance.’ (i.e., I know
 it)
 Not: *‘Hey, this doesn’t ignore me.’ (C00ANDIALECT3)

So far, the discussion has shown that the causative construction is a formally unmarked transitive structure – like the transitive patient / theme construction and the transitive range construction. Nevertheless, there are a number of reasons to analyze it differently from the other two. First, no verb occurs exclusively in the causative construction (see the examples below). Second, verbs occurring in this construction can only be detransitivized (see section 2.2, point vi) if they are lexically transitive – but not if they are lexically intransitive. This pattern suggests that the causative construction does not constitute a basic argument structure construction. Third, number marking is independent of any core argument: lexically intransitive verbs use their singular form, and lexically transitive verbs mark their oblique argument. Both patterns can be explained if the causative construction is analyzed as a derivational construction: it could be argued that the singular form constitutes the less marked form, thus being able to occur in derived structures; and the oblique argument functions as a core argument for the lexically transitive verbs in their basic use, thus making it possible that the basic number-marking pattern has been retained in the derived construction. Fourth, there is a regular semantic change between the basic construction and the derived construction. The remainder of this section explores this semantic change in more detail.

The causative construction is used to derive causative reading from (i) intransitive and (ii) transitive verbs. (If a verb occurs both intransitively and transitively, it is always the intransitive alternant that provides the input for the causative construction). All verbs retain their lexical aspect, and – with the exception of activities – all lexical aspects are attested. In the following examples, the A example illustrates the basic use, and the B example the causative use.

(i) Most lexically intransitive verbs are verbs of internal experience, including stative verbs (such as *zèm* ‘like’ in 44a and 44b), inchoative verbs (such as

wèèl ‘become worried’ in 45a and 45b) and result verbs (such as *wál* ‘cry’). This also includes stative verbs expressing natural states (such as *d’wám* ‘be prone to craving’) and result verbs expressing bodily processes and movements (such as *òòt* ‘yawn’ in 46a and 46b). In addition, some individual transitive range verbs of sound emission (such as *gwààn* ‘howl’ in 47a and 47b) and experiencing (such as *tàp* ‘show ignorance’ in 43a and 43b above) are treated like lexically intransitive verbs in this causative construction. In all cases, their basic S/A argument becomes an O argument, and an external causer is added in A function.

- (44) a. *Ú yí póenóe=à? Yin tó [dòe]_S=zèm.*
 goat SAY thus=INTERR SAY okay SGF.LOG.SP.S=like
 ‘The goat said, like this? (She₁) said, okay, she₁ agrees.’
 (F99DPAAP)
- b. [*s’óe*]_A *zém* [*hèn*]_O
 food like 1SG.O
 ‘the food is agreeable to me (lit. makes me agree (with it))’ (A-23/04/04)
- (45) a. [*màt=hòk*]_S *wèèl*
 woman(SG)=DEF bec.worried
 ‘the woman got worried’ (A-22/05/04)
- b. [*sóól*]_A *wèèl* [*màt=hòk*]_O
 metal/money bec.worried woman(SG)=DEF
 ‘money made the woman get worried’ (A-22/05/04)
- (46) a. [*là=hòk*]_S *òòt*
 child(SG)=DEF yawn
 ‘the child yawned’ (A-15/05/04)
- b. [*muès*]_A *òòt* [*gùrùm*]_O *bá*
 beer yawn person NEG
 ‘beer doesn’t make a person yawn’ (A-15/05/04)
- (47) a. *Gòe-tér múk dóe dé múk / [áás]_A*
 NOMZ-move.aside 3SG.POSS come DIR 3SG.POSS dog
gwáán [*nì*]_O / [*áás*]_A *gwáán* [*nì*]_O / *yóól* *b’yáál*
 howl 3SG.O dog howl 3SG.O rise(SG) anger

dé múk.

DIR 3SG.POSS

‘When he moved aside towards him, the dog howled at him, the dog howled at him, (it) rose in anger towards him.’ (F00CAAS)

- b. [*wúl nóe*]_A *gwáán* [*nì*]_O *tóe*
 arrival 1SG.POSS howl 3SG.O EMPH
 ‘my arrival made him howl’ (A-15/05/04)

(ii) Lexically transitive verbs include patient / theme verbs of transfer (as *màng* ‘take’ in 48a and 48b), range verbs of attending and presenting (as *k’ám* ‘try/demonstrate’ in 49a and 49b), and range verbs of bodily emissions (as *k’yàs* ‘spit’ in 50a and 50b). All lexically transitive verbs are result verbs. In all cases, their basic A argument becomes O, the original O argument occurs in a comitative phrase, and an external causer is added.

- (48) a. [*màt*]_A *t’óng màng* [*lé* *gòe-sh’òòn*]_O.
 woman(SG) IRR take(SG) goods/clothes NOMZ(SG)-bec.heavy
 ‘the woman would pick up a heavy load.’ (C01FGHJARAM6)

- b. [*hèn*]_A=*màng* [*nì*]_O [*góe lé múk*]_{ADV}
 1SG.S=take(SG) 3SG.O COMIT goods/clothes 3SG.POSS
 ‘I passed the load to her (lit. I made her pick up the load)’ (A-19/04/04)

- (49) a. [*Muèp*]_A *b’ép zák-yít / k’ám*
 3PL.S do.again also/however-again try/demonstrate
 [*sh’é muép*]_O.
 foot/leg 3PL.POSS

‘They again tried out their feet.’ (F00JDUUS)

- b. [*hèn*]_A=*t’èn k’ám* [*d’èmdé*]_O [*góe d’uóe*
 1SG.S=IRR try/demonstrate remainder COMIT voice:GEN
Gòemâi]_{ADV}.
 <ETHNIC.NAME>

‘I will demonstrate the Goemai language to them (lit. I will make them try out the Goemai language).’ (C01FGHJARAM9)

- (50) a. *mán* [*gòe*]_A=*k’yàs* [*t’íli*]_O *m-pìn bá*
 PROH 2SGM.S=spit saliva LOC-hut NEG
 ‘don’t spit saliva in the hut’ (A-15/05/04)

- b. [shítá]_A k'yás [hèn]_O [góe t'íli]_{ADV}
 pepper spit 1SG.O COMMIT saliva
 'pepper made me spit saliva' (A-15/05/04)

Most participating verbs describe internally-caused states of affairs (i.e., emotions, natural states, bodily processes, bodily emissions, experiences, speeches). A majority of verbs belonging to these semantic fields are attested in the causative construction. There are only few semantically-similar verbs that are not attested – presumably because there are difficulties in attributing an external cause to a basically internal state-of-affairs: not all verbs lend themselves equally well to such a construal. Cross-linguistically, such verbs rarely – if ever – occur in constructions that code direct causation (see also the discussion in section 3.5). For Goemai, it could be argued that this construction does not code direct causation, but indirect causation. The animate O argument carries out the state-of-affairs: it feels, is in a condition, emits a bodily fluid, speaks or experiences. The A argument, by contrast, codes the source, i.e., the point of origin of the state-of-affairs. Unlike prototypical causers, its referent is frequently inanimate. But even if it is animate, it acts non-volitionally (as illustrated by the ungrammaticality of 51a). Notice that the inability to express volition is a property of the construction, not of the verbs: in their basic uses, the verbs can combine with adverbs expressing volition (as in 51b).

- (51) * a. là=hòk lúút là gòe-b'áng
 child(SG)=DEF be.afraid(SG) child(SG) NOMZ(SG)-bec.red
 gòe-ñ-màn
 NOMZ-ADVZ-know
 *'the boy made the baby be afraid on purpose' (A-24/04/04)
- b. là lúút gòe-ñ-màn
 child(SG) be.afraid(SG) NOMZ-ADVZ-know
 'the child is afraid on purpose (i.e., he pretends to be afraid)'
 (A-24/04/04)

Verbs of transfer and of attending / presenting, however, contradict this pattern: their English glosses of 'teach' (in 40b), 'show' (in 41a and 41b), 'sell' (in 41c, 42b and 42c), 'pass on' (in 48b) or 'demonstrate' (in 49b) suggest a more direct type of causation. It could still be possible to conceive of these events as being indirectly caused: with translations such as 'cause to attend to something' (for verbs of attending / presenting) and 'cause to take something' (for verbs of transfer). That is, it is possible that the referent of the A argument triggers the

state-of-affairs, but that its control over it is limited – it is the referent of the O argument that carries out the verb action. However, there is no independent indication that these two verb types do not convey direct causation. I therefore tentatively assume that the construction is underspecified as to the type of causation, and that this information is contributed by the verb. Alternatively, these verbs could instantiate a distinct “effential” (action away from source) type of semantics, which is conflated with the causative construction in many Chadic languages.

This causative construction is not described for other West Chadic languages. However, some of the attested semantic fields show parallels that merit further investigation: verbs of transfer and verbs of emotion.

Verbs of transfer have received much attention within Chadic linguistics, and grammars tend to exemplify them by means of the verbs ‘buy’ and ‘sell’. There are only few languages that use different lexical stems for the two concepts (e.g., Miya, see Schuh 1998: 169). In most languages, the ‘sell’ reading is derived, and it is often analyzed as ‘cause to buy’. Many languages use a causativizing affix on the verb ‘buy’ (i.e., an affix that also expresses causation) (see Abdoulaye 1992: 339–376; Jaggat 2001: 248–256; P Newman 2000: 651–661; E. Wolff 1993: 369–372 for Hausa; see Frajzyngier 1989: 174–176, 181–182 for Pero). Alternatively, languages use particles for this purpose (see Junggraithmayr 1970: 119–120, 188–189; Seibert 1997: 41–42 for Ron), or comitative-type prepositions only (see Frajzyngier 1993: 220–225 for Mupun). For example, the closely related language Mupun uses a transitive construction to express the ‘buy’ reading (in 52a), but a transitive construction plus an associative preposition to express the ‘sell’ reading (in 52b). In fact, example (52b) looks very similar to Goemai example (42b) – except that Goemai also expresses the recipient. For Mupun, Frajzyngier (1993: 220–225) does not analyze examples like (52b) as instances of a causative construction, but as instances of an oblique case; this case also introduces less-affected arguments of experiencer verbs (e.g., ‘forget about something’). In Goemai, by contrast, there are clear formal differences between transfer verbs occurring in the causative construction and experiencer verbs occurring with less-affected arguments (see section 5.1 for the latter).

- (52) a. *n-seet caan* (Mupun)
 1SG-buy hoe
 ‘I bought a hoe’ (FRAJZYNGIER 1993: 223)
- b. *n-seet kə caan* (Mupun)
 1SG-buy PREPOSITION hoe
 ‘I sold a hoe’ (FRAJZYNGIER 1993: 223)

Verbs of emotion have received less attention, but some information is available. Hausa uses the same grade that expresses transfer (i.e., grade 5) to also express some emotions (Abdoulaye 1992: 365–374). Other authors have commented on an unexpected linking of thematic roles, in that the experiencer is linked to the O argument and the stimulus to the A argument (e.g., Frajzyngier 2001: 114–117 for Lele) – thus showing superficial similarities to the linking pattern in the causative construction. And in closely-related Mupun, verbs of “pleasing” and “aching” allow for two different linking patterns (Frajzyngier 1993: 204–213). One is formally and semantically similar to that of the transitive range construction in Goemai. The other is a “subjectless sentence” whose two arguments are marked by prepositions, and whose second argument is usually marked for contrastive focus by means of the copula *a* (as illustrated in 53).

- (53) *dien n-an a n-mo* (Mupun)
 like PREPOSITION-1SG COPULA PREPOSITION-3PL
 ‘it is them that I like’ (FRAJZYNGIER 1993: 207)

Goemai does not have any parallel structure. However, it is possible that a structure like (53) goes back to an intransitive sentence plus a focused constituent of the type “(it) is likeable to me, (it is) they” (compare 53 to 44b). Like Goemai, Mupun allows for the omission of subject arguments; and, like Goemai, it moves focused constituents outside of core argument slots. Mupun possibly uses a different formal mechanism to code a similar semantic distinction.

3.5. Intransitive construction

The intransitive construction is summarized in figure (10) below.

Unlike its elaborate system of transitive constructions, Goemai has only one intransitive construction. This construction accepts verbs of all lexical aspect classes: stative verbs coding natural states (such as *d’álám* ‘be prone to sickness’ in 54a) and locative states (such as *t’óerép* ‘lie’); inchoative verbs coding internal experiences (such as *rèng* ‘become astonished’ in 54b), manner of motion (such as *sù* ‘start to run’), and bodily movements (such as *d’ààr* ‘start to tremble’); and verbs that are ambiguous between activity and result readings coding bodily processes (such as *f’úút* ‘vomit’) and motion (such as *mùààn* ‘go’ in 54c). The S argument can act volitionally (in 54c) or non-volitionally (in 54a), allowing also for less agentive roles, e.g., experiencer (in 54b) or patient (in 54a). Additionally, the intransitive alternants of transitive (patient / theme and range) verbs occur in this construction.

Syntactic function	S	V
Thematic role	effector, patient / theme	
Semantics	S <i>verbs</i> (i.e., does something or is in a condition)	
Verbs	(i) verbs of natural states, location, internal experiences, motion, bodily processes and movements	
	(ii) verbs alternating between intransitive and transitive patient / theme uses (see section 3.2)	
	(iii) verbs alternating between intransitive and transitive range uses (see section 3.3)	

Figure 10. Intransitive construction

- (54) a. [sék múk]_s d'álám
 body 3SG.POSS be.proned.to.sickness
 'his body is prone to sickness' (A-21/05/04)
- b. [hèn]_s=rèng kúút d'yém
 1SG.S=bec.astonished just stand(SG)
 'I just stand astonished (lit. I became astonished and stand)' (A-21/05/04)
- c. [ndá múk]_s d'è t'óng muààn yì
 father 3SG.POSS exist PROGR go(SG) PROGR
 n-zàm n-lú.
 LOC-field LOC-settlement
 'his father is going to the field in the village.' (C00ANYOUTH4)

Formally, number-marking always indicates number in the S argument (as in 55a and 55b), and verbal nominalization allows the notional S argument to occur as possessor (as in 55c).

- (55) a. Yìn / núún jí múút /
 SAY mother SGM.LOG.SP.POSS die(SG)
 ndá jí múút.
 father SGM.LOG.SP.POSS die(SG)
 '(He₁) said, his₁ mother has died, his₁ father has died.'
 (D00EWITCH3)

- b. *fě* *núún* *jí* *ńdòe* *ńdà*
 THAT/WHEN mother SGM.LOG.SP.POSS CONJ father
jí *muèp=muáráp.*
 SGM.LOG.SP.POSS 3PL.S=die(PL)
 ‘when his mother and his father, they have died.’ (D00EWITCH2)
- c. *múút* *múk* *dám* *bòezúng* *nóe* *p’ùùr*
 dying(SG) 3SG.POSS spoil chest 1SG.POSS very
 ‘his dying made me very sad’ (A-21/05/04)

All intransitive verbs behave uniformly, and there is no clear evidence for the cross-linguistically common division of intransitive verbs into unaccusative and unergative verbs (or into S_O and S_A verbs). These two classes are said to be sensitive to features of causation (i.e., unaccusative verbs pick out externally-caused events, and unergative verbs internally-caused events) and change (i.e., unaccusative verbs code a change of state, and unergative verbs a dynamic state-of-affairs) (e.g., Levin and Rappaport Hovav 1995). Possibly, Goemai reflects such a difference in its division between (1) verbs that alternate between intransitive and transitive patient / theme uses (i.e., unaccusative verbs), and (2) verbs that occur intransitively only (or that alternate between intransitive and transitive range uses) (i.e., unergative verbs). As discussed in section 3.2, all verbs of group (1) express a change of state, alternating between externally caused (transitive) and uncaused (intransitive) uses. Cross-linguistically, it is common for unaccusative verbs to occur in comparable transitive / intransitive alternations. Most verbs of group (2), by contrast, do not code a state change. They usually denote internally-caused events, i.e., some property of the S argument brings about the state-of-affairs. Furthermore, a number of intransitive-only verbs – but no verbs alternating between intransitive and transitive patient / theme uses – occur in the causative construction, i.e., in a construction that, for most verb types, receives an interpretation of indirect causation. It is therefore possible that the cross-linguistic distinction between unaccusative and unergative verbs manifests itself in Goemai not as a division within the intransitive class, but as a distinction between alternating and non-alternating verbs. Further research into their lexical properties is needed to verify or falsify this hypothesis.

4. Detransitivizing strategies

While Chadic languages usually have a number of transitivizing strategies at their disposal (often in the form of verbal extensions), they are characterized by

a “lack of [...] the intransitivizing morpheme or the passive construction” (Frajzyngier 1984: 155) (see also Frajzyngier 1988; P Newman 1971). Goemai is similar in that it does not have a morphological passive. Instead, it uses an impersonal construction (section 4.1) and participle nominalization (section 4.2) to convey passive-type readings, i.e., to give prominence to the O argument and to demote the A argument. Unlike other Chadic languages, it also uses a reflexive-type construction as a means to detransitivize expressions (section 4.3). Notice that Goemai – unlike most other West Chadic languages, but similar to closely-related Angas-Goemai group languages – does not have the so-called “intransitive copy pronouns (ICPs)” The ICPs are formally identical to the transitive object pronouns, but they occur with intransitive verbs, having the same person and number specification as the intransitive S argument (i.e., they “copy” the features of S). In some present-day languages, they serve an intransitivizing function (P Newman 1971, 1974: 23–24), but Frajzyngier (1977a, 1984) assumes that they originally had an inchoative function.

4.1. Impersonal construction

Chadic languages usually convey passive-type interpretations by means of an impersonal construction, using either a dedicated impersonal subject pronoun (e.g., Hausa, see Jaggat 2001: 207–211; P Newman 2000: 270–275) or a zero subject (e.g., Miya, see Schuh 1998: 292–293).⁵⁷ Goemai conforms to this common Chadic pattern by using the impersonal construction illustrated in figure (11) below.

Syntactic function	A	V	O ₍₁₎	(O ₂)
Semantics	a non-referential A carries out a state-of-affairs			
Verbs	ditransitive, transitive patient / theme & range			

Figure 11. Impersonal construction

The impersonal construction is formed with the ordinary 3PL pronoun *muëp* in A function. This construction is formally (di-) transitive, allowing for ditransitive verbs (as *póe* ‘give’ in 56a), transitive patient / theme verbs (as *lèng* ‘hang/move’ in 56b) and transitive range verbs (as *k’òelèng* ‘hear/smell’ in 56c) to occur in it. Recall that inanimate O arguments are omitted if they are recoverable from the linguistic context (section 2.2) – this also holds true for the

57. Hausa is rather unique in having a verbal extension (grade 7) that functions for some verbs (but not all) as a passive (Abdoulaye 1992: 249–264).

impersonal construction (in 56c). Similarly, closely-related Angas-Goemai group languages also use their 3PL pronoun for forming impersonal structures (Burquest 1973; Frajzyngier 1993; Jungraithmayr 1963a).

- (56) a. *góe=shín sh'ít yì ò-zàm. Dé*
 2SGM.S:CONS=do work CONS LOC-field SO.THAT
hén=póe gòe yì / náirà gòemé.
 1SG.S:CONS=give 2SGM.O CONS <CURRENCY> one
Tô / Ìmá ná / kó=lá d'óng má /
 okay <NAME> see any/every=COND be.good also
ní t'én táb'à kàt náirà gòemé
 3SG.S IRR do.ever/never find <CURRENCY> one
bá. Sáí muààn. [Muèp]_A póe [ní]_O [mààr
 NEG then/only go(SG) 3PL.S give 3SG.O farm/farming
gòe-f'yér]_O. Ní shín sh'ít d'ì.
 NOMZ(SG)-bec.big(SG) 3SG.S do work LOC.ANAPH
 'so you work on the field. So that I give you one *naira*. Okay, Ima saw (that) even if (things) go well, he would never get one *naira* (anywhere else). So (he) went. He was given a big farm (lit. they gave him a big farm). He worked there.' (D00EWITCH1)
- b. [*muèp*]_A *léng [lé]_O ò-k'ék*
 3PL.S hang/move(PL) goods/clothes LOC-heads(PL)
muép
 3PL.POSS
 'loads were put on their heads (lit. they₁ put loads on their₂ heads)' (A-17/02/00)
- c. *Tàmtìs nóe à k'à néng / òdòe ú /*
 folktale 1SG.POSS FOC HEAD(SG):GEN cow CONJ goat
òdòe kè / òdòe / sh'òòr / òdòe néng. Muèp kút
 CONJ chicken CONJ duck CONJ cow 3PL.S talk
muép yì tô / kó=wúròe / gòe wál d'uòe
 3PL.S SAY okay any/every=who OBLIG cry(SG) voice
múk / dé [muép]_A gòe k'òelèng yì.
 3SG.POSS SO.THAT 3PL.S:CONS OBLIG hear/smell CONS
 'My folktale is about the cow, and the goat, and the chicken, and the duck, and the cow. They₁ talked (and) they₁ said that, okay, everyone should raise his voice, so that (it) should be heard (lit. they₂ should hear (it)).' (D00JANIMAL9)

Given the structural identity between the impersonal construction and the (di-) transitive constructions, it is necessary to resort to contextual information to identify the intended reading. For example, it is likely that *muěp* ‘3PL’ in (56a) above receives a non-referential interpretation – given that (a) the person who gave Ima the farm is singular and that (b) the story-line describes the events from the perspective of Ima. Pronominal reference can provide additional information: the A argument of the impersonal construction is always non-referential, i.e., it cannot be co-referential with any argument, and hence does not trigger logophoric marking. This difference in logophoric marking shows in two contexts. First, a possessor occurring within an O argument slot or within an adverbial slot can be marked by a logophoric possessive pronoun if its referent is co-referential with the referent of the S/A argument. For example, if the possessor in (56b) were co-referential with the A argument, it could take the logophoric possessive form *dwén* ‘PL.LOG.SP.POSS’ (as illustrated in 57a below). By using the non-logophoric pronoun *muěp* ‘3PL.POSS’ in (56b), the speaker signals that the two referents are not co-referential – possibly (but not necessarily) because the A argument is non-referential. Second, speakers use logophoric pronouns in reported speech to signal co-reference with either the speaker or the addressee. If the referent of the A argument *muěp* ‘3PL.S’ in (56b) were co-referential with the reported speaker (or addressee), the logophoric pronoun *dũ* ‘PL.LOG.SP.S’ (or *nwǎ* ‘PL.LOG.AD.S’) would have occurred instead (as in 57b below). Logophoric marking of co-referential arguments is optional in the first case (see chapter 3, section 2.4), but obligatory in the second (see chapter 8, section 4.7).

- (57) a. [*muěp*]_A *léng* [*lé*]_O *n-k'ék*
 3PL.S hang/move(PL) goods/clothes LOC-heads(PL)
dwén
 PL.LOG.SP.POSS
 ‘they₁ put loads on their₁ heads’ (A-17/02/00)
- b. *muěp* *yí (...)* *dé* [*dũ*]_A=*gòe* *k'óelèng* *yì*
 3PL.S SAY SO.THAT PL.LOG.SP.S=OBLIG hear/smell CONS
 ‘they₁ said (...) so that they₁ should hear (it)’ (A-12/06/01)

Given these differences in distribution, I assume that the pronoun *muěp* is polysemous between a referential 3PL and a non-referential impersonal sense.⁵⁸

58. Notice that this pronoun cannot be used to express an indefinite subject – instead speakers use generic nouns in specific-indefinite noun phrases (see chapter 3, section 5.3).

This non-referential sense can be interpreted as a demotion of the A argument, and a promotion of the O argument. As such, the Goemai impersonal construction functions similar to prototypical morphological passives (Comrie 1976; Klaiman 1991; Siewierska 1984; Shibatani 1985, 1988). This assumption is further corroborated by the observation that the non-referential sense of the pronoun *muěp* is only available for (di-) transitive verbs, but absent with intransitive verbs.

4.2. Participle

Goemai forms participles from transitive (patient / theme and range) verbs, including the transitive alternant of ditransitive verbs (but not directly from ditransitive verbs). The resulting expressions have passive-like connotations: the participle modifies its notional O argument, while its notional A argument cannot be expressed – although the presence of an external agent is understood (see chapter 3, section 4.3 for details).

4.3. Reflexive, reciprocal and reflexive-intransitive: *Sék* ‘body’

Goemai uses free pronouns to express reflexive, reciprocal and reflexive-intransitive notions. All forms are variants of the lexeme *sék* ‘body’: this form is marked for person categories, and occurs within the paradigmatic set illustrated in table (49) below – a paradigm that presumably reflects the Proto-Chadic root *z(k) ‘body’ (Jungraithmayr and Ibriszimow 1994; P. Newman 1977a), fused with old possessive suffixes (see also chapter 3, section 2.4).

The first set of forms is the only available mechanism to express reflexivity: these forms occur with transitive verbs – typically, but not necessarily, with transitive verbs of grooming – to indicate the identity of the A and O arguments. The appropriate form occurs either as head noun (as in 58a) or as possessor in a genitive construction. In the latter case, the possessed noun is a part noun (usually a bodypart noun), and the structure indicates that the action has been performed by the referent of the A argument on his own bodypart (as in 58b and 58c). In both cases, the noun phrase occurs in the O argument slot. As such, it precedes particles such as *yi*, which indicate the end of the unit containing the verb and its direct object(s) (as in 58a) (see section 2.2, point v). And like other direct objects, they can form the basis for participle structures (as in 58b) (see chapter 3, section 4.3).

Table 49. Reflexive, reciprocal and reflexive-intransitive forms

	Reflexive	Reciprocal	Reflexive-intransitive
1SG	<i>sán</i>		
2SGM	<i>sák</i>		
2SGF	<i>shik</i>		
3SG	<i>sék múk</i>		<i>sék</i>
1PL	<i>sém</i>	<i>shák</i>	
2PL	<i>súk</i>	<i>shák</i>	
3PL	<i>sék muép</i>	<i>shák</i>	
SGM.LOG.SP	<i>súún</i>		
SGF.LOG.SP	<i>sát</i>		
PL.LOG.SP	<i>sút</i>	<i>shák</i>	
SGM.LOG.AD	<i>sék gwá</i>		
SGF.LOG.AD	<i>sék pá</i>		
PL.LOG.AD	<i>sék nwá</i>	<i>shák</i>	

- (58) a. [hèn]_A=s'úk [sán]_O yì ò-ní.
 1SG.S=wash(SG) body.1SG.POSS CONS COMIT-3SG.I
 'and so I wash myself (lit. my body) with it.' (C00JMQUEST6)
- b. *N'dè / gòe-yóól nóe / [hèn]_A=màn [yít*
 one/other NOMZ-rise(SG) 1SG.POSS 1SG.S=know eye/face:GEN
sán gòe-ò-s'úk]_O.
 body.1SG.POSS NOMZ-ADVZ-wash(SG)
 'Another (thing), when I grew up, I knew (about) washing the
 face myself (lit. face of my body being washed).'
 (C00JMQUEST3)
- c. *nd'àsòenòe dái / hèn=b'óót dé*
 now indeed 1SG.S:CONS=gain.expertise(SG) SO.THAT
[hèn]_A=k'ám [k'à sán]_O /
 1SG.S:CONS=try/demonstrate head(SG):GEN body.1SG.POSS
ndòe yàm-núún nóe
 CONJ son(SG):GEN-mother 1SG.POSS
gòe-òk'óng bá (...).
 NOMZ(SG)-bec.small/young(SG) NEG
 'Now indeed, and so I cannot measure myself against my
 younger brother (...) (lit. head of my body).' (C00JMQUEST2)

The default interpretation of the above examples is reflexivity. However, this information is not coded in the form itself. Instead, it is a contextual interpretation that arises because the A and O arguments have identical referents. Given the right context, the same forms are used to describe actions performed on another person's body (as in 59 below). For ease of reference, these forms are nevertheless labeled 'reflexives' throughout this section.

- (59) [Hèn]_A=màn [kó=ndòe gòe-mì mén]_{A/O}
 1SG.S=know any/every=some NOMZ(SG)-be.related(SG) 1PL.POSS
 d'è t'én s'úk [sán]_O yì bá.
 exist PROGR wash(SG) body.1SG.POSS PROGR NEG
 'I don't know any relative (of) us (who) was washing my body
 (when I was a child).' (C00JMQUEST3)

The same set of forms is used to emphasize that the referent of the A argument has done the action themselves. In this case, the forms co-occur with the comitative preposition *góe* plus the bodypart noun *k'á* (SG) ~ *k'ék* (PL) 'head' (as in 60a), and the resulting expression fills an adverbial slot. Notice that this use is also attested with intransitive verbs (in 60b). Such an emphatic use of reflexives is common, both within Chadic (Frajzyngier 1999a) and cross-linguistically (König and Siemund 1999).

- (60) a. *S'òe gòe-t'òng s'òe góe / t'òng [góe]_A=táng*
 food NOMZ-IRR eat 2SGM.POSS IRR 2SGM.S=search
tóe [góe k'á sák]_{ADV} /
 EMPH COMIT head(SG):GEN body.2SGM.POSS
nyè-pé góe=f'yér d'èmt'èi.
 because-THAT/WHEN 2SGM.S:CONS=bec.big(SG) already
 'The food that you would eat, you will search (for it) by your-
 self, because you have already grown up.' (C00ANYOUTH1)
- b. [*ní*]_S wúl [*góe k'á sék múk*]_{ADV}.
 3SG.S arrive COMIT head(SG):GEN body 3SG.POSS
 'he arrived himself.' (P00JWALL)

As shown in table (49), the form *sék* is attested in different person categories. It is likely that *sék* was originally restricted to 3SG, and was later generalized to mean 'body'. In present-day Goemai, this noun needs to co-occur with the possessive modifiers to express 3SG (because the original form *sék* was re-interpreted as 'body'), 3PL (because the original form *shák* was re-interpreted

as reciprocal, see below), and addressee logophoric (because they constitute more recent developments). But notice that *sék* can alternatively replace all other forms as well (as illustrated by *sék mén* ‘our bodies’ in the first sentence in 61). Such forms are commonly uttered by younger speakers – older speakers prefer the forms in table (49) (illustrated by the corrected form *sém* ‘our bodies’ in the second sentence of 61).

- (61) *mén / góe k'á sék mén (...). Mén góe*
 1PL.I COMIT head(SG):GEN body 1PL.POSS 1PL.I COMIT
k'ék sém.
 heads(PL):GEN body.1PL.POSS
 ‘we ourselves (...). We ourselves.’ (C01FGHJARAM4)

Occasionally, *sék* is attested as a general reflexive morpheme, unspecified for person categories – including the 3SG category (in 62a), but also other categories (in 62b). It is possible that such uses constituted the source for its further development as an intransitive-reflexive morpheme (see below).

- (62) a. *Mùdùüt góe k'á sék yóng ni.*
 <PLACE.NAME> COMIT head(SG):GEN body call 3SG.O
t'ìjén.
 pot.fragment
 ‘Shendam by (it)self calls it *tijen*.’ (C00ANDIALECT3)
- b. *Là gú=t'wót ñdòe sék / kùt d'úóe*
 COND 2PL.S=sit(PL) CONJ body talk voice:GEN
Gòemâi / kùt d'úóe lú gwén /
 <ETHNIC.NAME> talk voice:GEN settlement 2PL.POSS
dé gú=k'óelèng d'úòe sùk
 SO.THAT 2PL.S:CONS=hear/smell voice:GEN body.2PL.POSS
yì.
 CONS
 ‘When you sit amongst (your)selves, speak the Goemai language, speak the language of your homes, so that you listen to your own language.’ (D00NSPEAKING)

The second form in table (49) is the invariant reciprocal form *shák*. This form functions as O argument (as in 63a), and can thus only occur with transi-

tive verbs. It has given rise to the adverb *góeshák* ‘together (lit. with each other)’ (as in 63b).

- (63) a. [*muèp*]_A *ná* [*shák*]_O / [*muèp*]_A *zém* [*shák*]_O.
 3PL.S see each.other 3PL.S like each.other
 ‘they see each other, they like each other.’ (C00ANDIALECT5)
- b. [*Muèp*]_S *yúúl* *góeshák*.
 3PL.S rise(PL) together
 ‘They rose together.’ (F99AKUR)

It is phonologically possible that *shák* was originally part of the reflexive paradigm (3PL) (deriving from **siak*),⁵⁹ and was then re-interpreted as a reciprocal pronoun. In present-day Goemai, there is some overlap between reflexive and reciprocal notions: the reflexive form *sút* ‘body.PL.LOG.SP.POSS’ (in 64a) and the reciprocal form *shák* (in 64b) have similar extensions. According to native-speaker judgments, they differ very slightly in their interpretation: the choice of *sút* indicates a collective interpretation (i.e., the women act as a collective in 64a) while the choice of *shák* indicates reciprocity (i.e., the women help each other individually in 64b).

- (64) a. *shàràp=hòk* *k’át* *sút*
 women(PL)=DEF help body.PL.LOG.SP.POSS
 ‘the women₁ helped themselves₁ (as a collective)’ (A/N-19/05/04)
- b. *shàràp=hòk* *k’át* *shák*
 women(PL)=DEF help each.other
 ‘the women helped each other (as individuals)’ (A/N-19/05/04)

The form *shák* expresses a wide range of reciprocal types (see Dalrymple et al. 1994, 1998; Evans 2008), covering not only strong reciprocity (where all actors interact with all others) (as in 65a), but also adjacency (as in 65b) and asymmetrical reciprocity (as in 65c, where only the sane person does the pursuing).

59. Frajzyngier (1999b: 186–192) argues that most Chadic languages differentiate between reflexives (originating in the noun ‘head’) and reciprocals (originating in the noun ‘body’). He also assumes that the cognate Mupun form *shak* originated in an adverb meaning ‘together’. In present-day Goemai, by contrast, the adverb ‘together’ is derived from the reciprocal form.

- (65) a. *gùrùm mòe-t'wót d'ì m̀-̀pè=hòk*
 person NOMZ(PL)-sit(PL) LOC.ANAPH LOC-place=DEF
muèp=myá shák díp
 3PL.S=be.related(PL) each.other all
 ‘the people who live there in the place, they are all related to each other’ (A-29/04/04)
- b. *Wèl wúl góe-dáng shák góe-dáng*
 worrying arrive COMMIT-tail each.other COMMIT-tail
shák ǹ-̀lú nóe.
 each.other LOC-settlement 1SG.POSS
 ‘troubles come after each other, after each other in our house’ (A-29/04/04)
- c. *Muèp t'án shák / muèp t'án shák / muèp.*
 3PL.S pursue each.other 3PL.S pursue each.other 3PL.S
t'án shák Gùrùm góe kyóóp múk
 pursue each.other person COMMIT health 3SG.POSS
b'óót gòe / yà gòe-rwáng môu.
 gain.expertise(SG) SEQ catch NOMZ(SG)-bec.mad NEG
 ‘They pursued each other, they pursued each other, they pursued each other. (But) the sane person was not able to catch the mad person.’ (F00CGOERWANG; A-29/04/04)

The third form in table (49) is the invariant reflexive-intransitive form *sék* ‘body’ This form is used to convey a reflexive-intransitive reading, occurring with some types of transitive verbs (see below). In this case, the former O argument is promoted to A function, and the invariant form *sék* occurs in O function. Example (66a) illustrates a basic transitive clause, and example (66b) the corresponding reflexive-intransitive clause. Formally, the structure in (66b) is transitive. Semantically, however, it is used to demote the erstwhile A argument: the A argument is understood, but cannot be expressed.

- (66) a. [*Gòe*]_A=*láp* [*sóól=hók*]_O.
 2SGM.S=receive money=DEF
 ‘You receive the money.’ (C00ANYOUTH2)
- b. [*shind'óng=hók*]_A *láp* [*sék*]_O *d'èmt'èi*
 present=DEF receive body already
 ‘the present has already been received (lit. it received itself)’ (A-17/04/04)

This construction conveys an additional nuance: when used with reference to human subjects, it conveys the certainty of the action taking place. As such, it is often used as an implicit threat (as indicated by the alternative translation in 67).

- (67) [là=hòk]_A dâl [sék]_O
 child(SG)=DEF strike body
 'the boy has been beaten'
 'the boy is sure to be beaten' (A-25/05/04)

The form *sék* retains some of its original semantics, as can be shown with regard to its distribution: it occurs only with transitive verbs that describe events that typically act on an animate or inanimate *sék* 'body', i.e., verbs of contact and grooming (e.g., *dâl* 'strike', *pèk* 'rub oil'). There are some extensions to individual verbs from other semantic fields (e.g., *k'ât* 'measure out corn', *làp* 'receive'), but such extensions are not accepted by all speakers. In terms of their lexical aspect, all participating verbs are activity or result verbs. But independent of their basic lexical aspect, they receive a stative reading in the reflexive-intransitive structures above.

It is unlikely that the reflexive-intransitive construction is related in any way to the intransitive copy pronouns (ICPs) attested in other Chadic languages (see the introduction to section 4): this construction does not make use of the direct object pronouns, it only occurs with transitive verbs, and it does not convey any inchoative semantics. It is more likely that its use reflects an on-going grammaticalization process – well-attested cross-linguistically (Kemmer 1993; Klaiman 1992) – by which reflexive pronouns are used with an intransitivizing function. However, given its present-day distribution, *sék* cannot (yet) be considered an intransitivizing morpheme.

The use of the lexeme 'body' (and 'head') to convey reflexive and reciprocal notions is common, both cross-linguistically and within Chadic. Chadic languages also tend to mark person categories on the reflexive form (and sometimes on the reciprocal, too); and the distribution of the Goemai forms is similar to that attested in other Chadic languages (Frajzyngier 1989: 183–185, 1993: 118–123; Haruna 2003: 60–62; P. Newman 1974: 21, 2000: 476–487; Schuh 1998: 240–241). The extension of the reflexive for purposes of intransitivization, by contrast, is not described for any other West Chadic language, but is found in some Central and East Chadic languages (Heine 1999).

5. Adding participants to an event

Goemai uses a number of strategies to add participants to an event. Unlike the structures discussed in sections 3 and 4 above, these strategies do not alter the basic pattern of linking thematic roles to grammatical relations. Instead, prepositions, prefixes, conjunctions and spatial nominals add participants in adverbial function (section 5.1), verb serialization makes use of a second verb to introduce a further participant (section 5.2), and juxtaposition allows another participant to occur in a separate clause (section 5.3). Some of these strategies show indications of grammaticalization, as the added participant is developing O argument properties.

5.1. Prepositions, prefixes, conjunctions and spatial nominals

Goemai makes use of prepositions, prefixes, conjunctions and spatial nominals to code a number of different thematic roles. Syntactically, the added elements do not function as core arguments of the verb. Being peripheral arguments, they follow the core arguments, i.e., they follow particles that indicate the final boundary of direct object noun phrases (as the particle *yì* in 68). In most cases, they are not obligatory, and I do not consider them to be part of the semantic participant structure of a verb (but see the discussion below).

- (68) *[Muép]_A shin [s'óe]_O yì [n-nl]_{ADV} (...).*
 3PL.S:CONS do food CONS COMMIT-3SG.I
 'So they make food with it (...).' (C00JMQUEST6)

Table (50) gives an overview of the attested expressions. The remainder of this section illustrates their functions in more detail (see chapter 5, section 4 for a discussion of their categorical status and details of their spatial semantics).

Spatial notions are conveyed by the preposition *góe* 'located at a place', the prefix *N-* 'located at an object' and a large number of spatial nominals (see chapter 5, section 4). In most cases, these locative phrases do not constitute semantic participants of the verb, and are thus not part of their lexical participant structure. The only exception are the five intransitive postural-based locative verbs and their corresponding transitive counterparts (see chapter 3, section 2.2): they obligatorily occur with a locative adverbial, and they need to be marked formally if this adverbial is omitted. For example, when they occur in a purpose clause without their locative adverbial, the adverbializer *N-* has to be prefixed to the verb (as in 69a) – just as with transitive verbs whose direct object is omitted (as in 69b) (see also the discussion in section 2.2, point iii).

Other intransitive verbs, by contrast, can occur without this prefix, regardless of whether a locative phrase is absent (as in the first clause in 69c) or present (as in the second clause of 69c).

Table 50. Prepositions, prefixes, conjunctions and spatial nominals

Preposition / Prefix		
<i>góe</i>	PLACE	locative (location at a place)
<i>góe</i>	COMIT	comitative / instrumental / accompaniment; (direct causation); causation
<i>N-</i>	LOC	locative (location at an object)
	COMIT	comitative / instrumental / accompaniment; (direct causation); causation
	BEN	benefactive
Conjunction		
<i>ńdòe</i>	CONJ	accompaniment; addressee (of some speech act verbs)
Spatial nominals		
<i>fè</i>	OWNER	source (of non-spatial verbs)
<i>sék</i>	BODY	addressee (of some speech act verbs)
<i>k'á</i>	HEAD(SG)	stimulus (of experiencer verbs), content (of speech act verbs)

- (69) a. *Là góe=wá ń-lú shínî*
 COND 2SGM.S=return.home(SG) LOC-settlement today
dé-gòe ń-t'ó fá / gòe=shìn góe án
 PUR ADVZ-lie(SG) indeed 2SGM.S=do COMIT mind
góe.
 2SGM.POSS
 '(He) said, when you return home today to lie, really, do (it) with your mind (i.e., carefully).' (F99DLA)
- b. *Muèp kát là-t'èng dé-gòe ń-s'òe bá.*
 3PL.S find child(SG):GEN-tree PUR ADVZ-eat NEG
 'They didn't find any fruit to eat.' (F99ANTI)

- c. *Lú* *gòepé* *góe=zèm* *dé-gòe* *rú* /
 settlement THAT/WHEN 2SGM.S:CONS=like PUR enter(SG)
gòepé *góe=zèm* *dé-gòe* *rú*
 THAT/WHEN 2SGM.S:CONS=like PUR enter(SG)
ńdòe=lú *zák-yìt* *bá (...)*.
 SPEC=settlement also/however-again NEG
 ‘The compound where you like to enter, (or) where you don’t
 like to enter (another) compound again (...).’ (D01CLU)

In addition to their spatial functions, the preposition *góe* (triggering a high tone in the following noun) and the prefix *N-* introduce instruments (in 70a) and companions (in 70b). In all cases, the preposition is used to introduce nouns and animate companions (independent of their categorical status), and the prefix is used to introduce pronouns. Frequently, comitative phrases co-occur with intransitive motion verbs to express the notion of transport (as in example 26a in section 3.2) – like many other Chadic languages, Goemai does not have transitive verbs of transport (Frajzyngier 1989: 181–182; Frajzyngier 1993: 220–225; P. Newman 1974: 25–26). Accompaniment can alternatively be expressed with the nominal conjunction *ńdòe* introducing a noun phrase (in 70c). Like the comitative phrase, the conjoined phrase follows the verb and its direct object(s). It differs semantically in that the added participant takes a more active part in the event.

- (70) a. [*Muèp*]_A *t’óng* / *k’úl* [*nì*]_O [*góe* *yít’úl*]_{ADV}.
 3PL.S IRR strike 3SG.O COMIT round.stone
 [*Muèp*]_A *t’óng* *tù* [*lwá*]_O [*ń-ń*]_{ADV}.
 3PL.S IRR kill(SG) meat/animal COMIT-3SG.I
 ‘They would strike it (a spear) with a round stone. They would
 kill animals with it (the spear).’ (C01FGHJARAM5)
- b. *Sái* *muààn* [*góe* *ń*]_{ADV} *d’i* *ńdòe=pìn*.
 then/only go(SG) COMIT 3SG.I LOC.ANAPH SPEC=hut
 ‘Then (she) went with him there into a room.’ (D00EWITCH3)
- c. [*K’úr*]_S *yóól* [*ńdòe muép*]_{ADV}.
 tortoise rise(SG) CONJ 3PL.I
 ‘The tortoise rose (together) with them.’ (F99AKUR)

The preposition *góe* (plus noun) and the prefix *N-* (plus pronoun) are also used in an idiomatic way with the two transitive verbs *s’óe* ‘eat’ and *s’wà*

‘drink’ to convey a causative reading (as shown in 71). Notice that this use is very restricted: it is not possible to specify the type of food or drink given to the recipient (i.e., it is not possible to include an O argument); and it can only occur with the two generic verbs of eating and drinking – not with any of the semantically more specific verbs of consumption (e.g., *hààr* ‘consume tough food such as meat, nuts, beans, maize’, *muák* ‘consume juicy food such as fruits’).

- (71) [hèn]_S=s’òe [góe jíp nóe]_{ADV}
 1SG.S=eat COMMIT children(PL) 1SG.POSS
 ‘I fed my children (lit. I eat with my children)’ (A-16/04/04)

Furthermore, both the preposition (plus noun) and the prefix (plus pronoun) occur with transitive verbs in the derivational causative construction, where they introduce a theme or range participant. The introduced participant functions as adverbial in this derivational construction, but as core argument in the basic construction (see section 3.4).

In all contexts above, the preposition and the prefix are in complementary distribution. In another context, only the prefix *N-* is attested: to introduce a benefactive participant (as in 72), which – in certain contexts – can receive a recipient interpretation (see the discussion of example 23a in section 3.1).

- (72) dé [móe]_A=nyét yì [n-gùrùm=hòk]_{ADV} bá.
 SO.THAT 1PL.S:CONS=leave CONS BEN-person=DEF NEG
 ‘so that we won’t leave (it) for the person.’ (F00JNAAN)

The preposition and the prefix co-occur with a wide range of verbs. In addition, Goemai speakers use conjunctions and spatial nominals to add adverbials to specific verbs only.

First, non-spatial verbs – in particular verbs of transfer – can add their source by means of the spatial nominal *fê* (as in 73). Spatial verbs, by contrast, convey the source reading through their lexical semantics plus a locative preposition, prefix or spatial nominal (see chapter 5, section 4).

- (73) Yin ndòe=gùrùm wúl hár [ní]_A dóe làp
 SAY SPEC=person arrive even/until 3SG.S:CONS come receive
 [s’óól]_O [fê jí]_{ADV} / bì wààp.
 money OWNER SGM.LOG.SP.POSS thing borrow/lend
 ‘(He₁) said, someone arrived, and he even received money from him₁ here, a loan.’ (F00CGOEBETLA)

Second, many speech act verbs link the content or topic of the speech act in O function. Most such verbs have the possibility to alternatively or additionally introduce an addressee: *t'ém* 'tell, report', *t'át tàmtis* 'tell folktale' and *làp* 'receive, answer' introduce it by means of a serial verb construction (see section 5.2); *tàl* 'ask' uses the spatial nominal *sék* 'body' (in 74a); and *k'wál* 'talk' and *kùt* 'talk' use the conjunction *ndòe* (in 74b). In all cases, the addressee occurs in adverbial function. The speech content is either expressed in O function (in 74a) or is omitted (if it is recoverable from the context) (in 74b).

- (74) a. *hèn=zèm dé [hén]_A=tál / [gòe-sék]_O*
 1SG.S=like SO.THAT 1SG.S:CONS=ask/greet NOMZ(SG)-body
[sèk puòe góe]_{ADV} (...).
 BODY:GEN mouth 2SGM.POSS
 'I want that I ask this to you (...).' (C00JMQUEST6)
- b. *Gòe=màn / [Góe-dùùt]_A / kùt [ndòe]*
 2SGM.S=know NOMZ(SG)-<ETHNIC.NAME> talk CONJ
góe]_A / yìn jì=k'èl bá.
 2SGM.I SAY SGM.LOG.SP.S=hear/smell NEG
 'You know, a person₁ from the Duut talks to you (and) says he₁ didn't hear (it).' (C00ANDIALECT3)

Third, most experiencer and speech-act verbs have some freedom in the expression of their stimulus or content: either in O function (as exemplified with *rǎng* 'think' in 75a) or in adverbial function introduced by the spatial nominal *k'á* 'HEAD (SG)' (as in 75b). For these verbs, the participant is less affected in the adverbial strategy (in 75b) than in the direct object strategy (in 75a). For the few intransitive experiencer and speech-act verbs, the adverbial strategy is the only available strategy (as in 75c). Generally, Goemai speakers frequently use bodypart nouns as the head of stimulus and speech-content noun phrases. For example, verbs of liking are often followed by *yít* 'eye/face' (as in 75d). Unlike *k'á* 'HEAD (SG)' (in 75b and 75c), however, such bodypart nouns occur within the direct object slot (i.e., as possessed noun within a genitive construction) – not as adverbials. It is nevertheless likely that structures such as (75d) constituted the source for the adverbials in (75b) and (75c). Closely-related Chadic languages have similar alternations between adverbial and direct object strategies (see Frajzyngier 1993: 220–225).

- (75) a. [Muèp]_A ráng [bi]_O gòpé muép t'óng
 3PL.S think thing THAT/WHEN 3PL.S:CONS IRR
 muèn gòe k'wál ndòe lítt.
 go(PL) SEQ talk CONJ lion
 'They thought up the thing that they would go and say to the lion.' (F99DLIT)
- b. Tó / Ìmá / bá dóe t'óng t'óng ráng
 okay <NAME> return(SG) come sit(SG) PROGR think
 yì [k'á]_{ADV} gòfè / lá d'óng ní
 PROGR HEAD(SG) THAT/WHEN COND be.good 3SG.S
 lá bá f'yér (...).
 COND return(SG) bec.big(SG)
 'Okay, Ima returned (and) sat here thinking about that (it) would be good if he became big, too (...).' (D00EWITCH1)
- c. Mútàné=hók / [muèp]_S / wéél [k'á
 people(PL)=DEF 3PL.S bec.worried HEAD(SG):GEN
 k'wál=hók]_{ADV} bá.
 talking=DEF NEG
 'The people, they didn't worry about the matter.' (D00EWITCH1)
- d. [páng]_A nyáng / [yìt gòes'éng]_O.
 puffadder hate(SG) eye/face:GEN urine
 'the puffadder hates urine (lit. hates the face of urine).'
 (D99DPANG)

In some of the above cases, it is possible to observe an on-going grammaticalization process: some forms start to confer direct object properties on the following noun phrase. This includes the causative uses of the comitative preposition and prefix, as well as the different forms introducing addressees of speech acts. Some speakers (but not all) allow the added participant to precede particles such as *yì* (as in 76), i.e., they allow the added noun phrase to occur in a syntactic position reserved for unmarked core arguments (see section 2.2, point v). In all attested examples, the added participant can be considered an integral part of the verb's participant structure: if it were left out, the meaning would change. Possibly, their variable syntactic behavior reflects this central semantic status (see Van Valin and LaPolla 1997: 116–118 for a comparable cross-linguistic discussion of verbs of saying).

- (76) *À bí mímòe wèèl nwá tóe póenóe*
 FOC thing what bec.worried PL.LOG.AD.O EMPH thus
[nwá]_A k'wál k'wál [ndòe ní]_O yì?
 PL.LOG.AD.S:CONS talk talking CONJ 3SG.I CONS
 '(He₁ said) what (is it that) gets them₂ worried like this, so that
 they₂ talk (this) talk to him?' (F99DLIT)

5.2. Serialization

Goemai makes extensive use of serial verb constructions (see chapter 8, section 3 for details). There are several different subtypes, and one of them – the coordinate serial construction – can be used to add participants to events. Such participants include recipients, addressees of the speech-act verbs *t'ém* 'tell, report', *t'át tàmtis* 'tell folktale' and *làp* 'receive, answer' (in 77a), instruments (in 77b), sources or goals of motion verbs, and comparative standards (in 77c).

- (77) a. *[muèp]_A t'át [támtis]_O póe [muèp]_O*
 3PL.S propel/tell.folktale(SG) folktale give 3PL.O
 'they tell them a folktale.' (D01CLU)
- b. *[ní]_A mǎng [shík]_O twò [muèp]_O [n-ní]_{ADV}*
 3SG.S take(SG) knife kill(PL) 3PL.O COMMIT-3SG.I
 'they took a knife (and) killed them with it' (A-17/02/00)
- c. *D'úús nyáng / nyè-gòepé [d'úús]_{S/A} k'óóm*
 cricket hate(SG) because-THAT/WHEN cricket bec.strong
mà [ní]_O / kúmá f'yér mà [ní]_O
 surpass 3SG.O also bec.big(SG) surpass 3SG.O
 'The cricket refused, because the cricket is stronger than him,
 and (it) is also bigger than him.' (D00JANIMAL12)

In the examples above, a verb – *póe* 'give' in (77a), *mǎng* 'take' in (77b) and *mà* 'surpass' in (77c) – is used to introduce the additional participant. Notice that the presence of this participant does not lead to an increase in the number of arguments occurring with the main verb: the verbs retain their lexical argument structure. In particular, the serial construction as a whole does not have a transitivity value of its own. Evidence for this statement comes from number marking, which continues to be governed by the argument structure of the participating verbs. It is therefore possible for the two verbs to be marked

for different number categories (in 77b). If the entire construction had a single argument structure, it would be expected that the verbs would be marked for the same number category. An analysis in terms of a single transitivity value would also lead to the following problem: in (77b), the instrument participant seems to be coded twice – once as the O argument of *màng* ‘take’ and once in a prepositional phrase. It is unlikely that the same participant should be coded twice. Instead, it is more plausible to analyze *shik* ‘knife’ as the theme participant of *màng* ‘take’. Its instrumental interpretation is an implicature, which follows from its occurrence as the first verb in the coordinate serial verb construction – a construction that codes a temporal relationship between two subevents. The instrument participant is then coded explicitly in the prepositional phrase by means of a pronoun that refers back to the previously mentioned *shik* ‘knife’⁶⁰. On the basis of the above evidence, I therefore assume that Goemai serializes verb phrases – not verbs. As a consequence, serialization does not affect the argument structure of the main verb. Goemai patterns here with many West African serializing languages such as Ewe (Ameka 2006), but differs from other languages where serial constructions have a single transitivity value (Aikhenvald 2006).

Despite the above discussion, there is one indication that the serial structure exemplified under (77a) above is undergoing a grammaticalization process: some (but not all) Goemai speakers allow the second verb phrase to occur in a core argument slot, i.e., before particles such as habitual *t'óng* (as in 78) (see section 2.2, point v). It seems that the verb *póe* is developing into a type of verbal extension that confers direct object properties – similar to some of the elements discussed in section 5.1.

- (78) [hèn]_A=dók lá t'ém [póe gòe]_O t'óng gòepé (...)
 1SG.S=PAST.REM HAB tell give 2SGM.O HAB THAT/WHEN
 ‘in the past, I used to tell you that (...)’ (A-28/04/04)

5.3. Juxtaposition

Juxtaposition serves to introduce the content of the verbs *yóng* ‘call’ (in 79a) and *hès* ‘pierce, name’ (in 79b) (see chapter 8, section 4.9 on juxtaposition).

60. Recall that only core arguments can be omitted (provided that they are recoverable from context) – not adverbials (see chapter 4, section 2.2).

This added participant does not function as a core argument, and hence follows particles such as *yì* (as in 79b). Furthermore, it is frequently marked by the focus particle.

- (79) a. A: [*Mòe*]_A=*yòng* [*ní*]_O [*à p'áán*]_{JUXTAPOSED.CLAUSE}
 1PL.S=call 3SG.O FOC fish.type
 'We call it *p'aan* fish.'
- N: [*Mòe*]_A=*yòng* [*ní*]_O [*à muèrgwèr*]_{JUXTAPOSED.CLAUSE}
 1PL.S=call 3SG.O FOC fish.type
 '(But) we call it *muergwer* fish.' (C00ANDIALECT2)
- b. *ní zém dé [muèp]_A hés [s'ém múk]_O*
 3SG.S like SO.THAT 3PL.S pierce(SG) name 3SG.POSS
yì [à John]_{JUXTAPOSED.CLAUSE}
 CONS FOC <NAME>
 'he wants that they name him (lit. pierce his name) John' (A-15/05/04)

6. Changing lexical aspect

Goemai uses three strategies that serve lexical aspect functions: cognate object and light verb constructions (section 6.1), verb serialization (section 6.2), and the modifying construction (see section 6.3).

6.1. Cognate object and light verb constructions

Many Goemai verbs can derive cognate nouns by means of either zero nominalization, the morpheme *bì* or the prefix *nyè-*. The choice of strategy, the resulting semantic interpretation and the syntactic function depend largely on the semantic type of the verb (see chapter 3, section 4.1). One of these semantic and syntactic possibilities is relevant to the notion of lexical aspect: some verbs (see below) can co-occur with their cognate noun filling the direct object slot, i.e., they occur with a cognate object. This possibility is independent of the basic transitivity of the verb: (80a) illustrates the intransitive verb *múút* 'die', and (80b) shows the same verb with its cognate object; (80c) and (80d) give parallel examples of the transitive verb *múúr* 'steal'

- (80) a. *Sáí* [ndòe=là *líit*]_S / *gók* / *múút*.
 then/only SPEC=child(SG):GEN lion bec.ill die(SG)
 ‘Then a child of the lion became sick, (and he) died.’ (F99DLIIT)
- b. *t’òng* [jì]_A=*góe* *múút* [*múút*]_O *góe*
 IRR SGM.LOG.SP.S=FUT.DEF die(SG) death(SG) COMMIT
gólóng (...).
 useless
 ‘he will surely die uselessly (...).’ (F99ATYAKLANG)
- c. *gùrùm* *góe-d’è* *t’óng* *múúr* / [*óerémjí*]
 person NOMZ-exist PROGR steal beans SGM.LOG.SP.POSS
hnòe]_O=*hòe* *yì*.
 LOC.ANAPH=exactly PROGR
 ‘the person who is stealing these his beans.’ (F00AFUAN)
- d. *Wái* [*ú*]_A *múúr* [*múúr*]_O.
 SAY goat steal stealing
 ‘(He said) that the goat has stolen.’ (F00JFUAN)

In all cases, the cognate noun occurs in the slot of a direct object: it precedes particles such as *yì*, which indicate the end of a direct object noun phrase (as in 81a) (see section 2.2, point v). But unlike prototypical direct objects, the cognate objects are always non-referential and cannot be modified by any nominal modifiers. In fact, speakers usually interpret such sentences as emphasizing the verb action, venturing free translations such as ‘be fond of doing’ or ‘do always’ (as illustrated in the elicited example 81b).

- (81) a. [*mòe*]_A=*kùt* [*kùt*]_O *yì* / *góe* *s’ém* *ndá* *mén*.
 1PL.S=talk talking CONS COMMIT name:GEN father 1PL.POSS
 ‘so we talk in the name of our ancestors.’ (C00JMQUEST5)
- b. [*ní*]_A *b’óól* [*b’óól*]_O
 3SG.S beg/appeal begging/appealing
 ‘he is fond of begging’ (A-19/04/04)

Since the presence of a cognate object creates a formally transitive structure, it could be argued that it serves a transitivity function – at least with intransitive verbs such as *múút* ‘die’ (in 80b above). However, its regular occurrence with transitive verbs and its inability to be modified already indicate that the transitivity function cannot be its only – or even primary – function. Notice

also its behavior in the environment of participant-oriented adverbs: Goemai has a group of adverbs that are oriented towards the intransitive S and the transitive (patient / theme, range or causative) O; but in the case of the cognate object construction, they are oriented towards the transitive A (see chapter 5, section 2.1). This behavior suggests that the cognate object construction is a very untypical transitive construction. Instead, the primary function of this construction is a lexical aspect function: it creates an activity expression that lacks temporal boundaries, i.e., it creates expressions that behave like activity verbs (i.e., they fulfill all the criteria for activity verbs introduced in section 2.3). This lexical aspect interpretation is implicitly captured by free translations such as the one in (81b) above.

Further evidence for its lexical aspect function comes from its distribution: the cognate object construction in Goemai is only attested with result verbs, i.e., it derives activity expressions from result verbs. Stative and activity verbs, by contrast, are incompatible with cognate objects – this restriction follows from the fact that stative and activity expressions inherently lack temporal boundaries. Inchoative verbs do not have cognate objects either: although they code a change of state (i.e., events that have boundaries), it is generally acknowledged that they share some similarities with activity verbs, and – in some classifications – they are indeed classified as activities (see the discussion in footnote 48). That is, stative, inchoative and activity verbs cannot occur with a cognate object (even though most of them can derive cognate nouns).

To derive the activity interpretation, the cognate noun of a result verb either occurs in the cognate object construction (as in the examples above), or as an O argument of the semantically-general or ‘light’ verb *shín* ‘do’ (as in 82a). Notice that the verb *shín* ‘do’ also introduces all non-derived activity nouns (as in 82b). It is not clear whether there is a semantic difference between the cognate object construction and the light verb construction.

- (82) a. *Póe nì gòe wá dóe dé*
 give 3SG.O SEQ return.home(SG) come SO.THAT
 [*móe*]_A=*shín* [*k'wál*]_O *yì*.
 1PL.S:CONS=do talking CONS
 ‘Let her come back, so that we talk.’ (F99DREEP)
- b. [*góe*]_A=*shín* [*sh'ít*]_O *n-ní* (...).
 2SGM.S:CONS=do work COMMIT-3SG.I
 ‘and so you work with it (...).’ (F99DLA)

Goemai does not have many activity verbs (see also section 1.3): concepts that are expressed by activity verbs in English, are usually expressed by result

verbs in Goemai. Other Chadic languages seem to follow a similar pattern. For example, Abdoulaye (1992: 187–190) shows that Hausa has only few activity verbs – and most activity concepts are expressed by means of a light verb plus an activity noun (similar to the Goemai structure exemplified in 82b) (see also P Newman 2000: 473–475, 682–693). And other Chadic languages extensively use their cognate object constructions, including closely-related Angas-Goemai group languages (Frajzyngier 1993: 191). For Miya, Schuh (1998: 111, 184–186) argues that these constructions do not constitute transitivizing devices because they occur with otherwise transitive verbs (as in Goemai), and because they can co-occur with pronominal or nominal direct objects (unlike Goemai). Instead, he assumes that they constitute a type of verb focus.⁶¹ And P. Newman (1974: 79–81) shows that Dera uses verbs together with their participle forms to convey intensive meaning, or to put an emphasis on the verb action. Given their widespread distribution, P. Newman (2000: 89) suggests that they may be an inheritance from Afroasiatic. Notice that Benue-Congo languages in the Jos Plateau area have similar constructions (e.g. Jukun, see Storch 1999).

6.2. Serialization

Goemai has two serial verb constructions – the inchoative and the configurational constructions – that differ formally from other serial verb constructions, and that serve lexical aspect functions in that they create inchoative and stative expressions respectively (see chapter 8, section 3.3 for details; see also Hellwig 2006a, 2006e).

Generally, Goemai does not have many stative verbs (see also section 1.3): a few verbs of relating (such as *mi* ‘be related’), evaluation, fitting and comparison (such as *sh’áng* ‘be pleasant’), internal experience (such as *fén* ‘be surprised’), natural property (such as *nyààl* ‘be naturally thin’), and location (such as *t’óng* ‘sit’). The last group of verbs – the stative locative verbs – occur in the inchoative serial construction to denote a change of state. This construction is formed by means of the verbs *t’á* ‘fall’ or *yóól* ‘rise’ plus a locative verb (as illustrated in 83a). No other stative verbs occur in this construction; and there is no alternative mechanism for them to describe a state change. While the class

61. Their distribution differs from that in Goemai, though: in Miya (but not in Goemai), they cannot occur in contexts where another element is focused (e.g., questioned or negated). Furthermore, Schuh does not link the occurrence of cognate objects to lexical aspect. Instead, he argues that cognate objects occur to either focus on a relationship between two arguments (especially with emotion verbs such as ‘like’ or ‘dislike’) or to focus on objects produced by the verb action (e.g., with verbs of bodily processes).

of stative verbs is very small, Goemai has a large class of inchoative verbs, including those denoting property concepts (such as *b'áng* 'become red'), dispositions (such as *k'óón* 'get face down'), bodily movements (such as *d'ààr* 'start to tremble'), manner of motion (such as *sù* 'start to run'), directed motion (such as *rú* 'start to enter'), and internal experiences (such as *k'áng* 'become confused'). All verbs can be used intransitively (and some can also be used transitively). In their intransitive use, they can occur in the configurational serial verb construction to denote a state. This construction is formed with an inchoative verb as the first verb and a stative locative verb as the second (as in 83b). Some result verbs of transforming (such as *p'yán* 'break') can also enter this construction.

- (83) a. *Sái t'á t'óng d'ì / nyè-pé*
 then/only fall(SG) sit(SG) LOC.ANAPH because-THAT/WHEN
ní né p'ùùr (...).
 3SG.S bec.tired very
 'Then (he) sat down there, because he had become very tired (...).' (F99ANTI)
- b. *Gòe-ń̀ndè k'óón d'yém*
 NOMZ(SG)-LOC.ANAPH bec.face.down(SG) stand(SG)
k'à tébùl.
 HEAD(SG):GEN table
 'This one stands face down on the table.' (M00ANDISPOS2)

The coding of verbal concepts as inchoatives (rather than statives) is common in the Jos Plateau area, but probably not in Chadic (see section 1.3). However, the use of serialization to change lexical aspect has not been attested in other languages on the Plateau.

6.3. Modifying construction

Goemai has a modifying construction that serves different functions in present-day Goemai (see chapter 3, section 4.2 for details), including lexical aspect functions. In particular, it creates nominalized stative forms (i.e., forms that lack a temporal boundary) from the same set of inchoative and result verbs that is also attested in the configurational serial construction (see section 6.2). Stative, activity and other result verbs cannot occur here. The derived forms occur in different syntactic functions, including as the complement of a verbless clause (in 84b) (see chapter 8, section 2.1) and as the complement of the verbal

ascriptive construction (in 84c) (see chapter 8, section 2.2). Notice that the second clause type obligatorily contains a stative locative verb – i.e., Goemai again uses its few available stative verbs to create stative expressions.

- (84) a. *Ní zák à gòe-tép.*
 3SG.I also/however FOC NOMZ(SG)-bec.black
 ‘He, however, is a black one.’ (D00JANIMAL8)
- b. *Yím d’è góe-tép mú?*
 leaf exist NOMZ(SG)-bec.black INTERR
 ‘The leaf exists (as) a black one, right?’ (= the leaf is black)
 (M00ANCOMP1)

Closely-related Chadic languages use similar word class changes to create stative expressions (Burquest 1973; Foulkes 1915: 26–27; Frajzyngier 1993: 66–73, 157–159; Jungraithmayr 1963: 25–26, 1970: 40–43, 107, 170, 248, 308; Seibert 1997: 36–37, 49–50, 83).

7. Summary

This chapter has discussed verbs and verb phrases: after a general overview of the verb phrase structure, verbal morphology and semantics (section 1), it focused on argument structure constructions (sections 2 and 3). Goemai has five formally-unmarked argument structure constructions, which express the following types of lexical aspect, causation properties and thematic roles:

- The ditransitive construction expresses a transfer event. It focuses on the recipient role, and allows two state-change verbs of transfer to occur in it. Both verbs alternatively occur in transitive constructions, focusing on the act of transfer itself.
- The transitive patient / theme construction expresses an externally-caused change of state or location. Verbs that occur only transitively tend to additionally specify the manner by which the state or location is changed. Verbs that occur both transitively and intransitively, by contrast, tend to lack this manner component. The latter type of verbs describes events that can be construed as either externally caused (yielding a transitive structure) or uncaused (yielding an intransitive structure).
- The transitive range construction describes a state-of-affairs that is carried out in relation to an O argument. It occurs with verbs of all lexical aspect classes; and the direct object can never be interpreted as patient

or theme (but – depending on the verb – as location, stimulus, topic, addressee, emitted substance, comparative standard, or instrument). Some verbs are used both transitively and intransitively, but the factors that govern their distribution are not clear.

- The transitive causative construction specifies (indirect or direct) causation. It admits verbs that denote internally-caused events as well as verbs of transfer. All verbs also occur in one of the other constructions.
- The intransitive construction occurs with verbs of all lexical aspect classes, allowing also for the intransitive alternant of verbs that are used both transitively and intransitively. Those verbs that occur only intransitively usually denote internally-caused events.

Most verbs occur in more than one of the five argument structure constructions, with concomitant changes in their semantics and syntax. Their sensitivity to thematic roles and lexical aspect is expected from a Chadic perspective – but it is remarkable that Goemai has retained this sensitivity despite its lack of morphology (i.e., verbal extensions) to overtly mark the semantic and syntactic changes. However, recall that there is a controversy within Chadic linguistics as to the diachronic status of the verbal extensions: if they were part of Proto-Chadic, Goemai must have lost them; but if they arose from independent grammaticalizations, Goemai may have preserved an older Chadic pattern. In any case, Chadic languages seem to be characterized by a common lexicalization pattern in this part of grammar (independent of their coding mechanisms). Such parallel developments in genetically related languages are a common phenomenon, known under the term of “Sapir’s drift” (see e.g. Givón 1975 on Niger-Congo; LaPolla 1994 on Tibeto-Burman). The above similarities seem to be confined to Chadic, but other similarities extend to non-related neighboring Benue-Congo languages: the predominant lexicalization of verbal concepts as inchoatives, and the use of cognate object constructions to create activity expressions. It is possible that such similarities reflect language contact.

The remainder of this chapter illustrated the available possibilities for changing the transitivity or lexical aspect of an expression. Like other Chadic languages, Goemai has only limited possibilities for detransitivizing an expression: it mainly uses an impersonal construction to convey passive-type interpretations, but has also innovated a participle structure and a reflexive-intransitive structure (section 4). Participants can be added in adverbial function or through verb serialization and juxtaposition (without altering the basic linking of thematic roles to grammatical relations) (section 5). Finally, Goemai employs cognate object and ‘light’ verb constructions, serialization and nominalization to create activity and stative expressions. Given that Goemai has only few stative and activity verbs, these derived expressions fill a gap in the verbal lexicon (section 6). Most of the strategies above recruit constructions that have a wider

range of functions, and that are discussed in more detail in other parts of the grammar.

Chapter 5

Adverbial phrases

This chapter focuses on the adverbial phrase: it first outlines its syntax (section 1) and then discusses its membership. Adverbial phrases are formed by members of different word classes: simple adverbs (section 2), ideophones (section 3), and prepositional phrases (section 4). Section 5 summarizes the discussion.

1. The adverbial phrase

Adverbial phrases function as peripheral constituents. As such, they follow all core constituents, and they follow all those particles that mark the final boundary of a direct object noun phrase or verbless clause complement (e.g., the consequence clause particle *yì* in 1a to 1d) – core arguments, by contrast, precede them (see also chapter 3, section 1; and chapter 4, section 1.1). This distribution is illustrated with the help of the different spatial adverbials below: a deictic adverb (in 1a), a noun phrase marked by the locative prefix *N-* (in 1a and 1b), a noun phrase marked by the locative preposition *góe* (in 1c), a noun phrase marked by the spatial nominal *k'á* (in 1d), and an unmarked quantifying adverb (in 1d).

- (1) a. *dé* [*móe*]_S=*dóe* *yì* [*b'ák*]_{ADV}
 SO.THAT 1PL.S:CONS=come CONS here
 [*n̄-Jós*]_{ADV}.
 LOC-<PLACE.NAME>
 ‘so that we come here to Jos.’ (H01CJOS)
- b. *dé* [*hén*]_S=*sám* *yì* [*n̄-yíl*]_{ADV}.
 SO.THAT 1SG.S:CONS=descend CONS LOC-ground
 ‘so that I descend onto the ground.’ (D00JANIMAL7)
- c. [*hèn*]_S=*làng* *yì* [*góe* *yíl* *ínòe*]_{ADV}.
 1SG.S=hang/move(SG) CONS PLACE ground LOC.ANAPH
 ‘and so I live on this earth.’ (C00JMQUEST6)

those that have a non-spatial semantics (as in the parallel example 3g). Furthermore, there are idiomatic collocations of adverbs whose order cannot be reversed, e.g., *d'ì puánáng* 'there at the identified place (lit. LOC.ANAPH there/yonder)' (in 3b).

- (3) a. *duút múk suóe póenóe zarát*
spear 3SG.POSS bec.long thus IDEOPH
'his spear is very long like this' (A-22/05/04)
- b. *Sái / yár / láp d'ì puánáng*
then/only bird receive LOC.ANAPH there/yonder
[*nd'ùùn t'èng=hók*]_{ADV (...)}.
INSIDE:GEN tree=DEF
'Then a bird answered over there in the tree (...).' (F99ANTI)
- c. *Là góe=wá [n-lú]_{ADV} shínî*
COND 2SGM.S=return.home(SG) LOC-settlement today
dé-gòe n-t'ó fá / gòe=shìn góe án
PUR ADVZ-lie(SG) indeed 2SGM.S=do COMMIT mind
góe.
2SGM.POSS
'(He) said, when you return home today to lie, really, do (it) with your mind (i.e., carefully).' (F99DLA)
- d. *Muèp yóng pè yì [dàkd'ùòe lú=hók]_{ADV} díp.*
3PL.S call place CONS MIDDLE:GEN settlement=DEF all
'So they called the place (i.e., people) to the town center, everybody.' (F99ANTI)
- e. *S'èm sh'áráp / ñgàm / [góe yíl /*
name:GEN fish much/many PLACE ground:GEN
Dórók]_{ADV} wá kús ñdòe góe
<ETHNIC.NAME> return.home(SG) NEAR CONJ PLACE
yíl Mòek'wò (...)
ground:GEN <PLACE.NAME>
'Fish names, many (of them), in the land of the Dorok are similar to (those) in the land of Kwande (...).' (C00ANDIALECT2)

- f. *B'iling húra d'úóe* [n'd'ùùn d'á]_{ADV}
 knead gruel cause.sitting(PL) INSIDE:GEN calabash
ngàm (...).
 much/many
 '(She) kneaded the gruel (and) poured a lot into a calabash
 (...).' (F99DREEP)
- g. *Yár zák shàt muàlám ngàm* [n'd'ùùn
 bird also/however knead tuber much/many INSIDE:GEN
*t'óégái]*_{ADV}.
 calabash
 'The bird, however, had made a lot of *mualam* food inside a
 calabash.' (F99ANTI)

Like other phrasal units, adverbial phrases can host phrasal clitics such as =*hòe* 'exactly' (as in 4a and 4b).

- (4) a. *gòe-f'yér* [n-West Africa]_{ADV} [díp]_{ADV}=*hòe (...).*
 NOMZ(SG)-bec.big(SG) LOC-<PLACE.NAME> all=exactly
 'a big one in all of West Africa (...).' (H01AJOS)
- b. *à mímòe sá tóe góe=p'ét* *yì*
 FOC what make EMPH 2SGM.S:CONS=exit(SG) CONS
góe=yà wàkám góe
 2SGM.S:CONS=catch way 2SGM.POSS
góe=muààn m-pìn / gòe=muààn
 2SGM.S:CONS=go(SG) LOC-hut 2SGM.S=go(SG)
 [n-lú]_{ADV}=*hòe?*
 LOC-settlement=exactly
 'what makes (it) (that) you go out (and) take your road (and) go
 to the hut, go to the compound?' (C00JMQUEST1)

Both properties – their position within the clause and their ability to occur with phrasal clitics – distinguish adverbial phrases from particles (see chapter 6).

2. Adverbs

This section introduces the characteristic properties of simple adverbs (section 2.1), illustrates the attested semantic types (section 2.2), and describes productive mechanisms for deriving adverbs from verbs (section 2.3).

2.1. Adverbs and their defining properties

Adverbs, like ideophones and prepositional phrases, function as peripheral constituents. They form an open word class, they share formal similarities with nouns, and they have a wide range of distribution in that they modify many different types of verbs (thus differing from ideophones; see section 3). They furthermore occur in peripheral function without being overtly marked as peripheral constituents (thus differing from noun phrases occurring within prepositional phrases, see section 4).

Goemai adverbs are usually oriented towards the event, i.e., they can be interpreted as modifying the verb (as in 5a). In addition, Goemai has a number of adverbs that have a dual orientation: either towards the event (in 5b and 5c) or towards a participant within the event (in 5d and 5e). In these cases, contextual information determines the intended interpretation – i.e., in other contexts, alternative interpretations are available (as illustrated by the alternative translations in 5b to 5e). Syntactically, all adverbs – regardless of their orientation – occur as peripheral constituents outside the unit formed by the verb and its direct objects. If they are participant-oriented, the transitivity of the clause imposes the following constraints: the adverb is oriented towards the intransitive S (as in 5d), the transitive A of a cognate object construction (as in 5f), the transitive O of all other transitive constructions (as in 5e), and the verbless clause complement (as in 5g). In the latter two cases, an orientation towards A or towards the verbless clause subject triggers the structure exemplified in (5h): the adverb is placed in apposition to the lexical noun phrase, and the subject is expressed by means of a cliticized subject pronoun. Participant orientation is attested in the case of quantifiers and numerals.⁶²

62. It is possible that other semantic types allow for a similar variation, but there is not enough data available. Regarding quantification, recall that Goemai has only very few quantifiers that occur underived within the noun phrase – and all of them are recent developments (see chapter 3, section 5.1). Other Chadic languages also have large groups of adverbial quantifiers (in addition to large groups of nominal quantifiers). For example, Hausa has several quantifying adverbs that can semantically modify the noun phrase. In two cases, their categorial status changes: the forms *dùk* ‘all’ and *d’án* ‘DIM’ function either as adverbs (modifying a verb phrase, with a

- (5) a. [*Hén*]_S=*yír* *yì* [*b'ák*]_{ADV} *n-Jòs*.
 1SG.S:CONS=turn CONS here LOC-<PLACE.NAME>
 ‘So I turned (around) here in Jos.’ (C00ANJOS)
- b. *Kwài* / *hóót* [*díp*]_{ADV} *bá* (...).
 no shut all NEG
 ‘(It) isn’t shut completely (...).’
 Or: ‘All (of them) (collectively) aren’t shut (...).’
 (M00ANDISPOS10)
- c. [*Muèp*]_A *fúm* [*nì*]_O [*vél*]_{ADV}.
 3PL.S fold 3SG.O two
 ‘They folded it twice.’
 Or: ‘They folded the two of them (collectively).’
 (M00ANDISPOS13)
- d. [*S’óe*]_S *muáráp* [*díp*]_{ADV}.
 food die(PL) all
 ‘All the food had died.’
 Or: ‘The food had died completely.’ (F99ANTI)
- e. *dé* *gòe* *tù* [*ndòe=gùrùm*]_O *yì*
 SO.THAT OBLIG kill(SG) SPEC=person CONS
 [*gòemé*]_{ADV} (...).
 one
 ‘so that (he) should kill one person (...).’
 Or: ‘so that (he) should kill a person once (...).’ (D00EWITCH3)
- f. [*Muèp*]_A *s’óe* *s’óe* [*gòemé*]_{ADV}.
 3PL.S eat food one
 ‘They ate (as) one.’ (F99ANGOEGAN)
- g. [*Bi* *nnòe*]_{VCS} *à* [*dé Gòemâi*]_{VCC} [*díp*]_{ADV} (...).
 thing LOC.ANAPH FOC DIR <ETHNIC.NAME> all
 ‘This thing is for all the Goemai (...).’ (TIEMSAN 1999: IV)

reading of ‘entirely, completely’ and ‘a bit’ respectively) or as elements within the noun phrase (modifying the head noun) (P. Newman 2000: 40, 379–391). See also Schuh (1998: 205–209, 234–240, 258–260) who argues that some Miya quantifiers have an adverbial origin, and can quantify noun phrases and verb phrases alike.

- h. [Gùrùm]_{NP} [díp]_{ADV} [muèp]_{A=táng} [pè góe-d'è
 person all 3PL.S=search place NOMZ-exist
 s'óe]_O (...).
 food:POSS
 'The people, all, they searched for a place where (there) is food
 (...).' (F00AFUAN)

The close semantic association of quantifying and numeral adverbs with the noun phrase is formally reflected in the following observation: if an adverb is participant-oriented, nominal modifiers that modify the noun can form a syntactic constituent with the adverb instead. Most commonly, modifiers occur within the noun phrase, and the adverb occurs unmodified in its own phrase: e.g., in (6a), the modifiers *d'ù* 'much/many' and *jáp* 'DIM(PL)' function as pre-head modifiers to the noun, and the adverb *díp* 'all' occurs in peripheral function. Alternatively, however, modifiers such as *d'ù* 'much/many' (in 6b) or *gwén* 'ASSOC.PL' (in 6c) can form a constituent with the adverb – not with the preceding noun. Notice that the highlighted expressions in (6b) and (6c) cannot be interpreted as part of the preceding noun phrase: they do not occur in any of the slots available to nominal modifiers (see chapter 3, section 1 for the structure of the noun phrase); and elements such as the consequence clause particle *yì* would follow the noun phrase (thus conveying its status as a core constituent) but precede the entire adverbial phrase (including the modifiers bracketed with it) (thus conveying its status as a peripheral constituent) (see also section 1).

- (6) a. [*d'ù* *jáp* *pè*]_S *búk* *yír* *d'ém*
 much/many DIM(PL):GEN place return(PL) turn this.time
kúút / [*díp*]_{ADV} (...).
 just all
 'the many little places have now just changed again, all (of
 them) (...).' (C00ANJOS)
- b. *Kúmá* [*bì* *gòe-t'óng* *shín* *lóng*]_{NP} [*d'ù*
 also thing NOMZ-IRR do chief:POSS much/many
díp]_{ADV} (...).
 all
 'And the things that the chief would do, all the many (things)
 (...).' (C00ANDIALECT4)

- c. *mòe=shìn* [*d'ú* *jáp*]_{NP} [*gwén* *ngàm*]_{ADV}.
 1PL.S=do much/many DIM(PL) ASSOC.PL much/many
 ‘we make many little ones, many kinds (of little ones).’
 (D01NTREE)

In addition to the examples above, all adverbs (independent of whether they are participant- or event-oriented) can co-occur with nominal modifiers. This possibility is not very common, and there are restrictions in that some adverbs allow for more types of modifiers (i.e., those that are diachronically derived from nouns) than others (i.e., those whose source is no longer transparent). There are also semantic restrictions that prevent the occurrence of some modifiers with some adverbs. But the word class of adverbs as a whole is compatible with all types of nominal modifiers, e.g., with the specific-indefinite article *ndòe*= (in 7a), the possessive pronouns (in 7b), or the locative anaphor (in 7c). Furthermore, numeral adverbs (in 7d), spatial adverbs and temporal adverbs can be coordinated by means of the nominal conjunction *ndòe*.

- (7) a. *lá* *muààn* [*ndòe=pè*]_{ADV} / *wó* *t'óng* *bí*
 COND go(SG) SPEC=place snake:CONS IRR follow
nì.
 3SG.O
 ‘when (it) goes somewhere, the snake would then follow it.’
 (F00JGOESEM)
- b. *Gòepé* *t'óng* *góe=muààn* [*lú=mén*]_{ADV}
 THAT/WHEN IRR:CONS 2SGM.S=go(SG) settlement=1PL.POSS
tóe (...).
 EMPH
 ‘When you would go to our home (...).’ (D01ALU)
- c. *Fuán* *yín* *tô* / [*shinî* *ndòe*]_{ADV} / *t'òng*
 rabbit SAY okay today LOC.ANAPH IRR
dú=muén *ndòe* / *lìgyà*.
 PL.LOG.SP.S=go(PL) CONJ nightjar
 ‘The rabbit₁ said, okay, this today, they₁ would go with the nightjar.’ (F99DLIGYA)

- d. [Páát]_{ADV} *ńdòe* [vél]_{ADV} *t'óng pòe* *gòe* *à*
 five CONJ two IRR give 2SGM.O FOC
kông?
 how.much/many
 'five and two, (it) would give you how much?' (I-20/01/99)

The close association of adverbs and nouns has possibly motivated speakers to extend the modifying construction (see chapter 3, section 4.2) and the proprietary construction (see chapter 3, section 3.1) to formally integrate adverbs into the noun phrase. The modifying construction allows the resulting expression to occur either as modifier within the noun phrase (as in 8a) or as head noun (as in 8b); and the proprietary construction links adverbs to head nouns (as in 8c). Most examples are of quantifying and numeral adverbs (as in 8a to 8c), but there are instances of other types of adverbs as well (e.g., the temporal adverb in 8d).

- (8) a. *Bì k'áng / ńdòe ú=hók / à [bì gòe-gòemé]_{NP}*
 thing guard/wait CONJ goat=DEF FOC thing NOMZ(SG)-one
 'Domestic animals and the goats are one (and the same) thing.'
 (C00ANDIALECT5)
- b. *ní à [gòe-kyòklók]_{NP}*
 3SG.I FOC NOMZ(SG)-small
 'he is a small one.' (F00JMUSU)
- c. *Yìn / tún gòe-yóól jí /*
 SAY since NOMZ-rise(SG) SGM.LOG.SP.POSS
jì=tàb'à jí=hóóm [sóól
 SGM.LOG.SP.S=do.ever/never SGM.LOG.SP.S=hold money
mìmùk ñgàm]_{NP} pòenóe ńndòe bá.
 NOMZ.3SG.POSS much/many thus LOC.ANAPH NEG
 '(He₁) said, since he₁ grew up, he₁ had never held so much
 money like this.' (D00EWITCH2)
- d. *Dé gú=ráng [gòe-dók pòeb'ít]_{NP} yì.*
 SO.THAT 2PL.S:CONS=think NOMZ(SG)-past remote CONS
 'So that you think of the old times.' (C00ANYOUTH4)

In addition, there are a few examples of numerals being integrated into the noun phrase by means of deictic classifier morphology (as in 9) – such morphology usually occurs with demonstratives only (see chapter 3, section 5.4).

- (9) [Ǹdòe / jáp n̄-d'è-vél]_{NP} / ñdòe=gùrùm
 SPEC children(PL) ADVZ-CL:exist-two SPEC=person
 gòe-mìs ñdòe=gòe-màt.
 NOMZ(SG)-man(SG) SPEC=NOMZ(SG)-woman(SG)
 ‘(There are) some two youths, a boy and a girl.’ (R01NSTAGE)

In individual cases, it is even possible to observe a change in word class from adverb to noun. One high-frequency expression is the adverb *ñdè* ‘one/other’, which was originally used with a temporal interpretation only (as in 10a). Given its present-day distribution, it is likely that – at some stage – it frequently preceded core constituents: at first, it still received a temporal interpretation in this context (‘another time’) (as in 10b), but a comparable structure has probably given rise to a non-temporal genitival interpretation (*ñdè muèp* ‘others of them’) (as in 10c). In present-day Goemai, this form has now lexicalized this second sense, and speakers allow *ñdè* to function as a noun. As such, it occurs in, e.g., subject (as in 10d) and object function (as in 10e).

- (10) a. *B'it p'ét lín / [muèp]_S t'óng p'úát muèn*
 day exit(SG) dry(SG) 3PL.S IRR exit(PL) go(PL)
 [ñdè]_{ADV}.
 one/other
 ‘The day came out (and) dawned, (and) they would go out (and) go (yet) another time.’ (F99DLIGYA)
- b. [Ǹdè]_{ADV} [muèp]_S b'ép muáráp zák-yìt.
 one/other 3PL.S do.again die(PL) also/however-again
 ‘Another time, they, too, died.’ (D00EWITCH3)
- c. [Ǹdè gòe-b'áng]_{NP} d'yém ñk'óng múk (...).
 one/other NOMZ(SG)-bec.red stand(SG) BACK 3SG.POSS
 ‘Another red one stands behind it (...).’ (M99IJMT2)
- d. *ñd'ùùn jáp múk ñnòe=hòe /*
 INSIDE:GEN children(PL) 3SG.POSS LOC.ANAPH=exactly
 [ñdè]_S d'è d'í gòemé / gòepé à
 one/other exist LOC.ANAPH one THAT/WHEN FOC
 gòe-b'ák pè.
 NOMZ(SG)-disregard place
 ‘Among these here children, there was one who was a disrespectful (person).’ (F00CKE)

- e. [*Muèp*]_A *lá shin [ndè]*_O *t'óng pónóe*.
 3PL.S HAB do one/other HAB thus
 ‘They usually have another one like this.’ (C04ANARAM)

Despite their formal similarities to nouns, adverbs cannot occur in the same syntactic functions. Superficially, adverbs sometimes seem to occur as subjects (as in the verbless clause in 11a). However, all such instances are structures where the 3SG subject pronoun is omitted because it is recoverable from discourse (see chapter 8, section 1.1 on the omission of core arguments). For example, in both (11a) and (11b), the subject is co-referential with the quantifying adverb *díp* ‘all’. They differ, however, in that the subject in (11a) is 3SG (and hence omitted), while in subject in (11b) is 3PL (and hence overtly expressed).

- (11) a. *Tó / à pónóe / [díp]_{ADV} / à bì gòepé*
 okay FOC thus all FOC thing THAT/WHEN
móe=shín / góe yil Mòek'wò / ndòe
 1PL.S:CONS=do PLACE ground:GEN <PLACE.NAME> CONJ
góe yil Dórók.
 PLACE ground:GEN <ETHNIC.NAME>
 ‘Okay, (it) is thus, (this) all (it) is the thing that we do in the land of Kwande and in the land of the Dorok.’ (C00ANDIALECT6)
- b. [*Díp*]_{ADV} *muèp / muèp=káát nì*.
 all 3PL.I 3PL.S=greet 3SG.O
 ‘They all, they greeted him.’ (F00JFUAN)

2.2. Semantic types

This section illustrates the semantic types that are commonly lexicalized in Goemai adverbs: quantification (section 2.2.1), number (section 2.2.2), space (section 2.2.3), time (section 2.2.4), aspect (section 2.2.5), manner (section 2.2.6), and evaluation (section 2.2.7). Synchronically, these adverbs have to be analyzed as basic. Diachronically, however, most of them were probably derived from nouns or verbs (which have been lost in present-day Goemai) by means of the locative prepositions *N-* or *góe* (see section 4) or by means of the prefix *N-* or reduplication (which derive adverbs) (see section 2.3). In fact, most Goemai adverbs are probably diachronically derived, and there is only a small number that does not betray any derivational origin. Notice also that speakers sometimes overtly mark adverbs with prepositions (as in 12).

- (12) *Íbò /* *muèp=t'óng* [*góe* [*d'í*]_{ADV}]_{ADV}.
 <ETHNIC.NAME> 3PL.S=sit(SG) PLACE LOC.ANAPH
 'The Igbo, they sit there (in large numbers).' (C00ANJOS)

2.2.1. Quantifiers

Goemai has a large group of adverbs that code quantification, occurring both with count nouns and mass nouns, e.g., *lé* 'a bit, a small part', *kyòklók* ~ *tyòklók* 'few/little; small', *m̀b'èl* 'a lot', *̀nd̀uni* 'much/many, in abundance', *̀ng̀am* 'much/many, full', *dip* ~ *dibit* 'all, entirely', *góek'wák* ~ *̀nk'wák* 'all (of a set)' or *t'òet'èi* 'everything, everywhere' (see also footnote 62). As discussed in section 2.1, they can either express an event orientation or a participant orientation.

Quantifying adverbs frequently occur reduplicated, in which case they receive an intensive reading (as in 13a). In some cases, the reduplicated adverbs acquire additional manner senses (as in 13b) – these forms can then be reduplicated again for purposes of intensification (as in 13c) (see also section 2.2.6 below on manner adverbs).

- (13) a. *Là góe=làp góe sóól góe /*
 COND 2SGM.S=receive COMIT money 2SGM.POSS
lélé / t'òng góe=t'él gòe=lóe.
 REDUP.bit IRR 2SGM.S=assemble 2SGM.S=put
 'If you have your money, a tiny bit, you would collect (it) (and) keep (it).' (C00ANYOUTH2)
- b. *K'wàl lélé / muèp taping.*
 talk carefully 3PL.S tape
 'Talk carefully, they tape (it).' (C01FGHJARAM3)
- c. *t'ò t'óng myáláp yit múk yì*
 lie(SG) PROGR shine eye/face 3SG.POSS PROGR
lélélélé.
 REDUP.carefully
 '(he) lay flickering his eyes, very carefully.' (F99DLA)

2.2.2. *Numerals*

The numerals are illustrated in table (51) below: numerals above 20 are based on 20, and numerals below 20 are based on 5 (from 6 to 9) and 10 (from 11 to 19). A base 20 system is not very common, either in Chadic or on the Plateau,⁶³ but it is known from Jukun and the Kororofa empire (Gerhardt 1987; Ibrizimow 1988; Shimizu 1980). In present-day Goemai, speakers usually resort to Hausa loans for all numerals above 20.

Table 51. Numerals

	Cardinal numerals	Ordinal numerals
1	<i>(gòe-) mé</i>	<i>gòegòémé, (gòedékàng)</i>
2	<i>vél</i>	<i>gòevél</i>
3	<i>k'ún</i>	<i>gòek'ún</i>
4	<i>f'ér</i>	etc.
5	<i>páát</i>	
6	<i>pòemóe</i> ('give 1')	
7	<i>pòevél</i> ('give 2')	
8	<i>pùk'ún</i> ('give 3')	
9	<i>pòef'ár</i> ('give 4')	
10	<i>s'ár</i> (< <i>s'á</i> 'hand/arm')	
11	<i>s'ár (shì-) k'à gòémé</i> ('10 plus 1')	
etc.		
20	<i>yàgùrùm</i> ('catch person') ⁶⁴	
21	<i>yàgùrùm shik'à gòémé</i> ('20 plus 1')	
etc.		
30	<i>yàgùrùm shik'à s'ár</i> ('20 plus 10')	
40	<i>yàgùrùm vél</i> ('20 twice')	
50	<i>yàgùrùm vél shik'à s'ár</i> ('20 twice plus 10')	
etc.		

The numeral 'one' shows some formal and semantic idiosyncrasies. The form *mé* is used in counting (as in 14a), while the form *gòémé* is used in all

63. But notice that there are indications of an archaic base 20 system in Hausa; present-day Hausa uses Arabic loans (P. Newman 2000: 379–391).

64. Goemai speakers offer two folk etymologies for this form: i) counting all fingers and toes of a person adds up to 20; or ii) a slave was said to be bought for twenty cowries.

other contexts (as in 14b). Given their phonological shapes, it is likely that *mé* was the original form, while *gòemé* was the derived ordinal number. In present-day Goemai, the ordinal form is formed by means of a second prefix *gòe-* (as in 14c). Alternatively, speakers use the form *gòedékàng*, based on the forms *gòedé* ‘bottom; following’ and *nkàng* ‘before’ (as in 14d).

- (14) a. *Mé / vél / k'un / f'ér / gáp k'á f'ér.*
 one two three four divide(SG) head(SG) four
 ‘One, two, three, four, (it) divides into four heads.’
 (M00ANDISPOS3)
- b. *kó=wúròe p'én d'ip múk gòemé.*
 any/every=who remove(SG) hair 3SG.POSS one
 ‘everybody removed one of his feathers.’ (F99AKUR)
- c. *Gwà ná gòe-gòemé ònòe / t'òng*
 SGM.LOG.AD.S see ORD-one LOC.ANAPH IRR
jí=wá dé-gòe ò-póe ndá
 SGM.LOG.SP.S=return.home(SG) PUR ADVZ-give father
jí (...).
 SGM.LOG.SP.POSS
 ‘(He₁ said) he₂ (should) understand, this first one, he₁ would re-
 turn (with it) to give (it) (to) his₁ father (...).’ (F99DGOESHANG1)
- d. *Ódòe=láyí d'è d'i. Nyè-pé pùmpò*
 SPEC=lane exist LOC.ANAPH because-THAT/WHEN pump
gòedékàng dók d'yém d'i m-pè=hòk /
 first PAST.REM stand(SG) LOC.ANAPH LOC-place=DEF
muèp yóng nì Pump Street.
 3PL.S call 3SG.O <PLACE.NAME>
 ‘There is a lane. Because the first pump stood there in the
 place, they call it Pump Street.’ (H01CJOS)

Semantically, the numeral ‘one’ is not only used to express a cardinal number, but also to convey the notions of sameness (as in 15a) and unique involvement (as in 15b).

- (15) a. *D'ùòe lú mén má à gòemé.*
 voice:GEN settlement 1PL.POSS also FOC one
 ‘And the languages of our villages, too, are the same.’
 (C00ANDIALECT6)

- b. *hén=láng* *bì nóe muáán*
 1SG.S:CONS=hang/move(SG) thing 1SG.POSS go(SG):CONS
yì / hén gòemé.
 CONS 1SG.I one
 ‘and so I move around in my own way and walk, I alone.’
 (N01JTIME)

All cardinal numerals are adverbs, and thus function as peripheral constituents. This includes all counted units, e.g., units of money (as in 16a) or units of time (as in 16b). Younger speakers, however, preferably use a numeral together with the Hausa loan *gùdáá* ‘unit’ – with both inanimate (in 16c) and animate referents (in 16d). The resulting expression then functions as the possessor within a genitival noun phrase. In Hausa, this term occurs optionally with count nouns to individuate referents (P. Newman 2000: 379–391), but its frequent use with human nouns in Goemai seems to be an innovation. Older speakers never use this structure.

- (16) a. [*hén*]_A=*d’è t’óng k’wát [lé=hók]_O yì*
 1SG.S=exist PROGR pay goods/clothes=DEF PROGR
 [*náirà sár*]_{ADV}
 <CURRENCY> ten
 ‘I usually pay 10 naira for the goods’ (A-17/04/04)
- b. *Dé máng [mèn]_O yì / [áwà gòemé /*
 SO.THAT take(SG):CONS 1PL.O CONS hour one
*góe míntì / yàgùrùm]*_{ADV}.
 COMMIT minute twenty
 ‘So that (it) takes us one hour and twenty minutes.’
 (D00JFARMING)
- c. *Hèn=t’òng tál d’ùòe góe / [ndòe=bì /*
 1SG.S=IRR ask/greet voice 2SGM.POSS SPEC=thing:GEN
*gùdá gòemé]*_{NP} / *gòepé / hèn=zèm / dé*
 unit one THAT/WHEN 1SG.S=like SO.THAT
hén=k’òelèng yì / sèk pùòe góe.
 1SG.S:CONS=hear/smell CONS BODY:GEN mouth 2SGM.POSS
 ‘I will ask you, (about) one thing, that I want to hear from you.’
 (C00JMQUEST1)

- d. *ní ná [jàp gùdá vél móenàng]_{NP} (...)?*
 3SG.S see children(PL):GEN unit two which(PL)
 ‘has he seen either of the two children (...)?’ (N00JKEY)

Unlike cardinal numerals, all derived ordinal numerals are nominals. As such, they can function as the head of a noun phrase (as *gòevél* ‘second’ and *gòek’ún* ‘third’ in 17a), or in place of the modifying construction within the noun phrase (as *gòegòemé* ‘first’ in 17a and *gòevél* in 17b). Alternatively, they occur as the possessed noun of a genitive construction (in 17c).

- (17) a. *Gòe=nà [puóe zóli gòe-gòemé*
 2SGM.S=see mouth:GEN entrance ORD-one
ń-d’é-ńnòe]_{NP} / [gòe-vél múk]_{NP} / [gòe-k’ún
 ADVZ-CL:exist-DEM.PROX ORD-two 3SG.POSS ORD-three
ń-d’é-náng]_{NP}=hòe (...).
 ADVZ-CL:exist-DEM.DIST=exactly
 ‘You see this first entrance door, its second one, that third one (...).’ (D01CLU)
- b. *Màng [sh’é múk gòe-vél]_{NP} /*
 take(SG) foot/leg 3SG.POSS ORD-two
t’át màshà ń-ní.
 propel/tell.folktale(SG) lady COMMIT-3SG.I
 ‘(He) took his second foot (and) kicked at the lady with it.’
 (F00AFUAN)
- c. *K’úr t’ó d’i hár b’ít jí*
 tortoise lie(SG) LOC.ANAPH even/until day SGM.LOG.SP.POSS
k’ún / t’ò t’óng sáám yì. [Gòe-f’ér b’ít]_{NP} /
 three lie(SG) PROGR sleep PROGR ORD-four day
k’úr éép yít jí.
 tortoise open(SG) eye/face SGM.LOG.SP.POSS
 ‘The tortoise₁ lay there until his₁ three days (were over), lay sleeping. The fourth day, the tortoise₁ opened his₁ eyes.’
 (F99AKUR)

As in many other Chadic languages (P. Newman 2000: 379–391; Burquest 1973), the numerals are reduplicated to express the distribution of an event over several participants (as in ‘two or three each’ in 18a). The same construction is also used to express a temporal modulation (as in ‘one by one’ in 18b).

- (18) a. *Yìn dòe=zèm à dé-gòe dé*
 SAY SGF.LOG.SP.S=like FOC PUR SO.THAT
dú / t'óng dú=màràp
 PL.LOG.SP.S:CONS IRR:CONS PL.LOG.SP.S=step(PL)
gyà góra yì / [n̄k'òng b'ít]_{ADV} [véł
 performance:GEN bamboo CONS BACK:GEN day two
vél]_{ADV} kó [k'ún k'ún]_{ADV}.
 two maybe/or three three
 '(She₁) said she₁ wants in order that they₁ would dance the
gora dance, after every two days or three.' (F99DPAAP)
- b. *D'èmdè lwá mòe-nán / wúl*
 remainder:GEN animal/meat NOMZ(PL)-bec.big(PL) arrive
[gòemé gòemé]_{ADV} t'óng dóe tàl líit / t'óng
 one one IRR come ask/greet lion IRR
búk yók.
 return(PL) return.home(PL)
 'The remainder of the big animals arrived one after the other,
 would greet the lion here (and) would return home again.'
 (F99DLIIT)

2.2.3. *Spatial adverbs*

Adverbs code many different spatial concepts, including deixis and anaphor, cardinal and relative direction, distance, and geometry. In addition, there are a number of inherently locational nouns that function as both nouns and adverbs.

Goemai has two deictic adverbs (*b'ák* 'here' and *puánáng* 'there/yonder') that structure space into a proximal and a distal region. Both adverbs are used with exophoric reference only; and it is possible to expand or decrease the scale to express relative proximity or distance. They differ from the demonstratives (see chapter 3, section 5.4) in that their deictic center includes only the speaker – recall that the deictic center of the demonstratives includes both the speaker and the addressee. That is, whenever a referent is located close to the addressee but far from the speaker, it is possible to use the proximal demonstrative and/or the distal adverb (as in 19a). Furthermore, the distal adverb replaces the demonstratives in all cases of non-accessible referents, e.g., in large-scale geographical space (as in 19b). The double gloss 'there/yonder' for *puánáng* attempts to capture its distribution in both the 'there' space (in contrast to the 'here' space of the proximal adverb *b'ák*) and the 'yonder' space (in contrast to

the ‘here’ space of the proximal demonstrative and the ‘there’ space of the distal demonstrative).

- (19) a. *Gòe=shàng ñ-gòedè*
 2SGM.S=glance LOC-bottom:GEN
gòe-ñ-d'è-ñnòe *puánáng ñnòe /*
 NOMZ(SG)-ADVZ-CL:exist-DEM.PROX there/yonder LOC.ANAPH
gòe=b'èm ní.
 2SGM.S=touch 3SG.O
 ‘Look under this one over there, touch it.’ (Context: referent is close to addressee, but three meters away from speaker.)
 (M01ANCOLOR)
- b. *t'òng gòe=ná Kàbòng / lán*
 IRR 2SGM.S=see <PLACE.NAME> hang/move(SG)
puánáng sòe-séng.
 there/yonder REDUP-far
 ‘you would see (that) Kabong is over there far away.’
 (C00ANJOS)

It is likely that the adverb *puánáng* ‘there/yonder’ was derived from the inherently locational noun *pè* ‘place’ co-occurring with the distal adverb **náng*, i.e., ‘the place there’ In present-day Goemai, **náng* is the distal deictic root of the demonstrative word, and cannot be used as an adverb. However, the old manuscripts of Sirlinger (e.g., 1937: 153) still list *náng* as an adverb; and there are some idiomatic expressions where *náng* occurs in adverbial function in present-day Goemai (as in 20a). Notice also that present-day deictic adverbs commonly co-occur with the locational noun *pè* ‘place’ (as in 20b), thus paralleling the structure that presumably gave rise to the form *puánáng*.⁶⁵

- (20) a. *Muèp yí muèp yí / ài / fuán ñ-láng*
 3PL.S SAY 3PL.S SAY INTERJ rabbit PRES-hang/move(SG)
[náng-puánáng]_{ADV} / fuán wá kàm.
 there-there/yonder rabbit return.home(SG) RESULT
 ‘They say, they say, hey, see the rabbit moving there over there, the rabbit is escaping.’ (F99DLIT)

65. Similarly, the present-day adverbs *pùen sòe* ‘proximal’ and *pùen sóe* ‘distal’ in the closely-related language Mupun were derived from the noun ‘place’ plus the original deictic adverbs (Frajzyngier 1991a: 49–50).

- b. [Pè]_{NP} [b'ák]_{ADV} b'áán (...).
 place here bec.warm
 'The place here is hot (...).' (S00JFAREWELL1)

In addition to its deictic adverbs, Goemai has an anaphoric adverb *d'i* whose distribution parallels that of the anaphoric modifier *ínòe* (see chapter 3, section 5.5): it is used to refer back to a previously-introduced location (as in the second line of 21a). Notice that it is irrelevant whether this location was introduced by a proximal deictic adverb, distal deictic adverb or prepositional phrase: the locative anaphor neutralizes this information. The anaphor is further used with all non-specific locations (as in 21b).

- (21) a. *Gòe=bà* *gòe=yá* *ńk'òng* *lú*
 2SGM.S=return(SG) 2SGM.S=catch BACK:GEN settlement
puánáng *t'òng* *móe=kát* *Gángarè* *d'i*.
 there/yonder IRR 1PL.S=find <PLACE.NAME> LOC.ANAPH
 '(When) you return (and) go behind the settlement over there,
 (then) we would find Gangare there.' (H01AJOS)
- b. *Tó / gòe=nà* *k'yák* *gòe-ń-dám* *d'è*
 okay 2SGM.S=see heart/neck NOMZ-ADVZ-spoil exist
d'i (...) *K'yák* *pyá* *d'è* *d'i*.
 LOC.ANAPH heart/neck bec.white exist LOC.ANAPH
 'Okay, you see, there is sadness. (...) And there is happiness.'
 (N01ATIME)

The last deictic adverb is the demonstrational adverb *póenóe* 'thus, like this', which refers to a proposition (as in 22a) or a state-of-affairs (as in 22b).

- (22) a. *Lìgyà* *yìn tó / t'òng dú=muén.* *Làp* *póenóe*
 nightjar SAY okay IRR PL.LOG.SP.S=go(PL) receive thus
póe *fuán.*
 give rabbit
 'The nightjar₁ said, okay, they₁ would go. (He) answered (it)
 like this to the rabbit.' (F99DLIGYA)

- b. *mén Dórók* *mòe=shìn ní / Mòek'wò* *má*
 1PL.I <ETHNIC.NAME> 1PL.S=do 3SG.O <PLACE.NAME> also
shìn pónóe.
 do thus
 ‘we Dorok, we do it, and Kwande, too, does (it) like this.’
 (C00ANDIALECT6)

A second group of spatial adverbs contains the cardinal directions (summarized in table 52). The structure of these expressions is not entirely transparent, but they probably derive from prepositional phrases containing the locative prefix *N-*, the part noun *dèr* ‘base’ (which forms part of some present-day bodypart nouns) or an old locative prefix *mòe-* (which forms part of some present-day place names, see below).

Table 52. Cardinal directions

Cardinal direction	(Possible) diachronic origin	Literal translation
<i>m̀p'áng</i> ‘north’	<i>N-</i> ‘LOC’ + <i>p'áng</i> ‘hill’	‘in the hills’ (= there are hills in the north)
<i>dèr't'éng</i> ‘east’	<i>dèr</i> ‘base’ + <i>t'éng</i> ‘tree’	‘below the trees’ (= there are forests in the east)
<i>mòekwáán</i> ‘south’	<i>mòe-</i> ‘LOC’ + <i>kwáán</i> ‘Jukun’	‘at the place of the Jukun’ (= the Jukun live in the south)
<i>p'úánká</i> ‘west’	‘??’ + (<i>mòe</i>) <i>ká</i> ‘drizzling rain’	‘?? of the drizzling rain’ (= this rain comes from the west)

The cardinal directions function as simple adverbs (as in 23a). Alternatively, they express their direction in relation to another point of reference (as in 23b), or they describe an area (as in 23c). In both cases, the nominal conjunction *ndòe* is used to introduce the second participant (see also example 25c below).

- (23) a. *Mén ndòe Dórók /* *mòe=p'ùàt / [mòekwáán]_{ADV.}*
 1PL.I CONJ <ETHNIC.NAME> 1PL.S=exit(PL) south
 ‘We and the Dorok Goemai, we come from the south.’
 (C00ANDIALECT2)

b. *Jàpjààn* *d'è* [*p'úánká ñdòe Mòek'wò*]_{ADV}
 <PLACE.NAME> exist west CONJ <PLACE.NAME>
 'Namu is to the west of Kwande' (D-11/01/99)

c. *díp lú* *gòe-léng* [*p'úánká ñdòe*
 all settlement NOMZ-hang/move(PL) west CONJ
Mòek'wò]_{ADV} *à Mòe-ñshi* *t'óng*
 <PLACE.NAME> FOC NOMZ(PL)-<ETHNIC.NAME> IRR
d'è d'i
 exist LOC.ANAPH

'all the villages that are in the western part of Kwande, (it) is the Tiv (who) would be there' (A-03/02/00)

The cardinal directions are only used in large-scale geographical space. In small-scale space, speakers use intrinsic and relative frames of reference (see section 4). They also use the terms *ñkúl* 'left' and *ñs'è* 'right' (in 24a). These forms are likely to be derived by means of the locative prefix *N-* 'LOC' from the roots **kúl* 'left' and **s'è* 'right' (whose categorical status can no longer be determined). Notice that this prefix is omitted whenever the adverbs occur in the modifying construction (in 24b).

(24) a. *Ñdè* [*ñkúl*]_{ADV} / *ñdè* [*ñs'è*]_{ADV}.
 one/other left one/other right
 'One on the left, one on the right.' (M99IJMT2)

b. *Ñdè* *ñ-[s'á* *gòe-kúl*]_{NP} / *ñdè*
 one/other LOC-hand/arm NOMZ(SG)-left one/other
ñ-[s'á *gòe-s'è*]_{NP}.
 LOC-hand/arm NOMZ(SG)-right
 'One on the left side, one on the right side.' (M99IJMT2)

Finally, spatial adverbs describe distances (e.g., *dúk* 'close', *kús* 'near' or *séng* 'far') and geometrical concepts (e.g., *jár* 'straight, parallel', *ñkyàt* 'straight, square', *p'àng ~ f'àng gàng* 'triangular', *sùùr* 'rectangular'). *Kús* 'near' and *jár* 'straight, parallel' may be loanwords (from Hausa *kiúsáá* 'near' and *cár* 'straight'), some geometrical notions are probably derived from nouns (e.g., *p'àng gàng* from *p'áng* 'stone, hill', *ñkyàt* from *kyàt* 'equal'), and most distance adverbs have probably originated in verbs. Some of them still occur in restricted verbal environments, e.g., *séng* still occurs as the first verb in the configurational serial verb construction (in 25a). Speakers vary as to whether or

not they produce and accept such verbal structures, but all speakers produce and accept adverbial structures (as in 25b). Such adverbs often occur partially reduplicated (as in 25c) – but unlike reduplicated quantifiers (expressing intensification) and reduplicated numerals (expressing distribution), the simple and reduplicated distance adverbs are used interchangeably without any change in meaning. Possibly, their reduplication is a remnant of their verbal origin (see section 2.3 for reduplication to derive adverbs from verbs). Intensification is instead achieved by fully reduplicating the partially reduplicated forms, or by repeating the whole phrase or clause (as in 25a).

- (25) a. *Sháng yít múk n-yíl / nà d'ú*
 glance eye/face 3SG.POSS LOC-ground see much/many
pè gòe-káám / t'ó puánáng / [séng t'ó]_{SVC}
 place NOMZ(SG)-bec.wide lie(SG) there/yonder far lie(SG)
puánáng / [séng t'ó]_{SVC} puánáng.
 there/yonder far lie(SG) there/yonder
 ‘(He) cast his eyes onto the ground, (he) saw lots of wide place
 lie down there, lie far away down there, lie far away down
 there.’ (F99AKUR)
- b. *Tó / ní / t'óng d'ì [séng]_{ADV}.*
 okay 3SG.S sit(SG) LOC.ANAPH far
 ‘Okay, she sits there far away.’ (D00EWITCH2)
- c. *pè dók d'è [sòe-séng ndòe n-Jòs]_{ADV} (...).*
 place PAST.REM exist REDUP-far CONJ LOC-<PLACE.NAME>
 ‘the place used to be far away from Jos (...).’ (C00ANJOS)

The spatial adverbs introduced above can only function as adverbs. In addition, Goemai has inherently locational nouns that occur underived in the syntactic functions of both nouns and adverbs. One group consists of places that typically belong to an owner, e.g., *b'òerù* ‘yard’, *lú* ‘settlement’ or *zám* ‘field’. These expressions function as nouns (i.e., as the heads of noun phrases in 26a and 26b) and as adverbs (in 26c). Whenever they occur as adverbs, they obligatorily co-occur with a possessor (as in 26c). The only exception is the locational noun *pè* ‘place’, which can occur unpossessed in this function. In adverbial function, two phonetic processes are attested: possessive pronouns tend to cliticize to the locational nouns, and the nouns themselves undergo phonetic reduction (as in 26c). Similarly, the noun *bì* ‘thing’ in its possessed form has given rise to an adverb that stresses the individuality of the protagonist (as in 26d).

- (26) a. *mòe=shìn kókáři móa / d'ík / gák / dé*
 1PL.S=do effort 1PL.S:CONS build/marry wall SO.THAT
[móa]_A=jél [lú mén]_O yì ò-ní (...).
 1PL.S:CONS=surround settlement 1PL.POSS CONS COMIT-3SG.I
 'we make an effort and we build a wall, so that we surround
 our home with it (...).' (D01CLU)
- b. *bì góe-d'è t'én shin yì [ò-[lú*
 thing NOMZ-exist Progr do Progr LOC-settlement
múk]_{NP}ADV (...).
 3SG.POSS
 'the things that are happening in her compound (...).'
- c. *Là góe=shìn s'ár dé [góe]_S=wá*
 COND 2SGM.S=do ten SO.THAT 2SGM.S:CONS=return.home(SG)
yì [lòe=góe]_{ADV} góe kyóóp / kó
 CONS settlement=2SGM.POSS COMIT health maybe/or
góe k'yákláng.
 COMIT life
 'If you are (at) ten (o'clock), so you (better) return to your
 home with health or with life.' (H01CJOS)
- d. *dé [muèp]_S góe yók yì*
 SO.THAT 3PL.S OBLIG return.home(PL) CONS
[bì=muèp]_{ADV} (...).
 thing=3PL.POSS
 'so that they should return home in their own way.' (F99AKUR)

Another group of inherently locational nouns are place names. Many Goe-mai place names are descriptive (see chapter 3, section 2.3), and they often contain a locative element as part of their name, e.g., the locative prefix *N-* is visible in names such as *Ngòòtlóng* 'Demshin (lit. at the cave of the chief)' or *Ngòòtdugút* 'Ungwan Rina (lit. at the cave of the wasps)'. Other place names contain a prefix *mòe-*, e.g., *Mòek'wò* 'Kwande' or *Mùdùüt* (< **Mòediüt*) 'Shendam', which is possibly a remnant of the common Afroasiatic prefix **ma-* that derives nouns of location (Greenberg 1966; see also chapter 3, section 4.2). And yet other place names contain the inherently locational noun *lu* 'settlement' plus a possessor, e.g., *Lù Migùrùm* 'Gidan Masaka (lit. settlement of Migurum)' or *Lù Nyú* 'Bakin Ciyawa (lit. settlement of the Nyú chief)'. In all cases, the place names function both as nouns (as in 27a) and adverbs (as in

27b). Place names that do not contain any of the above elements, by contrast, are unambiguously nouns, and they have to be overtly marked with locative elements to occur in adverbial function (as in 27c).

- (27) a. *Àmmá ñd'àsóenòe=hòe / [Mòek'wò]_S bá yír*
 but now=exactly <PLACE.NAME> return(SG) turn
ñdòe=bì gòe-k'ém.
 SPEC=thing NOMZ(SG)-different
 'But nowadays, Kwande has changed again into something different.' (D00AKWANDE)
- b. *[Hèn]_S=f'yèr [Móek'wò]_{ADV.}*
 1SG.S=bec.big(SG) <PLACE.NAME>
 'I grew up in Kwande.' (C00JMQUEST5)
- c. *[Ni]_S d'è [ń-[Jòs]_{NP}]_{ADV.}*
 3SG.S exist LOC-<PLACE.NAME>
 'He is in Jos.' (D00JFAMILY)

Finally, Goemai has a number of inherently locational nouns that are probably derived, as they all seem to contain the locative prefix *góe-* (see section 4). However, the original lexeme is no longer attested, and the present-day locational nouns can function as both nouns and adverbs – the most common ones are *gòesàmpè* 'outside', *góet'éng* 'above, up(ward), sky(ward)' and *góet'úún* 'opposite/beyond, shore'

2.2.4. Temporal adverbs

Temporal adverbs mirror some of the semantic distinctions found in the absolute tense system of Goemai (see chapter 7, section 3): *pòeb'it* ~ *pòedók* 'remote past', *dók* 'remote past', *(ñ)dòkñdók* 'before yesterday', *ñdyén* ~ *(ñ)dyèndyén* 'yesterday', *shinî* 'today', *ñd'àsóenòe* ~ *ñd'àsóe* ~ *ñd'àsóehd'énnòe* 'now', *góed'áár* ~ *t'òed'áár* 'tomorrow', and *p'èt m'p'èt* ~ *p'èt-b'it* 'after tomorrow'. Temporal sequences such as 'later' and 'before', by contrast, are expressed by the locative classes (see section 4). Most temporal adverbs probably originated in prepositional phrases: in present-day Goemai, the locative prefix *N-* derives temporal expressions from nouns denoting times of the day (e.g., *m'b'itlúng* 'in the morning' from *b'itlúng* 'morning'), and the locative preposition *góe* creates temporal expressions from nouns denoting seasons (e.g., *góe p'às* 'in the rainy season' from *p'às* 'rainy season') – both elements

are frequently attested in synchronically unanalyzable temporal adverbs. As is the case with the spatial adverbs (see section 2.2.3 above), there are some forms that occur underived both as nouns and as adverbs, e.g., *ngóng* ‘(at) night’, and *p’úús* ‘sun; time’

Temporal adverbs can co-occur (as in 28a); and those that mirror the absolute tenses can either co-occur with their corresponding tense (as in 28b) (emphasizing the time), or can replace the tense (as in 28c). Emphasis is also conveyed by modifying the temporal adverb with a demonstrative (as in 28d).

- (28) a. *là góe=wá góe=t’ó ngóng*
 COND 2SGM.S=return.home(SG) 2SGM.S:CONS=lie(SG) night
shíní (...)
 today
 ‘if you return home, so that you sleep at night today (...).’
 (F99DLA)
- b. *Àmmá gòe-d’á góed’áár / t’óng d’á shín gók*
 but NOMZ-FUT.CL tomorrow IRR FUT.CL do illness
póe nì.
 give 3SG.O
 ‘But going to (be) tomorrow, (it) will give an illness to him.’
 (D00JANIMAL1)
- c. *Sái góed’áár / mòe=gàmà d’émgòedé.*
 then/only tomorrow 1PL.S=finish remainder
 ‘Until tomorrow, (then) we finish the rest.’ (D00JANIMAL8)
- d. *Pè=hók d’è d’i / hár shíní*
 place=DEF exist LOC.ANAPH even/until today
ń-d’é-ńndè=hòe (...)
 ADVZ-CL:exist-DEM.PROX=exactly
 ‘The place is there, until this very day (...).’ (D01ALU)

2.2.5. Aspectual adverbs

A number of adverbs convey aspectual notions, including *d’èmt’èi* ‘already’, *m̀púoe m̀púoe* ‘always’, *ńk’á ńk’á* ‘continuously’, *t’èi* ‘(not) yet’, *t’èkgòed’i* ‘still, already’, and *yit ~ zák-yit* ‘again’. These adverbs usually modify a verb that is unmarked for TAM (as in 29a to 29c). Alternatively, they co-occur with

one of the grammaticalized aspectual particles (see chapter 7, section 4 for the aspectual categories).

- (29) a. *nyè-pé* *gòe=f'yér* *d'èmt'èi.*
 because-THAT/WHEN 2SG.S:CONS=bec.big(SG) already
 ‘because you have already grown up.’ (C00ANYOUTH1)
- b. *n-yí* *gòe-ñnòe /* *ñdòe=yí* *wá*
 LOC-year NOMZ(SG)-LOC.ANAPH SPEC=year return.home(SG)
wúl / hààm t'èkğòed'í t'ó ñgwà
 arrive water already/still lie(SG) suburb:GEN
Réés.
 <PLACE.NAME>
 ‘In that year, (and) (in) the year (that) has come, water still lies
 in the suburb of Rees.’ (D00AKWANDE)
- c. *Làp s'wà zák-yít.*
 receive drink also/however-again
 ‘(He) received (it) (and) drank (it) again.’ (F99DLIIT)

2.2.6. Manner

Goemai has only few forms that serve to express manner concepts. This scarcity may be related to Goemai coding the schematic core of an event in verbs (e.g., path information in the case of motion events) and not in a satellite to the verb (see chapter 4, section 1.3) – cross-linguistically, such languages tend to have fewer manner expressions (see Slobin 1996; Talmy 1985, 2000). In Goemai, most attested manner expressions are lexicalized in verbs, such as *ráp* ‘go/do quickly’ (in 30a) or *d'òk* ‘quiet’ (in 30b). These verbs frequently combine with other verbs in a serial verb construction to express both manner and the schematic core (as in 30a). Mostly, however, manner concepts are not overtly expressed at all, and left to implicatures instead (e.g., *yóól* ‘rise’ can be interpreted as ‘hover’ when predicated of a bird, or *hèèt hààm* ‘move in water’ can trigger an interpretation of ‘swim’).

- (30) a. *ráp* *yà* *ñ-Jòs*
 go/do.quickly catch LOC-<PLACE.NAME>
 ‘(he) was quick (and) went to Jos’ (A-07/02/00)

- b. *Gwén liit yín / hâi / gwà góe d'òk.*
 ASSOC.PL lion SAY INTERJ SGM.LOG.AD.S OBLIG bec.quiet
 'The lion and his people said, hey, he should get silent.'
 (F99DLIIT)

In addition, there are a few adverbs that express speed (e.g., *d'át* ~ *d'àd'át* 'fast') and sound (e.g., *gòegwó* 'silent, on and on'). Frequently, the same form is used for both concepts (e.g., *d'óót* ~ *d'òd'óót* 'quiet/slow'). It is likely that these adverbs derive from verbs, as some of them still occur in the verb slots of fixed expressions (as in 31a). And like other adverbs derived from verbs (see the distance adverbs in section 2.2.3), they usually have both simple and partially reduplicated forms that are used interchangeably (as in 31b and 31c). To emphasize the manner component, speakers have to reduplicate the already reduplicated form (as in 31d) or lengthen its final vowel (as in 31e).

- (31) a. *Hèn=dók [d'át]_v bì=nóe.*
 1SG.S=PAST.REM ??be.quick thing=1SG.POSS
 'I was fast in my own way' (i.e., I am old and experienced) (A-16/12/99)
- b. *Yín gwà góe sù [d'át]_{ADV}.*
 SAY SGM.LOG.AD.S OBLIG run(SG) quickly
 '(He₁) said, he₂ should run quickly.' (F99DLIGYA)
- c. *Fuán yín gwà góe yóól gòe muàn*
 rabbit SAY SGM.LOG.AD.S OBLIG rise(SG) OBLIG go(SG)
gòe mànng / wàr lè d'á=hók [d'àd'át]_{ADV}.
 OBLIG take(SG) collect load:GEN calabash=DEF quickly
 'The rabbit₁ said, he₁ should rise (and) go (and) take--, collect the load of the calabashes, quickly.' (F99DLIGYA)
- d. *à là=ndòe=bí d'è n-lú pónóe*
 FOC DIM(SG):GEN=SPEC=thing exist LOC-settlement thus
[d'òd'òd'óót]_{ADV}.
 REDUP.quietly/slowly
 'a little something is in the compound like this, very quietly.'
 (C01FGHJARAM06)

- e. *Là=gùrùm* *t'óng* [*gòegwóóó*]_{ADV} / *shín*
 DIM(SG):GEN=person sit(SG) silent/on.and.on do
nyè-ráng.
 matter-think
 ‘The poor person sat siilently, (and he) thought.’
 (F00CGOEBETLA)

Recall also that the reduplication of quantifying adverbs often acquires an additional manner sense (see section 2.2.1 above).

2.2.7. Evaluation

A final group of about 10 adverbs expresses the evaluation of an event, e.g., *ns'één* ~ *s'één* ‘truly’, *nt'ít* ‘well’, *p'ùùr* ‘well/very’ (in 32a) or *kúút* ‘merely, only’ (in 32b).

- (32) a. *À* *lóng* *gòe-f'yér* *p'ùùr* *bá.*
 FOC chief NOMZ(SG)-bec.big(SG) very NEG
 ‘(He) is not a very important chief.’ (C00ANDIALECT4)
- b. *Muép* *muèn* *kúút.*
 3PL.S:CONS go(PL) just
 ‘And so they just went.’ (C01FGHJARAM8)

2.3. Adverbialization

Adverbialization is a productive process in Goemai. The resulting expressions differ from underived adverbs in that they cannot be modified by nominal modifiers, and in that their distribution is usually restricted to co-occurrence with their lexical source.

The most widespread strategy is the use of the prefix *N-* to derive adverbs from any verb in the language. The derived adverbs then occur as peripheral constituents (as in 33a) (although some individual adverbs have been reanalyzed as modifiers within the noun phrase; see chapter 3, section 5.4). Frequently, the derived adverbs co-occur with their lexical verbs to emphasize a state-of-affairs. In this case, they immediately follow an intransitive verb (as in 33b) or the direct object of a transitive verb (as in 33c).

- (33) a. *gòe=tàràp s'ónkwà m-b'árák.*
 2SGM.S=snap(PL) maize ADVZ-bec.wet
 'you break the maize freshly (i.e., while it is wet).' (P00DCROPS)
- b. *Nyè-pé muèp t'óerép n-t'óerép ndòe*
 because-THAT/WHEN 3PL.S lie(PL) ADVZ-lie(PL) CONJ
shàràp bá.
 women(PL) NEG
 'Because they and the women do not lie lying (together).'
- c. *Tù bí=hòk n-tù.*
 kill(SG) thing=DEF ADVZ-kill(SG)
 'Kill the thing killing.' (C01FGHJARAM10)

Some verbs can be adverbialized by means of partial reduplication. In this case, the first consonant is reduplicated to the left (whereby implosives are often realized as non-aspirated voiceless stops), and the vowel [ə] is inserted between the reduplicated consonant and the stem. This process is largely restricted to the subclass of property verbs (as in 34a). A few other verbs can undergo the same derivation, but the resulting expressions are idiomatic: their semantics are not fully predictable on the basis of the original form (as in 34b); and some of the derived forms occur in speech formulas only (as in the traditional opening sentence of a folktale in 34c).

- (34) a. *vuáng à rigá múk pòe-pyá*
 wash FOC gown 3SG.POSS REDUP-bec.white
 '(he) washed his gown white' (A-01/02/00)
- b. *mán gòe=màng lóe-lá bá*
 PROH 2SGM=take(SG) REDUP-pain NEG
 'do not take (it) seriously' (i.e., do not worry) (A-02/02/00)
- c. *Tàmtis nóe t'òe-t'át.*
 folktale 1SG.POSS REDUP-propel/tell.folktale(SG)
 'My folktale is being told.' (F99AKUR)

Total reduplication is attested, but plays only a minor role: it is infrequent, and the reduplicated form can only ever co-occur with its lexical form, giving an intensive reading (as in 35). Its distribution is restricted to those verb classes that also undergo partial reduplication.

- (35) *Zòk kúút zòkzòk.*
 bec.generous just REDUP.bec.generous
 ‘he is just very very generous’ (A-29/12/99)

Closely-related Chadic languages use reduplication in a more systematic way to form stative predicates from different types of verbs (Burquest 1973; Jungraithmayr 1963a).

3. Ideophones

Goemai has a class of about 80 ideophones that occur in adverbial function. As such, they are similar to simple adverbs, but they differ from adverbs in their distributional restrictions, and – at least originally – in their expressive prosody. They furthermore differ in that they cannot be modified by any nominal modifiers.

Ideophones either follow the verb (as in 36a and 36b) or they follow a verb nominalized by means of the modifying construction (as in 36c). Unlike adverbs, they cannot be fronted. In all cases, the ideophones emphasize the endstate that results from the completion of the verb action (see below). If the ideophones are not present, this endstate may still hold, but it is not emphasized.

- (36) a. *K'óón k'íríp bá.*
 bec.face.down(SG) IDEOPH NEG
 ‘it’s not completely face down’ (M00NADRAW)
- b. *hèn=jààl gúlús*
 1SG.S=belch IDEOPH
 ‘I belched loudly’ (A-15/04/04)
- c. *Gòe-pyá sòesák.*
 NOMZ(SG)-bec.white IDEOPH
 ‘A really white one.’ (M00ANDISPOS4)

While simple adverbs occur with many different verbs, ideophones always occur with one specific verb only. For example, the ideophones *k'íríp* in (36a), *gúlús* in (36b), and *sòesák* in (36c) only ever occur with the verbs *k'óón* ‘become face down’, *jààl* ‘belch’, and *pyá* ‘become white’ respectively. A partial exception to this generalization is their occurrence in the configurational serial verb construction (see chapter 8, section 3.3) and the ascriptive construction (see chapter 8, section 2.2) – in both cases, they follow a locative verb. For

example, the ideophone *pálàlà(u)* is usually linked to the verb *káám* ‘become wide’ In example (37a), this verb occurs in the configurational serial construction together with the locative verb *t’ó* ‘lie’, and the ideophone *pálàlà* follows the whole construction. Example (37b) expresses a similar concept by means of two clauses: the first clause contains the verb *káám* ‘become wide’ in the intransitive construction, and the second clause the verb *t’ó* ‘lie’ in the ascriptive construction – yet the ideophone *pálàlà* occurs in the second clause. Notice that in both cases, the locative verbs do not occur with their basic locative sense, but rather in constructions that serve aspectual (i.e., the configurational serial construction) or ascriptive functions (i.e., the ascriptive construction).

(37) a. *Tó / òd’àsóenòe là gòe=rú / pè*
 okay now COND 2SGM.S=enter(SG) place
káám t’ó b’ák pàlàlà (...).
 bec.wide lie(SG) here IDEOPH
 ‘Okay, nowadays, when you enter, the place lies here wide
palala (...).’ (D01CLU)

b. *Só / nyè-gòe-sék / pé dók*
 so because-NOMZ(SG)-body place:CONS PAST.REM
kààm bì=múk t’ó pàlàlà.
 bec.wide thing=3SG.POSS lie(SG) IDEOPH
 ‘So, because of this, so the place became wide in the past in its
 own way, (it) lies *palalau.*’ (H01CJOS)

The ideophones are not characterized by any phonotactic characteristics that are not attested elsewhere in the language (see also the discussion below on prosody). However, as in other languages (see the contributions in Voeltz and Kilian-Hatz 2001; see also P. Newman 2000: 242–259 for Hausa), there are certain patterns that recur. In particular, it is noticeable that the overwhelming majority of ideophones are formed by means of partial reduplication (e.g., *p’òdep’ét* ‘sweat profusely’), a sequence -VrV- or -VIV- (e.g., *k’iríp* ‘completely face down’) or by a final velar consonant (e.g., *júng* ‘dark red’, *kàd’ák* ‘very hard’). Partial reduplication is a common means to form adverbs from some types of verbs (see section 2.3), e.g., the ideophone *p’òdep’ét* ‘sweat profusely’ could be related to the present-day verb *p’ét* ‘exit; ooze out’. And the other two patterns are common plural formatives in the language (see chapter 2, section 2.1; chapter 3, section 2.1; chapter 4, section 1.2). The presence of plural morphology probably follows from one of the functions of ideophones: to intensify the meaning of the verb.

Such ideophones are only attested with the semantic fields of inchoative property verbs (such as *pyá* ‘become white’ in 36c and *káám* ‘become wide’ in 37a and 37b), inchoative dispositional verbs (such as *k’óón* ‘become face down’ in 36a), and result verbs of bodily processes (as *jààl* ‘belch’ in 36b). They are notably absent with all stative verbs, including stative property verbs (such as *d’óng* ‘be good’) and stative locative verbs (such as *t’ó* ‘lie’) – even though these stative verbs code concepts that are similar to those coded in inchoative property and dispositional verbs. Their absence with stative verbs is possibly related to their main function in Goemai grammar: they specify a degree of change. This degree of change can lead to an intensification of the verb meaning (as in *k’óón k’iríp* ‘completely face down’), but it can also serve to focus on different nuances of the verb meaning. For example, the verb *b’áng* ‘become red’ is compatible with different shades of red, and the ideophones *júng* ‘dark red’ and *wùwák* ‘bright red’ specify some such shades. Similarly, the meaning potential of the verb *b’áán* ‘become hot/warm’ can be restricted by the ideophones *wárák* ‘boiling hot’ and *tòtém* ‘lukewarm’. Given this distribution, it is likely that ideophones serve lexical aspect functions: their presence implicates an accomplished state-change that resulted in the state specified by the ideophone (see chapter 4, section 2.3 on lexical aspect). As such, they are absent with stative verbs because stative verbs code a state – not a state change – and hence no degree of change can be predicated of them. This function of ideophones is not attested in other Chadic languages (see e.g. P. Newman 2000: 242–259; Schuh 1998: 308–310).

In addition, some present-day adverbs probably originated in ideophones, e.g., *jár* ‘straight’ (possibly borrowed from the Hausa ideophone *cár*), or *pòèb’ít* ~ *pòèdók* ‘remote past’ (as in 38a). Furthermore, there are some animal names – in particular bird names – that possibly go back to sound-symbolic forms, e.g., *kòèrè* ‘pied crow’, *nghánghà* ‘heron’ (as in 38b) or *t’ingilitit* ‘horn-bill’

- (38) a. *Gòè-dók* *pòèb’ít* / *múúr* *dók* *lá*
 NOMZ(SG)-past remote thief/stealing PAST.REM HAB
yén *t’óng* *bá*.
 bec.plenty HAB NEG
 ‘In the old old times, thieves weren’t plenty.’ (D01CLU)
- b. *Nghánghà*. (...) *S’ém* *múk* *as you call it*. "*Nghá nghà*."
 heron name 3SG.POSS as you call it <QUOTE>
 ‘Heron. (...) Its name (is) as you call it. *Ngha-ngha* (imitating the bird).’ (V04ANLWA2)

All forms illustrated above function as part of Goemai grammar: they serve lexical aspect functions (as in 36 and 37); and they occur as adverbs (as in 36, 37, and 38a) or nouns (as in 38b). Being ideophones they can be uttered with expressive force, usually at a higher pitch range (as illustrated in figure 12a). More frequently, however, they are integrated prosodically into the utterance (as in figure 12b). All sound symbolic quotes, by contrast, are always uttered with a higher pitch (as the quote in 38b above). Notice that similar prosodic phenomena are attested in another type of quote: reported speech (see chapter 8, section 4.7).

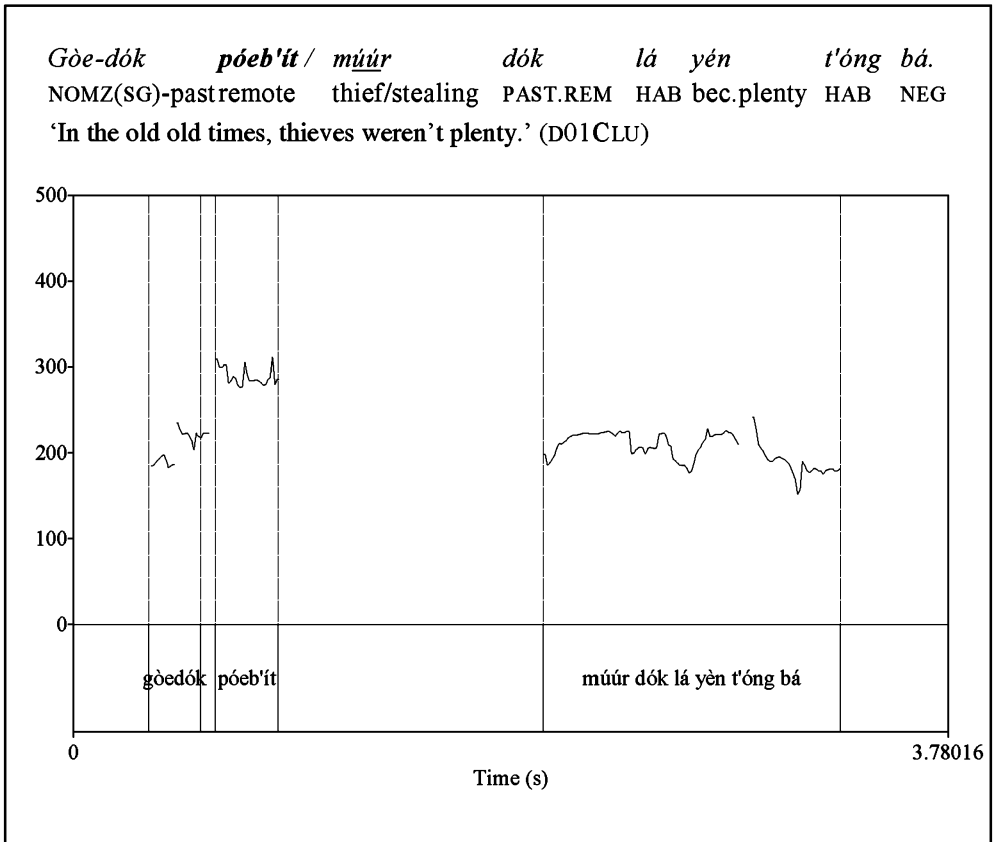


Figure 12a. Typical pitch contours of ideophones: Example (38a)

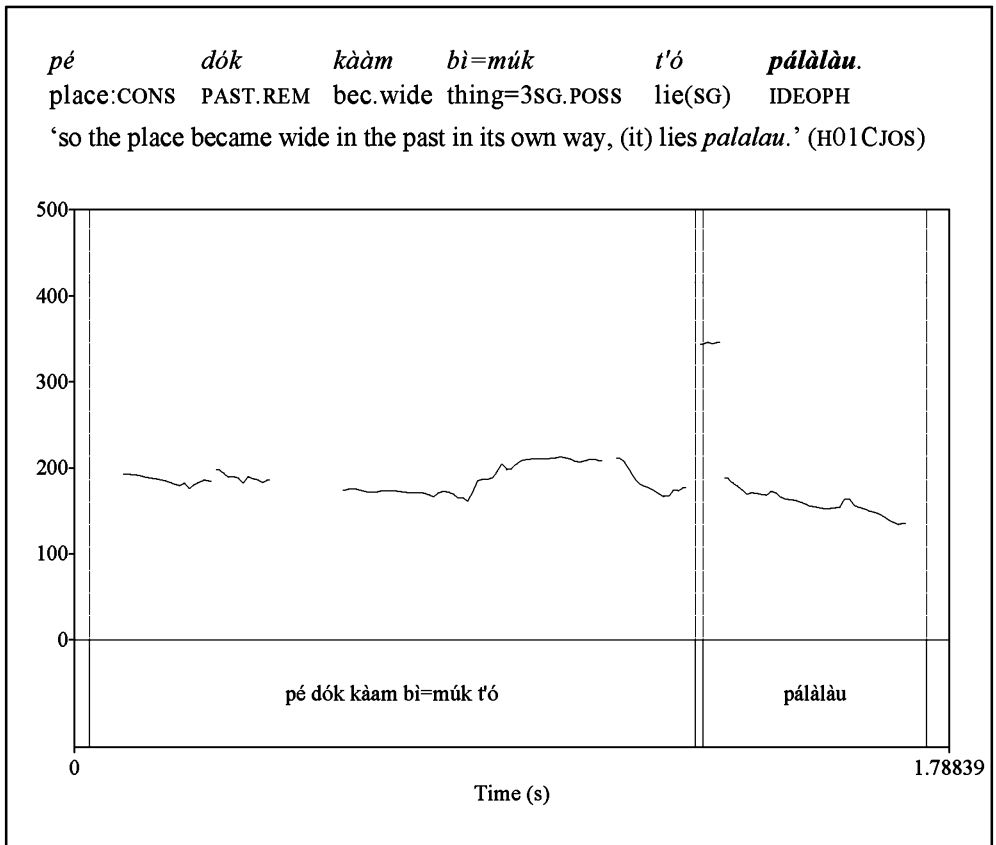


Figure 12b. Typical pitch contours of ideophones: Example (37b)

4. Locative classes: Prepositions, prefixes, spatial nominals

Locative classes are defined as expressions that can head prepositional phrases. Table (53) below gives an overview of the available forms, together with an indication of their uses.⁶⁶

Despite their identical syntactic function as heads of prepositional phrases, the locative classes differ in their categorical status. The spatial nominals are nominals, and have a nominal origin. As heads of prepositional phrases, they

66. Notice that the list in table (53) is not exhaustive: other nouns denoting intrinsic parts of entities can also function as spatial nominals (e.g., *dáng* 'tail', *k'ùm* 'navel'). However, these forms are infrequent, and often occur in idiomatic expressions only.

form a genitive construction with the following noun, i.e., when occurring with a nominal possessor, the spatial nominal receives a low tone (as the spatial nominal *k'á* 'HEAD(SG)' in 39a). And when occurring with a pronoun, this pronoun has to occur in its possessive form (as in 39b). The prefix and the preposition, by contrast, co-occur with independent pronouns (as in 39c). Furthermore, spatial nominals differ from prefixes and prepositions in that they can occur without a following noun (as in 39d).

- (39) a. *dóe kàt bóól d'i [k'á tébùl]*_{ADV} (...).
 come find ball LOC.ANAPH HEAD(SG):GEN table
 '(he) found the ball here on the table (...).' (R00ATAMIRR3)
- b. *Jì=muààn jì=góe lyàk*
 SGM.LOG.SP.S=go(SG) SGM.LOG.SP.S=SEQ throw
*gòes'éng=hók [k'á múk]*_{ADV} (...).
 urine=DEF HEAD(SG) 3SG.POSS
 '(He₁ said) he₁ went and threw the urine onto it (...).' (D99DPANG)
- c. N: *Muèp shín nímòe góe lúdè?*
 3PL.S do what COMMIT spoon
 'What do they do with the calabash spoon?'
- A: *Muèp s'wá yíp [n-ní]*_{ADV}.
 3PL.S drink gruel COMMIT-3SG.I
 'They drink gruel with it.' (C01ANHAND)
- d. *Jì=d'uòe nshì [k'á]*_{ADV}.
 SGM.LOG.SP.S=cause.lying(PL) bee/honey HEAD(SG)
 '(He₁ said) he₁ has poured honey on (it).' (F99AMOESHAAR)

All prefixes, prepositions and spatial nominals code exclusively or originally spatial semantics. This section focuses on their spatial semantics (see chapter 4, section 5.1 for their non-spatial functions); and the discussion makes use of the terms 'Figure' (i.e., the entity being located) and 'Ground' (i.e., the entity with respect to which the Figure is located) (following Talmy 1985, 2000).

Table 53. Prepositions, prefixes and spatial nominals

Prepositions	
<i>góe</i> <i>góe</i>	location at Ground (as a place); comitative / instrumental / accompaniment; (direct causation); causation
Prefix	
<i>N-</i>	location at Ground (as an entity); comitative / instrumental / accompaniment; (direct causation); causation; benefactive
Spatial nominals	
<i>dé</i>	in the vicinity of Ground
<i>wá ~ bá</i>	in the area of Ground
<i>fè</i>	at / near Ground (as the owner) also: source (of non-spatial verbs)
<i>sék ~ sèk b'èt</i> (cf. <i>sék</i> 'body', <i>b'èt</i> 'belly')	at / near the main 'body' of Ground e.g., surface (ceiling, wall, tree stem), three- dimensional Ground without subdivisions (ball) also: addressee (of some speech act verbs)
<i>(n)k'á</i> (SG) ~ <i>(n)k'ék</i> (PL) (cf. <i>k'á</i> ~ <i>k'ék</i> 'head')	at / near the 'head' of Ground e.g., upper parts (of table, water, tree), end part(s) of long Ground (necklace, trough, banana) also: stimulus (of experiencer verbs); content (of speech act verbs)
<i>(n)gòedé</i> (cf. <i>gòedé</i> 'bottom')	at / near the 'bottom' of Ground e.g., lower parts (of table, water), growth-point of natural Ground (tree, fruit, banana, stick)
<i>(m)puòe ~ góepuóe</i> (cf. <i>puòe</i> 'mouth')	at / near the 'mouth' of Ground e.g., opening (door, basket), edge (road, river)
<i>nd'ùùn</i> (cf. <i>nd'ùùn</i> 'inside')	inside Ground e.g., partial / complete containment inside a con- tainer, mass, aggregate, encircling object

- c. *lá muààn / lá jík ñ-zàm*
 COND go(SG) COND come.from LOC-field
wá (...).
 return.home(SG)
 ‘when (he) goes, when (he) comes home from the field (...)’
 (F99DMATWO)
- d. *Yóól dàgà Mùduùt zúwà Nàgàn*
 rise(SG) from <PLACE.NAME> to <PLACE.NAME>
ñ-sh'é múk.
 LOC-foot/leg 3SG.POSS
 ‘(He) went from Shendam to Kurgwi on his feet.’ (Q99JCG)

The prefix *N-* and the preposition *góe* are in complementary distribution: they distinguish between location at an entity (*N-*) and location at a place (*góe*). In the first case, a topological relation is asserted; in the second case, topology is irrelevant (see J. Lyons 1977: 693 for a discussion of entities and places). Both expressions interact in different ways with the semantically more specific spatial nominals.

Typically, *N-* is used when the Figure is located in contact with a human or animal bodypart (as in 41a), or with a non-differentiated Ground (as in 40a to 40c above). These are all contexts where no spatial nominal is available. But notice that the prefix *N-* can express any type of topological relation, even if a semantically more specific spatial nominal would be available. For example, in (41b) it expresses an inside relation (which could have been expressed with the spatial nominal *ñd'ùùn* ‘INSIDE’). Usually, this prefix replaces spatial nominals in all cases of stereotypical relations: e.g., the use of *N-* with the noun *hàngòed'è* ‘water’ in (41b) invites the stereotypical interpretation ‘in the water’ – to specify any other relation, a spatial nominal needs to be used, e.g., *k'à hàngòed'è* ‘on the water’, *gòedè hàngòed'è* ‘at the bottom of the water’ etc.

- (41) a. *Lá át gòe ñ-s'á (...).*
 COND bite(SG) 2SGM.O LOC-hand/arm
 ‘If (it) bites you in the hand (...)’ (D00JANIMAL12)
- b. *Lá át gòe ñ-hàngòed'è (...).*
 COND bite(SG) 2SGM.O LOC-water
 ‘If (it) bites you in the water (...)’ (D99DGWAKTAK)

The preposition *góe*, by contrast, is used whenever the locative relation is construed as a non-topological location at a place (as in 42 below). Notice that it triggers a high tone in the following noun. Many nouns can occur with either of the two prepositions, in which case they receive different interpretations: compare *góe yíl* ‘on earth’ (in 1c in section 1 above) with *ñ-yíl* ‘on the ground’ (in 1b above).

- (42) *ní wá rú góe lóet'úk.*
 3SG.S return.home(SG) enter(SG) PLACE market
 ‘he returned back (and) arrived at the market.’ (D00JANIMAL11)

Neither the prefix nor the preposition gives detailed spatial information – they only code the fact that the Figure is located. To give more detailed information, speakers use (i) postural-based locative verbs or (ii) spatial nominals. Locative verbs combine with the prefix and the preposition to highlight certain readings. For example, the expression *ñ-yíl* ‘LOC-ground’, can be used with Figures located in the ground or on the ground. In (43a), it co-occurs with *t'óng* ‘sit’, indicating that the pot is self-supported (and thus presumably located on the ground). In (43b), it co-occurs with *d'yém* ‘stand’, indicating that the pot is externally supported (and thus presumably located in the ground) (see chapter 3, section 2.2 for the semantics of locative verbs).

- (43) a. *Wáng=hók t'óng ñ-yíl.*
 pot=DEF sit(SG) LOC-ground
 ‘The pot sits on the ground.’ (M00ANDISPOS10)
- b. *gòedé múk d'yém ñ-yíl.*
 bottom 3SG.POSS stand(SG) LOC-ground.
 ‘its (= pot) bottom stands in the ground.’ (= inserted in ground)
 (M00ANDISPOS10)

Spatial nominals are used to give more detailed information about the Ground. As indicated in table (53), they are either formally identical to nouns that denote intrinsic parts of humans or animals, or they are derived from them by means of the prefix or the preposition (see below). One of them even retains the number specification of its nominal source: the plural form *k'ék* ‘HEADS’ is used whenever several Figures are located at different Grounds (e.g., it is used in 44a for three groups of trees, each being located on a separate Ground). And another one retains the bound possessive suffixes of its nominal source (as *sák* ‘BODY.2SGM.POSS’ in 44b) (see also chapter 3, section 2.4; chapter 4, section 4.3).

- (44) a. *d'yám à [k'èk mímòè]*_{ADV?}
 stand(PL) FOC HEADS(PL):GEN what
 ‘(they) stand on the tops of what?’ (M00ANDISPOS11)
- b. *Kó=lá mèl lánng [sák]*_{ADV}
 any/every=COND haunt hang/move(SG) BODY.2SGM.POSS
nd'àng (...).
 how
 ‘However / anyhow (it) hangs haunting (you) at your body (...).’ (D99DGWAKTAK)

The spatial nominals *dé* ‘DIR’ (in 45a), *fè* ‘OWNER’ (in 45b), and *wá ~ bá* ‘AREA’ (in 45c) are less transparent than the others: their lexical origins are unknown, and they do not code any topological information. Formally, they behave like other spatial nominals, thus suggesting a nominal origin.

- (45) a. *Fuán / t'òng góe=t'óng b'ák [dé nóe]*_{ADV}.
 rabbit IRR 2SGM.S=sit(SG) here DIR 1SG.POSS
 ‘Rabbit, you would sit here by me.’ (F00JFUAN)
- b. *Ní s'óe, ní s'wá [fè gùrùm ònòe]*_{ADV}.
 3SG.S eat 3SG.S drink OWNER person LOC.ANAPH
 ‘He ate (it), he drank (it) from (the possessions of) this person.’ (F99DLA)
- c. *Wákáám=hók / t'ó [wá]*_{ADV} *b'ák / òk'óng*.
 road=DEF lie(SG) AREA here BACK
 ‘The road lies in the area here, at the back.’ (D00JFARMING)

All other spatial nominals express information about the intrinsic geometry of the Ground. For example, the spatial nominal *sék* ‘BODY’ in (46a) specifies location on the blade of a knife, while the spatial nominal *k'á* ‘HEAD’ in (46b) specifies location on its handle. These different spatial nominals are chosen because the Figure is located at different intrinsic units of this Ground – even though the relation between Figure and Ground is an “on-top-of” relation in both cases. In all cases, the appropriate spatial nominal is used with any Figure that is either located at such a unit, or in a region projected from it.

- (46) a. *Tyèm=hók d'è [sèk shík=hók]*_{ADV}.
 blood=DEF exist BODY:GEN knife=DEF
 ‘The blood is on the blade of the knife.’ (B99ITRPS12)

- b. *Tyèm=hók d'è [k'à shík=hók]_{ADV}*
 blood=DEF exist HEAD(SG):GEN knife=DEF
 ‘The blood is on the handle of the knife.’ (I-16/01/99)

In addition, some spatial nominals can be interpreted as expressing a relative frame of reference. That is, a spatial nominal such as *ɲk'óng* ‘back’ can receive a topological interpretation (i.e., the Figure is in contact with the back part of the Ground), an intrinsic frame of reference interpretation (i.e., the Figure is in a region projected off the back part of the Ground), or a relative frame of reference interpretation (i.e., the Figure is on the other side of the Ground).⁶⁷ It is likely that the topological and intrinsic interpretations diachronically preceded the relative interpretation. Cross-linguistically, there is evidence for the extension of intrinsic body parts to topological relations to frames of reference (see Heine 1997a: 37–49; Svorou 1994: 89–100).

Formally, some of the spatial nominals are marked optionally or obligatorily with the prefix *N-* or the preposition *góe* (realized as the prefix *góe-*). There are three reasons that account for this type of marking.

First, the marking reflects a diachronic development. Synchronically, the nasal element in *ɲd'ùùn* ‘inside’, *ɲk'óng* ‘back’ and *ɲkyèm* ‘front’ is an unanalyzable part of the form: the same form functions both as noun (as in 47a) and spatial nominal (as in 47b). But old documents of Goemai from the 1930s mention corresponding nouns that do not contain the nasal element (as illustrated in 47c). It is therefore likely that, originally, the spatial nominals were formed by means of a prefix *N-* combining with the part nouns **d'ùùn*, **k'óng* and **kyèm*. Later, these forms were lost, and the prefix was reanalyzed as part of the noun.

67. In Goemai, a Figure is located in the front (*ɲkyèm*) if it is between the speaker and the Ground, and in the back (*ɲk'óng*) if it is on the other side of the Ground. This type of relative perspective corresponds to the ‘facing’ perspective familiar from English (the Ground is assumed to ‘face’ the speaker, i.e., the speaker sees the front of the Ground). The closely-related language Hausa, by contrast, has a different relative perspective: the ‘aligned’ perspective (the Ground ‘faces’ in the same direction as the speaker, i.e., the speaker sees the back of the Ground) (see Hill 1974, 1975, 1978, 1982). This aligned perspective is not attested in Goemai.

- (47) a. [**ñk'óng múk**]_{NP} *bá* *k'úr* / *bá*
 back 3SG.POSS return(SG) bec.hooked return(SG)
póenóe=hòe.
 thus=exactly
 'Its (= tortoise) back became carved, (it) turned just like this.'
 (F99AKUR)
- b. *Puòe múk t'ó* [**ñk'òng t'ú**]_{ADV.}
 mouth 3SG.POSS lie(SG) BACK:GEN calabash.bottle
 'Its mouth lies behind the calabash bottle.' (M00ANDISPOS7)
- c. [**K'óng nóe**]_{NP} *p'yárám.*
 back 1SG.POSS break(PL)
 'My back is sore.' (SIRLINGER 1937: 103)

Second, the marking reflects the semantic differences attested between the prefix *N-* and the preposition *góe*: *t'óór* 'flank' and *puòe* 'mouth' have to combine with either of the two, whereby *N-* is used whenever the Ground is perceived as an entity, while *góe* is used whenever the Ground is perceived as a place. In (48), for example, two speakers discuss the use of *góet'óór* 'to the side' and *nt'óór* 'at the side' in reference to a tree located at the side of a hill. In this extract, speaker N. acknowledges a contradiction in that he uses the expression *góet'óór* 'to the side', even though "the hill touches the side (of the tree)" In the end, the speakers decide to use *nt'óór* 'at the side'

- (48) A: **Gòe-t'òòr** *p'áng?* *Kó* *d'yém* **nt-t'òòr**
 PLACE-flank:GEN stone maybe/or stand(SG) LOC-flank:GEN
p'áng? (...)
 stone
 'To the side of the hill? Or does (it) stand at the side of the hill?'
- N: *P'áng b'ém t'óór / àmmá d'yém góe-t'óór.*
 stone touch flank but stand(SG) PLACE-flank
 'The hill touches its side, but it stands to the side.'
 (M00ANDISPOS15)

Third, the marking reflects pragmatic markedness. In this case, the marked form indicates a non-stereotypical relation – either non-contiguity between Figure and Ground (compare 49a and 49b), or a shift from an intrinsic frame of reference to a relative frame of reference. Notice that these differences are not

semantically coded, but pragmatically inferred. That is, the interpretations can be cancelled and the unmarked form can be used for a non-contiguous relation (as in 49c), or for a relative frame of reference. It is very likely that non-marked spatial nominals receive a default topological interpretation, i.e., unless there is some evidence to the contrary, speakers assume that a topological relation is conveyed. Such evidence to the contrary can consist of an additional adverb (as *góet'éng* ‘above’ in 49c), but also in the use of prefixes or prepositions with spatial nominals (see Hellwig 2003: 222–236 for details; see Levinson 2000 for the pragmatic framework used).

- (49) a. *Gwì t'óng [k'à tébùl]*_{ADV}.
calabash sit(SG) HEAD(SG) table
‘The calabash sits on the table.’ (B98ATRPS1)
- b. *Wús=hók lánɡ [n-k'à tébùl]*_{ADV}.
fire=DEF hang/move(SG) LOC-head(SG) table
‘The lamp hangs above the table.’ (B98ATRPS13)
- c. *Wús=hók lánɡ [góet'éng]*_{ADV} *[k'à tébùl]*_{ADV}.
fire=DEF hang/move(SG) above HEAD(SG) table
‘The lamp hangs above the table.’ (B00CTRPS13)

The above paragraphs illustrated the spatial semantics of the prefix *N-*, the preposition *góe* and the spatial nominals. In addition, some of the elements serve non-spatial functions in that they introduce additional non-spatial participants to a clause (see chapter 4, section 5.1).

5. Summary

This chapter focused on adverbials: it illustrated their common syntactic function as peripheral constituents (section 1), and then illustrated different types of adverbials – simple adverbs (section 2), ideophones (section 3), and locative classes (section 4). Goemai has a large number of adverbials synchronically, but it is very likely that most of them are derived diachronically from verbs and nouns. Goemai also has productive mechanisms for deriving adverbs from verbs.

Simple adverbs express quantification (including number), space, time, aspect, manner, and evaluation. A characteristic property is their close relationship with nouns: all adverbs can occur with nominal modifiers, and some adverbs can be oriented towards participants (i.e., they semantically modify nouns). Given this close connection, speakers make extensive use of deriva-

tional mechanisms to formally integrate adverbs into the noun phrase: the modifying construction and the proprietary construction. Ideophones, by contrast, have a closer relationship with verbs in that they serve a lexical-aspect function: they express an accomplished state change (and hence occur with state-change verbs only). Finally, Goemai has a rich inventory of locative classes that interact with each other to code spatial information. Many of them were grammaticalized further with non-spatial functions.

Chapter 6

Closed word classes and other parts of speech

The previous chapters were organized around phrasal units: noun phrases (chapter 3), verb phrases (chapter 4) and adverbial phrases (chapter 5), focusing on those word classes that constitute phrasal heads: nouns, verbs and adverbs (including ideophones). These three classes constitute the open word classes of Goemai. Recall that Goemai does not have a word class of non-derived adjectives (see chapter 3, section 4.2). This chapter now concludes the discussion of phrases and word classes by summarizing the closed word classes, and adding information on bound morphemes: particles and conjunctions (section 1), clitics and affixes (section 2), and interjections (section 3). In addition, Goemai has closed classes of locative prefixes, prepositions and nominals (discussed in chapter 5, section 4) and nominal modifiers (discussed in chapter 3, section 5). This chapter furthermore illustrates the semantically-defined class of interrogative words that cross-cuts word classes (section 4). A summary concludes this chapter (section 5).

1. Particles and conjunctions

The particles and conjunctions belong to different paradigmatic sets and grammatical systems, but they share certain formal similarities: they occur in fixed syntactic positions (depending on their paradigmatic set and diachronic origins), they cannot be modified by any type of nominal modifier, they are generally outside the scope of phrasal clitics such as *=hòe* ‘exactly’, and they tend to be morphologically simple. Different particles and conjunctions are discussed in more detail throughout other parts of this grammar, and this section only intends to give a brief overview. It introduces tense / aspect / modality particles (section 1.1), focus and emphasis particles (section 1.2), question particles (section 1.3), negation particles (section 1.4), discourse particles (section 1.5), and conjunctions (section 1.6). These groups reflect functional domains; and their grouping is based on the assumption that the choice of any one expression within a domain is partly determined by the availability of alternative expressions that code similar or contrasting meanings. As such, the groups form the basis for future more detailed investigations into the formal and semantic properties of particles and conjunctions in Goemai.

1.1. Tense / aspect / modality (TAM) particles

Most TAM categories are expressed by means of free particles. More specifically, Goemai has grammaticalized absolute tenses (remote past, yesterday past, earlier today past, tomorrow future), different irrealis categories (irrealis, focused irrealis, negative irrealis, obligative, permissive), imperative, and the aspectual categories of progressive, habitual, durative, anterior and resultative. Most forms derive from either verbs or prepositions, and they still betray some of their diachronic origins. In addition to the formally-marked categories, Goemai uses a verb form unmarked for TAM, which conveys some of the interpretations coded by the more grammaticalized TAM constructions. The TAM categories and their formal expressions are the topic of chapter 7.

1.2. Focus and emphasis particles

All focused constituents are marked by means of the focus particle *à* preceding that element. This particle can focus noun phrases (in 1a), adverbial phrases (in 1b) – including prepositional phrases (in 1c) – as well as purpose (in 1d), sequential, adverbial and complement clauses (throughout this section, the focused constituent is rendered in SMALL CAPS). The particle cannot focus verb phrases, nor can it focus individual elements within a phrase.

- (1) a. *Jáp gwén ñdòe sùt / muèp*
 children(PL) 2PL.POSS CONJ body.PL.LOG.SP.POSS 3PL.S
kút à [D'UÒÈ BAKWÁ]_{NP}.
 talk FOC voice:GEN <ETHNIC.NAME>
 'Your children₁ with themselves₁, they speak THE LANGUAGE OF THE HAUSA.' (D00NSPEAKING)
- b. *Dók mòe=hòk à [D'Í]_{ADV} m̀-̀pè=hòk.*
 PAST.REM 1PL.S=dig FOC LOC.ANAPH LOC=place=DEF
 'We dug THERE in the place.' (D01ALU)
- c. *Muèp yúúł kúúł sàm sái à*
 3PL.S rise(PL) just descend then/only FOC
[N-YÍL]_{ADV} b'ák / hurr / sái à [N-YÍL]_{ADV}.
 LOC-ground here <QUOTE> then/only FOC LOC-ground
 'They just rose (and) descended, then ONTO THE GROUND here, hurr, then ONTO THE GROUND.' (F99AKUR)

- d. *Yìn nwà t'óng muèn à [DÉ-GÒÈ N-K'WÁL*
 SAY PL.LOG.AD.S IRR go(PL) FOC PUR ADVZ-talk
À K'WÁL NDÒÈ LIÍT]_{PURPOSE=à?}
 FOC talking CONJ lion=INTERR
 '(He₁) asked if they₂ would go TO TALK WITH THE LION?'
 (F99DLIIT)

The surface order of elements within the clause is usually maintained. However, as shown below, a focused noun phrase always occurs in a peripheral syntactic function, not in a core argument function.

If speakers focus on a subject noun phrase, this phrase precedes the clause (often occurring within its own intonation unit), and the subject is expressed by means of a dependent subject pronoun (as in 2) (see chapter 3, section 2.4 for the co-occurrence of lexical noun phrases with pronominal arguments).

- (2) *Nyè-gòe-sék à [GÓÈ]_{NP} / [gòe]_A=nyàng [bí*
 because-NOMZ(SG)-body FOC 2SGM.I 2SGM.S=hate(SG) thing
wààp]_O tóe. À [HÉN]_{NP} / [hèn]_A=nyàng [bí
 borrow/lend EMPH FOC 1SG.I 1SG.S=hate(SG) thing
wààp]_O tóe môu.
 borrow/lend EMPH NEG
 'Because of this (it) is YOU, you reject loans. ME, I don't reject loans.' (F00CGOEBETLA)

If speakers focus on an object noun phrase, this phrase follows the verb phrase. Its syntactic status becomes visible in contexts where the final boundary of the verb-plus-direct-object complex is overtly marked, e.g., by the progressive particle *yì* or the habitual particle *t'óng*: a direct object noun phrase precedes such a particle (as in 3a), but noun phrases in any other function follow it (as the focused constituent in 3b) (see section 1 in chapter 3; section 1.1 in chapter 4; section 1 in chapter 5 for this diagnostics).

- (3) a. *[muép]_{S/A} d'è t'óng d'yán [d'ík]_O yì.*
 3PL.S exist PROGR tie(PL) marrying PROGR
 'they are tying (= confirming) the marriage.' (N01ATIME)
- b. *Dók là [móe]_A / d'yán t'óng à [BÀNTÉ]_{NP}.*
 PAST.REM HAB 1PL.S tie(PL) HAB FOC loincloth
 'In the past, we used to tie LOINCLOTHS.' (C00ANDIALECT4)

Alternatively, focused direct object noun phrases can be fronted. In this case, the verb appears within a consequence clause (as in 4a and 4b), and the emphasis particle *tóe* optionally marks the fronted constituent (as in 4b). In both cases, the presence of the consequence clause particle *yì* creates a biclausal structure (see chapter 8, section 4.4).

- (4) a. *À* [ND'ÙÙN MÚK]_{NP} / *móe=ná* *yì* (...).
 FOC inside 3SG.POSS 1PL.S:CONS=see CONS
 '(It is) ITS INSIDE (that) we saw (...).' (C01ANHAND)
- b. *À* [NÍ]_{NP} *tóe* *yí=ná* *yì* (...).
 FOC 3SG.I EMPH 2SGF.S:CONS=see CONS
 '(It is) IT (that) you see (...).' (F00JGOESEM)

Notice that the focus particle *à* and the consequence particle *yì* cannot co-occur in the same clause (see chapter 8, section 4.4). The same restriction also applies to the progressive particle *yì* (which has developed from the consequence particle *yì*; see chapter 7, section 4.1): if a focus morpheme is present, this particle cannot occur (as in 5a) – in all other contexts, by contrast, it is obligatory (as in 5b).

- (5) a. *Sái* *líit* *yín* *jí=d'è* *t'òng*
 then/only lion SAY SGM.LOG.SP.S=exist PROGR
jí=táng *à* [FUÁN]_{NP}.
 SGM.LOG.SP.S=search FOC rabbit
 'Then the lion₁ said, he₁ is searching for THE RABBIT.'
 (F99DLIIT)
- b. *Pè=hòk* *lá* *b'áán* / *muèp* *p'uát* / *t'óng*
 place=DEF COND bec.warm 3PL.S exit(PL) IRR
lèng *gòedè* *gák* / *t'óng* *wén* [pè
 hang/move(PL) BOTTOM:GEN wall PROGR search place
gòe-zòòm]_O *yì*.
 NOMZ(SG)-bec.cold PROGR
 'When the place has become hot, they come out (and) would
 move around along the wall looking for a cold place.'
 (D00JANIMAL10)

The particle *à* cannot focus a verb phrase. It can, however, focus an adverbialized verb phrase (as in 6a). Just like focused noun phrases, focused adverbialized verb phrases can optionally be fronted (as in 6b).

- (6) a. *ndè sh'it=hòk à [N-WÁN]_{ADV}=à?*
 one/other work=DEF FOC ADVZ-lack=INTERR
 ‘another day, (would) the work BE ABSENT?’ (C00ANYOUTH2)
- b. *à [N-B'UÁT NÍ]_{ADV} kó=wúròe b'óót*
 FOC ADVZ-beat 3SG.O any/every=who gain.expertise(SG)
yì bá.
 CONS NEG
 ‘PLAYING IT, not everybody can (do it).’ (D01JHAND)

The particle *à* is used to focus a constituent: it is very often used contrastively (as in 2 above), and it almost always marks interrogative words (see section 4). It furthermore occurs regularly in negative sentences where it serves to restrict the intended interpretation. This last function follows from the placement of the negation particle at the end of a Goemai sentence: in most multi-verb structures, its scope is vague – either over the first verb phrase or clause (e.g., *zèm* ‘like’ in the first translation of 7a) or the second verb phrase or clause (e.g., *vuáng* ‘wash’ in the second translation of 7a). If the second expression is focused, however, its scope can only ever be over this focused element (as in 7b) (see section 1.4 for negation; see also chapter 8, sections 3 and 4).

- (7) a. *Gòe=zèm dé-gòe ñ-vuáng lé góe*
 2SGM.S=like PUR ADVZ-wash goods/clothes 2SGM.POSS
bá.
 NEG
 ‘You don’t want to wash your clothes.’
 Or: ‘You want to not wash your clothes.’ (D00JLAZINESS)
- b. *D'ùòe Gòemâi ñnòe / hèn=kùt ní /*
 voice:GEN <ETHNIC.NAME> LOC.ANAPH 1SG.S=talk 3SG.O
à DÉ-GÒE N-TÁP GÙRÙM bá.
 FOC PUR ADVZ-show.ignorance person NEG
 ‘This Goemai language, I talk it not to CONFUSE PEOPLE.’ (lit. not to make people show their ignorance)
 Not *‘(...) I don’t talk it to confuse people.’ (D00JPEOPLE)

The particle *à* has developed a second sense: it became reanalyzed as a verbless clause particle, losing its focus semantics in this context (see chapter 8, section 2.1). A cognate particle is attested in closely related languages such as Mupun, where it is used both as a focus particle and as an equational clause copula (Frajzyngier 1993: 247–258, 397–407). It is likely that both the focus particle and its further grammaticalization are inherited from Proto-Angas-Goemai.

In present-day Goemai, speakers frequently use the focus particle *à* together with the emphasis particle *tóe* (with *à* preceding the focused constituent and *tóe* following it): the two particles interact to focus on a proposition (as in 8a); the same structure is found in a number of idiomatic expressions (as in 8b); and the two regularly – but not obligatorily – co-occur in contexts where a focused constituent is fronted (as in 4b above).

- (8) a. *Tó / à T'ÓQRNÚNG DÓK YÀ D'ÚÚS tóe.*
 okay FOC anger PAST.REM catch cricket EMPH
 ‘Okay, ANGER SEIZED THE CRICKET.’ (D00JANIMAL7)
- b. *À BÌ GÒE-SÁ tóe / muép lá kàt*
 FOC thing NOMZ-make EMPH 3PL.S:CONS COND find
ní / muèp tú nì.
 3SG.O 3PL.S kill(SG) 3SG.O
 ‘(This) is THE REASON (lit. the thing that makes it) that when they find him, they kill him.’ (D00JANIMAL1)

Otherwise, the emphasis particle *tóe* is used in contexts where the focus particle *à* cannot occur, i.e., to focus a verb phrase, in which case *tóe* is placed after the direct object noun phrase and before any adverbials (as in 9a). And it is used in those contexts where the focus particle has lost its focus semantics, i.e., in verbless clauses (as in 9b). In the latter case, it always replaces the verbless clause particle *à*, and it often co-occurs with the consequence clause particle *yì* (as in 9c).

- (9) a. *K'yàk góes'ém DÓK DÀM tóe ÑDÒE*
 heart/neck:GEN rat PAST.REM spoil EMPH CONJ
WÒ.
 snake
 ‘In the past, the rat BECAME ANGRY WITH THE SNAKE (lit. the heart of the rat got spoiled with the snake.)’ (F00JGOESEM)

- b. *Nàgú yín Jí tóe / lònḡ / ñkyá /*
 cattle.egret SAY SGM.LOG.SP.I EMPH chief:GEN vulture
ñdòe d'úús.
 CONJ cricket

‘The cattle egret₁ said, HE₁ (is) the chief of the vulture and the cricket.’ (F00JDUUS)

- c. *Dúús / yín / Jí tóe lònḡ ñkyá yì /*
 cricket SAY SGM.LOG.SP.I EMPH chief:GEN vulture CONS
ñdòe nàgú.
 CONJ cattle.egret

‘The cricket₁ said, (it is) HIM₁ (that is) the chief of the vulture and the cattle egret.’ (F00JDUUS)

Goemai has a second emphasis particle *b'è* that occurs only very infrequently. It seems to always emphasize an entire proposition (as in 10).

- (10) *Yin / HULÁ GWÁ P'ÉT T'Á b'è.*
 SAY hat SGM.LOG.AD.POSS exit(SG) fall(SG) EMPH
 ‘(She₁) said, HIS₂ HAT HAD COME OFF (AND) FELL.’ (F99DREEP)

1.3. Question particles

All polar questions are marked by clause-final particles that usually cliticize to the last word: *à* indicates a neutral question (as in 11a), *ò* a question that expects an affirmative answer (as in 11b), *è* a question that expresses surprise (as in 11c), and *mú* seeks confirmation (as in 11d). These question tags have the following irregular allomorphs: *wè* (for *è* following a vowel), *wà* and *wò* (for *à* and *ò* following a back vowel), and *yà* and *yò* (for *à* and *ò* following a front vowel). Like content questions (see section 4), all polar questions maintain the canonical AVO / SV constituent order, and receive a rising intonation contour.

- (11) a. A: *Gù=ñ-ní=yà?*
 2PL.S=COMIT-3SG.I=INTERR
 ‘Do you have it?’
 N: *Á'à*
 no
 ‘No.’ (C00ANDIALECT4)

- b. *T'à* *yì=p'ét* *kyóóp* *kúút=ò?*
 fall(SG) 2SGF.S=exit(SG) health just=INTERR
 'Have you slept (and) gotten up well (I hope)?' (H01CJOS)
- c. *Gòe=kàt=é?* *Yin m̀m̀.* *Yin* *gòe=kàt=é?*
 2SGM.S=find=INTERR SAY yes SAY 2SGM.S=find=INTERR
Góe=làngòdé *nd'àng / ní* *póe gòe*
 2SGM.S:CONS=start how 3SG.S:CONS give 2SGM.O
sóól *̀ǹnòe=hòe* *yì?*
 money LOC.ANAPH=exactly CONS
 'You really got (it)? (He) said yes. (She) said you really got (it)? So how did you start (it) that he gave you this very money?' (F00CGOEBETLA)
- d. *Á* *t'is* *mú?*
 FOC snail INTERR
 '(It) is a snail, right?' (C01FGHJARAM2)

Such clause-final question particles are also attested in other Chadic languages. For example, the closely-related language Mupun has an identical inventory (Frajzyngier 1993: 359–366), but its semantics differ slightly. And P. Newman (2000: 488–502) posits the existence of a low-tone question morpheme for Hausa, assuming it to be a remnant of a Proto-Chadic question particle *à (see also Schuh 1998: 326–342 for Miya). In Hausa and Miya, this morpheme marks both polar questions and content question. In Goemai, by contrast, the particles only occur in polar questions.

In addition to the Goemai particles above, speakers use borrowed Hausa forms. To seek confirmation, they use Goemai *mú* (as in 11d above) interchangeably with Hausa *kóó* 'right?' (in 12a below). And to emphasize a questioned referent, they use Hausa *fà* ~ *pà* 'what about?' (in 12b).

- (12) a. *à* *m̀p'át* *bá* *kó?*
 FOC broom NEG INTERR
 '(it) isn't a broom, or is it?' (C01FGHJARAM1)
- b. *Gòemài* *b'úát* *ní.* *Bàkwá* *fà?*
 <ETHNIC.NAME> beat 3SG.O <ETHNIC.NAME> INTERR
 'The Goemai play it. What about the Hausa?' (C01ANHAND)

All clause-final question particles occur in all types of clauses, including both non-verbal (as in 11a, 11d, 12a and 12b above) and verbal clauses (as in 11b and 11c), as well as negative clauses (as in 12a).

Frequently, the particle *ò* co-occurs with clause-initial particles that serve to soften a question. Such particles are either borrowed from Hausa (as *kó* ‘maybe, or’ in 13a; also *wàtàkìlà* ‘maybe, perhaps’) or are recent formations whose origins are still transparent (as *kàt* ‘maybe, lit. it finds that’ in 13b; also *lá d’óng* ‘maybe, lit. if it is good that’).

- (13) a. *Dù=t'èk* *mú?* *Kó* *t'òng*
 PL.LOG.SP.S=pluck(PL) INTERR maybe/or IRR
dú=kát *lwá* *d'i*
 PL.LOG.SP.S=find animal/meat LOC.ANAPH
mè-pè=hòk=ò?
 LOC-place=DEF=INTERR
 ‘They pluck (it), right? Possibly they would find meat there in the place?’ (F99DLIGYA)
- b. *Kàt ní dám t'ó yò?* *Kàt ní*
 maybe 3SG.S spoil lie(SG) CONS:INTERR maybe 3SG.S
múút=ò?
 die(SG)=INTERR
 ‘So maybe he lies sad? Maybe he has died?’ (C01FGHJARAM3)

The clause-final particles play a further role in the formation of complex polar questions. The particle *à* is used to indicate an ‘either / or’ type of question: the first clause ends with the particle *à*, and the second clause is introduced by the borrowed disjunction *kó* ‘maybe, or’ (from Hausa *kóó*) (as in 14a). And the particle *ò* is used to pose a ‘whether / or’ type of question: each clause ends with the particle *ò*, the second clause is obligatorily introduced by *kó*, and the first clause is optionally introduced by it (as in 14b). This last structure is also used to coordinate noun phrases (as in 14c) (see also chapter 3, section 3.2; chapter 8, section 4.9).

- (14) a. *gwà* *sh'ái* *sh'ài*
 SGM.LOG.AD.S show.pride showing.pride
dóe=à / *kó* *gwà*
 SGF.LOG.SP.POSS=INTERR maybe/or SGM.LOG.AD.S

sh'ái sh'ài Náán?
 show.pride showing.pride:GEN God
 ‘(She₁ asked) is he₂ proud of her₁ or is he₂ proud of God?’
 (F99OGOELONG)

b. *Kó kúma bì=hòk p'ét=ò kó*
 maybe/or also thing=DEF exit(SG)=INTERR maybe/or
p'ét má bá=wò / mòe=màn má bá.
 exit(SG) also NEG=INTERR 1PL.S=know also NEG
 ‘And maybe the thing comes out (good) or maybe (it) does not
 come out (good), we just don’t know.’ (C01FGHJARAM4)

c. *Muép yóng ni à gòek'ál=ò kó*
 3PL.S:CONS call 3SG.O FOC gazelle=INTERR maybe/or
à jìri=yò. Hèn=màn s'ém múk
 FOC antelope=INTERR 1SG.S=know name 3SG.POSS
ńt'it bá.
 well NEG
 ‘And so they call it red-fronted gazelle or maybe roan antelope.
 I don’t know its name very well.’ (R00CFROG)

1.4. Negation particles

Negation is expressed by means of a sentence-final negation particle – either the Goemai particle *môu* or the equivalent Hausa loan *bá* (as in 15a to 15c); the two particles cannot co-occur. They are used interchangeably to negate all verbal and non-verbal clauses, as well as all TAM constructions. Notice that there is no neutralization of TAM distinctions under negation (for the expression of prohibitive and imperative, see chapter 7, sections 5.5 and 5.6). Such sentence-final particles are common in both Chadic (Pawlak 1994) and Jos-Plateau languages (E. Wolff and Gerhardt 1977).

- (15) a. *Muép ná fuán môu.*
 3PL.S see rabbit NEG
 ‘They didn’t see the rabbit.’ (F00CFUAN)
- b. *Muép ná ni bá.*
 3PL.S see 3SG.O NEG
 ‘They didn’t see him.’ (F00CKE)

- c. *Ni à d'úús bá.*
 3SG.I FOC cricket NEG
 'It is not a cricket.' (D00JANIMAL12)

Occasionally, speakers not only borrow the Hausa form *bá*, but also some of the Hausa patterns. That is, they place a negation particle both at the beginning and at the end of a verb phrase (as in 16a), or only at the beginning of a non-verbal clause (as in 16b) (see P. Newman 2000: 357–365 for negation in Hausa). Both patterns are recognized as borrowings and are dispreferred.

- (16) a. *Yàm múk bá làp bá=à?*
 son(SG) 3SG.POSS NEG receive NEG=INTERR
 'Didn't his son receive it?' (C00ANDIALECT4)
- b. *nd'ùùn muép / bá ñdòe=gùrùm gòepé kàt.*
 INSIDE 3PL.POSS NEG SPEC=person THAT/WHEN find
 'Among them, there wasn't anybody who found (it).'
- (F00JNAAN)

With the exception of the borrowed Hausa patterns, the negation particle only occurs at the end of a sentence – it can only ever be followed by a question particle (see section 1.3). The same structure is also attested in many multiverb structures, including, e.g., complement clauses (as in 17a). As illustrated by the two free translations in (17a), the particle then has scope over either the first or second verb phrase (in a serial construction) or clause (in a complex sentence). Although rare, it is also possible for the negation to have scope over both clauses (resulting in the third free translation in 17a; see also the intended interpretation of the natural example in 17b). In any case, contextual factors are needed to restrict their scope (see also section 1.2 for the role of the focus particle *à* in such contexts). That is, Goemai negates whole sentences, but not clauses, phrases or elements within phrases. Notice, however, that Goemai can individually negate each clause in a coordinate structure as well as in juxtaposed structures (see chapter 8, sections 3 and 4 for details).

- (17) a. *Mòe=màn gòepé ní s'wà hààm bá.*
 1PL.S=know THAT/WHEN 3SG.S:CONS drink water NEG
 'We didn't know that he drank water.'
 'We knew that he didn't drink water.'
 'We didn't know that he didn't drink the water.' (D01CLU)

- b. *Tô / hèn=rìgà màn gòefé / hèn=t'èn*
 okay 1SG.S=do.already know THAT/WHEN 1SG.S=IRR
t'óng m-mákarántá / shín / t'áár gòemé bá.
 sit(SG) LOC-school do moon one NEG
 'Okay, I didn't know yet that I wouldn't even stay in school for
 one month (lit. and do one month).' (N00EWITCH3)

In addition to the sentence-final negation particles *môu* and *bá*, Goemai employs initial negation particles in negative irrealis contexts (see chapter 7, section 5.5 for details).

Finally, Goemai speakers frequently use lexically negative verbs to convey negative readings. In particular, they use the verb *nyáng* 'refuse, hate' (as in 18a). Such verbs not only convey negation, but add other nuances, e.g., in (18a), the verb adds the nuance of impossibility. Compare also (18b), where the lexeme *zém* 'accept, like' (an antonym to *nyáng* 'refuse, hate') is used to convey the nuances of possibility and likelihood.

- (18) a. *Shim k'un nyáng b'óót.*
 yam three hate(SG) tying
 'Three yam cannot be tied (together) (lit. hate/refuse tying).'
- (C01FGHJARAM2)
- b. *Jimáár tóe shimsék múk zém dé-gòe*
 fish.type EMPH skin 3SG.POSS like PUR
ñ-b'áng lé.
 ADVZ-bec.red bit
 'The *jimaar* fish, its scales are possibly a bit red (lit. like to become red).' (C00ANDIALECT2)

1.5. Discourse particles

A number of different particles are used to structure discourse by relating states-of-affairs to each other. In particular, Goemai employs the topicalization particle *zák* 'also/however' to equate (as in 19a) or contrast (as in 19b) the properties or activities of a second participant to those of a first participant. In all cases, the topic phrase is fronted and followed by the topicalization particle; a resumptive pronoun occurs in place of the fronted topic (e.g., the dependent subject pronoun *hèn*= '1SG' cliticizing to the verb in 19a; see also the highlighted form *muěp* '3PL' in 20a and 20b).

- (19) a. *Góe=d'è góeshák ndòe hén. Kúmá [hén]_{TOPIC}*
 2SGM.S=exist together CONJ 1SG.I also 1SG.I
zák / hén=d'è góeshák ndòe góe.
 also/however 1SG.S=exist together CONJ 2SGM.I
 ‘You are together with me. And as for me, too, I am together with you.’ (C00JMQUEST4)
- b. *Yì=màn à ní / yì múk à yàgùrùm.*
 2SGF.S=know FOC 3SG.I year 3SG.POSS FOC twenty
[Yì Ìmá]_{TOPIC} zák s'ár-k'á-pòemóe.
 year:GEN <NAME> also/however ten-HEAD(SG)-six
 ‘You know as regards her, her age is twenty. As for Ima’s age, however, (he is) sixteen.’ (D00EWITCH2)

In addition, Goemai – like many other Chadic languages (see e.g. Schuh 1998: 346–352 for Miya) – conveys topicalization by means of the so-called ‘modal particles’ borrowed from Hausa: *fá* ‘indeed’, *dáì* ‘just, only’, *kúmá* ‘(and) also, too, likewise’ (as in 20a), *má* ‘too, also, even, still’, *kwá* ~ *ñkwá* ‘moreover, however’ (from Hausa *kúwá*) (as in 20b) and *kèm* ‘certainly’ (from Hausa *kàm*) (P Newman 2000: 326–334). These particles also convey speaker evaluation (as in 20c).

- (20) a. *[Jáp mén]_{TOPIC} kúmá / kó=t'átnàng / móe=d'è*
 children(PL) 1PL.POSS also any/every=when 1PL.S=exist
t'òng móe=sh'é muèp yì ò-ní (...).
 PROGR 1PL.S=learn/teach 3PL.O CONS COMIT-3SG.I
 ‘As for our children, all the time we are teaching them about it (...).’ (H99BTARIHI)
- b. *Tó / [muèp]_{TOPIC} kwá / muèp à*
 okay 3PL.I also/however 3PL.I FOC
mòe-jàp-núún shák / àmmá / muèp
 NOMZ(PL)-children(PL):GEN-mother each.other but 3PL.S
p'uát shák bá (...).
 exit(PL) each.other NEG
 ‘Okay, as for them, they are siblings of each other, but they do not resemble each other (...).’ (R00ACLOTHING2)
- c. *Á pòenóe kèm.*
 FOC thus certainly
 ‘(It) is certainly like this.’ (C00ANDIALECT3)

The particle *mé* ‘really, after all’, places confirmation on an unreal or surprising situation. It is used especially in negative commands (in 21a), in conditional sentences (in 21b), and in exclamations (in 21c).

- (21) a. *Mán mé à gòe-f'yér múk bá.*
 PROH really FOC NOMZ(SG)-bec.big(SG) 3SG.POSS NEG
 ‘He really shouldn’t be his senior.’ (C00ANDIALECT5)
- b. *yìn là góe / núnng gòe=má*
 SAY COND 2SGM.S bec.mature(SG) 2SGM.S=surpass
ndòe=gúrùm mé / t'òng góe=núnng
 SPEC=person really IRR 2SGM.S=bec.mature(SG)
gòe=má ndòe=gúrùm zák=à?
 2SGM.S=surpass SPEC=person also/however=INTERR
 ‘(he) said, if you really are cleverer than someone, will you also be cleverer than someone (else)?’ (F99DLIGYA)
- c. *Àsé mé / à hàngòed'è kàl-f'uél /*
 INTERJ really FOC water:GEN froth-yeast
gòe-ròk.
 NOMZ(SG)-bec.sweet
 ‘What a surprise, it's beer, sweet (beer).’ (F99DLIIT)

Finally, the presentative particles (*ná*) *n-* are used to introduce new referents into discourse (see chapter 8, section 1.3).

1.6. Clausal particles and conjunctions

Goemai has a small inventory of particles and conjunctions that introduce or mark different types of clauses: adverbial and complement clauses, consequence clauses, purpose and sequential clauses, reported speech, and conditional clauses (see chapter 8, section 4). In addition, it has noun phrase coordinators (see chapter 3, section 3.2). In most cases, the conjunctions constitute recent developments, and there is some evidence that Goemai originally used juxtaposition in place of overt grammatical markers.

2. Clitics and affixes

Goemai is predominantly isolating, and words tend to be morphologically simple. Nevertheless, there are a few clitics (both pro- and enclitics) (section 2.1) and affixes (prefixes only) (section 2.2). Both clitics and affixes form single phonological words with the expressions they attach to (see chapter 2, section 2 for details on words), but they differ in their syntactic position and realization. Most clitics are phrasal clitics, and thus have a wider distribution in that they can cliticize to different elements of a phrase. Furthermore, all clitics can alternatively be realized as separate words – with concomitant segmental and suprasegmental differences. Prefixes, by contrast, occur in a fixed position relative to the expression they attach to, and they can never be uttered as separate words. In most cases, however, their diachronic origins in independent words are still visible. Most clitics and prefixes are discussed in more detail in other sections of the grammar.

2.1. Clitics

The largest group of proclitics are the dependent subject pronouns that cliticize to either the initial or the second element of a verb phrase (i.e., to a verb or a TAM particle). Their position depends on the pronoun set and on the diachronic origins of the TAM particle (see chapter 3, section 2.4; and chapter 7). Within the TAM system, one clitic is attested: the proclitic *bòe* = ‘FOC.IRR’ that cliticizes to verb phrases and verbless clause complements (see chapter 7, section 5.4). The homonymous proclitic *bòe* = ‘HOW/WHERE’ functions as a manner / locative nominalizer (see chapter 3, section 4.4). Within the noun phrase, some modifiers are frequently realized as clitics: *là* = ‘DIM(SG)’ (see chapter 3, section 2.5), *ndòe* = ‘SPEC’ (see chapter 3, section 5.3) and *=hok* ‘DEF’ (see chapter 3, section 5.6). In addition, inherently-locational nouns in adverbial function usually occur with a cliticized possessive pronoun (see chapter 5, section 2.2). And the clause-final question particles are often realized as enclitics (see section 1.3).

Two phrasal clitics have a particularly wide distribution: *=hòe* ‘exactly’ and *kó* = ‘every/each; any’. Both are of analytical importance in determining phrasehood as well as phrasal and clausal boundaries.

First, the enclitic *=hòe* ‘exactly’ serves emphatic functions in that it identifies a referent or event as exactly the referent or event that is being talked about. As such, it frequently co-occurs with definite or deictic expressions (as in 22a, 22b and 22d), but not necessarily so (as in 22c and 22e). It always cliticizes to the last element of a phrase (a noun phrase (as in 22a and 22b), a verb phrase (as in 22c) or an adverbial phrase (as in 22d)) or of a clause (as in 22e,

where it cliticizes to the last element of this verbal clause, the emphasis particle *tóe*). Generally, it cannot have scope over particles.

- (22) a. *Nyét rù̀̀nsék múk=hók / nyét nà̀̀yít / t'án [áás*
 leave shadow 3SG.POSS=DEF leave mirror pursue dog
*ń-d'è-ń̀̀nòe]*_{NP}=*hòe*.
 ADVZ-CL:exist-DEM.PROX=exactly
 ‘(It) left its shadow, (it) left the mirror, and (it) pursued this
 very dog.’ (F00CAAS)
- b. *gòèbí t'óng t̀̀ tú [mà̀̀t=hòk]*_{NP}=*hòe*.
 AS.IF IRR kill(SG) woman(SG)=DEF=exactly
 ‘as if (it) would kill the very woman.’ (F99DLA)
- c. *Kó [t'óng kà̀̀t]*_{VP}=*hòe*.
 maybe/or IRR find=exactly
 ‘Maybe (he) would really find (it).’ (F00JNAAN)
- d. *Pè=hók d'è d'í / hár [shíní*
 place=DEF exist LOC.ANAPH even/until today
*ń-d'è-ń̀̀nòe]*_{ADV}=*hòe (...)*.
 ADVZ-CL:exist-DEM.PROX=exactly
 ‘The place is there, until this very day (...).’ (D01ALU)
- e. *Lókà̀̀shí gòè-dòk dà̀̀í / gwén Íbò*
 time NOMZ(SG)-past indeed ASSOC.PL <ETHNIC.NAME>
t'óng wá tóe=hòe.
 IRR return.home(SG) EMPH=exactly
 ‘In the old times, those Igbo would have returned back.’
 (C01ANHAND)

Second, the proclitic *kó=* ‘every/each; any’ was borrowed from Hausa *kóó-*. In Hausa, this form is generally analyzed as a prefix that attaches to interrogatives. However, P Newman (2000: 625–626) explicitly comments on its phrasal nature (in that some particles and prepositions can occur between *kóó-* and the interrogative word). Such a phrasal nature is clearly evident in Goemai: *kó=* attaches to the beginning of any phrase – or even clause – that is within the scope of an interrogative word. As such, it can attach to both simple (as in 23a and 23b) and complex noun phrases (as in 23c), to prepositional phrases (as in 23d) and clausal conjunctions (as in 23e). Deviating from Hausa, there are also a few examples where Goemai *kó=* occurs in noun phrases that do not contain

interrogative words – instead, such phrases contain generic nouns that receive an indefinite interpretation (as *gùrùm* ‘person’ in 23f).

- (23) a. *kó*=[*wúróè*]_{NP} *màng* *lwá=hók*.
any/every=who take(SG) animal/meat=DEF
‘everybody / anybody picked up the meat.’ (D00EWITCH3)
- b. *Kó*=[*mímòè*]_{NP} *shín* *n-góè* / *gùrùm* *t’óng* *zèm*
any/every=what do BEN-2SGM.I person IRR like
tù *sék* *múk* *kúút* *póenóè* *gòelóng=à?*
kill(SG) body 3SG.POSS just thus useless=INTERR
‘Whatever / anything that happens to you, would a person like (to) kill himself just like this for nothing?’ (F99ATYAKLANG)
- c. *kó*=[*là=gùrùm* *góenàng*]_{NP} *góè*
any/every=DIM(SG):GEN=person which(SG) PLACE
yíl *Plateau* *ínòè* *díp (...)*.
ground:GEN <PLACE.NAME> LOC.ANAPH all
‘every / any poor person in this whole state of Plateau (...).’
(D01ATREE)
- d. *Gùrùm* *lá* *k’wál* *t’óng* *kó*=[*n-d’uòè* *muép*]_{ADV}.
person HAB talk HAB any/every=LOC-voice 3PL.POSS
‘People used to speak in each / any of their languages.’
(C00JMQUEST2)
- e. *Kó*=[*lá* *mèl* *láng* *sák*
any/every=COND haunt hang/move(SG) BODY.2SGM.POSS
nd’àng]_{COND} (...).
how
‘However / anyhow (it) hangs haunting (you) at your body (...).’ (D99DGWAKTAK)
- f. G: *Kó*=[*gùrùm*]_{NP} *màn* *gòè-sék* *nd’ùùn*
any/every=person know NOMZ(SG)-body INSIDE
gwén *b’ák* *m-pè* *ínòè=à?*
2PL.POSS here LOC-place LOC.ANAPH=INTERR
F: *Hèn=màn*.
1SG.S=know
G: ‘Did everybody / anybody know this among you here in this place?’
F: ‘I knew (it).’ (C01FGHJARAM1)

This proclitic regularly co-occurs with singular marking in the noun phrase (as *góenàng* ‘which (SG) in 24a) or clause (as *láng* ‘hang/move (SG)’ in 24b). The only exceptions are plural subject pronouns, triggering an interpretation of ‘every / any of PRONOUN’ (as *muèp* ‘3PL’ in 24a and 24b).

- (24) a. *mòe=màràp K'yan*
 1PL.S=step(PL) <MASQUERADE.NAME>
ń-d'è-ńndè / kó=[Gòemâi
 ADVZ-CL:exist-DEM.PROX any/every=<ETHNIC.NAME>
*góenàng=hòk]*_{NP} *muèp=ń-ní.*
 which(SG)=DEF 3PL.S=COMIT-3SG.I
 ‘we dance this *K'yan* masquerade, every / any (of) the Goemai
 they (all) have it.’ (C00ANDIALECT6)
- b. *kó=[muèp]*_{NP} *láng ńk'óng (...).*
 any/every=3PL.S hang/move(SG) BACK
 ‘every / either (one of) them hangs at the back (...).’
 (D04AKALANGA2)

As in Hausa, the proclitic *kó=* ‘every/each; any’ serves two functions (see Haspelmath 1997: 300–301; P Newman 2000: 622–626): it expresses universal quantification (‘every/each’) (see chapter 5, section 2.2 for other quantifying expressions), and it forms indefinite expressions that convey free choice (‘any’). As indicated by the alternative free translations in (23) and (24) above, each of the two interpretations is available in each case. But while the indefinite interpretation is possible in all examples above, it is much more commonly attested in comparative contexts (as in 25a), negative contexts (as in 25b), and conditional contexts (as in 25c) – i.e., in contexts where, cross-linguistically, the universal quantifier tends to receive indefinite interpretations (Haspelmath 1997: 11, 48–51, 90–94, 111–118, 154–156). Notice also that Goemai has a native expression for indicating indefiniteness and free choice: the use of noun phrases containing the specific-indefinite article *ńdòe=* plus a generic noun (see also chapter 3, section 5.3). It therefore seems likely that the use of *kó=* to express indefiniteness is a new development, intruding into the domain of specific-indefinite noun phrases.

- (25) a. *Gòebí ní núnng / mà / kó=wúròe.*
 AS.IF 3SG.S bec.mature(SG) surpass any/every=who
 ‘As if (he) were cleverer than anybody (else).’ (D00JLAZINESS)

- b. *Hèn=màn kó=ndòe gòe-mì*
 1SG.S=know any/every=some NOMZ(SG)-be.related(SG)
mén d'è t'én s'úk sán yì
 1PL.POSS exist PROGR wash(SG) body.1SG.POSS PROGR
bá.

NEG

‘I don’t know any relative (of) us (who) was washing my body (when I was a child).’ (C00JMQUEST3)

- c. *kó=wúróe lá d'áláng nà góe.*
 any/every=who COND pass(SG) see 2SGM.O
 ‘if anybody passes, (he) sees you.’ (D01CLU)

2.2. Affixes

The most common affixes are the prefixes *N-*, *góe-* and *gòe-*. They have basic spatial functions (see chapter 5, section 4), but have now added some non-spatial functions, too (see chapter 4, section 5.1). The prefix *góe-* is furthermore employed in various forms of nominalization (see sections 4.2, 4.3 and 4.4 in chapter 3; and sections 4.1 and 4.3 in chapter 8), and the prefix *N-* in various forms of adverbialization (see section 4.3 in chapter 3; section 2.3 in chapter 5; and sections 1.3, 4.3 and 4.5 in chapter 8). Another prefix *mòe-* is probably a remnant of the Afroasiatic prefix **ma-*, deriving nouns of agent, location and instrument (Greenberg 1966; see also P. Newman 2000: 51–60 for Hausa) – in Goemai, this prefix has lost most of its original functions, but has developed new modifying functions instead (see chapter 3, section 4.2). More recently, postural verbs became prefixed as postural classifiers to demonstrative roots (see chapter 3, section 5.4), and the nominalizing prefix *nyè-* developed from the noun *nyè* ‘matter’ (see chapter 3, section 4.1). Goemai also allows for partial and total reduplication (see chapter 5, section 2.3): partial reduplication repeats the initial consonant to the left, and is therefore analyzed as prefixal reduplication; the direction of total reduplication cannot be determined. Finally, there are a number of unproductive plural formatives – suffixes and infixes – that were inherited from the proto-language (see chapter 4, section 1.2).

3. Interjections

Goemai has only few native interjections. These include the forms *kwàì* ‘no’ (as in 26a), *m̀m̀* ‘yes (male speaker)’ (as in 26b) and *ò* ‘yes (female speaker)’ (as in

26c). Notice that the latter distinction is an idealization: it is emphasized by the speakers, but it is usually not observed in discourse as both male and female speakers regularly use both forms (e.g., both the utterances in 26b and 26c were uttered by the same male speaker). Notice that each of the interjections can make up a complete utterance by itself.

- (26) a. N: *Gù=góe K'úmpyùùr=à?*
 2PL.S=COMIT <TITLE>=INTERR
 'Do you have the *K'umpyuur* chief?'
- A: *Kwài / mòe=góe K'úmpyùùr bá (...).*
 no 1PL.S=COMIT <TITLE> NEG
 'No, we don't have the *K'umpyuur* chief (...).'
- (C00ANDIALECT4)
- b. N: *Tó / gòe=màn gwén bóe=d'è*
 okay 2SG.S=know ASSOC.PL HOW/WHERE=exist
jímáár=hòe=à?
 fish.type:POSS=exactly=INTERR
 'Do you know the whereabouts of the *jimaar* fish?'
- A: *m̀m̀.*
 yes
 'Yes.' (C00ANDIALECT2)
- c. N: *Mùdùùt góe Mángáp=è?*
 <PLACE.NAME> COMIT <MASQUERADE.NAME>=INTERR
 'Does Shendam have the *Mangap* masquerade?'
- A: *Ó.*
 yes
 'Yes.' (C00ANDIALECT6)

The interjection *kàmbók* 'please' is used to introduce important and serious requests (as in 27a), and it is used to convey dismay (as in 27b).

- (27) a. *Kàmbók / k'à yil ñ-d'è-ñnòe*
 please HEAD(SG):GEN ground ADVZ-CL:exist-DEM.PROX
d'à móe=t'óng móe=shin bì / mòe=ràng Náán.
 COND 1PL.S=IRR 1PL.S=do thing 1PL.S=think God
 'Please, on this earth, when (ever) we will do something, we (should) think of God.' (N01ATIME)

- b. A: *B'itlúng b'itlúng pyú / kàfín fuán (...)* *muáán*
 morning morning IDEOPH before rabbit go(SG)
dé-gòe yóól yìtsáám=hòe / n't'i
 PUR rise(SG) sleep=exactly son.of.rabbit
wá d'èmt'èi rú n-gòedè t'èng.
 return.home(SG) already enter(SG) LOC-bottom:GENTree
 'Early early in the morning, before the rabbit (...) had
 gone to rise from sleep, the son of the rabbit had already
 entered at the base of the tree.'

N: *Kàmbók!*
 please

N: 'Please!' (The son of the rabbit is very foolish, and
 speaker N. anticipates a disaster happening.) (F04ATAMTIS)

The interjection *hó* functions as a greeting routine (as in 28a and 28b). It is often accompanied by a prepositional phrase indicating the addressee (as *ngóe* 'to you' in 28a and 28b) and by a comitative phrase giving further contextual information (as *góe sh'it* 'at work' in 28b). This greeting can be recruited to function as an activity noun, occurring as an argument to the verb (as in 28c).

- (28) a. N: *Tó / hó?*
 okay <GREETING>
 'Okay, greetings.'

A: *Hó n-góe dáí.*
 <GREETING> BEN-2SGM.I just
 'Greetings to you, too.' (D04NTALDAAS2)

- b. *Gòe-p'èt múk / yì / hó n-góe*
 NOMZ-exit(SG) 3SG.POSS SAY <GREETING> BEN-2SGM.I
gòes'ém / hó n-góe góe sh'it.
 rat <GREETING> BEN-2SGM.I COMIT work

'When he came out, (he) said, greetings to you rat, greetings to
 you at work.' (F00JGOESEM)

- c. [*Mòe*]_A=*làp* [*hó*]_O.
 1PL.S=receive <GREETING>

'We received (or answered) the greetings.' (SIRLINGER 1937: 78)

Another interjection is *àvù*, a very disrespectful type of calling attention (as in 29).

- (29) *Àvù là líít múút ò-d'óng / àvù*
 INTERJ child(SG):GEN lion die(SG) ADVZ-be.good INTERJ
là kúng múút ò-d'óng.
 child(SG):GEN leopard die(SG) ADVZ-be.good
 ‘Hey (you), the child of the lion has died, (it is) good, hey (you),
 the child of the leopard has died, (it is) good.’ (F99DLIIT)

In addition to the interjections above, Goemai has borrowed a large number of interjections from Hausa. The corpus includes frequent examples of the following forms: *á'á* ‘no’ (sometimes realized as *m'm*), *á'á* ‘oh (expression of surprise)’, *àsé* ‘oh (expression of surprise)’ (from Hausa *àshéé*), *hâi* ~ *âi* ‘hey (expression to call attention, especially in negative contexts)’, *kâi* ‘hey (expression of disapproval or surprise), *tô* ~ *tó* ‘okay’ and *yâuwá* ‘okay, right’

4. Interrogatives

The interrogatives form a semantic subsystem of the language, but they do not constitute a uniform word class. Instead, the interrogative word is of the same word class as the element it questions. Table (54) below lists the available forms together with their glosses and an indication of their word class.

All interrogatives have a HL tonal pattern. This pattern is characteristic for the class as a whole, and all derived interrogatives adapt to this pattern (e.g., *bí nímòè* ‘what’ contains the basic low-tone noun *bì* ‘thing’; see also the discussion on diachronic origins below).

The forms *wúròè* ‘who’, *nímòè* ‘what’, *nd'àng* ‘how’ and *kông* ‘how much / many’ are synchronically not analyzable. Two of them contain an initial prenasalized consonant – since most such consonants are analyzable as containing a nasal prefix (see chapter 2, section 1.2), it is possible that these interrogatives are diachronically derived, too. Notice also that the non-analyzable form *nímòè* ‘what’ is frequently replaced by the more transparent form *bí nímòè* ‘what (lit. thing what)’. All other interrogatives are morphologically complex. Three of them contain the element *nàng*, which is possibly related to the present-day distal deictic root *náng*: the interrogative *góenàng* ~ *móenàng* ‘which’ is possibly formed from this root by means of the modifying prefixes *gòe-* (SG) and *mòe-* (PL) (see chapter 3, section 4.2), the interrogative *hnàng* ‘where’ by means of the locative prefix *N-* (see chapter 5, section 4), and the interrogative *t'átnàng* ‘when’ by means of the adverbial *t'át* ‘time (measured in days)’. The

three possible formations of the interrogative ‘why’ – *dé (bi) nímòè*, *nyè (bi) nímòè* and *k’á (bi) nímòè* – are synchronically analyzable as containing a spatial nominal (see chapter 5, section 4) plus the interrogative *(bi) nímòè* ‘what’

Table 54. Interrogatives

Question word	Gloss	Word class
<i>wúròè</i>	who	nominal
<i>nímòè ~ bí nímòè</i>	what	nominal
<i>dé (bi) nímòè</i>	why (lit. for what)	spatial nominal
<i>nyè (bi) nímòè</i>	why (lit. matter of what)	spatial nominal
<i>k’á (bi) nímòè</i>	why (lit. head of what)	spatial nominal
<i>góenàng</i> (SG) ~ <i>móenàng</i> (PL)	which	nominal in modifying construction
<i>ínàng</i>	where	adverbial
<i>t’átnàng</i>	when	adverbial
<i>nd’àng</i>	how	adverbial
<i>kóng</i>	how much / many	adverbial

All content questions maintain AVO / SV constituent order. The interrogative belongs to the same word class as the element it questions, and it occurs in the same syntactic function. That is, question words occur in situ (but see the discussion below). For example, the form *(bi) nímòè* ‘what’ is used to question a noun phrase. As such, it occurs in all the syntactic functions available to noun phrases: as subject or object of a verbal clause (in 30a and 30b), within a prepositional phrase (in 30c), or as subject or complement of a verbless clause (in 30d). It can even occur as the possessor of the genitive construction (in 30e). Unlike other nouns, however, it cannot occur with any nominal modifier.

- (30) a. [*bí nímòè*]_S *shín tóe?*
 thing what do EMPH
 ‘what happened?’ (F99AKUR)
- b. *d’á gú=kát [nímòè]*_O?
 FUT.CL 2PL.S=find what
 ‘you will find what tomorrow?’ (H01AJOS)

- c. *Muép / mòe-gùrùm mén / muép dók d'è*
 3PL.I NOMZ(PL)-person 1PL.POSS 3PL.S PAST.REM exist
h-tù lwá=hók à [góe mímòe]_{ADV?}
 PROGR-kill(SG) animal/meat=DEF FOC COMMIT what
 ‘They, our people, they used to kill animals with what?’
 (C01FGHJARAM4)
- d. *Sh'àng tàmtis à [mímòe]_{VCC} n-d'ùòe*
 pleasantness:GEN folktale FOC what LOC-voice:GEN
Gòemâi?
 <ETHNIC.NAME>
 ‘The sweetness of folktales is what in the language of the
 Goemai?’ (D99PGOELONG)
- e. *Á [meeting mímòe]_{NP} t'òe jí=muáán*
 FOC meeting what IRR SGM.LOG.SP.S=go(SG)
yì?
 CONS
 ‘(It) is a meeting of what (where) he would go to?’
 (D00EWITCH3)

The adverbial and spatial nominal interrogatives occur in adverbial function. Like other adverbials (see chapter 5, section 1), they usually occur at the end of the clause (as in 31a), but they can alternatively be fronted for reasons of emphasis (as in 31b). In the second case, they are almost always marked with the focus particle *à* (see also below). In addition, they mirror other types of formal behavior: for example, numerals are reduplicated to give a distributive reading (see chapter 5, section 2.2) – and so is their corresponding interrogative (as in 31c).

- (31) a. *Tó / yìn / t'òng jí=shín n'd'àng dé /*
 okay SAY IRR SGM.LOG.SP.S=do how SO.THAT
ngàn k'óelèng d'ùòe jí yì?
 <NAME> hear/smell voice SGM.LOG.SP.POSS CONS
 ‘Okay, (he₁) said, he₁ would do (it) how, so that Ngan hears
 his₁ voice?’ (F99OGOELONG)

- b. *Á nd'àng dé miút nyáng gòe màng*
 FOC how SO.THAT death(SG) hate(SG) SEQ take(SG)
gwén / pààp?
 ASSOC.PL duiker
 'How (come) that death refused to take the duiker and his people?' (F99DLIT)
- c. *Muèp k'òerèng s'wá à kóngkòng*
 3PL.S measure(PL) guineacorn FOC REDUP.how.much/many
nd'àsòenòe?
 now
 'for how much each do they measure (i.e., sell per measure) guineacorn now?' (A-21/05/04)

Finally, the interrogative *góenàng* (SG) ~ *móenàng* (PL) 'which' distributes like any expression within the modifying construction (see chapter 3, section 4.2): it is marked with the appropriate prefixes (*gòe-* (SG) and *mòe-* (PL)), and it occurs either as modifier within the noun phrase (in 32a), or as head noun (in 32b).

- (32) a. *yìn pà t'óng b'ép tàng [mís*
 SAY SGF.LOG.AD.S IRR do.again search man(SG)
*góenàng]*_{NP} *zák-yít?*
 which(SG) also/however-again
 '(he₁) asked, what kind of husband would she₂ look for now?'
 (F99DREEP)
- b. [*móenàng*]_{NP} *t'óng gòe yil nì?*
 which(PL) IRR FUT.DEF write 3SG.O
 'which ones will write on it?' (C01ANHAND)

Generally, interrogative words occur in situ. Notice, however, that they are very frequently marked with the focus morpheme *à*. In this case, the interrogative occurs in peripheral function, e.g., it follows particles that mark the final boundary of the verb-plus-direct-object complex (such as the habitual particle *t'óng* in 33a). Focused interrogatives thus behave like any other focused constituent (see section 1.2 above). The close connection between interrogatives and focus constructions is also attested in other Chadic languages. In some languages, interrogatives and focused constituents are both fronted (see P Newman 2000: 488–502 for Hausa); and in others, both occur in situ (see

Schuh 1998: 331–342 for Miya). In both cases, they tend to trigger a special TAM marking on the verb. In Goemai, by contrast, this special marking is absent, and fronting is very rare. That is, it is unlikely that the use of focus constructions with interrogatives is a contact influence from Hausa. Typologically, focused interrogatives are frequent and can easily develop language-internally (Lambrecht 1994). Notice also that Goemai has not adopted the Hausa strategy of forming relative pronouns from interrogative words. Younger speakers occasionally borrow Hausa words for this purpose, using them together with the Goemai particle (*gòe-*) *pé* ~ *fě* (as with the borrowed Hausa relative pronoun *indà* ‘where’ in 33b). Their occurrence is rare, and native Goemai interrogatives are never used in this way. Goemai did, however, borrow the morpheme *kó*= ‘every/each; any’ from Hausa to co-occur with interrogatives (see section 2.1).

- (33) a. *Dók lá shín t'óng [à nímòe]*_{ADVERBIAL?}
 PAST.REM HAB do HAB FOC what
 ‘What did (he) usually do in the past?’ (Q99ATQ20)
- b. *Yì=màn indà fé ní kát*
 2SGF.S=know where THAT/WHEN 3SG.S find
tóóm=hók=à?
 chair=DEF=INTERR
 ‘Do you know where she got the chair?’ (D00EWITCH3)

In addition to content question, Goemai has polar questions. These are marked by a clause-final question particle (see section 1.3). Interrogative words and question particles are mutually exclusive.

5. Summary

This chapter has given a brief overview of the closed word classes and other parts of speech in Goemai (particles and conjunctions in section 1, clitics and affixes in section 2, and interjections in section 3) as well as of the semantically-defined class of interrogatives (section 4). The chapter as a whole supplements the discussion of phrasal units and open word classes in the preceding three chapters. Each of the closed classes illustrated above deserves a more detailed syntactic and semantic investigation. Some classes are discussed in other parts of this grammar – in particular, nominal modifiers (chapter 3, section 5), TAM particles (chapter 7) and clausal particles and conjunctions (chap-

ter 8). The remaining classes, however, are only briefly illustrated in this chapter, and further in-depth analyses are left to future research.

Chapter 7

Tense, aspect, modality (TAM)

1. Introduction

Goemai differs from many other Chadic languages in its marking of tense, aspect and modality (TAM) (see, e.g., Jungraithmayr 1979; P. Newman 1977c; Schuh 1976; E. Wolff 1979 for a discussion of TAM marking within Chadic). Formally, it does not use TAM-inflected verbs or pronouns, but free particles and discontinuous constructions. Semantically, it does not exhibit any evidence for the common Chadic perfective / imperfective dichotomy, nor does it have narrative tenses or negative tenses. Its categories – albeit not its forms – show some similarities to those of other Angas-Goemai group languages (see Burquest 1973 for Angas; Frajzyngier 1993 for Mupun; and Jungraithmayr 1963a for Mwaghavul).

Given this overall lack of correspondence with other Chadic languages, it can be assumed that the present-day TAM system is of recent origin. In fact, the diachronic origins of most particles are still transparent, as summarized in table (55).

Their presumed diachronic origins are reflected in formal differences among the present-day particles. In particular, particles that were derived from verbs differ from those that were derived otherwise. In chapter 3, section 2.4, it was shown that pronouns are divided into two sets on the basis of several characteristics, including their position relative to verbs in multiverb constructions (e.g., in serial verb constructions): pronouns of set 1 (1SG, 3SG, 3PL, LOG.AD) (and nouns) occur only once preceding the first verb phrase, while those of set 2 (2SG, 1PL, 2PL, LOG.SP) occur with each verb phrase and may be absent from the first. The same behavior is attested in the case of TAM particles originating in multiverb constructions: pronouns of set 1 (and nouns) precede such particles (in 1a), while those of set 2 follow (in 1b). That is, these TAM particles are treated like the first verb of a multiverb construction. Similarly, TAM particles that originated as the second verb of a multiverb construction are preceded by the present-day verb as well as any set 2 pronoun (see the discussion of examples 41d and 44b). TAM particles that originated in other contexts, by contrast, do not show this alternation: pronouns of both sets precede these particles (e.g., the set 2 pronoun *mõe* ‘1PL’ in 1c).

Table 55. TAM categories and their origins

Category	Form	Presumed origin
Absolute tenses	<i>dǒk</i> 'PAST.REM', <i>dǔén</i> 'PAST.YEST', <i>d'in</i> 'PAST.CL', <i>d'á</i> 'FUT.CL'	V ₁ in SVC
Progressive	locative verb + <i>t'óng</i> ~ <i>d'á</i> ~ <i>lá</i> ~ <i>N</i> ... <i>yì</i>	Main locative clause + irrealis-marked consequence clause
Habitual	<i>d'á</i> ~ <i>lá</i> <i>t'óng</i>	Conditional clause + apodosis
Durative	<i>yì</i>	Consequence-cum-progressive particle (?)
Anterior	<i>lát</i>	V ₂ in SVC
Resultative	<i>kám</i>	V ₂ in SVC
Irrealis	<i>t'óng</i> <i>bòe</i> = <i>mán</i>	V ₁ in SVC ? ?
Obligative	<i>gòe</i>	Sequential particle (?)
Permissive	<i>N</i> -	?

SVC: serial verb construction V₁ / V₂: first / second verb

- (1) a. *kó* *kúmá* *n=t'óng* *kút* *ndòe=kút*.
 maybe/or also 1SG.S=IRR talk SPEC=talking
 'and I will say something.' (FO0JFUAN)
- b. *T'óng* *mòe=kút* *à* *nímòe* / *k'á* *gòe-sék?*
 IRR 1PL.S=talk FOC what HEAD(SG) NOMZ(SG)-body
 'What will we say about this?' (FO0JGOESEM)
- c. *là=s'èm* *k'wál* *gòepé* / *mòe=gòe*
 DIM(SG):GEN=name:GEN talking THAT/WHEN 1PL.S=OBLIG
shín *tóe*.
 do EMPH
 'the little sayings that we should do.' (C01FGHJARAM2)

All TAM particles – independent of their origin – make use of the dependent subject pronouns, e.g., both *t'óng* 'IRR' in (1b) and *gòe* 'OBLIG' in (1c) co-occur with the dependent pronoun *mòe* '1PL' (and not with the corresponding inde-

pendent pronoun *mě̃n* ‘1PL’). Furthermore, all TAM particles occur in the particle slot of nominalized clauses (i.e., the possessor occurs after the particle and the verb, as in 2a and 2b) and consequence clauses (i.e., the consequence clause particle *yì* occurs after the particle and the verb, as in 2c and 2d). This distribution suggests that the TAM particles have lost part of their lexical properties: if they still functioned as verbs, possessor and consequence clause particle would have to occur between the TAM-denoting verb and the main verb (see section 4.4 in chapter 3 and section 4.4 in chapter 8 for nominalized clauses and consequence clauses respectively).

- (2) a. *Gòe-t'óng p'ét mùk puánáng (...)*.
 NOMZ-IRR exit(SG) 3SG.POSS there/yonder
 ‘When it would come out over there (...).’ (D04ANWOSHARAP2)
- b. *yít gòe-gòe tàp mén dip.*
 eye/face NOMZ-OBLIG show.ignorance 1PL.POSS all
 ‘the face that we all should ignore.’ (N01ATIME)
- c. *dé muép t'óng màng gya=hòk yì (...)*.
 SO.THAT 3PL.S:CONS IRR take(SG) performance=DEF CONS
 ‘so that they would sing (...).’ (O04AGYAGOEWAM)
- d. *Dé / mótò gòe hàn yì (...)*.
 SO.THAT car OBLIG climb(SG) CONS
 ‘So that the car should ascend (...).’ (H01CJOS)

Verbal clauses can be marked for any TAM category, and non-verbal clauses can be marked for tense, habitual aspect, focused irrealis modality and negative irrealis modality. That is, these latter categories presumably express a property of the clause rather than of the verb phrase. However, for ease of reference, all TAM categories are discussed together in this chapter. In addition to the formally-marked categories, Goemai employs a verb form that is unmarked for TAM.

This chapter introduces first the unmarked verb (section 2), and then discusses the categories of tense (section 3), aspect (section 4) and modality (section 5). The chapter concludes with a summary (section 6) and a list of attested TAM paradigms (section 7).

2. Unmarked verb

The most common verb form in Goemai is the verb unmarked for TAM. In this case, the subject pronoun – of both set 1 (as *muěp* ‘3PL’ in 3a) and set 2 (as *mõe* ‘1PL’ in 3b) – directly precedes the verb.

- (3) a. *Muěp máng lóe ñd'ùùn t'úksh'i kó*
 3PL.S take(SG) put INSIDE:GEN basket maybe/or
ñd'ùùn tása (...).
 INSIDE:GEN plate
 ‘They pick (it) up (and) put (it) in a basket or in a plate (...).’
 (D04NMUES2)
- b. *Mõe=màng wánònò=hòk gòemé.*
 1PL.S=take(SG) cobra=DEF one
 ‘We took up (the topic of) the one cobra.’ (D04AWO)

The interpretation of this form depends on the lexical aspect of the verb (see chapter 4, section 2.3 for details on lexical aspect). More specifically, all non-stative (i.e., activity, result and inchoative) verbs receive a default past tense interpretation. In the case of activity verbs (as *b'úén* ‘watch’ in 4a) the entire event is construed as a past event. In the case of result verbs (as *là* ‘produce’ in 4b) and inchoative verbs (as *f'yér* ‘become big’ in 4b), the state-change event is construed as completed and as resulting in a present endstate (of being born and being big in 4b). This present endstate, however, is an implicature only: whenever speakers were asked to describe an endstate only – without having witnessed the prior state-change event – they consistently rejected the use of the unmarked result or inchoative verb, and instead shifted to other constructions, e.g., a nominalized structure (as in 4c). Stative verbs, by contrast, receive a default present tense interpretation (as *d'yám* ‘stand’ in 4d). It is cross-linguistically common that unmarked verbs receive different interpretations, depending on their lexical aspect (Bybee 1994; Comrie 1976: 82–84).

- (4) a. *B'úén / yár ñnòe sòsái (...).*
 watch bird LOC.ANAPH well
 ‘(He) watched this bird carefully (...).’ (F99ANTI)
- b. *Muěp lá hèn b'ák / hèn=f'yér.*
 3PL.S produce(SG) 1SG.O here 1SG.S=bec.big(SG)
 ‘They had given birth to me here, (and) I have become big.’
 (C00JMQUEST1)

- c. *ní à gòe-f'ýér.*
 3SG.I FOC NOMZ(SG)-bec.big(SG)
 'he is a big one.' (D00JANIMAL11)
- d. *D'à góe=muáán gòe=yá d'i kó*
 COND 2SGM.S=go(SG) 2SGM.S=catch LOC.ANAPH maybe/or
nd'àsòenòè / t'èng dèèr (...) d'yám d'i
 now tree:GEN sasswood stand(PL) LOC.ANAPH
sòsái ngàm.
 well much/many
 'When you go (and) arrive there even now, very many sass-
 wood trees (...) (still) stand there.' (D04ALUDUUT2)

Recall that Goemai has only very few stative verbs (see chapter 4, section 1.3). Most unmarked verbs therefore receive a past tense interpretation; and speakers explicitly remark that the unmarked verb expresses an event that “is over” But despite its default past (or present) tense interpretations, I do not analyze it as a tense because these interpretations can be cancelled: given the right context, an unmarked non-stative verb can alternatively receive a habitual or generic interpretation (as *s'óe* ‘eat’ and *háb'ál* ‘swell’ in 5a), a stative verb a past interpretation (as *t'wót* ‘sit’ in the first sentence of 6b), and all verbs a future interpretation (in 5b).

- (5) a. *Mòe-gùrùm múk muèp=s'óe s'óe / muép*
 NOMZ(PL)-person 3SG.POSS 3PL.S=eat food 3PL.S:CONS
háb'ál. D'à góe=k'wál gòe-shinî / à
 swell(PL) COND 2SGM.S=talk NOMZ(SG)-today FOC
gòe-d'á góed'áár tóe (...).
 NOMZ(SG)-FUT.CL tomorrow EMPH
 'His people, they eat food, and so they become satisfied. When
 you say (it) of today, (it) will be (the same as) of tomorrow
 (...) (= it happens every day).' (F00AFUAN)
- b. *Góed'áár mòe=kàt.*
 tomorrow 1PL.S=find
 'Tomorrow, we (will) get (it).' (V04ANSEMKWAL2)

In fact, the unmarked verb form is used in all cases of tense neutralization, i.e., it is the default choice once temporal reference is established. For example, in (6a), the narrative is set in the remote past, established by means of the tense

particle *dòk* in the first line; all subsequent utterances then contain unmarked verbs. As such, the unmarked verb is generally used to tell the main story-line of a narrative, while other TAM morphemes are introduced as soon as the temporal sequence is interrupted (as in 6b, where the close past tense particle *d'in* occurs).

- (6) a. *Fuán dòk d'è bì=jí / ñdòe*
 rabbit PAST.REM exist thing=SGM.LOG.SP.POSS CONJ
mòe-gùrùm jí / yàm jí
 NOMZ(PL)-person SGM.LOG.SP.POSS son(SG) SGM.LOG.SP.POSS
nt'i / ñdòe màt jí nàser.
 son.of.rabbit CONJ woman(SG) SGM.LOG.SP.POSS wife.of.rabbit
Nèèn / t'á k'à yíl / díp. S'òe wán.
 hunger fall(SG) HEAD(SG):GEN ground all food lack
Gùrùm díp muèp=táng pè gòe-d'è s'òe (...).
 person all 3PL.S=search place NOMZ-exist food:POSS
 'The rabbit₁ was on his₁ own, (together) with his₁ people, his₁ son *Nt'i* and his₁ wife *Naser*. Hunger fell onto the land, every(where). Food was scarce. The people, all, they searched for a place where (there) is food (...).' (F00AFUAN)
- b. *Muèp t'wót shin nyè-d'wò ñdòe. Nyè*
 3PL.S sit(PL) do matter-debate LOC.ANAPH matter
gòe-d'émèn. D'óng ñt'it. Muèp yúúl p'úát
 NOMZ(SG)-good be.good well 3PL.S rise(PL) exit(PL)
dé-gòe ñ-muèn. Sái fuán / d'in t'óng
 PUR ADVZ-go(PL) then/only rabbit PAST.CL sit(SG)
d'i gòe-t'óór k'óelèng bì gòe-k'wál
 LOC.ANAPH PLACE-flank hear/smell thing NOMZ-talk
muèp / yìn hyámmà.
 3PL.POSS SAY INTERJ
 'They sat (and) had this debate. Truly. (It) was really good. They rose (and) went out to go. Then the rabbit – (who) had earlier sat there by the side (and) had listened to the things they said – (he) said *hyamma*.' (F99DLIT)

For these reasons, the unmarked verb is not analyzed as a tense. Instead, it seems to have aspectual readings that are similar to those coded in the adverb *t'èkgòed'i* 'still/already', which conveys the (present) reading 'still' with stative

verbs (as in 7a), and the (past) reading ‘already’ with non-stative verbs (as in 7b).

- (7) a. *Hár shínî / muèp t'ékgòed'i t'wót d'i.*
 even/until today 3PL.S already/still sit(PL) LOC.ANAPH
 ‘Up to today, they still sit there.’ (D05AMOENYE1)
- b. *T'èkgòed'i / ní shín s'óe / pòe muèp.*
 already/still 3SG.S do food give 3PL.O
 ‘And so already, he has made the food, (and) (he) gave (it to) them.’ (F00JFUAN)

Similarly, the closely related language Mupun uses an unmarked verb form that occurs predominantly in past, present and generic contexts. Frajzyngier (1993: 316–317) suggests that it codes a proposition that is true at all times. This characterization could possibly account for its distribution in Goemai, too. There are some potential counter-examples – its occurrence in future (in 5b above) and irrealis contexts (in 8 below) – but these are rare, and it is much more common to encounter the irrealis particle *t'óng* in such contexts. Possibly, the choice of the unmarked verb form in these contexts is pragmatically marked, conveying an additional nuance of, e.g., certainty that the future or irrealis event is true.

- (8) *nd'àsòe-n-d'é-ñnòe=hòe / hèn=ràng gòépé*
 now-ADVZ-CL:exist-DEM.PROX=exactly 1SG.S=think THAT/WHEN
kó=wúròe / muèp=b'át gòe shín nì.
 any/every=who 3PL.S=gain.expertise(PL) SEQ do 3SG.O
 ‘Nowadays, I think that everybody (amongst) them is able to do it.’
 (D04NROGO)

3. Tense

Goemai has four tenses (based on different degrees of remoteness): three past tenses (*dòk* ‘day before yesterday and any time before’, *dyén* ‘yesterday’, *d'in* ‘earlier today’) and one future tense (*d'á* ‘tomorrow’).

The tenses occur as free particles that follow the verbless clause subject (as in 9). In verbal clauses, nouns and pronouns of set 1 (e.g., in 11a) precede the tense particles, while those of set 2 follow them (e.g., in 11b).

- (9) *ní dók à lóng ái?*
 3SG.I PAST.REM FOC chief INTERJ
 ‘was he a chief, hey?’ (C00ANDIALECT4)

The tense particles can combine with aspect and modality categories: they co-occur with all aspectual structures (e.g., with the progressive in 10a and the habitual in 10b), and with the irrealis morphemes. In the latter case, the past tense particles precede (in 10c) and the future tense particle follows the irrealis morpheme (in 10d).

- (10) a. *Nyè-pé / dók d'è t'óng tàng*
 because-THAT/WHEN PAST.REM exist PROGR search
lóng yì.
 chief PROGR
 ‘Because in the past, (he) was looking for a chieftaincy (title).’
 (D04NSEM5)
- b. *dók là móa=tú t'óng góe s'á.*
 PAST.REM HAB 1PL.S=pound HAB COMIT hand/arm
 ‘in the past, we used to pound (it) with hands.’ (D04NROGO)
- c. *Ásé mé / k'wál=hók dók t'óng nyán (...).*
 INTERJ really talking=DEF PAST.REM IRR be.bad
 ‘Surprise, in the past, the matter would have turned bad (...).’
 (N01ATIME)
- d. *Muèp t'óng d'á kàt muèr muép (...).*
 3PL.S IRR FUT.CL find oil 3PL.POSS
 ‘They will find their oil tomorrow (...).’ (V04ANSEMKWAL2)

Semantically, the tenses 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 (in 11a to 11d). Alternatively, they can locate an event relative to some other reference point that is established by the context (as in 11e). As is cross-linguistically common (Comrie 1985a: 83–101, Dahl 1985: 120–128), this latter usage is rare.

- (11) a. *Dòkndók má / ní dók k'àng*
 before.yesterday also 3SG.S PAST.REM guard/wait
k'à là múk. Dòkndók
 HEAD(SG):GEN child(SG) 3SG.POSS before.yesterday

gòe-ń-d'è-náng / ní dók
 NOMZ(SG)-ADVZ-CL:exist-DEM.DIST 3SG.S PAST.REM
k'àng k'à là múk.
 guard/wait HEAD(SG):GEN child(SG) 3SG.POSS

‘The day before yesterday, too, she waited for her son. The day before that (lit. that (other) day before yesterday), she waited for her son.’ (R00ASVCTAM1)

- b. *Dyèn móe=tángóedé / góe Bákwa.*
 PAST.YEST 1PL.S=start COMIT <ETHNIC.NAME>
 ‘Yesterday, we started (to talk about) the Hausa.’
 (D05AMOENYE2)

- c. *ńd'ùùn sh'áráp=hók / gòepé d'ín*
 INSIDE:GEN fish=DEF THAT/WHEN PAST.CL:CONS
móe=wún ñì (...).
 1PL.S=count 3SG.O
 ‘Among the fish that we enumerated earlier today (...).’
 (D04NWOSHARAP2)

- d. *B'ít lá d'á lín / t'óng muès.*
 day COND FUT.CL dry(SG) sit(SG) beer
 ‘When the day dawns tomorrow, (it) becomes beer.’
 (D04NMUES2)

- e. *dyén k'wál yìn d'ín jí=wúl*
 PAST.YEST talk SAY PAST.CL SGM.LOG.SP.S=arrive
m-b'ítlúng
 LOC-morning

‘(he₁) said yesterday that he₁ had arrived earlier today in the morning (i.e., yesterday from the perspective of the current speaker)’ (A-21/02/00)

While the examples above illustrate the use of tenses to denote a specific absolute point in time, they can also be used to denote unspecific points in time. In this case, *dók* expresses a remote past (in 12a), *d'ín* a recent past (in 12b), and *d'á* an unspecific ‘someday’ (in 12c).

- (12) a. *muèp=dók mààr máár ñt'ít bá.*
 3PL.S=PAST.REM farm farm/farming well NEG
 ‘they didn’t farm much in the past.’ (H99BTARIHI)

- b. *Pè m-Plateau State má d'ín t'óng d'óng.*
 place LOC-<PLACE.NAME> also PAST.CL IRR be.good
 ‘The place of Plateau State, too, would have been good in recent times.’ (H01AJOS)
- c. *T'òng d'á gú=p'úát gù / ná lònɡvìlip /*
 IRR FUT.CL 2PL.S=exit(PL) 2PL.S see paper
gòepé ní yíl ñ-d'ùòe Gòemâi /
 THAT/WHEN 3SG.S write LOC-voice:GEN <ETHNIC.NAME>
ñ-t'át ñdòe=b'it.
 LOC-day:GEN SPEC=day
 ‘You would go out one day (and) see the book that she writes in the language of the Goemai, one day.’ (S99DFAREWELL)

All tenses are optional. As such, they tend to occur only once in a story to anchor the event in time (as in the first sentence of 6a in section 2). If temporal adverbs are present, they can co-occur to emphasize the temporal setting (as in 11a above), but they usually do not co-occur (as in 13a and 13b where the temporal setting is specified by means of adverbs alone, not tenses).

- (13) a. *Fuáán t'áán dòkñdók p'ùùr.*
 rain fall before.yesterday very
 ‘Rain fell a lot the day before yesterday.’ (S04ANYOOR2)
- b. *m̀fèt / góed'áár t'óng kàt góe (...).*
 mosquito tomorrow IRR find 2SGM.O
 ‘The mosquito, tomorrow, (it) will get you (...).’ (D00JANIMAL1)

In fact, all tenses have corresponding temporal adverbs that share some formal similarities: (*ñ*)*dòkñdók* (before yesterday), *nyén* ~ (*ñ*)*dyèndyén* (yesterday), *shinì* (today) and *góed'áár* ~ *t'òed'áár* (tomorrow). Cross-linguistically, it is well attested that absolute tense particles tend to grammaticalize from temporal adverbs (Bybee et al. 1994: 98–104; see also Frajzyngier 1993: 303–317 for similar developments in Mupun). In Goemai, by contrast, the temporal adverbs are clearly derived, and the attested morphology (partial reduplication, prefix *N-*, prefix *góe-*) is used productively to derive adverbs from other word classes (see chapter 5, section 2). Notice also the distribution of tense particles relative to the two sets of pronouns (with set 1 preceding and set two following the particle): as discussed at the beginning of this chapter, such a distribution sug-

gests a verbal origin.⁶⁸ Absolute tenses are also attested in Mupun (Frajzyngier 1993: 303–317), and it is thus possible that their grammaticalization has already started at the level of Proto-Angas-Goemai. However, there are also differences between the two languages: only some of the forms are cognate, all Mupun tenses appear clause-initial, and Mupun has more than one absolute future tense. Some of its future tenses seem to be cognate to Goemai modality particles (to permissive *N-* and focused irrealis *bòe=*). In Goemai, these particles are not analyzed as part of the tense system, as they do not denote absolute tenses but modalities (see section 5); as such, they can co-occur with the tenses in Goemai.

4. Aspect

Goemai distinguishes the following aspectual categories: progressive (section 4.1), habitual (section 4.2), durative (section 4.3), anterior (section 4.4) and resultative (section 4.5). In addition to these grammaticalized forms, speakers employ a number of other strategies to convey aspectual readings.

One common strategy is the use of the coordinate serial verb construction. This construction is not an aspectual construction (see chapter 8, section 3.2), but some aspectual verbs can occur as its first verb. This includes especially the verbs *bá* (SG) ~ *búk* (PL) ‘return’ and *b'ép* ‘do again’, which both express frequentative readings. The verb *bá* (SG) ~ *búk* (PL) ‘return’ goes back to a motion verb that can still occur in present-day Goemai as the only verb of a clause (as in the first clause of 14a). Within the coordinate serial verb construction, it co-occurs predominantly with other motion verbs. Such expressions are then ambiguous between a motion sense (i.e. ‘return’) and an aspectual sense (i.e., ‘do the same again, do the same as somebody else’) (as illustrated by the two free translations in 14b). It is likely that such utterances constituted the bridging contexts that allowed for the development of the aspectual sense. In this second sense, the aspectual verb can even co-occur with its source verb (as in 14c). In present-day Goemai, its distribution has been extended to co-occurring with non-motion verbs, where it invariably conveys the aspectual sense (as in 14d). This second sense has then led to a further grammaticalization of this verb into a conjunction (see chapter 8, section 4.9). Alternatively, speakers use the verb *b'ép* ‘do again’. This verb is only ever attested as the first verb of the coordinate

68. It seems likely that both the tense particles and the temporal adverbs derive from the same source, i.e., from verbs. Alternatively, the temporal adverbs could be derived from the tense particles – but such an analysis would pose problems for the principle of unidirectional change in grammaticalization theory (see, e.g., Heine et al. 1991: 212).

serial verb construction, where it conveys an iterative reading. Speakers choose it to emphasize that an activity is constantly repeated (as in 14e).

- (14) a. *Yìn là jí=bá n-lú /*
 SAY COND SGM.LOG.SP.S=return(SG) LOC-settlement
gùrùm ònòe t'én nyét jì bá.
 person LOC.ANAPH IRR leave SGM.LOG.SP.O NEG
 '(He₁) said that if he₁ returned to the compound, this person would not leave him₁ (in peace).' (D00EWITCH1)
- b. *Muèp búk rwó (...).*
 3PL.S return(PL) enter(PL)
 'They returned (and) entered (...).'
 Or: 'They entered again ~ also (...).' (R01NFROG)
- c. *Bá bá bì=dóe.*
 return(SG) return(SG) thing=SGF.LOG.SP.POSS
 '(She) returned again on her own.' (F99DMATWO)
- d. *Hèn=póe nì wús yít. Hèn=bà kàt*
 1SG.S:CONS=give 3SG.O fire again 1SG.S=return(SG) find
à k'óón.
 FOC bush.cow
 'And so I shot at him again (lit. I gave him fire again). I again encountered the bush cow.' (C01FGHJARAM7)
- e. *T'óng b'ép kàt gók póe gòe (...).*
 IRR do.again find illness give 2SGM.O
 '(It) would again and again find an illness (and) give (it to) you (...).' (D00JANIMAL3)

The coordinate serial verb construction is also used to integrate aspectual verbs that were borrowed from Hausa (as in 15a): *fàrà* ~ *pàrà* and *sómà* 'begin', *gámà* 'finish', *kàrà* 'repeat', *rígá* 'already' and *táb'à* 'taste; have (n)ever done' (sometimes replaced with the Goemai calque *k'yám* 'taste; have (n)ever done'). Older speakers rarely use these borrowed verbs, but they are attested with considerable frequency among younger speakers. There are even indications for their further integration into Goemai. More specifically, they are currently giving rise to a new construction: the use of complements with auxiliary verbs (illustrated in 15b) (see chapter 8, section 4.3).

- (15) a. *yì=pàrà* *yì=mán* *à* *ní*.
 2SGF.S=begin 2SGF.S=know FOC 3SG.I
 ‘you began (and) knew him.’ (N01JTIME)
- b. *Sái* *ní* *fàrà* *gòe-n-wál (...)*.
 then/only 3SG.S begin NOMZ-ADVZ-cry(SG)
 ‘So then he began crying (...).’ (N00EWITCH1)

Goemai also has adverbs that convey aspectual notions, including *d'èmt'éi* ‘already’, *m̀púóe m̀púóe* ‘always’, *̀ǹk'á ̀ǹk'á* ‘continuously’, *t'éi* ‘(not) yet’, *t'èk-gòed'i* ‘still, already’, and *yìt ~ zák-yìt* ‘again’. These forms tend to combine with the unmarked verb form (see the first sentence in 14d for an example; see also 7a and 7b in section 2). Formally, they share all the properties of adverbs (see chapter 5).

Finally, reduplication can be used to convey a frequentative reading. In this case, the main verb is repeated twice, and the two repetitions occur in adverbial function (as in 16a). Alternatively, the first reduplication is replaced by *bá* (SG) ~ *búk* (PL) ‘return’ or *b'ép* ‘do again’ (as in 16b). Both structures are very infrequent.

- (16) a. *kó=m-b'ít* *góenàng* *yóng* *nì* *yòng*
 any/every=LOC-day which(SG) call 3SG.O REDUP.call
yóng
 REDUP.call
 ‘every morning, (he) called him again’ (A-14/02/00)
- b. *kó=m-b'ít* *góenàng* *yóng* *nì* *bá*
 any/every=LOC-day which(SG) call 3SG.O return(SG)
yóng
 REDUP.call
 ‘every morning, (he) called him again’ (A-14/02/00)

4.1. Progressive

The progressive is a discontinuous construction that contains a postural-based locative verb (see chapter 3, section 2.2 for the locative verbs) and the two particles *t'óng* and *yì* (as in 17a). Unlike their lexical source, the locative verbs invariably receive low tones in the progressive construction. The particle *t'óng* can be replaced with either the prefix *N-* (as in 17b) or the particle *d'á ~ lá* (as

in 17c). The three forms reflect diachronic variation and seem to be semantically equivalent: the prefix *N-* is attested almost exclusively in the variety of younger speakers; and the particle *d'á ~ lá* was described in the 1940s (Sirlinger 1942: 68), but only occurs infrequently in present-day Goemai.⁶⁹

- (17) a. *Ní kát là=hòk / t'ò t'óng sáám yì /*
 3SG.S find child(SG)=DEF lie(SG) PROGR sleep PROGR
m̀-̀pìn.
 LOC-hut
 'She found the boy (and) (he) lay sleeping in the hut.'
 (R00DSVCMOTION)
- b. *Muép d'è ñ-vuáng gùrùm yì bá.*
 3PL.S exist PROGR-wash person PROGR NEG
 'They are not insulting anybody.' (C00JMQUEST4)
- c. *làng lá muààn yì.*
 hang/move(SG) PROGR go(SG) PROGR
 '(he) moved around walking.' (D00EWITCH1)

The position of the subject argument varies: nominal and pronominal subjects of set 1 (1SG, 3SG, 3PL, LOG.AD) always precede the locative verb (as in 17a and 17b above). Pronominal subjects of set 2 (2SG, 1PL, 2PL, LOG.SP), by contrast, follow the particles *t'óng* (as in 18a) and *d'á ~ lá*, and precede the prefix *N-* (as in 18b). In all cases, pronouns of set 2 can optionally precede the locative verb as well (as in 18b).

- (18) a. *D'è t'òng móe / b'úát yì.*
 exist PROGR 2PL.S beat PROGR
 'We are playing (it).' (D01JHAND)
- b. *Sái / móe=d'è mòe=ñ-shín*
 then/only 1PL.S=exist 1PL.S=PROGR-do
gòe-ñ-d'è-ñnòe=hòe yì.
 NOMZ(SG)-ADVZ-CL:exist-DEM.PROX=exactly PROGR
 'Then we are doing this thing.' (N00EFRIENDS3)

69. Both alternative morphemes are related to other formatives: *N-* to the permissive prefix (see chapter 7, section 5.3), and *d'á ~ lá* to the conditional particle (see chapter 8, section 4.8).

Whenever a simple verbal clause is marked for progressive aspect, the verb and its direct object(s) occur between the discontinuous particles *t'óng*⁷⁰ and *yì*, and all adverbials (as *n̄pìn* 'in the hut' in 17a above) and particles (as *bá* 'NEG' in 17b above) follow. In the case of a progressive-marked multiclausal construction, only the first verb (and its object(s)) precedes the particle *yì*, while all subsequent verbs follow (as the verb in the purpose clause in 19a). And in the case of serial verb constructions – excepting the deictic serial verb construction – all subsequent verbs are introduced by the irrealis particle *t'óng*: in (19b), the particle *t'óng* is repeated between the two verb phrases of the coordinate serial construction (*wúl* 'arrive' and *dóe k'óeréng* 'measure here'), but not between the two verbs of the deictic serial construction (*dóe* 'come' and *k'óeréng* 'measure') (see chapter 8, section 3 on serialization).

- (19) a. *muép lèng t'óng muèn yì [dé-gòe*
 3PL.S hang/move(PL) PROGR go(PL) PROGR PUR
*n̄-tàng nóemuàt=hòk]*_{PURPOSE}.
 ADVZ-search frog=DEF
 'they move around walking to look for the frog.' (R00AFROG)
- b. *muép d'è t'óng wúl yì t'óng dóe*
 3PL.S exist PROGR arrive PROGR IRR come
k'óeréng n̄i.
 measure(PL) 3SG.O
 'they are (repeatedly) arriving (and) measuring them here.'
 (D04NLOETUK)

If the direct object is focused, the particle *yì* is omitted (as in 20). Its omission is probably triggered by the fact that the focus particle confers an adverbial function on the focused element (see chapter 6, section 1.2), i.e., a focused constituent does not occur in a core argument function. However, it is not clear why the particle is omitted altogether (see also chapter 8, section 4.4, for further discussion).

70. This section focuses on the particle *t'óng*, but unless stated otherwise, the same argument applies to the two alternative morphemes.

- (20) *yìn fùán làng t'óng shìn à NÙNGYÍT*
 SAY rabbit hang/move(SG) PROGR do FOC trick
ndòe dwén.
 CONJ PL.LOG.SP.I
 '(he₁) said the rabbit moves playing A TRICK on them₁.' (FOOCFUAN)

The progressive is negated by means of the sentence-final negation particle. By default, it negates the whole event (as in 21a). Given the right context, it can alternatively negate either the locative verb phrase or the main verb phrase independently. In this case, the negated element tends to be formally marked, e.g., through a cognate adverb (as in 21b) or a focus particle (as in 21c). In addition, the negated element carries contrastive stress.

- (21) a. *t'òng t'óng yil lònghìlip yì bá*
 sit(SG) PROGR write paper PROGR NEG
 '(she) does not sit writing a letter (i.e., she is not writing)' (A-22/06/01)
- b. *màt=hòk t'òng n-t'óng t'óng yil*
 woman(SG)=DEF sit(SG) ADVZ-sit(SG) PROGR write
lònghìlip yì bá / d'yém à n-d'yém
 paper PROGR NEG stand(SG) FOC ADVZ-stand(SG)
 'the woman does not sit sitting writing a letter, (but) stands standing (writing a letter)' (A-22/06/01)
- c. *màt=hòk t'òng t'óng yil à lònghìlip*
 woman(SG)=DEF sit(SG) PROGR write FOC paper
bá / t'òng t'óng b'uén à hòtó
 NEG sit(SG) PROGR watch FOC photo
 'the woman does not sit writing a letter, (but she) sits looking at a photo' (A-22/06/01)

The progressive construction can be marked for either past or future tense (e.g., for remote past in 22a), and for modality (e.g., for irrealis modality in 22b). The tense or modal particle has scope over the whole construction, and it is not possible to mark the locative verb separately or differently from the main verb.

- (22) a. *gòepé hén=dók d'è t'óng ráng*
 THAT/WHEN 1SG.S:CONS=PAST.REM exist PROGR think
yì k'à nyè (...).
 PROGR HEAD(SG):GEN matter
 'when I was thinking about (...).' (C00ANDIALECT5)
- b. *muèp t'óng lèng d'i t'óng yír*
 3PL.S IRR hang/move(PL) LOC.ANAPH PROGR turn
yì sèk wàndó=hók.
 PROGR BODY:GEN trousers=DEF
 'they would move there turning around in the trousers.'
 (D00JANIMAL12)

The locative verbs constitute an obligatory element of the progressive construction, but they have retained most of their verbal properties. That is, they have not (yet) developed into aspectual auxiliaries or particles, as has been attested in many comparable grammaticalization processes (Bybee et al. 1994: 127–133; Heine and Reh 1984: 104–105). Being verbs, they occur in the verb slot of, e.g., nominalized clauses, i.e., preceding the possessor (as in 23a) – if they were particles, the possessor would have followed the main verb (i.e., *k'wál* 'talk' in 23a) (see chapter 3, section 4.4 for clausal nominalization). Like full verbs, the locative verbs can also introduce their own locative and temporal adverbials: such adverbials can thus occur in two different positions (illustrated with the locative adverbials in 23b and 23c).

- (23) a. *Pé / màt / t'óng b'óót gòe*
 THAT/WHEN woman(SG) IRR gain.expertise(SG) SEQ
màn bì [góe-d'è muép t'óng k'wál yì]_{NOMZ}
 know thing NOMZ-exist 3PL.POSS PROGR talk PROGR
bá.
 NEG
 'Where the woman would not be able to know the things that they are talking about.' (D05ADUOEDAAS)
- b. *hààn t'ò k'à gádó t'óng sáám yì.*
 climb(SG) lie(SG) HEAD(SG) bed PROGR sleep PROGR
 '(he) climbed (and) lay on the bed sleeping.' (R00ASVCTAM2)

- c. *bá dóe t'òng t'óng sáám yì k'à*
 return(SG) come sit(SG) PROGR sleep PROGR HEAD(SG)
sh'èp tòeb'áp.
 wood:GEN drum
 '(he) returned (and) sat here sleeping on the drum.' (TIEMSAN
 1999: 11)

Locative verbs also show some prosodic independence from the unit containing the particle *t'óng*, the main verb phrase and the particle *yì*. In particular, intonation breaks are frequently observed between the locative verb and *t'óng* (as in 24a). And when speakers repair the choice of an inappropriate main verb, they always repeat *t'óng* together with the main verb (as in 24b), but they never repeat the locative verb.

- (24) a. *Yír bá dóe d'yèm / t'óng b'uén ndá*
 turn return(SG) come stand(SG) PROGR watch father
múk yì (...).
 3SG.POSS PROGR
 '(He) turned (and) returned (and) stood here looking at his father (...).' (F00CAAS)
- b. *Lókàshí pé b'èt-lá d'è t'óng shín-- /*
 time THAT/WHEN belly-pain exist PROGR do
t'óng dám mèn yì (...).
 PROGR spoil 1PL.O PROGR
 'At the time when maliciousness (lit. belly pain) is doing--, troubling us (...).' (D01ATREE)

Despite their relative independence, the two verb phrases of the progressive construction constitute a unit with respect to negation (see the discussion of example 21). Furthermore, the fact that adverbials can follow the whole construction suggests some unity: in other multiverb structures, locative adverbials would have to follow the locative verbs directly. Notice also that locative adverbials are obligatory with locative verbs in simple clauses – but not with locative verbs in progressive clauses. These observations indicate that even though the locative verbs have retained their status as full verbs, they have nevertheless lost part of their original locative semantics.

The progressive construction codes an event that is on-going at reference time, and its overall interpretation depends on the lexical aspect of the main verb. Typically, it occurs with activity and durative result verbs, where it ex-

presses an on-going activity (as in 25a). Similarly, when it occurs with inchoative verbs, it expresses an on-going change of state (as in 25b). It occasionally occurs with punctual result verbs, in which case the utterance receives an iterative reading (as in 25c). And it occurs with stative verbs, receiving a habitual interpretation (as in 25d). This habitual reading is available for other verbs as well, but it then needs to be coerced through the context (e.g., by means of the adverb *m̀p̀uóe m̀p̀uóe* ‘always’ in 34b in section 4.2) (see chapter 4, section 2.3 for details on lexical aspect).

- (25) a. *Dók là góe=p'ét / t'òng góe=kát*
 PAST.REM COND 2SGM.S=exit(SG) IRR 2SGM.S=find
jáp / d'è t'óng shin shél yì.
 children(PL) exist PROGR do game PROGR
 ‘When you went out in the past, you would have found children playing games.’ (D00AKWANDE)
- b. *T'èng=hók d'è t'óng t'èng yì b'è.*
 tree=DEF exist PROGR bec.tall PROGR EMPH
 ‘The plant is really growing tall.’ (said of a slowly growing animated plant) (B01ADPPROG79)
- c. *p'yáram ués / k'áu k'áu k'áu. Gòpé ní*
 break(PL) bone <QUOTE> THAT/WHEN 3SG.S
k'óeléng d'ùòe ués góe-d'è t'óng p'yáram
 hear/smell voice:GEN bone NOMZ-exist PROGR break(PL)
yì (...).
 PROGR
 ‘(he₁) broke the bone (repeatedly), *k'au k'au k'au*. When he₂ heard the sound of the bone that was breaking (repeatedly) (...).’ (F00CAAS)
- d. *Á bì gòe-sá tóe músú d'è ñ-t'ó*
 FOC thing NOMZ-make EMPH cat exist PROGR-lie(SG)
yì ñ-s'ét bá.
 PROGR LOC-bush NEG
 ‘(This) is the reason why the cat never lies in the bush.’
 (F00JMUSU)

The progressive construction is preferably used with animate referents, but there are also some examples of inanimate referents (as in 25b). This preference for animate referents is probably a consequence of its function: since in-

animate referents rarely carry out an on-going activity or state change, they only rarely occur in the progressive construction.

In all cases, the locative verbs add semantic information about the position of the referent engaged in the main event. As in their simple verbal use (see section 2.2 in chapter 3, and section 1.2 in chapter 8), they can focus on its current position. For example, the speaker in (26a) uses different locative verbs with the same referent as it changes position over time. Alternatively, the locative verbs can express the referent's canonical position. For example, in (26b) water is portrayed as 'lying' (i.e., in the canonical position for masses), even though it is currently moving. The first use is salient in all contexts where speakers have witnessed the event. Other genres (e.g., narrated folktales or historical accounts), by contrast, tend to generate the second use. In addition, a third use is attested where locative verbs collocate with typical activities: e.g., eating activities collocate with *t'óng* 'sit' – even though the referent may be in a different position (e.g., in a lying position, as illustrated in 26c). Given the importance of locative verbs to the overall meaning of the progressive construction, it is not surprising that speakers pay attention to the postural information, and, if necessary, correct it (as in 26d).

- (26) a. *sáí* *nà / áás* *ínòè* *làng* *t'óng*
 then/only see dog LOC.ANAPH hang/move(SG) PROGR
muààn *yì. (...)* *Dóe* *d'yèm* *t'óng* *kúk* *pè*
 go(SG) PROGR come stand(SG) PROGR bark place
yì (...).
 PROGR
 'then (he) saw this dog moving around walking. (...) (It) stood here barking at the place (...).' (FOOCAAS)
- b. *D'ù* *hàngòèd'è* *t'ò* *b'ák* *t'óng* *sù*
 much/many water lie(SG) here PROGR run(SG)
yì *n-yíl.*
 PROGR LOC-ground
 'Much water lies here running on the ground.' (H01AJOS)
- c. *Góebóór=hók* *t'ó* *n-yíl. (...)* *T'òng* *t'óng* *s'óe*
 hedgehog=DEF lie(SG) LOC-ground sit(SG) PROGR eat
bì *yì.*
 thing PROGR
 'The hedgehog lies on the ground. (...) (It) sits eating something.' (D-13/01/00)

- d. *Muép d'è t'óng-- / t'wòt t'óng shin sh'it yì*
 3PL.S exist PROGR sit(PL) PROGR do work PROGR
b'ák m-pè ñ-d'è-ñnòe=hòe.
 here LOC-place ADVZ-CL:exist-DEM.PROX=exactly
 'They are--, sit doing work here in this place.' (H01AJOS)

In addition to their postural semantics, two of the locative verbs convey further aspectual nuances when occurring in the progressive construction. The verb *láng* 'hang/move' conveys the extended sense of the agent of the action deliberately keeping the action going (as in 27a). And the verb (*ñ*)*d'è* 'exist' replaces all other locative verbs whenever the speaker does not intend reference to a specific quantifiable number of entities in the real world, but makes a general statement about the entity in question (as in 27b).

- (27) a. *Là góe=k'wál gòe-shinî / à gòe-d'á*
 COND 2SGM.S=talk NOMZ(SG)-today FOC NOMZ(SG)-FUT.CL
góed'áár tóe. Bì gòe-làng k'úr
 tomorrow EMPH thing NOMZ-hang/move(SG) tortoise:POSS
tóe t'óng shin yì ñdòe muép.
 EMPH PROGR do PROGR CONJ 3PL.I
 'When you say (it) of today, (it) will be (the same as) of tomorrow. (It is) the thing that the tortoise kept on doing to them.'
 (F00AFUAN)
- b. *T'òng góe=ná gòe-tép / t'òng góe=ná*
 IRR 2SGM.S=see NOMZ(SG)-bec.black IRR 2SGM.S=see
gòe-pyá. (...) D'èmdè gùrùm d'è d'í /
 NOMZ(SG)-bec.white remainder:GEN person exist LOC.ANAPH
muép d'è t'óng s'óe s'óe yì. D'èmdè
 3PL.S exist PROGR eat food PROGR remainder:GEN
gùrùm muép=góe s'óe bá.
 person 3PL.S=COMIT food NEG
 'You will see bad (times), you will see good (times). (...)
 Some people are there, they eat food.
 Some people are (there) without food..' (N01ATIME)

Diachronically, the progressive construction has developed from a complex structure consisting of a main locative clause plus a consequence clause marked for irrealis modality. It is well known that progressive structures grammatical-

ize from locative expressions (Anderson 1973; Austin 1998; Bybee et al. 1994: 127–133; Comrie 1976: 98–106, 129–130; Heine 1997b: 195–207; Heine and Reh 1984: 122–126; Kuteva 1999; J. Lyons 1977: 718–724; J. Newman and Rice 2004; Reid 2002). Commonly, this process involves a locative copula, an adpositional element and a nominalized verb. But it is also known that “[p]ostural and durative verbs form another important (...) source of progressive / incompletive aspect markers” (Heine and Reh 1984: 124).

The formal properties of the Goemai progressive construction suggest that it developed from the type of complex clause illustrated in (28a): it consists of a main clause (in this case, a coordinate serial verb construction with the second verb *láng* ‘hang/move’ used transitively) and a consequence clause (containing the irrealis particle *t’óng* and the consequence clause particle *yì*). Notice the superficial similarity to (28b), which illustrates the present-day progressive construction and contains the verb *láng* ‘hang/move’ (used intransitively) and the progressive particles *t’óng* and *yì*.

- (28) a. *Màng d’èm láng à n-k’á*
 take(SG) this.time hang/move(SG) FOC LOC-head(SG):GEN
múk t’óng b’uát yì.
 3SG.POSS IRR beat CONS
 ‘This time, (he) took (it) (and) put (it) on his head, so that (he) would play (it).’ (R01NSTAGE)
- b. *áás ñnòe làng t’óng muààn yì.*
 dog LOC.ANAPH hang/move(SG) PROGR go(SG) PROGR
 ‘this dog moves around walking.’ (F00CAAS)

In addition to their superficial similarity, clauses such as (28a) share a number of formal properties with clauses such as (28b): pronouns of set 2 follow both the irrealis particle *t’óng* and the progressive particle *t’óng*; only core arguments precede both the consequence clause particle *yì* and the progressive particle *yì*; and if the direct object is focused, both the consequence clause particle *yì* and the progressive particle *yì* are omitted. But there are also differences: the subject of the consequence clause can differ from that of the main clause, but the progressive construction makes a predication over one subject only; the scope of negation is over the consequence clause only, but over the entire progressive construction; and a locative adverbial has to follow the verb that introduces it in the consequence clause, but can occur in any position in the progressive construction (see chapter 8, section 4.4 for details on consequence clauses). Given these differences, it is likely that a syntactic reanalysis has taken place that integrated the two verbs of the progressive construction into a

tighter unit. This syntactic reanalysis probably co-occurred with a semantic reinterpretation of the type illustrated in (29) below: the original structure expressed two overlapping events (a posture and an intention), and this temporal overlap has probably given rise to the development of a progressive interpretation. That is, a development occurred from ‘be in a position with the intention to do X’ to ‘be in a position and do X’ Notice that, cross-linguistically, purposive structures often constitute the sources for further grammaticalization processes of this kind (Hopper and Traugott 1993: 83ff.).

- (29) *t'ò t'óng sáám yì*
 lie(SG) IRR sleep CONS
 PROGR PROGR

Consequence interpretation: ‘(he) lies so that (he) would sleep’

Progressive interpretation: ‘(he) lies sleeping’

(CONSTRUCTED EXAMPLE)

The progressive construction is the most common structure for expressing progressive semantics, but there are two alternative structures available (and both of them contain a locative verb).

First, a structure containing a locative verb plus the spatial nominal *k'à* ‘HEAD’ expresses the progressive-like reading of ‘busily doing something at reference time’ This structure can co-occur with the progressive construction (as in 30a), but it can also occur with a participle (as in 30b).

- (30) a. *T'ò k'à móló t'óng b'úát yì.*
 lie(SG) HEAD(SG):GEN guitar PROGR beat PROGR
 ‘(He) is busy playing the guitar.’ (lit. he lies on the guitar playing) (B00APROGLA15)
- b. *Dóe kàt / muèp / t'wót k'à s'óe*
 come find 3PL.S sit(PL) HEAD(SG):GEN food
gòe-n-s'óe.
 NOMZ-ADVZ-eat
 ‘(He) found (them) here, (and) they were busy eating (lit. they sat on the food eating).’ (F00CFUAN)

Second, the coordinate serial verb construction with a locative verb in first position is used to convey a progressive-like reading (as in 31). This reading, however, is not coded in the semantics of the construction, but is an implicature that derives from the lexical aspect of the participating verbs (see chapter 8,

section 3.2 for details). Although it is well known that serial verb constructions can grammaticalize into progressive structures (Crowley 1987: 42; Durie 1997: 336; Foley and Olson 1985: 40–42; Lord 1993: 9–30; Svorou 1994: 110–113), the serial verb construction below is not the source construction for the Goemai progressive.

- (31) *Muèp léng tàng fuán.*
 3PL.S hang/move(PL) search rabbit
 ‘They moved around (and) searched for the rabbit.’ (F00CFUAN)

4.2. Habitual

The habitual is a discontinuous construction that is formed by means of the discontinuous particles *d'á ~ lá* and *t'óng*. The particles *d'á ~ lá* occur in free variation in the corpus, but speakers maintain that they represent a dialectal alternation (*d'á* belonging to the K'wo dialect, and *lá* to the Duut and Dorok dialects).

Formally, the habitual construction shows many similarities to the progressive construction. As in the progressive construction, the position of subject arguments depends on the pronoun set: nominal and pronominal subjects of set 1 (1SG, 3SG, 3PL, LOG.AD) precede the particle *d'á ~ lá* (as *muèp* ‘3PL’ in 32a), while pronominal subjects of set 2 (2SG, 1PL, 2PL, LOG.SP) follow (as *mõe* ‘1PL’ in 32b). The verb and its direct object(s) precede the final particle *t'óng*, and all adverbials follow it (as in 32a and 32b). In the case of multiclausal structures, all subsequent verbs follow the particle *t'óng* (as the verb in the purpose clause in 32c). And in the case of serial verb constructions (excepting the deictic serial construction), each subsequent verb is marked by means of the irrealis particle *t'óng* (as in 32d).

- (32) a. *Á gyà gòepé / muèp dók d'á*
 FOC performance THAT/WHEN 3PL.S PAST.REM HAB
máráp t'óng góe shímt'úk / n-gòedé.
 step(PL) HAB COMIT loincloth LOC-bottom
 ‘(It) is a dance that they used to dance with loincloths around the bottom.’ (004AKANGRANG1)
- b. *là móa=yóng nì t'óng (...).*
 HAB 1PL.S=call 3SG.O HAB
 ‘we used to say it (...).’ (H99BTARIHI)

- c. *Muèp lá yíl gòe-ń̀nòe t'óng* [dè-gòe
 3PL.S HAB write NOMZ(SG)-LOC.ANAPH HAB PUR
ń̀-nyàp / pè m-pìn ń̀-ń̀l]_{PURPOSE}
 ADVZ-prepare place LOC-hut COMMIT-3SG.I
 ‘They used to decorate this one to beautify the place in the hut
 with it.’ (C01ANHAND)
- d. *muèp lá t'ék t'óng t'óng t'wót k'à*
 3PL.S HAB fall(PL) HAB IRR sit(PL) HEAD(SG):GEN
gádó
 bed
 ‘they used to sit down on the bed (lit. they used to fall and
 would sit on the bed)’ (A-13/06/01)

Unlike the progressive construction, the habitual construction not only marks verbal clauses, but also non-verbal clauses (as in 33a); and the negation particle has unambiguous scope over the whole construction (as in 33b). Notice also that there is an alternative – less common – way to negate the habitual construction: the particle *t'óng* is replaced by the adverb *t'éi* ‘yet’ (as in 33c).

- (33) a. *Pìn ń̀nòe d'á à gòe-b'áng t'óng=à?*
 hut LOC.ANAPH HAB FOC NOMZ(SG)-bec.red HAB=INTERR
 ‘This hut used to be a red one, right?’ (Q99ATQ70)
- b. *Gòe-dók pòeb'ít / múúr dók lá*
 NOMZ(SG)-past remote thief/stealing PAST.REM HAB
yén t'óng bá.
 bec.plenty HAB NEG
 ‘In the old old times, thieves weren’t plenty.’ (D01CLU)
- c. *Muèp d'á t'óerép t'éi ń̀dòe=pè gòe-k'ém*
 3PL.S HAB lie(PL) yet SPEC=place NOMZ(SG)-different
bá (...).
 NEG
 ‘They never lay any place else (...).’ (R00ATAMYIN2)

The habitual construction is used for any event that is characteristic for an extended period of time, taking place habitually or repeatedly. In all cases, the habitual construction receives a past tense interpretation (as in 34a). To convey

other interpretations, speakers resort to the progressive construction (as in 34b) or to the unmarked verb form (see example 5a in section 2).

- (34) a. *Pè gòpé muép lá táp muès t'óng /*
 place THAT/WHEN 3PL.S:CONS HAB brew beer HAB
d'è tóe dàkd'ùòe lú.
 exist EMPH MIDDLE:GEN settlement
 'The place where they used to brew beer is there in the middle
 of the compound.' (D01ALU)
- b. *Wò=hòk kúmá d'è t'óng t'án mòemâi yì /*
 snake=DEF also exist PROGR pursue people PROGR
m̀puóe-m̀puóe.
 REDUP.always
 'And the snake is pursuing the people, always.' (F99DMATWO)

It is likely that the habitual construction developed from the conditional construction (see chapter 8, section 4.8 for the conditional): the conditional clause contains the particle *d'á ~ lá* 'if/when', and the apodosis clause frequently contains the irrealis particle *t'óng*. Out of context, an utterance such as (35) could be interpreted as instantiating either the conditional construction or the habitual construction (as illustrated by the two translations). The similarities between the two constructions are not only superficial: the alternation *d' ~ l* is not otherwise attested in Goemai; the position of set 1 and set 2 pronouns is identical in both constructions; and both can occur with non-verbal clauses. Notice also that the two constructions cannot co-occur – which again points to their common origin. If this scenario holds true, the second particle *t'óng* developed from the irrealis particle *t'óng*, which in turn developed from the verb *t'óng* 'sit' (see section 5.1).⁷¹

71. Bybee et al. (1994: 151–160), Heine and Kuteva (2002: 278–279) and J. Newman (2002a) list the verb 'sit' as a possible lexical source for habitual morphemes. Notice, however, that the Goemai habitual was derived from the irrealis particle – and not directly from the verb 'sit'. The closely-related language Mupun has an auxiliary *tóng* 'always' that is formally and semantically similar to the Goemai form. According to Frajzyngier (1993: 336), it derives directly from the verb *tóng* 'sit, live, rest'. Since its syntactic position (i.e., preceding the verb) differs from that of the corresponding form in Goemai (i.e., following the verb), it is likely that the habitual markers in the two languages are independent innovations originating from similar sources.

- (35) *là* *góe=p'ét /* *t'òng* *góe=kát* *jáp (...).*
 COND 2SGM.S=exit(SG) IRR 2SGM.S=find children(PL)
 HAB HAB
 Conditional: 'if you go out, you will find children (...)'
 Habitual: 'you always went out, you found children (...).'
- (D00AKWANDE)

Despite their diachronic relationship, the habitual and conditional constructions show formal differences in present-day Goemai. Whenever a serial verb construction is marked for habitual aspect, the first verb receives full habitual marking, and all subsequent verbs are introduced with the irrealis particle *t'òng* (as in 32d above); in the case of conditional marking, by contrast, the serial verb is only marked once with the conditional particle *d'á ~ lá* (as in 36a). Furthermore, all adverbials in the habitual construction obligatorily follow the particle *t'òng* (as in 32a above); but both clauses of the conditional construction can introduce their own adverbials (as in 36b). Finally, they differ in the scope of negation: the negation particle has scope over the whole habitual construction (as in 33b above); but can independently negate either of the two clauses in the conditional construction.

- (36) a. *hèn=ràng* *gòepé* *kó* *là*
 1SG.S=think THAT/WHEN maybe/or COND
móe=yók *mòe=rwó* *n-lú /* *t'òng*
 1PL.S=return.home(PL) 1PL.S=enter(PL) LOC-settlement IRR
móe=yóng *mòe-gùrùm* *mén (...).*
 1PL.S=call NOMZ(PL)-person 1PL.POSS
 'I think that when we maybe return home (and) enter into the compound, we will call our people (...).' (C00ANYOUTH3)
- b. *Là* *góe=d'áláng* *d'ì /* *t'òng* *góe=rú*
 COND 2SGM.S=pass(SG) LOC.ANAPH IRR 2SGM.S=enter(SG)
gòe=kát *Kàfànshán* *d'ì*
 2SGM.S=find <PLACE.NAME> LOC.ANAPH
 'If you pass there, you will enter (and) see Kafanchan there'
 (H01AJOS)

The three properties above suggest that, unlike the conditional construction, the habitual construction is a monoclausal structure. In the course of its development from the biclausal conditional construction, a reanalysis of the clause boundaries must have taken place: the particle *t'òng* was reanalyzed as part of

the first clause, the apodosis clause was omitted, and adverbials from the conditional clause were moved outside of the construction.

4.3. Durative

The durative is formed by means of the particle *yì*. All nominal and pronominal subject arguments immediately precede this particle, while the verb phrase follows it (as in 37a). It can co-occur with the tense particles (e.g., with the remote past tense particle *dòk* in 37b), and with the irrealis particle *t'óng* (as in 37c). It can further occur in questions and negative statements (as in 37d).

- (37) a. *hùòe óerém góe / yì t'óerép à d'ì*
 seed:GEN bean 2SGM.POSS DUR lie(PL) FOC LOC.ANAPH
k'à tébùl / (...). Muèp d'à t'óerép t'èi
 HEAD(SG):GEN table 3PL.S HAB lie(PL) yet
ndòe=pè gòe-k'ém bá (...).
 SPEC=place NOMZ(SG)-different NEG
 'your beans are lying on the table (...). They never lay any
 place else (...).' (R00ATAMYIN2)
- b. *Dàkd'ùòe pìn múk / ndòe pìn T. / mè*
 MIDDLE:GEN hut 3SG.POSS CONJ hut:GEN <NAME> barn
dók yì láng d'ì m-pè=hòk.
 PAST.REM DUR hang/move(SG) LOC.ANAPH LOC-place=DEF
 'Between her hut and T.'s hut, a barn was hanging there in the
 place.' (D01ALU)
- c. *fitilà=hòk t'óng yì láng d'ì sèk*
 lamp=DEF IRR DUR hang/move(SG) LOC.ANAPH BODY:GEN
gák
 wall
 'the lamp would be hanging there at the wall.' (A-04/07/01)
- d. *Yìn / fitilà jí / yí d'è nnàng? (...)*
 SAY lamp SGM.LOG.SP.POSS DUR exist where
Nyè-pé / táb'à t'èi yì láng
 because-THAT/WHEN do.ever/never yet DUR hang/move(SG)

ńdòe=pè gòe-k'ém bá.
 SPEC=place NOMZ(SG)-different NEG

‘(He₁) said, his₁ lamp is where? (...) Because (it) has never hung any place else.’ (R00ATAMYIN2; A-04/07/01)

The marking of durative aspect is restricted to locative verbs (see chapter 3, section 2.2). More specifically, it is restricted to all constructions that employ locative verbs to express a static locative relation: the locative construction (in 37a to 37d above), most serial verb constructions (as the serial verbs *p'úát d'yám* ‘exit (and) stand’ in 38) and the progressive construction (as the progressive clause *d'yám t'óng pil muèp yi* ‘stand watching them’ in 38). When locative verbs occur in a non-stative context, i.e., in the inchoative serial verb construction, durative marking is ungrammatical (see also chapter 8, section 3.3). Notice that the particle cannot occur with any other verb: neither with the transitive counterparts of the locative verbs (such as *twáám* ‘cause standing’), nor with any stative non-locative verb.

(38) *ńdòe=màt ńdòe ńdòe=mìs / muèp p'úát yi*
 SPEC=woman(SG) CONJ SPEC=man(SG) 3PL.S exit(PL) DUR
d'yám t'óng pil muèp yi.
 stand(PL) PROGR watch 3PL.O PROGR

‘A woman and a man, they came out (and after that) were standing (continuously) watching them.’ (R01NSTAGE)

Durative marking expresses that, for a specific time-interval, a referent continues to be located in a place. As such, it is often used to describe the spatial layout of settlements (as in 37b above), but can be used for any locative relation that is construed as continuous. For example, as indicated by the second sentence of (37a) above, the protagonist talks about the continuous location of objects in specific places.

Given its semantics, the restriction to stative contexts is to be expected: duratives mark continuous, temporally-unstructured, events; and statives are continuous by definition (Comrie 1976: 41–51; Frawley 1992: 149, 306–310). But its restriction to the locative context is unexpected. This restriction possibly results from a diachronic development that originated in the consequence-cum-progressive particle *yi* (see chapter 8, section 4.4 for consequence clauses; see section 4.1 for the progressive). Semantically, a connection between the durative and progressive particles is conceivable, as both convey a notion of unboundedness (and the progressive particle itself has been grammaticalized from the consequence clause particle). Syntactically, however, such a development is

not immediately obvious, as the particles occur in different positions: the durative particle precedes the verb, while the other two particles follow it – the durative and consequence particles can even co-occur within the same clause (as in 39a). In fact, Goemai speakers consider the durative particle to be different from the other two, and they explicitly base their argumentation on their different syntactic positions. It is nevertheless possible that the durative particle developed from the other two. In multiverb clauses, these two particles always follow the first verb and precede the second. Since locative verbs frequently occur as the second verb in such clauses (see especially chapter 8, section 3), they often occur following these particles (as in 39b). In this position, the particle *yì* could have been reanalyzed as the durative particle. And, in a further development, it then occurred preceding the verb in a simple verbal clause.

- (39) a. *Kwálbá=hók k'óón n-k'óón*
 bottle=DEF bec.face.down(SG) ADVZ-bec.face.down(SG)
yì d'yém yì k'à tébùl.
 DUR stand(SG) CONS HEAD(SG):GEN table
 'The bottle is face down so that it is standing on the table.'
 (Q01APROG1.33)
- b. *Rú d'èm wá yà n-gòedè*
 enter(SG) this.time return.home(SG) catch LOC-bottom:GEN
hòòl gádò núún múk góe
 hollow:GEN bed:GEN mother 3SG.POSS OBLIG:CONS
t'á yì t'ó.
 fall(SG) CONS lie(SG)
 '(He) entered this time (and) returned home (and) arrived at the hollow of his mother's bed, so that (he) should lie down.'
 (F99OGOELONG)

The durative particle has probably given rise to another construction: in combination with the conditional particle *d'á ~ lá*, it codes the temporal overlap between two events (in 40). This construction is not restricted to locative verbs, and any verb can occur in it.

- (40) *yì d'á màng gyà yì d'á màt*
 DUR COND take(SG) performance DUR COND step(SG)
 'while (he) is singing, (he) is dancing (lit. when (he) is singing, when (he) is dancing)' (A-28/12/99)

4.4. Anterior

The anterior is formed by means of the particle *lát*. This particle occurs at the end of a verbal clause, following the verb, its arguments and adverbials (as in 41a to 41d). Both sets of subject pronouns – set 1 (as *muěp* ‘3PL’ in 41a and 41b) and set 2 (as *gũ* ‘2PL’ in 41c) – precede the verb. Optionally, set 2 pronouns can be repeated preceding the particle *lát* (as *gũ* ‘2PL’ in 41d).

- (41) a. *Muěp lá s'wà hààm lát / muěp yá wàkáám.*
 3PL.S COND drink water ANT 3PL.S catch way
 ‘When they have finished drinking the water, they take to the road.’ (D04CSHITBIT)
- b. *Muěp d'è d'i lát. Mát t'óng*
 3PL.S exist LOC.ANAPH ANT woman(SG) sit(SG)
mát.
 woman(SG)
 ‘They really are there. The woman has become a wife.’
 (C00ANDIALECT6)
- c. *Là gú=fér gyélgyéł ñ-d'è-ñnòè*
 COND 2PL.S=weed REDUP:quick ADVZ-CL:exist-DEM.PROX
lát (...).
 ANT
 ‘When you have finished weeding (it) this quickly, (...).’
 (D04ALUUNPAS3)
- d. *D'à gú=póe k'aràm gù=lát / tó /*
 COND 2PL.S=give mat 2PL.S=ANT okay
gù=lèng d'ém gù=shín tàl yì.
 2PL.S=hang/move(PL) this.time 2PL.S:CONS=do greeting CONS
 ‘When you have finished giving away the mat, okay, you now move around and do the greeting.’ (C00ANDIALECT5)

The anterior particle *lát* is used to mark an event prior and relevant to the situation at reference time, indicating that this prior event has ended. As such, it predominantly occurs in complex sentences to convey a temporal order (as in 41a, 41c and 41d). But notice that it can occur with any verb, including stative verbs. In this case, however, it loses its anterior semantics and instead emphasizes the current state-of-affairs (as in 41b above).

It is likely that the anterior particle grammaticalized from the verb *lát* ‘finish’, which still occurs as a full verb in present-day Goemai (as in 42). The source structure was probably this verb *lát* occurring as the second verb of the coordinate serial verb construction: the clause-final position of *lát* as well as the possible double marking of set 2 pronouns (as in 41d above) indicate such an origin. In a further development, *lát* must have lost some of its verbal properties, and now allows subject pronouns of set 2 to occur before the main verb only (as in 41c above) – this distribution would not have been possible in the original serial structure (see chapter 8, section 3).

- (42) *Mán t'òng gòe=lát à m-b'it gòe-gòemé bá.*
 PROH IRR 2SGM.S=finish FOC LOC-day NOMZ(SG)-one NEG
 ‘You should not intend to finish (it) on the same day.’
 (D04ALUUNPAS3)

Cross-linguistically, the grammaticalization of verbs such as ‘finish’ to code anterior aspect is well attested (Bybee et al. 1994; Heine and Reh 1984). Frequently, these verbs develop first into completive or resultative aspect markers, and only then into anterior markers. In Goemai, by contrast, there is no indication that the anterior particle *lát* expresses any resultative or completive notions. Resultative aspect is coded by a different particle (see section 4.5). And neither of the two particles shares the features that are often associated with completives (i.e., to do something thoroughly and to completion): the object of the action is not totally affected (as illustrated in 43a); the occurrence of the particle is not restricted to plural contexts; and it does not indicate the completeness of the state (as illustrated in 43b). To convey completive readings, speakers have to resort to lexical means instead, e.g., to the adverb *dip* ‘all, completely’

- (43) a. *s'òe bì=hòk lát / d'èmgòedé bá*
 eat thing=DEF ANT remainder return(SG)
 ‘(he) finished eating the thing, but some (food) remained’ (A-14/02/00)
- b. *pùòe-pìn=hòk b'àl lát*
 mouth:GEN-hut=DEF fasten ANT
 ‘the door has finished closing’ (talking about a door that has stopped closing, but is still halfway open)’ (A-14/02/00)

4.5. Resultative

The resultative is formed by means of the particle *kàm*, which follows the verb and all its arguments. Subject pronouns of set 1 precede the verb (as *muèp* ‘3PL’ in 44a), and those of set 2 precede the resultative particle (as *yì* ‘2SGF’ in 44b).

- (44) a. *muèp páár nì kàm ñ-Jòs*
 3PL.S send 3SG.O RESULT LOC-<PLACE.NAME>
 ‘they have sent her to Jos’ (A-14/02/00)
- b. *Tô / lókàshi gòepé wá yì=kám (...)*
 okay time THAT/WHEN return.home(SG) 2SGF.S=RESULT
 ‘Okay, at the time after you have returned home (...).’
 (N01JTIME)

If adverbials are present, they follow the resultative particle. The only exception are locative adverbials: they preferably follow this particle (as in 45a, see also 44a above), but they can alternatively precede it (as in 45b). It is not clear if there is a semantic difference between the two positions.

- (45) a. *muààn kàm ñdòe=pè (...)*
 go(SG) RESULT SPEC=place
 ‘(she) went somewhere (...).’ (R01NSTAGE)
- b. *Muèp lá muèn ñ-zàm ñndòe kàm /*
 3PL.S COND go(SG) LOC-field LOC.ANAPH RESULT
shàràp / ñdòe jáp dwén
 women(PL) CONJ children(PL) PL.LOG.SP.POSS
mòe-shàràp / muép d’è ñ-lú.
 NOMZ(PL)-women(PL) 3PL.S exist LOC-settlement
 ‘When they have gone to this farm, the women and their female children stay in the compound.’ (D04CSHITBIT)

The resultative codes a state that is seen as the result of the state change expressed by the verb. Its exact interpretation depends on the lexical aspect of the verb (see also chapter 4, section 2.3). In the case of inchoative verbs, it focuses on the initial boundary of entering a state and thus expresses a continuation of this state (as in 46a). And in the case of result verbs, it focuses on the final boundary of the event, expressing the termination of this event (as in 46b). It

cannot occur with either activity or stative verbs, since they do not lexicalize a change of state.

- (46) a. *Lwá / sù kàm n-s'á muép.*
 animal/meat run(SG) RESULT LOC-hand/arm 3PL.POSS
 ‘The animal is running from their hands.’ (i.e., the animal has started to run, and hence is now in the state of running)
 (R01NFROG)

- b. *Nà kòdàyákè pé gwén L. / ndòe*
 see even.though THAT/WHEN ASSOC.PL <NAME> CONJ
W. / ndòe K. / ndòe L. / muép=muáráp
 <NAME> CONJ <NAME> CONJ <NAME> 3PL.S=die(PL)
kàm / d'èmdé mén / pé mén à
 RESULT remainder 1PL.POSS THAT/WHEN 1PL.I FOC
jáp múk / t'èkgòed'i móe=ń-d'è
 children(PL) 3SG.POSS already/still 1PL.S=PRES-exist
d'i.
 LOC.ANAPH

‘See, even though those L. and W and K. and L., they have died (= the dying event is over), we others, who are his children, we are still there.’ (H04AKWAPNDA1)

Notice that not all inchoative and result verbs can be marked for resultative aspect. The restrictions are not fully understood, but it is likely that they are connected to the lexical origin of the resultative particle in a locative verb (see below). In present-day Goemai, the particle retains some of its original locative semantics in that it preferably occurs with motion and caused motion verbs. In the course of grammaticalization, its distribution must have been gradually extended to non-motion verbs – adding both a resultative reading and a motion reading (as in 47). Finally, it has become acceptable with non-motion verbs, conveying a resultative reading only (as in 46b above). This grammaticalization process is not yet completed, as many eligible non-motion verbs are not accepted. There is also speaker variation in that different speakers produce and accept different verbs.

- (47) *wús háár kàm póenóe*
 fire gnaw RESULT thus
 ‘the fire has moved like this (lit. has eaten (its way) like this)’ (A-11/02/00)

It is likely that the resultative particle *kàm* grammaticalized from the stative locative verb **kàm* ‘?stay’ in the coordinate serial verb construction. Although the original verb is no longer used productively, it still occurs in the verb slot of the fixed expression in (48). The verbal origin of the resultative particle is still visible in its position with respect to pronouns of set 2: such pronouns follow the verb but precede *kàm* (as *yĩ* ‘2SGF’ in 44b above) – if *kàm* had a non-verbal origin, these pronouns would have preceded the main verb. Notice also that a comparable grammaticalization process is taking place in present-day Goemai: the coordinate serial verb construction allows for the co-occurrence of (caused) motion verbs with locative verbs, in which case the locative verbs receive a default resultative interpretation. Unlike resultative *kàm*, their grammaticalization has only just begun: the resultative reading is only implicated (not coded) and the locative verbs cannot co-occur with non-motion verbs (see chapter 8, section 3.2).

- (48) *Hèn=pààr réép nóe / muààn gòegòe kàm*
 1SG.S=send girl(SG) 1SG.POSS go(SG) REDUP.OBLIG ??stay
d’ì.
 LOC.ANAPH

‘I sent my daughter, (she) went and in the end remained there.’ (A-09/02/00)

From a cross-linguistic perspective, the above grammaticalization pattern is unusual: although resultative particles often originate in serial verb constructions, they tend to originate in verbs such as ‘finish’ – not in locative verbs. The development of resultative readings from locative verbs is rarely mentioned in the grammaticalization literature (e.g., it is not discussed in Heine et al. 1993 who summarize attested grammaticalization processes in African languages; but see Reid 2002).

5. Modality and mood

Goemai distinguishes the following types of modality: irrealis (section 5.1), obligative (section 5.2), permissive (section 5.3), focused irrealis (section 5.4) and negative irrealis (section 5.5). In addition, this section discusses the imperative mood (section 5.6). Note that the prohibitive is formed by means of the negative irrealis.

5.1. Irrealis

Irrealis modality is expressed by means of the particle *t'óng*.⁷² This particle has some verbal properties in that nouns and pronouns of set 1 precede it (as *muěp* '3PL' in 49a), while pronouns of set 2 follow it (as *mõe* '1PL' in 49b). Despite these verbal properties, it is clearly a particle, occurring in the particle slot of nominalized clauses (as in 49c) and consequence clauses (as in 49d), i.e., both the particle and the verb precede the possessor and the consequence clause particle *yì*.

- (49) a. *Muěp t'óng shin bi ñnòe (...).*
 3PL.S IRR do thing LOC.ANAPH
 'They would do this thing (...).' (D04NTOKMUUT)
- b. *S'à / yó muààn d'i m-pè*
 PROH rise(SG) go(SG) LOC.ANAPH LOC-place
gòépé t'óng mõe=shin bì=hòk.
 THAT/WHEN IRR:CONS 1PL.S=do thing=DEF
 'Lest (she) rises (and) goes to the place where we would do the thing.' (D05ADUOEDAAS)
- c. *Là=hòk / màn bì gòe-t'óng shin múk*
 child(SG)=DEF know thing NOMZ(SG)-IRR do 3SG.POSS
bá.
 NEG
 'The boy didn't know what he would do.' (R00AFROG)
- d. *dé muěp t'óng nyàp pè yì.*
 SO.THAT 3PL.S:CONS IRR prepare place CONS
 'so that they would prepare the place.' (D04ALWA3)

The particle *t'óng* is used in irrealis contexts. This includes the expression of epistemic modality (as in 50a), intention (as in 50b), polite requests (as in 50c), and counterfactual contexts (as in 50d).

- (50) a. *ràng pé hàngòed'è t'óng zòòm ñd'àsòenòe.*
 think THAT/WHEN water IRR bec.cold now
 '(he) thinks that the water would be cold now.' (Q99ATQ115)

72. Younger speakers occasionally reduce this form to *t'én* or *t'òe*.

- b. *T'òng dú=k'wál à k'à gòpé (...).*
 IRR PL.LOG.SP.S=talk FOC head(SG) THAT/WHEN
 '(They₁ said that) they₁ would talk about the fact that (...).'
- (F99DLIIT)
- c. *T'òng góe=t'ó s'àyò bà gòe=né.*
 IRR 2SGM.S=lie(SG) PROH return(SG) 2SGM.S=bec.tired
 'You would better sleep lest you become tired again.'
- (Q99ATQ131)
- d. *D'in là góe=zém d'uòe nóe / d'in*
 PAST.CL COND 2SGM.S=like voice 1SG.POSS PAST.CL
t'òng góe=bí fuán bá.
 IRR 2SGM.S=follow rabbit NEG
 'If you had accepted my advice, you would not have followed the rabbit (but you did follow him).'
- (F99DLIIT)

The particle is furthermore near-obligatory in future contexts (but see section 2 on the distribution of the unmarked verb), occurring in both intention-based (as in 51a, see also 50b above) and prediction-based contexts (as in 51b). Notice that some authors consider an occurrence in prediction-based contexts the defining criterion of a future tense marker (Bybee et al. 1991: 20). It can also occur in a less-prototypical future context, e.g., in the protasis of the conditional construction (see Dahl 1985). It is more common for Goemai speakers to use an unmarked verb in this context, but they can use the irrealis particle to emphasize a hypothetical reading (as in 51c).

- (51) a. *Gòe-f'ér ònòe (...)/ hèn=t'òng pòe à màt*
 ORD-four LOC.ANAPH 1SG.S=IRR give FOC woman(SG)
nóe.
 1SG.POSS
 'This fourth one (...), I will give (it) to my wife.'
- (F99DGOESHANG2)
- b. *Là góe=p'ét t'òng góe=múút.*
 COND 2SGM.S=exit(SG) IRR 2SGM.S=die(SG)
 'If you go out, you will (probably) die.'
- (D04AWO)

- c. *Tó / lá t'òng góe=shín òd'ùun wàng*
 okay COND IRR 2SGM.S=do INSIDE:GEN pot:GEN
sóól (...)
 metal/money
 'Okay, if you would do (it) in a pot of iron (...).'

(P04CMUALAM2)

In many languages, irrealis modality and future tense show some overlap: they may be expressed by the same form; the irrealis marker may be part of the same formal paradigm as the past / present tense markers; or the future marker may have developed from the irrealis marker (Bybee et al. 1994: 251–271; Comrie 1985a: 43–48; Dahl 1985: 103; J. Lyons 1977: 816; Palmer 1986: 49). For Goemai, I analyze *t'òng* basically as a modality: it occurs in non-future irrealis contexts (see examples 50a to 50d above), future time reference can be expressed with the help of the unmarked verb form (see section 2), and *t'òng* is not part of the same paradigmatic set as the tenses (see section 3). 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 1985a: 46).

The particle *t'òng* was probably grammaticalized from the locative verb *t'òng* 'sit (SG)', occurring as the first verb in the coordinate serial verb construction (as illustrated with its plural counterpart *t'wót* 'sit' in 52a). This construction receives a simultaneous interpretation whenever a locative verb occurs as the first verb, i.e., the referent is considered to be in a specific position while engaged in an activity (see chapter 8, section 3.2). While such an origin is syntactically plausible, it is not entirely clear how the modality reading could have developed from the simultaneity reading.⁷³ Bybee et al. (1994: 181–187, 258–264) suggest that the locative verb 'be' can grammaticalize into an agent-oriented modality (i.e., a modality that imposes conditions on the agent, e.g., obligation), from where it develops further into a marker for intention, and eventually into a marker for epistemic modality (i.e., a modality showing the commitment of the speaker to the truth of the proposition, e.g., possibility). They argue that the source structure must have expressed two overlapping events (as in the serial construction of 52a). Later, the agent then became associated with a projected activity, allowing for an interpretation of 'the agent

73. Most attested grammaticalization chains have verbs of motion, volition or desire as sources for irrealis / future markers (Bybee et al. 1994: 251–271; Heine and Reh 1984: 131). Locative verbs, by contrast, are not very common – Heine et al. (1993: 270, 272), for example, do not mention any such verbs among the possible sources.

commits himself to be at an activity’ (1991: 26–27, 1994: 258–264). Notice that the present-day Goemai verb *t’óng* ‘sit’ has an extended sense of ‘remain, stay’ (as in 52b), which arguably may require a commitment to remain in a place. It is possible that this extended sense encouraged the reinterpretation from, e.g., ‘they sat ~ remained and thought’ in (52a) to ‘they had the intention to think’ Such a scenario could explain the fact that only the locative verb *t’óng* ‘sit’ has been grammaticalized – the other locative verbs do not have such an extended sense.⁷⁴ But given the scarcity of available diachronic data, this scenario has to remain speculative. It is even possible that its grammaticalization has already taken place in Proto-Angas-Goemai: Mupun has an auxiliary *ntóng* ‘maybe’ that is semantically similar to irrealis *t’óng* in Goemai (i.e., it expresses epistemic modality); and it also shows some syntactic similarities (in that subject pronouns precede or follow it, depending on their set) (Frajzyngier 1993: 336).⁷⁵

- (52) a. *Muèp t’wót ràng nyé-ráng.*
 3PL.S sit(PL) think matter-think
 ‘They sat (and) thought a thought.’ (F99DLIIT)
- b. *Muèp b’è m̀òe-b’è / m̀òe-̀ndá*
 3PL.S produce(PL) NOMZ(PL)-produce(PL) NOMZ(PL)-father
mèn. Muèp b’è m̀òe-b’è / mèn.
 1PL.POSS 3PL.S produce(PL) NOMZ(PL)-produce(PL) 1PL.O
Mèn zák m̀òe=b’è. Yil=hók
 1PL.I also/however 1PL.S:CONS=produce(PL) ground=DEF

74. In many languages, ‘sit’ is the only locative verb that has been grammaticalized into a TAM morpheme, usually a morpheme for progressive or habitual aspect (Austin 1998; Heine and Reh 1984: 124–126; Heine et al. 1993: 201). Alternatively, if several locative verbs have been grammaticalized, ‘sit’ is often used to express permanent states (while the others are used for temporary states) (Comrie 1976: 102–105; J. Newman and Rice 2004). It is possible that the wide distribution of ‘sit’ is related to its common extension to notions such as ‘stay, remain, live’

75. An irrealis modality has not been described for any other Angas-Goemai group language, although some of the attested forms seem to have similar extensions to Goemai *t’óng* (e.g., the future tense in Angas; or the imperfective in Mupun) (see Burquest 1973; Frajzyngier 1993).

t'óng.
sit(SG)

‘They gave birth to those who gave birth to our fathers. They gave birth to those who gave birth to us. And then we, too, we gave birth. The country remains.’ (H99BTARIHI)

The irrealis particle *t'óng* has given rise to the progressive particle *t'óng* (see section 4.1) and to the habitual particle *t'óng* (see section 4.2).

5.2. Obligative

The obligative is formed by means of the particle *gòe*. This particle is preceded by subject pronouns of both set 1 (as *pǎ* ‘SGF.LOG.AD’ in 53a) and set 2 (as *gũ* ‘2PL’ in 53b), and it is followed by the verb phrase. It is attested in both affirmative (as in 53a and 53b) and negative sentences (as in 53c).⁷⁶ In the latter case, it is sometimes replaced by the irrealis clitic *bòe*= (see section 5.4).

- (53) a. *B'it lá lín / pà gòe nyàp / húra (...).*
day COND dry(SG) SGF.LOG.AD.S OBLIG prepare gruel
‘When the morning dawns, she should prepare gruel (...).’
(F99DREEP)
- b. *Là gú=gámá póenóe ñnòe gù=gòe*
COND 2PL.S=finish thus LOC.ANAPH 2PL.S=OBLIG
yók.
return.home(PL)
‘When you have finished (it) like this, you should return home.’ (D04ATATMAT1)
- c. *mán nwà gòe yók dóe s'óe*
PROH PL.LOG.AD.S OBLIG return.home(PL) come eat
shàt môu
porridge NEG
‘they shouldn’t return home (and) eat porridge here’ (A-04/02/00)

76. Notice that the obligative particle has scope over the negative particle, resulting in the meaning of “should not, must not”. It is not possible to get the meaning of “not have to” (as, e.g., in German, where negation has scope over the TAM morpheme in comparable contexts).

This particle codes obligative modality. As such, it frequently occurs in polite orders and requests, i.e., it preferably occurs with second person and addressee logophoric referents (as in 53a to 53c above). And although it is attested with other person subjects (as in 54a), it is far more common to encounter the irrealis particle *t'óng* in these cases (coding an intention rather than an obligation, as in 54b).

- (54) a. *hèn=gòe gámà kàràtú=hók d'ì.*
 1SG.S=OBLIG finish studies=DEF LOC.ANAPH
 'I was obliged to finish the studies there.' (N01NTIME)
- b. *nè=t'òng shín àrààm (...).*
 1SG.S=IRR do conversation
 'I will tell a story (...).' (D00JANIMAL11)

The particle combines with the irrealis particle *t'óng* to express the definite future. In this case, nouns and pronouns of set 1 precede the irrealis particle (as *muěp* '3PL' in 55a), while those of set 2 precede the obligative particle (as *gòe* '2SGM' in 55b).

- (55) a. *Sái fúán yín / muěp t'óng gòe nyét*
 then/only rabbit SAY 3PL.S IRR FUT.DEF leave
nwà bá (...).
 PL.LOG.AD.O NEG
 'Then the rabbit said (to them₁), they will definitely not leave them₁ (...).' (F00CFUAN)
- b. *shàm t'óng yà góe / t'óng dàl k'á*
 turtle.type IRR catch 2SGM.O IRR strike head(SG)
góe / hár t'òng góe=góe múút
 2SGM.POSS even/until IRR 2SGM.S=FUT.DEF die(SG)
d'ì m-pè=hók.
 LOC.ANAPH LOC-place=DEF
 'the giant turtle will catch you, (and it) will beat you, until you will definitely die in the place.' (D04ALWA3)

The origins of the obligative particle remain unclear, but it may be related to the sequential particle *gòe* (see chapter 8, section 4.5).

5.3. Permissive

The permissive is formed with the prefix *N-* attaching to the verb. Pronouns of both set 1 (as in 56a) and set 2 (as in 56b) precede it. It occurs in affirmative (as in 56a and 56b) as well as in negative sentences (as in 56c).

- (56) a. *hén=m-màng*
1SG.S=PERM-take(SG)
'let me take (it)' (A-14/11/00)
- b. *Móe=n-pàrà tóe.*
1PL.S=PERM-begin EMPH
'Let us begin.' (M00JMDISPOS6)
- c. *mán móe=n-vuáng nì ñd'ùùn bì=hòk bá.*
PROH 1PL.S=PERM-wash 3SG.O INSIDE:GEN thing=DEF NEG
'let us not insult her in this thing.' (C01FGHJARAM3)

In discourse, it frequently functions as an exhortative (as in 56a to 56c), but it is attested in all sentence types conveying the permissive reading of 'allowing' and 'enabling'. For example, in (57) it occurs in a question.

- (57) *Kàt jí=n-míút=ò kàt*
maybe SGM.LOG.SP.S=PERM-die(SG)=INTERR maybe
jí=n-láng=ò?
SGM.LOG.SP.S=PERM-hang/move(SG)=INTERR
'Maybe he would be allowed to die, maybe he would be allowed to live?' (F99AKUR)

It can combine with the irrealis particle *t'óng* to convey an immediate future reading (as in 58).

- (58) *muèp t'óng ñ-yúúl*
3PL.S IRR FUT.IMM-rise(PL)
'they are about to rise' (A-29/12/00)

The origins of the permissive prefix are unknown. It is possibly a retention from Proto-Angas-Goemai: the closely-related language Mupun has a form *N-* that is used in future tense contexts (Frajzyngier 1993: 314–315). Given the

close semantic association between future tenses and irrealis-type modalities, this form may be cognate to the Goemai permissive prefix.

5.4. Irrealis (focused)

Goemai has another irrealis morpheme, the proclitic *bòe=* ‘FOC.IRR’, which cliticizes to the initial boundary of a verb phrase. That is, it precedes subject pronouns of set 2 (as *yĩ* ‘2SGF’ in 59a), but follows those of set 1 (as *pǎ* ‘SGF.LOG.AD’ in 59b).

- (59) a. *mán* *bòe=yì=lúút* *môu*.
 PROH FOC.IRR=2SGF.S=be.afraid(SG) NEG
 ‘don’t be afraid.’ (F99DMATWO)
- b. *Yìn* *kédè* *pà* *bòe=wál* *bá (...)*.
 SAY PROH SGF.LOG.AD.S FOC.IRR=cry(SG) NEG
 ‘(He₁) said, she₂ shouldn’t cry (...).’ (F99DREEP)

This formative only occurs in certain types of focused irrealis contexts, although its exact semantics remain unclear: in negative imperative and prohibitive clauses (as in 59a and 59b above), in negative verbal and verbless irrealis clauses (as in 60a and 60b), and in questioned irrealis clauses (as in 60c). In all contexts, this clitic is optional: a negative imperative context does not need any overt expression of modality (see section 5.5); a verbless clause is usually unmarked for modality; and in all other cases, it is more common to either use the obligative particle *gòe* (see section 5.2) or the irrealis particle *t’óng* (see section 5.1). For example, in (60d) the speaker chooses the irrealis particle *t’óng* in the first sentence, and then rephrases this sentence by means of the proclitic *bòe=*. The semantic differences between the two sentences are not clear. In the case of questions, it is even possible for *bòe=* and *t’óng* to co-occur (as in 60e).

- (60) a. *Ni* *bòe=k’òelèng* *d’uòe* *Bàkwá* *bá*.
 3SG.S FOC.IRR=hear/smell voice:GEN <ETHNIC.NAME> NEG
 ‘She wouldn’t understand the language of the Hausa.’
 (D04ALUDUUT2)
- b. *Pyá* *yà* *ní* *sòsái*. *Gùrùm* *ínòe* *à*
 whiteness catch 3SG.O well person LOC.ANAPH FOC
gòe-pyá *sòsái*. *Bòe=gòe* *mát* *bá*.
 NOMZ(SG)-poor well FOC.IRR=COMIT woman(SG) NEG

B̀̀e=g̀̀o`e` l`a` b`a`.
 FOC.IRR=COMIT child(SG) NEG

‘Poverty afflicted him a lot. This person was a very poor one.
 (He) wouldn’t have a wife. (He) wouldn’t have a child.’
 (F99ATYAKLANG)

c. *B̀̀e=g̀̀o`e`=yil=à?*

FOC.IRR=2SGM.S=write=INTERR

‘Would you write (it)?’ (M00ANDRAW)

d. *n`i` t`o`ng` b`o`o`t` g̀̀o`e` m`a`n` h`d`o`e`=b`i` b`a`.*
 3SG.S IRR gain.expertise(SG) SEQ know SPEC=thing NEG

B̀̀e=b`o`o`t` b`i` yil b`a`.
 FOC.IRR=gain.expertise(SG) thing write NEG

‘he wouldn’t be able to know anything. (He) wouldn’t be able
 (to know) writing.’ (C00ANYOUTH1)

e. *À` w`u`r`o`e` b̀̀e=t`o`ng` d`i`ng` d`u`o`e` n`o`e` t`o`e`?*
 FOC who FOC.IRR=IRR imitate voice 1SG.POSS EMPH

‘Who would imitate my voice?’ (F99ANTI)

5.5. Irrealis (negative)

Irrealis, obligative and permissive clauses are all negated like other clauses: by means of the sentence-final negation particle *m̀̀ou* (or its Hausa equivalent *b`a`*) (see chapter 6, section 1.4). In addition, the negative irrealis contexts below are expressed by means of the initial particle *m`a`n`* ‘PROH’ (or its Hausa equivalent *k`a`d`a` ~ k`e`d`e`*), together with the ordinary sentence-final particle. This includes in particular the negative imperative (as in 61a) and the prohibitive (as in 61b). Speakers also use the Goemai form (but not the Hausa loan) in negative irrealis contexts that report on knowledge gained through hearsay: the particle *m`a`n`* ‘PROH’ negates a constituent that is hearsay knowledge in (61c); and it occurs in a verbless clause that reports on the world of the ancestors in (61d). In such contexts, the particle *m`a`n`* ‘PROH’ frequently co-occurs with the discourse particle *m`e`* ‘really, after all’ (see chapter 6, section 1.5) or with the proclitic *b̀̀e`=* ‘FOC.IRR’ (see section 5.4).

- (61) a. *m`a`n` y`i`=l`u`u`t` m̀̀ou.*
 PROH 2SGF.S=be.afraid(SG) NEG
 ‘don’t be afraid.’ (F99DMATWO)

- b. *kádà d'ùòe Bàkwá gòe rú ñd'ùùn*
 PROH voice:GEN <ETHNIC.NAME> OBLIG enter(SG) INSIDE
bá.

NEG

‘the language of the Hausa should not enter inside.’

(C01FGHJARAM9)

- c. *Ñdòe=gùrùm gòegòe d'ùng / pòe / pààp /*
 SPEC=person REDUP.OBLIG whisper give duiker
gòepé ù d'è t'óng shín / àmfàni múk
 THAT/WHEN goat exist PROGR do benefit 3SG.POSS

à gòe / sh'èp / mán à kwák
 FOC COMMIT wood PROH FOC foot/leg:GEN

jáp múk môu.

children(PL) 3SG.POSS NEG

‘Someone eventually whispered to the duiker that the goat is making use of sticks, not of the legs of her children.’

(F99DPAAP)

- d. *Mán à b'òu bá. Mán à kwáp bá.*
 PROH FOC arrow NEG PROH FOC spear NEG

‘Not that (it) was an arrow. Not that (it) was a spear.’

(F99OGOELONG)

The initial particle *mán* is always placed before the constituent that is within the scope of its negation: in (61a) and (61d) above, it occurs at the beginning of a full clause; in (61c) above and (62a) below, it precedes an appositional clause; and in (62b), it marks a prepositional phrase. The Hausa loan *kádà ~ kédè* ‘PROH’ can only occur at the beginning of a clause (as in 61b above).

- (62) a. *Là móe=k'wál mòe=yí / tô / "màng kúút dip" /*
 COND 1PL.S=talk 1PL.S=SAY okay take(SG) just all
mán / "gòe=màng díbit" bá.
 PROH 2SGM.S=take(SG) all NEG

‘When we talk we say, okay, “just take *dip* (all)”, not “take *díbit* (all).’ (C00ANDIALECT3)

- b. *t'à gòe=t'óng mán puòe gádó bá*
 fall(SG) 2SGM.S=sit(SG) PROH MOUTH:GEN bed NEG

‘sit down but not on the bed’ (A-07/02/00)

In addition to the particles *mán* and *kádà ~ kédè*, Goemai has a third initial negation particle: *s'à ~ s'àyò*. Sirlinger (1937: 200) lists it as ‘lest, for fear that’, and gives examples of it being used without a sentence-final negation particle to warn against the possible negative consequences of an event. This is also the most common use in my database (as in 63a). In present-day Goemai, however, it is increasingly used interchangeably with the prohibitive particles *mán* and *kádà ~ kédè* (as in 63b).

- (63) a. *Là góe=zém k'yákláng góe / s'àyò bá*
 COND 2SGM.S=like life 2SGM.POSS PROH NEG
gòe=tàl nyé-tàl ònòe / sèk
 2SGM.S=ask/greet matter-ask LOC.ANAPH BODY:GEN
pùòe nóe.
 mouth 1SG.POSS

‘If you like your life, you had better not ask this question to me.’ (D00EWITCH3)

- b. *s'à gwà wá gòe t'ém bì*
 PROH SGM.LOG.AD.S return.home(SG) SEQ tell thing
gòe-ná gwá (...) *mòu.*
 NOMZ-see SGM.LOG.AD.POSS NEG

‘(He₁ said) he₂ shouldn’t go and tell the things that he₂ has seen (...).’ (TIEMSAN 1999: 12)

5.6. Imperative

The imperative is formed without the second person subject pronoun, both in singular (as in 64a) and plural contexts (as in 64b). Its tonal pattern is identical to that of the second person unmarked verb form (i.e., the verb receives a low tone and the following element a high tone; see also chapter 2, section 1.4). If the speaker intends to emphasize the subject, a pronoun can optionally occur (as in 64c). In the case of a serial verb construction, the subject pronoun has to be present with all verbs except the first (where it is optional) (as in 64d).

- (64) a. *Shìn tál=hòe!*
 do greeting=exactly
 ‘Do the greeting!’ (O04ANTALMUUT2)

- b. *P'ùàt dé gù=ná nì yì!*
 exit(PL) SO.THAT 2PL.S:CONS=see 3SG.O CONS
 ‘Come out, so that you see him!’ (F00CGOERWANG)
- c. *Gù=d'yàm puánáng=hók!*
 2PL.S=stand(PL) there/yonder=DEF
 ‘Stand over there!’ (D04NTATMAT2)
- d. *Bùk gù=t'úún gòe-d'yén (...)!*
 return(PL) 2PL.S=push NOMZ(SG)-bec.small/young(PL)
 ‘Push away the small ones again (...)!’ (P00NFISHING)

The subject pronouns are obligatory in the negative imperative (see section 5.5).

6. Summary

This chapter has discussed the Goemai TAM categories: the most common form is the verb unmarked for TAM (section 2), but Goemai also allows for the expression of absolute tenses (section 3), different aspectual categories (section 4) and modalities (section 5). Goemai differs from other Chadic languages in that it does not use TAM-inflected verbs or pronouns. Instead, it uses free particles and discontinuous constructions whose diachronic origins are often still transparent.

7. TAM paradigms

This section lists the paradigms for the TAM categories discussed in this chapter. The paradigms are included because of their variation in syntax (i.e., in the position of the subject pronoun) and tone (resulting from the interaction of the tones of the subject pronoun, the TAM particle and the verb). More specifically, the different person-number categories fall into the following four groups:

- 1) (cliticized or non-cliticized) rising-tone pronoun of set 1 (*hě̀n* ‘1SG’);
- 2) cliticized rising-tone pronouns of set 2 (*gõe* ‘2SGM’, *yì* ‘2SGF’, *mõe* ‘1PL’, *gũ* ‘2PL’, *jĩ* ‘SGM.LOG.SP’, *dõe* ‘SGF.LOG.SP’, *dũ* ‘PL.LOG.SP’);
- 3) high-tone pronoun (*nì* ‘3SG’) and nouns; and zero-marked 3SG (Ø);
- 4) non-cliticized rising-tone pronouns (*muě̀p* ‘3PL’, *gwǎ* ‘SGM.LOG.AD’, *pǎ* ‘SGF.LOG.AD’, *nwǎ* ‘PL.LOG.AD’) and nouns.

Only one form per group is given. Recall that the phonemic tone is written – in some cases, tonological processes such as downstep and HH dissimilation take place, causing the tone to be realized as mid (see chapter 2, section 1.4).

Table 56. Unmarked verb

1	hèn=	<i>vèrb</i> (óther ¹)	‘I <i>verb</i> ’
2	mòe=	<i>vèrb</i> (óther ¹)	‘we <i>verb</i> ’
3	ní Ø	<i>vèrb</i> ¹ <i>verb</i>	‘(s/he) <i>verb</i> ’
4	muèp	<i>vèrb</i> ¹	‘they <i>verb</i> ’

Table 57. Remote past tense: *dók*

1	hèn=dók	<i>vèrb</i> (óther ¹)	‘I <i>verbed</i> ’
2	(mòe=) dók mòe=	<i>vèrb</i> (óther ¹)	‘we <i>verbed</i> ’
3	(ní) dók	<i>vèrb</i> (óther ¹)	‘(s/he) <i>verbed</i> ’
4	muèp dók	<i>vèrb</i> (óther ¹)	‘they <i>verbed</i> ’

Table 58. Yesterday past tense: *dyén*

1	hèn=dyén	<i>vèrb</i> ¹	‘I <i>verbed</i> ’
2	(mòe=) dyén móe=	<i>vèrb</i> ¹	‘we <i>verbed</i> ’
3	(ní) dyén	<i>verb</i>	‘(s/he) <i>verbed</i> ’
4	muèp dyén	<i>verb</i>	‘they <i>verbed</i> ’

Table 59. Recent past tense: *d'in*

1	hèn=d'in	<i>vèrb</i> ¹	‘I <i>verbed</i> ’
2	(mòe=) d'in móe=	<i>vèrb</i> ¹	‘we <i>verbed</i> ’
3	(ní) d'in	<i>verb</i>	‘(s/he) <i>verbed</i> ’
4	muèp d'in	<i>verb</i>	‘they <i>verbed</i> ’

Table 60. Future tense: (*t'óng*) *d'á*

1	<i>hèn=t'óng d'á</i>	<i>vérb</i> ¹	'I will <i>verb</i> '
2	<i>(mòe=) t'óng d'á móe=</i>	<i>vérb</i> ¹	'we will <i>verb</i> '
3	<i>(ní) t'óng d'á</i>	<i>verb</i>	'(s/he) will <i>verb</i> '
4	<i>muèp t'óng d'á</i>	<i>verb</i>	'they will <i>verb</i> '

Table 61. Progressive aspect: *locative verb + t'óng* (~ *d'á* ~ *lá* ~ *ñ-*) *yì*

1	<i>hén=d'è ~ hèn=nd'è</i>	<i>t'óng</i>	<i>vérb</i> ¹	<i>yì</i>	'I am <i>verbing</i> '
2	<i>(mòe)=d'è ~ (mòe)=nd'è</i>	<i>t'óng móe=</i>	<i>vérb</i> ¹	<i>yì</i>	'we are <i>verbing</i> '
3	<i>(ní) d'è ~ (ní) nd'è</i>	<i>t'óng</i>	<i>verb</i>	<i>yì</i>	'(s/he) is <i>verbing</i> '
4	<i>muép d'è ~ muép nd'è</i>	<i>t'óng</i>	<i>verb</i>	<i>yì</i>	'they are <i>verbing</i> '

Table 62. Habitual aspect: *d'á* ~ *lá* *t'óng*

1	<i>hèn=d'á</i>	<i>vérb</i> ¹	<i>t'óng</i>	'I used to <i>verb</i> '
2	<i>(mòe=) d'á móe=</i>	<i>vérb</i> ¹	<i>t'óng</i>	'we used to <i>verb</i> '
3	<i>(ní) d'á</i>	<i>verb</i>	<i>t'óng</i>	'(s/he) used to <i>verb</i> '
4	<i>muèp d'á</i>	<i>verb</i>	<i>t'óng</i>	'they used to <i>verb</i> '

Table 63. Irrealis modality: *t'óng* (~ *t'én* ~ *t'òe*)

1	<i>hèn=t'óng</i>	<i>vérb</i> ¹	'I would <i>verb</i> '
2	<i>(mòe=) t'óng móe=</i>	<i>vérb</i> ¹	'we would <i>verb</i> '
3	<i>(ní) t'óng</i>	<i>verb</i>	'(s/he) would <i>verb</i> '
4	<i>muèp t'óng</i>	<i>verb</i>	'they would <i>verb</i> '

Table 64. Obligative modality: *gòe*

1	<i>hèn=gòe</i>	<i>verb</i>	'I should <i>verb</i> '
2	<i>mòe=gòe</i>	<i>verb</i>	'we should <i>verb</i> '
3	<i>ní gòe</i> ¹ <i>Ø gòe</i>	<i>verb</i> <i>verb</i>	'(s/he) should <i>verb</i> '
4	<i>muèp gòe</i> ¹	<i>verb</i>	'they should <i>verb</i> '

Table 65. Definite future tense: *t'óng gòe*

1	<i>hèn=t'óng gòe</i> ¹	<i>verb</i>	'I would <i>verb</i> '
2	<i>(mòe=) t'óng móe=gòe</i> ¹	<i>verb</i>	'we would <i>verb</i> '
3	<i>(ní) t'óng gòe</i>	<i>verb</i>	'(s/he) would <i>verb</i> '
4	<i>muèp t'óng gòe</i>	<i>verb</i>	'they would <i>verb</i> '

Table 66. Permissive modality: *òn-*

1	<i>hén=òn-</i>	<i>verb</i>	'I can <i>verb</i> '
2	<i>móe=òn-</i>	<i>verb</i>	'we can <i>verb</i> '
3	<i>(ní) òn-</i>	<i>verb</i>	'(s/he) can <i>verb</i> '
4	<i>muèp òn-</i>	<i>verb</i>	'they can <i>verb</i> '

Table 67. Immediate future tense: *t'óng òn-*

1	<i>hèn=t'óng òn-</i>	<i>verb</i>	'I will <i>verb</i> '
2	<i>(mòe=) t'óng móe=òn-</i>	<i>verb</i>	'we will <i>verb</i> '
3	<i>(ní) t'óng òn-</i>	<i>verb</i>	'(s/he) will <i>verb</i> '
4	<i>muèp t'óng òn-</i>	<i>verb</i>	'they will <i>verb</i> '

Table 68. Focused irrealis: *bòe*=

1	<i>hèn=bòe</i> =	<i>verb</i>	'I would <i>verb</i> '
2	<i>bòe=mòe</i> =	<i>verb</i>	'we would <i>verb</i> '
3	<i>ní bóe</i> = ¹	<i>verb</i>	'(s/he) would <i>verb</i> '
	Ø <i>bòe</i> =	<i>verb</i>	
4	<i>muèp bóe</i> = ¹	<i>verb</i>	'they would <i>verb</i> '

Table 69. Imperative

2	<i>vèrb (óther</i> ¹)	' <i>verb</i> !'
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¹ This high tone potentially triggers a downstep (if the high tone settles on a morpheme that has an inherent low tone, this low tone is displaced to the right, causing a following high tone to be downstepped).

Chapter 8

Clause types

This chapter presents the Goemai clause types: simple verbal clauses (section 1), non-verbal clauses (section 2), verb serialization (section 3) and other types of multiverb constructions (section 4); a summary concludes this chapter (section 5). All types can be recruited to perform all types of speech acts, including declarative utterances, negative utterances (see chapter 6, section 1.4), questions (see chapter 6, sections 1.3 and 4) and imperatives (see chapter 7, section 5.6).

1. Simple verbal clauses

This section introduces intransitive, transitive and ditransitive constructions (section 1.1). Following that, it describes two specific verbal constructions: the locative and existential construction (section 1.2) and the presentative construction (section 1.3). Notice that other Chadic languages exclusively or predominantly express locative, existential and presentative concepts by means of non-verbal structures (Frajzyngier 1987a; Pawlak 1994). And even closely-related Angas-Goemai group languages employ prepositional strategies in this context, not verbal strategies (see, e.g., Burquest 1973; Frajzyngier 1993: 259–263) (see also chapter 4, section 1.3).

1.1. Intransitive, transitive and ditransitive clauses

Depending on its participant structure and lexical aspect, a verb can occur in one or more of the five Goemai argument structure constructions: the intransitive construction (as in 1a) (see chapter 4, section 3.5), a transitive construction (as exemplified with the transitive range construction in 1b) (see chapter 4, sections 3.2, 3.3 and 3.4 for the three different transitive constructions), and the ditransitive construction (as in 1c) (see chapter 4, section 3.1).

- (1) a. [Hèn]_S=lùùt.
1SG.S=be.afraid(SG)
'I was scared.' (N00EFRIENDS2)

- b. [Muèp]_A d'án [ni]_O.
 3PL.S cook/warm 3SG.O
 'They boil it.' (D01ATREE)
- c. [ñdá múk]_A pòe [ni]_O / [s'ém
 father 3SG.POSS give 3SG.O name
 ñ-d'è-ñnòe]_O=hòe.
 ADVZ-CL:exist-DEM.PROX=exactly
 'His father gave him this very name.' (D04NSEM4)

The five constructions differ in the number of arguments and in the linking of thematic roles to arguments (see chapter 4, section 1 for details). But despite these differences, they share similarities. In particular, they all mark grammatical relations through the strict constituent order of AVO / SV: there is no case marking within the noun phrase, and no general cross-referencing of arguments within the verb phrase (but see the discussions in chapter 3, section 2.4 and chapter 4, section 1.1). The importance of constituent order is a common phenomenon within Chadic (Frajzyngier 1996).

Some core arguments can be – and usually are – omitted if they are recoverable from the linguistic context. This omission covers 3SG subjects and inanimate direct objects (including lower animals). For example, the speaker introduces *fúán* 'rabbit' in the first sentence of (2a), but omits the subject pronoun in all subsequent references to it. Similarly, the direct object *shàt* 'porridge' in (2b) does not trigger the use of pronominal forms in subsequent utterances. Notice that the 3SG subject is also omitted whenever it refers to a proposition (as in 2c) (see especially the discussion in section 4.2). Non-core arguments, other subject categories and animate direct objects, by contrast, are not omitted.

- (2) a. [Fúán]_A mán [án]_O. Sái rú kúút t'ó
 rabbit know mind then/only enter(SG) just lie(SG)
 [ñd'ùùn là=báng]_{ADV}. Gòepé t'ó
 INSIDE:GEN DIM(SG):GEN=calabash THAT/WHEN lie(SG)
 [ñd'ùùn báng]_{ADV} lát / b'iring kúút hààn
 INSIDE:GEN calabash ANT roll just climb(SG)
 [m-puòe / mè]_{ADV}.
 LOC-mouth:GEN granary
 'The rabbit knew a trick. Then (he) just entered (and) lay inside a little calabash. When (he) lay in the calabash, (he) just rolled (and) climbed through the opening of the granary.'
 (F99DLIIT)

- b. [Là=ndòe=gùrùm]_A b'às
 DIM(SG):GEN=SPEC=person cut.off
 [là=ndòe=shàt gòe-kyòklók]_O / pòe yì
 DIM(SG):GEN=SPEC=porridge NOMZ(SG)-small give CONS
 [n-n't'i]_{ADV}. [n't'i]_A láp yì s'óe.
 BEN-son.of.rabbit son.of.rabbit receive CONS eat
 'Some poor person cut off a little bit of **porridge**, so that (he) gave **(it)** to the son of the rabbit. So the son of the rabbit took **(it)** (and) ate **(it)**.' (F99DLIGYA)
- c. sh'áng hèn gòepé gòe=wùl
 be.pleasant 1SG.O THAT/WHEN 2SGM.S=arrive
 lú=nóe
 settlement=1SG.POSS
 '(it) pleases me that you arrived at my home' (A-22/04/04)

If a pronoun is used in any of the contexts above, its default interpretation is one of non-co-reference with the preceding subject or object (as in 3a). Since this is a preferred interpretation only, it can be cancelled – for example in (3b) where the repeated use of the pronoun serves to emphasize the preceding referent (see also Levinson 2000: 285 for a pragmatic framework to explain this variation).

- (3) a. líit muáán dé ní góe tàl ní yì
 lion go(SG) SO.THAT 3SG.S OBLIG ask/greet 3SG.O CONS
 'the lion went so that **he** (= preferred interpretation: not the lion) should greet him' (A-15/02/00)
- b. Mútúru / ní sh'ái k'óóm. Ní sh'ái
 cattle 3SG.S show.pride strength 3SG.S show.pride
 s'óóm. Ní sh'ái sh'é.
 horn 3SG.S show.pride foot/leg
 'The cow, **it** shows pride in strength. **It** shows pride in horns. **It** shows pride in legs.' (D00JANIMAL5)

In all cases of omission, the omitted argument is recoverable from the discourse. Indefinite or generic reference, by contrast, triggers the use of semantically general nouns such as *bì* 'thing (something)', *gùrùm* 'person (someone)' or *pè* 'place (somewhere)' in subject or object function. In particular, the noun *pè* 'place' is developing into a generic object pronoun, occurring especially

with experiencer and speech act verbs (as in 4a). Some verbs alternatively allow for the occurrence of cognate objects in comparable contexts (in 4b) (see chapter 4, section 6.1).

- (4) a. *Tô / [gùrùm]_A lá nyáng gòè k'òelèng [pè]_O (...).*
 okay person COND hate(SG) SEQ hear/smell place
 'Okay, if someone refuses to listen (...).' (F00CKE)
- b. *[hèn]_A=mùùr [múúr]_O bá.*
 1SG.S=steal stealing NEG
 'I didn't steal.' (F00JFUAN)

The omission of core arguments thus follows a predictable pattern. Similar patterns are attested in other West Chadic languages, although some languages require additional formal marking on the verb in such contexts (Frajzyngier 1989: 161, 1993: 191; P Newman 2000: 682–693; Schuh 1998: 288–292, 297–300; Seibert 1997: 97).⁷⁷

The simple verbal clause can be augmented by means of adverbials (see chapter 5) and particles (see chapter 6, section 1). Such elements generally do not constitute obligatory parts of the simple verbal clause.⁷⁸

1.2. Locative and existential clause

The locative construction consists of a subject noun phrase, a locative verb and an adverbial phrase (as in the second sentence of 5a and in 5b). It serves to locate an entity (i.e., the Figure) with respect to another entity (i.e., the Ground),⁷⁹ including both concrete (as in 5a) and abstract entities (as in 5b). As such, it constitutes the typical answer to a 'where' question (as in 5a).

The subject noun phrase denotes the Figure. As in all clauses (see section 1.1), a 3SG subject can be omitted, provided that it is recoverable from the con-

77. Frajzyngier (1993: 251–252) notes that speakers of the closely-related language Mupun also omit the subject whenever they point at something. In Goemai, by contrast, a demonstrative has to fill the subject slot under this condition.

78. The main exceptions to this generalization are (i) locative verbs, which occur with an obligatory locative adverbial (see chapter 4, section 5.1), (ii) the causative construction, which introduces a comitative phrase (see chapter 3, section 3.4) and (iii) the verbal ascriptive construction and the inceptive equational construction, which co-occur with adverbials (see chapter 8, section 2.2.2).

79. This discussion makes use of the terminology of Talmy (1985, 2000).

text. The verb and adverbial, by contrast, are obligatory. The verb is usually a postural-based locative verb that expresses information about the position of the Figure relative to the Ground (see below). However, it is possible to alternatively recruit inchoative dispositional verbs such as *k'óón* 'become face down' or *dúút* 'become leaning, supported' (see Hellwig 2003: 94–101 for details). The adverbial gives information about the search region (i.e., the space that is anchored to the Ground and within which the Figure is located) and the Ground itself. Speakers use the locative prefix *N-* or a spatial nominal when talking about the Ground as an object, and the spatial preposition *góe* or a deictic adverb when talking about the Ground as a place (see chapter 5, section 4 for the locative classes; see chapter 5, section 2.2.3 for deictic adverbs).

- (5) a. A: *Wáng=hók t'óng hnàng?*
 pot=DEF sit(SG) where
 'Where does the pot sit?'
- N: *Wáng=hók t'óng n-yíl.*
 pot=DEF sit(SG) LOC-ground
 'The pot sits on the ground' (M00ANDISPOS10)
- b. *gók d'è m-pè gòe-hnòe=hòe (...)*
 illness exist LOC-place NOMZ(SG)-LOC.ANAPH=exactly
 'illness is in this place (...).' (D01CLU)

The same construction is used to convey an existential reading – a reading that follows from the classificatory semantics of the locative verbs. Recall that these verbs are used to classify nominal concepts on the basis of the canonical positions of their referents (see chapter 3, section 2.2). For example, containers canonically 'sit', and hence belong to the class of 'sitting' objects. If a speaker now uses the locative verb *t'óng* 'sit' in the locative construction to talk about containers, this construction receives an existential reading. This existential reading is especially visible in negative contexts: if speakers negate the locative construction, they negate the existence of the container at the location, not its position (as in 6a). It is even possible to use classificatory verbs such as *t'óng* 'sit' in cases where a container is not canonically located. In this case, speakers confirm the existence of an object belonging to the class of 'sitting' objects at a location (as in 6b), but they do not make a statement about its current position.

- (6) a. *Hèn (...)* *sh'àng* *nd'ùùn* *tóeb'àl.* *Kwálbá* *t'óng*
 1SG.S glance INSIDE:GEN calabash bottle sit(SG)
d'ì *bá.*
 LOC.ANAPH NEG
 'I (...) looked into the calabash. The bottle did not sit (= exist) there.' (R00ANEGLOC7)
- b. *Kwálbá* *gòe-t'óng* *k'à* *múk* *zák*
 bottle NOMZ-sit(SG) HEAD(SG) 3SG.POSS also/however
à *hààm* *yím.*
 FOC water:GEN leaf
 'The bottle that sits (= exists) on its top is also of green color.'
 (= talking about an upside-down bottle) (M00ANCOMP5)

Alternatively, speakers can decide to focus on the current position rather than on the canonical position. In this case, they shift away from the classificatory verb and instead choose a verb that more adequately describes this position. As a result, the locative construction does not receive an existential reading – the speaker simply asserts or negates the current position of the Figure (as in 7).

- (7) *Gòe-ńndè* *t'ó* *k'à* *kwàtí* *bá.*
 NOMZ(SG)-LOC.ANAPH lie(SG) HEAD(SG):GEN box NEG
 'This one doesn't lie on the box.' (= talking about a 'sitting' bottle)
 (B00NNEG4.6)

In both the locative and existential readings, the adverbial phrase is obligatory. That is, it is not possible to express existence irrespective of location. If the location is known from previous discourse, it still needs to be overtly expressed by means of the locative anaphor *d'ì* (as in the second and third lines of 8a). The same adverb is used to assert the existence of entities at non-specific locations (as in 8b).

- (8) a. *Áás* *ruún* *k'à* *jí* *nd'ùùn*
 dog insert(SG) head(SG) SGM.LOG.SP.POSS INSIDE:GEN
kwálbá / dé *gòe* *ná* *yì* *kó* *nóemuát*
 bottle SO.THAT OBLIG see CONS maybe/or frog

d'è d'í=wò. Nóemuát d'è d'í bá.
 exist LOC.ANAPH=INTERR frog exist LOC.ANAPH NEG
 ‘The dog₁ inserted its₁ head into the bottle, so that (it) should
 see (that) maybe the frog is there. There was no frog.’
 (R00AFROG)

- b. *byààp t'éng gòe-mís d'è d'í/*
 pumpkin:GEN tree NOMZ(SG)-man(SG) exist LOC.ANAPH
gòepé gòe-sék là là
 THAT/WHEN NOMZ(SG):CONS-body produce(SG) child(SG)
bá. Byààp t'éng gòe-mát d'è
 NEG pumpkin:GEN tree NOMZ(SG)-woman(SG) exist
d'í/ gòepé gòe-sék là
 LOC.ANAPH THAT/WHEN NOMZ(SG):CONS-body produce(SG)
là.
 child(SG)

‘There are male pawpaw trees that do not produce fruit. There
 are female pawpaw trees that produce fruit.’ (D01NTREE)

1.3. Presentative clause

The presentative construction is similar to the locative construction (see section 1.2) in that it contains a subject noun phrase (denoting the Figure), a locative verb (giving postural information) and an adverbial phrase (denoting the Ground). The presentative function is marked by the optional particle *ná* and the obligatory prefix *N-* preceding the verb (as illustrated in 9a to 9c).

This construction is used to direct the attention of the addressee to a referent, thereby introducing it into discourse. This function is illustrated in (9a): speaker A. uses the presentative construction to draw the attention of speaker N. to a pot, but he is not successful in establishing reference – speaker N. tries to identify the pot, but fails and asks for further information. In the first line of (9b), another text example, reference is successfully established by means of the presentative construction. Once the referent is identified, all subsequent reference makes use of the locative anaphor (e.g., *gòehmòe* ‘this one’ in the second line of 9b). The presentative is used predominantly with spatial referents (as in 9a and 9b), but it can also be used with linguistic entities (in 9c).

- (9) a. A: *Ŋ̀dòe=wáng ná ñ-t'óng d'ì.*
 SPEC=pot PRES PRES-sit(SG) LOC.ANAPH
 'See a pot sits there.'
- N: *Góenàng?*
 which(SG)
 'Which one?' (M00ANDISPOS8)
- b. *t'éng ná ñ-d'yém d'ì puánáng.*
 tree PRES PRES-stand(SG) LOC.ANAPH there/yonder
Gòe-ñhòe à t'èng kyóók.
 NOMZ(SG)-LOC.ANAPH FOC tree:GEN tree.type
 'See a tree stands over there. This one is a *kyóok* tree.'
 (D01ATREE)
- c. *Ŋ̀dòe=àrà̀m ná ñ-d'è k'á ñdòe=réép (...).*
 SPEC=story PRES PRES-exist HEAD(SG):GEN SPEC=girl(SG)
 'See here is a story about a girl (...).' (F99DREEP)

The presentative is only used if the referent is identifiable. This restriction should not be confused with visibility: an invisible referent can be identifiable through other types of sensory information, e.g., through auditory information (as in 10) (see also chapter 3, section 5.4 for similar restrictions in the demonstratives).

- (10) N. *ná ñ-láng d'ì!*
 N. PRES PRES-hang/move(SG) LOC.ANAPH
 'See N. moves there!' (N. was heard approaching, but was not yet visible.) (A-12/10/00)

Given that this construction is used in reference to entities that are present in the current speech situation and at the current time (including a transposition to the place and time of a narrative), it cannot co-occur with any other TAM category. And since it directs attention to an identifiable, and hence existing, referent, it cannot be negated.

As in the case of all other constructions (see section 1.1), the subject noun phrase can be omitted. However, since the presentative serves to introduce new entities into discourse, this noun phrase almost always contains new information and is thus present. The adverbial phrase, by contrast, is frequently omitted (as in 11a). If it is present at all, it typically takes the form of a deictic or anaphoric adverb (as in 11b). Detailed topological information is only volunteered

if the speaker has reasons to assume that the addressee cannot identify the referent on the basis of the postural and deictic information provided.

- (11) a. *Dók t'òng góe=ná / kàfin gòe=rù*
 PAST.REM IRR 2SGM.S=see before 2SGM.S=enter(SG)
dákd'ùòe lú / gùng lóng ná ò-t'ó.
 MIDDLE:GEN settlement forest:GEN chief PRES PRES-lie(SG)
 'You would see (it), before you entered the town, see the forest of the chief lies (here).' (D00AKWANDE)
- b. *Àsé / s'óe ná ò-t'ó b'ák m-pè*
 INTERJ food PRES PRES-lie(SG) here LOC-place
ònòe-hòe.
 LOC.ANAPH-exactly
 'Surprise, see food lies here in this place.' (F00AFUAN)

The presentative morphology (*ná*) *N-* probably originated in a complex construction that contained the main verb *nǎ* 'see' plus a locative verb that was adverbialized by means of the adverbializer *N-*. It is likely that the verb *nǎ* 'see' originally carried the presentative load (i.e., it directed the attention of the addressee).⁸⁰ But in present-day Goemai, the verb *nǎ* 'see' and the presentative morpheme *ná* have to be analyzed as two separate morphemes, which can even co-occur (as in 12). In the course of grammaticalization, *nǎ* 'see' has lost its status as a verb: the presentative morpheme *ná* now occurs in a particle slot; the adverbialized form '*N-verb*' has been reanalyzed as the main (and only) verb of the clause; and the adverbializing prefix *N-* has been reanalyzed as the presentative prefix. In the course of this development, the particle *ná* became optional.

- (12) *t'òng góe=ná bóól ná ò-t'ó d'ì.*
 IRR 2SGM.S=see ball PRES PRES-lie(SG) LOC.ANAPH
 'you will see a ball (and) see (it) lies there.' (M00ANCOMP2)

2. Non-verbal clauses: Equational and possessive clauses

Goemai makes use of non-verbal strategies to express equative, ascriptive and possessive functions (section 2.1). In recent times, verbs have taken over some

80. Similarly, the presentative particle *gàà* in Hausa probably originated in the verb *gánii* 'see' (see Jaggat 2001: 468–469; P. Newman 2000: 181–182).

of these functions: locative verbs occur in the ascriptive construction (which assigns a property to a referent), and intrude into possessive contexts; and one of the locative verbs, together with motion verbs, occurs in the inceptive equational construction (which expresses a change in status) (section 2.2).

2.1. Non-verbal clauses

Goemai has two non-verbal clauses: the equational construction formed by means of the focus particle *à* (as in 13a), and the possessive construction formed by means of the comitative prepositions *góe* and *N-* (as in 13b) (see below for details). Both non-verbal clauses share a number of formal properties that set them apart from verbal clauses.

First, the subject pronouns are taken from the independent set (as *měn* ‘1PL’ in 13a and *gwěn* ‘2PL’ in the first utterance of 13b). There is variation in that speakers of the Dorok dialect alternatively allow for the dependent subject pronouns to occur in the possessive construction (as *gũ* ‘2PL’ in the second utterance of 13c).

- (13) a. [*mén*]_{VCS} *à* [*mòe-jàp-núún*]_{VCC}.
 1PL.I FOC NOMZ(PL)-children(PL):GEN-mother
 ‘we are siblings.’ (N00EFRIENDS3)
- b. [*Gwén*]_{VCS} *góe* [*Mángáp*]_{VCC?} (...) [*Gù*]_{VCS}=*góe*
 2PL.I COMIT <MASQUERADE.NAME> 2PL.S=COMIT
 [*Dápyít*]_{VCC}=*à?*
 <MASQUERADE.NAME>=INTERR
 ‘Do you have *Mangap*? (...) Do you have *Dapyit*?’
 (C00ANDIALECT6)

Second, TAM marking in non-verbal clauses is restricted to the absolute tenses (as in 14a), the habitual aspect (as in 14b), and focused and negative irrealis modalities (see chapter 7).

- (14) a. [*ndá nóe*]_{VCS} *dók* *à* [*lòng káuyè*
 father 1SG.POSS PAST.REM FOC chief:GEN village
mén]_{VCC} *tóe*.
 1PL.POSS EMPH
 ‘My father was the chief of our village.’ (D01CLU)

- b. [Kùp ònòe]_{VCS} d'á à [gòe-b'áán]_{VCC} t'óng (...).
lake LOC.ANAPH HAB FOC NOMZ(SG)-bec.warm HAB
'This lake was usually a warm one (...).' (Q99ATQ34)

Third, non-verbal clauses cannot be nominalized with the help of the clausal nominalizer *gòe-*. They can, however, be nominalized with the nominalizer *bòe=* (as in 15) (see chapter 3, section 4.4).

- (15) Lá bòe=à [hàngòed'è gòe-tél]_{VCC}
COND HOW/WHERE=FOC water NOMZ(SG)-bec.deep
tòe (...).
EMPH
'If (it is) where (there) is deep water (...).' (P00NFISHING)

In other respects, non-verbal clauses are similar to verbal clauses: they can be negated with the help of the sentence-final negation particle (as in 16a); they can occur within complex clauses, e.g., within a conditional clause (as in 16b); and a 3SG subject is omitted if it is recoverable from the linguistic context (as in 16c).

- (16) a. [muèp]_{VCS} à [yár]_{VCC} bá / àmmá muèp yúúł
3PL.I FOC bird NEG but 3PL.S rise(PL)
sh'áát.
wing/shoulder
'they aren't birds, but they rise (on) wings.' (D04ALWA3)
- b. muèp t'óng tù ní kàt [ní]_{VCS} lá à
3PL.S IRR kill(SG) 3SG.O maybe 3SG.I COND FOC
[Tífi]_{VCC}.
<ETHNIC.NAME>
'they would kill him if he was a Tiv.' (H01JWAR)
- c. Àsé / à [lóng gòe-f'yér]_{VCC}.
INTERJ FOC chief NOMZ(SG)-bec.big(SG)
'Surprise, (he) is a big chief.' (C00ANDIALECT4)

The remainder of this section illustrates the two non-verbal clauses, equational clauses (section 2.1.1) and possessive clauses (section 2.1.2).

2.1.1. Equational clause

The equational construction contains a subject noun phrase, the focus particle *à*, and a complement consisting of either a noun phrase (as in 17a) or an adverbial phrase (as in 17b). The subject is frequently followed by a marked pause (as in 17c), suggesting that the particle *à* forms a unit with the complement rather than the subject noun phrase.

- (17) a. *Àmmá yín [Ìmá]_{VCS} à [mìs dóe]_{VCC}.*
 but SAY <NAME> FOC man(SG) SGF.LOG.SP.POSS
 ‘But (she) said that Ima is her husband.’ (D00EWITCH3)
- b. *[Mángòrò múk]_{VCS} à [m̀b'èl]_{VCC} bá.*
 mango 3SG.POSS FOC much/many NEG
 ‘His mangos aren’t many.’ (R00JMUCH1)
- c. *[Muép]_{VCS} / à [jàp K'wò]_{VCC}.*
 3PL.I FOC children(PL):GEN <ETHNIC.NAME>
 ‘They are children of the K'wo.’ (D00JMASS)

The particle *à* is probably a retention from Proto-Angas-Goemai, since closely-related languages use the same form in both focus and equational structures (Frajzyngier 1986, 1993: 251–258; Pawlak 1994). Cross-linguistically, both the development of focus markers into copulas and the opposite development of copulas into focus markers is attested (Heine and Reh 1984: 147–182; Stassen 1997: 76–91).

In the equational construction, the focus particle *à* has lost its pragmatic function. To mark pragmatic focus, speakers have to use different constructions instead (see also chapter 6, section 1.2). For example, the emphasis particle *tóe* is used in (18a) to focus on the subject. Or in (18b), the subject is fronted and marked by the focus particle *à* (and the equational construction receives a new subject).

- (18) a. *Nàgú yín Jí tóe / l̀ng / ñkyá /*
 cattle.egret SAY SGM.LOG.SP.I EMPH chief:GEN vulture
̀ndòe d'úús.
 CONJ cricket
 ‘The cattle egret₁ said, HE₁ (is) the chief of the vulture and the cricket.’ (F00JDUUS)

- b. *Yì=màn* *à* *ní* / [*yí* *múk*]_{VCS} *à* [*yàgùrùm*]_{VCC}.
 2SGF.S=know FOC 3SG.I year 3SG.POSS FOC twenty
 ‘You know her, her age is twenty.’ (D00EWITCH2)

The equational construction has three different – albeit related – functions, depending on its lexical fillers. It has an equative function where it identifies the referent of one expression with that of another expression (as in 19a). It has an ascriptive function where it assigns a property or status to a referent (as in 19b). And it has restricted possessive functions where it expresses the concept of ‘belonging’ (linking the possessed entity to the subject and the possessor to the complement, as in 19c). In all cases, the referent of the subject noun phrase is identical to either the referent of the complement noun phrase (e.g., the ‘cricket’ in 19a) or to a subset of these referents (e.g., the subset of ‘black ones’ in 19b, and the subset of ‘his belongings’ in 19c).

- (19) a. [*Yàm-nùún* / *nàgú*]_{VCS} / *à* [*d’úús*]_{VCC}.
 son(SG):GEN-mother:GEN cattle.egret FOC cricket
 ‘The brother of the cattle egret is the cricket.’ (F00JDUUS)
- b. [*Sh’ép* *múk*]_{VCS} *à* [*gòe-tép*]_{VCC}.
 wood 3SG.POSS FOC NOMZ(SG)-bec.black
 ‘Its wood is a black one.’ (M00ANCOMP2)
- c. [*Gòe-gòe* *puóe=hók*]_{VCS} / *à* [*mùmùk*
 NOMZ(SG)-PLACE mouth=DEF FOC NOMZ.3SG.POSS
yàm-nùún *nóe* *gòe-ñk’óng*]_{VCC}.
 son(SG):GEN-mother 1SG.POSS NOMZ(SG)-bec.small/young(SG)
 ‘The one at the entrance is the one of my younger brother.’
 (D01JLU)

It is cross-linguistically common that all three functions are expressed with the help of the same or similar non-verbal structures (Hengeveld 1992; J. Lyons 1977: 469–475; Stassen 1997: 100–120). But notice that, with the exception of the equative function, there are alternative strategies available in Goemai: property verbs are used with an ascriptive function (see also section 2.2), and there is a dedicated possessive clause (see below).

2.1.2. Possessive clause

Predicative possession is expressed by means of a subject noun phrase (coding the possessor), a comitative preposition and a complement noun phrase (coding the possessed). The preposition *góe* (triggering a high tone in the following noun) is used if the complement is a noun, and the prefix *N-* if it is a pronoun (as illustrated in 20) (see chapter 4, section 5.1 on the comitative).

- (20) *Kwàì* / [m̀m̀à̀n]_{VCS} *góe* [t'éng]_{VCC} *bá.* (...) *Kwàì* /
 no NOMZ.1SG.POSS COMIT tree NEG no
 [hén]_{VCS} ñ-[ní]_{VCC} *bá.*
 1SG.I COMIT-3SG.I NEG
 'No, mine doesn't have a tree. (...) No, I don't have it.'
 (M00ANCOMP2)

Like attributive possession (see chapter 3, section 3.1), predicative possession is used to express all types of possessive relationships, excepting locative possession. Locative possession is coded by means of the spatial relator *fê* 'OWNER' (see chapter 4, section 5.1).

The possessive construction is a non-verbal structure that exhibits all properties illustrated at the beginning of this section. Like the equational construction, it can be negated with the help of the sentence-final negation particle *bá* (as in 20 above). But speakers frequently use the transitive verb *wán* 'lack' instead (as in 21).

- (21) *à* *bì* *gòefè* *sóól* *wán* *hèn.*
 FOC thing THAT/WHEN money lack 1SG.O
 '(it) is the case that I don't have money (lit. money lacks in relation to me)' (N00EFRIENDS1)

The possessive constructions of Goemai and of closely-related languages are very similar (Burquest 1973; Frajzyngier 1993; Jungraithmayr 1963a). Mupun, for example, uses the associative preposition *ká* in this context (but not the complementary preposition *N-*) (Frajzyngier 1993: 263–270). Given their paradigmatic difference, it seems likely that the possessive morphemes in both languages are independent developments originating from the same (comitative or associative) source. Like Goemai, Mupun also uses a verb, *né* 'be without', to express negative possession (Frajzyngier 1993: 266–270). But, again, independent developments have to account for their occurrence: not only are the forms phonetically different, they also differ in their syntax (a transitive clause

in Goemai as opposed to an intransitive clause plus prepositional phrase in Mupun) and in their distribution of thematic roles (the subject slot is filled by the possessed in Goemai, but by the possessor in Mupun).

2.2. Intrusion of verbs into equational, ascriptive and possessive contexts

The non-verbal clauses described in section 2.1 above are probably the original structures for coding equational and possessive concepts: similar strategies and forms are attested in related languages, and they constitute the typical means of expressing these concepts in present-day Goemai. In recent times, however, locative and motion verbs have taken over some of this domain: they occur in the verbal ascriptive construction (section 2.2.1) and the inceptive equational construction (section 2.2.2), and there are some indications of their spread to possessive contexts (section 2.2.3). In all cases, the verbs retain their lexical semantics.

The intrusion of verbs into the non-verbal domain is (with one possible exception) not attested in other Angas-Goemai group languages. Cross-linguistically, it is known that locative verbs constitute possible sources for copulas (see, e.g., Devitt 1990: 113; Stassen 1997: 94–95, 214). However, their development in Goemai deviates from the better-documented cases: they retain their original semantic content; and they are more commonly used for ascriptive functions (in particular, there is no indication that the ascriptive construction initially coded equative semantics). The spread of locative verbs to non-verbal contexts is likely to be related to their stative lexical aspect (see chapter 4, section 1.3) and to their classificatory semantics (see chapter 3, section 2.2).

2.2.1. *Verbal ascriptive construction*

The verbal ascriptive construction serves to ascribe a property to a referent. It consists of a subject noun phrase, an intransitive locative verb and a complement.

In this construction, the locative verbs are thus used for a function that, cross-linguistically, is often expressed in copulas (Hengeveld 1992; Stassen 1997). For Goemai, however, there are no language-internal reasons to assume that they are copulas: their distribution is identical to that of other verbs, e.g., they are preceded by dependent subject pronouns (such as *gũ* ‘2PL’ in 22a), and they can be marked for all TAM categories (e.g., for obligative modality in 22b).

- (22) a. *gòepé gú=d'è góémé ñdòe muép (...).*
 THAT/WHEN 2PL.S =exist one CONJ 3PL.I
 ‘when you exist (as) one with them (...).’ (C00JMQUEST2)
- b. *dé góe t'óng yì kyóóp.*
 SO.THAT OBLIG:CONS sit(SG) CONS health
 ‘so that (the girl) should sit (in) health.’ (C00ANDIALECT6)

The complement can be an underived noun (as in 22b above), but very often it is a noun derived by – or marked by – the modifying prefixes *gòe-* (SG) or *mòe-* (PL) (as in 23a below) (see chapter 3, section 4.2 for the modifying construction). Alternatively, it is an adverbial (as *ñdùni* ‘much/many’ in 23b), including ideophones (as *pálàlàu* in 23b) and numerals (as in 22a above and 23c below). Or it is a comparative ‘AS IF’ clause (as in 23d). For reasons of emphasis, the complement can precede the verb (as in 23e).

- (23) a. *Yim d'è góe-tép mú?*
 leaf exist NOMZ(SG)-bec.black INTERR
 ‘The leaf exists (as) a black one, right?’ (= the leaf is black)
 (M00ANCOMP1)
- b. *pé dók kààm bì=múk t'ó*
 place:CONS PAST.REM bec.wide thing=3SG.POSS lie(SG)
pálàlàu. Bì d'ík / d'è ñdùni bá.
 IDEOPH thing build/marry exist much/many NEG
 ‘so the place became wide in the past in its own way, (it) lies *palalau*. Buildings did not exist (in) great numbers.’ (H01CJOS)
- c. *lòet'úk=hók d'è góémé.*
 market=DEF exist one
 ‘the market existed (as) one.’ (= there was one market)
 (H01NJOS)
- d. *kó kúmá hèn=gòe t'óng / gòebí gùrùm /*
 maybe/or also 1SG.S=OBLIG sit(SG) AS.IF person
gòe-dóór=hòe=à?
 NOMZ(SG)-deaf=exactly=INTERR
 ‘or should I sit like a deaf person?’ (C00JMQUEST4)
- e. *ñ-gòròng t'ó?*
 ADVZ-bec.crooked lie(SG)
 ‘Crooked (it) lies?’ (M00ANDISPOS10)

Notice that all locative verbs are intransitive verbs – yet in this construction, they co-occur not only with adverbials (see 22a, and 23b to 23e above), but also with nominals (see 22b and 23a). Example (22b) is of particular interest because it illustrates the adverbial function of these nominals: the property noun *kyóóp* ‘health’ follows the consequence particle *yì* – a position that is reserved for adverbials (see section 4.4). Generally, nominals in adverbial function need to be overtly marked with a preposition (see chapter 4, section 5.1 and chapter 5, section 4). The ascriptive construction, however, is one of two structures that allows an intransitive verb to be followed by an unmarked noun phrase in adverbial function (see section 2.2.2 below for the other such structure).

In all examples above, a property is assigned to the referent of the subject noun phrase: a color in (23a), a distribution and a quantity in the first and second sentence of (23b) respectively, a number in (23c), and a comparative standard in (23d). All propositions (excepting the ones lexicalized in ideophones, as in 23b) can alternatively be expressed with the non-verbal equational construction. But unlike the equational construction, the ascriptive construction is additionally concerned with the position of the referent (coded in the locative verbs), and it cannot be used for possessive and equative functions. The ascriptive construction has probably developed directly from the locative construction (see Hellwig 2003: 363–372 for details of the argument). Even in present-day Goemai, the distribution of the ascriptive construction is still closely connected to that of the locative construction. Speakers frequently use first the locative construction to locate a referent, and then shift to the ascriptive construction to correct some mistake or to clarify a property of the referent. Example (24) illustrates a typical situation. In the prelude to this example, two speakers talk about different fish species, the *búlúdi* and the *k’wák* species. Speaker A. is not aware of any distinction between them, and assumes that both expressions refer to the same type of white-colored fish (in the first line of 24). Speaker N. corrects this assumption. He first uses the existential verb in the locative construction to assert the existence of the *búlúdi* species. Following that, he uses the non-verbal equational construction to assert its white color. Finally, he shifts to the ascriptive construction to assert (a) the independent existence of the *k’wák* species (by using the existential verb (*ń*)*d’è*) and (b) its different color (by using the property noun *gòeb’àng* ‘red one’). Such contexts – which are concerned with the location / existence of a referent as well as with its properties – usually trigger the use of the verbal ascriptive construction.

- (24) A: \dot{A} *gòe-pyá* *bá=à?*
 FOC NOMZ(SG)-bec.white NEG=INTERR
 ‘(It) is a white one, isn’t it?’

- N: *Búlúdí d'è d'i. À gòe-pyá.*
 fish.type exist LOC.ANAPH FOC NOMZ(SG)-bec.white
Gòe=màn k'wák=hók? D'è gòe-b'áng.
 2SGM.S=know fish.type=DEF exist NOMZ(SG)-bec.red
 'The *buludi* fish exists. (It) is a white one. (...). You know the
k'wak fish? (It) exists (as) a red one.' (C00ANDIALECT3)

2.2.2. Inceptive equational construction

The inceptive equational construction consists of a subject noun phrase, an intransitive verb – either the locative verb *t'óng* (SG) ~ *t'wót* (PL) 'sit' or a motion verb – and an unmarked noun phrase occurring in adverbial function. Like the non-verbal equational construction, it serves to express identity or class membership – but unlike this construction, it receives an inchoative interpretation (as in the last clause of 25).

- (25) *Àmmá dáí à d'á muép b'é nì /*
 but indeed FOC calabash 3PL.S:CONS produce(PL) 3SG.O
t'óng lúdè gòe-yíl yì ò-ní.
 sit(SG) calabash.spoon NOMZ-write CONS COMMIT-3SG.I
 'But indeed, (it) is a calabash (that) they produce, so that (it) be-
 comes (lit. sits) a decorated calabash spoon.' (C01ANHAND)

The verb in this construction retains its lexical semantics, as illustrated by the comparable examples (26a) and (26b). In (26a), the inceptive equational construction contains the intransitive motion verb *wá* 'return home' followed by a nominal. The first line of this example states that young people pursue an education elsewhere and then return home afterwards. In the following inceptive construction, the speaker uses the verb *wá* 'return home' again to take up this topic, expressing the view that the young person returns home as a doctor. In (26b), by contrast, the construction contains the locative verb *t'óng* 'sit'. Again, the speaker first talks about young people who obtain an education and become professionals. But now he does not focus on the home-coming of the professional, but on the continuation of his career. To do so, he uses the verb *t'óng* 'sit' in its extended sense of 'remain, stay'

- (26) a. *t'óng sh'è bì sh'è t'óng búk*
 IRR learn/teach thing learn/teach IRR return(PL)
yók. Ñdè wá à doctor (...).
 return.home(PL) one/other return.home(SG) FOC doctor
 ‘(they) would pursue an education (and) would return home
 again. One returns home (as) (= becomes) a doctor (...).’
 (C00ANYOUTH2)
- b. *gòe k'wát sòòl bì sh'è muép*
 SEQ pay money:GEN thing learn/teach 3PL.POSS
òn-ní. (...) Ní kát doctor múk t'á
 COMMIT-3SG.I 3SG.S find doctor 3SG.POSS fall(SG)
t'óng. (...) Ní t'óng engineer.
 sit(SG) 3SG.S sit(SG) engineer
 ‘and pay their school fees with it. (...) He receives his doctor
 (title) (and) settles down (with it). (...) (Or) he sits (as) (= be-
 comes) an engineer.’ (C00ANYOUTH4)

While the verb contributes its lexical semantics, the non-stative inchoative reading is not part of the verb semantics. It is not clear how this reading arises. Examples such as (26a) and (26b) above suggest that this reading is a contextual reading and not coded semantically. However, even out of context, speakers always translate comparable structures with ‘become’. This pattern would suggest that the semantics of the construction is responsible for the inchoative reading, not the pragmatic context. For the moment, both interpretations are equally acceptable. Notice that the closely-related language Mupun has developed an ‘inceptive copula’, which originated in a verb *d'éé* ‘stop, remain’ (Frajzyngier 1993: 255–257) – this verb is probably cognate to the existential verb (*ń*)*d'ě* in Goemai.

2.2.3. *Possession*

Goemai has not developed a verbal structure to express possession. Nevertheless, there are two indications that verbs may eventually be used in this context, too. One indication is that in present-day Goemai, the free possessive pronouns can occur in the locative construction to stress a contrastive location (as in the second sentence of 27a). And another indication is that locative verbs frequently co-occur with the comitative preposition to express accompaniment (as in 27b). It is conceivable that these structures may develop further to express general possession.

- (27) a. *Sh'áráp d'è n-hàngòed'è. K'áb'ál d'yém*
 fish exist LOC-water crab stand(SG)
m̀m̀ùk góet'úún.
 NOMZ.3SG.POSS beyond/shore
 'The fish lives in water. The crab stands (= has) its own (hide-out) ashore.' (F00JKABAL)
- b. *Là=hòk / hóm áás=hók / d'yém n-ní.*
 child(SG)=DEF hold dog=DEF stand(SG) COMMIT-3SG.I
 'The boy holds the dog, (he) stands with it.' (R00JFROG2)

3. Verb serialization

Goemai extensively uses verb serialization to express temporal relations among events, to change the lexical aspect of an expression, and to give information on the deictic setting of an event. Serialization also serves to add participants (see chapter 4, section 5.2) and to convey aspectual notions (see chapter 7, section 4), sometimes grammaticalizing into TAM particles (see chapter 7).

Serialization is not considered a typical feature of Chadic languages – although present-day deictic particles, spatial prepositions and directional verbal extensions are sometimes traced back to serialized motion verbs (Frajzyngier 1987a, 1987b, 1987c, 1991b). In particular, Frajzyngier argues that such serialization was motivated through the semantics of Chadic verbs and prepositions: while parameters such as source, goal or path, are commonly lexicalized in verbs, prepositions do not differentiate between them. In order to indicate the directionality of an event, the verb coding the main event has to therefore combine with a motion verb, e.g., in the form of a serial structure (see also chapter 4, section 1.3, and chapter 5, section 4 on comparable lexicalization patterns in Goemai). Alternatively, serialization may have originated from language contact: it is only attested in present-day Chadic languages that are spoken in contact areas, e.g., in the Jos Plateau area. Serialization is common in this geographical area, and Pawlak (2002: 66, 83–84) even notes that the variety of Hausa spoken on the Jos Plateau is characterized by verb serialization. Research on serialization in this geographic area has centered on the occurrence of motion verbs (see Frajzyngier 1993 and Jungraithmayr 1963a for Chadic languages), and on the grammaticalization of TAM morphemes from serial structures (see Gerhardt 1994 for Benue-Congo languages). Both types also play a role in Goemai, but Goemai seems to use serialization more extensively and productively than its neighbors.

This section discusses those formal properties that define Goemai serial constructions and that distinguish between different subtypes (section 3.1). It then investigates the semantics of each subtype in more detail, discussing the coordinate serial construction (section 3.2), the inchoative serial construction and the configurational serial construction (section 3.3) and the deictic serial construction (section 3.4).

3.1. Defining properties of serial verb constructions

A serial verb construction is a type of multiverb structure that joins two or more verbs together. But unlike other multiverb structures, it does not contain any marker of coordination or subordination, and instead constitutes a single clause. Furthermore, there are restrictions on the expression of TAM, core arguments, polarity and location. These restrictions are summarized in table (70) below: serial verbs are distinguished from other multiverb structures by properties (i) to (vii); and it is possible to define subtypes of serial verbs on the basis of how properties (iv) to (vi) are realized, as well as on the basis of properties (viii) and (ix). This section discusses the shared and distinguishing properties.⁸¹

(i) No marker of coordination / subordination

As repeatedly stated in the theoretical literature, serial verb constructions do not contain any marker of coordination or subordination. While this property is also found in Goemai, it cannot reliably distinguish serial structures from coordinated structures. Compare examples (28a) and (28b) below:⁸² the first illustrates a serial verb, and the second a coordinated structure – yet the two structures are segmentally identical, and the coordinated structure can only be recognized by the presence of an intonation break between the verbs in question. This analytical difficulty arises because Goemai usually does not employ clausal conjunctions (see section 4.9) and because it regularly omits 3SG sub-

81. The literature proposes different tests to determine the tightness of verbs in serial structures (Aikhenvald and Dixon 2006; Durie 1997; Foley and Olson 1985; Foley and Van Valin 1984: 187–263; Pawley and Lane 1998; Van Valin and LaPolla 1997: 441–484, 517–575), but it is often difficult to find criteria that are universally applicable. This section illustrates language-internal morphosyntactic environments where serial constructions show differences. These differences are then used to draw conclusions about the tightness of their junctures.

82. Throughout this section, the verbs of a serial verb construction are highlighted in boldface.

ject pronouns if they are recoverable from discourse (see section 1.1). Notice that this difficulty is largely restricted to 3SG pronouns, as other pronouns cannot be omitted in coordinated structures (as *muĕp* '3PL' in the coordinated structure of 28c). Other multiverb structures have an overt marker of coordination or subordination, e.g., the sequential particle *gòe* (in 28d).

Table 70. Formal properties of serial verb constructions

No.	Criterion	Serial verb construction:			
		coordi- nate	inchoative	configu- rational	deictic
i	No marker of coordination / subordination	yes			
ii	Monoclausal structure	yes			
iii	Shared temporal setting	yes			
iv	Shared modality	yes			
	Concordant marking for obligative	yes			no
v	Shared aspectual value	yes			
	Concordant marking for progressive and habitual	yes			no
	V ₂ can be marked for dura- tive or resultative	yes	no	yes (DUR) no (RES)	no
vi	Negation is marked once	yes			
	Negation can have scope over V ₂ only	yes	no		
vii	Shared core argument(s)	yes			
viii	Separate locational setting	yes	no		
ix	V ₁ / V ₂ occurs in verb slot:				
	... relative to set 2 pronoun	yes			no
	in consequence clause	yes		no	
	when nominalized	yes			

- (28) a. *Sáí sù rú / ñ-gòedè gádó.*
 then/only run(SG) enter(SG) LOC-bottom:GEN bed
 ‘Then (he) ran (and) entered under the bed.’ (N00EWITCH1)
- b. *T’èkgòed’i músù yóól yì / sù / rú*
 already/still cat rise(SG) CONS run(SG) enter(SG)
dàkd’uòe lú.
 MIDDLE:GEN settlement
 ‘And so the cat had already risen (and it) ran (away), (and it) entered into the middle of the village.’ (F00JMSUSU)
- c. *Muèp swó / muép rwó ñ-s’ét.*
 3PL.S run(PL) 3PL.S:CONS enter(PL) LOC-bush
 ‘They ran, and so they entered into the bush.’ (R01NFROG)
- d. *sù gòe rú m-pìn (...).*
 run(SG) SEQ enter(SG) LOC-hut
 ‘(she) ran and entered into the hut (...).’ (OHIKERE AND TIEMSAN 1998: 3)

(ii) *Monoclausal structure*

Goemai serial verb constructions constitute a single clause. Their monoclausal structure is reflected in their intonational properties: intonation breaks indicative of clause boundaries do not occur within serial verbs (as in 28a above), but are frequently observed in other multiverb structures (as in 28b and 28c). Similarly, the extract from the conversation in (29) below reveals differences in the back-channeling behavior of addressees (i.e., in the interjection of utterances such as *m̀m̀* ‘yes’, *kwài* ‘no’ etc.). Addressees back-channel after a clause, i.e., following each verb phrase in most multiverb structures (as in 29-1 and 29-2), but following the whole serial verb construction (as in 29-3 to 29-5).

- (29) 1. N: *gòe=rù ñ-kènsúún /*
 2SGM.S=enter(SG) LOC-evening
 ‘you enter in the evening,’
- A: *m̀m̀.*
 yes
 ‘Yes.’

2. N: *dé-gòe tàng wákáám.*
 PUR search way
 ‘to look for a way.’

A: *m̀m̀.*
 yes
 ‘Yes.’

3. N: *Gòe=màng ní gòe=sú ò-ní.*
 2SGM.S=take(SG) 3SG.O 2SGM.S=run(SG) COMMIT-3SG.I
 ‘You take her (and) run with her.’

A: *m̀m̀.*
 yes
 ‘Yes.’

4. N: *Tó / là gòe=máng gòe=sú*
 okay COND 2SGM.S=take(SG) 2SGM.S=run(SG)
gòe=wá ò-ní /
 2SGM.S=return.home(SG) COMMIT-3SG.I
 ‘Okay, if you take (her and) run (and) return with her.’

A: *m̀m̀.*
 yes
 ‘Yes.’

5. N: *̀̀k'òng b'it vél / b'ép muààn tàl.*
 BACK:GEN day two do.again go(SG) greeting
 ‘after two days, (he) goes again (for) the greeting.’

A: *m̀m̀.*
 yes
 ‘Yes.’ (C00ANDIALECT5)

Goemai does not share one of the properties that is commonly listed as characterizing the monoclausal nature of serial verb constructions: the repetition of the whole construction. Although speakers preferably repeat the whole construction, the text database also contains examples where speakers repeat only the last verb phrase (as in 30a). This possibility is restricted to verb phrases within the coordinate serial construction. The inchoative, configurational and deictic serial constructions, by contrast, are always repeated whole (as in 30b, where the speaker chooses a wrong verb and repeats the deictic serial structure, but not the entire coordinate serial structure).

- (30) a. N: *Muèp t'óng làp k'áràm=hòk nín.*
 3PL.S IRR receive mat=DEF point/show
 'They would receive the mat (and) show (it).'
- A: *Nín.*
 point/show
 'Show.' (C00ANDIALECT5)
- b. [*Wá [dóe t'--]DEICTIC.SVC]COORDINATE.SVC / [dóe*
 return.home(SG) come ?? come
t'óng]DEICTIC.SVC dàkd'uòe lú.
 sit(SG) MIDDLE:GEN settlement
 '(He) returned home (and) *verbed* here--, (he) sat here in the
 center of the village.' (D04ALUKWO)

Finally, their monoclausal structure can be shown with respect to the clitic =*hòe* 'exactly'. This clitic attaches to the end of a clause or phrase (see chapter 6, section 2.1). As such, it can cliticize to the first clause of most multiverb structures (as in 31a), but only ever to the end of the entire serial verb construction (as in 31b).

- (31) a. *Tó / muèp t'óng làp=hòe / dé muèp*
 okay 3PL.S IRR receive=exactly SO.THAT 3PL.S:CONS
t'óng s'óe yì.
 IRR eat CONS
 'Okay, they would receive (it), so that they would eat (it).'
- (P04CMUALAM2)
- b. *Lóng wá rú=hòe.*
 chief return.home(SG) enter(SG)=exactly
 'The chief returned home (and) entered.' (O04ANSEMKWAL3)

(iii) Shared temporal setting

The verbs share their temporal setting. That is, only one tense or temporal adverb can occur (as in 32a); the temporal setting cannot be marked on both verbs; nor can the two verbs be marked differently (as in the ungrammatical example 32b) – even if world knowledge tells us that the two subevents must have taken place at different times. To assert two different settings, a coordinated structure is used instead (as in 32c).

- (32) a. *Ni dyén wá dóe t'ó (...).*
 3SG.S PAST.YEST return.home(SG) come lie(SG)
 'Yesterday, he returned home (and) lay here (...).'
 (R00DSVCTAM)
- b.* *hèn=dyén muáán n-Jós bá*
 1SG.S=PAST.YEST go(SG) LOC-<PLACE.NAME> return(SG)
wá shinî
 return.home(SG) today
 'I went to Jos yesterday (and) returned home again today' (A-10/11/00)
- c. *hèn=dyén muáán n-Jós /*
 1SG.S=PAST.YEST go(SG) LOC-<PLACE.NAME>
hèn=bà wá shinî
 1SG.S=return(SG) return.home(SG) today
 'I went to Jos yesterday, (and) I returned home again today' (A-10/11/00)

(iv) Shared modality

The verbs also share their modality. Modality receives single marking (i.e., is marked only once), except for the obligative, which – depending on the subtype – receives either concordant marking (i.e., is marked on each verb phrase) (as in the coordinate serial structure in 33a) or single marking (as in the deictic serial structure in 33b).

- (33) a. *dé ǹwò gòe kàt yì gòe rú*
 SO.THAT snake OBLIG find CONS OBLIG enter(SG)
d'ì ǹd'ù̀n.
 LOC.ANAPH INSIDE
 'so that the snake should find (it and) should enter there inside'
 (F00JGOESEM)
- b. *Gwà góe dóe kàt jí ǹ--*
 SGM.LOG.AD.S OBLIG come find SGM.LOG.SP.O LOC-
dóe ǹ- Lé gòs.
 SGF.LOG.SP.O LOC-<PLACE.NAME>
 '(She₁ said to him₂ that) he₂ should meet him₁ here in-- her₁ here in Lagos.' (D00EWITCH1)

(v) Shared aspectual value

Furthermore, the verbs share their aspectual value. The progressive and habitual aspects always have scope over the whole construction, and – in most subtypes – receive truncated concordant marking. For example, the first verb in (34a) is marked fully for progressive aspect (by *d'è t'óng yi*), but the second verb is marked by *t'óng* only. In addition, some subtypes allow for the possibility to mark the second verb separately for durative or resultative aspect. In this case, the first verb is always a non-stative verb in the unmarked verb form, while the second verb occurs in the durative (as in the coordinate serial structure in 34b) or the resultative aspect. Despite their different markings, their aspectual values are semantically compatible: a non-stative unmarked verb receives a default past tense interpretation (to the effect that the event has ended; see chapter 7, section 2), and the serial construction is thus compatible with both durative (i.e., after a prior event has ended, the referent continues to be in a location) and resultative aspect (i.e., explicitly marking the completion of the prior event).

- (34) a. *Nyè-pé* *mútàné* *d'è t'óng* *s'áráp*
 because-THAT/WHEN people(PL) exist PROGR buy/sell(PL)
yi t'óng s'óe.
 PROGR IRR eat
 'Because people are buying (them) (and) eating (them).'
 (R00AMUCH1)
- b. *Sh'ép rú* *yi d'yém* *òn-yíl.*
 wood enter(SG) DUR stand(SG) LOC-ground
 'The stick has entered (and) stands in the ground (= it entered and now stands continuously)' (B99APSPV)

(vi) Negation

In all serial verb constructions, negation is marked only once. Tests show that, depending on the subtype, the scope of negation is either vague (i.e., over the whole construction or over the last verb phrase only, as indicated by the two translations to the coordinate serial structure in 35a), or over the whole construction (as in the deictic serial structure in 35b). In all cases, the default scope is over the whole construction.

- (35) a. *Tó / mén / mòe=gàp mòe=húár bá.*
 okay 1PL.I 1PL.S=divide(SG) 1PL.S=gnaw NEG
 ‘Okay, we, we don’t divide (it) (and don’t) eat (it).’
 Or: ‘Okay, we, we divide (it) (but) don’t eat it.’
 (C00ANDIALECT6; A-07/02/00)
- b. *dóe t’óng góe yil mén bá.*
 come sit(SG) PLACE ground 1PL.POSS NEG
 ‘(such a person) didn’t sit here in our country.’ (C00JMQUEST4)

(vii) Shared core argument(s)

The verbs share at least one core argument, usually the subject (as in 36a to 36e); but switch-function serialization is attested as well (see section 3.2). In the coordinate serial structure, there are no restrictions with respect to the transitivity of the verbs: it is possible to serialize two intransitive verbs (as in 36a), a transitive and an intransitive verb in any order (as in 36b), or two transitive verbs (as in 36c); a ditransitive verb such as *póe* ‘give’ can also participate (as in 36d). If there are two (di)transitive verbs, their objects are usually shared (as *ués* ‘bone’ in 36c, and *hààm* ‘water’ in 36d), and they directly follow the verb that introduces them, i.e., they occur between the first and the second verb. In the other three serial verb constructions, there are restrictions on the transitivity of the verb (see sections 3.3 and 3.4 for details). But notice that in all four serial constructions, each verb introduces its own arguments, i.e., all verbs retain their lexical transitivity, and – as in simple verbal clauses – direct objects are only omitted if they are recoverable from the linguistic context. Furthermore, number marking is identical to that found in simple verbal clauses, i.e., it is possible for the two participating verbs to have different values for number, depending on their separate arguments (as in 36e). Given this pattern, it is not possible to assign a transitivity value to the serial verb construction as a whole, independent of the values of the participating verbs. It could therefore be argued that Goemai serializes not verbs but verb phrases.

The coordinate serial construction can convey an instrumental reading. In this case, the object is not shared and each verb introduces its own object (as *shik* ‘knife’ and *muěp* ‘them’ in 36e). This is a typical pattern in serializing languages, and it has often been argued that the whole serial structure has three arguments (i.e., A, O and instrument). In the case of Goemai, however, there are two indications that would suggest a different analysis. First, notice that the instrument seems to be coded twice in (36e): once as the object of *màng* ‘take’, and once in a prepositional phrase. Since it is unlikely that the same role should

be coded twice, it would be better to analyze the instrumental reading as an implicature that arises from the lexical semantics of verbs co-occurring in a construction that codes a temporal relation (i.e., if a speaker describes someone as first taking a knife and then killing someone, it is likely – but not inevitable – that this knife was the murder instrument; see section 3.2 for the semantics of this construction). Second, there is a difference in number marking: *màng* ‘take’ is marked for singular (corresponding to the single knife) and *twò* ‘kill’ for plural (corresponding to the multiple victims). If the serial structure as a whole had a unique argument structure, both verbs would need to be marked for plural (corresponding to the plural O). I therefore assume that Goemai serializes verb phrases (not verbs), thus accounting for the presence of two objects.

- (36) a. *Nóemuàt sù pààp.*
 frog run(SG) hide(SG)
 ‘The frog ran (and) hid.’ (R01NFROG)
- b. *Muèp máng nì búk ò-ní zák*
 3PL.S take(SG) 3SG.O return(PL) COMIT-3SG.I also/however
m-pè ò-d’è-òndò=hòe.
 LOC-place ADVZ-CL:exist-DEM.PROX=exactly
 ‘They took him (and) returned with him again (...).’ (N01ATIME)
- c. *Áás máng ués hààr.*
 dog take(SG) bone gnaw
 ‘The dog took the bone (and) chewed (it).’ (F00CAAS)
- d. *Nàk hààm póe Gòelóng.*
 fetch water give <NAME>
 ‘(He) fetched water (and) gave (it) to Goelong.’ (F99OGOELONG)
- e. *ní máng shik twò muèp ò-ní*
 3SG.S take(SG) knife kill(PL) 3PL.O COMIT-3SG.I
 ‘he took a knife (and) killed them with it’ (A-28/10/05)

The realization of the shared subject argument depends on the pronoun set. In the case of set 1 pronouns (i.e., 1SG, 3SG, 3PL, LOG.AD) and nouns, there is single marking (as in 37a). In the case of set 2 pronouns (i.e., 2SG, 1PL, 2PL, LOG.SP), there is optional concordant marking: the pronouns are repeated with each verb (as in 37b), but are optional with the first verb (as indicated by the bracketing in 37b). In some subtypes, set 2 pronouns receive single marking, too (as in the deictic serial structure in 37c). The tonal realization of the first verb is always the same as in simple verbal clauses (see the summary of TAM

paradigms in chapter 7, section 7). In the case of set 1 pronouns, all subsequent verbs then receive their lexical tones. In the case of set 2 pronouns, however, the pronouns receive a low tone, while the verbs receive a high tone.

- (37) a. *Muèp máng lyàk (...).*
 3PL.S take(SG) throw
 ‘They took (it and) threw (it) away (...).’ (R01NSTAGE)
- b. *(jì)=màng jì=wá*
 (SGM.LOG.SP.S)=take(SG) SGM.LOG.SP.S=return.home(SG)
òn-ní òn-lú=wà?
 COMIT-3SG.I LOC-settlement=INTERR
 ‘does he take (it) (and) return with it home to the village?’
 (F04ATAMTIS)
- c. *gòe=dòe kàt gwén lú.*
 2SGM.S=come find ASSOC.PL settlement
 ‘you found those huts here.’ (D01CLU)

(viii) Locational settings

In the coordinate serial structure, the locational settings need not be shared, and each verb can introduce its own location. This includes the first verb, in which case the locative adjunct occurs between the first and second verb (as in 38a). In fact, since each verb can introduce a location, it is possible to assert multiple locations. In other subtypes, by contrast, the setting is shared, and all locative adverbials follow the entire construction (as in the deictic serial structure in 38b).

- (38) a. *Muèp p'úát d'ì yók òn-lú.*
 3PL.S exit(PL) LOC.ANAPH return.home(PL) LOC-settlement
 ‘They left there (and) returned home to the village.’
 (F99DLIGYA)
- b. *dóe kàt bóól d'ì k'à tébùl (...).*
 come find ball LOC.ANAPH HEAD(SG):GEN table
 ‘(he) found the ball here on the table (...).’ (R00ATAMIRR3)

(ix) Verbal properties

There are indications that, in some subtypes, one of the participating verbs has lost part of its verbal properties, and has acquired properties similar to those of particles instead. That is, some grammaticalization must have taken place. This is notably the case for TAM particles that grammaticalized from serial verb constructions (see the introduction to chapter 7). Similarly, the configurational and deictic serial constructions also show similarities to particle structures.

Verbs and particles can be distinguished in the following environments:

(a) In the deictic serial structure, pronouns of set 2 receive single marking and precede the first verb (see point vii above). As such, the first verb behaves like a particle.

(b) When a serial structure occurs within a consequence clause, the consequence particle *yì* follows the first verb (as in the coordinate serial structure in 39a). But in some subtypes, it follows the second verb (as in the deictic serial structure in 39b) – just as in a particle-verb structure (as with the obligative particle *gòe* in 39c).

- (39) a. *dé ní d'áláng yì rú lú.*
 SO.THAT 3SG.S pass(SG) CONS enter(SG) settlement
 ‘so that he passes (and) enters the town.’ (H99BTARIHI)
- b. *dé dóe t'óng yì.*
 SO.THAT come sit(SG) CONS
 ‘So that (he) sits here.’ (H99BTARIHI)
- c. *dé góe kàt / ñgúm yì (...).*
 SO.THAT OBLIG:CONS find beetle CONS
 ‘so that (he) should find a beetle (...).’ (D00JANIMAL1)

(c) A similar behavior is attested in nominalized serial verb structures, where the possessor usually follows the first verb. In some subtypes, by contrast, it follows the second verb – again, similar to particle structures (see chapter 3, section 4.4 for details on clausal nominalization).

Many of the properties discussed above are commonly found in serializing languages (see, e.g., Aikhenvald and Dixon 2006; Crowley 1987; Durie 1997; Foley and Olson 1985; Givón 1991), and they are usually taken to indicate that the verbs form a tight unit that expresses a single event: the monoclausal structure, the shared tense and modality, the constraints on aspectual marking and negation, and the shared core argument. Compared with other languages, the coordinate serial structure in Goemai constitutes a very loose juncture, as evi-

denced by the concordant marking of several categories, the marking of different aspects, the vague scope of negation, the separate introduction of arguments, and the non-shared locational setting. Yet, all these characteristics are also attested in other serializing languages, e.g., Alambak shares the vague scope of negation (Bruce 1988: 27–28), or Ewe allows for the marking of separate aspectual categories (Ameka 2006). Furthermore, the coordinate serial structure is only one of the subtypes: the verbs of other subtypes form a tighter unit, and even show some signs of grammaticalization. The following sections illustrate each subtype in more detail.

3.2. Coordinate serial verb construction

The coordinate serial verb construction is assumed to be the prototypical serial construction in the sense that it (i) occurs most frequently and (ii) constitutes the source structure for the other subtypes (see Hellwig 2003: 285–314 for details). As shown in table (70) above, this construction constitutes the loosest type of juncture. It is used to code a temporal relation between two or more subevents, whereby the nature of this relation is determined by the lexical aspect of the participating verbs: it receives either a sequential or a simultaneous interpretation (see below). There are no formal restrictions on the types of verbs that can participate; nor are there any formal restrictions on the number of verbs. Usually, only two verbs are serialized, but there are examples that contain up to five verbs. In principle, any two (or more) verbs can thus co-occur in the coordinate serial construction. However, as in many other serializing languages (see, e.g., Durie 1997: 322), Goemai speakers use serial structures to express stereotypical or culturally-recognized events. Less stereotypical events or novel concepts, by contrast, are expressed by other multiverb structures. There are also a few collocations of verbs whose meaning in a serial structure cannot be predicted on the basis of each individual meaning, e.g., *t'á hààn* 'cross (a river)' (lit. 'fall climb').

The sequential interpretation arises whenever the first verb is a non-stative verb (see chapter 4, section 2.3 for details on lexical aspect): the verbs are ordered iconically, and the subsequent subevent is seen as a result or further development of the previous subevent. Notice that a simultaneous interpretation is not available in this case – for this interpretation to arise, speakers have to resort to a non-serial coordinated structure (as in 40).

- (40) *muèp s'óe bì, muèp s'wá hààm, muèp shin tàl.*
 3PL.S eat thing 3PL.S drink water 3PL.S do greeting
 'they eat things, they drink water, they perform greetings.' (OHIKERE
 AND TIEMSAN 1999: 2)

Any two subevents that can be brought into a temporal sequence can co-occur here (see 36c above for an example). The construction also serves to add participants to an event, which then receive the contextual interpretations of recipient (see 36d), instrument (see 36e), source, goal or manner of a complex motion event (as in 41a below) or comparative standard (as in 41b). It is known that serial verbs commonly add participants and then develop further into grammatical markers, e.g., verbal extensions or prepositions introducing arguments (Givón 1991; Lord 1993). This type of grammaticalization has been attested for other Chadic languages (Frajzyngier 1987a, 1987b, 1987c), and it is conceivable that the deictic serial construction in Goemai has developed from such a coordinate serial construction. For the moment, however, there are no formal reasons to treat verb combinations that receive the specialized interpretation of recipient, instrument, spatial preposition, or comparative standard any different from the ones that receive a simple temporal interpretation (see especially the discussion under point (vii) in section 3.1).

- (41) a. *Ni nyét Mòek'wò muààn Mùdùùt.*
 3SG.S leave <PLACE.NAME> go(SG) <PLACE.NAME>
 'She left Kwande (and) went to Shendam.' (Q99JCG)
- b. *Ni gòebí zwám=hòe / àmmá f'yér mà*
 3SG.I AS.IF viper=exactly but bec.big(SG) surpass
zwám.
 viper
 'It (is) like the viper, but (it) is bigger than the viper.'
 (D04AWO)

Frequently, the second verb of the coordinate serial construction is a stative locative verb (see chapter 3, section 2.2, and chapter 4, section 1.3) that specifies the position of a referent at the endpoint of its movement. Their occurrence in this construction thus triggers a resultative interpretation. For example, in the serial construction in (42a), the referent has returned home, and the locative verb *t'óng* 'sit' marks the end of this returning event (in a sitting position). That is, whenever a stative verb follows a non-stative verb in this construction, it carries an implicature to the effect that the prior (motion) event has ended (in a

locative state). This implicature arose because of a peculiarity in the Goemai system: unlike many other serializing languages (see Durie 1997: 310–313), Goemai prefers to not have a verb series consisting of a motion verb followed directly by a non-motion verb (e.g., ‘go eat’). Instead, a locative verb almost always intervenes (e.g., ‘go sit eat’). A locative verb thus frequently marks the end of a motion event and the beginning of another event (as in 42b). It is not surprising that, in this context, it should receive a resultative reading. This resultative reading is also present in the deictic serial construction. In (42c), the speaker describes first a returning event, and then uses *t’wót* ‘sit’ in the deictic serial construction to mark the end of this event (in a sitting position). Following that, he specifies further events that take place after returning (i.e., people take calabashes and drink from them). Notice that he first attempts to use *t’wót* ‘sit’, but then interrupts himself and replaces *t’wót* ‘sit’ with *lát* ‘finish’. His repair strategy suggests that the resultative reading of locative verbs is related to their co-occurrence with dynamic motion verbs in a serial construction – the locative verbs on their own cannot convey this reading.

- (42) a. *Á ní tóe. Tó / wá t’óng.*
 FOC 3SG.I EMPH okay return.home(SG) sit(SG)
 ‘(This) is it. Okay, (it) has returned home (and) sits.’
 (M01ANCOLOR)
- b. *Yír bá dóe d’yèm / t’óng b’uén ndá*
 turn return(SG) come stand(SG) PROGR watch father
múk yi (...).
 3SG.POSS PROGR
 ‘(He) turned (and) returned (and) stood here looking at his father (...).’ (F00CAAS)
- c. *Muèp t’óng yók k’èk sék muép.*
 3PL.S IRR return.home(PL) HEADS(PL):GEN BODY 3PL.POSS
Muèp t’óng dóe t’wót. Muèp lá t’wót-- /
 3PL.S IRR come sit(PL) 3PL.S COND sit(PL)
lá lát / muép t’óng wàr / gwì (...).
 COND finish 3PL.S IRR collect calabash
 ‘They themselves would return home. They would sit here.
 When they sit--, when (they) finish, they would take the calabashes.’ (H00JANCESTOR2)

There is one indication that a grammaticalization process is currently taking place in examples (42a) to (42c) above. Locative verbs in simple verbal clauses

occur with an obligatory locative adverbial (see chapter 4, section 5.1); but when occurring in the coordinate serial construction, this adverbial is optional. I assume that its omission is related to the development of an aspectual resultative semantics. A similar grammaticalization process has probably taken place in the development of the present-day resultative particle *kám* from the locative verb ‘stay’ (see chapter 7, section 4.5).

The coordinate serial construction alternatively receives a simultaneous – progressive-like – interpretation, whenever the first verb is a stative verb. Only the stative locative verbs are attested in this position (as in the first sentence of 43). Again, I assume that this interpretation is an implicature that arises from the lexical aspect of the participating verbs and from the semantics of the construction. This structure occurs only rarely, and speakers tend to rephrase it immediately by means of the progressive construction (as in the second sentence of 43) – i.e., by means of a construction that is dedicated to coding progressive aspect, not just implicating it.⁸³

- (43) *Áás=hók d'yém p'áár. (...) Áás=hók zák*
 dog=DEF stand(SG) jump dog=DEF also/however
d'yèm n-p'áár yi.
 stand(SG) PROGR-jump PROGR
 ‘The dog stood (and) jumped (up and down). (...) And the dog stood jumping.’ (R99JFROG1)

Finally, the coordinate serial construction has one subtype, the switch-function serial construction. The two structures exhibit the same formal properties except for the nature of the shared argument: in the switch-function construction, the object of the first verb corresponds to the subject of the second (as in 44a). This construction is rare, and there are only very few examples in the text database. In most cases, it receives a sequential interpretation (as in 44a). Only the occurrence of the two perception verbs *nǎ* ‘see’ and *kát* ‘find’ triggers a simultaneous interpretation (as in 44b and 44c). Since these two verbs are result verbs (and not stative verbs), the simultaneous interpretation is surprising. It is possible that it arises from the preferred use of the progressive aspect construction in this context: examples such as (44b) are rare, while examples such as (44c) are common. In (44c), the two verbs *nǎ* ‘see’ and (*ń*)*d'ě*

83. It is widely attested that progressive structures grammaticalize from serial verbs (Bybee et al. 1994: 127–133; Heine and Reh 1984: 116–119). The Goemai progressive, by contrast, originates from a consequence clause marked for irrealis modality (see chapter 7, section 4.1).

‘exist’ form the serial construction, but at the same time (*ń*)*d’ě* ‘exist’ also forms part of the following progressive construction.

- (44) a. *muèp hét nì t’á ñ-yíl*
 3PL.S hit 3SG.O fall(SG) LOC-ground
 ‘they hit him (and he) fell on the ground’ (A-07/02/00)
- b. *Dóe kàt ñdòe=là ú=hók sù (...)*
 come find SPEC=child(SG):GEN goat=DEF run(SG)
 ‘(She) found here a child of the goat (that) just ran (...).’
 (F99DPAAP)
- c. *pè gòepé ní ná fuán d’è t’óng muààn*
 place THAT/WHEN 3SG.S see rabbit exist PROGR go(SG)
yì m̀puóe-m̀puóe.
 PROGR REDUP.always
 ‘at the place where he always saw the rabbit (and) (it) was going.’ (F99ANTI)

3.3. Inchoative and configurational serial verb constructions

The inchoative and configurational serial verb constructions look superficially similar to the coordinate serial verb construction, but their formal properties (as summarized in table 70 above) suggest a tighter juncture. Both constructions pose restrictions on the participating verbs: they consist of two intransitive verbs that are taken from specific verb classes (see table 71).

Table 71. Inchoative and configurational serial verb constructions

	First verb	Second verb
Inchoative	<i>t’á</i> (SG), <i>t’ék</i> (PL) ‘fall’ <i>yóól</i> (SG), <i>yúúl</i> (PL) ‘rise’	locative verb
Configurational	inchoative verb (some result verbs of transforming)	locative verb

Although the two constructions are formally different, they are discussed together because they serve complementary aspectual functions: in the inchoative serial construction, a stative locative verb occurs in reference to a state-change

(i.e., ‘getting into a position’, as in 45a); and in the configurational serial construction, a state-change verb occurs in reference to a state (i.e., ‘being in a certain configuration and position’, as in 45b).

- (45) a. *yìtsáám* *máng* *k'úr* *mú?* *K'úr* *t'á*
 sleep take(SG) tortoise INTERR tortoise fall(SG)
t'ó.
 lie(SG)
 ‘the tortoise became sleepy, right? The tortoise lay down’
 (F99AKUR)
- b. *Wáng* *k'óón* *t'óng* *k'à*
 pot bec.face.down(SG) sit(SG) HEAD(SG):GEN
kùk *sh'ép.*
 stump:GEN wood
 ‘The pot sits face down on the tree stump.’ (B99APSPV)

In both constructions, a non-stative verb is followed by a stative verb. Yet, unlike the coordinate serial construction, the inchoative and configurational serial constructions do not receive a sequential interpretation, i.e., (45a) could not be interpreted as ‘fall and then lie’, and (45b) not as ‘get face down and then as a result sit’ Instead, the properties discussed below point to a simultaneous interpretation.

In the case of the inchoative serial construction, a number of observations indicate that ‘motion’ and ‘state’ are not seen as separable subevents. First, the locative verbs cannot be marked for durative aspect (see table 70 above) – this is to be expected if the construction codes a non-stative meaning. Second, the construction cannot be paraphrased as a sequential structure. And third, the entire construction can occur in the second position of the deictic serial construction (as in 46) – a slot that is restricted to non-motion predicates (see section 3.4). By contrast, a coordinate serial construction containing *t'á* ‘fall’ (or *yóól* ‘rise’) plus a locative verb exhibits different properties: while durative marking and sequential paraphrase are possible, it cannot occur within the deictic serial construction. These three differences suggest that *t'á* ‘fall’ (and *yóól* ‘rise’) do not designate separate motion events when occurring in the inchoative serial construction. Rather, it is likely that the inchoative construction as a whole is comparable to lexically inchoative verbs (such as *b'áng* ‘become red’) in coding the inception of a state (e.g., *t'á t'ó* ‘become lying’). Notice, however, that the two verbs retain their directional semantics: *t'á* ‘fall’ entails a downward movement, and *yóól* ‘rise’ an upward movement.

- (46) *hèn*=[*muààn* [*dóe* [*t'á* *t'ó*]_{INCHOATIVE}]_{DEICTIC}]_{COORDINATE} (...).
 1SG.S=go(SG) come fall(SG) lie(SG)
 'I went (and) lay down here (...).' (N01JTIME)

In the case of the configurational serial construction, there are two indications that argue against its sequential interpretation. First, the state cannot always be semantically interpreted as the result of the state-change: e.g., in (45b) above, the state-change *k'óón* 'become face down' cannot result in the state *t'óng* 'sit' (but in *t'ó* 'lie' or *d'yém* 'stand'). Rather, the two verbs convey two complementary perspectives on the same event: a configuration ('face down') and a location ('sit') (Hellwig 2003: 303–307). And second, the configurational serial construction shows affinities to adverbial structures: speakers only ever paraphrase it as an adverbial structure (as in the second sentence of 47a below), never as a sequential structure. Similarly, in order to assert two different configurations, speakers always combine an adverbialized state-change verb with the configurational serial construction (as in 47b). Notice that the same inchoative and result verbs that participate in the configurational serial construction also participate in the modifying construction, which also allows them to be used in reference to a stative event (see chapter 3, section 4.2).

- (47) a. *Gòròng* *t'ó* *n-yil* *nnòe=hòe=à?*
 bec.crooked lie(SG) LOC-ground LOC.ANAPH=exactly= INTERR
n-gòròng *t'ó?*
 ADVZ-bec.crooked lie(SG)
 'Does (it) lie crooked on this ground? Crooked (it) lies?'
 (M00ANDISPOS10)
- b. *N-k'óón* *b'àm* *láng* *sèk*
 ADVZ-bec.face.down(SG) bec.stuck hang/move(SG) body:GEN
gák.
 wall
 'Being face down, (it) hangs stuck at the wall' (B00NPHOTO62)

The simultaneous interpretation of both constructions cannot be derived from the lexical aspect of the participating verbs: given their lexical aspect, a sequential interpretation would be expected instead. And, indeed, this interpretation arises if the same verbs co-occur with a locative verb in the coordinate serial construction. It is therefore likely that the simultaneous interpretation results directly from the semantics of the two constructions. Generally, it is well-known that serial constructions develop aspectual meanings, but there is

not much information about the role of serial constructions to express lexical aspect. In Goemai, both constructions have to be seen in the larger context of lexicalization patterns. As mentioned in section 1.3 in chapter 4, Goemai lexicalizes verbal concepts predominantly as inchoatives, not as statives. In the absence of derivational morphology, the inchoative and configurational serial constructions make it possible for statives to occur in reference to a state-change, and for inchoatives to occur in reference to a state.

3.4. Deictic serial verb construction

The deictic serial construction consists of the intransitive motion verb *dóe* ‘come’ followed by a non-motion verb. Although it looks similar to the coordinate serial construction, its formal properties (as summarized in table 70 above) show that the verbs form a tight unit; they even indicate some grammaticalization towards a deictic particle. The deictic serial construction is used to code the deictic setting of an event, i.e., the construction does not express a sequence (e.g., ‘come and find’) but deixis (e.g., ‘find here’) (as indicated in 48a). It can even co-occur with the verb *dóe* ‘come’ (as in 48b): the first *dóe* is used as a motion verb, while the second *dóe* is used as a deictic element.

- (48) a. *Yóól kúút muààn dé lóng / dóe kàt lóng*
 rise(SG) just go(SG) DIR chief come find chief
yín (...).
 SAY
 ‘(He) just rose (and) went to the chief, (and he) found the chief here, saying (...).’ (F99ATYAKLANG)
- b. *dé [gòe dóe yì [dóe kùt*
 SO.THAT OBLIG come CONS come talk
kùt]_{DEICTIC}COORDINATE
 talking
 ‘so that (he) should come (and) talk here (lit. come and come and talk)’ (A-13/06/01)

The different serial constructions discussed above can combine with each other, whereby some occur in the first or second verb slot of others. The combinations are determined by the formal properties and semantics of each serial construction. The following combinations are possible: the inchoative, configurational and deictic serial constructions can occur in either verb slot of the coordinate serial construction, e.g., in second (as in 49a) or first position (as in 49b); and

the inchoative and configurational serial constructions can occur in second position of the deictic serial construction (in 49c).

- (49) a. [*Kwálbá rú* [*kán d'yém*
 bottle enter(SG) bec.inclined stand(SG)
̀n-yíl.]_{CONFIGURATIONAL}]_{COORDINATE}
 LOC-ground
 ‘The bottle entered (and) stands inclined in the ground.’
 (B00NPHOTO)
- b. [[*dóe kàt fuán*]_{DEICTIC} *hà̀r lwá*]_{COORDINATE} *lát.*
 come find rabbit gnaw animal/meat ANT
 ‘(he) found here the rabbit (that) ate the meat.’ (F99DLIGYA)
- c. [*dóe [t'á t'óng ̀n-gòedè*
 come fall(SG) sit(SG) LOC-bottom:GEN
t'éng.]_{INCHOATIVE}]_{DEICTIC}
 tree
 ‘(he) sat down here under the tree.’ (F99ANTI)

4. Multiverb constructions

This section discusses clauses that contain more than one predicate (excepting serial verb constructions). The different types are summarized in table (72) below.

The multiverb constructions differ in the restrictions they place on the expression of person, TAM and polarity: purposive and sequential linking do not allow for the separate expression of person and TAM categories; the nominalized clause expresses an A/S argument occurring within it as a possessor; and the negation particle is placed at the end of the entire sentence in the case of nominalized clauses, adverbial clauses, complement clauses, complements of auxiliary verbs, purposive linking and sequential linking (having vague scope over either of the individual constituents). By contrast, consequence clauses, purpose clauses, reported speech, conditional clauses and coordinated clauses all allow for the independent expression of person, TAM and polarity.

All complex clauses (excepting complements of auxiliary verbs, purposive linking and sequential linkings) share a number of intonational characteristics: there tends to be a brief pause or intonation break between the two clauses; the second clause resets the pitch level and starts a new downdrift contour; and if

the second clause is introduced by a conjunction or particle, it is spoken in a much higher pitch range than usual.

Table 72. Multiverb constructions

Clause type	Form	Section
Nominalized clause	<i>gòe-</i> ‘NOMZ’	4.1
Adverbial clause	<i>(gòe-) pé ~ fě</i> ‘THAT/WHEN’	4.1
Complement clause	<i>(gòe-) pé ~ fě</i> ‘THAT/WHEN’	4.2
Complement of auxiliary verb	<i>gòe- ñ-</i> ‘NOMZ- ADVZ-’	4.3
Consequence clause	high tone + <i>yì</i> ‘CONS’	4.4
Purpose clause	<i>dé</i> ‘SO.THAT’ + high tone + <i>yì</i> ‘CONS’	4.5
Purposive linking	<i>dé-gòe (ñ-)</i> ‘PUR (ADVZ-)’	4.5
Sequential linking	<i>gòe</i> ‘SEQ’	4.5
Reason clause	<i>nyè-(gòe-) pé ~ fě</i> ‘because-THAT/WHEN’	4.6
Reported speech	<i>yì(n)</i> ‘SAY’	4.7
Conditional clause	<i>d’á ~ lá</i> ‘COND’	4.8
Coordinated clause	(a) juxtaposition (b) various coordinators	4.9

4.1. Adverbial and nominalized clauses

Goemai has two types of clauses that can both function as adverbial clauses: a nominalized clause (section 4.1.1) and an adverbial clause (section 4.1.2). Both have a similar distribution, and both can be oriented either towards a participant (acting similar to a relative clause) or towards an event. This double orientation is attested in other Goemai adverbials, too (see chapter 5, section 2.1) (see also Hale 1976 who reports similar patterns for some Australian languages). Despite their present-day distributional similarities, the two clauses probably have different diachronic origins.

4.1.1. Nominalized clause

The nominalized clause occurs in two distinct syntactic functions. It can occur within the noun phrase, where it then functions as a modifier to the head noun (as in 50a). Alternatively, it occurs in adverbial function without a head noun. In this case, it receives a temporal interpretation: if it is not marked for progressive aspect, it introduces an event that temporally precedes the main event (as in 50b); if it is marked for progressive aspect, it introduces a simultaneous event (as in 50c). It cannot introduce events that follow the main event in time (see section 4.4 for the latter function). Formally, the nominalized clause contains all arguments, TAM morphemes and adverbials that were present in the corresponding verbal clause (see chapter 3, section 4.4 for details of the internal structure and of the modifying function).

- (50) a. *ní mán [[bì]_N [gòè-t'óng shin múk]_{MODIFIER}]*_O.
 3SG.S know thing NOMZ-IRR do 3SG.POSS
 'he knows the thing that he would do.' (C00ANYOUTH1)
- b. [*Gòè-t'óng yóól múk m-b'ìtlúng pyú*]_{ADV} /
 NOMZ-IRR rise(SG) 3SG.POSS LOC-morning IDEOPH
láng à sèk puòe muès (...).
 hang/move(SG) FOC BODY:GEN mouth:GEN beer
 'After he would rise very early in the morning, (he) hangs
 around at the door of the beer (parlor) (...).' (C00ANYOUTH3)
- c. [*Gòè-t'wót muép t'óng k'wál ndòe*
 NOMZ-sit(PL) 3PL.POSS PROGR talk CONJ
*àrà̀m=hòk yì]*_{ADV} / *nshìk múk=hók* /
 conversation=DEF PROGR grandchild 3SG.POSS=DEF
kút ndòe / nàkú múk (...).
 talk CONJ grandparent 3SG.POSS
 'While they sat having the conversation, his grandchild talked
 to his grandparent (saying) (...).' (R00CUNMARKED)

Notice that the two functions trigger the use of different verbs: when functioning as a noun phrase modifier, there are no restrictions; but when functioning as an adverbial clause, the main verb of the nominalized clause has to be intransitive (and the vast majority of examples contain motion or location verbs, such as *yóól* 'rise' in 50b and *t'wót* 'sit' in 50c).

I tentatively assume that its use as a modifier preceded its use as an adverbial clause. This assumption is based on contexts such as (51a) below. In (51a),

the nominalized clause functions as a modifier to the head noun *̀̀k'̀̀ng* 'BACK'. And the whole noun phrase then functions as an adverbial temporal clause. Its adverbial interpretation is made possible by the lexical semantics of the head noun *̀̀k'̀̀ng* 'BACK': it is a spatial nominal that functions both as a noun and as an adverbial (see chapter 5, section 4). As an adverbial, it conveys primarily spatial semantics, but can alternatively receive a contextualized temporal interpretation. This interpretation is also available in the absence of a modifying nominalized clause (as illustrated in 51b). It is possible that expressions such as (51a) constituted the bridging context that led to the reanalysis of a modifying nominalized clause as an adverbial clause: presumably, the head noun was omitted, and the nominalized clause then appeared in adverbial function. In present-day Goemai, speakers use the head noun *̀̀k'̀̀ng* 'BACK' only infrequently, and only if they intend to stress that the two events took place in a sequence.

- (51) a. [*̀̀k'̀̀ng* [*̀̀g̀̀e-ỳ̀ól* *̀̀g̀̀e*]_{MODIFIER}]_{ADV} / *̀̀nì* *̀̀d̀̀e* *̀̀b'̀̀ák*
 BACK NOMZ-rise(SG) 2SG.POSS 3SG.S come here
 'after you had risen, he came here' (A-22/12/99)
- b. *T.* / *̀̀g̀̀ók* / *̀̀k'̀̀ng* *̀̀ỳ̀e*.
 <NAME> bec.ill BACK 2SGF.POSS
 'T. became ill after you.' (N01JTIME)

In the absence of the head noun *̀̀k'̀̀ng* 'BACK', the adverbial clause still receives a sequential interpretation (as in 50b above). A simultaneous reading is only possible if the clause is marked for progressive aspect (as in 50c above). Notice that such examples are very rare, and that progressive aspect marking does not necessarily preclude a sequential interpretation: in (52) below, the speaker uses a progressive-marked adverbial clause, but then introduces the main clause with the conjunction *̀̀sáì* 'then' (borrowed from Hausa). That is, the simultaneous interpretation could be a contextual reading that is permitted – but not entailed – by progressive-aspect marking. Furthermore, if the diachronic scenario above is true, this simultaneous interpretation is a later development that took place after the adverbial function was well established. This assumption follows from the observation that there is no spatial relator – analogous to *̀̀k'̀̀ng* 'back' – that could convey the notion of simultaneity.

- (52) [*Góe-d'è muép t'óng sh'àng pè=hòk yi*]_{ADV/}
 NOMZ-exist 3PL.POSS PROGR watch place=DEF PROGR
sái muép kàt nóemuàt vél (...).
 then/only 3PL.S:CONS find frog two
 'After they were watching the place, then they found two frogs
 (...).' (R00AFROG)

Goemai has a spatial relator *nkyèm ~ ntyèm* 'FRONT' that – like *nk'óng* 'BACK' – can receive a temporal interpretation, expressing events that temporally follow the main event. It is used in a different type of construction (see section 4.4), however, and cannot introduce nominalized clauses.

The predominantly sequential interpretation of nominalized adverbial clauses is possibly related to their discourse function: they provide a temporal setting for the main event by relating it to a previous (or sometimes simultaneous) event. In particular, they are frequently employed in head-tail linkages (in the sense of Thompson and Longacre 1985). When narrating events, speakers tend to repeat a constituent of the preceding sentence as an introductory adverbial in the subsequent sentence. The repeated constituent is the verb together with its direct object(s) and adverbials (if any) that immediately precedes the main event in time (as in 53a). Notice that purpose and reason clauses are not taken into consideration: as illustrated in (53b), the first nominalized clause (*gòep'áar múk* 'after he jumped') refers back to the jumping event, but ignores the intervening purpose and reason clauses. In the case of multiverb clauses, the repeated constituent can be the last verb phrase only: e.g., the second nominalized clause in (53b) (*gòet'à múk nhàngòed'è ñnòehòe* 'after he fell into this water') omits the exiting subevent of the preceding serial verb construction. Alternatively, the entire multiverb clause can be repeated (as in 53c). In no case, however, is it possible to repeat more than one clause. For example, in the case of a coordinate sentence, only the second coordinand is repeated (as in 53d).

- (53) a. *Sái bá. Gòe-bá múk / sái*
 then/only return(SG) NOMZ-return(SG) 3SG.POSS then/only
Ìmá p'ét d'i.
 <NAME> exit(SG) LOC.ANAPH
 'Then (he) returned. After he returned, Ima came out there.'
 (D00EWITCH1)

- b. *Tó / ní p'áár / dé-gòe ñ-muààn / ní yá*
 okay 3SG.S jump PUR ADVZ-go(SG) 3SG.S catch
kè=hòk. Gòe-p'áár múk sáí p'ét
 chicken=DEF NOMZ-jump 3SG.POSS then/only exit(SG)
t'á ñ-hàngòed'è / ñd'ùùn bòegá. Gòe-t'á
 fall(SG) LOC-water INSIDE:GEN well NOMZ-fall(SG)
múk ñ-hàngòed'è ñnòe=hòe móe-nyé
 3SG.POSS LOC-water LOC.ANAPH=exactly NOMZ(PL)-matter
múk yír (...).
 3SG.POSS turn

‘Okay, he jumped to go (because) he (wanted to) catch the chicken. After he jumped, then (he) came out (and) fell into the water in the well. After he fell into this water, his friends turned around (...).’ (FOOÇKE)

- c. *fuán yóól sù. Gòe-yóól múk sù*
 rabbit rise(SG) run(SG) NOMZ-rise(SG) 3SG.POSS run(SG)
ñnòe (...).
 LOC.ANAPH

‘the rabbit rose (and) ran. After he rose (and) ran (...).’ (FOOÇFUAN)

- d. *Áás p'áár / p'ét / góe kwálbá ñ-k'á*
 dog jump exit(SG) COMIT bottle LOC-head(SG)
múk. Gòe-p'ét áás / ñ-fúng / ñ-pìn /
 3SG.POSS NOMZ-exit(SG) dog:POSS LOC-hole LOC-hut
t'á ñ-yíl.
 fall(SG) LOC-ground

‘The dog jumped, (and) (he) got out with the bottle over his head. After the dog got out through the hole, through the hut, (he) fell onto the ground.’ (R00ÇFROG)

The nominalized clause in adverbial function almost always precedes the main clause. This position differs from the position of other adverbials, which only occur initially for reasons of emphasis (see chapter 5, section 1). Their initial position probably iconically reflects their main function as relating a main event to a preceding (or – less commonly – simultaneous) event.

4.1.2. Adverbial clause

The adverbial clause only ever occurs in adverbial function. It is introduced by means of (*gòe-*) *pé* ~ *fě*, and its internal structure is identical to that of a verbal clause in its marking of arguments and TAM categories, and in the presence of peripheral constituents. Semantically, it is used to introduce temporal clauses that either precede the main event in time (as in 54a) or that occur simultaneous to it (as in 54b). In the first case, it can be optionally augmented with the spatial nominal *̀̀k'óng* 'back' (as in 54c). As in the case of the nominalized clause, a simultaneous interpretation is only possible if the clause is marked for progressive aspect; again, the adverbial clause cannot be used for events that follow in time.

- (54) a. *Sáí máng s'á múk nín*
 then/only take(SG):CONS hand/arm 3SG.POSS point/show
̀̀n-yít nóe. [G̀̀depé nín s'á
 LOC-eye/face 1SG.POSS THAT/WHEN point/show hand/arm
múk ̀̀n-yít nóe lát]ADV / hèn=wàm
 3SG.POSS LOC-eye/face 1SG.POSS ANT 1SG.S=bec.wet
yì t'óng=hòe.
 DUR sit(SG)=exactly
 'Then (he) took his hand (and) pointed (it) at my face. After (he) finished pointing his hand at my face, I sat rotten.'
 (F99DLIT)
- b. *ní muán d'yèm ̀̀n-kóng / t'óng s'úp*
 3SG.S go(SG) stand(SG) LOC-stream PROGR wash(SG)
sék múk yì. [G̀̀depé ní d'yèm
 body 3SG.POSS PROGR THAT/WHEN 3SG.S stand(SG)
t'óng s'úp sék múk yì t'óng s'úp
 PROGR wash(SG) body 3SG.POSS PROGR PROGR wash(SG)
sék múk yì t'óng s'úp sék múk
 body 3SG.POSS PROGR PROGR wash(SG) body 3SG.POSS
yì]ADV / ̀̀ndòe=gòe-rwáng / jík
 PROGR SPEC=NOMZ(SG)-bec.mad come.from
wá wúl.
 return.home(SG) arrive
 'he went (and) stood at the river washing his body. While he stood washing his body, washing his body, washing his body, a

madman came (from somewhere) (and) arrived.’
(F00CGOERWANG)

- c. *Muép d'è d'í* [*ńk'óng pé*
3PL.S exist LOC.ANAPH BACK THAT/WHEN
móe=nyét *ń-Wùkái*]_{ADV.}
1PL.S:CONS=leave LOC-<PLACE.NAME>
‘They were there after we had left from Wukari.’ (H99BTARIHI)

Its predominant discourse function is to relate a main event to a preceding or simultaneous event (as in 54a to 54c above). In fact, the adverbial clause is often used interchangeably with the nominalized clause, and – like the nominalized clause – it almost always precedes the main clause (see 54c for a counter-example). It only differs in its wider distribution, as there are no restrictions on the transitivity of the participating verbs (e.g., a transitive verb occurs in 54a).

Like the nominalized clause, the adverbial clause can alternatively be oriented towards one of the participants of the main clause. But unlike the nominalized clause, it continues to function as an adverbial in this case. For example, the nominalized clause occurs within the noun phrase and hence precedes particles that overtly mark the final boundary of noun phrases functioning as direct objects or verbless clause complements (as the particle *yì* in 55a). The adverbial clause, by contrast, does not occur within the noun phrase, and obligatorily follows particle such as *yì* (as in 55b and 55c) (see also section 1 in chapter 3, section 1.1 in chapter 4, and section 1 in chapter 5 for this diagnostic). That is, it still occurs in adverbial function, even though it is participant-oriented (see chapter 5, section 2.1 for a similar distribution in simple adverbs). In all cases of participant orientation, the adverbial clause follows the main clause – regardless of whether it is oriented towards a direct object or verbless clause complement (as in 55b) or a subject (as in 55c).

- (55) a. *dé ní k'óerék* [*bì* [*gòe-k'wál*
SO.THAT 3SG.S remember/remind thing NOMZ-talk
mís=hòk]_{MODIFIER}]_O *yì* (...).
man(SG):POSS=DEF CONS
‘so that she remembers the thing that the man said (...).’
(F99DMATWO)

- b. *gòèbí* [*ládàbí*]_{VCC} *yì* / [*gòèpé* *pá*
 AS.IF respect CONS THAT/WHEN SGF.LOG.AD.S:CONS
shín òdòè mìs pá]_{ADV}.
 do CONJ man(SG) SGF.LOG.AD.POSS
 ‘as if (it were) respect that she₁ showed to her₁ husband.’
 (F99DMATWO)
- c. *dé* [*kó=bí* *nímòè*]_S / *góè* *d’óng*
 SO.THAT any/every=thing what OBLIG:CONS be.good
yì / (...) [*gòèpé* *móè-ndá* *mén* /
 CONS THAT/WHEN NOMZ(PL):CONS-father 1PL.POSS
muèp=kút]_{ADV}.
 3PL.S=talk
 ‘so that everything should be good (...) what our fathers said.’
 (D00JPEOPLE)

The observation that the (*gòè-*) *pé* ~ *fè* adverbial clause is not integrated into the noun phrase suggests that its diachronic origins differ from those of the nominalized clause (whose modifying function probably preceded its adverbial function). It is possible that the form (*gòè-*) *pé* ~ *fè* derived from the inherently locational noun *pè* ‘(at) a place’, which is optionally augmented with the nominalizer *gòè-* (thus paralleling the nominalized clause). The tonal change from *pè* ‘place’ to *pé* ‘adverbial clause’ was probably triggered by the tendency of Goemai conjunctions and clause-introducing particles to receive high tones. The variant (*gòè-*) *fè* is almost exclusively attested among younger speakers. This variant either resulted from the common weakening of plosives in medial position (see chapter 2, section 2.1) or from a free variation between *p* ~ *f* (which is commonly attested in Hausa loanwords, albeit not in native Goemai words).⁸⁴

84. There is also a distinct spatial relator *fè* ‘OWNER’ (see chapter 4, section 5.1). However, speakers of all age groups consider *fè* ‘OWNER’ to be distinct from (*gòè-*) *fè*. Older speakers furthermore explicitly reject the use of (*gòè-*) *fè* for the very reason that it could otherwise be confused with *fè* ‘OWNER’. The closely-related language Mupun has a complementizer *paa* that occurs in a subset of those environments where (*gòè-*) *pé* ~ *fè* occurs, albeit with a slightly different interpretation. The Mupun form is derived from the verb ‘think’. However, it is unlikely that the Goemai form (*gòè-*) *pé* ~ *fè* is cognate to it, because forms that originated in verbs tend to retain at least some verbal properties – this is true for *paa* in Mupun (Frajzyngier 1993: 435–472), but not for (*gòè-*) *pé* ~ *fè* in Goemai.

Both adverbial and nominalized clauses cannot be independently negated. Instead, the negation particle occurs at the end of the sentence, with a vague scope over either the main clause (in 56a) or the adverbial clause (in 56b) – dependent on the context. As indicated by the alternative free translation, a different context would trigger a different reading. A similar vagueness is attested in nominalized clauses: depending on the context, they have scope over the main clause (in 56c) or the nominalized clause (in 56d).

- (56) a. *Ñdòe=gùrùm màn [bì]_O [gòpé gú=shín]_{ADV}*
 SPEC=person know thing THAT/WHEN 2PL.S:CONS=do
bá (...).
 NEG

‘No-one knows the thing that you did (...).’

Or: ‘Someone knows the thing that you didn’t do.’

(F99AMOESHAAR)

- b. *d’è góebí [gùrùm]_{VCC} [gòfé / wáyó*
 exist AS.IF person THAT/WHEN intelligence
k’é nì bá]_{ADV}.
 be.sufficient 3SG.O NEG

‘(she) is like a person who is not intelligent (lit. intelligence is not sufficient for her).’

Or: ‘(she) isn’t like a person who is intelligent.’ (D00EWITCH1)

- c. *Hèn=màn [ńdá / [gòe-là ńdá*
 1SG.S=know father NOMZ-produce(SG) father
nóe]_{MODIFIER}]_O bá.
 1SG.POSS NEG

‘I don’t know the ancestor who gave birth to my father.’

Or: ‘I know the ancestor who didn’t give birth to my father.’

(D00JPEOPLE)

- d. *Tó / góe gòe-mis zák / gòpé*
 okay 2SGM.I NOMZ(SG)-man(SG) also/however THAT/WHEN
góe=ná [d’èmdè màt
 2SGM.S:CONS=see remainder:GEN woman(SG)

4.2. Complement clause

The (*gòe-*) *pé ~ fě* adverbial clause (see section 4.1) has grammaticalized into a complementizer that introduces complement clauses in O function with verbs of attention (as in 59a) and thinking (as in 59b). It is also attested with verbs of speaking (as in 59c) and liking (as in 59d), albeit infrequently.

- (59) a. *Ní ná [gòepé / mís=hòk zèm yít*
 3SG.S see THAT/WHEN man(SG)=DEF like eye/face
múk nt'it / gòebi yít
 3SG.POSS well AS.IF eye/face:GEN
*mòe-jàr múk yì bá*_{COMP.}
 NOMZ(PL)-bec.jealous(PL) 3SG.POSS CONS NEG
 ‘She saw that the husband didn’t like her as much as (he) (likes) her co-wives.’
 Or: ‘She didn’t see that the husband liked her as much as (he) (likes) her co-wives.’ (F99DMATWO)
- b. *dé muép màn yì / [gòepé / gók*
 SO.THAT 3PL.S:CONS know CONS THAT/WHEN illness
*d'è ní-pè gòe-ñnòe*_{COMP}=*hòe (...)*
 exist LOC-place NOMZ(SG)-LOC.ANAPH=exactly
 ‘so that they know that illness is in this place (...).’ (D01CLU)
- c. *Sáí ní k'wál [gòepé jì=nà*
 then/only 3SG.S talk THAT/WHEN SGM.LOG.SP.S=see
*A. ñ-láng-náng*_{COMP.}
 <NAME> ADVZ-CL:hang/move(SG)-DEM.DIST
 ‘Then he₁ said that he₁ had seen that moving A.’ (N00JKEY)
- d. *hèn=zèm [góepé muép t'wót / m-pè*
 1SG.S=like THAT/WHEN 3PL.S:CONS sit(PL) LOC-place
*gòe-gòemé*_{COMP.}
 NOMZ(SG)-one
 ‘I like (the ones) that sit in one place.’ (R01JCONTR)

Formally, the internal structure of the complement clause is that of a verbal clause: it is identical to simple clauses in terms of its argument and TAM marking possibilities; and it can even include peripheral constituents and multiverb clauses (see 59a above for a complex complement clause, which contains A and O arguments, an adverb, an ‘AS IF’ clause, and a negative particle). It only dif-

- b. *t'óng k'áng là dóe yì /*
 IRR guard/wait child(SG) SGF.LOG.SP.POSS CONS
[gòepé ní p'ét kàm]_{ADV.}
 THAT/WHEN 3SG.S exit(SG) RESULT
 '(she₁) would wait for her₁ child that had left.'
 (R00ASVCMOTION)
- c. *Muèp nyák yì [gòe t'ém pòe gòe]_{SEQUENTIAL=à?}*
 3PL.S hate(PL) CONS SEQ tell give 2SGM.O=INTERR
 'So they refused to tell you (lit. so they rejected (it) and told
 (it) to you)?' (C00JMQUEST4)

The position of the complement clause preceding particles such as *yì* is an idealization: while speakers consistently reject utterances where the complement clause follows, they nevertheless produce them spontaneously in natural discourse (as in 61a or 59b). The converse situation, by contrast, does not hold: other types of clauses always follow the particle (as in 60b and 60c), but never precede it. It is possible that examples like (61a) result from a tendency to move heavy O constituents to the end of a clause. However, there are two indications that point against such an analysis. First, other types of heavy O constituents always remain in situ (as in example 61b, which parallels example 61a). Second, assuming that heavy constituents are moved because they are hard to process in situ, it would be expected that prosodic means are employed to further lighten the processing load – but this is not necessarily the case (as in example 61a, where there are no changes to the intonation contour, nor is there any intonation break).

- (61) a. *Dé jí=màn yì pé*
 SO.THAT SGM.LOG.SP.S:CONS=know CONS THAT/WHEN
ndòe=sóól d'è d'i bá.
 SPEC=money exist LOC.ANAPH NEG
 'So that he knew that there wasn't any money.'
 Or: 'So that he didn't know that there was some money.'
 (F99AMOESHAAR)
- b. *dé jí=màn / uh / pé*
 SO.THAT SGM.LOG.SP.S:CONS=know <HESIT> place
góe-d'è lú Náán=hók yì.
 NOMZ-exist settlement:GEN:POSS God:POSS=DEF CONS
 'so that he knows, uh, the place where the house of God is.'
 (F99AKUR)

In view of the above observations, it is more likely that the distributional variation is a remnant of the diachronic origin in the (*gòe-*) *pé* ~ *fě* adverbial clause – a clause that occurs in adverbial function. That is, it is likely that complement clauses (as in 62a) developed from participant-oriented adverbial clauses (as in 62b). Their variable position in natural discourse suggests that this reanalysis is not completed yet. A further indication of this development is a current reanalysis of the scope of negation. Negation particles occur at the end of the sentence, and their scope is vague – either over the main verb or over the complement clause verb (as indicated by the alternative translations in 62a); but out of context, they are always interpreted as having scope over the main verb only. In the case of adverbial modification, by contrast, either interpretation is equally fine (as in 62b).

- (62) a. *hèn=nà góepé mèt=hòk shin sh'it bá*
 1SG.S=see THAT/WHEN woman(SG)=DEF do work NEG
 Preferred (out of context): ‘I didn’t see that the woman did the work’
 Possible (in context): ‘I saw that the woman didn’t do the work’ (A-21/04/04)
- b. *hèn=nà mèt=hòk góepé d’è t’óng shin*
 1SG.S=see woman(SG)=DEF THAT/WHEN exist PROGR do
sh'it yi bá
 work PROGR NEG
 ‘I saw the woman who didn’t do the work’
 Or: ‘I didn’t see the woman who did the work’ (A-24/04/04)

The complement clause always occurs in O function. There are a few examples where a (*gòe-*) *pé* ~ *fě* clause seems to occur in A/S function where it expresses a stimulus (as in 63a). However, such clauses never occur preceding the verb (i.e., they do not occur in the position reserved for nominal A/S arguments). Given their position, I prefer to analyze them not as complement clauses, but rather as adverbial clauses that are oriented towards the A/S argument. In this case, the A/S argument is a 3SG pronoun, which is omitted. If it is a noun, by contrast, it is overtly present (as in the parallel example 63b).

- (63) a. *sh’áng hèn gòepé gòe=wùl*
 be.pleasant 1SG.O THAT/WHEN 2SGM.S=arrive
lú=nóe
 settlement=1SG.POSS
 ‘(it) pleases me that you arrived at my home’ (A-22/04/04)

- b. *bì=hòk sh'áng hèn gòépé gòe=wùl*
 thing=DEF be.pleasant 1SG.O THAT/WHEN 2SGM.S=arrive
lú=nóe
 settlement=1SG.POSS

‘the thing pleases me that you arrived at my home’ (A-22/04/04)

In all cases, complement clauses express facts that were perceived, thought, spoken or liked. That is, they do not constitute faithful representations of the states-of-affairs that was perceived, thought, spoken or liked. A consequence of this type of semantics is that the complement clause cannot be marked for progressive aspect. If speakers intend to convey any other semantics, they need to resort to other clause types: serialization (to express perceived activities; see examples 44b and 44c in section 3.2), apposition (to express evaluations; see example 107f in section 4.9), reported speech (to represent speech; see section 4.7), purpose clauses (to express potentials, persuasions and orders; see examples 83a to 83c in section 4.5), sequential clauses (to express enablement and disablement; see example 83d in section 4.5), and consequence clauses (to express causation; see examples 71b to 71d in section 4.4).

The restricted semantics of complement clauses is commonly attested within Chadic: these languages usually have several distinct complement clauses (or clauses that serve complementation functions) whose semantic extensions are restricted. Frajzyngier (1996: 227–272), for example, assumes that Proto-Chadic had a number of polysemous complement-taking verbs (e.g., the verb ‘like / want’), and the desired interpretation was then conveyed through the type of complementizer. A similar situation holds in Goemai, where the verb *zèm* ‘like / want’ receives the interpretation ‘like’ when occurring with the complement clause (as in 59d above), but the interpretation ‘want’ when occurring with a purpose clause. In other cases, however, Goemai deviates from the expected Chadic pattern. In particular, Frajzyngier (1996: 273–302) argues for differences in the coding of direct and indirect evidence, which are attested for verbs of attention and thinking. He assumes that many Chadic languages first used speech act verbs to introduce reported speech; in the course of grammaticalization, they were then used to introduce indirect evidence and hypothetical situations, and – in some languages – have developed into general complementizers (1996: 105–206). Goemai differs from this cross-Chadic pattern: its complementizer does not originate in a speech act verb, and there is no grammatical distinction between different types of evidence.

4.3. Complements of auxiliary verbs

The related language Hausa has a category of aspectual or auxiliary verbs that require non-finite verb phrases as their complements (P Newman 2000: 64–70, 288–292, 699–717). Many of these verbs have been borrowed into Goemai, where they occur as the first verb of the coordinate serial verb construction (see chapter 7, section 4 for details). In addition, their introduction into Goemai has triggered the innovation of another construction restricted to a subgroup of these verbs: those expressing notions of beginning and finishing (the Hausa loans *sómà* ‘begin’, *fàrà* ‘begin’, *gámà* ‘finish’, and to some extent also their Goemai equivalents).⁸⁶

The innovated structure is illustrated in (64a) and (64b): the aspectual verb constitutes the main verb of the clause, which is followed by a direct object noun phrase and a complement marked by the prefix combination *gòe- ñ-*. This complement occurs in adverbial function outside the verb and noun phrases (as illustrated in 64b, where the definite article =*hok* marks the end of the preceding noun phrase). Notice that it cannot be separately negated, and that the negation particle always negates the main verb (as in 66b below).

- (64) a. *Muèp sómà [shál]_{NP} [gòe-ñ-lyàk]_{COMPLEMENT} / muèp*
 3PL.S begin war NOMZ-ADVZ-throw 3PL.S
tàngòèdé [shál]_{NP} [gòe-ñ-lyàk]_{COMPLEMENT}.
 start war NOMZ-ADVZ-throw
 ‘They started waging the war, they started waging the war.’
 (F99DPAAP)
- b. *Muèp máng b’ít / b’ít gòepé muép t’óng*
 3PL.S take(SG) day day THAT/WHEN 3PL.S:CONS IRR
làngòèdé [gyà=hòk]_{NP} [gòe-ñ-màràp]_{COMPLEMENT}.
 start performance=DEF NOMZ-ADVZ-step(PL)
 ‘They picked a day, a day when they would start dancing the dance.’ (lit. start the dance dancing) (F99DPAAP)

This construction probably developed from a nominalized participle (illustrated in 65). This participle structure is superficially similar to the structure above: the participle is derived by the same formal means, it serves a modifying

86. The equivalent Goemai verb *tàngòèdé* ~ *làngòèdé* ‘start’ preferably occurs in a sequential structure, although it can occur as auxiliary verb in this construction; the Goemai verb *lát* ‘finish’ has grammaticalized into an anterior particle (see chapter 7, section 4.4), and is not attested in this auxiliary construction.

function, and it follows a head noun. It differs, however, in that the participle modifies the noun, and occurs as a modifier within the noun phrase (and not as an adverbial) (see chapter 3, section 4.3 for details).

- (65) *sái* *gòe=nàk* [*hðòe=háás*
then/only 2SGM.S=fetch SPEC=fLOUR
gòe-n-d'èk=hòk]_{NP} (...).
NOMZ-ADVZ-move.up/down=DEF
'then you fetch some of the winnowed flour (...).' (P00DCROPS)

In present-day Goemai, the auxiliary construction is undergoing two further developments. First, younger speakers increasingly place the direct object following the complement (as in 66a). Second, younger speakers allow intransitive verbs to occur as complements (as in 66b). Older speakers, by contrast, only allow for transitive verbs in this structure – this restriction follows from its origin in the participle construction, which only accepts transitive verbs. Notice that both examples are rare and are invariably rejected by older speakers, i.e., the grammaticalization process is not yet completed.

- (66) a. *Sái ní fàrà* [*gòe-n-k'yàp* *Ímá*]_{COMPLEMENT}.
then/only 3SG.S begin NOMZ-ADVZ-instruct <NAME>
'Then she started to berate Ima.' (D00EWITCH3)
- b. *lé=hók* *t'óng gámà* [*gòe-n-fí*]_{COMPLEMENT} *bá*.
goods/clothes=DEF IRR finish NOMZ-ADVZ-dry(SG) NEG
'the clothes wouldn't have finished drying.' (D00JLAZINESS)

4.4. Consequence clause

The consequence clause is marked by both tonal and segmental means. The first word of the clause receives a high tone, triggering corresponding changes in the following tones (see chapter 2, section 1.4 for tonal changes due to high-tone spreading). In addition, there is a consequence clause particle *yí*.⁸⁷ This particle is optional: it is usually present, but there are examples where the con-

87. This particle may be cognate to the particle *d'i* in the closely-related language Mupun. In Mupun, it occurs in a comparable syntactic position where it marks an embedded obligation clause. Frajzyngier (1993: 460–465) assumes that it developed from the locative anaphor.

sequence clause is marked by high tone only. If it is present, it always occurs following the verb, TAM particle and direct object(s), but preceding adverbials and other particles (as in 67a). If the consequence clause is a verbless clause, the particle occurs at the end the verbless clause complement (as in 67b). And if the clause consists of several verbs, only the first verb precedes the particle (as in the serial verb construction in 67c).⁸⁸ A consequence clause has all the possibilities of other clauses regarding the presence of person marking, TAM marking and adverbials; it can be marked for specific speech acts (as the prohibitive consequence clause in 67d), and it can be negated. In fact, each clause can be negated independently (as illustrated in 67e and 67f).

- (67) a. *mòe=hòk à t'úún. T'óng móe=twàt*
 1PL.S=dig FOC hole IRR:CONS 1PL.S=cause.standing(PL)
muép yi / òd'ùún.
 3PL.O CONS INSIDE
 'we dig a hole. And so we would stand them inside.'
 (P00JFARMING)
- b. *Gòe-pis tàl ò-d'ùòe múk,*
 NOMZ(SG)-bec.stingy(SG) ask/greet LOC-voice 3SG.POSS
yìn, à tyóóp yi=à?
 SAY FOC health CONS=INTERR
 'The stingy one greeted him saying, and so is (it) health?'
 (TIEMSAN 1999: 7)
- c. *Gók t'ó. Yár muép=yíúú yi muèn tàl.*
 bec.ill lie(SG) bird 3PL.S=rise(PL) CONS go(PL) greeting
 '(He) lay ill. And so the birds rose (and) went for greetings.'
 (F99AKUR)

88. Notice that this distribution makes the particle *yi* of analytic importance: it helps to differentiate between direct objects (preceding the particle) and adverbials (following it); and it differentiates between TAM particles that have grammaticalized from verbs in a multiverb construction but are now part of the verb phrase (and thus precede the particle *yi*) and verbs in a multiverb construction (all but the first verb follow the particle) (see especially chapter 3, section 1; chapter 4, section 1.1; chapter 5, section 1; and the introduction to chapter 7).

- d. *Mán mé hén=k'wál à d'ùòè*
 PROH really 1SG.S:CONS=talk FOC voice:GEN
K'wò bá.
 <ETHNIC.NAME> NEG
 'And so I shouldn't talk in the language of the K'wo.'
 (C00ANDIALECT3)
- e. *K'yák muép pyá bá / muép yúúúl yì.*
 heart/neck 3PL.POSS bec.white NEG 3PL.S rise(PL) CONS
 'Their heart wasn't happy, and so they rose.'
 (H01JWAR)
- f. *Bì ñ-d'è kázá / hén=màn yì bá.*
 thing PRES-exist such.and.such 1SG.S:CONS=know CONS NEG
 'See the thing is such-and-such, and so I didn't know (it).'
 (C00JMQUEST5)

The consequence clause expresses an event that is seen as the consequence of a previous – expressed or understood – event (as in 67a to 67f above). In addition, consequence clause marking is regularly observed in the following four contexts:

First, it obligatorily occurs in the purpose clause (as in 68) (see section 4.5): this clause is introduced by the conjunction *dé* 'SO.THAT', and further marked by high tone and particle *yì*. It serves to specify the desired outcome of an event.

- (68) *Gòe=t'èm gòe=póe hèn dé hén=màn*
 2SGM.S=tell 2SGM.S=give 1SG.O SO.THAT 1SG.S:CONS=know
yì.
 CONS
 'Tell (it) to me so that I know (it).' (F99DLA)

Second, it is obligatory in all sentences that relate events by means of the spatial relator *ñkyèm ~ ñtyèm* 'FRONT'. As indicated by the intonation break in (69a), this adverbial forms part of the first clause; the second clause is then marked by high tone and particle *yì*. The free translation of this example suggests a temporal relationship, but the sentence conveys more than that: it carries the reading that the event described in the second clause is a consequence of the event described in the first clause. In fact, the second clause is frequently marked overtly as a purpose clause (as in 69b), thus showing its semantic relationship to the structure illustrated under (68) above. By contrast, speakers use

the conjunction *kàfin* ‘before’ (borrowed from Hausa) to convey a temporal relationship only: as illustrated in (69c), this clause is not marked as a consequence clause.

- (69) a. *Shín b'ít ògàm òtyèm / kát kyóóp*
do day much/many FRONT find:CONS health
múk yì.
3SG.POSS CONS
‘(She) passed many days before (she) found her health (lit. she passed many days first, and so she found her health).’
(F99DREEP)
- b. *Àmmá d'óng d'òn óerém òtyèm / dé*
but be.good pick.up bean FRONT SO.THAT
muép búk yì d'íp s'wá (...).
3PL.S:CONS return(PL) CONS reap(SG) guineacorn
‘But (it) is necessary that (he) plucks the beans before they re-
turn (and) reap the guineacorn.’ (V04ANLUUNPAS1)
- c. *Wá b'ák ò-Jòs / hèn=dòe làngòdé*
AREA here LOC-<PLACE.NAME> 1SG.S=come start
t'óng / dé mìsk'á nóe /
sit(SG) DIR brother.in.law(SG) 1SG.POSS
yàm-nùùn gòe-pép lú
son(SG):GEN-mother:GEN NOMZ(SG)-master:GEN settlement
nóe / Water's Barracks / kàfin hèn=kát lú.
1SG.POSS <PLACE.NAME> before 1SG.S=find settlement
‘Here in the area of Jos, I started to stay here at my brother-in-
law’s (place), the brother of my husband, (at) Water’s Bar-
racks, before I found a compound.’ (H01CJOS)

Third, consequence clause marking obligatorily occurs in comparative *gòebi* ‘AS.IF’ clauses that specify hypothetical states-of-affairs (as in 70a). The comparative clause can alternatively consist of a verbless clause (as in 70b) – in this case, the verbless clause particle *à* ‘FOC’ is usually omitted, and the comparative clause consists of a nominal element only (as in 70c). It is possible that the presence of consequence clause marking is triggered by the frequent association of consequence clauses with irrealis situations: consequences necessarily depend on the happening of a prior event; and the use of consequence marking in

the purpose clause (as in 68 above) has probably further strengthened the association with the irrealis domain.

- (70) a. *p'às* *n̄-yí* *ń-d'è-ńndè=hòe /*
 rainy.season LOC-year ADVZ-CL:exist-DEM.PROX=exactly
p'às=hòk / *dók* *d'è* *góebí* *t'óng* *wúl*
 rainy.season=DEF PAST.REM exist AS.IF IRR arrive
yì *bá.*
 CONS NEG
 'the rainy season in that year, the rainy season was as if (it)
 wouldn't arrive.' (C04ANARAM)
- b. *góebí ní* *à* *ńdòe=bì* *yì (...).*
 AS.IF 3SG.I FOC SPEC=thing CONS
 'as if he were something (special) (...).' (D00JLAZINESS)
- c. *ńdòe=gùrùm* *góepé /* *lá* *fyér /* *góebí*
 SPEC=person THAT/WHEN COND bec.big(SG) AS.IF
jí *yì / ní* *t'óng làp* *lóng=hók*
 SGM.LOG.SP.I CONS 3SG.S IRR receive chief=DEF
tóe.
 EMPH
 '(He₁ said) a person who if (he) has become big as if (he)
 (were) him₁, so he would receive the chieftaincy.' (F00JDUUS)

Fourth, consequence clause marking occurs in some focused sentences. In this case, the first clause is marked by the emphasis particle *tóe*, while the second is marked as a consequence clause. As indicated by the literal translation in (71a), it retains its consequence semantics in this context. The same structure is frequently used to form the analytic causative that expresses indirect mediated causation. This structure uses either of the main verbs *shín* 'do', *sá* 'make' (borrowed from Hausa) or *yà* 'catch', followed by the emphasis particle *tóe* and consequence clause marking (as in 71b). If causation is expressed by means of juxtaposition, by contrast, consequence marking is not present (as in 71c). But notice that there are a few isolated examples that retain consequence marking in this context (as in 71d). Given their low frequency, it is possible that these constitute an innovation.

- (71) a. *rwáng tóe mà gòe-nyé múk yì.*
 bec.mad EMPH surpass NOMZ(SG)-matter 3SG.POSS CONS
 ‘(he) really is madder than his neighbor (lit. he is really mad
 and so he surpasses his neighbor).’ (TIEMSAN 1999: 1)
- b. *ní shin tóe gòe-shà múk kàt*
 3SG.S do EMPH NOMZ(SG)-friendship 3SG.POSS find
lóng yì
 chief CONS
 ‘he made (it) so that his friend received the chieftaincy’ (A-
 17/02/00)
- c. *Náán sá hèn p’èt shinî.*
 God make 1SG.O exit(SG) today
 ‘God made (it) (so that) I came out today.’ (N00EFRIENDS2)
- d. *t’óng muààn gòegòe yà hén dám yì (...).*
 IRR go(SG) REDUP.OBLIG catch 1SG.O spoil CONS
 ‘(he) would go and eventually cause me (so that I) become sad
 (...).’ (C00ANYOUTH2)

Consequence-clause marking cannot co-occur with the focus particle *à* in the same clause: for example, the purpose clause in (72a) does not contain the high tone or the particle *yì* (compare 68 above for the normal structure). The motivation for this restriction is not entirely clear. Possibly, it is related to the observation that the focus particle confers an adverbial function on the focused element, i.e., this element has to follow the particle *yì* (in 72a, the expression *à mmik* ‘yours’ does not occur as the direct object of the transitive verb *yír* ‘turn into’, but as an adverbial) (see chapter 6, section 1.2). It is not clear, however, why the particle is omitted altogether, and not placed before the focused constituent. Notice that this restriction only applies to the focus particle – not to the grammaticalized use of the focus particle as a non-verbal clause particle (as in 72b; see section 2.1 for non-verbal clauses).

- (72) a. *Kó yì=zèm / dé gòe yír à*
 maybe/or 2SGF.S=like SO.THAT OBLIG turn FOC
MMÍK.
 NOMZ.2SGF.POSS
 ‘Or you want (it) so that (it) should turn into YOURS.’
 (F00JNAAN)

- b. *Gòebí à mààr múk yì.*
 AS.IF FOC farm/farming 3SG.POSS CONS
 ‘As if (it) were his farm.’ (F99DSHOOM)

Consequence clause marking also interacts with the placement of the enclitic =*hòe* ‘exactly’ that cliticizes to the end of a phrase or clause: if it cliticizes to a consequence clause, the particle *yì* is optional (e.g., it is omitted in 73a, but present in 73b). In both cases, high-tone marking is still observed.

- (73) a. *gòebí t’óng tù [màt=hòk]_{NP}=hòe.*
 AS.IF IRR kill(SG) woman(SG)=DEF=exactly
 ‘as if (it) would kill the woman.’ (F99DLA)
- b. *gòebí gòe-t’wót mén yì=hòe (...).*
 AS.IF NOMZ-sit(PL) 1PL.POSS CONS=exactly
 ‘like where we sit (...).’ (C01FGHJARAM2)

Consequence clause marking has given rise to the progressive aspect construction (see chapter 7, section 4.1).

4.5. Purpose and sequential clauses

This section introduces purpose structures (section 4.5.1) and sequential structures (section 4.5.2), and looks at their possibilities to act as complementation strategies (section 4.5.3).

4.5.1. Purposive linking and purpose clauses

The particle combination *dé-gòe* (*n-*) serves as a purposive linker. It follows a main verb (marked for any TAM category) as well as its arguments and adverbials; and it introduces either a simple verb phrase (as in 74a) or a serial verb construction (as in 74b). These introduced expressions can take their own adverbials (as in 74c). However, they cannot be marked for TAM. And their subject arguments – which have to be identical to those of the main clause – cannot be expressed overtly. Their dependency on the main clause is also evident in their behavior under negation: the negation particle always occurs at the end of the entire construction, but its scope is vague (as illustrated by the two free translations in 74d). The scope of negation can only be unambiguously deter-

mined if the purposive is focused – in this case, negation has scope over the purposive only (as in 74e) (see chapter 6, section 1.2 on focus).

- (74) a. *Kó muèp nyáp gwén kátákó ò-ní /*
 maybe/or 3PL.S prepare ASSOC.PL plank COMMIT-3SG.I
dé-gòe yà k'à-pìn.
 PUR catch head(SG):GEN-hut
 ‘Or they prepare those planks with it in order to thatch the roof.’ (D01NTREE)
- b. *Hèn=wùl tóe dé-gòe dóe tàl gwén.*
 1SG.S=arrive EMPH PUR come ask/greet 2PL.O
 ‘I arrived in order to greet you here.’ (D04ATALMI1)
- c. *Kó=wúròe wàr mòmùk dé-gòe*
 any/every=who collect NOMZ.3SG.POSS PUR
wá ò-ní.
 return.home(SG) COMMIT-3SG.I
 ‘Everybody collects his own in order to return home with it.’ (D04ASHANG)
- d. *Hèn=wùl dé-gòe ò-t'óng gòelóng kúút bá.*
 1SG.S=arrive PUR ADVZ-sit(SG) useless just NEG
 ‘I didn’t arrive in order to just sit (around) useless.’
 ‘I arrived in order not to just sit (around) useless.’ (H01CJOS)
- e. *pìn à gòepé móe=d'ík*
 hut FOC THAT/WHEN 1PL.S:CONS=build/marry
móe=léng / à dé-gòe shén à fúáán /
 1PL.S:CONS=hang/move(PL) FOC PUR chase FOC rain
à dé-gòe shén à gùrùm bá.
 FOC PUR chase FOC person NEG
 ‘a hut is what we build (and) put up in order to chase away rain, (it is) not to chase away people.’ (S04NNYOOR1)

It is possible for two or more purposive expressions to co-occur (as in 75a). Alternatively, speakers can mark the second expression as sequential (as in 75b) (see below for the sequential). In the first case, the second purpose is portrayed as following from the first purpose; and in the second case, they are considered subparts of a single purpose.

- (75) a. *Muèp t'óng yók dé-gòe mùèn dé-gòe*
 3PL.S IRR return.home(PL) PUR go(PL) PUR
yà Íbì.
 catch <PLACE.NAME>
 'They would return home in order to go to arrive in Ibi.'
 (D04NLUDOROK)
- b. *Gùrùm gòepé t'óng s'éét / dé-gòe muààn*
 person THAT/WHEN IRR buy/sell(SG) PUR go(SG)
gòe wá n-ní (...).
 SEQ return.home(SG) COMMIT-3SG.I
 'The person who would buy (it) in order to go and return home
 with it (...).' (P00NFISHING)

The purposive linker *dé-gòe* is alternatively realized as *dé-gòe n-*. The form *dé-gòe n-* is obligatory whenever a semantic participant of the verb is not expressed within the purposive – either the direct object of a transitive verb (compare the parallel examples 76a and 76b), or the locative participant of a locative verb (see chapter 4, section 5.1). In all other contexts, the two linkers appear to be in free variation. Notice, however, that the use of *dé-gòe n-* implicates that the purpose was not achieved (as in 76c). This implicature can be cancelled (as in 76d, where the speaker then goes on to give the little talk she announced) (see also chapter 4, section 2.2).

- (76) a. *Tó / à bì gòepé / hén=zèm tóe*
 okay FOC thing THAT/WHEN 1SG.S:CONS=like EMPH
dé-gòe n-kùt.
 PUR ADVZ-talk
 'Okay, (this) is the thing that I wanted to talk (about).'
- (H01CJOS)
- b. *hèn=t'òng b'ák dé-gòe kùt kùt ndòe gwén.*
 1SG.S=sit(SG) here PUR talk talking CONJ 2PL.I
 'I sit here to talk a talk with you.' (D00NSPEAKING)
- c. *Liit zém dé-gòe n-rúúp mè=hòk. Mè=hòk*
 lion like PUR ADVZ-collapse barn=DEF barn=DEF
b'ál.
 be.hard
 'The lion wanted to destroy the barn. (But) the barn was (too)
 hard.' (F99DLIIT)

- d. *Hèn=zèm dé-gòe n-k'wál là=àrà̀m /*
 1SG.S=like PUR ADVZ-talk DIM(SG):GEN=conversation
k'à / dé nóe b'ák n-Jòs.
 HEAD(SG):GEN DIR 1SG.POSS here LOC-<PLACE.NAME>
 'I want to talk a little talk about my place here in Jos.'
 (H01CJOS)

Goemai has a second purpose structure, which is formed by means of the particle *dé* 'SO.THAT' plus the consequence-clause marking of high tone and particle *yì* (see section 4.4). It allows overt expression of a subject that can – but need not – be different from the subject of the main clause (compare 77a and 77b); and it allows for separate TAM-marking (as in 77a to 77c) and negation (as in 77c).

- (77) a. *Muèp k'úúr pè / dé lwá gòe*
 3PL.S burn place SO.THAT animal/meat:CONS OBLIG
p'uát yì.
 exit(PL) CONS

'They burned the place, so that the animals should come out.'
 (D04ASHANG)

- b. *t'óng jí=wá dé*
 IRR:CONS SGM.LOG.SP.S=return.home(SG) SO.THAT
jí=góe làp yì.
 SGM.LOG.SP.S:CONS=OBLIG receive CONS

'so he₁ would return home, so that he₁ should receive (it).'

(F99AMOESHAAR)

- c. *muà̀n gòe shin ndòe=bì / dé t'yák*
 go(SG) SEQ do SPEC=thing SO.THAT heart/neck
góe gòe pyá yì bá.
 2SGM.POSS OBLIG bec.white CONS NEG

'(he) goes and does something, so that your heart shouldn't be happy.'

(C00ANYOUTH4)

It is likely that the two purpose structures are diachronically related. In the text database, the purpose clause (*dé yì*) most commonly occurs in reference to 3SG subjects (which are omitted because they are recoverable from the context; see section 1.1) and with obligative TAM marking (as in 78a). That is, the obligative particle *gòe* would frequently follow immediately after the purpose

particle *dé*. Now compare this example to (78b), which illustrates purposive linking (*dé-gòe* (*n-*)): in surface form, the only difference with respect to (78a) is the absence of consequence-clause marking. It is possible that this marking was lost as the purpose clause lost its freedom to mark person, TAM and polarity, thus losing some of the possibilities available to full clauses. In present-day Goemai, the two purpose structures are formally distinct, and there are even examples where both co-occur (as in 78c).

- (78) a. *Áás rúún k'á jí ñd'ùùn*
 dog insert(SG) head(SG) SGM.LOG.SP.POSS INSIDE:GEN
kwálbá / dé gòe ná yì kó nóemuát
 bottle SO.THAT OBLIG see CONS maybe/or frog
d'è d'i=wò.
 exist LOC.ANAPH=INTERR
 'The dog₁ inserted its₁ head into the bottle, so that (it) should see (if) maybe the frog is there.' (R00AFROG)
- b. *rúún k'á múk dé-gòe nà nóemuát.*
 insert(SG) head(SG) 3SG.POSS PUR see frog
 '(he) inserted his head to see the frog.' (R01NFROG)
- c. *Gù=shìn gòe-ñ-d'é-ñnòe=hòe kúút /*
 2PL.S=do NOMZ(SG)-ADVZ-CL:exist-DEM.PROX=exactly just
à dé-gòe dé gú=ná yì (...).
 FOC PUR SO.THAT 2PL.S:CONS=see CONS
 'You just do this in order that you see (it) (...).' (D04ATATMAT1)

The purpose clause particle *dé* possibly originated in the spatial relator *dé* 'DIR' (see chapter 5, section 4). This relator is also used to relate a purpose coded through a nominal to a main verb.

- (79) *ní wál dé bì shél*
 3SG.S cry(SG) DIR thing game
 'he cried for his toy' (A-22/04/04)

4.5.2. Sequential linking

Sequential linking is structurally identical to purposive linking: the sequential particle follows a main verb (marked for any TAM category), its arguments and

adverbs; the sequential structure can consist of a serial verb construction, but it cannot be marked for TAM; the subject is identical to that of the main clause and cannot be overtly expressed; and the negative particle occurs at the end of the whole sentence having vague scope. The sequential particle is *gòe* (as illustrated in 80a). Alternatively, speakers use the reduplicated particle *gòegòe* (in 80b) to stress that some effort was involved in accomplishing the subsequent state-of-affairs. Furthermore, the deictic verb *dóe* ‘come’ replaces the sequential particle *gòe* in all motion events that are directed towards the speaker (as in 80c) – in such cases, the use of *gòe* is ungrammatical.

- (80) a. *Nyè-gòe-sék / ní là gòe-mìs /*
 because-NOMZ(SG)-body 3SG.I child(SG) NOMZ(SG)-man(SG)
muààn gòe nà réép.
 go(SG) SEQ see girl(SG)
 ‘Because of this, he, the male child, goes and (successfully) sees the girl.’ (D04NTALSUUR1)
- b. *Fuán muáán / gòegòe nà pé gòe-d’è s’òe.*
 rabbit go(SG) REDUP.OBLIG see place NOMZ-exist food:POSS
 ‘The rabbit went and made a great effort to see the place where the food is.’ (F00CFUAN)
- c. *Gùrùm=hòk wúl dóe nà ñ-k’á*
 person=DEF arrive come see LOC-head(SG):GEN
súún ñs’éen (...).
 BODY.SGM.LOG.SP.POSS truly
 ‘The person arrived and saw here truly for himself (that) (...).’ (F99DMATWO)

Semantically, sequential linking differs from purposive linking in that it stresses the accomplishment of the subsequent state-of-affairs (compare 81a and 81b). But notice that the sequential event can take place in the irrealis domain. In this case, it stresses that the sequential state-of-affairs is an inevitable outcome of the main event (if this main event should take place; as in 81c).

- (81) a. *Sái ñ-t’át ñdòe=b’ít muààn gòe*
 then/only LOC-time/day:GEN SPEC=day go(SG) SEQ
màng là=ñdòe=áás (...).
 take(SG) DIM(SG):GEN=SPEC=dog
 ‘Then on one day, (he) went and (successfully) picked up a certain little dog (...).’ (F00CAAS)

- b. *̀̀t'í p'ét / muà̀n dé-gòe ñ-màng d'á.*
 son.of.rabbit exit(SG) go(SG) PUR ADVZ-take(SG) calabash
 ‘The son of the rabbit went out, (he) went in order to pick up a calabash (and he may or may not have picked it up).’
 (F99DLIGYA)
- c. *T'óng bá gòe kà̀t màshà mùk (...).*
 IRR return(SG) SEQ find lady 3SG.POSS
 ‘(She) would return and find her girlfriend (...).’
 (D04NTALSUUR1)

It is possible that the sequential particle is of Chadic origin, as many West Chadic languages have a sequential morpheme *k- (P Newman and Schuh 1974; E. Wolff 1979). Notice that – unlike the purposive linker *dé-gòe* (*̀̀*) – the sequential particle needs to be preceded by pronouns of set 2 (as in 82a). This characteristic behavior makes it more similar to a TAM particle. It is furthermore likely that the sequential particle gave rise to the obligative particle (see chapter 7, section 5.2): in some types of serial verb constructions, the obligative particle *gòe* is repeated with each verb (as in 82b). As shown by the two free translations, a sequential interpretation would be a possible alternative interpretation in such cases.

- (82) a. *Jì=muà̀n jì=gòe lyà̀k*
 SGM.LOG.SP.S=go(SG) SGM.LOG.SP.S=SEQ throw
gòes'éng=hók k'á mùk (...).
 urine=DEF HEAD(SG) 3SG.POSS
 ‘(He₁ said) he₁ went and threw the urine onto it (...).’
 (D99DPANG)
- b. *Gwà gòe bá gòe mà̀ng d'á=hók (...).*
 SGM.LOG.AD.S OBLIG return(SG) OBLIG take calabash=DEF
 OBLIG SEQ
 Serial verb: ‘He should return (and) pick up the calabash.’
 Sequential: ‘He should return and pick up the calabash.’
 (F99DLIGYA)

4.5.3. *Complementation strategies*

Purposive linking and purpose clauses are used as complementation strategies with verbs of wanting and trying in order to express potentials (as in 83a), and

the purpose clause is used with verbs of speaking to express persuasions and orders (as in 83b). Notice that the main verb *zèm* ‘like’ plus the purpose clause can also trigger a reading of possibility (as in 83c). And sequential linking is used with verbs of beginning and enabling to express enablement and disablement (as in 83d). The structures in (83a) to (83d) are not analyzed as complement clauses because they do not constitute arguments of the main verb (see section 4.2 for a discussion). Instead, the purpose and sequential structures have the same properties as purpose and sequential structures elsewhere in the language – thus making it likely that the language exploits an existing strategy to express these concepts.

- (83) a. *Ni zèm dé-gòe ñ-làp / réép=hók.*
 3SG.S like PUR ADVZ-receive girl(SG)=DEF
 ‘He wants to marry the girl.’ (F99DLA)
- b. *Muèp t’ém / dé kó=wúròe gòe t’ó yì*
 3PL.S tell SO.THAT any/every=who OBLIG lie(SG) CONS
góe án múk.
 COMMIT mind 3SG.POSS
 ‘They said (it) so that everybody should sleep carefully.’
 (D04CSHITBIT)
- c. *Jimáár tóe shìmsék múk zèm dé-gòe*
 fish.type EMPH skin 3SG.POSS like PUR
ñ-b’áng lé.
 ADVZ-bec.red bit
 ‘The *jimaar* fish, its scales are possibly a bit red (lit. like to become red).’ (C00ANDIALECT2)
- d. *Pà t’óng b’óót gòe shín sh’it*
 SGF.LOG.AD.S IRR gain.expertise(SG) SEQ do work
ñndè=à?
 LOC.ANAPH=INTERR
 ‘(He₁ asked her₂) would she₂ be able to do this work?’
 (F99DMATWO)

4.6. Reason clauses

Reason clauses are formed by means of the conjunction *nyè* ‘because’, which precedes the (*gòe-*) *pé* ~ *fě* adverbial clause (as in 84a) (see section 4.1). This

conjunction can also directly precede a nominal (as in 84b) or an adverbial (as in 84c). It originated in the noun *nyè* ‘matter, word’, which commonly acts as the direct object of speech act and cognition verbs, and which occurs as a nominalizer to form cognate objects from speech act and cognition verbs (as in 84d) (see also chapter 3, section 4.1). This context has then given rise to the use of *nyè* to introduce adverbials that specify the content of a speech act or cognition event (as in 84e). Probably, it was then extended to introduce other adverbials (as in 84a and 84c), and eventually received a reason interpretation.

- (84) a. *Móe=póe* *lóng* / *nyè-[gòdepé* *lóng*
 1PL.S:CONS=give chief because-THAT/WHEN chief
wá *n-k'á* *mén.*]CLAUSE
 return.home(SG) LOC-head(SG) 1PL.POSS
 ‘And so we gave (it) to the chief because the chief has returned home on account of us.’ (D04ASEM5)
- b. *t'óng* *móe=hóóm* *sém* / *nyè* [*kóór* /
 IRR:CONS 1PL.S=hold body.1PL.POSS because jealousy
góe-d'è *t'óng* *wèl* *mén* *yì.*]NP
 NOMZ-exist PROGR bec.worried 1PL.O PROGR
 ‘and so we would hold on to each other because of the jealousy that is troubling us.’ (D99PGOELONG)
- c. *Nyè* [*póenóe*]ADV / *à* *jí* *t'òng*
 because thus FOC SGM.LOG.SP.I IRR
jí=làp *lóng=hók* *tóe.*
 SGM.LOG.SP.S=receive chief=DEF EMPH
 ‘Because (it is) like this, (it) is him, he would receive the chieftaincy.’ (F00JDUUS)
- d. *dé* *muép* *gòe* *tàl* [*nyè-tàl*]O *yì*
 SO.THAT 3PL.S:CONS OBLIG ask/greet matter-ask CONS
sèk *puòe* *múk.*
 BODY:GEN mouth 3SG.POSS
 ‘so that they should ask a question from him.’ (N00EWITCH5)
- e. *d'ù* *gùrùm* *t'óng* *màn* *pé* *ní* *d'è*
 much/many person IRR know THAT/WHEN 3SG.S exist
n-tàl *yì* [*nyè* *lwá*]ADV *sèk*
 PROGR-ask/greet PROGR concerning animal/meat BODY

puè góe bá.
 mouth 2SGM.POSS NEG

‘many people wouldn’t know that he is asking you about meat
 (lit. about meat from your mouth).’ (D05ADUOEDAAS)

Although reason clauses are formed on the basis of adverbial clauses, they are not analyzed as adverbial clauses. Adverbial clauses modify a main clause, and thus have restrictions on the expression of negation (see section 4.1). The reason clause, by contrast, is a true coordinand – and each of the two coordinands can be independently negated (as in 85a and 85b).

- (85) a. *Shin zéng t’èi bá / nyè-gòdepé*
 do parasitic.plant yet NEG because-THAT/WHEN
góe-ńnòde à là
 NOMZ(SG):CONS-LOC.ANAPH FOC child(SG)
ńk’óng.
 bec.small/young(SG)
 ‘Okay, (it) doesn’t yet have a parasitic plant, because this one
 is a young one.’ (D01ATREE)
- b. *Ní t’óng t’án yì áráp yòe /*
 3SG.S IRR pursue CONS bite(PL) 2SGF.O
nyè-gòdepé muèp zém bá.
 because-THAT/WHEN 3PL.S like NEG
 ‘And so they would pursue (and) bite you, because they don’t
 like (this).’ (D00JANIMAL12)

4.7. Reported speech

Goemai has two main strategies for introducing reported speech: a complement clause that is used to report the fact of the utterance (see section 4.2), and an (in)direct speech construction that is used to faithfully report the utterance itself. This latter construction shows characteristics of both direct and indirect speech, and its use is mainly attested in the variety of older speakers. In addition, there is direct speech: older speakers shift to direct speech in specific contexts, and younger speakers tend to replace the (in)direct speech construction with direct speech.

The (in)direct speech construction can be overtly introduced by means of a speech act verb (as in 86a), by a speech act verb plus the defective verb *yìn ~ yì*

‘SAY’ (as in 86b), or by the defective verb alone (as in 86c). Throughout the reported speech, speakers make use of logophoric pronouns (see below).

- (86) a. *gùrùm k'wál <jì=màn Náán bá.>*_{SPEECH}
 person talk SGM.LOG.SP.S=know God NEG
 ‘a person₁ says, he₁ doesn’t know God.’ (C01FGHJARAM9)
- b. *T'òng yì=k'wál yì=yí <ó.>*_{SPEECH}
 IRR 2SGF.S=talk 2SGF.S=SAY yes
 ‘You would say yes.’ (D00JANIMAL8)
- c. *Sáí líít yín <jì=d'è t'òng*
 then/only lion SAY SGM.LOG.SP.S=exist PROGR
*jì=táng à fuán.>*_{SPEECH}
 SGM.LOG.SP.S=search FOC rabbit
 ‘Then the lion₁ said, he₁ is searching for the rabbit.’ (F99DLIIT)

The most common speech act verbs are *kùt* ~ *k'wál* ‘talk’ and *t'ém* ‘tell, report’, but a wide variety of other verbs is attested in the introduction of speech, too. The defective verb *yìn* ~ *yì* ‘SAY’ presumably derives from a speech act verb. Like full verbs, it can be preceded by dependent subject pronouns (as *yí* ‘2SGF’ in 86b above); it can occur without any main verb (as in 86c); and whenever it co-occurs with a speech act verb, it appears in the same slot as the second verb in a serial verb construction (e.g., it is preceded by subject pronouns of set 2, such as *yí* ‘2SGF’ in 86b) (see chapter 4, section 1.1 for the defining properties of verbs). Despite its presumed verbal origin, however, present-day *yìn* ~ *yì* ‘SAY’ is only attested in the two contexts illustrated in (86b) and (86c) above: it cannot occur in any other position, introduce nominal arguments, or be marked for TAM. If TAM-marking is intended, speakers have to use a full verb (as in 86b). Notice also that, in present-day Goemai, it is not possible for two speech act verbs to co-occur in a serial construction.

If speakers report longer stretches of discourse, they usually use the defective verb (or a full speech act verb) once in the beginning. All subsequent utterances are not overtly introduced, but are nevertheless still marked for logophoricity (as in 87a). That is, within speech act contexts, logophoricity is used to maintain co-reference across clause boundaries, and even across sentence boundaries. Notice also that there are instances where reported speech is not overtly introduced: the use of logophoric pronouns alone can signal the shift to a speech context (as in 87b).

- (87) a. *Yìn* <gòe-láng *jí* *b'ák* góe
 SAY NOMZ-hang/move(SG) SGM.LOG.SP.POSS here PLACE
yíl *h-d'é-ńndòe=hòe* / *jì=màn*
 ground ADVZ-CL:exist-DEM.PROX=exactly SGM.LOG.SP.S=know
bí gòe-t'óng *s'òe jí* *bá.*
 thing NOMZ-IRR eat SGM.LOG.SP.POSS NEG
Jí góe *rigá* *bá* / *dé-gòe fít*
 SGM.LOG.SP.I COMIT gown NEG PUR wear(SG)
ń-súún *bá.* *Jí* góe *bí*
 LOC-body.SGM.LOG.SP.POSS NEG SGM.LOG.SP.I COMIT thing
dé-gòe gòng *súún* *ń-ní* *má* *bá* /
 PUR cover body.SGM.LOG.SP.POSS COMIT-3SG.I also NEG
sàmsàm. *Jí* góe *ńndòe=bí* *bá.*
 IDEOPH SGM.LOG.SP.I COMIT SPEC=thing NEG
Nyè-gòe-sék *jì=zèm (...)* *dé-gòe múút.*
 because-NOMZ(SG)-body SGM.LOG.SP.S=like PUR die(SG)
Gwà góe *tù* *jí.*>SPEECH
 SGM.LOG.AD.S OBLIG kill(SG) SGM.LOG.SP.O
 '(He₁) said, when he₁ lives here on this earth, he₁ doesn't know
 what he₁ would eat. He₁ doesn't have a gown, no (thing) to
 wear on his₁ body. He₁ doesn't have a thing to cover his₁ body
 with it, nothing. He₁ doesn't have anything. Because of this,
 he₁ wants to die. He₂ should kill him₁.' (F99ATYAKLANG)
- b. *Yàm-nùùn* *Gòelóng* *yóól* / *wúl.*
 son(SG):GEN-mother <NAME> rise(SG) arrive
 <ń=muààn *jì=ná* *k'én*
 SGM.LOG.SP.S=go(SG) SGM.LOG.SP.S=see maternal.relative(SG)
jí.>SPEECH
 SGM.LOG.SP.POSS
 'The brother of Goelong rose (and) arrived. (He₁ said to him-
 self) he₁ goes (and) sees his₁ sister's child.' (F99OGOELONG)

There is no restriction on the type of speech act reported: speakers not only report declarative utterances, but also negative utterances (as in 88a) and questions (as in 88b). When commands are reported, speakers use the obligative construction instead of the unmarked imperative (as in 88c). This shift probably follows from the obligatory use of logophoric pronouns in a speech act context: the unmarked imperative can only be used with a sec-

and person referent (see chapter 7, section 5.6) – for all other person categories, including the logophoric categories, speakers have to resort to the obligative construction. Other than that, there are no restrictions on TAM marking, i.e., all TAM categories discussed in chapter 7 are attested in reported speech.

- (88) a. <T'òng ji=b'óót mǎu>_{SPEECH} (...).
IRR SGM.LOG.SP.S=gain.expertise(SG) NEG
'He won't be able (to stand it) (...).' (F99DLIT)
- b. <À nd'àng gwá t'óng hók k'à
FOC how SGM.LOG.AD.S:CONS IRR dig head(SG):GEN
gòeshir yì ñgóng=hòe=è?>_{SPEECH}
grave CONS night=exactly=INTERR
'How (come) he would dig at the top of the grave at night?'
(F99DLIT)
- c. <Gwà góe móór.>_{SPEECH}
SGM.LOG.AD.S OBLIG be.patient
'He should be patient.' (F99DLIT)

The same strategies are also used to introduce sound-symbolic quotes: the defective verb (as in 89a), a speech act verb (as in 89b), both (as in 89c), or none (as in 89d). Alternatively, speakers use the semantically general verb *shin* 'do' (as in 89e). This last strategy is not attested in the context of reported speech.

- (89) a. *Sh'òr yìn kékékékéké. (...) kè / yìn kùkùlùkù. (...)*
duck SAY <QUOTE> chicken SAY <QUOTE>
m̀bél / yìn kùlùkùkù kùkù / kùlùkùkù kùkù.
pigeon SAY <QUOTE>
'The duck said *kekekekeke. (...)* the chicken said *kukuluku. (...)*
The pigeon said *kulukuku kuku, kulukuku kuku.*' (D00JANIMAL9)
- b. *T'àng / d'è ñ-wál yì / kyók kyók kyók.*
bat exist PROGR-cry(SG) PROGR <QUOTE>
'The bat was crying *kyok kyok kyok.*' (D00JANIMAL9)
- c. *néng k'wál yìn / móó mòò (...).*
cow talk SAY <QUOTE>
'the cow said *moo-moo (...).*' (D00JANIMAL9)

- d. *Nà rúúnsék múk ñd'ùùn nàýít.*
 see shadow 3SG.POSS INSIDE:GEN mirror
Grr / grr / wu wu (...).
 <QUOTE>
 ‘(The dog) saw its shadow in the mirror. *Grr, grr, wu wu (...).*’
 (F00CAAS)
- e. *áás gòe-d'yém ñ-nàýít zák shín*
 dog NOMZ-stand(SG) LOC-mirror also/however do
wú.
 <QUOTE>
 ‘the dog that stood in the mirror, too, did *wu.*’ (F00CAAS)

The most intriguing characteristic of reported speech is the use of three distinct sets of pronouns: LOG.SP pronouns (which indicate co-reference with the speaker) (as in 90a), LOG.AD pronouns (which indicate co-reference with the addressee) (as in 90b), and non-logophoric pronouns (which indicate non-co-reference with any participant) (as in 90c) (see chapter 3, section 2.4 for the pronouns). Logophoric pronouns are also used whenever the current speaker or addressee only constitutes a subset of the reported participants (as in 90d).⁸⁹ And they are used in cases where the current speaker or addressee is not overtly mentioned, but is understood from the context (as in 90e).

- (90) a. *Là=gùrùm yìn <ñ / zèm à bì*
 DIM(SG):GEN=person SAY SGM.LOG.SP.S like FOC thing
wààp.>^{SPEECH}
 borrow/lend
 ‘The poor person₁ said he₁ wants a loan.’ (F00CGOEBETLA)
- b. *Sái ní tál ñ-d'ùòe*
 then/only 3SG.S ask/greet LOC-voice:GEN
là=gùrùm / yìn <gwà wúl à
 DIM(SG):GEN=person SAY SGM.LOG.AD.S arrive FOC

89. Notice that it is always the current speaker or addressee who is included within the reported referents, never the other way around. In such cases, non-logophoric pronouns need to be used.

dé bí mímòè?>^{SPEECH}

DIR thing what

‘Then he₁ asked the poor person₂ saying, he₂ arrived for what?’
(F00CGOEBETLA)

- c. *Muèp yí <ńdòè=là / ńdòè=là ńd'ùùn*
3PL.S SAY SPEC=child(SG) SPEC=child(SG) INSIDE

dwén t'á ńd'ùùn hàngòed'è.>^{SPEECH}
PL.LOG.SP.POSS fall(SG) INSIDE:GEN water

Núún=hók yín / <ní lángòedé ńd'àng (...)?>^{SPEECH}
mother=DEF SAY 3SG.S start how

‘They₁ said a child₃, a child₃ from among them₁ fell into water.
The mother said, how did he₃ start (it) (...)?’ (FOOCKE)

- d. *Nt'i yín dù=wàr mú?*
<NAME> SAY PL.LOG.SP.S=collect right

‘Nt'i₁ said, they₁ (= Nt'i and rabbit) take it, right?’ (F99DLIGYA)

- e. *Muài yìn <pà góe nyét d'ì.*>^{SPEECH}
fellow SAY SGF.LOG.AD.S OBLIG leave LOC.ANAPH

‘The fellow₁ said (to her₂), she₂ should leave (it) there.’
(F99DREEP)

The occurrence of logophoric pronouns is restricted to reporting the speech of a third party; they do not occur when reporting the speech of the current speech act participants. For example, in the first sentence of (91), the speaker reports his own speech, using non-logophoric pronouns. In the second sentence, by contrast, the speech is reported from the perspective of a third party, and the speakers shift to logophoric pronouns accordingly.

- (91) *Hén=k'wál ń=yí <à hén / hèn=t'ùùs*
1SG.S:CONS=talk 1SG.S:CONS=SAY FOC 1SG.I 1SG.S=push
ní tóe bá.>^{SPEECH} *Ní k'wál yì wái <tó /*
3SG.O EMPH NEG 3SG.S talk SAY SAY okay
jí / t'òng jí=shín b'óón ńnòe.>^{SPEECH}
SGM.LOG.SP.I IRR SGM.LOG.SP.S=do remedy LOC.ANAPH

‘And so I said that (it) wasn’t me, I didn’t push him. He₁ said, okay,
he₁, he₁ would do this trick.’ (F00JFUAN)

This shift in pronoun form is an element of indirect speech. But at the same time, the utterance also reflects properties of direct speech: speakers use interjections (as in 92a) and absolute tenses that were true at the time of the original utterance (as in 92b). Speakers also tend to report utterances as faithfully as possible, including characteristic traits of speech (as the childish pronunciation of *óelém* ‘beans’ instead of *óerém* in 92c, or the Duut dialect form *k’él* ‘hear/smell’ instead of the K’wo dialect form *k’óelèng* of the K’wo speaker in 92d). Notice also that the logophoric pronouns are similar to 2SG pronouns – but different from 3SG pronouns – in that they distinguish gender.

- (92) a. *Yìn / <tó / hâi pà góe dáp.>*^{SPEECH} *Yìn /*
 SAY okay INTERJ SGF.LOG.AD.S OBLIG slap SAY
<tó / hâi gwà góe k’wák.>^{SPEECH}
 okay INTERJ SGM.LOG.AD.S OBLIG knock
 ‘(He₁) said, okay, hey, she₂ should slap (him). (She₁) said,
 okay, hey, he₂ should hit (her).’ (F99ANTI)
- b. *dyén k’wál yìn <d’in jí=wúl*
 PAST.YEST talk SAY PAST.CL SGM.LOG.SP.S=arrive
m-b’itlúng>^{SPEECH}
 LOC-morning
 ‘(he₁) said yesterday that he₁ had arrived earlier today in the
 morning’ (i.e., yesterday from the perspective of the current
 speaker) (A-21/02/00)
- c. *<Jì=t’ál óelém bá lúúp lúúp.>*^{SPEECH}
 SGM.LOG.SP.S=pluck(SG) beans return(SG) <QUOTE>
 ‘He plucked the beans, munching (them).’ (F00AFUAN)
- d. *Gòe=màn / Góe-dùut / kùt ñdòe góe /*
 2SGM.S=know NOMZ(SG)-<ETHNIC.NAME> talk CONJ 2SGM.I
yìn <jì=k’él bá.>^{SPEECH}
 SAY SGM.LOG.SP.S=hear/smell NEG
 ‘You know, a person₁ from the Duut talks to you (and) says he₁
 didn’t hear (it).’ (C00ANDIALECT3)

Furthermore, speakers mark reported speech prosodically: they tend to utter it with a much higher pitch range than usual (as illustrated in figure 13); the same prosodic effect is also attested with sound-symbolic quotes (see also Evans et al. (2002) and McGregor (1994) who have noted similar pitch adjustments in the direct speech of different Australian languages).

Direct speech using second person pronouns is also attested, but it serves different functions. In particular, it is used by narrators to directly address story characters or imagined audiences (see chapter 3, section 5.2 for the grammaticalization of the associative plural morpheme *gwén* from this style of speech). In the first case, the narrator steps outside the narrative at a turning point to incite his protagonists. In this case, all protagonists are addressed with second person forms, e.g., the narrator in (93a) uses 2SG imperatives and 2SG pronouns in reference to different persons (first the rabbit and then the bird). In the second case, narrators either directly address their real or imagined audiences (as in 93b), or they phrase their contribution in terms of reported speech. The latter option is the predominant mechanism to report the morale of a story (as in 93c): this morale forms part of the reported speech directed from one story protagonist to another. As such, it is almost identical to the (in)direct speech construction discussed above, but differs in (a) the use of non-logophoric pronouns and (b) its function (as being implicitly directed towards the real-world audience).

- (93) a. *Màng lá=p'áng ñnòè! K'wàk*
 take(SG) DIM(SG):GEN=stone LOC.ANAPH knock
lá=k'á yóè ñ-ní!
 DIM(SG):GEN=head(SG) 2SGF.POSS COMMIT-3SG.I
 'Pick up (said to the rabbit) this little stone! Knock (said to the rabbit) against your (said to the bird) little head with it!
 (F04ATAMTIS)
- b. *Só hèn=b'òòl gwén dàsk'óóm / hèn=b'òòl*
 so 1SG.S=beg/appeal 2PL.O elders(PL) 1SG.S=beg/appeal
gwén mòè-ndá / ñdòè jáp / t'wòt
 2PL.O NOMZ(PL)-father CONJ children(PL) sit(PL)
mípuóè-mípuóè / t'òng gú=sh'é / d'uòè
 REDUP.always PROGR 2PL.S=learn/teach voice:GEN
Gòemài=hòk yì.
 <ETHNIC.NAME>=DEF PROGR
 'So I ask you, elders, I ask you, fathers and children, always sit learning the Goemai language.' (D00NSPEAKING)
- c. *Muèp dók k'wàl ñdòè fuán. Muèp yí tó /*
 3PL.S PAST.REM talk CONJ rabbit 3PL.S SAY okay
lá t'òng góè=shín bì pónóè
 COND IRR 2SGM.S=do thing thus

- c. *Shóóm dók d'è bí=dóe. (...)*
 guineafowl PAST.REM exist thing=SGF.LOG.SP.POSS
Shóóm yì <à m̀m̀ùn.>^{SPEECH}
 guineafowl SAY FOC NOMZ.SGM.LOG.SP.POSS
 'In the past, the guineafowl₁ was on her₁ own. (...) The guinea-
 fowl₁ said, (it) is his₁.' (F99DSHOOM)
- d. *<Gòe=kàt=é? Yin m̀m̀. Yin gòe=kàt=é?*
 2SGM.S=find=INTERR SAY yes SAY 2SGM.S=find=INTERR
Góe=làngòedé ñd'àng / ní pòe gòe sóól
 2SGM.S:CONS=start how 3SG.S give 2SGM.O money
h̀nòe=hòe yì?>^{SPEECH}
 LOC.ANAPH=exactly CONS
 'You really got (it)? (He) said yes. (She) said you really got
 (it)? So how did you start (it) so that he gave you this very
 money?' (F00CGOEBETLA)

The above variation points towards a loss of the logophoric system in the younger generation. It is possible that this loss was first triggered by the use of non-logophoric pronouns to convey the morale of a story (as in 93c above); and then later reinforced by the use of non-logophoric pronouns in highly-animated contexts (as in 94d above).

Furthermore, younger speakers use two additional discourse strategies in their speech reports. First, they tend to juxtapose lexical noun phrases and second person pronouns (as in 95a). And second, they frequently juxtapose two sentences – one phrased in terms of third person non-logophoric forms, and one in terms of second person non-logophoric forms (as in 95b). Older speakers use the first strategy to address protagonists and audiences (see examples 93a and 93b above), but they use neither of the two strategies for reporting speech. It is possible that both strategies developed to replace the loss of the distinctive (in)direct speech construction among younger speakers, but a more detailed corpus study would be needed to verify this impression.

- (95) a. *Liít k'wál yìn <tò. Fuán / góe=d'è*
 lion talk SAY okay rabbit 2SGM.S=exist
gòe=k'óeléng pè yì bá. (...) Góe fuán
 2SGM.S=hear/smell place CONS NEG 2SGM.I rabbit

tóe (...). *Góe* *ú* (...).>_{SPEECH}
 EMPH 2SGM.I goat

‘The lion said okay. Rabbit, so you are not listening. (...) You, rabbit (...). You, goat (...).’ (F00JFUAN)

- b. *Yìn* / <*dólè* / *ní* *góe* *muà̀n* / *̀n-lú*
 SAY necessary 3SG.S OBLIG go(SG) LOC-settlement
mùép / *dé* *gòe* *tù* *̀ndòe=gùrùm* *yì*
 3PL.POSS SO.THAT OBLIG kill(SG) SPEC=person CONS
gòemé *gòe* *bá* *̀n-ní* / *góe* *kyém=hók*.
 one OBLIG return(SG) COMIT-3SG.I COMIT blood=DEF
Gòe=tù *̀ndòe=gùrùm* *dé*
 2SGM.S=kill(SG) SPEC=person SO.THAT
góe=bá *yì* *góe* *kyém=hók*.>_{SPEECH}
 2SGM.S:CONS=return(SG) CONS COMIT blood=DEF
 ‘(She₁) said (to him₂) it is necessary that he (= he₂) should go to their (= their₁) village so that (he₂) should kill one person (and) return with it, with the blood. You kill someone so that you return with the blood.’ (D00EWITCH3)

Younger speakers furthermore frequently replace the defective verb *yìn* ~ *yì* ‘SAY’ with the Hausa particle *wái* (as in 96a). In Hausa, this particle is used to convey uncertainty or doubt in the truth of the utterance (Dimmendaal 1989; Frajzyngier 1996: 180–200; P Newman 2000: 97–108). Younger Goemai speakers, by contrast, use it interchangeably with the defective verb *yìn* ~ *yì*. Furthermore, younger speakers allow *wái* ~ *yìn* ~ *yì* ‘SAY’ to co-occur with the complementizer (*gòe-*) *pé* ~ *fé* (as in 96b). It is possible that this strategy is a calque of a Hausa structure where *wái* can co-occur with *cèwáá* (the speech act complementizer). Older speakers consider this use ungrammatical.

- (96) a. *Wái* <*à* *mìs* *dóe*.>
 SAY FOC man(SG) SGF.LOG.SP.POSS
 ‘(She₁) said, (he) is her₁ husband.’ (D00EWITCH3)
- b. *Ní* *zém* / *dé* *mùép* *gòe* / *k'wál* *yìn* /
 3SG.S like SO.THAT 3PL.S:CONS OBLIG talk SAY
 <*gòepé* *ní* *tóe* *góe* *k'óóm* (...).>_{COMP-SPEECH}
 THAT/WHEN 3SG.I EMPH COMIT strength
 ‘He₁ wants that they₂ should say that he (= he₁) has strength (...).’ (F00JNAAN)

b. *muèp d'á k'óelèng / Máámbyál / muèp yí*
 3PL.S COND hear/smell <PLACE.NAME> 3PL.S SAY

Biémbiém.

<PLACE.NAME>

‘when they (= the Hausa) heard (the place name) *Maámbyál*, they said (= wrote it down as) *Biémbiém.*’ (D04ALUKWO)

In present-day Goemai, the forms *d'á* ~ *lá* occur in free variation, and speakers alternate even in adjacent utterances (as in 99). Despite this free variation, speakers recognize the *d'á* alternant as belonging to the K'wo dialect, and *lá* to the Duut and Dorok dialects.

(99) *D'á góe=d'álang gòe=dóe / Puòesh'ip. Là*
 COND 2SGM.S=pass(SG) 2SGM.S=come <PLACE.NAME> COND
góe=kát Puòesh'ip (...).
 2SGM.S=find <PLACE.NAME>

‘When you pass (there), you come to Bakin Kogi. When you encounter Bakin Kogi, (...).’ (D04ALUDUUT2)

Formally, the particle patterns like the first verb in a serial verb construction (see section 3.1, point (vii)): nouns and pronouns of set 1 precede it (as *muèp* ‘3PL’ in 98b above), while pronouns of set 2 follow it (as *góe* ‘2SGM’ in 98a and 99 above). Although its origin is unknown, this distribution suggests a verbal origin (see also the introduction to chapter 7).⁹⁰

Generally, the conditional clause precedes the main clause (as in 98a, 98b and 99 above), although it is possible – albeit rare – to reverse this order. In this case, the conditional clause functions as an afterthought that provides additional information (as in 100a). As such, it is also possible for the conditional clause to occur between two main clauses (as in 100b).

90. It is likely that the particles are etymologically related to the particles *d'á* ~ *lá* indicating future tense (see chapter 7, section 3), progressive aspect (see chapter 7, section 4.1) and habitual aspect (see chapter 7, section 4.2): all have the same distribution relative to subject pronouns, and all have the same phonetic alternation between *d' ~ l* – an alternation that is not otherwise attested in the language. It can be shown that the conditional clause has given rise to the habitual aspect construction (see chapter 7, section 4.2); but their relationship to the future tense and progressive aspect constructions remains unclear.

- (100) a. *muèp t'óng tù ní kàt ní lá à*
 3PL.S IRR kill(SG) 3SG.O maybe 3SG.I COND FOC
Tifi.
 <ETHNIC.NAME>
 'they would kill him if he was a Tiv.' (H01JWAR)
- b. *Gòebi / sèk d'ik. Kó múút. Kó /*
 AS.IF BODY:GEN marrying maybe/or death(SG) maybe/or
ndòe=bì k'yák pyá. Muèp lá shin.
 SPEC=thing:GEN heart/neck bec.white 3PL.S COND do
Kó ndòe=gùrùm gòe-móós
 maybe/or SPEC=person NOMZ(SG)-hospitality
gòe-wúl (...).
 NOMZ(SG)-arrive
 'Like for marriage. Or (for) death. Or (for) a happy occasion.
 (This is) when they do (it). Or (for) some visitor who arrives
 (...). (P04CMUALAM2)

The conditional clause constitutes a full clause. It can be a simple verbal clause (as in 101a), a verbless clause (as in 100a above, and in 101b and 101c below), a complex clause (as the sequential structure in 104d below), or a serial verb construction (as in 102e). If two coordinated clauses occur, the conditional particle has to mark both coordinands (as in 101c).

- (101) a. *Là góe=t'óng d'i nd'ùùn*
 COND 2SGM.S=sit(SG) LOC.ANAPH INSIDE:GEN
hàngòed'è=hòk / muèp t'óng tàng / uén d'i.
 water=DEF 3PL.S IRR search medicine LOC.ANAPH
 'If you sit there in the water, they will search for medicine
 there.' (D04AWO)
- b. *Ní d'á / góe shàràp ngàm / b'it muèp*
 3SG.S COND COMIT women(PL) much/many day 3PL.POSS
gòemé gòemé.
 one one
 'If he has many wives, their days (for looking after the hus-
 band) (come) one after the other.' (D04AMISMAT)

- c. *kó lá à n-shìmsék múk / kó*
 maybe/or COND FOC LOC-skin 3SG.POSS maybe/or
lá à m-puòe múk / zwààn yà kúút.
 COND FOC LOC-mouth 3SG.POSS hook catch just
 ‘if (it) is on its skin or if (it) is on its mouth, the hook just catches (it).’ (P00NFISHING)

The conditional clause can be marked for almost all TAM categories. The examples in this section illustrate its co-occurrence with the unmarked verb (as in 98a, 98b, 99, 100b and 101a), past tense (as in 102a), future tense (as in 102b), progressive aspect (as in 102c), and irrealis modality (as in 102d). It is, however, incompatible with the habitual aspect construction. Since there is no semantic restriction against such a co-occurrence, this distribution could be another indication for their common origin (see chapter 7, section 4.2). In such cases, the habitual reading is instead conveyed by the unmarked verb (see chapter 7, section 2) or the progressive aspect (see chapter 7, section 4.1). For example, the conditional clause containing an unmarked verb in (102e) receives a habitual interpretation. As indicated by the alternative free translation, this habitual reading is only a contextual interpretation; it is not entailed.

- (102) a. *Dók là góe=muáán góe yíl*
 PAST.REM COND 2SGM.S=go(SG) PLACE ground:GEN
Gòemâi / t'òng góe=ná (...).
 <ETHNIC.NAME> IRR 2SGM.S=see
 ‘In the past, when you went to the land of the Goemai, you would see (...).’ (D01CLU)
- b. *b'ít lá d'á lín / t'óng b'óót gòe*
 day COND FUT.CL dry(SG) IRR gain.expertise(SG) SEQ
wùm òdè.
 bury one/other
 ‘when the day dawns tomorrow, (he) would be able to plant another time.’ (V04ANLUUNPAS1)
- c. *Muèp d'á d'è ò-tàl tàl yì /*
 3PL.S COND exist PROGR-ask/greet greeting PROGR
muèp shin sh'ít góe s'ém k'wál.
 3PL.S do work COMMIT proverb
 ‘When they are greeting, they make use of proverbs.’
 (O04ANSEMFWAL3)

- d. *Tó / lá t'òng góe=shín n'd'ùun wàng*
 okay COND IRR 2SGM.S=do INSIDE:GEN pot:GEN
sóól / t'òng góe=sám nì
 metal/money IRR 2SGM.S=descend 3SG.O
gòe=d'ú n-yíl môu.
 2SGM.S=cause.sitting(SG) LOC-ground NEG
 'Okay, if you would do (it) in a pot of iron, you would not take it down (and) set (it) on the ground,.' (P04CMUALAM2)
- e. *d'á nà d'ásk'óóm t'wót / t'òng tér dúk (...)*
 COND see elder(PL) sit(PL) IRR move.aside CLOSE
dóe dé muép / dé dóe shùur yì / dé
 come DIR 3PL.POSS SO.THAT come squat CONS SO.THAT
tàl muép yì.
 ask/greet 3PL.O CONS
 'whenever (he) sees elders (who) sit, (he) would step close (...) (and) come to them, so that (he) squats down here, so that (he) greets them.'
 'if (he) sees elders (...).' (D04NTALDAAS1)

While there are few restrictions on TAM marking in the conditional clause, the main clause cannot be marked for aspect: it is either marked for irrealis modality, or it remains unmarked. It can, however, be marked explicitly for tense (as in 103).

- (103) *hèn=d'á yóól / hèn=dók shín headmaster*
 1SG.S=COND rise(SG) 1SG.S=PAST.REM do headmaster
n-Kàbòng (...).
 LOC-<PLACE.NAME>
 'when I rose, I did (the work of) headmaster in Kabong (...).'

Both the conditional clause (in 104a) and the main clause (in 104b) can be negated independently. It is even possible for the negative particle *bá ~ môu* to occur in both clauses (as in 104c), although speakers disprefer such a structure. Instead, they prefer to use the verb *nyáng* 'hate/refuse' to negate the conditional clause (as in 104d).

- (104) a. *Só ñd'àsóenòe gùrùm lá wúl / lá nà gáda*
 so now person COND arrive COND see bridge
vél bá / t'òng nà á'á (...).
 two NEG IRR see INTERJ
 'So, when a person arrives, when (he) doesn't see the two
 bridges, (he) would go 'surprise' (...).' (H01CJOS)
- b. *Là yí=ná hàasyít muép / à iri*
 COND 2SGF.S=see eyeball 3PL.POSS FOC kind
mén bá.
 1PL.POSS NEG
 'If you see their eyeballs, (they) are not (of) our kind.'
 (N00EWITCH3)
- c. *là góe=hóóm ni ñ-k'yák góe*
 COND 2SGM.S=hold 3SG.O LOC-heart/neck 2SGM.POSS
bá / (...) / t'òng táb'à kàt góe bá.
 NEG IRR do.ever/never find 2SGM.O NEG
 'if you don't hold him in your heart, (...), he would never find
 you.' (D00JLAZINESS)
- d. *d'à góe=nyáng gòe=góe móór / t'òng*
 COND 2SGM.S=hate 2SGM.S=SEQ be.patient IRR
góe=kát ñdòe=bì gòe-zèm k'yák
 2SGM.S=find SPEC=thing NOMZ-like heart/neck:POSS
góe bá.
 2SGM.POSS NEG
 'if you are not patient (lit. refuse to be patient), you won't find
 the things that your heart likes.' (D04NSEM5)

The conditional clause can be modified further by particles. The particle *kàt* 'maybe' emphasizes the likelihood that the condition will occur (in 105a). And the Hausa loan *sáí* 'then/only' strongly emphasizes that the condition is absolutely necessary for the main event to occur (in 105b).

- (105) a. *nyè-gòepé* *ní t'óng làp* *ní tóe /*
 because-THAT/WHEN 3SG.S IRR receive 3SG.O EMPH
kàt lá f'yér / k'è d'ik.
 maybe COND bec.big(SG) be.sufficient marrying
 'because he would marry her, as soon as (she) has become old
 enough for marriage.' (D04ADIK)
- b. *Sáí lá góe=rú*
 then/only COND:CONS 2SGM.S=enter(SG)
Màngáp / dé góe=rú
 <MASQUERADE.NAME> SO.THAT 2SGM.S:CONS=enter(SG)
lù dààs=hòk yì.
 settlement:GEN men(PL)=DEF CONS
 'Only if you have entered *Mangap* (= are initiated into the
Mangap society), that you (are allowed to) enter the men's
 hut.' (V04ANLUDAAS1)

Finally, the conditional clause is used to mark irrealis and counterfactual conditions. In this case, both the conditional clause and the main clause are marked with the particle *d'in* (as in 106). This particle probably originated in the close past tense particle *d'in* (see chapter 7, section 3).

- (106) *Óerém mén d'in lá là / hèn=d'in*
 beans 1PL.POSS PAST.CL COND produce(SG) 1SG.S=PAST.CL
t'óng póe yòe (...).
 IRR give 2SGF.O
 'If our beans would produce (fruit) (but they don't), I would give
 (the fruit) (to) you.'
 Or: 'If our beans had produced (fruit) (but they didn't), I would
 have given (the fruit) (to) you .' (S00JFAREWELL2; A-04/02/00)

4.9. Juxtaposition and conjunctions

Like many Chadic languages (see Frajzyngier 1996), Goemai does not have a rich inventory of sentential conjunctions. It has (recently-developed) particles and conjunctions that overtly mark consequence clauses (4.4), purpose clauses (see section 4.5), reason clauses (see section 4.6), reported speech (see section 4.7) and conditional clauses (see section 4.8). But another very common strategy is to simply juxtapose two clauses, leaving the nature of the relationship

implicit: e.g., a conjoined reading in (107a), a contrastive reading in (107b), a reason reading in (107c), a purpose reading in (107d) and a conditional reading in (107e). This relationship is always interpreted as a logical relationship, not as a temporal relationship – to indicate temporal relationships, speakers have to resort to verb serialization (see section 3) or adverbial clauses (see section 4.1). Superficially, juxtaposed clauses look similar to serial verb constructions, but they differ in that they are independent of each other, i.e., they are usually separated by a short pause, and each clause is marked separately for person, TAM and polarity. In particular, this strategy is regularly used as a complementation strategy with verbs of attention and liking to express personal judgments and evaluations (as in 107f).

- (107) a. *muèp s'óe bì, muèp s'wá hààm, muèp shin tàl.*
 3PL.S eat thing 3PL.S drink water 3PL.S do greeting
 'they eat things, they drink water, they perform greetings.'
 (OHIKERE AND TIEMSAN 1999: 2)
- b. *Bàkwá yóng yì / Démshìn / s'em*
 <ETHNIC.NAME> call CONS <PLACE.NAME> name:GEN
lú=hók d'è bí=múk à Ngòòtlóng.
 settlement=DEF exist thing=3SG.POSS FOC <PLACE.NAME>
 'and so the Hausa call (it) Demshin, (but) the name of the vil-
 lage is in its own way *Ngootlong*.' (D04NLUOROK)
- c. *muèp lwát hèn sòsái / hèn=shàl.*
 3PL.S be.afraid(PL) 1SG.O well 1SG.S=fight
 'they fear me a lot, (because) I (can) fight.' (N00EWITCH5)
- d. *t'òng jí=shín, ní t'òng swár swár.*
 IRR SGM.LOG.SP.S=do 3SG.S IRR laugh laughing
 '(He₁ said) he₁ would do (it), (so that) he₃ would laugh.' (TIEM-
 SAN 1999: 6)
- e. *ní t'òng dóe vuáng gùrùm / (...) / ní t'òng dóe*
 3SG.S IRR come wash person 3SG.S IRR come
t'òng góe yíl mén=hòe / kyóóp=à?
 sit(SG) PLACE ground 1PL.POSS=exactly health=INTERR
 '(if) he were to insult people here, (...), would he (be able to)
 live in our land in peace?' (C00JMQUEST4)

- f. *Hèn=nà yí d'óng ñ-yít nóe.*
 1SG.S=see 2SGF.O be.good LOC-eye/face 1SG.POSS
 ‘I consider you beautiful in my eyes (lit. I see (it), you are beautiful in my eyes).’ (D04NTALSUUR1)

In addition, present-day Goemai employs a number of conjunctions – mostly borrowed from Hausa – to make the relationship explicit.

Disjoint clauses are formed by means of the borrowed disjunction *kó* ‘or’ (as in 108a). The same form is also used to join phrases (see chapter 3, section 3.2). Originally, Goemai speakers did not use a disjunction, but made use of juxtaposed clauses marked with the question particle *ò* (as in 108b) (see chapter 6, section 1.3 for these particles).

- (108) a. *Mòe=yòng góór kó mòe=yòng ñgùmgóór.*
 1PL.S=call fish.type maybe/or 1PL.S=call fish.type
 ‘We call (it) *goor* or we call (it) *ngumgoor*.’ (C00ANDIALECT2)
- b. *Kàt jí=ñ-míút=ò kàt*
 maybe SGM.LOG.SP.S=PERM-die(SG)=INTERR maybe
jí=ñ-láng=ò?
 SGM.LOG.SP.S=PERM-hang/move(SG)=INTERR
 ‘Maybe he would be allowed to die, maybe he would be allowed to live?’ (F99AKUR)

Goemai has also borrowed the conjunctions *àmmá* ‘but’ (in 109a), *kàfin* ‘before’ (in 109b), *sáí* ‘then/only’ (in 109c), and *hár* ‘until/even’ (in 109d). Other Hausa conjunctions – such as *sábò ñdòe* + NOMZ ‘because of’ (from Hausa *sábò dà*) and *kòdàshikè* ‘even though’ (from Hausa *kó dà cikèè*) – are also attested, but occur only infrequently in the database.

- (109) a. *ní góe mis / àmmá ní góe jáp*
 3SG.I COMIT man(SG) but 3SG.I COMIT children(PL)
bá.
 NEG
 ‘she has a husband, but she doesn’t have children.’
 (D00JFAMILY)

- b. *d'óng gòpé lá gòe-màt*
 be.good THAT/WHEN child(SG):CONS NOMZ(SG)-woman(SG)
t'óng màn / kàfn yóól muààn d'ík.
 IRR know before rise(SG) go(SG) marrying
 '(it) is necessary that a female child would know (it) before
 (she) rises (and) goes for marriage.' (D01CLU)
- c. *Sái Ìmá lúút. Sái muèp t'wót.*
 then/only <NAME> be.afraid(SG) then/only 3PL.S sit(PL)
Sái muèp muén gòe màn òdòe=réep
 then/only 3PL.S go(PL) SEQ take(SG) SPEC=girl(SG)
gòe-kyòklók zàk-yìt (...).
 NOMZ(SG)-small also/however-again
 'Then Ima became afraid. Then they sat. Then they went and
 picked up a small girl again (...).' (D00EWITCH3)
- d. *Gwàm muèp d'ì pòenóe / gwàm muèp*
 deceive 3PL.O LOC.ANAPH thus deceive 3PL.O
d'ì pòenóe / gwàm muèp d'ì pòenóe /
 LOC.ANAPH thus deceive 3PL.O LOC.ANAPH thus
hár muèp gógóe zèm.
 even/until 3PL.S:CONS REDUP.OBLIG like
 '(He) deceived them there like this, (he) deceived them there
 like this, (he) deceived them there like this, until they finally
 agreed (to do it).' (F99AKUR)

Finally, Goemai has grammaticalized the verb *bá* (SG) ~ *búk* (PL) 'return' to function as a conjunction 'and' that joins both verbal clauses (as in 110a) and non-verbal clauses (as in 110b). The origin of this conjunction is probably a motion verb in the coordinate serial construction, where it developed the aspectual sense of 'do the same again, do the same as somebody else' (as in 110c and 110d). In this serial construction, it still functions as a verb (see the introduction to chapter 7, section 4, for details). But in its further development as a conjunction, it has lost all its verbal properties, i.e., it cannot receive person or TAM marking.

- (110) a. *s'óe s'óe bá vuáng d'á*
 eat food return(SG) wash calabash
 '(he) ate and also washed the calabashes' (A-21/02/00)

Goemai has a variety of multiverb constructions, which impose different types of restrictions on the expression of TAM, person, and polarity. In particular, it makes extensive use of different types of serial verb construction to express temporal relationships, lexical aspect and deictic concepts; and of juxtaposition to express logical relationships. In addition, there are overtly marked complex clauses: two types of adverbial clauses that serve to indicate temporal relationships; two types of complement clauses that occur in O function with verbs of attention and thinking, and verbs of starting and stopping respectively; one consequence clause; different types of purpose and sequential structures; a reason clause; reported speech structures; and a conditional clause. Goemai also has borrowed conjunctions from Hausa. There are indications that many of these more specific clause types constitute either recent innovations or borrowings, and it is likely that Goemai originally made use of the formally unmarked strategies of verb serialization and juxtaposition.

Appendix 1

Text collection

The texts in this collection illustrate a number of different genres: a speech (section 1), a folktale (section 2), descriptions of the use of riddles (section 3), proverbs (section 4) and songs (section 5), together with some examples, and finally a procedural text (section 6).

All texts are based on recordings archived with the Max Planck Institute for Psycholinguistics (http://corpus1.mpi.nl/ds/imdi_browser/) and the Endangered Languages Archive (<http://www.hrelp.org/archive/>). The identifier of the text appears in brackets behind the title (referring back to the archived object); and the numbering on the left hand corresponds to the utterance number in the archived transcripts. The full texts, as well as other texts, can be accessed through the above archives.

In consultation with the speakers, the texts in this collection – but not in the main body of this grammar – were edited as follows: hesitations and false starts were omitted, some lexical choices were replaced, and some utterances were taken out; furthermore, the free translation may include additional material intended to make the original utterance more transparent to non-Goemai speakers. As a result of this editing process, examples in this text collection may differ slightly from examples in the rest of the grammar.

1. Speech: Speaking the Goemai language (D00NSpeaking)

Andreas Shakum, a Goemai elder from the Dorok Goemai, gives a speech about the Goemai language, exhorting people to speak their language.

0 *Tó, jáp mén Gòemâi, hèn=t'òng*
okay children(PL) 1PL.POSS <ETHNIC.NAME> 1SG.S=sit(SG)
b'ák dé-gòe kùt kùt ñdòe gwén.
here PUR talk talking CONJ 2PL.I

‘Okay, my Goemai children, I sit here to talk a talk with you.’

- 1 *Bì gòepé hèn=t'òng kút ñdòe gwén tóe,*
 thing THAT/WHEN 1SG.S=IRR talk CONJ 2PL.I EMPH
à nyè ñdòe=bì bá.
 FOC matter:GEN SPEC=thing NEG
 ‘The thing that I will talk to you about, it is not just about anything.’
- 2 *Gòdé mén dibít, mòe=zèm dé kó=wúròe*
 bottom 1PL.POSS all 1PL.S=like SO.THAT any/every:CONS=who
k'òelèng d'ùòe Gòemâi yì ñt'it.
 hear/smell voice:GEN <ETHNIC.NAME> CONS well
 ‘From our beginnings onwards, we want everyone to understand the Goemai language well.’
- 4 *Gòe-t'wót mén b'ák m-pè ñndòe*
 NOMZ-sit(PL) 1PL.POSS here LOC-place LOC.ANAPH
mòe=rèèp.
 1PL.S=mix
 ‘As we live here in this place, we have mixed [with other people].’
- 7 *Tó, rèèp gòepé mòe=rèèp ñdòe d'èmgòedè*
 okay mixing THAT/WHEN 1PL.S=mix CONJ remainder:GEN
gùrùm ñgàm.
 person much/many
 ‘Okay, our mixing is with many other people.’
- 8 *Gòemâi ñ-d'è, Biròm ñ-d'è,*
 <ETHNIC.NAME> PRES-exist <ETHNIC.NAME> PRES-exist
Jaráwá ná ñ-d'è, Íbò ná
 <ETHNIC.NAME> PRES PRES-exist <ETHNIC.NAME> PRES
ñ-d'è.
 PRES-exist
 ‘See, Goemai are there, Birom are there, Jarawa are there, Igbo are there.’
- 9 *Là gú=t'wót m-pè gòepé gòemé,*
 COND 2PL.S=sit(PL) LOC-place THAT/WHEN one
hèn=màn t'òng gú=kút d'ùòe=hòk, àmmá là
 1SG.S=know IRR 2PL.S=talk voice=DEF but COND
gú=búk yók dé-gòe kàt mòe-gùrùm
 2PL.S=return(PL) return.home(PL) PUR find NOMZ(PL)-person

gwén n-lú, kùt d'i n-d'ùòè
 2PL.POSS LOC-settlement talk LOC.ANAPH LOC-voice:GEN
Gòemâi.

<ETHNIC.NAME>

‘When you stay in a place together [with others], I know that you will speak the [other] language, but when you return to meet your people at home, talk there in the Goemai language.’

- 10 *Mòe-ndá ndòe mòe-núún, sh'è jáp*
 NOMZ(PL)-father CONJ NOMZ(PL)-mother learn/teach children(PL)

gwén kó=lókàshi góenàng góe d'ùòè
 2PL.POSS any/every=time which(SG) COMIT voice:GEN

Gòemâi dé móe=k'óelèng d'ùòè
 <ETHNIC.NAME> SO.THAT 1PL.S:CONS=hear/smell voice

gwén yì.
 2PL.POSS CONS

‘Fathers and mothers, teach your children all the time the Goemai language, so that we can hear their voices.’

- 16 *Là gú=t'wót ndòe sék, kùt d'ùòè*
 COND 2PL.S=sit(PL) CONJ BODY talk voice:GEN
Gòemâi, kùt d'ùòè lú gwén, dé
 <ETHNIC.NAME> talk voice:GEN settlement 2PL.POSS SO.THAT
gú=k'óelèng d'ùòè súk yì.
 2PL.S:CONS=hear/smell voice:GEN BODY.2PL.POSS CONS

‘When you sit amongst yourselves, speak the Goemai language, speak the language of your homes, so that you listen to your own language.’

- 17 *Shòrà gùrùm gòe-t'óng shin gwén, gù=shìn ní*
 advice:GEN person NOMZ-IRR do 2PL.POSS 2PL.S=do 3SG.O
à n-d'ùòè lú gwén.
 FOC LOC-voice:GEN settlement 2PL.POSS

‘When advising people, do it in the language of your homes.’

- 18 *Gùrùm lá t'óng rú dákd'ùòè gwén, t'óng*
 person COND IRR enter(SG) MIDDLE 2PL.POSS IRR
k'óelèng bì gòepé gù=nd'è t'óng gú=kùt
 hear/smell thing THAT/WHEN 2PL.S=exist PROGR 2PL.S=talk

yì bá, t'óng màn bì gòe-lòe gwén ñd'ùùn
 PROGR NEG IRR know thing NOMZ-put 2PL.POSS INSIDE
bá.
 NEG

‘If someone else enters amongst you [during your meetings], he will not understand what you are talking about, he will not know the words that you put inside [your speech].’

22a *Jáp búk dóe t'wót ñ-lú.*
 children(PL) return(PL) come sit(PL) LOC-settlement
 ‘The children return and stay here in the villages.’

22b *Á góe gòe=b'è jáp=hók tóe*
 FOC 2SGM.I 2SGM.S=produce(PL) children(PL)=DEF EMPH
ñ-k'à sák, kùt kút=hòk
 LOC-HEAD(SG):GEN BODY.2SGM.POSS talk talking=DEF
ñ-d'ùòe Gòemài ñdòe jáp góe.
 LOC-voice:GEN <ETHNIC.NAME> CONJ children(PL) 2SGM.POSS
 ‘It is you, you gave birth to the children yourself, now speak in the Goemai language to your children.’

23 *Jáp gwén ñdòe sùt, muèp=kút*
 children(PL) 2PL.POSS CONJ BODY.PL.LOG.SP.POSS 3PL.S=talk
à d'ùòe Bàkwá.
 FOC voice:GEN <ETHNIC.NAME>
 ‘Your children₁ amongst themselves₁, they speak the language of the Hausa.’

25 *Á bì gòe-sá tóe, móe=éép pè*
 FOC thing NOMZ-make EMPH 1PL.S:CONS=open(SG) place
yì d'ì puánáng ñ-Túdùn Wàdà.
 CONS LOC.ANAPH there/yonder LOC-<PLACE.NAME>
 ‘This is the reason why we have opened this place [for language classes] there in Tudun Wada [a suburb of Jos].’

26 *Wàr jáp gwén, dòe gù=kát mèn*
 collect children(PL) 2PL.POSS come 2PL.S=find 1PL.O
ñ-ní.
 COMMIT-3SG.I

‘Take your children, come and find us here with them.’

- 27 *T'òng m^{óe}=sh'é muèp g^{óe} d'ú^{óe}*
 IRR 1PL.S=learn/teach 3PL.O COMIT voice:GEN
Gòemâi gòe-n-kùt.
 <ETHNIC.NAME> NOMZ-ADVZ-talk
 'We will teach them to speak the Goemai language.'
- 28 *T'òng m^{óe}=sh'é muèp g^{óe} Góemâi*
 IRR 1PL.S=learn/teach 3PL.O COMIT <ETHNIC.NAME>
gòe-yíl.
 NOMZ-write
 'We will teach them Goemai writing.'
- 32 *Màt gòepé yóól, yì=dòe màn à*
 woman(SG) THAT/WHEN rise(SG) 2SGF.S=come know FOC
Gòemâi, yì=zèm ní yì=d'ík ní,
 <ETHNIC.NAME> 2SGF.S=like 3SG.O 2SGF.S=build/marry 3SG.O
tó, yì=shìn kókárí yì=sh'è à d'ú^{óe}=hòk,
 okay 2SGF.S=do effort 2SGF.S=learn/teach FOC voice=DEF
dé yì=k'òelèng yì dé
 SO.THAT 2SGF.S:CONS=hear/smell CONS SO.THAT
yì=kùt yì.
 2SGF.S:CONS=talk CONS
 'You, woman who came [from somewhere else], you know a Goemai man here, you like him, you marry him, okay, make an effort to learn the language, so that you understand it, so that you speak it.'
- 33 *Lá tàp yóe, là yì=wá*
 COND show.ignorance 2SGF.O COND 2SGF.S=return.home(SG)
yì=góe kàt mìs yóe, kùt òdòe mìs
 2SGF.S=SEQ find man(SG) 2SGF.POSS talk CONJ man(SG)
yóe, bì ná ñ-d'é, muèp kùt d'ú^{óe}
 2SGF.POSS thing PRES PRES-exist 3PL.S talk voice
ñ-d'é-ñnòe, hèn=k'òelèng bá.
 ADVZ-CL:exist-DEM.PROX 1SG.S=hear/smell NEG
 'When you don't understand something, when you return home and find your husband, talk to your husband [and say] see, the thing is this, they talk this language, and I don't understand it.'

- 34 *Tó, mìs yóe t'óng nyàp t'óng sh'è yí*
 okay man(SG) 2SGF.POSS IRR prepare IRR learn/teach 2SGF.O
̀n-ní.
 COMMIT-3SG.I
 'Okay, your husband will arrange it and will teach you.'
- 35 *Là yí=yóól, kó=lókàshí ònòe yì=kùt*
 COND 2SGF.S=rise(SG) any/every=time LOC.ANAPH 2SGF.S=talk
à d'̀uòe=hòk òdòe mìs yóe, mán yì=kùt
 FOC voice=DEF CONJ man(SG) 2SGF.POSS PROH 2SGF.S=talk
òdòe=d'̀uòe gòe-k'ém bá.
 SPEC=voice NOMZ(SG)-different NEG
 'When you rise, all this time, speak the language with your husband, don't speak any other language.'
- 36 *Tó, góe gòe-mìs zák, gòepé*
 okay 2SGM.I NOMZ(SG)-man(SG) also/however THAT/WHEN
gòe=ná d'èmdè màt
 2SGM.S:CONS=see remainder:GEN woman(SG)
gòe-k'òelèng bì=hòk bá, góe zák d'à
 NOMZ(SG)-hear/smell thing=DEF NEG 2SGM.I also/however COND
gòe=wá gòe=dóe òn-lú,
 2SGM.S=return.home(SG) 2SGM.S=come LOC-settlement
d'̀ù ní, sh'è ní góe d'̀uóe
 cause.sitting(SG) 3SG.O learn/teach 3SG.O COMMIT voice:GEN
Gòemài=hòk.
 <ETHNIC.NAME>=DEF
 'Okay, you, the man, too, when you see a woman who doesn't understand the thing, you, too, when you return home and come to the compound, set her down, teach her the Goemai language.'
- 37 *Lá bòe=àddú'à má, sh'è ní òn-ní*
 COND HOW/WHERE=prayer also learn/teach 3SG.O COMMIT-3SG.I
̀n-d'̀uòe Gòemài, dé góe
 LOC-voice:GEN <ETHNIC.NAME> SO.THAT OBLIG:CONS
k'òelèng yì.
 hear/smell CONS
 'And if it is about how to pray, teach her it in the Goemai language, so that she should understand it.'

- 38 *Yòng jáp gwén dibit t'òng gú=t'wót,*
 call children(PL) 2PL.POSS all IRR 2PL.S=sit(PL)
t'át támtìs òdòe jáp gwén,
 propel/tell.folktale(SG) folktale CONJ children(PL) 2PL.POSS
shìn kúrgòedé òdòe jáp gwén.
 do riddle CONJ children(PL) 2PL.POSS
 'Call all your children and sit [with them], tell folktales to your children, play riddles with your children.'
- 39 *Támtìs gòe-t'òng t'át gwén*
 folktale NOMZ-IRR propel/tell.folktale(SG) 2PL.POSS
ò-d'è-òdòe t'òng sá là k'òelèng
 ADVZ-CL:exist-DEM.PROX IRR make child(SG) hear/smell
d'ùòe Gòemài.
 voice:GEN <ETHNIC.NAME>
 'These folktales that you will tell will help the child understand the Goemai language.'
- 41 *Hèn=b'òòl gwén dàsk'òóm, hèn=b'òòl gwén*
 1SG.S=beg/appeal 2PL.O elders(PL) 1SG.S=beg/appeal 2PL.O
mòe-ndá, òdòe jáp, t'wòt mpuòe mpuòe,
 NOMZ(PL)-father CONJ children(PL) sit(PL) REDUP.always
t'òng gú=sh'é d'ùòe Gòemài=hòk yì.
 PROGR 2PL.S=learn/teach voice:GEN <ETHNIC.NAME>=DEF PROGR
 'I ask you, elders, I ask you fathers and children, always sit learning the Goemai language.'
- 42 *Kó ò-lú, kó ò-s'èt, kó=là*
 maybe/or LOC-settlement maybe/or LOC-bush any/every=COND
gú=muén à ònàng.
 2PL.S=go(PL) FOC where
 'In the villages, in the bush, wherever you go.'
- 44 *Àmmá là góe=ná là góe lá p'èt*
 but COND 2SGM.S=see child(SG) 2SGM.POSS COND exit(SG)
dé-gòe kùt ò-d'ùòe gòe-k'ém òdòe góe,
 PUR talk LOC-voice NOMZ(SG)-different CONJ 2SGM.I

d'ùòè *Bàkwá=wò,* *yòng ní dèl k'wám*
 voice:GEN <ETHNIC.NAME>=INTERR call 3SG.O pull ear
mùk, *ní gòe kùt.*
 3SG.POSS 3SG.S OBLIG talk

‘But if you see that your child goes out to speak in a different language with you, maybe in the Hausa language, call him, instruct him, he should speak [the Goemai language].’

- 45 *Lá wá yà ò-lú,* *là gòe*
 COND return.home(SG) catch LOC-settlement child(SG) OBLIG
kàt à dàsk'óóm, *wép dàsk'óóm òd'ùùn*
 find FOC elders(PL) respect elders(PL) INSIDE:GEN
Gòemâi gòepé Gòemâi lá shin t'óng,
 <ETHNIC.NAME> THAT/WHEN <ETHNIC.NAME> HAB do HAB
ní gòe wép ní.
 3SG.S OBLIG respect 3SG.O

‘When he returns home to the village, the child should [be able to] encounter elders and show respect to the elders in the Goemai language, just like the Goemai have always done, he should show respect to him.’

- 47 *Mìsk'óóm t'óng t'ém kó=nímòè pòe ní, dé*
 elder(SG) IRR tell any/every=what give 3SG.O SO.THAT
gòe k'òelèng yì.
 OBLIG:CONS hear/smell CONS

‘The elder would teach him everything, so that he should understand.’

- 48 *Tó, nyè-gòe-sék,* *hèn=b'òòl gwén*
 okay because-NOMZ(SG)-BODY 1SG.S=beg/appeal 2PL.O
dé gú=d'yám yì k'ék.
 SO.THAT 2PL.S:CONS=stand(PL) CONS HEADS(PL)

‘Okay, because of this, I beg you to make an effort.’

2. Folktale: The rabbit and a famine (F04ATamtis)

Louis Longpuan, a Goemai elder from the K'wo Goemai, narrates a popular folktale about the rabbit – the trickster character in Goemai – and his behavior during a famine. Louis Longpuan is the main speaker, and Andreas Shakum

occasionally adds a comment. The two speakers are represented here as “L.” and “S.” respectively.

- 0 L. *Tàmtìs nóe t'òe-t'át.*
folktale 1SG.POSS REDUP-tell.folktale(SG)
'My folktale is being told. [= Opening sentence of a folktale.]'
- 1 S. *Tó.*
okay
'Okay.'
- 2 L. *Dók bà yá m̀m̀ùk d'è̀m à f̀uán.*
PAST.REM return(SG) catch NOMZ.3SG.POSS this.time FOC rabbit
'It [= tale] returned and this time caught itself a rabbit [i.e., the tale is about the rabbit] [= Opening sentence of a folktale.]'
- 3 *Gòe=màn f̀uán à g̀r̀ùm gòe-ǹng.*
2SGM.S=know rabbit FOC person NOMZ(SG)-bec.mature(SG)
'You know, the rabbit is a clever character.'
- 4 *F̀uán ǹng án p'ù̀r.*
rabbit bec.mature(SG) mind very
'The rabbit is very clever in his mind.'
- 5 *Néén t'á yì dàkd'ù̀e lú muép.*
hunger:CONS fall(SG) CONS MIDDLE:GEN settlement 3PL.POSS
'So [one day], hunger fell into the middle of their village.'
- 6 *K'à yil=hók díp.*
HEAD(SG):GEN ground=DEF all
'Onto the whole land.'
- 7 *Ǹdòe=g̀r̀ùm gòe s'óe dé-gòe n-s'óe bá.*
SPEC=person COMIT food PUR ADVZ-eat NEG
'No-one had any food to eat.'
- 8 *Jàp bì n-zàm muèp=fyá díp.*
DIM(PL):GEN thing LOC-field 3PL.S=dry(PL) all
'All the little things in the fields dried up.'
- 9 *S'wá fi.*
guineacorn dry(SG)
'The guineacorn dried up.'

- 10 *K'áp'á fi.*
rice dry(SG)
'The rice dried up.'
- 11 *Mààr fi.*
millet dry(SG)
'The millet dried up.'
- 12 *Bì gòe-màn góe ñd'ùùn zàm díp, ñdòe=bi*
thing NOMZ-know 2SGM.POSS INSIDE:GEN field all SPEC=thing
d'è d'í zák-yít bá.
exist LOC.ANAPH also/however-again NEG
'All the things that you know from the fields, nothing was there any longer.'
- 13 *D'èmdè gùrùm muèp=rás.*
remainder:GEN person 3PL.S=bec.thin/lean(PL)
'Some people became lean.'
- 14 *D'èmdè gùrùm muèp=muáráp.*
remainder:GEN person 3PL.S=die(PL)
'Some people died.'
- 15 *D'èmdè gùrùm muèp=táng yím, dé*
remainder:GEN person 3PL.S=search leaf SO.THAT
muép t'óng p'ák t'óng s'óe, t'óng p'ák t'óng
3PL.S:CONS IRR pound IRR eat IRR pound IRR
s'óe, ñdòe jáp muép.
eat CONJ children(PL) 3PL.POSS
'Some people searched for leaves, so that they can pound and eat them, can pound and eat them, together with their children.'
- 16 *Náán sá muèp muáráp bá.*
God make 3PL.S die(PL) NEG
'God made it that they didn't die.'
- 17 *Fuán d'ín d'è d'í.*
rabbit PAST.CL exist LOC.ANAPH
'The rabbit was there.'
- 18a *Yóól.*
rise(SG)
'He rose.'

- 18b *Muààn muààn sh'é jí.*
go(SG) going(SG) foot/leg SGM.LOG.SP.POSS
'He₁ went for his₁ stroll.'
- 19 *Rú dàkd'ùòe s'é.t.*
enter(SG) MIDDLE:GEN bush
'He went into the middle of the bush.'
- 20 *Tàng s'òe m-pè gòe-ńńòe, tàng*
search food LOC-place NOMZ(SG)-LOC.ANAPH search
ń-gòe-ńńòe, wán.
LOC-NOMZ(SG)-LOC.ANAPH lack
'He searched for food in this place, he searched in that one, but it [= food] was lacking.'
- 21 *D'úk góng múk bá ń-gòe-ńńòe,*
pulsate nose 3SG.POSS return(SG) LOC-NOMZ(SG)-LOC.ANAPH
d'úk góng múk bá ń-gòe-ńńòe,
pulsate nose 3SG.POSS return(SG) LOC-NOMZ(SG)-LOC.ANAPH
kàt s'òe bá.
find food NEG
'He moved his nose quivering, turning to this side, he moved his nose quivering, turning to that one, but he didn't find any food.'
- 22 *Sái fuán dóe kàt gòedè t'èng.*
then/until rabbit come find bottom:GEN tree
'Then the rabbit encountered here the base of a tree.'
- 23 *Yùt d'yém.*
bec.accumulated stand(SG)
'It stood branching out.'
- 24 *Fuán t'á t'óng d'ì ń-gòedè t'èng.*
rabbit fall(SG) sit(SG) LOC.ANAPH LOC-bottom:GEN tree
'The rabbit sat down there at the base of the tree.'
- 25 *Yin jì=t'òng b'ák jí=nyák yì,*
SAY SGM.LOG.SP.S=sit(SG) here SGM.LOG.SP.S:CONS=rest CONS
dé jí=yóól yì
SO.THAT SGM.LOG.SP.S:CONS=rise(SG) CONS

jì=wá *ń-lú.*
SGM.LOG.SP.S=return.home(SG) LOC-settlement

‘He₁ said that he₁ will sit here and rest, before he₁ rises and returns home.’

- 26 *Gòe-t'á* *múk* *t'óng,* *sái* *hès* *nyák,*
NOMZ(SG)-fall(SG) 3SG.POSS sit(SG) then/until pierce(SG) breath
yìn hm-hm.
SAY <QUOTE>

‘When he had sat down, then he heaved a sigh saying *hm-hm.*’

- 27 *Sái* *ńdòe=yár* *láp* *puánáng* *góet'éng,* *yìn*
then/until SPEC=bird receive there/yonder above SAY
hm-hm.
<QUOTE>

‘Then a bird answered over there high up saying *hm-hm.*’

- 28 *Yì á'á,* *à* *wúròe d'in* *t'óng* *d'ing* *d'ùòe*
SAY INTERJ FOC who PAST.CL IRR imitate voice
nóe *tóe* *ńndè?*
1SG.POSS EMPH LOC.ANAPH

‘He said, what a surprise, who would have imitated my voice just now?’

- 29 S. <laughs>

- 30 L. *Yár* *ńndè* *yì* *à* *wúròe* *t'óng* *d'ing* *d'ùòe*
bird LOC.ANAPH SAY FOC who IRR imitate voice
tóe *zák?*
EMPH also/however

‘And this bird said, who else would imitate the voice now?’

- 31 *Á'á,* *t'òng* *jì=máng* *p'áng* *jì=k'wák*
INTERJ IRR SGM.LOG.SP.S=take(SG) stone SGM.LOG.SP.S=knock
k'á *pá* *ń-ní.*
head(SG) SGF.LOG.AD.POSS COMMIT-3SG.I

‘What a surprise, [he₁ said] he₁ would pick up a stone and hit her₂ head with it.’

- 32 *T'òng dóe=b'ás muàlám ònòe*
 IRR SGF.LOG.SP.S=break.off tuber.type LOC.ANAPH
dòe=dáp k'á gwá ò-ní.
 SGF.LOG.SP.S=slap head(SG) SGM.LOG.AD.POSS COMMIT-3SG.I
 ' [She₁ answered] she₁ would break off a bit of this *muàlam* dish and slap his₂ head with it.'
- 33 *Pé fúán k'òelèng muàlám dé-gòe dàp k'á*
 THAT/WHEN rabbit hear/smell tuber.type PUR slap head(SG)
jí, yì hâi, pà gòe dàp.
 SGM.LOG.SP.POSS SAY INTERJ SGF.LOG.AD.S OBLIG slap
 'When the rabbit heard about the *muàlam* dish to be slapped at his head, he₁ said, hey, she₂ should slap it.'
- 34 *Yì, tó, gwá gòe k'wák.*
 SAY okay SGM.LOG.AD.S OBLIG knock
 'She₁ said, okay, he₂ should hit her₁.
- 35a *Màng p'áng dé-gòe ò-lyák gòet'éng=hòe.*
 take(SG) stone PUR ADVZ-throw above=exactly
 'He picked up a stone to throw it high up.'
- 35b *Kwài, bà ò-ní hét sèk bì.*
 no return COMMIT-3SG.I hit body:GEN thing
 'But no, he just brought it back and hit it against something.'
- 36a *Màshà=hòk b'ás muàlám ògàm òd'ùùn t'òegái.*
 lady=DEF break.off tuber.type much/many INSIDE:GEN calabash
 'The lady broke off a lot of *muàlam* from inside the calabash.'
- 36b *Bá ò-ní lyák bàntyèm múk.*
 return(SG) COMMIT-3SG.I throw FRONT 3SG.POSS
 'She brought it back and threw it before him.'
- 37 *T'óng d'ì s'òe yì, s'òe yì, s'òe*
 sit(SG) LOC.ANAPH eat:CONS CONS eat:CONS CONS eat:CONS
yì, hár gòegòe hòdì.
 CONS even/until REDUP.OBLIG swell(SG)
 'He sat there and ate it, and ate it, and ate it, until he was eventually satisfied.'

- 38 *Yóól pàt puòe múk wá n-lú,*
 rise(SG) wipe mouth 3SG.POSS return.home(SG) LOC-settlement
d'óót.
 slowly/quietly
 'He rose and wiped his mouth and return home to the village, quietly.'
- 39 *Là góe=k'wál gòe-shinî, gòe-d'á*
 COND 2SGM.S=talk NOMZ(SG)-today NOMZ(SG)-FUT.CL
góed'áár tóe.
 tomorrow EMPH
 'When you talk about today's events, [it is the same as] tomorrow's events.'
- 40 *Fuán bá bá.*
 rabbit return(SG) return(SG)
 'The rabbit returned again.'
- 41-56 <The events in 26 to 38 repeat themselves.>
- 57 *D'è n-shin à mòesék múk.*
 exist PROGR-do FOC REFL.BODY 3SG.POSS
 'He is doing it all for himself.'
- 58 *Jáp múk ná n-d'è d'í, ndòe*
 children(PL) 3SG.POSS PRES PRES-exist LOC.ANAPH CONJ
màt múk.
 woman(SG) 3SG.POSS
 'See, his children are there, and his wife.'
- 59 S. *Nàsèl.*
 <NAME>
 '[His wife] *Nasel*.'
- 60 L. *Nàsèl.*
 <NAME>
 '[His wife] *Nasel*.'
- 61 *Ndòe gwén n't'í.*
 CONJ ASSOC.PL <NAME>
 'And [his son] *Nt'i* and his people.'

- 62 *Gòe=nà mímùk mú?*
 2SGM.S=see NOMZ.3SG.POSS right
 ‘You can already see [how events will unfold], right?’
- 63a *Fuán yóól yì.*
 rabbit:CONS rise CONS
 ‘So the rabbit rose.’
- 63b *Muààn ndè zàk-yìt, muààn gòe kàt*
 go(SG) one/other also/however-again go(SG) SEQ find
màshà ñ-d'è-ñnòe shin d'ù muàlàam.
 lady ADVZ-CL:exist-DEM.PROX do much/many tuber.type
 ‘He went again another time, he went and found that this lady had made a lot of *muàlam*.’
- 63c *Yì tó.*
 SAY okay
 ‘He said, okay.’
- 63d *T'óng ràng yì, jì=màng*
 IRR:CONS think CONS SGM.LOG.SP.S=take(SG)
jì=wá ñ-ní
 SGM.LOG.SP.S=return.home(SG) COMIT-3SG.I
ñ-lú=wà?
 LOC-settlement=INTERR
 ‘So would he₁ even consider to take it [= the food] and return home with it to the village?’
- 64 *Yì kái, yìn nàsèl t'óng b'àp k'á*
 SAY INTERJ SAY <NAME> IRR finish HEAD(SG)
jì.
 SGM.LOG.SP.POSS
 ‘He₁ said, hey, he₁ said, *Nasel* would finish it [= the food] before him₁.’
- 65 *Yìn gwén ñt'i, muèp=t'óng b'àp k'á*
 SAY ASSOC.PL <NAME> 3PL.S=IRR finish HEAD(SG)
jì.
 SGM.LOG.SP.POSS
 ‘He₁ said, *Nt'i* and his people would finish it [= the food] before him₁.’

- 66 *T'òng jí=bá* *jí=wá*
 IRR SGM.LOG.SP.S=return(SG) SGM.LOG.SP.S=return.home(SG)
̀n-ní ñdòe=pè bá.
 COMMIT-3SG.I SPEC=place NEG
 ‘He₁ won’t bring it back anywhere.’
- 67 *Ji=t'òng* *b'ák jì=b'áp* *yìt dip.*
 SGM.LOG.SP.S=sit(SG) here SGM.LOG.SP.S=finish again all
 ‘He₁ will sit here and finish it all again.’
- 68a *B'áp k'ék m-b'ét múk.*
 finish HEADS(PL) LOC-belly 3SG.POSS
 ‘He finished it all in his belly.’
- 68b *Yóól bì=múk wá.*
 rise thing=3SG.POSS return.home(SG)
 ‘He rose in his own way and returned home.’
- 69 *Fuán máng gòe-̀n-dóól.*
 rabbit take(SG) NOMZ-ADVZ-bec.fat
 ‘The rabbit started becoming fat.’
- 70a *Mòe-gùrùm lú=hók dip muèp=yí á'á.*
 NOMZ(PL)-person:GEN settlement=DEF all 3PL.S=SAY INTERJ
 ‘All the people of the village said, what a surprise.’
- 70b *Á ñd'àng?*
 FOC how
 ‘How come?’
- 70c *Fuán bá d'èm d'è t'óng dóól yì,*
 rabbit return(SG) this.time exist PROGR bec.fat PROGR
mútàné d'è ñ-rás yì t'óng
 people(PL) exist PROGR-bec.lean/thin(PL) PROGR PROGR
muáráp?
 die(PL)
 ‘The rabbit is getting fatter again now, while the people are getting leaner and are dying?’
- 71 *Fuán yí ah, tó.*
 rabbit SAY INTERJ okay
 ‘The rabbit said, ah, okay.’

- 72 *Yin jí yàm náán m̀m̀ù̀n*
 SAY SGM.LOG.SP.I son(SG):GEN God NOMZ.SGM.LOG.SP.POSS
m̀ú?
 right
 ‘He₁ said, he₁ is a son of God [= he₁ is lucky], right?’
- 73 *Jí góe s'óe s'óe=wà?*
 SGM.LOG.SP.I COMMIT food eat=INTERR
 ‘Does he₁ have food to eat?’
- 74 *Kó d'à jí=dóe s'óe nhàt, yìn bì*
 maybe/or COND SGM.LOG.SP.S=come eat wind SAY thing
gòe-gòemé.
 NOMZ(SG)-one
 ‘Even if he₁ just ate the air here, he₁ said, it would be the same thing.’
- 77 *T'òng jí=dóól kúút.*
 IRR SGM.LOG.SP.S=bec.fat just
 ‘He₁ would just become fat.’
- 78 *Nt'i nyáng.*
 <NAME> hate(SG)
 ‘Nt'i rejected [this explanation].’
- 79a *Nt'i yìn ndá d'è ñ-shin bì*
 <NAME> SAY father exist PROGR-do thing
ñ-d'è-ñmòe=hòe.
 ADVZ-CL:exist-DEM.PROX=exactly
 ‘Nt'₁ said father₃ is doing this thing.’
- 79b *Sái d'à jí=mán bì góe-d'è múk*
 then/until COND SGM.LOG.SP.S=know thing NOMZ-exist 3SG.POSS
t'óng muààn yì, t'óng gòe shin.
 PROGR go PROGR IRR FUT.DEF do
 ‘If only he₁ knew the thing that he₃ is going for, [the thing that] he₃ will do.’

- 80 *T'àt* *ndòe=b'it kúút, p'ét m-b'itlúng yó dé-gòe*
 time/day:GEN SPEC=day just exit LOC-morning rise(SG) PUR
dé muáán yì d'ì m-pè=hòk.
 SO.THAT go(SG):CONS CONS LOC.ANAPH LOC-place=DEF
 'Another day, he [= the rabbit] got out in the morning and rose to go
 there to the place.'
- 81 *Nt'i yó kúút t'ó gòedè k'á múk,*
 <NAME> rise(SG) just lie(SG) BOTTOM:GEN HEAD(SG) 3SG.POSS
d'óót.
 slowly/quietly
 'Nt'i just rose and followed him, quietly.'
- 82 *D'á láng b'ák ní t'óng rúún góng*
 COND hang/move(SG) here 3SG.S IRR insert(SG) nose
múk b'ák m-pè ñndè t'óng p'ét
 3SG.POSS here LOC-place LOC.ANAPH IRR exit(SG)
puánáng.
 there/yonder
 'When he moved around, he would insert his nose here in this place,
 and he would come out over there.'
- 83 *Nt'i làng puánáng t'óng b'úén ní*
 <NAME> hang/move(SG) there/yonder PROGR watch 3SG.O
yì.
 PROGR
 'Nt'i moved around there watching him.'
- 84 *Sái dái éép k'á jí, ñt'i*
 then/until just raise(SG) head(SG) SGM.LOG.SP.POSS <NAME>
bá sàm góe k'á jí bá
 return(SG) descend COMIT head(SG) SGM.LOG.SP.POSS return(SG)
ñ-ní ñ-yíl.
 COMIT-3SG.I LOC-ground
 'Indeed, as soon as he₁ raised his₁ head, then did Nt'i return and
 lower his₁ head again to the ground [in order to hide himself].'

- 85 *Làng t'óng mùààn yì hár gòegòe*
hang/move(SG) PROGR go(SG) PROGR even/until REDUP.OBLIG
wá rú d'ì ò-gòedè
return.home(SG) enter(SG) LOC.ANAPH LOC-bottom:GEN
t'éng=hók.
tree=DEF
'He moved around walking until he eventually returned back and arrived there at the base of the tree.'
- 86 *Gòe-nyàp t'á t'óng, òt'ì t'á t'óng gòe*
NOMZ-prepare fall(SG) sit(SG) <NAME> fall(SG) sit(SG) PLACE
t'éng puánáng sòe-séng t'óng nà ní yì.
tree there/yonder REDUP-far PROGR see 3SG.O PROGR
'When he prepared to sit down, *Nt'ì* also sat down there far away from the tree looking at him.'
- 87 *Yin hm-hm.*
SAY <QUOTE>
'He said *hm-hm*.'
- 88 *Màshà làp zák gòet'éng yì hm-hm.*
lady receive also/however above SAY <QUOTE>
'The lady answered again high up, saying *hm-hm*.'
- 89 *Yì wúròe bòe=t'óng d'ing d'ùòe nóe tóe=wè?*
SAY who FOC.IRR=IRR imitate voice 1SG.POSS EMPH=INTERR
'He asked, who would imitate my voice?'
- 90 *Dip bì òndè, òt'ì d'è t'óng k'òelèng yì.*
all thing LOC.ANAPH <NAME> exist PROGR hear/smell PROGR
'All of these things, *Nt'ì* is hearing them.'
- 91-102 <The events in 26 to 38 repeat themselves.>
- 103 *B'itlúng b'itlúng pyú, kàfin fúán mùáán dé-gòe*
morning morning IDEOPH before rabbit go(SG) PUR
yóól yìtsáám=hòe, òt'ì wá d'èmt'èi
rise(SG) sleep=exactly <NAME> return.home(SG) already
rú ò-gòedè t'éng.
enter(SG) LOC-bottom:GEN tree
'Early early in the morning, before the rabbit had gone to rise from sleep, *Nt'ì* had already arrived at the base of the tree.'

104 S. *Kàmbók!*

please

‘Please [let it not be true]!’

105 L. *Kàmbók.*

please

‘Please.’

106a *Dóe kàt t'éng gòe-d'yém.*

come find tree NOMZ(SG)-stand(SG)

‘He found here the tree standing.’

106b *T'á t'óng yì hm-hm.*

fall(SG) sit(SG) SAY <QUOTE>

‘He sat down and said *hm-hm*.’107 *Màshà yìn hm-hm.*

lady SAY <QUOTE>

‘The lady said *hm-hm*.’108 *Yì à wúròe bòe=t'óng d'ing d'ùòe nóe*

SAY FOC who FOC.IRR=IRR imitate voice 1SG.POSS

tóe=wè?

EMPH=INTERR

‘He said who would imitate my voice?’

109 *Màshà yìn à wúròe bòe=t'óng d'ing d'ùòe nóe*

lady SAY FOC who FOC.IRR=IRR imitate voice 1SG.POSS

tóe=wè?

EMPH=INTERR

‘The lady said who would imitate my voice?’

110a *Yìn jì=màng lá=p'áng.*

SAY SGM.LOG.SP.S=take(SG) DIM(SG):GEN=stone

‘He₁ said he₁ would pick up a little stone.’110b *Yìn jì=k'wàk k'á pá*

SAY SGM.LOG.SP.S=knock head(SG) SGF.LOG.AD.POSS

n-ní.

COMIT-3SG.I

‘He₁ said he₁ would hit her₂ head with it.’

- 111 *Yin t'òng dóe=b'ás muàlám ònòe*
 SAY IRR SGF.LOG.SP.S=break.off tuber.type LOC.ANAPH
zák dòe=dáp k'á gwá
 also/however SGF.LOG.SP.S=slap head(SG) SGM.LOG.AD.POSS
òn-ní.
 COMMIT-3SG.I
 'She₁ said she₁ would break off this *mualam* now and slap his₂ head with it.'
- 112 *Yin tó, hâi pà góe dàp.*
 SAY okay INTERJ SGF.LOG.AD.S OBLIG slap
 'He₁ said, okay, hey, she₂ should slap him₁.'
- 113 *Yin hâi, gwà góe k'wák.*
 SAY INTERJ SGM.LOG.AD.S OBLIG knock
 'She₁ said, hey, he₂ should hit her₁.'
- 114a *Màng p'áng gòe-ò-yóól d'yém.*
 take(SG) stone NOMZ-ADVZ-rise(SG) stand(SG)
 'He picked up a stone, standing up.'
- 114b *B'úén pè d'ì òd'ùùn, sòsái.*
 watch place LOC.ANAPH INSIDE well
 'He watched the place there inside, very closely.'
- 114c *Bá góe p'áng lyàk, hár yár*
 return(SG) COMMIT stone throw even/until bird
wá òn-yíl.
 return.home(SG) LOC-ground
 'He brought back the stone and threw it, until the bird fell to the ground.'
- 115 <laughs>
- 116 S. *Yár múút.*
 bird die(SG)
 'The bird died.'
- 117 L. *Yár múút.*
 bird die(SG)
 'The bird died.'

- 119 *Tù.*
kill(SG)
'He killed it.'
- 122 *Tó, muèp t'óng nà yít, bábù, nà ndòe=bì bá,*
okay 3PL.S IRR see again nothing see SPEC=thing NEG
bábù.
nothing
'Okay, they would look again, nothing, he doesn't see anything [= any food], nothing.'
- 123 *Màng yár wá n-ní*
take(SG) bird return.home(SG) COMIT-3SG.I
n-lú=hòe rú wús yì hààr.
LOC-settlement=exactly enter(SG) roast:CONS CONS gnaw
'He picked up the bird and returned home with it to the village, he arrived, and he roasted and ate it.'
- 124 *Lé, fuán p'ét wá wúl.*
bit rabbit exit(SG) return.home(SG) arrive
'A little bit later, the rabbit came out and arrived there.'
- 125 *Fuán dóe t'á t'óng.*
rabbit come fall(SG) sit(SG)
'The rabbit sat down here.'
- 126 *Yin hm-hm.*
SAY <QUOTE>
'He said *hm-hm*.'
- 127 *Pè làp gái.*
place receive silence
'The place answered with silence.'
- 128 S. *Gùrùm làp bá.*
person receive NEG
'No-one answered.'
- 130 L. *Gùrùm t'óng làp bá.*
person IRR receive NEG
'No-one would answer.'

- 131 *Màshà t'ó m-b'èt n't'i.*
 lady lie(SG) LOC-belly:GEN <NAME>
 'The lady lies in the belly of *Nt'i*.'
- 132 S. *Gwén n't'i.*
 ASSOC.PL <NAME>
 '*Nt'i* and his people.'
- 133 L. *Yin hm-hm.*
 SAY <QUOTE>
 'He said *hm-hm*.'
- 134 *Pè làp gái.*
 place receive silence
 'The place answered with silence.'
- 135 *Yin t'òng jí=shín, àvà hm-hm.*
 SAY IRR SGM.LOG.SP.S=do INTERJ <QUOTE>
 'He₁ said he₁ would do it, *ava hm-hm*.'
- 136 *Pè làp gái.*
 place receive silence
 'The place answered with silence.'
- 137 *Àvà hm-hm.*
 INTERJ <QUOTE>
 '*Ava hm-hm*.'
- 138 *Pè làp gái.*
 place receive silence
 'The place answered with silence.'
- 139 *Yi hâi.*
 SAY INTERJ
 'He said, hey.'
- 140 *Màt ínòde bá mùààn à ínàng?*
 woman(SG) LOC.ANAPH return(SG) go(SG) FOC where
 'Where did this woman go now?'

- 141 *T'òng jí=shín d'èm m̀p̀uóe m̀p̀uóe m̀p̀uóe m̀p̀uóe*
 IRR SGM.LOG.SP.S=do this.time REDUP.always
yìn, hm-hm, hm-hm, ah hm-hm, ah hm-hm,
 SAY <QUOTE> <QUOTE> INTERJ <QUOTE> INTERJ <QUOTE>
ah iná?
 INTERJ where
 'He₁ would do this now on and on and on and on, saying, *hm-hm, hm-hm, ah hm-hm, ah hm-hm, ah* how come?'
- 142 *Díp, pè làp gái.*
 all place receive silence
 'Everywhere, the place answered with silence.'
- 143 *Yìn bì ñnòe sh'it gwén ñt'i d'è*
 SAY thing LOC.ANAPH work:GEN ASSOC.PL <NAME> exist
tóe ñnòe.
 EMPH LOC.ANAPH
 'He said, this thing is surely the work of *Nt'i* and his people, it is like this.'
- 144a *Bá b'úen má póenóe.*
 return(SG) watch also thus
 'He turned around and watched like this.'
- 144b *Kàt d'ip yár gòe-t'óerép puánáng.*
 find hair:GEN bird NOMZ-lie(PL) there/yonder
 'He found the feathers of the bird lying over there.'
- 145 *Yìn tó, yì sh'it gwén ñt'i.*
 SAY okay SAY work:GEN ASSOC.PL <NAME>
 'He said, okay, he said, this is the work of *Nt'i* and his people.'
- 146a *Yó wá ñ-lú.*
 rise(SG) return.home(SG) LOC-settlement
 'He rose and returned home to the village.'
- 146b *Dóe kàt ñt'i.*
 come find <NAME>
 'He found *Nt'i* here.'

- 147 *Yóng n̄t'i muààn n-ní n-lù*
call <NAME> go(SG) COMMIT-3SG.I LOC-settlement:GEN
dààs.
men(PL)
'He₁ called *Nt'i*₂ and went with him to the men's hut.'
- 148 *Gwà muàán ònàng t'óng bá yì?*
SGM.LOG.AD.S go(SG) where IRR return(SG) CONS
'Where did he₂ go and return again?'
- 149 *Nt'i jì=muààn òdòe=pè shínì bá.*
<NAME> SGM.LOG.SP.S=go(SG) SPEC=place today NEG
'*Nt'i*₁ said he₁ didn't go anywhere today.'
- 150 *Yin gwà háár bí mímòe shínì*
SAY SGM.LOG.AD.S gnaw thing what today
ń-d'è-ńnòe?
ADVZ-CL:exist-DEM.PROX
'He₁ said what did he₂ eat this very day?'
- 151 *Nt'i jì=hàár òdòe=bì bá.*
<NAME> SGM.LOG.SP.S=gnaw SPEC=thing NEG
'*Nt'i*₁ said he₁ didn't eat anything.'
- 152 *Tàl gwén nyè-tàl dé sèk puòe*
ask/greet ASSOC.PL matter-ask/greet DIR BODY:GEN MOUTH
múk, n̄t'i, díp.
3SG.POSS <NAME> all
'He asked him, *Nt'i*, all these kinds of questions.'
- 153a *Yi kái.*
SAY INTERJ
'He said, hey.'
- 153b *Yin gwà shín sh'it ònòe tóe.*
SAY SGM.LOG.AD.S do work LOC.ANAPH EMPH
'He₁ [accused him₂ and] said, he₂ had done this work.'
- 154 *Yà n̄t'i dàl.*
catch <NAME> strike
'He caught *Nt'i* and beat him.'

- 155 *Nt'i yóng wòòr.*
 <NAME> call shouting
 'Nt'i screamed.'
- 156 *Núún múk p'ét.*
 mother 3SG.POSS exit(SG)
 'His mother came out.'
- 157 *Nt'i wár gòedè fuán t'ém póe*
 <NAME> collect bottom:GEN rabbit tell give
mòe-gùrùm dàkd'uòe lú=hók díp.
 NOMZ(PL)-person MIDDLE:GEN settlement=DEF all
 'Nt'i₁ revealed the secrets of the rabbit₃ to all the people in the vil-
 lage.'
- 158 *Bì gòe-shín múk ná n-d'é: gòe-làng*
 thing NOMZ-do 3SG.POSS PRES PRES-exist NOMZ-hang/move(SG)
múk t'óng s'òe yì, àmmá táb'à t'èi
 3SG.POSS PROGR eat PROGR but do.ever yet
wá n-ni dóe n-lú bá.
 return.home(SG) COMMIT-3SG.I come LOC-settlement NEG
 'Here is what he₃ has done: when he₃ moved around eating, he₃
 never ever returned home with the food to the village here.'
- 159 *Àmmá gòe-t'óng d'ì d'á shín, muèp b'ás*
 but NOMZ-sit(SG) LOC.ANAPH COND do 3PL.S break.off
muàlám póe nì.
 tuber.type give 3SG.O
 'But when he₃ sat there, and when he₃ did this, *muàlam* was broken
 off and given to him₃.'
- 160 *Jì=nà díp góe yít jí.*
 SGM.LOG.SP.S=see all COMMIT eye/face SGM.LOG.SP.POSS
 'He₁ has seen everything with his₁ own eyes.'
- 161 *Tó.*
 okay
 'Okay.'

- 162 *Ji=muààn* *ń-ni* *zák*
 SGM.LOG.SP.S=go(SG) COMIT-3SG.I also/however
ji=yà *d'i.*
 SGM.LOG.SP.S=catch LOC.ANAPH
 ‘He₁ went with it [= the knowledge], too, and he₁ arrived there.’
- 163 *Yin ji=shìn* *m̀m̀ùùn* *yi=yò.*
 SAY SGM.LOG.SP.S=do NOMZ.SGM.LOG.SP.POSS CONS=INTERR
 ‘He₁ said he₁ hoped to do his₁ own thing.’
- 164 *M̀m̀ùùn* *bá* *wá* *ń-zén.*
 NOMZ.SGM.LOG.SP.POSS return(SG) return.home(SG) ADVZ-wrong
 ‘But his₁ own thing turned out wrong.’
- 165 *Bá* *ji=ná* *yár=hók* *t'á* *tóe* *góe*
 return(SG) SGM.LOG.SP.S=see bird=DEF fall(SG) EMPH COMIT
k'á *sék* *múk.*
 HEAD(SG):GEN BODY 3SG.POSS
 ‘He₁ returned and saw the bird itself, it had fallen [from the tree].’
- 166 *Má* *zák* *ji=wùs* *ji=háár.*
 also also/however SGM.LOG.SP.S=roast SGM.LOG.SP.S=grow
 ‘So he₁ then roasted and ate it.’
- 167 *Kàt* *lèfi* *ji* *d'è* *d'i*
 maybe/or mistake SGM.LOG.SP.POSS exist LOC.ANAPH
ńd'ùùn=à?
 INSIDE=INTERR
 ‘Maybe his₁ mistake is there inside [the bird]?’
- 168 <laughs>
- 169a *Muèp dók* *k'wàl* *ńdòe* *fuán.*
 3PL.S PAST.REM talk CONJ rabbit
 ‘They talked to the rabbit.’
- 169b *Muèp yí* *tó,* *lá* *t'òng* *góe=shin* *bì* *póenóe*
 3SG.S SAY okay COND IRR 2SGM.S=do thing thus
ń-d'è-ńnòe: *gòe=kàt* *s'óe,* *bà*
 ADVZ-CL:exist-DEM.PROX 2SGM.S=find food return(SG)

n̄-ní n̄-lú.

COMIT-3SG.I LOC-settlement

‘They said, okay, it you would do it like this: if you find food, bring it back to the village.’

- 170 *D'à góe=kát s'óe, bà n̄-ní n̄-lú.*
COND 2SGM.S=find food return(SG) COMIT-3SG.I LOC-settlement
‘If you find food, you bring it back to the village.’

- 171 *Mán t'òng góe=t'òng puánáng nk'òng lú*
PROH IRR 2SGM.S=sit(SG) there/yonder BACK:GEN settlement
góe=s'óe yì mòesák bá.
2SGM.S:CONS=eat CONS REFL.BODY.2SGM.POSS NEG
‘Don’t you sit over there behind the village to eat it alone by yourself.’

- 172 *Nyè-gòe-sék muép dók yà fuán*
because-NOMZ(SG)-BODY 3PL.S:CONS PAST.REM catch rabbit
yì muép b'óót.
CONS 3PL.S tie
‘Because of this, they caught the rabbit and tied him up.’

- 173 *Dók bà muán yì wá.*
PAST.REM return(SG) go(SG) CONS return.home(SG)
‘It [= folktale] left again and returned home. [= Closing sentence of a folktale.]’

3. Riddles (D04AKurgoede1, O04ANKurgoede2)

Louis Longpuan explains the value of riddles in the Goemai culture. He (represented as “L.”) and Andreas Shakum (represented as “S.”) then go on to illustrate the process of riddle-telling.

- 0 L. *Kúrgòedé, n̄-d'ùòe* *Goemâi,* *kúrgòedé à bì*
riddle LOC-voice:GEN <ETHNIC.NAME> riddle FOC thing
gòepé t'òng sá jáp dé muép
THAT/WHEN IRR make children(PL) SO.THAT 3PL.S:CONS

gòe rànng nyé-ràng yì.
 OBLIG think matter-think CONS

‘Riddles, in the Goemai language, riddles are things that cause our children to do some thinking.’

- 1 *Ñdòe=bì gòe-t'él d'è góebi muép, dé*
 SPEC=thing NOMZ-collect exist AS.IF 3PL.I SO.THAT
muép gòe rànng nyé-ràng yì, dé
 3PL.S:CONS OBLIG think matter-think CONS SO.THAT
muép gòe màn yì.
 3PL.S:CONS OBLIG know CONS

‘Things come together [in a riddle] and are similar to something else, so that they [= the children] have to do some thinking, so that they should understand [the similarity].’

- 2 *Muèp t'óng k'ám ñdòe=bì ñdòe gòe-nyé,*
 3PL.S IRR try/demonstrate SPEC=thing CONJ NOMZ(SG)-matter
nyè-gòepé dákd'uòe muép, muèp p'úát
 because-THAT/WHEN middle 3PL.POSS 3PL.S exit(PL)
shák.
 each.other

‘They would compare something with something else, because their cores resemble each other.’

- 3 *K'wál=hók p'úát shák, àmmá muèp màn*
 talking=DEF exit(PL) each.other but 3PL.S know
bòe=k'ám múk bá.
 HOW/WHERE=try/demonstrate 3SG.POSS NEG

‘Their cores resemble each other, but they don’t yet know how it shows.’

- 4 *Tó, kúrgòedé t'óng sh'è muép ñ-ní, dé*
 okay riddle IRR learn/teach 3PL.O COMIT-3SG.I SO.THAT
muép gòe b'át bòe=rànng
 3PL.S:CONS OBLIG gain.experience(PL) HOW/WHERE=think
nyé yì.
 matter CONS

‘Okay, riddles will teach them this, so that they should know how to think about matters.’

- 5 *Muèp lá k'óelèng bì gòe-k'wál góe, dé*
 3PL.S COND hear/smell thing NOMZ-talk 2SGM.POSS SO.THAT
muèp ràng ñdòe=bì gòepé wá
 3PL.S:CONS think SPEC=thing THAT/WHEN return.home(SG)
ñkyàt ñdòe bì=hòk yì.
 equal CONJ thing=DEF CONS

‘When they hear the thing you say, they will then think about something that is similar to this thing.’

- 6 *Dé muèp gòe làp yì ñ-góe.*
 SO.THAT 3PL.S:CONS OBLIG receive CONS BEN-2SGM.I
 ‘So that they should answer you.’

- 7 *Ñdè zák muèp dén jáp*
 one/other also/however 3PL.S prevent children(PL)
mòe-nd'yén sék gòe-p'úát góesàmpé
 NOMZ(PL)-bec.small/young(PL) BODY NOMZ-exit(PL) outside
muèn muèn sh'é yì méét méét.
 go(PL) going(PL) foot/leg CONS REDUP.aimless

‘And another thing, too, they [= the riddles] prevent the young children from going outside wandering around aimlessly.’

- 8 *Gòe=làp muèp gòe=d'wár, dé*
 2SGM.S=receive 3PL.O 2SGM.S=cause.sitting(PL) SO.THAT
t'ém gòe pòe muèp kúrgòedé yì!
 tell:CONS SEQ give 3PL.O riddle CONS
 ‘Take them and set them down, so that [you] tell them riddles!’

- 9 *Kúrgòedé ñdòe=hòe à gòe-sh'áng*
 riddle LOC.ANAPH=exactly FOC NOMZ(SG)-be.pleasant
p'ùùr.
 very

‘These riddles are very nice.’

- 10a *Kó=là góenàng zèm dé-gòe ñ-làp.*
 any/every=child(SG) which(SG) like PUR ADVZ-receive
 ‘Every child wants to answer them.’

- 10b *Kó=là góenàng zèm dé-gòe ñ-làp.*
 any/every=child(SG) which(SG) like PUR ADVZ-receive
 ‘Every child wants to answer them.’

- 11 *S'àyò muèp t'óng yúú́l p'úát, dé muèp*
 PROH 3PL.S IRR rise(PL) exit(PL) SO.THAT 3PL.S:CONS
lèng ñ-muèn muèn sh'é yì bá.
 hang/move(PL) PROGR-go(PL) going(PL) foot/leg PROGR NEG
 'They would not leave home to wander around aimlessly.'
- 12 *Muèp t'óng t'wót yì d'ì dàkd'uòè lú.*
 3PL.S IRR sit(PL) CONS LOC.ANAPH MIDDLE:GEN settlement
 'So instead they would stay in the middle of the compound.'
- 13a *Kúrgòèdé sá gòè gòè p'yàráám k'á góe,*
 riddle make 2SGM.O SEQ break(PL) head(SG) 2SGM.POSS
gòè=p'yàráám k'á góè ñt'it dé
 2SGM.S=break(PL) head(SG) 2SGM.POSS well SO.THAT
góe=màn yì.
 2SGM.S:CONS=know CONS
 'The riddles make you rack your brain, you rack your brain, so that you understand them.'
- 13b *Kó gòè-ñ-d'é-ñnòè=hòè à*
 maybe/or NOMZ(SG)-ADVZ-CL:exist-DEM.PROX=exactly FOC
bí mímòè=wò?
 thing what=INTERR
 'What could this one be?'
- 13c *Kó gòè-ñ-d'é-ñnòè à bí*
 maybe/or NOMZ(SG)-ADVZ-CL:exist-DEM.PROX FOC thing
mímòè=wò?
 what=INTERR
 'What could this one be?'
- 14 *Kúrgòèdé t'óng sá gòè dé góe=zèm*
 riddle IRR make 2SGM.O SO.THAT 2SGM.S:CONS=like
yì dé-gòè mà d'èmdè
 CONS PUR surpass remainder:GEN
mòe-jàp-núún góe.
 NOMZ(PL)-children(PL):GEN-mother 2SGM.POSS
 'The riddles also make you try and want to perform better than your brothers and sisters.'

- 15 *À ní tóe dé góe=màn yìt*
 FOC 3SG.I EMPH SO.THAT 2SGM.S:CONS=know eye/face:GEN
nyè gòe=má d'èmdè gùrùm ò-ní.
 matter 2SGM.S=surpass remainder:GEN person COMIT-3SG.I
 'That is, so that you know more about it than the others.'
- 16a *Gùrùm ònòe zák shín òt'it dé-gòe màn*
 person LOC.ANAPH also/however do well PUR know
yìt nyè mà gùrùm ò-ní.
 eye/face:GEN matter surpass person COMIT-3SG.I
 'This person, too, tries hard to know more about it than another person.'
- 16b *Gùrùm shín òt'it dé-gòe màn yìt nyè mà*
 person do well PUR know eye/face:GEN matter surpass
gùrùm ò-ní.
 person COMIT-3SG.I
 'And he also tries hard to know more about it than another person.'
- 17 *À bóe=d'è kùrgòedé tóe.*
 FOC HOW/WHERE=exist riddle:POSS EMPH
 'This is the meaning of riddles.'
- 18 *À bì gòe-sà tóe Gòemài tángòedé*
 FOC thing NOMZ-make EMPH <ETHNIC.NAME> start
kùrgòedé yì.
 riddle CONS
 'This is the reason why the Goemai got started on riddles.'

L. and S. now illustrate some riddles.

- 0 L. *Kùrgòedé nóe à yàm kùrkí.*
 riddle 1SG.POSS FOC son(SG):GEN <NAME>
 'My riddle is a son of Kurki. [= Opening sentence of a riddle.]'
- 1 S. *Hèn=k'òelèng d'ém.*
 1SG.S=hear/smell this.time
 'I'm listening.'

- 2 L. *Là ñk'óng góe ñk'átà, misk'óom góe*
 child(SG) bec.small/young(SG) COMMIT hat elder(SG) COMMIT
ñk'átà.
 hat
 'The young child has a hat, the elder has a hat.'
- 5 S. *À dáp.*
 FOC blackberry
 'It's a blackberry [=a type of tree that has black plum-like roundish fruits with a red cap].'
- 9 L. *D'à góe=ná kó=dàp góenàng góe*
 COND 2SGM.S=see any/every=blackberry which(SG) COMMIT
ñk'átà ñ-k'á múk.
 hat LOC-head(SG) 3SG.POSS
 'When you look, every blackberry has a hat on its head.'
- 58 *Kúrgòedé nóe à yàm kùrki.*
 riddle 1SG.POSS FOC son(SG):GEN <NAME>
 'My riddle is a son of Kurki. [= Opening sentence of a riddle.]'
- 59 S. *Tó.*
 okay
 'Okay [I answer].'
- 60 L. *Sílili pátàtá.*
 IDEOPH
 'It is *silili patata* [= thin and branching out].'
- 61 S. *Sílili pátàtá ñnòe, bì=hòk t'óng tàp*
 IDEOPH LOC.ANAPH thing=DEF IRR show.ignorance
hén k'één b'è.
 1SG.O indeed EMPH
 'This *silili patata*, I really wouldn't know it.'
- 62 *T'óng tàp hén.*
 IRR show.ignorance 1SG.O
 'I really wouldn't know it.'
- 63 *Hèn=pòe góe lú.*
 1SG.S=give 2SGM.O settlement
 'I give you a village [in return for the right answer].'

- 65 L. *Gòe=pòe hén à ònàng?*
 2SGM.S=give 1SG.O FOC where
 ‘Which place are you going to give me?’
- 66 S. *Ngwá.*
 <PLACE.NAME>
 ‘[I give you] Ungwan Dad’i.’
- 69a L. *Hèn=hààr sh’aràp Ngwá díp.*
 1SG.S=gnaw fish:GEN <PLACE.NAME> all
 ‘I eat all the fish of Ungwan Dad’i.’
- 69b *D’èmdé hèn=t’èl gòe wá òn-ní.*
 remainder 1SG.S=collect SEQ return.home(SG) COMMIT-3SG.I
 ‘And the rest, I collect and bring home’
- 70 S. *Tó.*
 okay
 ‘Okay.’
- 71 L. *K’wàm gwààn.*
 ear:GEN cocoyam
 ‘[The answer is:] The leaves of cocoyam.’
- 75 S. *Bì gòe-sá mòe=yòng ní silili pàtata à mímòe?*
 thing NOMZ-make 1PL.S=call 3SG.O IDEOPH FOC what
 ‘What is the reason that we call it *silili patata*?’
- 76 L. *Gòe=nà k’ám múk dák k’wám múk póenóe=hòe.*
 2SGM.S=see twig 3SG.POSS open ear 3SG.POSS thus=exactly
 ‘You see, its twigs spread their leaves like this.’
- 77 S. *D’á yóól, dák k’wám múk.*
 COND rise(SG) open ear 3SG.POSS
 ‘[You’re right] when it grows, it spreads its leaves.’

4. Proverbs (O04ANSemkwál3)

Louis Longpuan describes the use of proverbs in Goemai culture. He (represented as “L.”) and Andreas Shakum (represented as “S.”) then explain the meaning of one proverb.

- 0 L. *S'èm k'wál ò-d'ùòè* *Goemâi.*
 proverb LOC-voice:GEN <ETHNIC.NAME>
 'Proverbs in the Goemai language.'
- 1 *Goemâi d'á búk dé-gòè ò-k'wál k'wál,*
 <ETHNIC.NAME> COND return(PL) PUR ADVZ-talk talking
muèp d'á zèm dé-gòè ò-s'ók k'wál=hók s'à
 3PL.S COND like PUR ADVZ-hide(SG) talking=DEF PROH
ndòè=gùrùm, k'wám muèp bá k'òelèng, muèp
 SPEC=person ear 3PL.POSS return(SG) hear/smell 3PL.S
shín sh'it góè s'ém k'wál.
 do work COMMIT proverb
 'When Goemai come together to talk, when they want to keep their
 speech a secret, lest somebody else's ears should overhear them,
 then they resort to proverbs.'
- 2 S. *Gòè-ò-b'ùét*
 NOMZ-ADVZ-cause.lying(SG)
 '[It is called] laying down [speech].'
- 3 L. *Dàsk'óóm ndòè shàràp, díp, muèp shín sh'it góè*
 elders(PL) CONJ women(PL) all 3PL.S do work COMMIT
s'ém k'wál.
 proverb
 'Elders and women, all of them, they use proverbs.'
- 4 *Á k'wál gòè-ò-b'ùét.*
 FOC talking NOMZ-ADVZ-cause.lying(SG)
 'It is [called] laying down speech.'
- 5 *Pé gòè=b'ùèt, s'à gùrùm, k'wám*
 THAT/WHEN 2SGM.S=cause.lying(SG) PROH person ear
muèp=hók, bá màn bì góè-d'è gwén t'óng
 3PL.POSS=DEF NEG know thing NOMZ-exist 2PL.POSS PROGR
k'wál yì.
 talk PROGR
 'When you lay it down, so that nobody else's ears will understand
 what you are talking about.'

- 6 *Kó=lá k'óelèng d'ùòe lú gwén*
 any/every=COND hear/smell voice:GEN settlement 2PL.POSS
ńd'àng.
 how
 'However well he may understand the language of your homes.'
- 7 *Gùrùm lá k'wál k'wál góe s'ém k'wál, ní*
 person COND talk talking COMIT proverb 3SG.S
nín pé ní k'óelèng d'ùòe lú
 show/point THAT/WHEN 3SG.S hear/smell voice:GEN settlement
muép p'ùùr.
 3PL.POSS very
 'If a person speaks in proverbs, he shows that he understands the language of their homes.'
- 8 *Dàsk'óóm ńdòe shàràp.*
 elders(PL) CONJ women(PL)
 'Elders and women.'
- 9 *À jàp swààl má ńd'àsóenòe=hòe, muép*
 FOC children(PL):GEN dance also now=exactly 3PL.S
mán s'ém k'wál, nyè-gòepé muép d'è t'óng
 know proverb because-THAT/WHEN 3PL.S exist PROGR
t'wót yì d'ì góe pé tàl.
 sit(PL) PROGR LOC.ANAPH PLACE place greeting
 'Also the young men nowadays know proverbs because they always sit at the meeting place.'
- 10 *Gùrùm d'á d'è ń-tàl tàl yì, muép*
 person COND exist PROGR-ask/greet greeting PROGR 3PL.S
shín sh'it góe s'ém k'wál.
 do work COMIT proverb
 'Whenever people are greeting, they make use of proverbs.'
- 11 *Muép d'á d'è ń-k'wál à k'wál má, gòelóng*
 3PL.S COND exist PROGR-talk FOC talking also useless
kuút dàkd'ùòe sék muép, gòepé muép d'è
 just MIDDLE:GEN BODY 3PL.POSS THAT/WHEN 3PL.S exist

t'óng shin àràm=hòe, muèp shin sh'it góe
 PROGR do conversation=exactly 3PL.S do work COMMIT
s'ém k'wál.

proverb

‘Even when people are talking, just casually amongst themselves, when they are having a conversation, they use proverbs.’

- 12 *Muèp gòe s'ók là=ndòe=bì yì.*
 3PL.S:CONS OBLIG hide(SG) DIM(SG):GEN=SPEC=thing CONS
 ‘They should hide their little secrets.’

- 13 *S'ém k'wál ñndòe zák ñ-d'ùòe*
 proverb LOC.ANAPH also/however LOC-voice:GEN
Gòemâi p'én gòedè k'wál=hók
 <ETHNIC.NAME> remove(SG) bottom:GEN talking=DEF
d'ú m-pè gòe-sáán.
 cause.sitting(SG) LOC-place NOMZ(SG)-bec.clear
 ‘These proverbs, too, in the Goemai language, they take out the secrets of the speech and put them in the open.’

- 14 *Dé gúrùm gòe-t'óng góe ní gòe màn*
 SO.THAT person:CONS NOMZ-sit(SG) COMMIT 3SG.I OBLIG know
yì.
 CONS
 ‘So that the people who sit with him should know them.’

- 15 *D'èmdè s'ém k'wál=hók muèp tóe, ná ñ-d'è.*
 remainder:GEN proverb=DEF 3PL.I EMPH PRES PRES-exist
 ‘Some proverbs, here they are.’

- 16 *Tó, mòe=k'wál: múút à múút, láng à láng.*
 okay 1PL.S=talk death(SG) FOC death(SG) life(SG) FOC life(SG)
 ‘Okay, we say: death is death, life is life.’

- 17 S. *Múút à múút, láng à láng.*
 death(SG) FOC death(SG) life(SG) FOC life(SG)
 ‘Death is death, life is life.’

- 18 *Gúrùm gòepé p'ét muààn d'è ñd'ùùn wèèl.*
 person THAT/WHEN exit(SG) go(SG) exist INSIDE:GEN worrying
 ‘A person who went out and is now in trouble.’

- 19 L. *m̀m̀.*
yes
'Yes.'
- 20 S. *Tó, bì t'á n-k'á múk.*
okay thing fall(SG) LOC-head(SG) 3SG.POSS
'Okay, something happened to him.'
- 21 *Màng b̀ezúng g̀e muàan n-ní.*
take(SG) chest SEQ go(SG) COMIT-3SG.I
'But he picks up his strength and goes on with it.'
- 22 *Kó j̀=mùt, kó*
maybe/or SGM.LOG.SP.S=die(SG) maybe/or
j̀=wà.
SGM.LOG.SP.S=return.home(SG)
'Whether he₁ dies or whether he₁ returns back.'
- 23 L. *m̀m̀, mùt à mùt.*
yes death(SG) FOC death(SG)
'Yes, death is death.'

5. Songs (O04AKangrang1, O04AKangrang2)

Louis Longpuan introduces a special song genre, the *kangrang* genre, and then sings two such songs.

- 0a *Gyà g̀e-t'óng màng nóe*
performance NOMZ-IRR take(SG) 1SG.POSS
n-d'è-h̀nòe ǹd'àsóenòe à gyà
ADVZ-CL:exist-DEM.PROX now FOC performance:GEN
kángráng.
group.dance
'These songs that I will sing now are *kangrang* songs.'
- 0b *Á gyà g̀e-dók p̀e'b'ít.*
FOC performance NOMZ-past remote.past
'They are songs of old.'

- 1 *Mòe-ndá mèn dók pòeb'it muèp mán*
 NOMZ(PL)-father 1PL.POSS past remote.past 3PL.S know
gyà ònòe tóe.
 performance LOC.ANAPH EMPH
 'Our fathers in the old times knew these songs.'
- 2 *Mòe=yùùl mòe=kát gyà=hòk má góe*
 1PL.S=rise(PL) 1PL.S=find performance=DEF also PLACE
yíl lú mèn bá.
 ground:GEN settlement 1PL.POSS NEG
 'We, however, we didn't grow up to find these songs in our homes.'
- 3 *Nd'àsónòe=hòe, gùrùm Dèrt'èng, wá*
 now=exactly person:GEN <ETHNIC.NAME> AREA
gòe-bá wá Mùdùùt, òdòe d'èmdè
 NOMZ-return(SG) AREA <PLACE.NAME> CONJ remainder:GEN
gùrùm Dórók, muèp d'è t'óng zèm dé-gòe
 person:GEN <ETHNIC.NAME> 3PL.S exist PROGR like PUR
búk góe gyà=hók, gyà
 return(PL) COMIT performance=DEF performance:GEN
kángráng.
 group.dance
 'These days, the East Ankwe, in the area up to Shendam, and some Dorok, they want to return to these songs, to the kangrang songs.'
- 4 *Muèp dók là máng gyà=hòk t'óng.*
 3PL.S PAST.REM HAB take(SG) performance=DEF HAB
 'In the past, they used to sing these songs.'
- 5 *Nd'àsónòe dái, gùrùm mòe-b'át*
 now just person NOMZ(PL)-gain.experience
gyà=hòk, gòemé gòemé.
 performance=DEF REDUP.one
 'But these days, the people who still know the songs are scattered one by one.'
- 6 *Hèn=t'òng máng vél ò-ní, dé*
 1SG.S=IRR take(SG) two COMIT-3SG.I SO.THAT
gù=k'òelèng yì òt'it.
 2PL.S:CONS=hear/smell CONS well
 'I will sing two of them, so that you can hear them well.'

- 7 *Á gyà gòepé muèp dók d'à máráp*
 FOC performance THAT/WHEN 3PL.S PAST.REM HAB step(PL)
t'óng góe shímt'úk ñ-gòedé.
 HAB COMIT loincloth LOC-bottom
 'It is a dance that they used to dance with loincloths around the waists.'
- 8 *Nà ñd'àsóenòe shímt'úk d'è góe yíl lú*
 see now loincloth exist PLACE ground:GEN settlement
mén zák-yít bá, gòepé
 1PL.POSS also/however-again NEG THAT/WHEN
gyà=hók d'áláng.
 performance=DEF pass(SG)
 'See, these days, there aren't any loincloths any longer in our homes, just like the songs have passed.'

Louis Longpuan now sings two such songs.

- 0 *K'wàl nyé Bòrí Bòrí, Bòrí wá*
 talking:GEN matter <NAME> <NAME> <NAME> return.home(SG)
sàm Kóbò.
 descend <PLACE.NAME>
 'Talk of Bori Bori, Bori returned home to Kobo.'
- 1 *K'wàl nyé Bòrí Bòrí ò, Bòrí*
 talking:GEN matter <NAME> <NAME> INTERJ <NAME>
wá t'á Mùdùùt.
 return.home(SG) fall(SG) <PLACE.NAME>
 'Talk of Bori Bori, oh, Bori returned home to Shendam.'
- 2 *K'wàl nyé Bòrí Bòrí ò, Bòrí*
 talking:GEN matter <NAME> <NAME> INTERJ <NAME>
wá t'á Mòek'wò.
 return.home(SG) fall(SG) <PLACE.NAME>
 'Talk of Bori Bori, oh, Bori returned home to Kwande.'

- 3 *Náán gòe-nèm ní gòe s'óóm, yóól*
 God NOMZ(SG)-refuse 3SG.O COMMIT horn rise(SG):CONS
yì màng s'óóm pòe pààp.
 CONS take(SG) horn give duiker
 'God who refused to give her horns, instead rose, took horns and gave them to the duiker.'
- 4 *Làng lá kwàp t'úúr yì ò-ní.*
 hang/move(SG) PROGR knock(SG) anthill PROGR COMMIT-3SG.I
 'It now moves around knocking over anthills with them.'
- 5 *K'wàl nyé Bòri Bòri ò, Bòri*
 talking:GEN matter <NAME> <NAME> INTERJ <NAME>
wá t'á Mòek'wò.
 return.home(SG) fall(SG) <PLACE.NAME>
 'Talk of Bori Bori, oh, Bori returned home to Kwande.'
- 6 *K'wàl nyé Bòri Bòri ò, Bòri*
 talking:GEN matter <NAME> <NAME> INTERJ <NAME>
wá t'á Mùduùt.
 return.home(SG) fall(SG) <PLACE.NAME>
 'Talk of Bori Bori, oh, Bori returned home to Shendam.'
- 7 *Náán gòe-nèm ní gòe s'óóm, yóól*
 God NOMZ(SG)-refuse 3SG.O COMMIT horn rise(SG):CONS
yì màng s'óóm pòe pààp.
 CONS take(SG) horn give duiker
 'God who refused to give her horns, instead rose, took horns and gave them to the duiker.'
- 8 *Làng lá kwàp t'úúr yì ò-ní.*
 hang/move(SG) PROGR knock(SG) anthill PROGR COMMIT-3SG.I
 'It now moves around knocking over anthills with them.'
- 9 *Á gòedékàng tóe, gyà kángráng.*
 FOC first EMPH performance:GEN group.dance
 'This is the first one, the first *kangrang* song.'
- 10 *Gòe-vel múk tóe.*
 ORD-two 3SG.POSS EMPH
 'Now the second one.'

- 11 *Ńnáméni wá K'wátnàng.*
 <NAME> return.home(SG) <PLACE.NAME>
 'Nnameni returned home to K'watnang.'
- 12 *Ńnà dók muààn lú dwén*
 old.woman:CONS PAST.REM go(SG) settlement PL.LOG.SP.POSS
yì láng lé lè k'úún.
 CONS hang/move(SG) goods/clothes goods/clothes:GEN salt
 'The old woman₁ went to their₁ village and carried a load, a load of salt.'
- 13 *Ńnáméni wá K'wátnàng.*
 <NAME> return.home(SG) <PLACE.NAME>
 'Nnameni returned home to K'watnang.'
- 14 *Ńnà dók muààn lú dwén*
 old.woman:CONS PAST.REM go(SG) settlement PL.LOG.SP.POSS
yì láng lé lè k'úún.
 CONS hang/move(SG) goods/clothes goods/clothes:GEN salt
 'The old woman₁ went to their₁ village and carried a load, a load of salt.'
- 15 *Lá bá dé-gòe muààn Dùnkúlma, ñdòe=bì*
 COND return(SG) PUR go(SG) <PLACE.NAME> SPEC=thing
p'yán k'á nóe gòe-muààn Dùnkúlma.
 break(SG) head(SG) 1SG.POSS NOMZ-go(SG) <PLACE.NAME>
 'When she returns to go to Dunkulma, something breaks my head when going to Dunkulma.'
- 16 *Lá bá dé-gòe muààn Dùnkúlma, ñdòe=bì*
 COND return(SG) PUR go(SG) <PLACE.NAME> SPEC=thing
fyá b'ét nóe gòe-muààn Dùnkúlma.
 dry(PL) belly 1SG.POSS NOMZ-go(SG) <PLACE.NAME>
 'When she returns to go to Dunkulma, something pains my belly when going to Dunkulma.'
- 17 *K'á nóe Dùnkúlma, ñd'ùùn nóe*
 head(SG) 1SG.POSS <PLACE.NAME> inside 1SG.POSS
Dùnkúlma.
 <PLACE.NAME>
 'My head is Dunkulma, my stomach is Dunkulma.'

- 18 *Ade wo ayo aya ade.*
 <SONG>
 ‘*Ade wo ayo aya ade.*’

6. Procedural text: Cooking *mualam* (P04CMualam2)

Maria Miaphen, a Goemai elder from the K'wo Goemai, describes how to cook *mualam*, a food prepared for special occasions..

- 0 *Hèn=zèm dé-gòe ñ-k'wál là=k'wál lé*
 1SG.S=like PUR ADVZ-talk DIM(SG):GEN=talking bit
k'à nyè muàlà̀m ñ-d'è-ñnòe.
 HEAD(SG):GEN matter:GEN tuber.type ADVZ-CL:exist-DEM.PROX
 ‘I want to talk a bit about this *mualam* dish.’
- 1 *Muàlà̀m, wàkáám gòe-shin ni d'è d'i*
 tuber.type way NOMZ-do 3SG.O exist LOC.ANAPH
ngàm, ñdòe=wàkáám bòe=d'án ni dé-gòe
 much/many SPEC=way FOC.IRR=cook 3SG.O PUR
ñ-s'òe.
 ADVZ-eat
 ‘*Mualam*, there are many ways of making it, ways of cooking it in order to eat it.’
- 5 *Hèn=t'òng lánɡòedé kùt k'à muàlà̀m*
 1SG.S=IRR start talking HEAD(SG):GEN tuber.type
gòe-ñ-b'ùák.
 NOMZ-ADVZ-bubble
 ‘I will start talking about the boiled *mualam*.’
- 6 *Muàlà̀m gòe-ñ-b'ùák muèp b'ùák ni*
 tuber.type NOMZ-ADVZ-bubble 3PL.S bubble 3SG.O
gòe-yén à dé móós.
 NOMZ(SG)-bec.plenty FOC DIR hospitality
 ‘The boiled *mualam*, they make it mostly for visiting.’
- 7 *Gòebí sèk d'ík.*
 AS.IF BODY:GEN marrying
 ‘Like for marriage.’

- 8 *Kó miút.*
maybe/or death(SG)
'Or death.'
- 9 *Kó ndòe=bì k'yák pyá.*
maybe/or SPEC=thing:GEN heart/neck bec.white
'Or some happy occasion.'
- 10 *Muèp lá shin.*
3PL.S COND do
'This is when they make it.'
- 11 *Kó ndòe=gùrùm gòe-móós gòe-wúl,*
maybe/or SPEC=person NOMZ(SG)-hospitality NOMZ(SG)-arrive
gòepé gòe=ná nì à
THAT/WHEN 2SGM.S:CONS=see 3SG.O FOC
gòe-sh'úút.
NOMZ(SG)-bec.important
'Or some visitor who arrives, whom you consider important.'
- 12 *Gòe=pòe yén n-ní.*
2SGM.S=give plenty BEN-3SG.I
'And you want to honor him.'
- 13 *T'òng móe=b'ùák muàlám dé-gòe n-pòe nì.*
IRR 1PL.S=bubble tuber.type PUR ADVZ-give 3SG.O
'Then we will boil *muàlam* to give it to him.'
- 14 *Mòe=nà muàlám sh'úút, nyè-gòepé ní*
1PL.S=see tuber.type bec.important because-THAT/WHEN 3SG.S
láp bì tók p'ùùr.
receive thing:GEN sauce very
'We consider *muàlam* to be important because it contains very many ingredients.'
- 17 *Dé-gòe n-b'ùák muàlám, bì gòepé gòe=zèm*
PUR ADVZ-bubble tuber.type thing THAT/WHEN 2SGM.S=like
à ní tóe: hààs muàlám gòe k'á
FOC 3SG.I EMPH flour:GEN tuber.type COMIT HEAD(SG):GEN

sék múk.

BODY 3SG.POSS

‘In order to boil *mu*alam, the things that you want are: *mu*alam flour itself.’

18 *Ñdòe lwá.*

CONJ animal/meat

‘And meat.’

19 *Kó lwá gòe-fi, kó*

maybe/or animal/meat NOMZ(SG)-dry(SG) maybe/or

lwá gòe-b'árak.

animal/meat NOMZ(SG)-bec.wet

‘Maybe dried meat, maybe fresh meat.’

20 *Ñdòe sh'áráp gòe-fi.*

CONJ fish NOMZ(SG)-dry(SG)

‘And dried fish.’

21 *Ñdòe b'úás.*

CONJ paste

‘And locust bean paste.’

22 *Shítá.*

pepper

‘Pepper.’

23 *K'úún.*

salt

‘Salt.’

24 *Muèrb'áng.*

palm.oil

‘Palm oil.’

25 *Dòu gòe-ñ-s'óe.*

onion NOMZ-ADVZ-eat

‘Edible onions.’

27 *Shén.*

beniseed

‘Beniseed.’

- 28 *Kó k'ónkwáán.*
maybe/or groundnut
'Or groundnuts.'
- 29 *Kó s'áár.*
maybe/or egusi
'Or egusi.'
- 30 *Gòe-ń̀nòe à lè bì tók*
NOMZ(SG)-LOC.ANAPH FOC goods/clothes:GEN thing:GEN sauce
gòepé gòe=zèm tóe dé-gòe ñ-b'ùàk muàlám.
THAT/WHEN 2SGM.S=like EMPH PUR ADVZ-bubble tuber.type
'These are the soup ingredients that you would want in order to boil *mualam*.'
- 31 *Nk'óng gòepé là gòe=f'yál lwá*
BACK THAT/WHEN COND 2SGM.S=boil animal/meat
gòe, gòe lá=k'ùún ń̀dòe mági ń̀dòe
2SGM.POSS COMIT DIM(SG):GEN=salt CONJ maggi CONJ
là=àlbásà, t'óng gòe=sám ñ-ní
DIM(SG):GEN=onion IRR 2SGM.S=descend COMIT-3SG.I
gòe=d'ú, gòe=làng muèrb'áng
2SGM.S=cause.sitting(SG) 2SGM.S=hang/move(SG) palm.oil
gòe k'à wús.
2SGM.POSS HEAD(SG):GEN fire
'After you have boiled your meat, with a bit of salt and maggi and a few onions, you would take it down [from the fire], set it aside and put palm oil [in a pot] on the fire.'
- 32 *Lá b'áán, gòerèp dóu gòe-ń-s'òe ń̀nòe,*
COND bec.warm cut(PL) onion NOMZ-ADVZ-eat LOC.ANAPH
gòe=d'ùòe d'i ń̀d'ùún.
2SGM.S=cause.lying(PL) LOC.ANAPH INSIDE
'When it has become hot, cut these onions and pour them there inside.'
- 34 *T'úés múk gòe-t'óng yóól ń̀nòe=hòe, gùrùm*
odor 3SG.POSS NOMZ-IRR rise(SG) LOC.ANAPH=exactly person
là láng puánáng là k'óelèng, t'óng
COND hang/move(SG) there/yonder COND hear/smell IRR

k'wál yì muép d'è t'óng nyàp ñdòe=s'òe
 talk SAY 3PL.S exist PROGR prepare SPEC=food
gòe-sh'áng yì.
 NOMZ(SG)-be.pleasant PROGR

'Its smell that rises, when someone moves around over there and smells it, he would say, they are preparing a delicious food there.'

- 36 *Muèr=hòk lá shin, p'ùàn lwá góe,*
 oil=DEF COND do remove(PL) animal/meat 2SGM.POSS
gòe=d'ùòe d'i ñd'ùùn, lwá
 2SGM.S=cause.lying(PL) LOC.ANAPH INSIDE animal/meat
gòepé gòe=f'yàl=hóe, p'ùàn gòe=lóe
 THAT/WHEN 2SGM.S=boil=exactly remove(PL) 2SGM.S=put
ñd'ùùn muèr=hòk.
 INSIDE:GEN oil=DEF

'When the oil is ready, take out your meat and put it there inside, the meat that you have boiled, take it out and put it inside the oil.'

- 37/39 *Lá láng d'i lé, gòebí m̀m̀ùk*
 COND hang/move(SG) LOC.ANAPH bit AS.IF NOMZ.3SG.POSS
mintì páát kó mintì s'ár, màng hángòed'è
 minute five maybe/or minute ten take(SG) water:GEN
lwá=hók, gòepé gòe=f'yàl=hóe,
 animal/meat=DEF THAT/WHEN 2SGM.S=boil=exactly
gòe=p'ìrìng d'i k'à lwá=hók
 2SGM.S=turn LOC.ANAPH HEAD(SG):GEN animal/meat=DEF

'After it has been there [over the fire] for a bit, like for five minutes or ten minutes, take the juice of the meat, which you have boiled, and pour it there over the meat.'

- 40 *Nàk hángòed'è gòe-zòòm.*
 fetch water NOMZ(SG)-bec.cold
 'Fetch cold water.'

- 41 *Kó lá góe hángòed'è gòe-b'áán, lá*
 maybe/or COND COMIT water NOMZ(SG)-bec.warm COND
d'è d'i dúk dé góe, d'ùòe
 exist LOC.ANAPH NEAR DIR 2SGM.POSS cause.lying(PL)

d'í k'à lwá=hók.
 LOC.ANAPH HEAD(SG):GEN animal/meat=DEF

‘Or if it is warm water, if it is close to you, pour it there over the meat.’

42 *S'óe gòe-yén gòepé gòe=zèm*
 food NOMZ(SG)-bec.plenty THAT/WHEN 2SGM.S=like
muálàm=hók d'è góedé.
 tuber.type=DEF exist BOTTOM

‘[Take] all the ingredients that you want your *muálàm* to contain.’

43 *Lá màng dé-gòe ò-f'yál, lá kús*
 COND take(SG) PUR ADVZ-boil COND NEAR
gòe-ò-f'yál, lè bì tók
 NOMZ-ADVZ-boil goods/clothes:GEN thing:GEN sauce
ò-d'è-òndòe gòepé gòe=tù, òdòe
 ADVZ-CL:exist-DEM.PROX THAT/WHEN 2SGM.S=pound CONJ
b'úás, k'úún òdòe sh'áráp, òdòe shítá, màng
 paste salt CONJ fish CONJ pepper take(SG)
gòe=d'úóe d'í.
 2SGM.S=cause.lying(PL) LOC.ANAPH

‘When it starts to boil, when it is close to boiling, these soup ingredients that you have pounded, the locust bean paste, salt, and fish, and pepper, take them and pour them in there.’

44 *Shén góe.*
 beniseed 2SGM.POSS

‘The beniseed, too.’

45 *Kàt lá t'òng góe=shín góe shén, lá t'òng*
 maybe/or COND IRR 2SGM.S=do COMIT beniseed COND IRR
góe=shín à góe k'ònkwaán=hòe, lá t'òng
 2SGM.S=do FOC COMIT groundnut=exactly COND IRR
góe=shín à góe s'áár=hòe, gòe=s'àm muép
 2SGM.S=do FOC COMIT egusi=exactly 2SGM.S=grind 3PL.O
d'èmt'èi.
 already

‘Whether you will make it with beniseed, or you will make it with groundnut, or you will make it with egusi, you have already ground them.’

- 46 *Gòépé* *gòe=zèm* *dé-gòe* *n-shín* *nì=hòk*.
 THAT/WHEN 2SGM.S=like PUR ADVZ-do 3SG.O=DEF
 ‘[All the things] that you want to make it with.’
- 47 *Lè* *bì* *tók=hók* *lá* *fyál,* *màng*
 goods/clothes:GEN thing:GEN sauce=DEF COND boil take(SG)
shén=hók, *kó=bì* *gòenàng* *pé*
 beniseed=DEF any/every=thing which(SG) THAT/WHEN
gòe=zèm *dé-gòe* *n-b'ùàk* *muàlà̀m=hòk* *n-ní,*
 2SGM.S=like PUR ADVZ-bubble tuber.type=DEF COMMIT-3SG.I
gòe=d'ùòe *d'í* *k'à* *wús.*
 2SGM.S=cause.lying(PL) LOC.ANAPH HEAD(SG):GEN fire
 ‘When the soup ingredients boil, take the beniseed, or whatever you
 want to boil the *mualam* with, and put them there over the fire.’
- 49 *Dé-gòe* *hóót* *k'à,* *pùòe* *láng* *d'í,*
 PUR shut head(SG) mouth hang/move(SG)LOC.ANAPH
m̀m̀ùk *gòebí* *m̀ntì* *s'ár* *kó* *yàgùr̀um.*
 NOMZ.3SG.POSS AS.IF minute ten maybe/or twenty
 ‘In order to close the top [of the pot], a lid is there, for like ten mi-
 nutes or twenty.’
- 50 *D'à* *gòe=ná* *lá* *ǹng,* *èèp* *k'à.*
 COND 2SGM.S=see COND bec.mature(SG) raise(SG) head(SG)
 ‘When you see that it has become ready, open the lid.’
- 51 *Dé-gòe* *màn* *pé* *ǹng,* *t'òng* *gòe=ná*
 PUR know THAT/WHEN bec.mature(SG) IRR 2SGM.S=see
hàngòed'è=hòk, *shén* *gòe-d'ùòe* *gòe*
 water=DEF beniseed NOMZ-cause.lying(PL) 2SGM.POSS
kó *k'ónkwáán=hók,* *nà* *ní* *d'wò̀r*
 maybe/or groundnut=DEF see 3SG.O form.excrecence
n-d'wò̀r.
 ADVZ-form.excrecence
 ‘In order to know that it is ready, you see that the water, and the be-
 niseed that you have poured inside, or the groundnuts, you see them
 rising.’

- 52 *Là góe=ná d'wòòr=hòk, t'òng góe=mán*
 COND 2SGM.S=see excrescence=DEF IRR 2SGM.S=know
gòepé nùng.
 THAT/WHEN bec.mature(SG)
 'When you see it rising, you will know that it is ready.'
- 53 *Là góe=láng à nd'ùùn wàng yíl,*
 COND 2SGM.S=hang/move(SG) FOC INSIDE:GEN pot:GEN ground
t'òng góe=sám gòe=d'ú n-yíl.
 IRR 2SGM.S=descend 2SGM.S=cause.sitting(SG) LOC-ground
 'If you have put it in an earthen pot, you will take it down and set it on the ground.'
- 54 *Dé góe=nák muàlám=hòk yì, t'òng*
 SO.THAT 2SGM.S:CONS=fetch tuber.type=DEF CONS IRR
góe=t'ít d'ì, dé t'òng góe=b'áp
 2SGM.S=sprinkle LOC.ANAPH SO.THAT IRR 2SGM.S=mix
yì.
 CONS
 'Then you fetch the *muàlám* flour, and you would sprinkle it there, so that you would mix it.'
- 55 *T'ít muàlám yì dé t'òng góe=b'áp nì yì.*
 sprinkle tuber.type CONS SO.THAT IRR 2SGM.S=mix 3SG.O CONS
 'Sprinkle the *muàlám*, so that you would mix it.'
- 56a *Góe=d'è t'òng góe=t'ít yì.*
 2SGM.S=exist PROGR 2SGM.S=sprinkle PROGR
 'You are sprinkling.'
- 56b *Góe=d'è t'òng góe=b'áp yì.*
 2SGM.S=exist PROGR 2SGM.S=mix PROGR
 'You are mixing.'
- 56c *Góe=d'è t'òng góe=t'ít yì.*
 2SGM.S=exist PROGR 2SGM.S=sprinkle PROGR
 'You are sprinkling.'
- 56d *Góe=d'è t'òng góe=b'áp yì.*
 2SGM.S=exist PROGR 2SGM.S=mix PROGR
 'You are mixing.'

- 56e *S'àyò gùrùp.*
PROH form.lump
'Lest it forms lumps.'
- 58 *Mòe=sàm m̀òe=d'ù ǹ-̀yíl*
1PL.S=descend 1PL.S=cause.sitting(SG) LOC-ground
nyè-gòepé wàng yíl à gòe-b'áán.
because-THAT/WHEN pot:GEN ground FOC NOMZ(SG)-bec.warm
'We take it down and set it on the ground because an earthen pot is hot.'
- 59 *Là góe=shát nì k'à wús, t'òng*
COND 2SGM.S=knead 3SG.O HEAD(SG):GEN fire IRR
nwáp mà góe k'óóm.
bec.sticky surpass COMIT strength
'If you stir it over the fire, it would get very sticky.'
- 60 *Nyè-gòe-sék móe=sàm ní yì*
because-NOMZ(SG)-BODY 1PL.S:CONS=descend 3SG.O CONS
m̀òe=lóe ǹ-̀yíl.
1PL.S=put LOC-ground
'That's why we take it down and put it on the ground.'
- 71a *T'òng góe=t'úng.*
IRR 2SGM.S=stir
'You will stir it.'
- 71b *T'òng góe=t'úng.*
IRR 2SGM.S=stir
'You will stir it.'
- 71c *T'òng góe=t'úng.*
IRR 2SGM.S=stir
'You will stir it.'
- 72 *Lá nék, wá rú s'óe gòe-zèm*
COND bec.thick return.home(SG) enter(SG) food NOMZ-like
góe, p'èn bí gòepé gòe=b'àp
2SGM.POSS remove(SG) thing THAT/WHEN 2SGM.S=mix

ń̀nòde ń̀k'wà.

LOC.ANAPH away

‘When it has become thick, when it has become the food you want, remove these things that you have mixed.’

73 *D'ù puánáng.*

cause.sitting(SG) there/yonder

‘Set them down over there.’

74 *Màng gòe=p'iring ń̀d'ù̀n d'á gòepé*
take(SG) 2SGM.S=turn INSIDE:GEN calabash THAT/WHEN

gòe=zèm dé-gòe muà̀n móos ń̀-ń̀.
2SGM.S=like PUR go(SG) hospitality COMMIT-3SG.I

‘Take them and pour them into the calabash, which you want to use for the visit.’

75 *Kó gòe=gàp, gòe=lòe ń̀d'ù̀n bì*
maybe/or 2SGM.S=divide(SG) 2SGM.S=put INSIDE:GEN thing

gòepé gòe=zèm dé-gòe ń̀-gàp.
THAT/WHEN 2SGM.S=like PUR ADVZ-divide(SG)

‘Or you share it out, and you put it into the thing that you want to share it out with.’

76 *Dé muép gòe s'óe yì.*
SO.THAT 3PL.S:CONS OBLIG eat CONS

‘So that they should eat it.’

77 *Gòe-ń̀nòde à b̀e=t'óng shín muà̀lám*
NOMZ(SG)-LOC.ANAPH FOC HOW/WHERE=IRR do tuber.type

tóe m̀esék múk dé-gòe ń̀-s'óe.
EMPH REFL.BODY 3SG.POSS PUR ADVZ-eat

‘This is how *muà̀lám* itself is made for eating.’

Appendix 2

Wordlist

This Goemai-English wordlist contains all Goemai words that appear in this grammar and in the text collection (appendix 2), summarizing their salient phonological, grammatical and semantic characteristics. The lexical entries are structured as follows:

- 1) Lexeme (in the practical orthography, see chapter 2, section 1.5).
- 2) Homonym number (if applicable).
- 3) Phonology (in IPA, see chapter 2).
- 4) Part of speech (using the abbreviations in table 73 below).

Table 73. Parts of speech

<i>adv</i>	adverb	see chapter 5, section 2
<i>cl</i>	classifier	see chapter 3, section 5.4
<i>clitic</i>	clitic	see chapter 6, section 2.1
<i>conj</i>	conjunction	see chapter 6, section 1.6.
<i>dem</i>	demonstrative	see chapter 3, section 5.4.
<i>ideoph</i>	ideophone	see chapter 5, section 3
<i>interj</i>	interjection	see chapter 6, section 3
<i>interr</i>	interrogative	see chapter 6, section 4
<i>mod</i>	modifier within noun phrase	see chapter 3, section 5
<i>n</i>	noun	see chapter 3, sections 2 and 4
<i>part</i>	particle	see chapter 6, sections 1.1. to 1.5.
<i>pl</i>	plural	
<i>pref</i>	prefix	see chapter 6, section 2.2
<i>prep</i>	preposition	see chapter 5, section 4
<i>pron</i>	pronoun	see chapter 3, section 2.4.
<i>relator</i>	relator noun	see chapter 5, section 4
<i>sg</i>	singular	
<i>v.ditr</i>	verb (ditransitive)	see chapter 4, section 3.1.
<i>v.intr</i>	verb (intransitive)	see chapter 4, section 3.5.
<i>v.tr</i>	verb (transitive)	see chapter 4, section 3.2. to 3.4.

- 5) English gloss.
- 6) Plural form (if applicable).

- 7) Variant form (if applicable).
 8) Source of the loanword (if applicable).

The entries are listed in alphabetical order, following the Goemai alphabet (and including the Hausa ejectives *k* and *ts* present in some loanwords):

a b b' d d' e f f' g h i j k k' (k) l m n ng o oe p p' r s s' (ts) sh sh' t t' u v w y z

If a form has several parts of speech or several senses, these are listed one after the other within the same entry.

If there are variant forms, full information is listed under the most common form (which is not necessarily the diachronically oldest form); and the variant form then cross-refers to this entry. Similarly, plural forms cross-refer to their corresponding singular forms.

The use of subentries is restricted to (a) nominalizations (appearing under the nominalizing morpheme), (b) pronominal forms (appearing under the independent pronoun) and (c) postural-based forms (appearing under the basic locative verb).

A [a]

à₁ [ʔà] *part.* 1) focus, emphasis. 2) equational copula.

à₂ [ʔà] *part.* question tag (neutral question, either / or question). *variant:* wà, yà.

ááp [ʔá:p] *see* éép.

áás [ʔá:s] *n.* dog.

á'á [ʔáʔá] *interj.* oh (surprise). *from* Hausa.

á'à [ʔáʔà] *interj.* no. *from* Hausa. *variant:* mí'm.

áddú'a [ʔáddúʔà] *n.* prayer. *from* Hausa.

ái [ʔái] *see* hâi.

ákwaí [ʔák^{hw}ái] *part.* there is, there are. *from* Hausa.

àlbásà [ʔàlbás^hà] *n.* onion. *from* Hausa.

àmfaní [ʔàm^fhàní] *n.* benefit, usefulness. *from* Hausa.

àmmá [ʔàmmá] *conj.* but. *from* Hausa.

án [ʔán] *n.* mind, intelligence, thought.

àràmm [ʔàràmm] *n.* conversation, chatting, story-telling.

áráng [ʔáráng] *n.* ashes.

áráp [ʔáráp] *see* át.

àràp [ʔàràp] *n.* ironwood.

àsé [ʔàs^hé] *interj.* oh (surprise). *from* Hausa.

át [ʔát] *v.tr.sg.* bite. *plural:* áráp.

àv̀à [ʔàv̀à] *see* **àv̀ù**.

àv̀ù [ʔàv̀ù] *interj.* hey (disrespectful form of address). *variant:* **àv̀à**.

áẁà [ʔáẁà] *n.* hour. *from* Hausa.

ázáishé [ʔázáíʰé] *n.* meaning. *from* Hausa.

ázùfá [ʔázùʰá] *n.* silver. *from* Hausa.

B [b]

bá₁ [bá] *v.intr.sg.* 1) return. 2) repeat, do again. 3) do the same as someone else. *part.sg.* and also. *plural:* **búk**.

bá₂ [bá] *part.* negation. *from* Hausa.

bá₃ [bá] *see* **wá₂**.

bábù [bábù] *part.* nothing. *from* Hausa.

bàkwá [bàk^{hw}á] *n.* Hausa, muslim.

báng [bán] *n.* long round calabash, used for storage or as floating device when crossing rivers.

bàñkyèm [bàⁿk^hè̀m] *relator.* in front of, before. *variant:* **bàntyèm**.

bànté [bànt^hé] *n.* loincloth. *from* Hausa.

bàntyèm [bàⁿt^hè̀m] *see* **bàñkyèm**.

bèèl [bè:l] *n.* type of large-sized fish.

bèèr [bê:r] *v.tr.* scatter something by means of scraping or scratching (e.g., chickens scratching at corn) or spreading (e.g., a rotten fruit). *v.intr.* become scattered or spread.

bél [bél] *see* **m̀bél**.

bèng [bèŋ] *n.* stomach.

bí [bí] *v.tr.* follow. *from* Hausa.

bì [bì] *n.* 1) thing. 2) nominalizer (to derive typical activities and character traits from verbs).

bì b'óót [bì b'ó:t] *n.sg.* being a rascal.

bì d'ám [bì dám] *n.* diving.

bì d'án [bì dán] *n.* cooking.

bì d'èk [bì dèk] *n.* winnowing.

bì d'ik [bì dîk] *n.* a building.

bì d'ip [bì dîp] *n.sg.* harvesting (with hand, small knife).

bì d'wòl [bì d^wò:l] *n.* chewing.

bì g̀àp [bì g̀àp] *n.sg.* dividing, sharing.

bì g̀ép [bì g̀óp] *n.sg.* cutting.

bì g̀ún [bì g̀ún] *n.* spearing.

bì hààr [bì hà:r] *n.* gnawing, eating.

bì hàrà̀m [bì hàrà̀m] *n.* harvesting (with scythe).

bì hès [bì hès] *n.sg.* piercing, weaving.

- bì hók** [bì hók] *n.* digging.
bì hóór [bì hó:r] *n.sg.* clothing.
bì kàt [bì k^hàt] *n.* a surprising find, wealth.
bì kùs [bì k^hùs] *n.* rubbing, softening.
bì k'ám [bì kám] *n.* instructing, exam.
bì k'áng [bì kán] *n.* herded animal, domestic animal.
bì k'àp [bì kàp] *n.* harvesting (with hoe).
bì k'ăt [bì kăt] *n.sg.* measuring out.
bì k'óón [bì kó:n] *n.sg.* baking.
bì làp [bì làp] *n.* receiving charms.
bì lyàk [bì l'ák] *n.* throwing.
bì màn [bì màn] *n.* knowledge.
bì nín [bì nín] *n.* pointing.
bì p'óe [bì p^hó] *n.* giving.
bì p'ák [bì pák] *n.* pounding.
bì p'íring [bì pírín] *n.* exchanging.
bì rà [bì rà] *n.* weaving.
bì s'am [bì sàm] *n.* grinding.
bì s'éét [bì sé:t] *n.sg.* trading.
bì s'óe [bì só] *n.* food ingredients.
bì sh'á [bì šá] *n.* being a wishful thinker.
bì sh'è [bì šè] *n.* learning, teaching.
bì sh'íng [bì šín] *n.* mixing (of liquid porridge).
bì tǎng [bì t^hǎŋ] *n.* searching.
bì t'át [bì tát] *n.* shooting.
bì t'úng [bì túŋ] *n.* frying.
bì vuáng [bì vuán] *n.* washing, laundry.
bì wààp [bì wà:p] *n.* borrowing, lending.
bì wùm [bì wùm] *n.* planting seeds.
bì yát [bì ját] *n.* advertizing.
bì yíl [bì jíl] *n.* writing.

adv. in a person's own way, own right.

- bí nímòe** [bí 'n^mè] *interr.* what.
bìròm [bìròm] *n.* Birom.
bòòì [bò:i] *n.* cowrie shells, used as money in the past.
bóró [bóró] *n.* Fulani.
b'óól [b'ó:l] *n.* ball. *from* English.
b'òe= [b'è] *clitic.* 1) nominalizer (forms locative 'where' and manner 'how' nominalizations). 2) focused irrealis modality (occurring in negative irrealis contexts and in questions).
b'óebép [b'ábáp] *n.* fruit pigeon.
b'óed'ě [b'ódě] *n.* 1) whereabouts. 2) meaning.

bòegá [bègá] *n.* well.

bòelát [bèlát] *n.* end.

bòezúng [bèzún] *n.* 1) chest. 2) strength, courage.

bùhú [bùhú] *n.* bag. *from* Hausa.

búk [búk] *see* bá₁.

búlúdí [búlúdí] *n.* type of fish with strong spikes, lives in standing water.

bùúr [bù:r] *v.tr.* become rich or wealthy in something. *v.intr.* become rich.

bùúr [bù:r] *n.* type of weed that destroys guineacorn.

byààp [b'à:p] *n.* pumpkin, gourd.

byàt [b'àt] *see* byèt.

byèt [b'àt] *v.tr.sg.* be too weak for something. *v.intr.sg.* become weak or useless. *n.sg.* weakness. *plural:* byàt.

B' [6]

b'ààl [b'à:l] *n.* carved stick or staff.

b'áám [b'á:m] *v.tr.* seize or take away by force. *n.* seizing.

b'áán [b'á:n] *v.tr.* make something warm (of material), enrage someone (of person). *v.intr.* become warm, hot-tempered. *n.* warmth.

b'ák₁ [b'ák] *see* là₂.

b'ák₂ [b'ák] *adv.* here.

b'àk [b'àk] *v.tr.* disregard or despise something.

b'ál [b'ál] *v.intr.* be hard (of material), expensive (of goods), stingy or hard-headed (of people), clear and piercing (of voice). *n.* hardness.

b'àl [b'àl] *v.tr.* lock, fasten. *v.intr.* get locked, fastened.

b'álang [b'álan] *v.tr.* make something hot. *v.intr.* become hot.

b'àm [b'àm] *v.tr.* stick something (onto something). *v.intr.* get stuck.

b'áng [b'án] *v.tr.* make red or clear. *v.intr.* become red or clear. *n.* redness, clearness.

b'áp [b'áp] *v.tr.* mix a sauce.

b'àp [b'àp] *v.tr.* finish, destroy.

b'árák [b'árák] *v.intr.* become wet or damp, fresh (of plants, meat), born (of a newborn child).

b'às [b'às] *v.tr.* break, cut a piece off. *n.* breaking, cutting off.

b'át [b'át] *see* b'óót.

b'é [b'é] *see* là₂.

b'è [b'è] *part.* emphasis.

b'é́m [b'é́m] *v.tr.* touch, cover something.

b'ép [b'ép] *v.intr.* 1) repeat, do again. 2) do the same as someone else.

b'èp [b'èp] *n.* type of large-sized fish.

b'é́t [b'é́t] *n.* belly. *relator.* near the main part of an object.

b'ètlá [bétlá] *n.* maliciousness.

b'íling [bílín] *v.tr.* knead or mould soft material (e.g., food, mud) into a ball.

b'íring [bírín] *v.tr.* roll something. *v.intr.* roll.

b'ít [bít] *n.* day.

b'itlúng [bìtlún] *n.* morning.

b'óót [bót:t] *v.tr.sg.* gain experience in, become able or capable of. *plural:* **b'át**.

b'òu [bòu] *n.* arrow.

b'óól [bó:l] *v.tr.* 1) beg, request something. 2) appeal or pray to someone. *n.* begging.

b'óón [bó:n] *n.* remedy, medicine.

b'óót [bót:t] *v.tr.* 1) tie, wear (by tying, e.g., a wrapper, a watch). 2) imprison someone. *n.* tying, wearing, imprisoning.

b'óerù [bérù] *n.* courtyard, place where people eat. *adv.* in the yard.

b'ú [bú] *n.* type of strong grass that is used for making mats and fences.

b'ùàk [bùàk] *v.tr.* cook (with beniseed). *v.intr.* bubble (of liquids), sizzle (of oil), blister (of skin).

b'ùáp [bùáp] *see* **b'úát**.

b'ùás [bùás] *n.* locust bean paste, forming the base for many soups.

b'úát [bùát] *v.tr.* beat repeatedly, flog, play a drum or string instrument. *n.* beating, playing. *variant:* **b'ùáp**.

b'ùén [bùén] *v.tr.* watch.

b'ùét [bùét] *v.tr.sg.* lay something down. *plural:* **d'ùóe**.

b'yáál [b'á:l] *v.tr.* become angry at someone or something. *v.intr.* become angry. *n.* anger.

D [d]

dààs [dà:s] *see* **mìs**.

dàbák [dàbák] *n.* stomach.

dàgà [dàgà] *prep.* from. *from* Hausa.

dái [dái] *part.* just, only. *from* Hausa.

dák [dák] *v.tr.* open wide, spread over a large surface. *v.intr.* become wide open or spread.

dákd'ùòe [dákduè] *n.* middle, center. *relator.* in the middle of, between.

dàl [dàl] *v.tr.* strike at someone. *n.* striking.

dáláng [dálán] *n.* bottle-shaped clay pot or jar (for carrying and storing liquids).

dám [dám] *v.tr.* spoil, damage, make sad. *v.intr.* get spoiled, sad.

dáng [dán] *n.* tail, ear (of grain). *relator.* behind, after.

dàp₁ [dàp] *n.* blackberry.

- dàp₂** [dàp] *v.tr.* 1) slap something (somewhere). 2) slap at something, plaster (a wall). 3) mix something. *n.* slapping.
- dàpyít** [dàpjít] *n.* name of a masquerade.
- dàsk'ék** [dàskák] *see* **mìsk'á**.
- dàsk'óóm** [dàskó:m] *see* **mìsk'óóm**.
- dàshit** [dàʃhìt] *n.* masquerade, masquerade dancer.
- dé** [dé] *relator.* in the vicinity, towards. *conj.* so that (introduces a purpose clause).
- dé bí mímòè** [dé bí 'nùmè] *interr.* why.
- dèèr** [dè:r] *n.* sasswood.
- dé-gòè** [dégè] *part.* to (introduces purposive linking).
- dél** [dól] *v.tr.* pull out.
- dém** [dám] *v.tr.* tip someone off balance, overthrow (e.g., in wrestling, in court case). *n.* overthrowing.
- dé mímòè** [dé 'nùmè] *interr.* why.
- dèn** [dèn] *v.tr.* prevent, forbid, make illegal.
- dép** [dép] *v.tr.* cultivate land through raising ridges.
- dèp** [dèp] *n.* penis.
- dèr** [dèr] *relator.* base (occurs only in compounds in present-day language).
- dèrt'éng** [dèrtéŋ] *n.* East Ankwe Goemai. *adv.* east.
- díbít** [díbít] *see* **díp**.
- díp** [díp] *adv.* all, entirely. *variant:* **díbít**.
- dò** [dò] *adv.* very.
- dók** [dók] *adv.* past, long time ago.
- dők** [dők] *part.* past tense (before yesterday, remote past).
- dòk̀ndók** [dòk`ndók] *see* **ndòk̀ndók**.
- dólè** [dólè] *part.* it is necessary that. *from* Hausa.
- dórók** [dórók] *n.* Dorok Goemai.
- dòu** [dòu] *n.* onion, onion-shaped tuber (used as medicine).
- dóól** [dó:l] *v.tr.* make fat, fatten. *v.intr.* become fat. *n.* fatness.
- dóór₁** [dó:r] *n.* gift of beer (from the brewer to her friends), gift of cooked food (from the wife to her husband).
- dóór₂** [dó:r] *v.tr.* block, cover, make deaf. *v.intr.* become blocked, deaf.
- dòòr** [dò:r] *v.intr.* limp.
- dóè** [dó] *v.intr.* come.
- dõe** [dǎ] *pron.* she (speaker in speech act context) (SGF.LOG.SP.subject, independent).
- doe** [dǎ] *pron.* her (SGF.LOG.SP.object).
- dóè** [dó] *pron.* her (SGF.LOG.SP.possessive).
- dõe=** [dǎ] *pron.* she (SGF.LOG.SP.subject).
- m̀màt** [m̀màt] *pron.* hers (free SGF.LOG.SP.possessive).
- m̀òèsát** [m̀ès^hát] *pron.* for, to herself (SGF.LOG.SP.reflexive).

- sát** [s^hát] *n.* her body. *pron.* herself (SGF.LOG.SP.reflexive).
ʼdòe= [ʼdà] *see* **ndòe**=.
dóelék [dólók] *v.tr.* make something rough (of skin). *v.intr.* become rough. *n.* roughness.
dũ= [dũ] *see* **dwě̃n**.
dùgút [dùgút] *n.* type of wasp.
dúk₁ [dúk] *v.tr.* put something upside down. *v.intr.* become upside down.
dúk₂ [dúk] *adv.* close, near.
dúlúk [dúlúk] *v.tr.* make something blunt or dull. *v.intr.* become blunt.
dùm [dùm] *v.tr.* 1) bend something forward (e.g., bow a head, tilt a pot). 2) put something upside down. *v.intr.* 1) bend forward, bow, dive. 2) become upside down.
dúníyà [dúníjà] *n.* world. *from* Hausa.
dùùt [dù:t] *n.* Duut Goemai.
dúús [dú:s] *see* **ndúús**.
dùùsnáán [dù:sná:n] *see* **ndùùsnáán**.
dúút [dú:t] *n.* spear.
dùùt [dù:t] *v.tr.* support something, lean something (against something). *v.intr.* become supported, leaning.
dwě̃n [d^wě̃n] *pron.* they (speaker in speech act context) (PL.LOG.SP.subject, independent).
dũ= [dũ] *pron.* they (PL.LOG.SP.subject).
dwen [d^wən] *pron.* them (PL.LOG.SP.object).
dwén [d^wén] *pron.* their (PL.LOG.SP.possessive).
m̀m̀m̀ùt [ʼ^mm̀ù:t] *pron.* theirs (free PL.LOG.SP.possessive).
m̀òesút [m̀ès^hút] *pron.* for, to themselves (PL.LOG.SP.reflexive).
sút [s^hút] *n.* their body. *pron.* themselves (PL.LOG.SP.reflexive).
dyén [dʼén] *part.* past tense (yesterday).
dyèndyén [dʼèndʼén] *see* **ndyèndyén**.

D' [d]

- d'á₁** [dǎ] *n.* calabash.
d'á₂ [dǎ] *part.* 1) future tense (tomorrow, someday). 2) progressive aspect. 3) habitual aspect. *conj.* when, if (introduces conditional clauses). *variant:* **lá**.
d'ààr [dǎ:r] *v.tr.* make something tremble, shiver. *v.intr.* start to tremble.
d'àd'àt [dǎdǎt] *see* **d'àt**.
d'àk [dǎk] *v.tr.* take care of an animal or dependent person, heal, mend.
d'ál [dál] *v.tr.sg.* swallow something. *v.intr.sg.* swallow. *plural:* **d'yóeléng**.
d'álám [dálám] *v.intr.* be prone to sickness.
d'áláng [dálán] *v.tr.sg.* pass something. *v.intr.sg.* pass by. *plural:* **d'óeléng**.

d'ám [dám] *v.tr.* sink, submerge something.

d'ám [dám] *n.* fever.

d'án [dán] *v.tr.* 1) cook, boil (crops, meat, fish). 2) warm oneself at a fire.

d'àng [dàŋ] *n.* monitor lizard.

d'át [dát] *v.intr.* move fast, quick. *adv.* fast, quickly. *variant:* **d'àd'át**.

d'ě [dě] *v.intr.* exist. *variant:* **ńd'ě**.

d'ě [dě] *v.intr.* exist (progressive aspect). *variant:* **ńd'ě**.

d'é- [dé] *cl.* exist.

d'èk [dèk] *v.tr.* move up and down (e.g., winnow grain, nod head, wink eyes, herd domestic animals).

d'èm [dèm] *adv.* this time.

d'èmdé [dèmdé] *n.* remainder, rest. *variant:* **d'èmgòedé**.

d'èmgòedé [dèmgòedé] *see* **d'èmdé**.

d'èmt'éi [dèmtéi] *adv.* already. *variant:* **d'ènt'éi**.

d'ènt'éi [dèntéi] *see* **d'èmt'éi**.

d'í [dí] *v.tr.sg.* 1) urinate. 2) make someone urinate. *plural:* **d'yá**.

d'ì [dì] *adv.* locative anaphor.

d'ík [dik] *v.tr.* 1) build. 2) marry, build up a family (said of a woman). *n.* marrying, marriage.

d'in₁ [dín] *n.* sheabutter.

d'in₂ [dín] *v.tr.sg.* tie or bind something (around something). *plural:* **d'yán**.

d'in₃ [dín] *part.* past tense (earlier today, recent past).

d'íng [díŋ] *v.tr.* imitate something.

d'ip₁ [díp] *n.* body hair, feather, fur.

d'ip₂ [díp] *v.tr.sg.* harvest, reap with hand, cut with small knife. *plural:* **d'yàp**.

d'òd'óót [dòdó:t] *see* **d'óót**.

d'òk [døk] *v.tr.* keep silent about something. *v.intr.* keep silent, do quietly.

d'óng [dóŋ] *v.tr.sg.* be good or beautiful in someone's eyes. *v.intr.sg.* be good or beautiful. *n.sg.* goodness, beauty. *part.* 1) it is good that, it would be good if. 2) it is possible that. *plural:* **d'óór**.

d'òòn [dò:n] *v.tr.* pick up, uproot one by one (grass, groundnuts).

d'óór [dó:r] *see* **d'óng**.

d'óót [dó:t] *v.intr.* walk slowly, linger behind, delay. *adv.* quiet, slow, careful. *variant:* **d'òd'óót**.

d'óeléng [dóléŋ] *see* **d'áláng**.

d'ú₁ [dú] *v.tr.sg.* set down. *plural:* **d'wár**.

d'ú₂ [dú] *v.tr.* 1) smell, sniff at something. 2) make someone sniff (by emitting a smell). *v.intr.* emit a (bad) smell. *n.* smelling, smell.

d'ù [dù] *mod.* much, many.

d'úk [dúk] *v.tr.* pulsate, move something in quick succession (e.g., beating of heart, blinking of eye, stammer of speech). *v.intr.* pulsate, move in quick succession.

d'úng [dúŋ] *v.intr.* whisper, reveal a secret, spread a rumor.

d'ùng [dùŋ] *n.* ridge, top of a furrow.

d'ùóe [dùó] *see* **b'ùét**.

d'ùòe [dùò] *n.* voice, sound, language.

d'wám [d'wám] *v.tr.* instill a craving in someone. *v.intr.* have a craving or longing (for meat, fish). *n.* craving, longing.

d'wàng [d'wàng] *v.tr.* make sour. *v.intr.* become sour. *n.* sourness.

d'wár [d'wár] *see* **d'ú**₁.

d'wò [d'wò] *v.tr.* consider or debate a matter.

d'wòl [d'wò:l] *v.tr.* chew. *n.* chewing.

d'wòr [d'wò:r] *v.intr.* form an excrescence. *n.* excrescence.

d'yá [d'já] *see* **d'í**.

d'yám [d'jám] *see* **d'yém**.

d'yàm [d'jàm] *see* **d'yém**.

d'yám- [d'jám] *see* **d'yém**.

d'yán [d'ján] *see* **d'in**₂.

d'yàp [d'jàp] *see* **d'ip**₂.

d'yém [d'jém] *v.intr.sg.* 1) stand, be located in a non-stable way. 2) stop, be stationary. *plural:* **d'yám**.

d'yém- [d'jém] *cl.sg.* stand. *plural:* **d'yám-**.

d'yèm [d'jèm] *v.intr.sg.* stand (progressive aspect). *plural:* **d'yàm**.

d'yén [d'jén] *see* **ńk'óng**₂. *variant:* **ńd'yén**.

d'yóeléng [d'jó|éŋ] *see* **d'ál**.

E [e]

è [ʔè] *part.* question tag (expressing surprise). *variant:* **wè**.

éép [ʔé:p] *v.tr.sg.* 1) raise, lift something. 2) open something. *plural:* **ááp**.

èèr [ʔè:r] *see* **wál**.

éés [ʔés:s] *v.tr.sg.* 1) grind something (that is dry). 2) grind on a grinding stone. *plural:* **úás**.

F [f^h]

fá [f^há] *part.* indeed. *from* Hausa.

fà [f^hà] *part.* question tag ('how about X?'). *from* Hausa. *variant:* **pà**.

fàlák [f^hà|lák] *n.* liver.

fàrà [f^hàrà] *v.tr.* begin. *from* Hausa. *variant:* **pàrà**.

fàrú [f^hàrú] *v.intr.* happen. *from* Hausa. *variant:* **pàrú**.

fé [f^hé] *see* **gòepé**.

fè [f^hè] *relator*. owner of, source of.

fén [f^hén] *v.tr.* make someone be surprised. *v.intr.* be surprised. *n.* surprise.

fép [f^hép] *v.tr.* make dirty. *v.intr.* get dirty. *n.* dirtiness, dirt, fertilizer, arrow poison.

fér [f^hér] *v.tr.* weed a field, clear land.

fí [f^hí] *v.tr.sg.* 1) dry. 2) make empty. 3) blow or fan at something. *v.intr.sg.* get dry, empty. *n.sg.* dryness. *plural:* **fyá**.

fín [f^hín] *n.* small grinding stone.

fit₁ [f^hít] *n.* type of strong grass that is used for thatching roofs.

fit₂ [f^hít] *v.tr.sg.* wear, put on clothing. *plural:* **fyát**.

fitílà [f^hít^hílà] *n.* lamp. *from* Hausa.

fóerém [f^hórém] *n.* knee.

fúm [f^húm] *v.tr.sg.* fold or wrap up something, close the mouth. *v.intr.sg.* get folded. *plural:* **fuám**.

fúng [f^húŋ] *n.* hole, opening, gap.

fuáán [f^huá:n] *n.* rain.

fuám [f^huám] *see* **fúm**.

fuán [f^huán] *n.* rabbit.

fyá [f^hyá] *see* **fí**.

fyát [f^hyát] *see* **fit**.

F' [f]

f'alf'é [fálfé] *n.* viper.

f'àng gàng [fàŋ gàŋ] *adv.* triangular. *variant:* **p'àng gàng**.

f'ér [fár] *num.* four.

f'ìt [fì:t] *n.* perch fish.

f'im [fím] *n.* cotton.

f'óót [fó:t] *v.tr.* listen, attend to something.

f'ú [fú] *v.tr.* scatter, sow. *v.intr.* get scattered, dispersed, sowed.

f'úút [fú:t] *v.tr.sg.* 1) vomit something out. 2) cause someone to vomit. *n.* vomiting, vomit. *plural:* **f'uáb'át**.

f'uáb'át [fuábát] *see* **f'úút**.

f'uél [fuól] *n.* yeast, stage in beer brewing (when the yeast is added, resulting in very bitter beer).

f'yál [βál] *v.intr.* boil, sparkle.

f'yár [βár] *see* **f'yér**.

f'yél [βól] *v.tr.* make something light (in weight) or quick. *v.intr.* become light or quick. *n.* lightness, quickness.

f'yér [f'ér] *v.tr.sg.* 1) make something big (in size, importance, age). 2) be older or senior to someone. *v.intr.sg.* become big. *n.sg.* old age, importance. *plural:* **f'yár, nán.**

G [g]

gádà [gádà] *n.* bridge. *from* Hausa.

gádó [gádó] *n.* bed. *from* Hausa.

gái [gái] *n.* silence, quietness.

gák [gák] *n.* wall.

gám [gám] *v.tr.* 1) fill something (into something). 2) fill a container (with something). 3) become pregnant. *v.intr.* become full. *plural:* **góeréng.**

gámà [gámà] *v.tr.* finish. *from* Hausa.

gàng [gàŋ] *n.* deleb palm.

gàp [gàp] *v.tr.sg.* 1) divide something into parts. 2) share out or distribute to someone. 3) get divided into parts. *v.intr.sg.* get divided or separated. *plural:* **gáráp.**

gáráp [gáráp] *see* **gàp.**

gàskiyá [gàsk'híjá] *n.* truth. *from* Hausa.

gép [gép] *v.tr.sg.* cut (with a knife or axe). *v.intr.* get cut. *plural:* **góerép.**

gók [gók] *v.tr.* make someone ill. *v.intr.* become ill. *n.* illness.

góng [góŋ] *n.* nose.

gòng [gòŋ] *v.tr.* 1) cover, block something from view. 2) protect against something (through covering it). *v.intr.* 1) get covered. 2) become night.

góór [gó:r] *see* **ngùmgóór.**

góra [góra] *n.* bamboo. *from* Hausa.

gòròng [gòròŋ] *v.intr.* become crooked, bent.

gòu [gòu] *n.* small calabash, used for drinking or fetching water, or measuring salt and grains.

gòt [gò:t] *n.* 1) cave, hollow. 2) hole, damaged thing.

góe₁ [gé '] *prep.* locative (location at a place).

góe₂ [gé '] *prep.* with (comitative, instrumental, accompaniment, direct and indirect causation).

gòe [gè] *part.* 1) sequential (introduces sequential clauses). 2) obligative modality. 3) definite future tense.

gõe [gě] *pron.* you (2SGM.subject, independent).

goe [gə] *pron.* you (2SGM.object).

góe [gə] *pron.* your (2SGM.possessive).

gõe= [gě] *pron.* you (2SGM.subject).

màmàk [ˈmàk] *pron.* yours (free 2SGM.possessive).

mòesák [mès'hák] *pron.* for, to yourself (2SGM.reflexive).

sák [s^hák] *n.* your body. *pron.* yourself (2SGM.reflexive).

gòe-₁ [gè] *pref.* nominalizer, deriving nominalized verb phrases and clauses.

gòe-₂ [gè] *pref.sg.* 1) nominalizer, deriving agentive nouns, (deictic, anaphoric and definite) pronouns, modifiers and headless modifiers. 2) marking deictic, anaphoric and definite modifiers within the noun phrase. 3) marking number on some (mainly human) nouns. *plural:* **mòe-**.

gòe-₃ [gè] *pref.* derives ordinal numbers.

gòebí [gèbí] *conj.* as if, like.

gòebóór [gèbó:r] *n.* hedgehog.

gòeb'óólnáán [gèbó:lná:n] *n.sg.* Christian. *plural:* **mòeb'óólnáán**.

gòedé [gèdé] *n.* 1) bottom. 2) origins, secrets. *relator.* 1) at the bottom of. 2) following.

gòedégòekàng [gèdégèk^hàng] *see* **gòedékàng**.

gòedékàng [gèdék^hàng] *adv.* first. *variant:* **gòedégòekàng**.

gòed'áár [gèdá:r] *adv.* tomorrow. *variant:* **t'òed'áár**.

gòed'émèn [gèdémèn] *mod.* good, truthful. *plural:* **mòed'émèn**.

gòed'èr [gèdèr] *n.* place name.

gòefé [gèf^hé] *see* **gòepé**.

gòegòe [gègè] *part.* do eventually.

gòegwó [gèg^wó] *adv.* silent, on and on, without end.

gòek'ál [gèkál] *n.* red-fronted gazelle.

gòek'wák [gèk^wák] *adv.* all (of a set).

gòelíp [gèlíp] *n.* type of very beautiful bird.

gòelóng [gèlón] *n.* 1) for nothing, useless. 2) proper name.

gòemâi [gèmâi] *n.* Goemai.

gòemé [gèmé] *num.* one. *adv.* same.

gòe- ñ- [gè- `n-] *pref.* 1) nominalizer (forming participles). 2) marking complements of auxiliary verbs.

gòenàng [gènàng] *pron.sg.* which one. *mod.sg.* which. *plural:* **móenàng**.

gòenyé [gènjé] *n.sg.* neighbor, friend, companion. *plural:* **móenyé**.

gòepé [gèp^hé] *conj.* 1) that, when (introduces an adverbial temporal clause). 2) that (introduces a complement clause). *variant:* **gòefé, pé, fé**.

gòep'úoe [gèp^ué] *mod.* new. *plural:* **mòep'úoe**.

gòeréng [gèrèng] *see* **gám**.

gòerép [gèrèp] *see* **gép**.

gòesàmpé [gès^hàmp^hé] *adv.* outside, abroad.

gòes'ém [gèsém] *n.* rat, mouse (living within settlements).

gòes'éng [gèséng] *n.* urine.

gòeshà [gè^hà] *n.sg.* friend. *plural:* **mòeshààr**.

gòeshák [gè^hák] *adv.* together.

gòeshír [gè^hír] *n.* grave.

gòetókmúút [gè^hókmú:t] *n.sg.* traditionalist. *plural:* **mòetókmúút**.

gòet'ánaán [gètàná:n] *n.sg. Muslim. plural: mòet'éknáán.*

góet'éng [gátəŋ] *adv. above, upward, skyward.*

góet'úún [gátú:n] *adv. opposite, beyond, at the shore.*

gǔ= [gǔ] *see gwě̀n.*

gùdá [gùdá] *n. unit. from Hausa.*

gúlùk [gúlùk] *see gúlùp.*

gùlùng [gùlùŋ] *n. dark corner.*

gúlùp [gúlùp] *n. type of large-sized bat. variant: gúlùk.*

gúlús [gúlús] *ideoph. belch loudly.*

gún [gún] *v.tr. stuff something (into a tight-fitting container).*

gùng [gùŋ] *n. type of fig tree, forest of fig trees.*

gùrùm [gùrùm] *n. person, people.*

gùrùp [gùrùp] *v.intr. form lumps.*

gwǎ [gʷǎ] *pron. he (addressee in speech act context) (SGM.LOG.AD.subject, independent).*

gwa [gʷa] *pron. him (SGM.LOG.AD.object).*

gwá [gʷá] *pron. his (SGM.LOG.AD.possessive).*

gwààn₁ [gʷà:n] *n. cocoyam.*

gwààn₂ [gʷà:n] *v.tr. 1) growl at someone. 2) make someone growl. v.intr. growl, howl, roar. n. growling.*

gwábnà [gʷábnà] *n. governor. from Hausa.*

gwàm [gʷàm] *v.tr. 1) deceive, disappoint someone. 2) pacify someone. n. deceiving, deceit.*

gwáté [gʷàthé] *n. yam dish.*

gwén [gʷén] *mod. associative plural (a person and his people, several objects of the same kind).*

gwě̀n [gʷě̀n] *pron. you (2PL.subject, independent).*

gǔ= [gǔ] *pron. you (2PL.subject).*

gwen [gʷən] *pron. you (2PL.object).*

gwén [gʷén] *pron. your (2PL.possessive).*

m̀m̀ùk [ʰm̀ùk] *pron. yours (free 2PL.possessive).*

m̀òesúk [m̀èshúk] *pron. for, to yourself (2PL.reflexive).*

súk [shúk] *n. your body. pron. yourself (2PL.reflexive).*

gwi [gʷì] *n. calabash.*

gyá [gʷá] *v.intr. become old.*

gyà [gʷà] *n. performance, dance, song.*

gyélgyé [gʷélgʷé] *n. quickness, superficiality.*

H [h]

hààm [hà:m] *n. water.*

hààm d'ám [hà:m dám] *n.* a children's game (diving into water).

hààm hààskè [hà:m hà:sk^hè] *n.* yellow.

hààm hèèt [hà:m hè:t] *n.* swimming.

hààm lòòn [hà:m lò:n] *n.* blue.

hààm s'wà [hà:m s^wà] *n.* drinking, a drink.

hààmsh'íng [hà:mʃíŋ] *n.* liquid porridge.

hààm tù [hà:m t^hù] *n.* thirst.

hààm yím [hà:m jí:m] *n.* green.

hààm d'è [hà:m dè] *see* **hàngòed'è**.

hààn [hà:n] *v.tr.sg.* climb something. *v.intr.sg.* climb, ascend. *plural:* **hùàn**.

hààr [hà:r] *v.tr.* gnaw, eat something tough (e.g., meat, nuts).

háás [há:s] *n.* flour.

hààs [hà:s] *n.* egg.

hààsyít [hà:sjí:t] *n.* eyeball.

háb'ál [hábál] *see* **hóól**.

háb'ár [hábár] *see* **hóór**.

hâi [hâi] *interj.* hey (calling attention). *from* Hausa. *variant:* **âi**.

hàk [hàk] *v.tr.* 1) expel (hiccup, vomit). 2) make someone hiccup or vomit.

hàm [hàm] *v.tr.* carve.

háng [hán] *n.* type of tree.

hàngòed'è [hàngòedè] *n.* water. *variant:* **hààm d'è**.

hár [hár] *conj.* until, even. *from* Hausa.

hàrààm [hàrààm] *v.tr.* harvest, cut with scythe or sickle.

hávàp [hávàp] *n.* broth, pepper soup.

háyák [háják] *n.* pregnancy.

háyàk [hájàk] *n.* ground squirrel.

héés [hé:s] *n.* coarse sand.

hèèt [hè:t] *v.tr.* set something in motion, move.

hě̀n [hě̀n] *pron.* I (1SG.subject, independent).

hèn [hən] *pron.* me (1SG.object).

màmààn [mà:mà:n] *pron.* mine (free 1SG.possessive).

mòesán [mèshán] *pron.* for, to myself (1SG.reflexive).

ń= [vⁿ] *pron.* I (1SG.subject).

nóe [nè] *pron.* my (1SG.possessive).

sán [s^hán] *n.* my body. *pron.* myself (1SG.reflexive).

hès [hès] *v.tr.sg.* 1) pierce or spear at something. 2) weave soft material (e.g., wool) 3) name, appoint someone. 4) burst into, expel something. *plural:*

hùàs.

hét [hét] *v.tr.* 1) hit something. 2) hit against something *n.* hitting.

hó [hó] *interj.* greeting.

hók [hók] *v.tr.* 1) dig out something (e.g., roots). 2) dig a deep hole or well.

=hok [høk] *mod.* the (definite article).

hóól [hó:l] *v.tr.* swell, fill or satisfy something or someone. *v.intr.* become swollen. *plural:* **háb'ál**.

hóór [hó:r] *v.tr.sg.* wear something, wrap a cloth around the body (wearing it). *plural:* **háb'ár**.

hóót [hó:t] *n.* big grinding stone.

hòtó [hòt^hó] *n.* photo, picture. *from* Hausa.

hóól [hó:l] *n.* hollow, opening that is formed by one thing joining another (e.g., hollow under bed, space between spread legs, arms or branches).

hóóm [hó:m] *v.tr.* hold something, hold on to something.

hòòs [hò:s] *n.* tooth.

hóót [hó:t] *v.tr.* shut, close something. *v.intr.* get shut, closed.

=**hòe** [hè] *clitic.* exactly.

hùlá [hùlá] *n.* hat, cap. *from* Hausa.

húrá [húrá] *n.* gruel, balls of cooked flour. *from* Hausa.

hùàn [hùàn] *see* **hààn**.

huàs [huàs] *see* **hès**.

huòe [huè] *n.* seed, grain.

hyámmà [h^hyámmà] *interj.* expressing disbelief.

I [i]

íbò [ʔíbò] *n.* Igbo.

ílmì [ʔílmì] *n.* education. *from* Hausa.

íná [ʔíná] *interr.* where. *from* Hausa.

índà [ʔíndà] *pron.* where (relative clause). *from* Hausa.

írì [ʔírì] *n.* kind, sort. *from* Hausa.

J [ʒ]

jààl [ʒà:l] *v.tr.* make someone belch. *v.intr.* belch. *n.* belching.

jààn [ʒà:n] *n.* twin.

jàng [ʒán] *n.* carelessness.

jàp [ʒáp] *see* **là₁**, **yàm**.

jàpjààn [ʒàpʒà:n] *n.* place name: Namu.

jàpnúún [ʒàpnú:n] *n.pl.* siblings.

jàp swààl [ʒàp s^{hw}à:l] *see* **là swààl**.

jàpt'éng [ʒàptéŋ] *see* **làt'éng**.

jár [ʒár] *adv.* straight, parallel. *from* Hausa.

jàr [ʒàr] *see* **jír**.

járáwá [ʒáráwá] *n.* Jarawa Bantu.

jél [zɛ́l] *v.tr.* surround something.

jī [zǐ] *pron.* he (speaker in speech act context) (SGM.LOG.SP.subject, independent).

jì [zi] *pron.* him (SGM.LOG.SP.object).

jí [zǐ] *pron.* his (SGM.LOG.SP.possessive).

jī= [zǐ] *pron.* he (SGM.LOG.SP.subject).

m̀m̀ù̀ù̀n [ˈm̀m̀ù̀:n] *pron.* his (free SGM.LOG.SP.possessive).

m̀d̀es̀ú̀ún [m̀d̀s̀h̀ù̀:n] *pron.* for, to himself (SGM.LOG.SP.reflexive).

s̀ú̀ún [s̀h̀ù̀:n] *n.* his body. *pron.* himself (SGM.LOG.SP.reflexive).

jìk [zǐk] *v.intr.* come from.

jìk [zǐk] *n.* type of small savanna tree or bush.

jìm [zǐm] *v.intr.* ferment.

jímáár [zǐmá:r] *n.* type of fish.

jír [zǐr] *v.intr.sg.* become jealous or envious. *n.sg.* jealousy, envy. *plural:* **jàr**.

jìràp [zǐràp] *see* **zàràp**.

jìrì [zǐrì] *n.* roan antelope.

jòs [zòs] *n.* place name.

jóóm [zó:m] *n.* chin.

júng [zúŋ] *ideoph.* dark red.

K [kʰ]

káám [kʰá:m] *v.intr.* become wide. *n.* width.

kààm [kʰà:m] *n.* festival, gathering, crowd.

kààt [kʰà:t] *v.tr.* greet someone in a casual way. *n.* greeting.

kádà [kʰádà] *see* **kédè**.

kàd'ák [kʰádák] *ideoph.* very hard.

kàfín [kʰáfín] *conj.* before. *from* Hausa.

kâi [kʰâi] *interj.* hey (disapproval, surprise). *from* Hausa.

kàl [kʰàl] *n.* froth.

kàm [kʰàm] *part.* resultative aspect.

kàmbók [kʰàmbók] *interj.* please.

kán [kʰán] *v.tr.* bend something sideways, incline or slant something. *v.intr.* become bent, inclined.

káng [kʰán] *v.tr.* join something (to something else), make a fire (by joining wood). *v.intr.* get joined or connected.

kángráng [kʰángrán] *n.* type of group dance.

kàràtú [kʰàràtʰú] *n.* studies. *from* Hausa.

kàt [kʰàt] *v.tr.* find, obtain, encounter. *part.* 1) maybe. 2) suddenly.

kátákó [kʰátʰákʰó] *n.* plank. *from* Hausa.

kàzá [kʰàzá] *adv.* such and such. *from* Hausa.

kè [k^hè] *n.* chicken, hen.

kédè [k^hédè] *part.* prohibitive. *from* Hausa. *variant:* **kádà**.

kéém [k^hé:m] *n.* type of tree.

kèm [k^hèm] *part.* certainly. *from* Hausa.

kèn [k^hèn] *v.tr.sg.* 1) excrete something (shit, fart). 2) make someone excrete
plural: **kóeráng**.

kènsúún [k^hèns^hú:n] *n.* late afternoon, early evening.

kèntí [k^hènt^hí] *n.* store. *from* Hausa.

kèp [k^hèp] *see* **kùp**.

kílíp [k^hílíp] *n.* kitchen. *variant:* **tílíp**.

kó [k^hó] *conj.* or, maybe. *part.* question tag (right?). *from* Hausa.

kó= [k^hó] *clitic.* 1) any (free choice). 2) every, each (universal quantification).
from Hausa.

kódàshikè [k^hódà^hík^hè] *conj.* even though. *from* Hausa. *variant:* **kódàyákè**.

kódàyákè [k^hódàj^hák^hè] *see* **kódàshikè**.

kóng [k^hój] *n.* stream, water body.

kông [k^hôŋ] *interr.* how much, many.

kóóm [k^hó:m] *n.* cold, windy season, time of harmattan (marking the beginning of the dry season).

kóór [k^hó:r] *v.intr.* become jealous or envious. *n.* jealousy, envy.

kóeráng [k^héráŋ] *see* **kèn**.

kòerè [k^hàrè] *n.* pied crow.

kóerém [k^héram] *v.tr.* take a large amount. *v.intr.* become a large amount, increase.

kú [k^hú] *v.tr.* coil something up. *v.intr.* get into a coiled-up position (e.g., sleeping coiled up because of the cold, people sitting in the presence of elders with their legs coiled to the side).

kúk [k^húk] *v.tr.* bark at something. *n.* barking.

kùk [k^hùk] *n.* tree stump.

kúl [k^húl] *see* **̀nkúl**.

kúlúŋ [k^húlúŋ] *n.* wild vine.

kúm [k^húm] *v.intr.* behave foolishly.

kùm [k^hùm] *n.* name of a masquerade.

kúmá [k^húmá] *part.* also, too, likewise. *from* Hausa.

kún [k^hún] *v.tr.* count. *variant:* **wún**.

kúŋ [k^húŋ] *n.* leopard.

kùp [k^hùp] *n.* lake, pond. *variant:* **kèp**.

kùr [k^hùr] *n.* chieftaincy title.

kúrgòedé [k^húrgòédé] *n.* riddle, puzzle.

kùrkí [k^hùrk^hí] *n.* archaic name.

kús [k^hús] *adv.* near. *from* Hausa.

kùs [k^hùs] *v.tr.* rub at skin or leather to make it soft, soften.

kùt [k^hùt] *v.tr.* talk about something. *n.* talking.

kuêt [k^huêt] *see kwêt.*

kúút [k^hú:t] *adv.* only, just.

kwá [k^{hw}á] *see ñkwá.*

kwáán [k^{hw}á:n] *n.* Jukun.

kwài [k^{hw}ài] *interj.* no.

kwàk₁ [k^{hw}àk] *n.* tibia, lower leg.

kwàk₂ [k^{hw}àk] *v.tr.* make something smooth, polish something. *v.intr.* become smooth.

kwálbá [k^{hw}álbá] *n.* bottle. *from* Hausa.

kwán [k^{hw}án] *v.tr.* 1) spill, throw away (many things). 2) throw at something. *v.intr.* become thrown or spilled.

kwáp [k^{hw}áp] *n.* spear.

kwàp [k^{hw}àp] *v.tr.sg.* knock, hit at something. *n.sg.* knocking. *plural:* kwàràp.

kwáram [k^{hw}áram] *n.sg.* slave. *plural:* sháram.

kwàràp [k^{hw}àràp] *see kwàp.*

kwàt [k^{hw}àt] *n.* communal hunt (for bigger animals), usually lasting for several days.

kwàtí [k^{hw}àt^hí] *n.* box. *from* Hausa.

kwêt [k^{hw}êt] *n.* adze. *variant:* kuêt.

kyák [k^hjá:k] *v.tr.* crack or split something. *v.intr.* get cracked, split.

kyàlàp [k^hjàlàp] *see kyàp.*

kyàp [k^hjàp] *v.tr.sg.* cut, chip off. *plural:* kyàlàp.

kyàt [k^hjàt] *see ñkyàt.*

kyèm [k^hjàm] *n.* blood. *variant:* tyèm.

kyôklók [k^hjàklók] *adv.* 1) few, little. 2) small. *variant:* tyôklók.

kyóók [k^hjó:k] *n.* type of tree.

kyóóp [k^hjó:p] *n.* (good) health. *variant:* tyóóp.

K' [k]

k'á [ká] *n.sg.* head. *relator.sg.* 1) on top of, above. 2) of, on account of (stimulus of experiencer verbs). 3) about (content of speech act verbs). 4) be busy at something. *plural:* k'ék.

k'á bí mímòè [ká bí 'n^mè] *interr.* why.

k'á b'ál [ká bál] *n.* hardheadedness.

k'á mímòè [ká 'n^mè] *interr.* why.

k'áb'ál [kábál] *n.* crab.

k'áb'án [kábán] *see k'óón₂.*

k'áf'á [káfá] *see k'áp'á.*

k'am₁ [kám] *n.* twig.

k'ám₂ [kám] *v.tr.* 1) try out or test something (by measuring its dimension or distance), compare (through measuring), aim a weapon at something (through measuring the distance). 2) try out on someone, demonstrate to someone, instruct someone. *n.* a measure.

k'án [kán] *see k'éń.*

k'áng₁ [kán] *v.tr.* make someone confused. *v.intr.* become confused.

k'áng₂ [kán] *v.tr.* guard, protect, look after something, wait for something.

k'ánglú [kánlú] *n.* chieftaincy title.

k'àp [káp] *v.tr.* harvest, dig up or cut with hoe.

k'àpìn [káp^hìn] *n.* roof.

k'áp'á [kápá] *n.* rice. *from Hausa. variant: k'áf'á.*

k'áràm [káràm] *n.* mat.

k'át [kát] *v.tr.* help someone.

k'ät [kät] *v.tr.sg.* 1) measure out grains. 2) distribute (grains) to someone. *plural: k'óeréng.*

k'è [kè] *v.tr.* be sufficient, enough for something or someone. *v.intr.* be sufficient, enough.

k'één [ké:n] *adv.* indeed.

k'ék [kók] *see k'á.*

k'él [kál] *see k'óelèng.*

k'ém [kém] *adv.* different. *variant: k'épmàng.*

k'éń [kán] *n.sg.* mother's brother, sister's child. *plural: k'án.*

k'ép [káp] *v.intr.* become short (of sticks, roads, people).

k'épmàng [kápman] *see k'ém.*

k'írìp [kírìp] *ideoph.* completely face down.

k'óng [kóng] *n.* type of large snake.

k'ónkwáán [kóngk^{hw}á:n] *n.* groundnut, peanut.

k'óón₁ [kó:n] *n.* bush cow, dwarf buffalo.

k'óón₂ [kó:n] *v.tr.sg.* 1) place something face down. 2) bake root crops (under a face-down pot). 3) become face down in relation to something. *v.intr.sg.* become face down. *plural: k'áb'án.*

k'óóm [kó:m] *v.tr.* strengthen something. *v.intr.* become strong, courageous. *n.* strength.

k'òòn [kò:n] *n.* type of large snake, non-poisonous.

k'óelèng [kólèŋ] *v.tr.* hear, understand, smell. *variant: k'él.*

k'òerèk [kèrèk] *v.tr.* 1) remember something or someone. 2) remind someone (of something).

k'óeréng [kéréŋ] *see k'ät.*

k'úl [kúl] *v.tr.* strike at something, hit at the top of something.

k'úm [kúm] *n.* navel (of mammals), stalk (of fruits).

k'úmpyùèr [kúmp^{hj}ù:r] *n.* chieftaincy title.

k'ún [kún] *num.* three.

k'úr [kúr] *n.* tortoise, water turtle.

k'ùr [kùr] *v.tr.* heap something up, bend something into a hook. *v.intr.* become heaped up or hooked.

k'út [kút] *v.tr.sg.* put in a coiled or crouching (e.g., snakes, humans, ropes) or rumpled (e.g., cloth, paper) position. *v.intr.sg.* coil, curl up, crouch, rumple.
plural: **k'wàt**.

k'úúr [kú:r] *v.tr.* burn something. *v.intr.* become burnt.

k'úún [kú:n] *n.* salt.

k'wák₁ [k'wák] *n.* type of fish with strong spikes, lives in standing water.

k'wák₂ [k'wák] *v.tr.* 1) knock, hit something. 2) knock at something.

k'wákták [k'wákt^hák] *n.* water snake.

k'wál [k'wál] *v.tr.* talk. *n.* talking.

k'wálám [k'wálám] *see* **k'wám**.

k'wám [k'wám] *n.* ear (of animal), leaf (of plant). *variant:* **k'wálám**.

k'wàm [k'wàm] *n.* bambara nut.

k'wát [k'wát] *v.ditr.* pay someone something. *v.tr.* 1) pay back something. 2) pay for someone's benefit, pay for goods. *n.* paying, payment.

k'wàt [k'wàt] *see* **k'út**.

k'wò [k'wò] *n.* K'wo Goemai.

k'wòzèm [k'wòzèm] *n.* proper name.

k'yák [k'ák] *n.* heart, neck. *variant:* **t'yák**.

k'yákláng [k'áklán] *n.* life. *variant:* **t'yákláng**.

k'yám [k'ám] *v.tr.* 1) taste, try, experience. 2) have never / ever done. *n.* testing, tasting.

k'yán [k'án] *n.* name of a masquerade.

k'yáng [k'áj] *n.* rope.

k'yàng [k'àŋ] *n.* small hoe with triangular blade.

k'yàp [k'àp] *v.tr.* instruct, correct, berate someone. *n.* quarrel.

k'yàs [k'às] *v.tr.* 1) spit out saliva. 2) make someone spit.

k'yòng [k'òŋ] *n.* meal.

K [k'] (Hausa loans only)

k'árà [k'árà] *v.tr.* repeat. *from* Hausa.

k'áuyè [k'áujè] *n.* village. *from* Hausa.

k'ókárí [k'ók'árí] *n.* effort. *from* Hausa.

k'úsà [k'ús^hà] *n.* nail. *from* Hausa.

L [l]

lá₁ [lá] *v.tr.* pain someone. *n.* pain.

lá₂ [lá] *see d'á.*

là₁ [là] *n.sg.* 1) child, offspring. 2) small, little (diminutive). *mod.sg.* small, little (diminutive). *plural: jáp. variant: lòe=.*

là₂ [là] *v.tr.sg.* produce, give birth. *plural: b'é, b'ák.*

ládàbí [ládàbí] *n.* respect, good manners. *from Hausa.*

lál [lál] *v.tr.* 1) make a mistake in something. 2) make someone err.

láng [láj] *v.tr.sg.* hang or move something within a location. *v.intr.sg.* hang, be moving (within a location). *n.sg.* life. *plural: léng.*

làng [làn] *v.intr.sg.* 1) hang, move (progressive aspect). 2) deliberately keep on doing (progressive aspect). *plural: lèng.*

láng- [láj] *cl.sg.* hang, move. *plural: léng-*.

làngòèdé [làngòèdé] *v.tr.* begin something. *v.intr.* begin, start. *variant: tàngòèdé.*

làp [làp] *v.tr.* 1) receive. 2) answer.

là swààl [là s^{hw}à:] *n.sg.* young man, youth. *plural: jáp swààl.*

lát [lát] *v.tr.* finish something. *v.intr.* finish. *part.* anterior aspect.

látk'wál [látk'wál] *n.* proper name.

làt'éng [làtér] *n.sg.* fruit. *plural: jàpt'éng.*

láyì [lájì] *n.* lane. *from Hausa.*

lé₁ [lé] *n.* goods, tools, load, clothes.

lé₂ [lé] *adv.* a bit, a small part.

lêfí [lêfí] *n.* mistake. *from Hausa.*

lèmú [lèmú] *n.* orange. *from Hausa.*

léng [lér] *see láng.*

lèng [lèr] *see láng.*

lèng- [lér] *see láng-*.

ligyà [lig'à] *n.* nightjar, nighthawk.

líís [lí:s] *n.* tongue.

líít [lí:t] *n.* lion.

lín [lín] *v.intr.sg.* become dried up, dawn (of the dry season, of a hot day). *plural: lyán.*

lókàshí [lók^{hà}shí] *n.* time. *from Hausa.*

lóng [lór] *n.* chief, chieftaincy.

lóngp'uán [lórpuán] *n.* proper name.

lòngvilip [lòrvìlip] *n.* 1) cobweb. 2) paper, book.

lòòn [lò:n] *n.* cloud.

lòe [lò] *v.tr.* put.

lòe= [lò] *see lú.*

lòe= [lò] *see là₁.*

lòeb'áng [lòbáŋ] *n.* oryx.

lòet'úk [lètúk] *n.* market.

lú [lú] *n.* settlement (house, compound, village, town). *adv.* home. *variant:* lóe=.

lúdè [lúdè] *n.* calabash spoon. *from* Hausa.

lù mìgùrùm [lù mìgùrùm] *n.* place name: Gidan Masaka. *adv.* in Gidan Masaka.

lù nyú [lù n'jú] *n.* place name: Bakin Ciyawa. *adv.* in Bakin Ciyawa.

lúún [lú:n] *n.* dry season.

lúút [lú:t] *v.tr.sg.* 1) be afraid of something. 2) make someone be afraid. *v.intr.sg.* be afraid. *n.sg.* fear. *plural:* lwát.

lwá [l'wá] *n.* animal, meat, flesh.

lwát [l'wát] *see* lúút.

lyàk [l'jàk] *v.tr.* 1) throw something away. 2) throw at something.

lyán [l'ján] *see* lín.

M [m]

má [má] *part.* too, also, even, still. *from* Hausa.

mà [mà] *v.tr.* surpass, exceed. *n.* superiority, majority.

máám'b'yál [má:m'b'jàl] *n.* place name: Biembiem.

mààr [mà:r] *v.tr.* farm. *n.* 1) farming, farm, field. 2) millet.

mági [mági] *n.* maggi, instant soup mix. *from* English.

mákárántá [mák^háránt^há] *n.* school. *from* Hausa.

màlàk [màlàk] *v.tr.* be drawy or slimy (of okra), be silky (of cloth), be troublesome (of a person) in relation to something. *v.intr.* be drawy, slimy, silky, troublesome. *n.* drawiness, silkiness.

mán [mán] *part.* negative irrealis, prohibitive.

màn [màn] *v.tr.* get to know or understand.

màng [màŋ] *v.tr.sg.* 1) take, pick up, lift. 2) pass something on to someone. *v.tr.* 1) assume that. 2) keep on doing. 3) start to do. *v.intr.sg.* stop. *n.sg.* lifting. *plural:* wàr.

màngáp [màŋgáp] *n.* name of a masquerade.

mángòrò [màŋgòrò] *n.* mango. *from* Hausa.

màràp [màràp] *see* mât₂.

màshà [mà^hà] *n.* female friend, lady. *variant:* mâtshà.

mât₁ [mât] *n.sg.* woman, wife. *plural:* shàràp.

mât₂ [mât] *v.tr.sg.* step (on a ride, vehicle, animal), dance. *v.intr.sg.* step on or over something. *plural:* mâràp.

mâtshà [mât^hà] *see* màshà.

màbái [m'nbái] *n.* large calabash, used for carrying or storing things.

- m̀bà`nè** [ˈn̄bà`nè] *n.* loincloth, made of skin.
m̀bél [ˈn̄bél] *n.* pigeon. *variant:* **bél**.
m̀b'áizwám [ˈn̄báizwám] *n.* jackal.
m̀b'èl [ˈn̄bèl] *adv.* a lot, much, many.
m̀b'óólshàt [ˈn̄bó:lʃhàt] *n.* type of bat (small, dark color).
mé₁ [mé] *num.* one (used in counting only).
mé₂ [mé] *part.* really, after all.
mè [mè] *n.* barn, granary.
mèèn [mè:n] *v.intr.* be raw (of food), awake (of humans), truthful (of speech).
méét [mé:t] *adv.* aimless.
mèl [mèl] *v.tr.* haunt someone. *v.intr.* become haunted.
mě̀n [mě̀n] *pron.* we (1PL.subject, independent).
men [mən] *pron.* us (1PL.object).
mén [mən] *pron.* our (1PL.possessive).
m̀mèn [ˈn̄mèn] *pron.* ours (free 1PL.possessive).
mõe= [mõ] *pron.* we (1PL.subject).
mòesém [mòs'hém] *pron.* for, to ourselves (1PL.reflexive).
sém [s'hém] *n.* our body. *pron.* ourselves (1PL.reflexive).
m̀fèt [ˈn̄fèt] *n.* mosquito.
m̀f'óóp [ˈn̄f'ò:p] *n.* tsetse fly.
m̀f'yél [ˈn̄f'yél] *adv.* quick, fast.
mì [mì] *v.tr.sg.* be related to someone. *n.sg.* blood relationship. *plural:* **myà**.
m̀ínti [m̀ínti] *n.* minute. *from* Hausa.
m̀is [m̀is] *n.sg.* man, husband. *plural:* **dààs**.
m̀isk'á [m̀iská] *n.sg.* brother in law. *plural:* **dàsk'ék**.
m̀isk'óóm [m̀iskó:m] *n.sg.* elder. *plural:* **dàsk'óóm**.
m̀m [m̀:] *interj.* yes (male speaker).
m̀mà`àn [ˈn̄mà`àn] *see* **hě̀n**.
m̀màk [ˈn̄màk] *see* **gõe**.
m̀màt [ˈn̄màt] *see* **dõe**.
m̀mèn [ˈn̄mèn] *see* **mě̀n**.
m̀mìk [ˈn̄mìk] *see* **yõe**.
m̀mìt [ˈn̄mìt] *see* **yõe**.
m̀mòe [ˈn̄mòe] *interr.* what.
m̀mùk [ˈn̄mùk] *see* **ní**, **gwě̀n**. *part.* belonging to, possessive.
m̀mùt [ˈn̄mùt] *see* **dwě̀n**.
m̀mùèp [ˈn̄mùèp] *see* **muèp**.
m̀mù`n [ˈn̄mù`n] *see* **jĩ**.
m̀m'`m [m̀m'`m] *see* **á'`à**.
m̀móló [m̀móló] *n.* guitar. *from* Hausa.
m̀móng [m̀món] *v.tr.* study something closely, aim at something carefully.
m̀mòr [m̀mò:r] *v.intr.* become oily.

móós [mó:s] *n.* hospitality, visit.

mótò [mót^hò] *n.* car. *from* Hausa. *plural:* **mótóshí**.

mótóshí [mót^hóʃ^hí] *see* **mótò**.

môu [môu] *part.* negation.

móór [mó:r] *v.tr.* bear something, be patient with something. *v.intr.* be patient.

mõe = [mǎ] *see* **mě̃n**.

mòe- [mè] *see* **gòe-₂**.

mòe- [mè] *pref.* locative (occurs only in place names in present-day language).

mòeb'óólnáán [mèbó:lná:n] *see* **gòeb'óólnáán**.

mòed'é̀mèn [mèdémèn] *see* **gòed'é̀mèn**.

mòeká [mèk^há] *n.* drizzling rain.

mòekwáán [mèk^{hw}á:n] *adv.* south.

mòek'wò [mèk^wò] *n.* place name: Kwande. *adv.* in Kwande.

mòelép [mèláp] *v.tr.* wink eyes. *v.intr.* wink

mòemâi [mèmâi] *n.pl.* people, strangers.

móenàng [ménàŋ] *see* **góenàng**.

móenyé [méné] *see* **góenyé**.

mòep'úóe [mèp^ué] *see* **gòep'úóe**.

móeríp [mèríp] *n.* soul, spirit.

mòesák [mès^hák] *see* **gõe**.

mòesán [mès^hán] *see* **hě̃n**.

mòesát [mès^hát] *see* **dõe**.

mòesék [mès^hék] *pron.* for, to self.

mòesém [mès^hém] *see* **mě̃n**.

mòesúk [mès^húk] *see* **gwě̃n**.

mòesút [mès^hút] *see* **dwě̃n**.

mòesúún [mès^hú:n] *see* **jĩ**.

mòeshààr [mèʃ^hà:r] *see* **gòeshà**.

mòeshík [mèʃ^hík] *see* **yõe**.

mòetókmúút [mèt^hókmú:t] *see* **gòetókmúút**.

mòet'éknáán [mètókná:n] *see* **gòet'ánáán**.

m̀p̀uóe m̀p̀uóe [ˈn̄p̄^huó ˈn̄p̄^huó] *adv.* always.

m̀p'áng [ˈn̄p̄áj] *adv.* north.

m̀p'at [ˈn̄p̄át] *n.* broom.

m̀p'úng [ˈn̄p̄úŋ] *n.* dust.

mú [mú] *part.* question tag (to seek confirmation).

mùdùùt [mùdù:t] *n.* place name: Shendam. *adv.* in Shendam.

múk [múk] *see* **ní**.

mùrú [mùrú] *n.* fig tree.

músù [mús^hù] *n.* cat.

mùtáné [mùt^háné] *n.pl.* people. *from* Hausa.

mùtùrú [mùt^hùrú] *n.* cattle. *from* Hausa.

múút [mú:t] *v.tr.sg.* die or long for something. *v.intr.sg.* die. *n.sg.* 1) dying, death. 2) traditional religion. *plural*: **múáráp**.

mụà [mụà] *n.* liquid (e.g., tears, milk, honey, juice).

mụààn [mụà:n] *v.tr.sg.* 1) go or travel by some means of transport. 2) go to do something. *v.intr.sg.* go, walk, journey. *n.sg.* walking, journey. *plural*: **mụèn**.

mụài [mụài] *n.* fellow.

mụák [mụák] *v.tr.* suck at, eat juicy food (e.g., fruit).

mụàlám [mụàlám] *n.* type of tuber, used for producing a dish for special occasions.

mụáráp [mụáráp] *see* **múút**.

mụèn [mụèn] *see* **mụààn**.

mụềp [mụềp] *pron.* 1) they (3PL.subject, independent). 2) they (impersonal).

mụềp [ˈmụềp] *pron.* theirs (free 3PL.possessive).

mụep [mụep] *pron.* them (3PL.object).

mụép [mụép] *pron.* their (3PL.possessive).

ụềp [ʔmụềp] *pron.* 1) they (3PL.subject). 2) they (impersonal).

mụèr [mụèr] *n.* oil, fat, butter, perfume.

mụèrb'áng [mụèrb'áng] *n.* palm oil.

mụèrgwèr [mụèrgwèr] *n.* type of fish.

mụès [mụès] *n.* beer, alcohol.

mụúr [mụ:r] *v.tr.* steal. *n.* 1) stealing, theft. 2) thief.

mụà [m'ạ] *see* **mì**.

mụálap [m'álap] *v.tr.* shine, flicker the eyes. *v.intr.* shine, glitter (of, e.g., adornments, lightning).

N [n]

ñ [ˈn] *see* **hěn**.

ń- [ˈn] *pref.* adverbializer (in demonstrative word).

ń-₁ [ˈn] *pref.* 1) location. 2) with (comitative, instrumental, accompaniment, direct and indirect causation). 3) to, for (benefactive).

ń-₂ [ˈn] *pref.* 1) adverbializer. 2) introduces new referents (presentative prefix).

ń-₃ [ˈn] *pref.* 1) permissive modality. 2) immediate future tense. 3) progressive aspect.

nă [nă] *v.tr.* see.

náán [ná:n] *n.* God.

náántwáám [ná:nt^{hw}á:m] *n.* proper name.

náánzém [ná:nzém] *n.* proper name.

nàgàn [nàgàn] *n.* place name: Kurgwi.

nàgú [nàgú] *n.* cattle egret.

náirà [náirà] *n.* Naira (Nigerian currency).

nàk [nàk] *v.tr.* fetch (water, food), go after men (said of women).

nàkú [nàk^hú] *n.* 1) grandparent, great grandparent. 2) in-law.

nàk'ùnsh'im [nàk^húⁿʃim] *n.* chameleon.

ná ò- [ná^hò] *part.* introduces new referents (presentative particle).

nán [nán] *see* **f'yér**.

náng [nán] *dem.* that, distal demonstrative root.

nàsèl [nàs^hèl] *see* **nàsèr**.

nàsèr [nàs^hèr] *n.* 1) grasshopper. 2) wife of rabbit (in folktales). *variant:* **nàsèl**.

nàyít [nàjít] *n.* mirror.

ndá [ˈndá] *n.* father.

ndáp'yà [ˈndáp'à] *n.* type of field mouse or rat.

ndè [ˈndè] *n.* another (of a specified set). *adv.* another, another time.

ndòkndók [ˈndòkˈndók] *adv.* before yesterday. *variant:* **dòkndók**.

ndòe [ˈndòe] *conj.* 1) and. 2) to, with. (addressee of speech act verbs).

ndòe= [ˈndòe] *mod.* a certain (specific-indefinite article). *variant:* **'dòe**.

ndùnì [ˈndùnì] *adv.* much, many, in abundance.

ndúús [ˈndú:s] *n.* type of large cricket. *variant:* **dúús**.

ndùùsnáán [ˈndù:sná:n] *n.* type of small cricket. *variant:* **dùùsnáán**.

ndyén [ˈndjén] *see* **ndyèndyén**.

ndyèndyén [ˈndjèndjén] *adv.* yesterday. *variant:* **dyèndyén**, **ndyén**.

nd'àng [ˈndãŋ] *interr.* how.

nd'àsòe [ˈndâshó] *see* **nd'àsòenòe**.

nd'àsòeńd'éńnòe [ˈndâshóˈndéˈnòe] *see* **nd'àsòenòe**.

nd'àsòenòe [ˈndâshónòe] *adv.* now, nowadays, in modern times. *variant:*

nd'àsòe, **nd'àsòeńd'éńnòe**.

nd'ě [ˈndě] *see* **'d'ě**.

nd'è [ˈndê] *see* **'d'ě**.

nd'in [ˈndin] *n.* type of bat (large, black color).

nd'òòlk'úún [ˈndò:lkú:n] *n.* gecko.

nd'ùùn [ˈndù:n] *n.* inside. *relator.* in, inside of.

nd'yén [ˈndjén] *see* **d'yén**.

nd'yérkúm [ˈndjérkúm] *n.* type of ant (small, red color).

nè [nè] *v.tr.* make someone tired. *v.intr.* become tired. *n.* tiredness.

nèèn [nè:n] *n.* hunger, famine.

nék [nák] *v.intr.* become thick (of liquid, gruel). *n.* thickness.

nèm [nèm] *v.tr.* 1) refuse (to give) something. 2) refuse someone (something).

n. refusing, refusal.

néng [néŋ] *n.* cow, cattle.

ngàm [ˈngàm] *adv.* much, many, full of.

ngàn [ˈngàn] *n.* proper name.

ngérgék [ˈngérgék] *v.intr.* become round.

̀ngét [ˈngét] *n.* woodworm.

̀ngók [ˈngók] *n.* type of small locust or grasshopper.

̀ngólóbé [ˈngólóbé] *n.* type of fish (long and flat, very bony).

̀ngóng [ˈngóng] *n.* night. *adv.* at night.

̀ngòòtdùgút [ˈngò:tdùgút] *n.* place name: Ungwan Rina. *adv.* in Ungwan Rina.

̀ngòòtlóng [ˈngò:tlóng] *n.* place name: Demshin. *adv.* in Demshin.

̀ngòegàn [ˈngòegàn] *n.* ring.

̀ngúm [ˈngúm] *n.* beetle.

̀ngùmgóór [ˈngùmgó:r] *n.* type of fish (small and round, spiky). *variant:* **góór**.

̀ngúúl [ˈngú:l] *n.* ground hornbill.

̀ngúút [ˈngú:t] *n.* type of small locust or grasshopper.

̀ngwá [ˈngwá] *n.* 1) suburb, quarter. 2) place name: Ungwan Dad'i. *from* Hausa.

̀ngwáshù [ˈngwáʃhù] *n.* type of pigeon (grey with dark markings, red rings around eyes).

̀ngyára [ˈngjára] *n.* black kite.

̀ngyarák [ˈngjarák] *n.* male cricket.

̀nhàt [ˈnhàt] *n.* wind, air.

ní₁ [ní] *n.* elephant.

ní₂ [ní] *pron.* he, she, it (3SG.subject, independent).

múk [múk] *pron.* his, her, its (3SG.possessive).

m̀m̀m̀úk [ˈm̀m̀m̀úk] *pron.* his, hers, its (free 3SG.possessive).

ni [ni] *pron.* him, her, it (3SG.object).

ní= [ní] *pron.* he, she, it (3SG.subject).

ník [ník] *v.intr.* make an effort.

nín [nín] *v.tr.* 1) draw attention to something (by pointing at it), introduce someone. 2) make someone attend (to something), show someone (something).

̀njà [ˈnzà] *n.* type of termite.

̀njálàng [ˈnzálàŋ] *n.* type of wasp or hornet.

̀njír [ˈnzír] *n.* small honeybee.

̀njòòn [ˈnzò:n] *n.* grey heron.

̀nkàng [ˈnkàŋ] *adv.* before.

̀nkóelèng [ˈnkʰólèŋ] *n.* hawk.

̀nkúl [ˈnkʰúl] *adv.* left. *variant:* **kúl**.

̀nkwá [ˈnkʰwá] *part.* moreover, however. *from* Hausa. *variant:* **kwá**.

̀nkyá [ˈnkʰjá] *n.* vulture.

̀nkyàt [ˈnkʰjàt] *adv.* equal, straight, square. *variant:* **kyàt**.

̀nkyèm [ˈnkʰjèm] *n.* front. *relator.* in front of, before. *variant:* **̀ntyèm**.

̀nk'á nk'á [ˈnká ˈnká] *adv.* continuously.

̀nk'átà [ˈnkátà] *n.* hat.

̀nk'één [ˈnké:n] *n.* thorn.

̀nk'óng [ˈnkóŋ] *n.* back. *relator.* at the back, behind.

- ̀̀nk'óng₂** [ˈnkóŋ] *v.tr.sg.* make something small, decrease. *v.intr.sg.* become young, small. *plural: d'yén.*
- ̀̀nk'wà** [ˈnkʷà] *adv.* away.
- ̀̀nk'wák** [ˈnkʷák] *adv.* all (of a set).
- ̀̀nnà** [ˈnà] *n.* grandmother, old woman.
- ̀̀nnàng** [ˈnàŋ] *interr.* where.
- ̀̀nnòe** [ˈnòe] *dem.* this, proximal demonstrative root. *mod.* locative anaphor.
- ̀̀nnùk** [ˈnùk] *n.* whip.
- ̀̀noe** [nó] *see hën.*
- ̀̀noem̀̀uàt** [nómuàt] *n.* frog.
- ̀̀ns'è** [ˈnsè] *adv.* right. *variant: s'è.*
- ̀̀ns'één** [ˈsé:n] *adv.* truly. *variant: s'één.*
- ̀̀nshì₁** [ˈʃì] *n.* bee, honey.
- ̀̀nshì₂** [ˈʃì] *n.* Tiv.
- ̀̀nshik** [ˈʃìk] *n.* grandchild.
- ̀̀nsh'ám** [ˈʃám] *n.* louse.
- ̀̀nsh'aràp** [ˈʃàràp] *n.* type of ant (small, black color).
- ̀̀nsh'óng** [ˈʃóŋ] *n.* type of sparrow.
- ̀̀nsh'óngkwáráp** [ˈʃóŋkʰwáráp] *n.* swift, swallow.
- ̀̀nténg** [ˈntʰéŋ] *n.* hoopoe.
- ̀̀ntyèm** [ˈntʰjè̀m] *see nkyèm.*
- ̀̀nt'í** [ˈntí] *n.* proper name (son of rabbit in folktales).
- ̀̀nt'it** [ˈntit] *adv.* well.
- ̀̀nt'wá́láng** [ˈntwá́láng] *n.* sugar ant.
- ̀̀nú** [nú] *n.* sea, large-sized river.
- ̀̀nùk'úpsh'íp** [nùkúpʃíp] *n.* kingfisher.
- ̀̀nùng** [nùŋ] *v.tr.sg.* make someone become mature or ready. *v.intr.sg.* become mature or ready (e.g., ripe of fruit, cooked of food, experienced or clever of humans, healed of wounds). *n.sg.* maturity, readiness. *plural: nwáng.*
- ̀̀nùngyít** [nùŋjít] *n.* trick.
- ̀̀núún** [nú:n] *n.* mother.
- ̀̀nwǎ** [nwǎ] *pron.* they (addressee in speech act context) (PL.LOG.AD.subject, independent).
- nwa** [nʷa] *pron.* them (PL.LOG.AD.object).
- nwá** [nʷá] *pron.* their (PL.LOG.AD.possessive).
- ̀̀nwàm** [ˈnʷàm] *n.* type of fish (large, black color, living in muddy waters).
- ̀̀nwáng** [nʷáng] *see nùng.*
- ̀̀nwáp** [nʷáp] *v.intr.* become sticky. *n.* stickiness, glue, gum, wax.
- ̀̀nwò** [ˈnʷò] *see wò₁.*
- ̀̀nyààl** [njà:l] *v.intr.* be naturally thin or slender. *n.* thinness.
- ̀̀nyák₁** [n'ák] *v.tr.* rest oneself. *v.intr.* breathe. *n.* rest, breath.
- ̀̀nyák₂** [n'ák] *see nyáng.*

nyáng [n'áj] *v.tr.sg.* 1) refuse, hate, disagree. 2) make someone be in disagreement. *v.intr.sg.* hate, be in disagreement. *n.sg.* hating, refusing. *plural:* **nyák**.

nyàp [n'àp] *v.tr.* prepare, arrange something nicely, repair something.

nyè [n'è] *n.* matter, word. *conj.* because.

nyè- [n'è] *pref.* nominalizer (to derive speech acts and cognitive acts from verbs).

nyèb'óót [n'èb'ót] *n.sg.* acting rascally.

nyèd'úk [n'èdúk] *n.* stammering, stammer.

nyèd'úng [n'èdúŋ] *n.* secret.

nyèd'wò [n'èd'wò] *n.* debate, advice.

nyèlál [n'èlál] *n.* erring, mistake.

nyèràŋ [n'èràŋ] *n.* thinking, thought.

nyèryè [n'èr'è] *n.* lie, falsehood.

nyèsh'á [n'èšá] *n.* desiring, desire.

nyètàl [n'èt'hàl] *n.* question, asking.

nyèt'ém [n'ètám] *n.* telling, report.

nyè bí mímòe [n'è bí 'mà] *interr.* why.

nyè mímòe [n'è 'mà] *interr.* why.

nyèfé [n'èf'hé] *see nyègòepé.*

nyègòefé [n'ègèf'hé] *see nyègòepé.*

nyègòepé [n'ègèp'hé] *conj.* because. *variant:* **nyèpé**, **nyègòefé**, **nyèfé**.

nyègòesék [n'ègèš'hók] *conj.* because of this.

nyèpé [n'èp'hé] *see nyègòepé.*

nyét [n'át] *v.tr.* leave or abandon something.

nyít [n'ít] *n.* worm, maggot.

nyú [n'ú] *n.* chieftaincy title.

nzàng [n'zàŋ] *n.* type of tilapia fish.

Ng [ŋ]

ngháng [ŋáj] *n.* type of small monkey.

nghánghà [ŋájà] *n.* heron.

nghóng [ŋóŋ] *n.* bells.

O [o]

ó [ʔó] *interj.* yes (female speaker).

ò [ʔò] *part.* question tag (expecting an affirmative answer, whether / or question). *variant:* **wò**, **yò**.

òòt [ʔò:t] *v.tr.* make someone yawn. *v.intr.* yawn. *n.* yawning.

Oe [ə]

óerém [ʔérém] *n.* beans.

P [pʰ]

pà [pʰà] *see* **fà**.

pǎ [pʰǎ] *pron.* she (addressee in speech act context) (SGF.LOG.AD.subject, independent).

pa [pʰa] *pron.* her (SGF.LOG.AD.object).

pá [pʰá] *pron.* her (SGF.LOG.AD.possessive).

pààp₁ [pʰà:p] *n.* crowned duiker.

pààp₂ [pʰà:p] *v.intr.sg.* get hidden, lost. *plural:* **pàp**.

páár [pʰá:r] *v.tr.* send someone (on an errand). *n.* message, errand.

páát [pʰá:t] *num.* five.

pál [pʰál] *v.tr.* make something flower, blossom, germinate. *v.intr.* flower, blossom. *n.* flower, blossom.

pálàlà [pʰálàlà] *ideoph.* spread out, in disarray. *variant:* **pálàlàu**.

pálàlàu [pʰálàlàu] *see* **pálàlà**.

páng [pʰájŋ] *n.* puffadder.

pàp₁ [pʰàp] *n.* beard.

pàp₂ [pʰàp] *see* **pààp**₂.

pàrà [pʰàrà] *see* **fàrà**.

párá [pʰárá] *ideoph.* suddenly.

pàrú [pʰàrú] *see* **fàrú**.

pàt [pʰàt] *v.tr.* wipe, brush, rub lightly.

pé [pʰé] *see* **gòepé**.

pè [pʰè] *n.* place. *adv.* in a place.

pèk [pʰèk] *v.tr.* rub something (e.g., oil on body, feet on ground).

pèmb'ét [pʰèmbót] *see* **pènb'ét**.

pènb'ét [pʰènbót] *n.* intestines. *variant:* **pèmb'ét**.

pèp [pʰèp] *n.* master.

pér [pʰér] *n.* lynx.

píl [pʰíl] *v.tr.* watch.

pìn [pʰìn] *n.* hut, room.

pís [pʰís] *v.intr.sg.* become stingy. *plural:* **pyás**.

pìt [pʰìt] *n.* red monkey.

póól [pʰó:l] *v.tr.* hide or conceal something. *v.intr.* get hidden, concealed.

- póe** [p^hé] *v.ditr.* give someone something. *v.tr.* 1) give something away. 2) let or allow someone to do something.
- pòeb'ít** [p^hèbít] *adv.* remote past.
- pòedók** [p^hèdók] *adv.* remote past.
- pòef'ár** [p^hèfár] *num.* nine.
- pòegóng** [p^hègón] *n.* upper lip.
- pòek'ún** [p^hèkún] *see* **pùk'ún**.
- pòemóe** [p^hèmó] *num.* six.
- póenóe** [p^hénó] *adv.* thus, like this.
- pòepìn** [p^hèp^hìn] *see* **pùòepìn**.
- pòevél** [p^hèvél] *num.* seven.
- púk** [p^húk] *n.* type of tree.
- pùk'ún** [p^húkún] *num.* eight. *variant:* **pòek'ún**.
- pùmpò** [p^húmp^hò] *n.* pump. *from* Hausa.
- pùánáng** [p^huánáng] *adv.* there, yonder, far away.
- pùér** [p^huér] *v.tr.* fish, take out of water. *n.* fishing.
- pùè** [p^huè] *n.* mouth. *relator.* at the mouth, edge of.
- pùòepìn** [p^huèp^hìn] *n.* door, entrance. *variant:* **pòepìn**.
- pùòesh'íp** [p^huèshíp] *n.* place name: Bakin Kogi. *adv.* in Bakin Kogi.
- púúr** [p^hú:r] *v.tr.* boil leaves.
- pyá** [p^hjá] *v.tr.* make white or clean, make someone poor. *v.intr.* become white, clean, poor. *n.* whiteness, cleanliness, poverty.
- pyás** [p^hjá:s] *see* **pís**.
- pyêr** [p^hjêr] *n.* type of stone (used for scrubbing the heels).
- pyú** [p^hjú] *ideoph.* early in the morning.

P' [p]

- p'áán** [pá:n] *n.* type of fish.
- p'áár** [pá:r] *v.intr.* jump, bounce.
- p'ák** [pák] *v.tr.* pound something moist (e.g., yam, cassava, locust bean cake).
- p'áng** [páj] *n.* stone, hill, mountain.
- p'àng gàng** [pàŋ gàn] *see* **f'àng gàng**.
- p'às** [pàs] *n.* rainy season.
- p'én** [pán] *v.tr.sg.* 1) remove, take out. 2) save. *plural:* **p'uán**.
- p'ét** [pét] *v.tr.sg.* 1) resemble. 2) ooze out, produce something. *v.intr.sg.* exit, go out, appear. *plural:* **p'úát**.
- p'étb'ít** [pétbít] *adv.* after tomorrow.
- p'ét nìp'ét** [pét `n'pét] *adv.* after tomorrow.
- p'íring** [pírín] *v.tr.* turn, exchange, pour from one container into another. *v.intr.* turn around.

p'ít [pít] *n.* fishing net.

p'òòt [pò:t] *v.intr.* become narrow.

p'òebít [pèbít] *see* **p'òeb'ít**.

p'òeb'ít [pèbít] *adv.* later, earlier. *variant:* **p'òebít**.

p'òep'ét [pèpét] *ideoph.* sweat profusely.

p'úk [púk] *n.* calf (of the leg).

p'ùùr [pù:r] *adv.* well, very.

p'uán [puán] *see* **p'én**.

p'uánká [puánk^há] *adv.* west.

p'uát [puát] *see* **p'ét**.

p'úús [pú:s] *n.* sun. *adv.* time.

p'yán [p'án] *v.tr.sg.* 1) break, shatter something. 2) pain someone. *v.intr.sg.* 1) break, shatter. 2) feel pain. *plural:* **p'yáram**.

p'yáram [p'áram] *see* **p'yán**.

R [r]

rà [rà] *v.tr.* weave.

räng [rǎŋ] *v.tr.* think of something.

ráp [ráp] *v.tr.* hurry something or someone along. *v.intr.* make hurry, haste.

rás [rás] *see* **réés₂**.

réep [ré:p] *n.sg.* girl, daughter. *plural:* **zàráp**.

rèep [rè:p] *v.tr.* make something mixed up, entangled, confused. *v.intr.* become mixed, entangled, confused. *n.* mixing.

réés₁ [ré:s] *n.* place name.

réés₂ [ré:s] *v.tr.sg.* make someone lean, thin. *v.intr.sg.* become lean, thin. *n.sg.* leanness, thinness. *plural:* **rás**.

rèng [rèŋ] *v.tr.* make someone astonished. *v.intr.* become astonished.

rép [rép] *v.tr.* make someone itch. *v.intr.* itch. *n.* itching, itch.

rígá [rígá] *v.tr.* have already done. *from* Hausa.

rìgá [rìgá] *n.* gown, robe. *from* Hausa.

ròk [ròk] *v.tr.* make something sweet. *v.intr.* become sweet. *n.* sweetness.

rú [rú] *v.tr.sg.* enter into. *v.intr.sg.* enter. *plural:* **rwó**.

rúún [rú:n] *v.tr.sg.* insert, put into, put on clothing. *plural:* **rwán**.

rúún [rú:n] *n.* shade.

rùùnsék [rù:ns^hék] *n.* shadow.

rúúp [rú:p] *v.tr.* demolish something. *v.intr.* get demolished, collapse.

rwán [rwán] *see* **rúún**.

rwáng [rwán] *v.tr.* make someone mad. *v.intr.* become mad. *n.* madness.

rwó [rwó] *see* **rú**.

ryè [r'è] *v.tr.* lie about something.

S [sʰ]

sá [sʰá] *v.tr.* 1) make, dig something wide. 2) make, cause someone to do something. *from* Hausa.

sáám [sʰá:m] *v.intr.* sleep, settle or sink to the bottom.

sáán [sʰá:n] *v.tr.* clear, brighten something. *v.intr.* become clear, bright.

sábò ńdòè [sʰábò ńdè] *conj.* because of. *from* Hausa.

sái [sʰái] *conj.* then, only. *from* Hausa.

sák [sʰák] *see* **gõe**.

sàm [sʰàm] *v.tr.* 1) unload or lower something. 2) help someone unload. *v.intr.* descend, lodge.

sàmsàm [sʰàmsʰàm] *ideoph.* nothing at all.

sán [sʰán] *see* **hěn**.

sàp [sʰàp] *n.* axe.

sát [sʰát] *see* **dõe**.

sék [sʰək] *n. body. relator.* 1) at the body of. 2) to, with (addressee of some speech act verbs). *pron.* 1) self (reflexive). 2) intransitivizer (for verbs of contact and grooming).

sèk b'ét [sʰək bét] *relator.* at the body of.

sém [sʰém] *see* **měn**.

sén [sʰén] *v.tr.* be prohibited, taboo, forbidden to someone. *v.intr.* be prohibited, taboo, forbidden.

séng [sʰéŋ] *v.intr.* be far. *n.* distance. *adv.* far.

sílílí pàtátà [sʰílílí pʰàtʰàtʰà] *ideoph.* thin and branching out.

só [sʰó] *part.* and so. *from* English.

sómà [sʰómà] *v.tr.* begin. *from* Hausa.

sòsái [sʰòshái] *adv.* well, correctly. *from* Hausa.

sóól [sʰó:l] *n.* metal, money.

sóe [sʰé] *adv.* time.

sòesák [sʰèsʰák] *ideoph.* very white.

sù [sʰù] *v.tr.sg.* run into, excrete. *v.intr.sg.* run. *n.sg.* running. *plural:* **swò**.

súk [sʰúk] *see* **gwěn**.

súshè [sʰúshè] *v.tr.* cheat. *from* Hausa.

sút [sʰút] *see* **dwěn**.

suòè [sʰuè] *v.tr.sg.* make something long. *v.intr.sg.* become long. *n.sg.* length. *plural:* **shàk**.

súún [sʰú:n] *see* **jĩ**.

sùùr [sʰù:r] *adv.* rectangular.

swààl [sʰwà:l] *n.* dance, feast.

swár [sʰwár] *v.tr.* 1) laugh about. 2) make someone laugh. *v.intr.* laugh. *n.* laughing.

swát [s^{hw}át] *v.tr.* clean something by pulling out loose strands (e.g., grass from roof, combing hair).
swò [s^{hw}ò] *see sù.*

S' [s]

s'á [sá] *n.* 1) hand, lower arm, handle. 2) measure (length of the lower arm). 3) handiwork.

s'à [sà] *see s'àyò.*

s'áár [sá:r] *n.* egusi, melon seed.

s'àl [sàl] *v.intr.* slip.

s'am [sàm] *v.tr.* 1) grind something. 2) grind on a grinding stone. *n.* flour, powder, ground paste.

s'án [sán] *v.intr.* 1) slip. 2) be slippery.

s'ár [sár] *num.* ten.

s'áráp [sáráp] *see s'éét.*

s'àyò [sàjò] *part.* 1) lest. 2) prohibitive. *variant:* s'à.

s'è [sè] *see òs'è.*

s'één [sé:n] *see òs'één.*

s'éét [sé:t] *v.tr.sg.* 1) buy. 2) sell. *plural:* s'áráp.

s'ék [sék] *v.tr.sg.* soak. *v.intr.sg.* become soaked, catch a cold. *plural:* sh'ák.

s'ém [sém] *n.* name.

s'em k'wál [sèm k^wál] *n.* proverb, saying.

s'ét [sét] *n.* 1) bush, grass. 2) wilderness.

s'ók [sók] *v.tr.sg.* hide, lose. *plural:* s'wák.

s'ónk'wà [sónk^wà] *n.* maize.

s'óóm [só:m] *n.* horn (of animal), trumpet.

s'òòt [sò:t] *n.* witchcraft.

s'óe [sé] *v.tr.* eat. *v.intr.* feed. *n.* 1) eating. 2) food.

s'úk₁ [súk] *n.* rubbish.

s'úk₂ [súk] *see s'úp.*

s'úp [súp] *v.tr.sg.* wash, beat. *n.sg.* washing, beating. *plural:* s'wáp. *variant:* s'úk.

s'úún [sú:n] *v.tr.* dream of or about something.

s'úúr [sú:r] *v.intr.* become old or worn-out (of things).

s'wá [s^wá] *n.* guineacorn.

s'wà [s^wà] *v.tr.* drink. *v.intr.* feed water, water.

s'wák [s^wák] *see s'ók.*

s'wàlàk [s^wàlàk] *v.intr.* become pointed, sharp.

s'wáp [s^wáp] *see s'úp.*

Ts [s'] (Hausa loans only)

tsàkání [s'ák'hání] *relator*. middle. *from* Hausa.

Sh [ʃ^h]

shààr [ʃ^hà:r] *n.* friendship.

shàgàng [ʃ^hàgàŋ] *n.* place name.

shák [ʃ^hák] *n.* each other (reciprocal).

shàk₁ [ʃ^hàk] *v.tr.* select, choose, pick out something.

shàk₂ [ʃ^hàk] *see* **suòe**.

shál [ʃ^hál] *v.intr.* fight. *n.* fighting, war.

shàlibì [ʃ^hàlibì] *n.* gown.

shályén [ʃ^hályén] *n.* proper name.

shàm [ʃ^hàm] *n.* type of giant turtle.

shán [ʃ^hán] *v.intr.* enlarge, grow in size.

sháng₁ [ʃ^hán] *n.* small bag made of string.

sháng₂ [ʃ^hán] *v.tr.* glance at something.

sháráám [ʃ^háráám] *see* **kwáráám**.

shàràp [ʃ^hàràp] *see* **màt₁**.

shàt [ʃ^hàt] *v.tr.* knead. *n.* 1) kneading. 2) porridge, dumpling.

shél [ʃ^hél] *n.* game, play, joke.

shén₁ [ʃ^hén] *n.* beniseed.

shén₂ [ʃ^hén] *v.tr.* chase someone away.

shì [ʃ^hì] *n.* thigh.

shík₁ [ʃ^hík] *n.* knife.

shík₂ [ʃ^hík] *see* **yõe**.

shik'à [ʃ^híkà] *conj.* plus (to form numerals above ten).

shìl [ʃ^híl] *n.* shell.

shím [ʃ^hím] *n.* skin (of human, animal, root crop), leather. *variant:* **shìmsék**.

shìm [ʃ^hìm] *n.* yam.

shìmsék [ʃ^hìms^hók] *see* **shím**.

shìmt'ùk [ʃ^hìmtùk] *n.* loincloth.

shín [ʃ^hín] *v.tr.* 1) do. 2) try to do something. 3) make something happen. *v.intr.* happen.

shínd'óng [ʃ^híndóŋ] *n.* gift, present, alms.

shíng [ʃ^hín] *n.* mortar.

shíní [ʃ^híní] *adv.* today.

shíp [ʃ^híp] *n.* type of tree.

shità [ʃ^hít^há] *n.* pepper. *from* Hausa.

shòm [ʃ^hòm] *n.* rock rabbit, hyrax.

- shòòt** [ʃ^hò:t] *v.tr.* 1) coil, roll something up. 2) coil around something. *v.intr.* become coiled up.
shórà [ʃ^hó:rà] *n.* advice. *from* Hausa.
shóóm [ʃ^hó:m] *n.* guineafowl.
shùùr [ʃ^hù:r] *v.tr.* put in a squatting or pyramid-shaped position. *v.intr.* 1) squat down, sit on heels. 2) relieve oneself.

Sh' [ʃ]

- sh'á** [ʃá] *v.tr.* desire something.
sh'à [ʃà] *n.* rattle, used in masquerade dances.
sh'áán [ʃá:n] *n.* large-sized hoe.
sh'áát [ʃá:t] *n.* wing, shoulder.
sh'ài [ʃài] *v.tr.* show pride in something. *v.intr.* show pride. *n.* pride.
sh'ák [ʃák] *see* s'ék.
sh'âk [ʃâk] *see* t'át₂.
sh'âkùm [ʃâk^hùm] *n.* proper name.
sh'àn [ʃàn] *v.tr.sg.* 1) break (of ropes), circumcise. 2) break free, escape from something. *v.intr.sg.* break, get circumcised. *plural:* sh'àràng.
sh'áng [ʃáŋ] *v.tr.* be pleasant to someone. *v.intr.* be pleasant, enjoyable. *n.* pleasantness, enjoyment
sh'äng [ʃǎŋ] *v.tr.* hunt for animals (also for money, food), carried out by a single hunter or small groups of hunters. *n.* hunting, hunt.
sh'àràng [ʃàràŋ] *see* sh'àn.
sh'áráp [ʃáráp] *n.* fish.
sh'é [ʃé] *n.* leg, foot.
sh'è [ʃè] *v.tr.* 1) learn. 2) teach.
sh'él [ʃél] *n.* wound, sore.
sh'ép [ʃáp] *n.* 1) wood, timber. 2) tree.
sh'ì [ʃì] *v.tr.* deny something, refuse to acknowledge something.
sh'ilím [ʃilím] *ideoph.* very black.
sh'im [ʃím] *n.* iguana.
sh'in [ʃín] *v.tr.* be pitiful to someone. *v.intr.* be pitiful. *n.* need, poverty.
sh'íng [ʃíŋ] *v.tr.* mix liquid porridge (i.e., before the flour is added to it).
sh'íp [ʃíp] *n.* river.
sh'it [ʃít] *n.* work, usage.
sh'óón [ʃó:n] *n.* fingernail, toenail, claw, hoof.
sh'òòr [ʃò:r] *n.* duck.
sh'óól [ʃó:l] *n.* type of big locust, grasshopper.
sh'òòn [ʃò:n] *v.intr.* become heavy. *n.* heaviness.
sh'óór [ʃó:r] *v.tr.* make someone ashamed. *v.intr.* become ashamed. *n.* shame.

sh'úút [ʃú:t] *v.intr.* become important.

T [tʰ]

táb'à [tʰáɓà] *v.tr.* have never / ever done. *from* Hausa. *variant:* **tóeb'à**.

tàl [tʰàl] *v.tr.* 1) ask. 2) greet. *n.* greeting.

tàmtis [tʰàmtʰis] *n.* folktale, story.

tǎng [tʰǎŋ] *v.tr.* search, look for something.

tàngòedé [tʰàngèdè] *see* **làngòedé**.

táp₁ [tʰáp] *v.tr.sg.* 1) snap something (bones, sticks). 2) break out, burst into.
v.intr.sg. snap. *plural:* **táráp**.

táp₂ [tʰáp] *v.tr.* brew, boil drinks (e.g., gruel, beer).

tàp [tʰàp] *v.tr.* 1) show ignorance, deny knowledge of something. 2) be unknown to someone.

táráp [tʰáráp] *see* **táp₁**.

tásà [tʰásʰà] *n.* bowl. *from* Hausa.

tàu [tʰàu] *n.* bow.

tébùl [tʰébùl] *n.* table. *from* Hausa.

tél [tʰól] *v.intr.* become deep. *n.* depth.

tép [tʰép] *v.tr.* make black. *v.intr.* become black. *n.* blackness.

tér [tʰér] *v.tr.* move, shift something aside. *v.intr.* move aside.

tífi [tʰífi] *n.* Tiv.

tíl [tʰíl] *v.tr.* make something worthless. *v.intr.* become worthless. *n.* worthlessness.

tílíp [tʰílíp] *see* **kílíp**.

tínì [tʰínì] *n.* palm (of hand), sole (of foot).

típ [tʰíp] *v.tr.* 1) press something down. 2) press on something.

tó [tʰó] *see* **tô**.

tô [tʰô] *interj.* okay. *from* Hausa. *variant:* **tó**.

tók₁ [tʰók] *n.* sauce, stew.

tók₂ [tʰók] *v.tr.* practice traditional religion.

tóóm [tʰó:m] *n.* seat, chair.

tóe [tʰé] *part.* emphasis.

tóeb'à [tʰéɓà] *see* **táb'à**.

tóeb'àl [tʰéɓàl] *n.* calabash (used for drinking).

tòeb'áp [tʰéɓáp] *n.* drum.

tòetém [tʰètʰém] *ideoph.* lukewarm.

tù₁ [tʰù] *v.tr.sg.* 1) kill. 2) inflict on someone. *n.sg.* killing, murdering. *plural:* **twò**.

tù₂ [tʰù] *v.tr.* 1) pound grains. 2) pound in a mortar.

tùl [tʰùl] *n.* limpet.

tún [t^hún] *conj.* since. *from* Hausa.

tuêr [t^huêr] *see* **twêr**.

twáám [t^hwá:m] *v.tr.sg.* make something stand. *plural:* **twàt**.

twàt [t^hwàt] *see* **twáám**, **twèt**.

twêr [t^hwêr] *n.* fig tree. *variant:* **tuêr**.

twèt [t^hwèt] *v.tr.sg.* make something stand (by itself). *plural:* **twàt**.

twò [t^hwò] *see* **tù**₁.

tyèm [t^hyèm] *see* **kyèm**.

tyòklók [t^hyòklók] *see* **kyòklók**.

tyóóp [t^hyó:p] *see* **kyóóp**.

T' [t]

t'á [tá] *v.intr.sg.* fall. *n.sg.* falling. *plural:* **t'ék**.

t'áán [tá:n] *v.intr.* fall (of rain).

t'áár [tá:r] *n.* moon, month.

t'ák'áyà [tàkájà] *n.* hat. *variant:* **t'àxáyà**.

t'ál [tál] *v.tr.sg.* harvest a crop by plucking it with hands (e.g., fruits, beans, okra). *plural:* **t'ék**, **t'óelèng**.

t'án [tán] *v.tr.* pursue someone.

t'áng [táj] *n.* bat.

t'át₁ [tát] *n.* time, day.

t'át₂ [tát] *v.tr.* propel forward (shoot, kick). *v.tr.sg.* tell a folktale. *plural:* **sh'ák**.

t'átnàng [tátnàng] *interr.* when.

t'àxáyà [tàxájà] *see* **t'ák'áyà**.

t'éi [téi] *adv.* not yet.

t'ék [tók] *see* **tá**, **t'ál**.

t'èkgòed'i [tèkgèdǐ] *adv.* still, already.

t'èl [tèl] *v.tr.* collect, assemble something. *v.intr.* get collected, assembled.

t'ém [tém] *v.tr.* tell or report something.

t'én [tén] *see* **t'óng**₂.

t'éng₁ [tén] *n.* tree, forest.

t'éng₂ [tén] *v.intr.* become tall, high. *n.* tallness, height.

t'èp [tèp] *v.tr.* be next in line to someone.

t'ìjén [tìzén] *n.* fragment of a pot.

t'ílí [tíli] *n.* saliva, spittle.

t'ingilíit [tíngíli:t] *n.* hornbill.

t'ís [tís] *n.* snail, shell of a snail.

t'ít [tít] *v.tr.* sprinkle something (somewhere).

t'ó [tó] *v.intr.sg.* lie, be located so as not to project away from the ground. *plural:* **t'óerép**.

t'ò [tò] *v.intr.sg.* lie (progressive aspect). *plural: t'òerèp.*

t'ó- [tó] *cl.sg.* lie. *plural: t'òerép-*.

t'óng₁ [tón] *v.intr.sg.* sit, be located in a stable way. *v.intr.* 1) remain, be permanently in a location. 2) be plentiful. 3) fit well into something. *plural: t'wót.*

t'òng [tòn] *v.intr.sg.* sit (progressive aspect). *plural: t'wòt.*

t'óng- [tón] *cl.sg.* sit. *plural: t'wót-*.

t'óng₂ [tón] *part.* 1) irrealis modality. 2) progressive aspect. 3) habitual aspect. *variant: t'én, t'óe.*

t'óór [tó:r] *n.* flank. *relator.* at the side of.

t'óórk'óóm [tó:rkó:m] *n.* courage.

t'óórnúng [tó:rnún] *n.* anger, annoyance.

t'óe [tá] *see t'óng₂.*

t'òed'áár [tèdá:r] *see góed'áár.*

t'óegái [tégái] *n.* middle-sized calabash, used for eating and for carrying meals to the farm.

t'óelèng [tálèŋ] *see t'ál.*

t'òerép [térèp] *see t'ó.*

t'òrèp [tèrèp] *see t'ó.*

t'òerép- [térèp] *see t'ó.*

t'óesék [tés^hák] *n.* hiccup.

t'òet'éi [tètéi] *adv.* all, everything, everywhere.

t'ú [tú] *n.* bottle, bottle-shaped calabash (used for carrying drinks).

t'úksh'i [túkš'í] *n.* basket.

t'úng [tún] *v.tr.* 1) fry. 2) stir.

t'úún [tú:n] *n.* hole.

t'ùùn [tù:n] *see t'ùùs.*

t'ùùs [tù:s] *v.tr.* push at something. *variant: t'ùùn.*

t'úés [tués] *n.* odor, smell.

t'úúr [tú:r] *n.* small-sized white anthill.

t'wót [t'wót] *see t'óng₁.*

t'wòt [t'wòt] *see t'óng₁.*

t'wót- [t'wót] *see t'óng₁.*

t'yák [t'ák] *see k'yák.*

t'yákláng [t'áklán] *see k'yákláng.*

U [u]

ú [ʔù] *n.* goat.

uás [ʔuás] *see éés.*

uén [ʔuén] *n.* medicine, poison.

uěp = [ʔuěp] *see muěp*.

ués [ʔuás] *n.* bone, stone (of a fruit).

V [v]

várám [várá:m] *n.* type of sharp-edged grass that is used for making ropes.

vèèl [vè:l] *n.* vein, artery.

vél [vél] *num.* two.

vèlú [vèlú] *n.* type of grass that is used for making whistles.

víling [vílɪŋ] *v.tr.* circle or fly around something. *v.intr.* fly around.

vòòm [vò:m] *v.tr.* blind someone, close eyes. *v.intr.* become blind.

vú [vú] *n.* type of edible tuber.

vuáng [vuáŋ] *v.tr.* 1) wash, clean. 2) insult. *n.* insulting.

vuét [vuét] *v.tr.* 1) take one's share. 2) leave one's share. *n.* taking or leaving a share.

vyáng [v'áŋ] *n.* termite.

W [w]

wá₁ [wá] *v.intr.* return home, return to stay. *plural:* yók.

wá₂ [wá] *relator.* in the area of. *variant:* bá.

wà [wà] *see* à₂.

wààp [wà:p] *v.tr.* 1) borrow. 2) lend. *n.* borrowing, lending.

wái [wái] *part.* say (introduces reported speech). *from* Hausa.

wàkám [wàkám] *n.* way, road.

wál [wál] *v.tr.sg.* 1) cry about, for. 2) make someone cry. *v.intr.sg.* cry. *plural:* èèr.

wám [wám] *v.tr.* make something wet, rotten. *v.intr.* become wet, rotten. *n.* wetness, rottenness.

wán [wán] *v.tr.* be lacking to someone. *v.intr.* be lacking.

wàn [wàn] *n.* red clay, brick.

wándó [wándó] *n.* trousers. *from* Hausa.

wáng [wáŋ] *n.* clay pot.

wànghèèn [wànghè:n] *n.* big storage pot (buried in ground).

wànònò [wànònò] *n.* cobra.

wàr [wàr] *v.tr.* 1) collect. 2) inflict upon a bodypart (plait hair, make incision). *see* màng.

wárák [wárák] *ideoph.* boiling hot.

wàtàkìlà [wà^hàk^hílà] *part.* maybe, perhaps. *from* Hausa.

wàyó [wàyó] *n.* intelligence. *from* Hausa.

wè [wè] *see è.*

wèèl [wè:l] *v.tr.* make someone worried. *v.intr.* become worried. *n.* worrying.

wén [wén] *v.tr.* search, look for something.

wép [wép] *v.tr.* show respect to someone or something.

wò₁ [wò] *n.* snake. variant: òwò.

wò₂ [wò] *see ò₁.*

wòòr [wò:r] *n.* shouting, screaming.

wùkái [wùkái] *n.* place name: Wukari.

wúl [wúl] *v.intr.* arrive. *n.* arrival.

wùm [wùm] *v.tr.* bury something or someone, plant seeds. *v.intr.* get buried, sink.

wún₁ [wún] *v.tr.* make someone sweat. *v.intr.* sweat. *n.* sweating.

wún₂ [wún] *see kún.*

wúròe [wúrè] *interr.* who.

wús [wús] *v.tr.* roast. *n.* 1) roasting. 2) fire.

wùt [wùt] *n.* wild custard apple.

wùwák [wùwák] *ideoph.* bright red.

Y [j]

yà₁ [jà] *v.tr.* 1) catch, get a hold of. 2) make, cause someone to do something. *v.intr.* arrive, reach.

yà₂ [jà] *see à₂.*

yàgùrùm [jàgùrùm] *num.* twenty.

yàm [jàm] *n.sg.* son. *plural:* jáp.

yáng [jáj] *n.* stalk.

yár [jáj] *n.* bird.

yát₁ [ját] *see yít.*

yát₂ [ját] *v.tr.* 1) call attention to goods (advertize, display, hawk). 2) advertise to someone. *n.* advertizing.

yâuwá [jàuwá] *interj.* okay. *from* Hausa.

yén [jén] *v.tr.* increase something. *v.intr.* become plentiful. *n.* plenty, honor.

yí [jí] *n.* year.

yì₁ [jì] *part.* 1) and so (introduces a consecutive clause). 2) progressive aspect. 3) durative aspect.

yì₂ [jì] *see yìn.*

yĩ [jĩ] *see yõe.*

yĩ= [jĩ] *see yõe.*

yígíl [jígíl] *see yúú.*

yíl₁ [jíl] *n.* ground, land, earth, country.

yíl₂ [jíl] *v.tr.* write.

yím [jím] *n.* leaf, grass.

yìn [jìn] *part.* say (introduces reported speech). *variant:* **yì**.

yíp [jíp] *n.* gruel, balls of cooked flour.

yír [jír] *v.tr.* 1) turn something. 2) turn into something. 3) turn around something. *v.intr.* turn around, change.

yìsáám [jìs^há:m] *see* **yìtsáám**.

yít [jít] *n.* eye, face, surface. *relator.sg.* in the eye of. *plural:* **yát**.

yìt [jìt] *adv.* again. *variant:* **zák yìt**.

yìtk'úl [jìtkúl] *n.* round stone.

yìtsáám [jìts^há:m] *n.* sleep. *variant:* **yìsáám**.

yó [jó] *see* **yóól**.

yò [jò] *see* ò₁.

yók [jók] *see* **wá₁**.

yóng [jón] *v.tr.* 1) call someone. 2) produce a sound. *n.* calling.

yóól [jó:l] *v.tr.sg.* rise as someone. *v.intr.sg.* rise, fly off, start. *plural:* **yúúl**.
variant: **yó**.

yõe [jě] *pron.* you (2SGF.subject, independent). *variant:* **yĩ**.

m̀m̀m̀ik [ˈm̀m̀ik] *pron.* yours (free 2SGF.possessive). *variant:* **m̀m̀it**.

m̀d̀eshík [m̀d̀eshík] *pron.* for, to yourself (2SGF.reflexive).

shík [ʃhík] *n.* your body. *pron.* yourself (2SGF.reflexive).

yĩ= [jĩ] *pron.* you (2SGF.subject).

yoe [jə] *pron.* you (2SGF.object).

yóe [jé] *pron.* your (2SGF.possessive).

yùùt [jù:t] *v.intr.* accumulate, amass. *n.* accumulation.

yúúl [jú:l] *see* **yóól**. *variant:* **yígíl**.

Z [z]

zák [zák] *part.* also, however.

zák yìt [zák jìt] *see* **yìt**.

zàm [zàm] *n.* field, farm. *adv.* in the field.

zàng [zàŋ] *n.* barrenness.

zàràp [zàràp] *see* **réép**. *variant:* **jiràp**.

zàrát [zàrát] *ideoph.* very long.

zèm [zèm] *v.tr.* 1) like, agree or accept something. 2) make someone be in agreement. *v.intr.* be in agreement. *n.* liking.

zén [zén] *v.intr.* be wrong.

zéng [zəŋ] *n.* type of parasitic plant.

zòk [zòk] *v.intr.* become kind or generous. *n.* kindness, generosity.

zóri [zóri] *n.* entrance hut, leading into the compound. *from* Hausa.

zòòm [zò:m] *v.tr.* make something cold. *v.intr.* become cold. *n.* coldness.

zúwà [zúwà] *prep.* toward. *from* Hausa.

zwààn [z^wà:n] *n.* hook, fishing hook.

zwám [z^wám] *n.* viper.

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