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University of California, Los Angeles, Ph.D.,
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Aspects of Ngizim Syntax

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Linguistics

by

Russell Galen Schuh

Doctoral Committee:

Professor Paul Schachter, Chairman
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1972
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To Paul Newman

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Of course, neither Dr. Newman nor Dr. Schachter are responsible for any part of this study which may prove to be ill-conceived, not to mention any purely factual errors.

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ABSTRACT OF THE DISSERTATION

Aspects of Ngizim Syntax

by

Russell Galen Schuh

Doctor of Philosophy in Linguistics

University of California, Los Angeles, 1972

Professor Paul Schachter, Chairman

The essential elements of the syntax of Ngizim, a Chadic language of northern Nigeria, are described and analyzed. The main purpose is to provide as complete and clear a descriptive grammar as possible, but points of interest to general linguistic theory are raised as well.

Chapters 1 and 2 provide a background sketch of the phonology and the main features of the verbal system. These areas are not covered in detail.

Chapters 3, 4, 5 present the core of the syntax of the simple Ngizim sentence. In Chapter 3, sentences are seen to be of two basic types: verbal and non-verbal. Non-verbal include locative, equational, adjectival, associative ("have"), existential, and deictic. Chapter 4 details constituents of the noun phrase. These include associative noun phrase constructions, relative clauses and their reduced forms, conjoined noun phrases, and determiners. The constituents of the determiner, which include demonstratives, indefinites, quantifiers, and a category called POST, are given detailed
discussion. Chapter 5 covers question formation and noun phrase focus. It turns out that the only constituent available for focus by a special syntactic rules is the subject, but a more general pseudo-cleft construction is available for focus as well.

Chapters 6, 7, and 8 investigate the means used in Ngizim to combine two or more simplex sentences. Chapter 6 questions whether Ngizim has anything corresponding to English 'and' conjunction of sentences. Arguments are drawn from Conjunction Reduction and Gapping, among others. In this chapter the characteristics of the Sequential aspect are explored in detail. It is argued that the Sequential is not merely a reduced form from conjoined "substantive" aspects. 'But', 'or', and 'let alone that' conjunction are also briefly discussed. Chapter 7 outlines the basic sentential complement structures as well as reported and direct speech constructions and indirect questions. Chapter 8 goes into the details of one of the more complex and interesting features of Ngizim syntax, that of sentence level adverbs. These include several kinds of conditional clauses, temporal adverbs, and explanatory 'because' adverbs. A basic dichotomy of definite vs. indefinite sentence level adverbs is argued for. Finally, in Chapter 8, it is claimed that topicalized noun phrases are to be included among sentence level adverbs. It is shown how topicalized noun phrases fit the characteristics of such adverbs, including the definite/
indefinite distinction.

Chapters 9 and 10 summarize two areas of syntax presented piecemeal in the preceding chapters. Chapter 9 covers anaphora. Two types of token anaphora are noted: pronominal and Ø anaphora. Next, "copy" processes are contrasted with "anaphoric" processes. EQUI-NP Deletion is shown to differ from normal anaphoric processes. Finally, type anaphora is briefly discussed. Chapter 10 summarizes the effects of negation and its scope, especially in cases where sentence embedding has taken place.

An Appendix listing pronouns and grammatical morphemes is included.
INTRODUCTION

The Ngizim language is a member of the Chadic branch of the Afroasiatic family. It is classified in Greenberg (1963) in subgroup 1b of the Chadic group, and Newman and Ma (1966) include it in the Plateau-Sahel branch of Chadic. It is therefore in the same major Chadic subgroup as Hausa, though it is one of the more distantly related languages to Hausa within that subgroup. Among languages still spoken, Ngizim is most closely related to Bade. (Greenberg (1963) lists three other languages in his group 1b, but none of these are any longer living languages.) There are no significant dialect areas within Ngizim.

Ngizim is spoken in an area fanning out to the east from Potiskum in the Northeast State of Nigeria. Based on records seen at the Roman Catholic mission in Potiskum, Ngizim is estimated to be spoken by about 25,000 people.

Very little published work has appeared on Ngizim. There are word lists in Koelle (1854) and Meek (1931). Recent articles are Schuh (1971a), giving a detailed analysis of the aspectual system, and Schuh (1971b), comparing focus of subjects with similar phenomena in other Chadic languages. The only document printed in the Ngizim language is Duvu Muya (anonymous, n.d.), a small manual for adult literacy. A word list will appear in Kraft (to appear).

The present study is based on material collected during eleven months of field work in 1969-1970. This work
was part of a larger comparative Chadic syntax project supported by a National Science Foundation grant, No. GS-2279, Paul Newman Principal Investigator. The work was conducted mostly in Potiskum town, but a number of trips to villages were made to get a broader perspective of the Ngizim speaking area and to investigate any dialect variations that might exist.

Field work was conducted by what may be termed "generative field methods". Central to this field procedure is the continual formulation of highly explicit formal rules to account for data elicited. Formulating such rules serves the dual purpose of summarizing data already collected and predicting facts about the language not yet observed in the corpus. Such predictions are of two kinds: (1) prediction of utterances which have not yet been recorded but which should be possible utterances of the language, and (2) prediction of utterances which should not be acceptable to native speakers. Predictions of the latter type are particularly important. If we are limited to utterances which a native speaker produces and/or accepts (such as we would expect to find in a recorded text, for example), we can never be sure what the limits of his grammar are. But if we are able to test both what he will accept and what he will not accept, following some rigorous and systematic procedure such as that provided by explicit rule formulation, we will be able to discover those
limits.

While doing direct informant work using such procedures, I also collected a fairly good-sized written and tape-recorded corpus. About 250 pages of folk-tale texts, history, and miscellaneous ethnographic material, as well as about 350 proverbs were collected. Most of the textual material was collected directly in written form from a literate informant, but a number of texts were also collected on tape and then transcribed.

The present study has used as a point of departure working papers written up in the field. These working papers were based primarily on direct informant work, and all hypotheses formulated in them have been tested and modified by a careful examination of texts. Examination of texts has also allowed me to to describe grammatical phenomena which I never managed to investigate in the field. Where possible, I have illustrated both with sentences elicited directly from informants and with sentences taken from texts. Proverbs are also frequently used as illustrative material. However, since proverbs are formulaic utterances, they sometimes contain figures of speech which are not part of the mainstream of the language. For this reason, I have tried to avoid using them as illustrative material where their formulaic nature might give an incorrect view of the generality of the phenomenon illustrated. Where "proverb style" seems to have some sort of
grammatical consequence, I have tried to point it out.

While the theoretical orientation here is generative-
transformational, the material has not been written up in
the form of a generative grammar, as have various earlier
studies, e.g. Newman (1970). It has been my own experience
that grammars written in this way are extremely difficult
to use as research tools, because they are not organized
in the way one usually attacks linguistic research, viz.
by topic (e.g. pronominalization, conjunction, etc.). In
the hope that this dissertation might serve as such a re-
search tool for people interested in "exotic" languages in
general, or in Chadic languages in particular. I have
tried to organize it in a way that would facilitate its
use as a reference grammar. Where I have given formal rules,
I have tried to formulate them such that they captured the
broad generalization, though they may not be wholly adequate
in detail. I agree with Newman (1972), p. viii, when he
says "in many cases ...excessive formalism (i.e. excessive
explicitness) results in important generalizations being
drowned in a sea of algebraic detail--to the dismay and
frustration of the reader." Details not accounted for by
rules given here are cleaned up in the prose contiguous to
the rules. As I pointed out above, formulation of highly
explicit rules does serve as a valuable field procedure.
But once the facts are obtained in this way, it is desirable
for the sake of the reader, to spread out the facts captured
by such detailed rules.

In order to limit what has proved to be an already lengthy study, I have concentrated only on Ngizim syntax. Comments on phonology have been limited to little more than a list of phonemes. Derivational morphology and inflectional morphology of nouns and verbs have been entirely omitted, except for brief comments needed as an aid to interpretation of examples. While the verbal system is central to Ngizim syntax, I have presented it only in a sketchy fashion. A fairly detailed account of the lexical classification of verbs and of the Ngizim aspect system is found in Schuh (1971a). The important system of verbal extensions is briefly summarized in Chapter 2, and is brought up at other points in the text.

This study can be separated into four fairly natural divisions: Chapters 1 and 2 present the essentials of the phonology and the verbal system, which will be needed in order to interpret examples in the rest of the study; Chapters 3 through 5 present what might be called the "core" of Ngizim syntax, i.e. those constituents and rules that come into play in virtually every sentence of the language; Chapters 6 through 8 present ways that sentences can be combined, and describe adjuncts to full sentences; Chapters 9 and 10 integrate and summarize certain related facts about the language that have come up piecemeal through the preceding pages. Finally, there is an appendix listing all the pronoun paradigms and grammatical formatives discussed.
Chapter 1

PHONOLOGICAL SKETCH

1. Charts of Ngizim Phonemes

Consonants

\[
\begin{array}{cccccccc}
\text{labials} & \text{alveolars} & \text{palatals} & \text{laterals} & \text{velars} & \text{labialized} & \text{velars} & \text{nasal} \\
\text{voiceless} & p & t & c & k & kw \\
\text{voiced} & b & d & j & g & gw \\
\text{glottalized} & b & d & 'y' \\
\text{prenasalized} & mb & nd & yg & ygw \\
\text{fricatives} & \\
\text{voiceless} & f & s & š & tl & h \\
\text{voiced} & v & z & š & dl \\
\text{nasals} & m & n & ny \\
\text{flap} & r \\
\text{sonorants} & \\
\text{trill} & f \\
\text{continuant} & l \\
\text{semivowels} & (w) & y & w \\
\end{array}
\]
Vowels

i  u  A non-phonemic high vowel, written e (phonetically [i]), is also of frequent occurrence.

ee  oo  

a  

aa  See discussion in section 3 below.

Tones

Phonemic: ' (high) ` (low)
Non-phonemic: " (falling) " (rising) ' (downstep)

2. Remarks on Consonants

Consonants written as digraphs or trigraphs

All the consonants in the chart above are unit phonemes. Mainly for typographical reasons, a number of them are written as digraphs or trigraphs. Because of the consonant sequence constraints of Ngizim, there is no possibility of confusion between a unit phoneme written as a digraph and a sequence of phonemes written with the same symbols, e.g. sonorant consonants can never directly follow obstruents, so the phoneme tl (voiceless lateral fricative) could never indicate the impossible sequence t + l, and likewise kw could never indicate k + w.

The prenasalized consonants are units only in word initial position. Medially, nasal + obstruent always behaves as a sequence. The word-initial prenasalized velars
have a nasal component written ṭ. Since ṭ has no independent phonemic status, a nasal abutting with a velar medially is written ṭ, though it assimilates to the velar phonetically, e.g. mâŋá 'friend' is phonetically [mâŋá].

The two "r" phonemes

Only the trilled ṭ is found preceding [+cor] consonants or following the sequences te- or de-, e.g. árđəwâ 'beans', ákúr̥nâ 'gruel', wûnjî 'scorpion'; tèrâ 'moon', gâdrərâ 'pond'. Almost all the remaining examples of ṭ are words identifiable as loans, mostly from Kanuri. The trilled ṭ will be written only where it could potentially contrast with flap ṭ, e.g. kârə 'reading' (cf. kârə 'theft'), zâgâr 'north' (cf. zârər 'foot').

Palatalization

All alveolar consonants except tl, dl, and the liquids (r, ṭ, l) are palatized before i. The alternations are as follows: t/c, d/i, d/lγ, s/z̠, z/z̠, n/ny. This alternation is seen, for example, between singular imperatives, which end in i, and perfectives, which end in u, e.g. á rëpçï 'open!' (cf. rëptú 'he opened'), á kîi'yï 'eat!' (cf. kîi'dî 'he ate'), á tâ'em 'leave!' (cf. bêzú 'he left'), á tân'yï 'remember!' (cf. tâa'nô 'he remembered').

Final devoicing

All obstruents are devoiced in word final position.
Cf. gūbēs 'warthog' (pl.) gūbāzāzin; dāborg 'he buried', dābārk 'burying'.

3. Remarks on Vowels and Diphthongs

Vowel length

Long vowels are written double. Length is phonemic only for the vowel "a", cf. kāwā 'playing', kāwā 'fondness'; gādū 'he bit', gādū 'it snapped off'. The vowels ee and oo are always long, though I have usually written them short utterance final, where there is no phonetic length contrast. The phonetic long high vowels, written ji and uu, are phonemically /iy/ and /uw/.

The high vowels

The phonemic high vowels i and u are lexically contrastive only at the end of a word. Medially, the quality of high vowels is determined by the environment. Essentially, u is conditioned by a [+round] consonantal environment (preceding or following w or labialized velar); i is conditioned by preceding or following y, and to a lesser extent, by contiguous palatal obstruents; and e (= [i]) is found elsewhere. Word final lexical i and u are also reduced to e medially in a phrase if the environment dictates this.

It is not only the quality of medial high vowels that is predictable, but also their position. Again, only word
final i and u are lexically unpredictable. Medially, high vowels are found only where some vowel is needed to break up sequences of segments prohibited by sequence structure constraints of Ngizim. (The vowel a(a) can, of course, appear where it breaks up such sequences, but it is not restricted to these positions.) In effect then, all medial high vowels are epenthetic! Medially in an utterance, lexical word final high vowels are obligatorily deleted after certain consonants, particularly sonorants, e.g. à rá́mì 'say it!' but à rá́m máá ... 'say that ...!' never *à rá́m máá ...!'. In other cases, deletion of final high vowels depends on factors such as speech tempo, e.g. á jíbí 'catch!', á jíbé gàskám = á jíb gàskám 'catch the rooster!'.

Vowel elision

All word final vowels, including a, are obligatorily deleted before a following vowel, e.g. /ná tá ábên/ 'I ate food' is phonetically [nátábèn], /á jíbí ákù/ 'catch the goat!' is phonetically [ájíbáakû].

Transcription of the vowels

For a variety of reasons, it is most practical to transcribe three high vowels, i, u, and e, even though such a transcription represents a gross underanalysis from a structural point of view. In cases where final vowels are obligatorily deleted phrase medially, I have transcribed the sentence as having no vowel in that position. I have
departed from this practice only where vowel deletion would leave only a single consonant as a surface root (as in 'I ate food' above, where I would write ná tá ábên or ná t(á) ábên) or where the first vowel is long. In the latter case, the surface result is a long vowel. In order to avoid the problem of deciding which word "gets the vowel", I have written the words in their lexical form, e.g. I transcribe 'there is water' as naa am, though phonetically it is [naam]. In the case of final lexical i or u, which are reduced to a phrase medially, I have usually retained the lexical form, though I have not been entirely consistent.

Diphthongs

Medially, the diphthongs ai and au become ii and uu respectively, e.g. kaakénáí 'remainder', káakéníí báí 'it's not the remainder'; jágádlú 'lion', jágádlúu-gú 'lion'. Lexical -awu becomes [aw] on the surface, i.e. it is phonetically identical to the diphthong -au. It differs from -au in not becoming -uu medially, e.g. díišáw-gú 'the vulture'. (A parallel rule taking lexical -ayi# to [ay] does not exist.)

4. Tones

Ngizim has two phonemic tones, Hi (marked ') and Lo (marked '). Phonetic Falling (') and Rising (") tones are respectively sequences of Hi-Lo and Lo-Hi on a single syllable. A Downstep (') is always analyzable as a Hi
following a Hi-Lo sequence where the Lo has been suppressed. The result is Hi-Downstep rather than Hi-Hi because of the downdrift phenomenon, universal to Chadic, whereby a Hi following a Lo has a lower pitch than a Hi preceding that Lo in the same phonological phrase.

Tone is marked in this study only on AUX pronouns, on single items cited in their lexical forms, and in a few instances where tone is specifically discussed. Tone is marked on the AUX pronouns since it is the interplay of AUX pronoun form (including tone), verb tone, and final vowel suffix on the verb which differentiates verbal aspects. While it is actually the verb that conditions tone of the AUX pronoun, the tone of the verb can likewise be predicted given the tone of the AUX pronoun and the final vowel of the verb.

I have not felt it necessary to mark tone elsewhere. While minimal tone pairs exist in both nouns and verbs, tone carries a low functional load in Ngizim and equivocations resulting from lack of tone marking would be rare indeed. Numerous problems involving tonal sandhi also make decisions on how to mark tone much more difficult than in a language like Hausa, where tones on individual words remain fairly constant.
Chapter 2

SKETCH OF THE VERBAL SYSTEM

1. Lexical Verb Classes

Lexically, verbs are classified according to final vowel, tone, and verbal noun form. These features are all in part predictable, either because certain types are statistically predominant, or because of certain phonological and semantic characteristics of the stem. In no case is there 100 percent predictability, however. Monosyllabic verbs differ in certain respects from polysyllabic verbs, and are thus discussed separately (section 1.4).

1.1. Final Vowel

Verbs fall into two lexical classes, final -a and final -ə, depending on which final vowel they have in the perfective. In other aspects the lexical vowel is pre-empted by vowels characteristic of those aspects. See (1) for examples.

1.2. Tone Classes

Verbs are lexically high or low tone. Only the first syllable need be lexically specified for tone, since the tone of subsequent syllables is predictable by rule. Lexical verb tone is seen in the Subjunctive, the Imperative, and usually in the verbal noun. In other aspects, tone is pre-empted by the tones characteristic of those aspects.
In (1) are examples of verbs in their lexical form (monosyllables are not included — See below section 1.4):

(1) **High Tone Verbs**

<table>
<thead>
<tr>
<th>Final -ə</th>
<th>Low Tone Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>mão 'buy'</td>
<td>tênə 'enter'</td>
</tr>
<tr>
<td>débə 'sell'</td>
<td>rèpte 'open'</td>
</tr>
<tr>
<td>rávenə 'trouble'</td>
<td>kələkə 'return'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Final -ə</th>
</tr>
</thead>
<tbody>
<tr>
<td>dába 'push'</td>
</tr>
<tr>
<td>rèma 'escape'</td>
</tr>
<tr>
<td>təluwa 'be poor'</td>
</tr>
</tbody>
</table>

1.3. Verbal Noun Classes

By far the most common verbal noun type has lexical verb tone on the first syllable, and substitutes low tone -ə for the final lexical vowel. Medial syllables are also low, except for a few high tone verbs where the medial syllable is high under certain phonologically specifiable conditions:

(2) **Lexical form**

<table>
<thead>
<tr>
<th>Verbal noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>mão 'buy'</td>
</tr>
<tr>
<td>rávenə 'trouble'</td>
</tr>
<tr>
<td>tênə 'enter'</td>
</tr>
<tr>
<td>kələkə 'return'</td>
</tr>
<tr>
<td>təmbə 'help'</td>
</tr>
</tbody>
</table>

Verbs of the form C_{1V1}C_{2(ə)}C_{3ə} having verbal nouns of
the above type also always have a second verbal noun, of the form \( C_1 \̆ V_1 C_2 \̆ V_1 C_3 \). This verbal noun usually indicates an action done as a habit or occupation.

(3) **Lexical form** | **Verbal nouns**
--- | ---
\( d̄ \̆ b̄ d̄ e \) | \( d̄ b̄ ð̄ ā / d̄ b̄ ð̄ ā \) 'sell'
\( k̄ ù ȳ e \) | \( k̄ ù ȳ ā / k̄ ù ā i \) 'fry'
\( r̄ ñ e n̄ e \) | \( r̄ ñ ē n̄ ā / r̄ ñ ē n̄ ā \) 'trouble'

A fairly large number of verbs have a verbal noun in -\( u \). These are mostly intransitive. Though the verbs having this type of verbal noun are all lexically low tone, the verbal nouns have initial high tone if the first syllable has the vowel -\( ù -\).

(4) \( d̄ w̄ a t̄ l̄ e \) | \( d̄ w̄ ñ̄ t̄ l̄ ū \) 'become tired'
\( d̄ l̄ ñ̄ ḡ a ȳ e \) | \( d̄ l̄ ñ̄ ḡ ñ̄ ȳ ū \) 'become blind'
\( b̄ m̄ e \) | \( b̄ ñ̄ m̄ ū \) 'hide'
\( d̄ ñ̄ ḡ a m̄ e \) | \( d̄ ñ̄ ḡ ñ̄ m̄ ū \) 'fall (from an upright position)'

A final major verbal noun type ends in -\( ì \). Such verbal nouns always end in high tone.

(5) \( ḡ ñ̄ ë \) | \( ḡ ñ̄ j̄ ī \) 'break off (transitive)'
\( b̄ ñ̄ ė \) | \( b̄ ñ̄ r̄ ī \) 'give'
\( ḡ ñ̄ d̄ ñ̄ ė l̄ e \) | \( ḡ ñ̄ d̄ ñ̄ ñ̄ ī \) 'belch'

There are several other minor verbal noun types with final diphthongs or other irregular forms. Each such type
is represented by fewer than five verbs in my materials, e.g. réma 'escape', (VN) rámâu; kétle 'break, shatter', (VN) kétł; zàga 'know', (VN) zàgàyà.

1.4. Monosyllabic Verbs

Monosyllabic verbs are those with a stem shape CV. There are fewer than 20 such verbs in Ngizim. All monosyllabic verbs have lexical -a. They fall into two basic tone classes, predictable on the basis of the consonant: high tone (initial voiceless consonant), and low tone (initial voiced consonant). Three of the low tone verbs have rising tone (-Lo-Hi) in certain aspects. I have no synchronic explanation for this. Monosyllabic verbs have verbal nouns either in -à or in -àyí (with one exception: the verbal noun of và 'leak, drip' is và). 

(6)    Lexical form  Verbal noun
      tá       tå       'eat'
      pà       pàyí      'pour'
      mà       mà       'take, carry'
      rà       rà       'protect (against), save'
      dlà       dlà      'dip out'
      bà       bàyí      'receive, get'

The verbs 'go' and 'come', while monosyllabic, cannot be collapsed into any of the classes given above. Three basic roots are seen: ì- (sometimes --- > i-), à-, and à-.
<table>
<thead>
<tr>
<th></th>
<th>D</th>
<th></th>
<th>N</th>
<th></th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'go'</td>
<td>'come'</td>
<td>'go'</td>
<td>'come'</td>
<td>'go'</td>
</tr>
<tr>
<td>Perfective</td>
<td>jú-w</td>
<td>děe-w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjunctive</td>
<td></td>
<td></td>
<td>nài</td>
<td>yí</td>
<td>(rare) yén</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ni*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Subjunctive</td>
<td>dá</td>
<td>děná</td>
<td>nná</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imperative (sg)</td>
<td>à jí</td>
<td></td>
<td></td>
<td>à yén</td>
<td></td>
</tr>
<tr>
<td>(pl)</td>
<td>à ddá</td>
<td></td>
<td></td>
<td>à nná =</td>
<td>à nlná**</td>
</tr>
<tr>
<td>Imperfective</td>
<td></td>
<td></td>
<td>níí</td>
<td>yá</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>nyá*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The Subjunctive ní and Imperfective nyá are neutral as to direction of motion. Subjunctive ní seems to be restricted to sequential (narrative) contexts. Nyá is usually the verbal noun form used in contexts other than the nucleus of a verb phrase.

** The Second Subjunctive and plural Imperative forms nná appear to be equivalent to those with the suffix -děná (cf. section 3.1).

Figure 1 - The verbs 'go' and 'come'
These roots appear as suppletive variants conditioned by aspect, presence or absence of the Ventive Extension (see section 3 below), and, in the Imperative, number. The forms are best presented in chart form, seen in Figure 1 on page 17.

2. Aspect, including Imperative

Verb aspect is indicated by tone of the verb, final vowel suffix of the verb, and form of the AUX. The AUX may be analyzed as a separate, sometimes abstract unit, but since it always imposes certain features on the preverbal AUX pronouns (cf. Chapter 3, section 1), the AUX for each aspect will be presented here in paradigmatic form as manifested in the AUX pronouns (see Schuh (1971a) for a more abstract analysis).

2.1. Perfective

Verb tone: (polysyllables) Lo ... Hi
(monomylables) lexical tone, but Lo dissimilates to Hi before Lo object

Verb suffix: lexical vowel + -w
(This -w, the Perfective marker, appears only phrase final.)

AUX forms: 1 ná 1 excl já
1 incl wá
2 ká 2 kwá
no AUX form in 3rd person
Indefinite ndá
The Perfective indicates completed action with respect to some time of reference. The time of reference may be past, present, or future, so Perfective aspect must not be equated with past tense (for use of Perfective in conditional clauses, where the time of reference may be future, see Chapter 8, section 1.2; for use of Perfective in narrative, where the time of reference may be past, see Chapter 6, section 1.2).

(7) ná pà bákâ 'I made ["poured"] a shelter'
(8) râ mḭutâ 'he protected (farm) against birds'
(9) râ vâjî 'he protected (farm) against monkeys'
(10) ná tə̀fə̀w --> [ná tʃu] 'I entered'
(11) ká tlémpiŷ zânâi --> [ká tʃémpiŷ zânâi] 'you (sg) tore the gown'
(12) mâazâm zèmâ dâbî 'the blacksmith forged a hoe'

2.2 Subjunctive

Verb tone: (polysyllables) all Hi or all Lo depending on lexical tone of the verb

(monosyllables) Hi or Lo depending on lexical tone; three verbs (bə̱ 'receive', də̱ 'remove', və̱ 'shoot') have rising tone
AUX forms: 1 na 1 excl jà
     1 incl wà
     2 ka  2  kwa
all third person: da
Indefinite nda

Forms unmarked for tone have tone polar to the verb. Low tone monosyllables, and two low tone disyllables (kèma 'hear', zàga 'know') have long vowels on the AUX, e.g. dáa mà 'that he take', nàa kàmì 'that I hear'.

The Subjunctive has a wide range of uses, but unifying them is a semantic thread of eventuality, potentiality, or subsequence, i.e., an event that will or may take place or has taken place subsequent to some time or other event of reference. I separate here six environments where the Subjunctive is used. Such a compartmentalization of usage is arbitrary, as evidenced by the fact that one "use" fades into another. (i) The Subjunctive has a sequential meaning when used in reporting a sequence of events. The first of the sequence may be any aspect, including Imperative. Following Subjunctives indicate events each immediately subsequent to the preceding. The first event may be embedded in an adverbial clause, e.g. a conditional, with the Subjunctive in the main clause (see Chapter 6, section 1.2, for a detailed discussion of the sequential use of the Subjunctive). (ii) The Subjunctive may be used as a request or suggestion (this contrasts with commands or exhortations, expressed by the Imperative and Second Subjunctive). A
related use is in questioning or reporting commands or exhortations. (iii) The Subjunctive is used in sentential complements of certain verbs, including bâ 'manage to', kûre 'refuse to, refuse that', ncû 'want', etc. (see Chapter 7, section 1.1.2 for a list of such verbs). For all these verbs, the event in the complement is subsequent to or somehow contingent on the "event" of the matrix verb.

(iv) The Subjunctive is used in purpose clauses, with or without the conjunction gâadâ. (v) It is used in 'before' clauses (see Chapter 8, section 5). (vi) It is used in relative clauses, usually with an indefinite antecedent, to indicate potentiality or eventuality (see Chapter 4, section 2.1).

(13)(i) ã vâjî, kâ mcî, kâa kì màntûu-cî

'lie down [imperative], die [subj.], (and) see [subj.] who your friends are'

(ii) nà têfî bí? 'should I enter?'

fi màa dâa mì dêm 'I said he should take wood'

cî kâa kì wâkà dâgâi kâ gáâyí-n-áîcî

'as for you, you should look for some tree and climb it'

(iii) nà ncî dá têfî 'I want him to enter'

(iv) àtû ffît akâ (gâadâ) dâ làm bënâ

'she started the fire (in order) to do cooking'

(v) kâabê kâ kàrmî dêm-gâ-n, kâ n'yi gâwà-w

'before you chop [subj.] wood, you should sharpen [subj. in use ii] the axe'
(vi) ðeɡo zam wà ba nen waaña wà bar(i) ii-ci bai

'not yet have we found a person that we might give [subj.] it to'

2.3. Second Subjunctive

Verb tone: (polysyllables) Lo ... Hi

(mono syllables) Hi

Verb suffix: -a

AUX forms: 1 nà 1 excl jà

1 incl wà

2 kà 2 kwà

all third person: då

Indefinite ndà

As in the Subjunctive, the AUX forms have long vowels before lexically low tone monosyllables (dàa má 'let him take') and the verbs kàma 'hear' and zàga 'know'.

Three uses of the Second Subjunctive can be delimited:

(i) exhortations or commands in first and third person

(the Imperative is used in second person); (ii) obligatory replacement of Subjunctive and Imperative in negative predicates (see Chapter 10, section 2); (iii) replacement of the Perfective in imaginative and concessive conditional clauses (see Chapter 8, sections 2.1 and 3). Usages (i) and (ii) are sub-cases of a single usage. Usage (iii) has a historically separate origin from a formerly distinct Unrealized Perfective aspect which has now fallen together
formally with the Second Subjunctive (see Chapter 8, section 2.1).

(14)(i) too, nà lêntá nàa kêmì
    'well, let me touch and feel' (the speaker is issuing himself a command)
    wà jàayá               'let's ask'
    dàa má dêm              'let him take wood'
    Sèkù dà bàrfàwàâtá kêm
    'may God bless you (f.)'

(ii) kà tèrì bái              'don't enter!'

(iii)(see Chapter 8, sections 2.1 and 3 for examples)

2.4 Imperative

Verb tone: (polysyllables)  lexically Hi verb: all Hi

lexically Lo verb:   Lo ... Hi

(monosyllables)    lexically Lo verb beginning in a sonorant has Downstep
                    (âa mì 'take!')

lexically Lo verb beginning in an obstruent has Falling AUX
                    or rising verb (âa dli = âa dli 'dip out!')

Verb suffix: -í (singular)
    -â (plural)

AUX form: a (tone polar to verb)

The AUX has a long vowel before lexically low monosyllables and the verbs kêmì 'hear' and zèga 'know'.

23
(15)(a) á tèfí  'enter (sg.)!
(b) á tèfá  'enter (pl.)!
(16)(a) á dánkí  'sew (sg.)!
(b) á dánká  'sew (pl.)!

2.5. Imperfective

Verb form: verbal noun

AUX forms: 1 naa  1 excl jáa
             1 incl wàa
             2 kaa  2 kwaa

all third person: aa

Indefinite ndaa

Forms not marked for tone have tone polar to verb.

The Imperfective indicates imcompleted action with respect to some time of reference. (See especially Chapter 8, section 1.2, for use of the Imperfective in adverbial clauses in this meaning.) The time of reference may be past, present, or future. Depending on context, or perhaps on the specific verb in some cases, the Imperfective may indicate an ongoing activity (progressive) or an activity not yet begun at the time in question (future).

(17) náa vèrà  'I will go out/am going out'
(18) áa bènà-k ábèn  'she will cook/is cooking food'

It is possible to unambiguously express the Progressive
and Future modalities by making additions to the Imperfective. The Imperfective derives historically from the locative predicate construction (see Chapter 3, sections 1 and 3). The formal and semantic relationship between the Imperfective and locative predicates is exploited by using locative words followed by verbal predicates. Thus, the words təkə 'body' (in locative constructions, 'next to') and kəmə 'stomach' (in locative constructions, 'inside, within') may be used to express progressive action. It may be that other locative words are used in this way, but I have not found any used as systematically as təkə and kəmə.

(19) nāa teka wana 'I'm busy working, I'm hard at work!'

(20) Mai Demza āa kunu-k dlama-k garva

'King Demza was engaged in the activities of [was in doing] chiefdom'

The Future can be unambiguously expressed using the verb 'go' plus what is historically a nominalized purpose phrase using ii 'to' (cf. English gonna < 'going (in order) to'). See Chapter 8, section 9.1 for derivation of these phrases.

(21) nāa ya ii takəa wurji tku

'I'm going to step on this scorpion'

3. Verbal Extensions

Verbal Extensions are suffixes added to verbs, which superimpose some dimension onto the event over and above
aspect and the meaning of the verb itself. There are two extensions in Ngizim, the Ventive and the Totality.

3.1. The Ventive Extension

This extension indicates action which takes place in the direction of, or for the benefit of, some person or place of reference (often the speaker or the speaker's location). Sometimes the event itself may have taken place somewhere else, but it ultimately affects the place or person of reference, e.g. 'ask' + Ventive = 'ask and bring back the answer'. The Ventive is always indicated by replacement of the neutral verb suffix by a special suffix, characterizable as AY, or in some aspects, -ding. There are slight variations on AY conditioned by aspect. In addition to this suffix change, all verbs in the Subjunctive and Imperative take low tone, regardless of lexical tone, when the Ventive is added.

Perf ective: -ẽ(-w)

(22) tẽfẽ-w 'he came in'
    (cf. tẽfẽ-w ---→ [tẽfũ] 'he went in')

(23) jã màsẽ màrdũ 'we bought (and brought) millet'
    (cf. jã màsẽ màrdũ 'we bought millet')

Subjunctive: -ãi All verbs take low tone, regardless of lexical tone.

(24) dá màsãi 'that he buy (and bring)'

26
(24) continued
(cf. dâ màṣî 'that he buy')

Second Subjunctive: -îná

(25) wâ màsiiná 'let's buy and bring'
(cf. wâ màsá 'let's buy')

Imperative: (singular) -én
(plural) -îná
All verbs take initial low tone regardless of lexical tone.

(26) à râurén 'call [sg.] (here)!'
(cf. à râurí 'call!')

(27) à wànnîná 'send [pl.] (here)!'
(cf. à wàná 'send!')

Imperfective (= verbal noun): -àyí

(28) tèfàyí 'coming in' (cf. tèfà 'going in')
màsàyí 'buying (and bringing)' (cf. màsà 'buying')
báràyí 'giving (here)' (cf. bârí 'giving')
zàdàpàyí 'alighting (here)' (cf. zàdàpà 'alighting')

3.2. The Totality Extension

The term "Totality" is applied to this extension following its usage with many transitive verbs to mean action completely or well done, or done to all objects/an entire object. In many cases, however, I was unable to arrive at any easily definable difference in meaning between a verb
with the Totality Extension and the same verb without it. The Totality Extension has different manifestations with transitive and intransitive verbs:

Transitives: suffixed -náa when directly followed by a direct object suffixed - dú elsewhere

Intransitives: Intransitive Copy Pronoun (ICP) suffixed to the verb. The ICP is composed of a formative -ɛ- followed by the Bound Suffix Pronouns. A paradigm of the verb jí 'go' (with Totality, 'leave') in the Perfective is given for reference.

(29) 1 ná jí-n-gâa(nái) 1 excl jà jí-n-áajà
      1 incl wà jí-n-áawà

2m ká jí-n-àaci

2f ká jí-n-àakèm

3m jí-n-gàrí

3f jí-n-gàrà

There are three principal reasons for identifying the -náa/- dú transitive allomorphs and the ICP on intransitives as being the same morpheme. (i) Transitives and intransitives respectively may potentially add these suffixes to give the meaning of action totally or well done, (30)–(31). A related fact is that certain verbs, which inherently have a "completed action" sense, such as 'kill' and 'die', invariably take the Totality Extension, (32)–(33). (ii) Both the transitive and intransitive counterparts have a formative -ɛ-. There is comparative evidence that the - dú allomorph was originally a transitizing suffix used on intran-
sitive verbs (see section 4 below) and the -n- was used in all environments as the Totality Extension. (iii) Neither the transitive -náa/-dú nor the ICP are allowed in negative predicates (see Chapter 10, section 2, for examples).

(30) ná kiide-n-aa tluwai 'I ate up the meat'
    (cf. ná kiide tluwai 'I ate meat')

(31) garwa zukte-n-gara, am dáa vi-n-gara
    'the can was punctured (and) the water (all) leaked out'
    (cf. am ya-wi ssau 'water leaked into the house')

(32) take-naa gaadagum 'he killed a rat'

(33) gwangurak æte-n-gara 'the old woman died'

The Totality and Ventive Extensions can be combined:

(34) ndiiwa kalaktee-n-aakši 'the people (all) came back'
    (cf. ndiiwa kalaktu 'people went back')

4. Transitivity

A few verbs use different forms (derivationally related or suppletive) depending on whether they are used transitively or intransitively, e.g. gáde 'snap off (tr.),
gáde 'snap off (intr.)'; tlá 'get up, fly up', tlátlá 'raise, scare up'; vàra 'go out', dà 'take out, remove';
méte 'die', tóke 'kill'. However, virtually all other verbs which can be used in their bare lexical form as transitives can also be used intransitively, e.g. rópte 'open (tr. or
intr.), gáaye 'climb; be climed/climbable', fótke 'untie;
become untied, unfastened', rëbe 'massacre; die (in great numbers)', etc.

Not all verbs that are used intransitively may be used transitively. I will refer to verbs which cannot be freely used as transitives as basic intransitives. With basic intransitives, a transitizing suffix may be added to convert the verb to transitive use. The form of the Transitizer is identical to the form of the Totality Extension used with transitive verbs, and it is mutually exclusive with it, viz. -näa directly preceding direct objects, -dû elsewhere. As I noted above, there is comparative evidence that originally, -näa was the Totality Extension, -dû the Transitizer. The Transitizer and the Totality Extension have been retained as distinct morphemes in underlying structure, but on the surface they are each represented by the identically conditioned, suppletive allomorphs, -näa and -dû.

The Transitizer differs from the Totality Extension in certain respects over and above the obvious semantic differences. (i) It is obligatory if a basic intransitive verb is used transitively. The Totality Extension is always an optional choice (though it has inherent meaning). (ii) The Transitizer cannot be deleted in negative predicates, while sentences having the Totality Extension in the negative are ungrammatical (see Chapter 10, section 2).

(35) ná waye-näa garuu-gaa 'I fed my goats'

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(36) Kwaana áa kalakta-du  'Kwana will return (it)'
    (cf. Kwaana áa kalakta 'Kwana will return (intr.)')
(37)  deé-naa am bai    'he didn't bring water'
    (cf. deé bai 'he didn't come')
Footnotes to Chapter 2

1 A more formal and detailed discussion of lexical classes of verbs and of the verbal aspect system is given in Schuh (1971a).

2 The form –ininá is probably two historically different forms stacked one on the other. In –ii– we can identify the AY Vente Extension (cf. the regular alternation ai—> ii medially, Chapter 1, section 3). The suffix –na is probably related to an *n suffix found elsewhere in Chadic as a Venteive or sometimes with benefactive objects. Cf. also the N root in the meaning 'come' in Figure 1, which may be historically related.
Chapter 3

SENTENCE TYPES

Constituents of Verbal and Non-Verbal Predicates

0. Introduction

Following are rules which generate the constituents for basic Ngizim sentence types:

(1) \[ S \rightarrow NP \ PRED \ (NEG) \ (ADV^*) \]

\[ \left\{ \begin{array}{l}
VP \ (INST)(ASSOC)(LOC)(MAN)(PUR) \\
\end{array} \right\} \]

(2) \[ PRED \rightarrow \left\{ \begin{array}{l}
LOC^* \ (ASSOC) \\
STAT \ (LOC) \\
\end{array} \right\} \ (NEG) \]

(3) \[ VP \rightarrow AUX \ V \ (NP)(PP) \]

(4) \[ \left\{ \begin{array}{l}
INST \\
ASSOC \\
LOC \\
\end{array} \right\} \rightarrow PP \]

(5) \[ MAN \rightarrow \left\{ \begin{array}{l}
\text{man} \\
PP \\
\end{array} \right\} \]

(6) \[ PP \rightarrow PREP \ NP \]

(7) \[ PUR \rightarrow CONJ \ S \ (\text{see Chapter 8, section 9.1, for description of PUR.}) \]

\[ \left\{ \begin{array}{l}
NP \\
AP \\
\end{array} \right\} \]

(8) \[ STAT \rightarrow \left\{ \begin{array}{l}
ASSOC \\
?Exist \\
?Deictic \\
\end{array} \right\} \]

(9) \[ NP \text{ see Chapter 4 for expansion of NP} \]

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(10) \( AP \longrightarrow \begin{cases} \text{AP PREP AP*} \\ \text{ADJ (MAN)} \end{cases} \)

This chapter will be concerned only with neutral sentences, i.e. sentences not containing interrogative words, focussed constituents, or negation. (A few negative examples may be included, but none where the negation might affect the "basic" status of the example). The order of development will be as follows: remarks will be made on the subject (= NP in (1)), especially on pronominal subjects; I will then turn to the VP, considering each constituent in turn, starting with the direct object seen in (3), then the indirect object, and then the adverbial sisters to VP introduced in (2) (the essentials of AUX and V have been sketched in Chapter 2); finally I will look at each of the possible rewrites of STAT, rule (8).

A few other comments on the rules are in order. Rule (4) has been used as an ad hoc device to assure that instrumental, associative, and locative adverbs all have the surface structure preposition + noun phrase. It would not have been sufficient to simply put PP in (2) in place of each of these adverb nodes, because some device is needed to represent these adverbial types as distinct categories in the base. In the first place, verbs must be subcategorized as to the types of adverbs they may co-occur with. Moreover, the various adverb types in Ngizim show different syntactic behavior, especially with respect to pro-forms.
Another solution would have been to generate constituents such as PP [+INST], etc., but for expository purposes, it is simpler to refer to INST.¹

The pattern of adverbs indicated in the second and third lines of (2) are uncertain at this time. ASSOC co-occurring with LOC is meant to yield sentences like

(11) áa kunu-k sau naa dagwa-geri

    ASSOC

    'he is in the room with his money'

LOC with STAT predicates is meant to give sentences such as

(12) aci naa dagwa aa kunu-k menduwa-geri

    LOC

    'he has money in his house'

(13) aci zedai aa menduwa-gaa

    LOC

    'he is a servant in my house'

LOC as a predicate can also have a locative adverb. This is accounted for by making LOC in (2) iterative, (indicated by *). Example (14) has only one locative in addition to the locative predicate itself, but presumably more could be added ("... in Northeast State in Nigeria, etc."). LOC as an adverb in other types of predicates probably should be iterative for the same reason.

(14) jàa kunu-k pata aa zegař tku

    LOC

    'we're in the bush in the north there'

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I will not discuss problems of adverbs in non-verbal predicates further. Other questions regarding rules (1) through (10) should be clarified below.

1. Subject

The neutral Ngizim word order is SVO (Subject-Verb-Object). It may be worth pointing out that if a subject is nominal (i.e. not pronominal), a pronoun cannot be used along with it.²

(15)(a) Aamadu dlamu 'Amadu did it'
   (b) *Aamadu aci dlamu
(16)(a) Aamadu áa dlama-w 'Amadu will do it'
   (b) *Aamadu aci aa dlama-w
(17)(a) Aamadu dà dlama 'Amadu should do it'
   (b) *Aamadu aci dà dlama
(18)(a) Aamadu manga-gaa 'Amadu (is) my friend'
   (b) *Aamadu aci manga-gaa

The formatives áa and dà of (16)(a) and (17)(a) respectively are markers of aspect, not pronouns. The starred sentences would be acceptable if Aamadu were topicalized, indicated by (potential) pause following it.

For subjects generated as pronouns in the base, the form of the pronoun is dependent on predicate type. For predicates of the type STAT, i.e. all predicates except verbal and locative, all persons use the Independent Pronouns:
(19) Singular  
1 iyũ (> ii medially)  
2m ci  
2f kem  
3m aci  
3f atū  

Plural  
1 excl ja  
2 kn  
3 akši  

Some examples are:

(20) ii Ngəzəm  'I am Ngizim' 
(21) aci naa dagwda  'he has money' 

(See sections 4 and 5 for further examples.)

With verbal and locative predicates, first and second persons have a special paradigm, the AUX pronouns:

(22) 1 na  
1 excl ja  
1 incl wa  
2 ka  
2 kwa  

There is also an indefinite form, nda, corresponding to French on, German man, Hausa an/aka/a, etc. This form is derived from the word for 'person' (cf. ndawă 'people'), but as a subject it is semantically indefinite and formally behaves like the other preverbal pronouns. It has no corresponding independent indefinite pronoun to go into the paradigm in (19).
The pronouns in (22) and the indefinite nda always combine with the aspect marker dominated by AUX. The tone of those unmarked for tone is determined by AUX. See Chapter 2 for the full paradigms of surface forms in each aspect, and see Schuh (1971a) for a detailed description of the forms of AUX and the rules needed for combining AUX pronouns with AUX. In third person in some aspects, the AUX markers aa or da appear. These are not pronouns: they do not vary for number and gender, they have nothing phonologically in common with true third person pronouns in Ngizim, and most important, they can be preceded by the Independent Pronouns, e.g.

(23)(a) (aci) áa dlama-w 'he will do it'
   (b) (atu) dà dlama 'she should do it'

(but cf. the ungrammatical *ii náa dlama-w 'I will do it' with first person Independent Pronoun plus AUX pronoun).

Numerous examples of pronoun subjects are seen below, in the sketch of the verbal system, and in Schuh (1971a).

I assume that pronouns introduced in underlying structure are feature bundles which get lexical specification by virtue of syntactic position. I propose the following rule(s) to give such lexical specification to subject pronouns.
Subject Pronoun Choice

\[
[\text{PRO}] \longrightarrow \begin{cases} 
[\text{PRO} + \text{AUX}] / \text{AUX} \\
[\text{PRO} + \text{independent}] \text{ elsewhere as subject}
\end{cases}
\]

The one problem with this rule is LOC predicates, since such predicates have no AUX, yet they do use AUX pronouns. LOC predicates are, however, always introduced by a formative \textit{aa}, which is historically (and synchronically) the preposition 'at'. This preposition is identical to the Imperfective aspect marker, and is, I believe, the historical source for the latter (see section 3.2). I hypothesize the following historical development:

Pre-Ngizim: "Imperfective verbal construction" was a subtype of Locative \textit{FRED}; this type of predicate was introduced by a preposition \textit{aa} and used the independent pronoun as subject.\(^3\)

Early Ngizim: For obvious reasons, the Imperfective construction was reinterpreted as a type of verbal construction, causing \textit{aa} to be construed as an AUX marker; \textit{aa} as an Imperfective AUX was thus added to the environment of the first line of rule (24).

Contemporary Ngizim: The Locative \textit{aa}, because of phonological and linear identity with the Imperfective \textit{aa}, is interpreted as AUX, thus conditioning the PRO

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feature specification in the first line of (24).

While we could generate locative predicates as having an underlying AUX, always realized as \textit{aa}, it appears that the reason that the AUX pronouns are used before \textit{aa} of locative predicates is merely a surface resemblance between that \textit{aa} and the \textit{aa} of the Imperfective. To capture the fact that rule (24) is operating on surface, not deep, categories, I suggest the following rule for Ngizim:

\begin{equation}
(25) \ldots[[\textit{aa}]_{\text{PREP}} \ x \ ]_{\text{PRED}} \ldots \ \Longrightarrow \ \ldots[[\textit{aa}]_{\text{AUX}} \ x \ ]_{\text{PRED}} \ldots
\end{equation}

That is, we merely substitute the node label AUX for the node label PREP when \textit{aa} is the first element in the predicate. I suggest that this is exactly what the Ngizims do. See section 3.2 for examples of locative predicates.

2. Verbal Predicates

In this section, after some general remarks, I will examine separately the direct object, the indirect object, INST and ASSOC, and MAN. Discussion of LOC will be delayed until the section on locative predicates. FUR (purpose adverbs) are discussed in Chapter 8, section 9.1.

\textbf{VP} \longrightarrow \textbf{AUX} \ \textbf{V}

If the optional constituents of rule (3) are not chosen, the verb must be intransitive. Besides verbs which are basically intransitive (26–28), most other verbs in Ngizim
can be used intransitively, either in an "object fronted" sense (29-31) or in an "agentless passive" sense (32-34). In the latter two senses, the Intransitive Copy Pronoun (ICP) seen in (28), (29), and (32) is usually used (the ICP is hyphenated), but is not obligatory, as seen in (30) and (33), and is impossible in the negative, as in (31) and (34). (The form and function of this suffix on intransitive verbs is outlined in Chapter 2, section 3.2.)

(26) ndiiwa kalaktu garvaca 'the people went back yesterday'
(27) duukakin åa vera 'the horses will go out'
(28) aci metre-n-gari 'he died'
(29) azem bake-n-gara 'the grass burned up'
(30) am venge fap 'a little water spilled'
(31) miya-k sau repte bai 'the door didn't close'
(32) moota tku danme-n-gara 'this car got repaired'
(33) kuku tku åa gaaya 'this Baobab is climbable'
(34) wana tku åa dlama bai 'this work is not doable'

VP ---> AUX V NP

If the optional NP from rule (3) is chosen, the verb is a simple transitive with a direct object. However, absence of an overt NP on the surface cannot be taken as necessarily being an indication of intransitivity. Ngizim not only allows anaphoric pronouns, but also anaphoric deletion (Ø anaphora) of noun phrases (see Chapter 9 for a complete discussion of anaphoric processes). Thus, (35)(b) and (c)
are equivalent.

(35)(a) ná jibe kwaařa 'I caught the donkey'
(b) ná jib aci 'I caught him'
(c) ná jibu 'I caught (him)' (with anaphoric deletion)

For all aspects but the Imperfective, there is no surface difference between a verb used intransitively and anaphoric deletion of an underlying object (except, of course, where an intransitive verb has the ICP, not possible with transitives). In the Imperfective, where a verb is used transitively but with deleted object, the verb adds a suffix -w or -gá (= the Previous Reference determiner in other contexts, see Chapter 4, section 5.1). Intransitives have no such marker.

(36)(a) náa dlama-k wana bai 'I won't do the work'
(b) náa dlama-w bai 'I won't do (it)' (with anaphoric deletion)
(c) áa dlama bai 'it is not doable' (intransitive)

\[ VP \rightarrow AUX \ V \ NP \ PP \]

If both NP and PP are chosen in rule (3), NP is the direct object, PP the indirect object. For the same reason that a verb without overt direct object is not necessarily interpreted as intransitive, a sentence with only an overt indirect object is not necessarily interpreted as having been generated without a direct object, i.e. there may be
no overt object because of anaphoric deletion. Thus, the
(b) versions of (37) and (38) can be answers to the (a)
versions but with the direct objects anaphorically deleted.

(37)(a) ká ram-d ii-ci laabáñ?
      'did you tell him the news?'
(b) aawo, ná ram-d ii-ci
      'yes, I told him'
(38)(a) ãa taatka kakkadi ii degem?
      'will he show the paper to the chief?'
(b) aawo, ãa taatka ii dedem³
      'yes, he will show the chief'

\[ \text{VP ---+ AUX V FP} \]

Transitive verbs are those which are lexically sub-
categorized as requiring a following NP. By this definition
there are no transitive verbs which are followed only by
an indirect object. Intransitive verbs can, however, be
followed by an indirect object, a configuration generated
by the rewrite of VP immediately above.

(39) wá yvi dà mc(i) ii-wa bi?
      'should we let him die on us?'
(40) laabáñ bee waafa waakaat ii-kši aa pata
      'the story of what happened to them in the bush'
(41) gaada-k kaa sau laabáñ-gə Ngwajin naa ke Maamədo
dəbs aa bai
      'because of that, the history of Ngwajin and of Maam-
      edo have not been lost to me' [...did not hide to me]'

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2.1. Direct Objects

Rule (63) below moves indirect object pronouns to a position directly after the verb. The only formatives which may intervene between a verb and a direct object are derivational suffixes to the verb and these indirect object pronouns. Nominal direct objects are not marked in any special way. With finite verbs (verbs in all aspects other than Imperfective), direct object pronouns are the Independent Pronouns of (19). They are invariable and are treated just as noun objects with one exception: following low tone verbs in the Subjunctive, all direct object pronouns take all low tone\(^5\) (this tone rule is vacuous for persons other than first singular and all third person, since other persons are low to start with).

(42) ...káa m(í) iyù íi wùrà ...that you take me on your back

cf. (Second Subjunctive) ká má iyù íi wùrà báí

'...don't take me on your back'

(43) ...ká dèg(í) ákší ...that you follow them

cf. (Perfective) ká dèg(é) ákší

'you followed them'

In the Imperfective, the verbal noun rather than a finite verb is used. A direct object following the verb takes the form of an associative NP (see Chapter 4, section 1, especially 1.3). Thus, nominal objects must be attached by means of the associative linker, /k/, and pronoun objects
appear in the bound form of the pronoun. The associative noun phrase construction and bound pronouns are discussed in Chapter 4, section 1.3. The bound pronoun paradigm is repeated here for convenience.

(44)⁶ 1 -gâa(nái)  1 excl - (áa-)jâ
     1 incl - (áa-)wâ
 2m - (áa-)cí  2  - (áa-)kân
 2f - (áa-)kêm
 3m -gê-rì  3  - (áa-)kâi
 3f -gâ-râ

(45)(a) náa ndâma-k degem --> [náa ndâma-g degem]
      'I will greet the chief'
  (b) náa ndâma-geri  'I will greet him'
  (c) náa ndem-aaci  'I will greet you (m.sg.)'
    cf.  (d) (Perfective) ná ndâme degem
      'I greeted the chief'
  (e) (Perfective) ná ndèm aci  'I greeted him'
  (f) (Perfective) ná ndâme ci  'I greeted you (m.sg.)'

(46) xâa ma-gaa ii wura  'you will take me on your back'
    (cf. 42)

(47) xâa deg-akâkâi  'you will follow them' (cf. 43)

(48) àa baka-k tluwai  'she will roast meat'

If any suffix (either the Totality Extension or the Transitzer) or an Indirect object pronoun intervenes between an Imperfective verb and a direct object, no linker appears and the Independent pronouns are used.
(49)(a) nàa tek-naa gadagum "I will kill the rat'
(b) nàa tek-naa aci "I will kill him' 
cf.(c) nàa tek-geri bai7 "I won't kill him' 
(50)(a) àa r'yi-naa kwam 'he will stop the bull'
(b) àa r'yi-naa ci 'he will stop you'
(51)(a) kàa raura ii-ci Audu 'you will call Audu for him'
(b) kàa raura ii-ci iyu 'you will call me for him'
cf.(c) kàa raura-gaa 'you will call me'

Following are a few more examples of verbs with pro-
noun and noun direct objects. No examples of anaphoric
deletion are included, but anaphoric deletion is copiously
illustrated in Chapter 9.

**Perfective**

(52) jaaye wa '(he/she/they) asked us'
(53) wà yka maayim 'I saw the boy'

**Subjunctive**

(54) (aci maa) kà maak(i) iyu '(he said) you should look for me'
(55) (ii maa) dàa mi ñem '(I said) he should take wood'

**Imperative**

(56) à rak(i) akši 'chase them away!'
(57) à maši gaaza 'buy a chicken!'

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Second Subjunctive

(58) kà yva ja bai 'don't leave us'
(59) dà karma dem tku 'he should chop this wood'

Imperfective

(60) òa maak-aakem 'he's looking for you (f.sg.)'
(61) nàa karma-k dem 'I'm chopping wood'

2.2. Indirect Objects

Indirect objects are marked by the preposition \textcircled{li} 'to'.
To account for this preposition and only this preposition appearing with indirect objects, it will be the only pre-
position lexically subcategorized for insertion in the FP
of rule (3).

The relative word orders in VP's having both direct
and indirect objects are given in (62):

(62) \begin{align*}
V & \quad DO & \quad N-IO \\
V & \quad PRO-IO & \quad DO \\
\end{align*}

A pronoun indirect object must directly follow the
verb and its bound affixes, if any, whether the direct
object is a noun or a pronoun. To account for this word
order, rule (63) is needed:

(63) \textbf{Indirect Object Movement}

\[
\begin{array}{ccc}
\ldots & V & NP \\
1 & 2 & 3 \\
\ldots & \text{ii-NP} & [+]PRO \\
\ldots & \Rightarrow & \ldots \\
\ldots & 1 & 2 \emptyset & \ldots \\
\end{array}
\]

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The indirect object pronoun paradigm is, in most respects, ɨi + Independent Pronoun. It differs from that configuration in two ways: in the first person singular the bound pronoun form -âa(náí) occurs alone, necessitating a morphophonemic rule deleting ɨi in this person; and in the third person, the initial formative ə-, which is usually present in the Independent Pronoun forms, does not occur.

(64) **Indirect Object Pronouns**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>1 excl</th>
<th>1 incl</th>
<th>2</th>
<th>2f</th>
<th>3</th>
<th>3f</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ãa(náí)</td>
<td>įį-jä</td>
<td>įį-wâ</td>
<td>įį-ci</td>
<td>įį-kôm</td>
<td>įį-ci</td>
<td>įį-tû</td>
</tr>
</tbody>
</table>

For third person, there is also a form -âw. I have characterized this form in Chapter 9 as the Ø anaphora form of the indirect object. See Chapter 9, section 1.2.3 for further examples.

(65) nä taatk-aw kam-gaa  'I showed him/her/them my farm'

There is no formal distinction between benefactive and dative objects. Both are included in the examples below. The formative -d (< -dû) appearing in some examples is the allomorph of the Totality Extension or Transitizer, which is used everywhere except before direct objects, where -náa is used.
Noun DO; Noun IO

(66) ná ram laabəf i ni nen  'I told the news to the man'

(67) zaata-naa aw ii Zaara  'she pounded guinea corn for Zara'

(68) Baaba dà bari wunya-garì ii Mai Saleeman
    'then Baba gave his daughter to Mai Suleman'

(69) à baren dagwda ii gazgara-gaa
    'give money to my brother'

(70) kàa dlamà viya ii Maakwai?
    'will you do washing for Makwai?'

Pronoun DO; Noun IO

(71) à taatk(i) aci ii magerəf
    'show him to the visitor'

(72) nàa nii-nea akši ii mii-kši
    'I will take them to their mother'

Noun DO; Pronoun IO

(73) ná bar-d ii-kun dëvu  'I have given you (pl) the means (the road)'

(74) à dlam(i) aa wana-gaa tku
    'do this work of mine for me'

(75) Seku dà sekuna ii-ci kenaasaф
    'may God increase victories for you (m.sg.)'

(76) àa nii-d ii-ci kaфe  'he will take loads to him'

(77) nàa karam ii-kši Ëmm tku
    'I am chopping this wood for them'
Pronoun DO; Pronoun IO

(78) ná rauree-d ii-tu atu 'I called her for her'
(79) à ji ká naangai aanii akši 'go and insult them for me'
(80) à taatk(i) ii-ci aci 'show him to him'

Indirect Object; no overt Direct Object

(81) ná jaay ii ndiiwa gaawa 'I asked a lot of people'
(82) bar-d ii degem 'he gave it to the chief'
(83) sai ká ji ká dee-d aa 'you should go and bring it to me'
(84) nàa ya ná viyai-d ii-kem 'I will go and wash it for you'
(85) nàa rama-d ii-ci 'I will tell him'

Some Chadic languages, e.g. Kanakuru, may attach a pronominal indirect object copy to the verb, even with overt indirect object noun. This is not common in Ngizim, and is definitely not a preferred variant, but it is possible, as seen in (36) and (37). To add a pronoun copy appears to add a meaning difference as well, though I was not able to determine exactly what from my informants' explanations. It is possible to have an indirect object copy even when the underlying indirect object is a pronoun, as in (88) and (89). Note that in the latter examples, the indirect object phrase following the direct object uses
the Independent Pronoun, while the special Indirect Object Pronoun forms are found preceding the direct object.

(86) ná rauree ii-tu maayim ii mii-k mendiwa tku
'I called for her a boy for this mistress-of-the house'

(87) dâ bar -ii-ci dabi ii kaayak
'(then) he gave him the hoe to the squirrel'

(88) taatk aa kam-geri ii iyu
'he showed to me his farm to me'

(89) náa karam ii-ci dem tku ii aci
'I am chopping for him this wood for him'

2.3. Instrumental (INST) and Associative (ASSOC) Adverbs

The categories INST and ASSOC require the preposition náa 'with'. The evidence for establishing two categories is not particularly strong, and they may eventually be collapsed. They differ semantically, of course. Syntactically, the strongest reason for establishing two categories is the fact that they can co-occur, as in (90) and (91), but neither is allowed more than one appearance per sentence.

(90) dlegwam karm-náa ada-k makure-geri náa kasaka
\[ \text{INST} \]
\[ \text{ASSOC} \]
'náa daga aa aikwa-geri

'the warrior chopped off the hand of his enemy with a sword with a charm in his hand'

(91) náa gaaya waka náa zayi tku náa gawa aa aikwa-gaa
\[ \text{INST} \]
\[ \text{ASSOC} \]
'I will climb the tree with this rope with an axe in my hand'.

Moreover, semantically ASSOC can appear alone as a predicate, but INST cannot. Aside from these facts, INST and ASSOC behave syntactically in exactly the same way, and will be considered equivalent in what follows.

Both INST and ASSOC take the form nàa + NP or nàa + Independent Pronoun.

(92) teke mbiikda nàa zawa 'he killed the snake with a stick'

(93) rii nàa gergiya-n, ndá ñgalta nàa aikwak bai 'if a place has a bowl, one doesn't do measuring with the hand'

(94) áa mi ñlakwak tiyu kà dab aci nàa atu 'take that rake and push him with it'

(95) nda kuram waaña kàa ñlama ruwii nàa atu? 'where is the hoe that you will do farming with (it)'

(96) ná dee-n-gaa nàa kuram 'I came with a hoe'

(97) gaay ii waka nàa audu? 'did he climb the tree with a knife?'

(98) á fuwen nàa atu 'come down with it'

INST and ASSOC have in common what we may refer to, for our purposes here, as a special "pronoun". This takes the form of a suffix on the verb, -dí or -dáw. Its insertion will be taken care of by the following rule, and the conditions will be explained in the order given.
(99) **INST/ASSOC Pronoun**

\[ \begin{array}{c}
\ldots v \ x \ \{ \text{INST} \} \ \\
\text{ASSOC} \ \\
\end{array} \text{} \rightarrow \ \\
\begin{array}{c}
\ldots \ 1 + \text{-du} \ 2 \ 3 \ \\
\end{array} \]

1 \ 2 \ 3

Conditions: (a) \text{OPT if INST/ASSOC is naa} \ \left\{ \text{NP} \begin{array}{c}
\text{PRO} \\
\text{-}\emptyset \\
\end{array} \right\}

(b) \text{OBLIG if INST/ASSOC is} \ \left\{ \text{PRO} \\
\begin{array}{c}
\text{+}\emptyset \\
\end{array} \right\}

(c) \text{Blocks if V has Totality or Transitizing suffix}

(d) \text{Blocks if 2 = } \emptyset \text{ and INST/ASSOC is} \ \\
\text{aa NP}

(a) The "pronoun" -du may be inserted optionally in the presence of an overt instrumental phrase.

(100)(a) Demza na(-du) aayu naa audu tku

'Demza skinned the gazelle with this knife'

(b) Demza na(-du) aayu naa atu

'Demza skinned the gazelle with it'

(101) nāa karam(-du) dem naa gawa tku

'I will chop wood with this axe'

(102) nā nci zayi waařa nāa gaaya-du ii waka naa atu

'I want a rope that I will climb the tree with it'

(b) I have claimed that besides substantive noun phrases there are two possible anaphoric elements, characterizable as \([\text{PRO} -\emptyset]\) and \([\text{PRO} +\emptyset]\). The former are normal anaphoric pronouns, the latter \(\emptyset\) (zero) anaphora. When \([\text{PRO} +\emptyset]\) is the object of a preposition, the entire prepositional phrase is

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deleted. Ngizim indicates that anaphorically deleted INST ASSOC was underlying by obligatorily attaching the suffix -dû or -dâw.

(103) ná ziide-dâw gwamak 'I slaughtered the ram with it'
(104) fena-k waana, ndâ ̣gwa-dâw rugâ bi 'a milking calabash, one doesn’t scoop up manure with it'
(105) apta âa kune-k jaka daama waâna akâsâ âa calma-du am 'flour was in a different bag that they would mix water with (it)'
(106) ná mbase-dâw 'I sat down with it'
(107) kuku tiyu, atu dá jibi ii aikwa-gara dá dlam-du suwaari 'that Baobab fruit, she held it in her hand to do dancing with it'

(c) The instrumental pronoun -dû/-dâw is mutually exclusive with other bound suffixes to the verb. Recall that these are the Transitizer, used to make transitives from intransitives, and the Totality Extension. Instrumental -dû/-dâw is mutually exclusive with Totality, both in its form as the Intransitive Copy Pronoun with intransitive verbs, (108), and the -nâa/-dâ allomorphs with transitive verbs, (109).

(108)(a) fuwee-n-geri naa atu =
(b) fuwee-dâw 'he came down with it'
(c) *fuwee-n-geri-dâw/*fuwee-du-n-geri

(109)(a) ná têke-naa mbiikda 'I killed a snake'
(b) ná têke-dâw mbiikda (naa atu)
'I killed a snake with it'

(c) *ná teke-du-daw mbiikda/*ná teke-du-naa mbiikda

Because of this mutual exclusivity, the role of -d suffixed to the verb in (110) is uncertain. It could be the allomorph of the Totality Extension used before indirect objects, or it could be the INST/ASSOC copy introduced by rule (99).

(110) danme-d aanai keekee naa sepaana

'he fixed the bicycle for me with a wrench'

(d) There is some question as to whether -du/-daw can be added by (99) if INST or ASSOC directly follows the verb, either where the verb is intransitive or where the direct object has been anaphorically deleted. Sentences where the following INST/ASSOC had a nominal complement were consistently rejected, as in (111)(b), but those where the INST/ASSOC complement was a pronoun were usually acceptable, as in (112). They were sometimes rejected by criteria which were not clear to me, (113).

(111)(a) áa végayi naa audu aa aikwa-geri

'he is going to fall with a knife in his hand'

(b) *aa végayi-du naa audu aa aikwa-geri

(112) áa végayi(-du) naa atu aa aikwa-geri

'he is going to fall with it in his hand'

(113) á fuwen(*-du) naa atu!' 'come down with it!'
To conclude this section, let me point out that rule (99) must make reference to the categories INST or ASSOC. The configuration n*aa NP is not sufficient in itself since there are phrases of this shape which cannot condition the insertion of -dù/-dáw. Two such phrase types are manner adverbs formed with the preposition n*aa, (114), and comitative phrases derived by extraposing a conjunct from the underlying subject, (115).

(114)(a)  ta bii-k ta n*aa nyanya
       'he ate the food with disgust'
(b) *ta-daw bii-k ta
       ((b) could mean 'he ate the foo*ad with it', e.g. a spoon)

(115)(a)  jâ dlam wana n*aa a*ci  'he and I worked' [we did work with him]
(b) *jâ dlam-daw wana
       ((b) could mean 'we did work with it', e.g. some instrument)

2.4. Manner Adverbs (MAN)

Manner adverbs are like other adverbs generated as part of the predicate, in not being freely fronted, and in serving to subcategorize verbs. They differ from predicate adverbs, however, in not necessarily being of the form PREP N*P.

There is a special, fairly small lexical category, man, which may appear as one of the rewrites of MAN adverbs. Some of the man found in my materials are the following:
nānā? 'how?'
bèlân 'well, nicely'
dáamā 'differently'
giina 'on the back'
jóokúlólók 'squatting'
kàlápíyá 'in good health'
kádê 'quickly, fast'
kàlkál 'correctly, just right'
ñànkátà 'very well, with force/conviction'
ñáp 'slightly, a little'

(116) nà tas aci dava ji giina 'I found him lying down on his back'
(117) akši dambasu jookulolok 'they were seated in a squatting position'
(118) kàa ya kelappiyá kà nai kelappiya 'you will go in good health and return in good health'
(119) masađi tku rawa-n-gara kàdê 'this corn grew fast'
(120) à ji kà gub'ý aanai aci ñànkata 'go and give him a good beating for me' [go and beat him for me well]

In addition to the simple manner adverbs (man) listed above, there is the entire class of ideophones. I have not studied the syntax of ideophones at all, but suspect that they have special properties not shared by other MAN. Following is a long sentence containing several ideophones (underlined) for illustration.

(121) kaayak veree bùkwàa̱t tànu, dá kkèm sesau tku bától dá veri-n-geri dá nai dá jìbi viida dá bakwàaci bùrwùk tàp-tàp tàp fák nàa ny-àwàsì
'When the squirrel came out bëkwàad, he hit (the roof of) the hut bêtól, he went out, came, caught the rabbit, and left up bëriik running tâp-tâp-tâp far away (=fâk) going'.

Three prepositions in particular are used in MAN phrases: nàa 'with', ji 'with respect to', and kàa 'like'. The latter can be used with the demonstratives sëu 'this' or sëwà 'this (thing or event) in question', as a sort of pro-MAN, (129) and (130). It can also be used with kà + S to mean 'as, in the way that', (128).

(122) nen sa am nàa azêm-nan, ñà tek vedau nàa boone
'if a person drinks water with grass, he will urinate [kill water] with difficulty'

(123) aben atlba, ndàa ta-w nàa nyanya
'the food of the disliked wife, one eats it with disgust'

(124) maayim dá gubaji nàa rawa
'the boy jumped up at a run [with running]'

(125) ndà gen(a) akši nàa geši aarawai
'they should be received with gladness' [one should receive them with white heart]

(126) kunamu tiyu deka-nàa kaakenii-gu ii gazbëf
'that deleb palm exceeds the others with respect to height'

(127) kuku maarem yaaye, bata mešenu ii aayuuu bai
'though the Baobab is big, it doesn't equal the tamarind with respect to strength'

(128) nàa ya nà viyai ii-kem kaa ka kà viy aa kaanai tenu
'I will go and wash it for you as you washed mine for me'
(129) náa yva-naa laabaŋ mazamcin kaa sau
'I'll leave the story of the hunters like that'

(130) náa dlama-w kaa sau 'I'll do that' [I will do it
thusly]

2.5. Surface Order of Adverbs

There is a certain amount of freedom of adverb order, the only VP word ordering which is not alterable being
V (PRO-IO) DO. Indirect objects with noun complements,
while preferably following the direct object directly, can
be reordered to follow adverbs. Informants usually rejected
such reordering if there was no overt direct object, (134)
and (135).

(131)(a) ná taatke kam-gaa i Maakwai garvaca =
(b) ná taatke kam-gaa garvaca i Maakwai
'I showed my farm to Mákwaí yesterday'

(132)(a) ná bare dagwda iì gëden-gaa iì kune-k ssau =
(b) ná bare dagwda iì kune-k ssau iì gëden-gaa
'I gave money to my brother in the hut'

(133)(a) ká karme dem iì Gambau naa gawa tku? =
(b) ká karme dem naa gawa tku iì Gambau?
'did you chop wood for Gambau with this axe?'

(134)(a) ná ram iì Audu garvaca
'I told Audu yesterday'

(b) ?*ná ram garvaca iì Audu
(135)(a) náa jaaya ii ndiiwa aa aasek

'I'll ask people in the market'

(b) *náa jaaya aa aasek ii ndiiwa

Beyond these facts, word order among adverbs seems to be fairly free. My impression is that the order of adverbs indicated in rules (1) and (2) is the preferred one, but the following sentence was accepted with any order.

(136) akši teke mbiikda náa zawa garvac a kàde kàde náa Audu

'they killed a snake with a stick yesterday quickly with Audu'

3. Locative Adverbs and Locative Predicates (LOC)

3.1. Locative Adverbs

All locative phrases except dàmtáu 'near' and pédém 'far' (see section 3.3) require a preposition. This includes locative goals of motion verbs.10 The locative prepositions of Ngizim are:

(137) ãa  'at' (stationary)

ìì  'to, toward' (goal);  'at' (stationary)

dà  'from'

The tone of ãa and ìì, but not dà, dissimilates to high before low tone. These prepositions are required even before the pro-LOC words ràwàn? 'where?', rìì tìì 'here' [this place], rìì tìyù 'there' [that place], and rìyù 'there (place referred to)’ [the place].

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(138) ká jibe kwaaña aa rawan?
'where did you catch the donkey?'

(139) kullum ndáa wuna aa rakii bai
'it's not always that one sleeps in a bed'

(140) bame-k dagaadarai: iiwe-naa kutef-geri aa veda
'hiding like a Fenec: he's left his tail outside'

(141) ndá zaméti šigom dagai aa riyu
'one speared a certain warrior there'

(142) ká raka kwaaña ii rawan?'
'where did you chase the donkey to?'

(143) agwdfu širin áa tefa ii miya gayi bai
'two taure-fruits won't go into one mouth'

(144) fena-k tatam á mbasu ii rii gayi bai
'a calabash for picking (beans) can't sit in one place'

(145) belan mbiikda, ndá tausa-w ii wura bai
'the beauty of a snake, one doesn't wrap it on the neck'

(146) wà mbasa ii rii tku
'let's sit here'

(147) ká bee da rawan?
'where did you get it from?'

(148) dee da Ngwajin
'he came from Ngwajin'

(149) naa bee waaña dâa b(i) akši da rii nd-aaja bai
'there's nothing that will happen to them from our people [from the place of our people]'

Those locative relations expressed in English by
different prepositions, are expressed in Ngizim (and most
other African languages) by relational nouns, mostly derived
from body parts. A fairly complete list from my materials,
with their lexical source, is given in Table 1 on page 63.
To this list can be added the compass points:

zègář 'north'  căď 'east'
àďáu 'south'  dèkèmá 'west'

(150) da āa dayu-n, da daya aa patla-k ada

'if the eye is going to get lost, let it get lost in
the middle of the head' (proverb meaning "if you must
squander money, do so yourself rather than giving it
to some rogue to do so")

(151) aci ă nci bee aa kumu-k dāa

'he wants something in town'

(152) garuu-gaa āa dawa aa miya mavgi-gaa

'my goats are grazing at my door [at the mouth of my
door]'

(153) ħa ya ii kumu-k pada

'we're going into the bush'

(154) zèba tefè-n-gara ii wiita-geri naa nda Ngwajin

'marriage entered between him and the people of Ngwajin'

(155) zenzen āa gaayi ii da-k bedlamu naa ja

'let the folk-tale mount on the hyena and the dog'
(opening formula for a folktale)

(156) kure-naa mbasu ii wiita-k ndiiwa

'he refused to live among people'

(157) nà nci kà nèm aa ten maarem ii desku-k ten-gaa tku

'I want you to mould me a big nose on top of this
nose of mine'

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<table>
<thead>
<tr>
<th>LOC word</th>
<th>LOC meaning</th>
<th>Basic meaning</th>
<th>LOC word</th>
<th>LOC meaning</th>
<th>Basic meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>dákáu</td>
<td>'behind'</td>
<td>'back'</td>
<td>madláwái</td>
<td>'left'</td>
<td>'left hand'</td>
</tr>
<tr>
<td>bàaká</td>
<td>'to the side'</td>
<td>?</td>
<td>màtá</td>
<td>'right'</td>
<td>'right hand'</td>
</tr>
<tr>
<td>dësëkù</td>
<td>'above, on top'</td>
<td>'sky'</td>
<td>niyá</td>
<td>'at the edge'</td>
<td>'mouth'</td>
</tr>
<tr>
<td>dà</td>
<td>'on, on top'</td>
<td>cf. àdà 'head'</td>
<td>pátlá</td>
<td>'middle, center'</td>
<td>'interior of a compound'</td>
</tr>
<tr>
<td>dàa</td>
<td>'down, on the ground'</td>
<td>'town, homeland'</td>
<td>sì</td>
<td>'underneath, at the base'</td>
<td>'base, under-part'</td>
</tr>
<tr>
<td>gësëti</td>
<td>'at the center'</td>
<td>'heart'</td>
<td>tèkà</td>
<td>'next to'</td>
<td>'body'</td>
</tr>
<tr>
<td>gáddâavá</td>
<td>'among'</td>
<td>cf. Kanuri dává 'mid, midst'</td>
<td>vëdà</td>
<td>'outside'</td>
<td>'quarter (of town)'</td>
</tr>
<tr>
<td>këmá</td>
<td>'in front'</td>
<td>?</td>
<td>wákà</td>
<td>'on top (of something high)'</td>
<td>'tree'</td>
</tr>
<tr>
<td>kùnû</td>
<td>'in, inside'</td>
<td>'stomach'</td>
<td>wëitatà</td>
<td>'within, between'</td>
<td>?</td>
</tr>
</tbody>
</table>

Table 1 - List of Locative Words
(158) Barde fuwe da waka-k duuka-geri
    'the Barde got down from on top of his horse'
(159) biî-k ajap, wiilewiili âa rawa da miya-k am
    'an amazing thing, a duck is running from the edge of the water'

A locative relational term such as those described here usually is in an associative construction with its complement (see Chapter 4, section 1). Some relational terms can govern a phrase introduced by nàa 'with' plus a complement. With compass points, there is little difference in meaning between the two types of construction, perhaps corresponding to the (?) difference between 'to the north of California' and 'to California's north'. With other relational terms, a semantic difference is observable, as in (162).

(160)(a) Yaîwa âa cad-ge Peteskemu =
(b) Yaîwa âa cad naa Peteskemu
    'Maiduguri is east of Potiskum'

(161)(a) dlam ža ii aduu dâa =
(b) dlam ža ii aduu naa dâa
    'they made war to the south of town'

(162)(a) dûutatin âa desku ssau
    'the birds are on the house'
(b) dûutatin âa desku naa ssau
    'the birds are above the house' [...]are skyward with the house]

See also section 3.3 for more discussion on the use of
nåa with locatives.

Only words that are semantically locational words can be used with the locative prepositional words. If the locative complement is non-locative, such as a person or an activity, then the word râi 'place' (→ rîi medially) must be used as the actual complement of the preposition.

(163) ſehu dambasu aa rii-k mbasu-geri

'the Shehu remained where he was' [the Shehu was seated at his place of sitting]

(164) bee waaфа jà dlamu garvaca aa rii-k ma-k dem

'the thing that we did yesterday during the collecting of wood' [the thing that we did yesterday at the place of collecting wood]

(165) nà deew gaada-k nya ii Barmo ii rii-k ſeehu

'I came to go to Borno to the Shehu' [...to the place of the Shehu]

(166) nà ji-naa beƙku-k gayim ii rii-k maarem pata

'I took my complaint against the cat to the lord of the bush' [...to the place of the lord of the bush]

(167) goomak dà yi-n-geri ii rii-k saaфа

'the ram went trading' [...to the place of trading]

(168) nà yka nen waafa dà geŋy atu da rii-gaa bai

'I haven't seen anyone who could take her from me' [...who could take her from my place]

(169) ndá waayu da rii-k zeɓa

'people dispersed from the marriage' [...from the place of marriage]

3.2. Locative Predicates

Locative predicates are nothing more than locative
adverbs using the stationary locative preposition ãa. The one feature which syntactically distinguishes them from other types of stative predicates is that they take the AUX pronoun paradigm (21) rather than the Independent paradigm (18). A hypothesis for why this is so was given on page 39. Other than this, all the observations about the form of locative adverbs hold for LOC as predicate: relational terms may be used, (175) through (179); the word râi 'place' is required with non-locative complements in LOC, (180) and (181); in some cases, either the associative link or nàa may be used with complements following relational terms, (182).

(170) akší ãa rawan? 'where are they?'
(171) ãa menduwa '(he/she/they) are at home'
(172) zanzaanin ãa gagii-k Yaʃwa
   'Kanuris are in the land of Maiduguri'
(173) jàa rii tku 'we (excl) are here'
(174) akší yikaa Canduwa ãa riyu bai
   'they saw that Canduwa wasn't there'
(175) garuu-gaa aa miya mavgii-gaa
   'my goats are just outside my doorway'
(176) nàa këma wunduwa 'I am in front of the compound'
(177) (ndàa dlama-w kaa suu nèn, ãa kuru-n tai?) žabuwa ãa kune-k akurna-k ñgaferak
   '(if one is doing things that way, who would refuse?) honey is in the patient's gruel'
(178) (dëka-naa raakan ãa dàt) garva ãa waka-k kwaaʃa
   '(it's better than traveling by foot) a chief is on top of a donkey'
(179) ii maa da ḡa gadaav-aakun
'I would have said that he was among you'

(180) suu tku, lamar-gu ḡa rii-k Seku waağa iivu zegaya ii ḡa-geri
'(as for) this, the affair is with [at the place of] God who rendered knowledge to himself'

(181) Mai Baaba-k Jaajam waağa zawa-k aada ḍa rii-geri
'King Baba Jaajam that the traditional scepter was with [at his place]'

(182)(a) garuu-gaa ḍa zegař mešenu tiyu =
(b) garuu-gaa ḍa zegař naa mešenu tiyu
'my goats are north of that tamarind'

3.3. The Words ḍamtáu 'near' and pędém 'far'

These two words, while semantically locative, behave syntactically like adjectives. This is seen in three ways. (i) they take no preposition, either when used as locative adverbs or as locative predicates.12 (ii) They can be used attributively to mean 'near' or 'far', as in (183) and (189), while other relational words are never attributive. Notice that the other relational terms (except for the compass points) in effect make reference to some part of the locative word - 'the top of ...', 'the inside of ...', etc. ḍamtáu and pędém do not. They express a relation between two locatives. This fact in part explains (iii).

(iii) ḍamtáu and pędém used as LOC cannot take comple-
ments in an associative construction. They always take mana + NP. This is because the relations 'near' and 'far' are
not part of a locative noun, but express a relationship with a locative noun. Compare the attributive use of dàmtáu and pédem (where they are in a surface associative relationship with the following noun) and the relational use (expressed by nàa) with the similar use of the adjective tòtò 'difficult, hard': teta-k wana 'hard work' but aayu tetaa nàa vayi 'the gazelle is hard to shoot'.

**Used as predicates**

(183) Yañwa pédem nàa Peteskemu

'Maiduguri is distant from Potiskum'

(184) Ngwajin dàmtáu nàa Peteskemu

'Ngwajin is near Potiskum'

(185) ci pédem nàa iyu

'you are far from me'

**Used adverbially**

(186) fiit aka pédem nàa ssau

'she started the fire far from the hut'

(187) ndá bédle duwa dàmtáu nàa wunduw-aaja

'they dug a well near to our house'

**Used attributively**

(188) Ngwajin dàmtu-u-k daa  'Ngwajin is a nearby town'

(189) Yañwa pédem daa  'Maiduguri is a distant town'

The following are ungrammatical:
(190) *Yařwa aa padem because the preposition åa is used (cf.183)
    because the preposition åa is used (cf.183)
(191) *Yařwa padem Peteškeμu because padem is used without nɑa (cf.183)
    because padem is used without nɑa (cf.183)
(192) *fiit aka ii padem nɑa ssau because a preposition is used before padem (cf.186)
    because a preposition is used before padem (cf.186)

The compass points seem to express the same type of relationship to a locative as đamtāu and padem, i.e. they do not represent part of the locative but a locative relation to it. However, they cannot be used as predicate adjectives as can đamtāu and padem.

(193)(a) Yařwa åa cad 'Maiduguri is to the east'
    'Maiduguri is to the east'
    (b) *Yařwa cad

4. Equational and Adjectival Sentences

Nouns (N) have the lexical features \([+N]_{-ADJ}\), adjectives (ADJ) have the lexical features \([+N]_{+ADJ}\). Adjectives, by virtue of having the feature \([+N]\), can be used as substantives, e.g.

(194) mbase-k duuniya ſak nɑa hɑk: ká yka aarawii-gu-n, kɑa lawan-nɑa aayuwa-w
    'the condition of the world is the same as a pied crow: if you see the white, you'll see the black'

Nevertheless there are several syntactic bases for separating equational sentences (NP as predicate) and adjectival sentences (AP as predicate): (i) equational sentences require overt plural agreement between the subject and pre-
dicate; (ii) certain modifiers of the category MAN can be used with adjectives but not nouns; (iii) some quality words, when predicated of a noun, must be used in associative predicates formed with the preposition nãa 'with' (see section 5). There is thus a syntactic distinction between a sentence using a quality noun as a predicate and one using an adjective as a predicate.

(195)(a) nen naa awayau 'the man is strong' [the man is with strength]

(b) *nen awayau (would mean 'man of strength')

Such nouns are not common. Most words interpretable as expressing inherent qualities or states may be used as adjectival predicates and attributives. This includes words like kâkâbabû 'fool', dlûgûyû 'blind (person)', as well as quality words like bâlân 'beautiful', âyûwâ 'black', etc. (See Chapter 4, section 2.2 for an extensive list of adjectives.)

As we shall see, these criteria do not characterize a perfect dichotomy (cf. fn.14 and below). However, those predicates discussed in 4.1 will be predicates characterizable as NP's by criteria (i)-(iii) given just above.

4.1. STAT ----> NP

Equational sentences require overt plural agreement between subject and predicate. Thus, in (196)-(197) the (a), but not the (b) versions, have the plural form of the predicate noun.
(196)(a)  jà maalamcin        'we are teachers'
       (b)  *jà maalam

(197)(a)  Maakwii  naa Kwaana gwanguraucin
          'Makwai and Kwana are old men'
       (b)  *Maakwii  naa Kwaana gwangurak

By "overt plural" I do not necessarily mean that some
morphological plural marker must be present. In (196), the
pronoun subject is inherently plural. In (198) (where the
predicate happens to be adjectival, but demonstrates the
point), the subject noun phrase is understood as a collective
and takes plural predicate agreement in the same way that
the English translation requires plural verb agreement.

(198)  Sau gazbaàrin kuřu guřjamcin
          'the So (people) were tall and moreover big'

To assure plural agreement, the following if-then condi-
tion will be placed on deep structure well-formedness. This
condition states that a predicate noun must be morphologically
marked to agree in plurality with the subject NP in deep
structure:

(199)  Deep Structure Plural Agreement

\[
\text{IF: } \begin{array}{c}
\text{NP} \\
[\text{apl}]
\end{array}
\rightarrow \begin{array}{c}
[+N] \\
[\text{X}] \\
[-ADJ] \\
\text{PRED}
\end{array}
\]

\text{THEN: } \begin{array}{c}
\text{apl}.
\end{array}

\text{Condition: Does not apply if } \text{X} \text{ contains con-

juncts to } \begin{array}{c}
[+N] \\
[-ADJ].
\end{array}\]
Certain universal considerations govern what determiners may appear on the subject and predicate NP's of equational sentences. For example, *kwaâfrica dagai dabba tku* 'some donkey is this animal' is ungrammatical because of an improper combination of determiners. There are no requirements that any determiners be overt on either subject or predicate nominal. The universal considerations just mentioned will determine which possible readings are grammatical, e.g.

(200) kwaâfrica dabba 'a/the donkey is an animal'

Following are a number of illustrations of equational sentences showing a range of subjects and predicates. For pronominal subjects or predicates the Independent Pronouns in (19) are used.

(201) kun Ngezamcin 'you (pl.) are Ngizims'
(202) iyu Fiika bai 'I am not a Bole person'
(203) gwani álegiá ci 'the expert wrestler is you (m.sg.)'
(204) degem daa aci 'the chief of the town is him'
(205) tla tiyu keci bi? 'is that cow yours (m.sg.)?'
(206) waka tku meñenu 'this tree is a Tamarind'
(207) lakwtu-w lakwtu-k ūa 'the time was a time of war'
(208) garvaca gusku bai 'yesterday isn't today'
(209) gwani-k duuka nín waâfrica ūa waka-w 'the expert horseman is the person who is on it (i.e. the horse)'

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(210) fēra-k maayim fēra-k baaci wunduwa

'the illness of a boy is the illness of the master of the house'

(211) laman ūgaferak ke baaci kaṟgun

'the wealth of the patient is that of the owner of the medicine'

(212) bända-k tleri taatka aikwak

'the beginning of a fight is the showing of one's hand'

(213) nuuba-k kerinakau da gaaya ii desku bai

'the fate of a frog is that he not (be able to) climb up'

The subject of an equational sentence need not be overt if anaphorically deleted because of previous context.

(214) kaane, ūbabwa bai, ūau

'what do you know, (it was) not honey, (it was) shit'

(215) kā kēma vērek nen, iyu

'if you hear something thrown, (it's) me'

4.2. Proper Name in the Predicate

Proper names used as predicate complements to the noun ðlugūn 'name' are, in their English translations, equational sentences. The predicate is invariably introduced by māː;

(216) ðlugūn-gaa maa Tambai  'my name is Tambai'

(217) ðlugūn ūSuwa-ūSuwa maa Aabuuna

'The Shuwa Arab's name was Abuna'

(218) ðlugūn dāawu maa Zaada  'the name of the town was Zada'
(219) dlugun-ci maa tam? 'what is your name?'

To analyze such sentences as equational sentences is probably a mininterpretation of the structure of such sentences. This formative maa is also used alone or following a verb such as 'say', 'ask', 'hear', etc. to introduce a speech act (direct or indirect) (see Chapter 6, section 5). In a usage more like that in (216)-(219) it can be used to mean something like 'people say of X that ...'.

(220) daaci amarya, maa atu mii sekentu, dà yi ña ma-w

'then the bride, (of whom) they say she was a haughty person, went taking it'

(221) wunya belan kaa saw, ká n-du ii kunu-k pata ká jibi ravan-gu maa ci baaci guru?

'a beautiful girl like that, you take her into the bush and set to troubling her with it being said of you that you are a jealous person'

4.3. STAT ----> AP

4.3.1. Predicates Containing True Adjectives

Rule (10), repeated here for convenience, gives not only simple adjectives (ADJ) but also conjoined adjectives and adjective phrases with modifiers:

(10) AP ----> \[\{AP \ PREP \ AP*\}\]

The first line is tentatively included to give surface structures like the following:

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(222) jaakuwa-geri bau naa aarawai
     'his cap is red and white'

I say "tentatively" because I am not at all sure that
adjectives connected in this way are really co-ordinate,
i.e. a better translation of (222) might be 'his cap is red
with white (in it)'. In this case, naa aarawai would probably be dominated by MAN (see below).

If the first line of (10) is retained, the only PREP
subcategorized for insertion here would be naa 'with'. Other
elements which appear to join adjectives on the surface will
have underlying structures of a different nature. For ex-
ample, èmmà 'but' in (223) conjoins two full sentences, not
just the adjectives:

(223) miya ñgezem tetaa amma kaarak
     'the Ngizim language is difficult but (it is) plea-
sant (to the ear)'

The category ADJ can have modifiers of the category
MAN (second line of rule (10)). These may be simple man
words themselves (èrankata in (224)) or prepositional phrases
(naa jiìeeewa in (226)(a)).

(224) Abas gazber ñrankata     'Abas is very tall'
(225) ama belan bee bai       'the woman is extremely
     beautiful'

(Be bai is translated as Hausa ba kome, but used with the
adjective bèlàn it is a fixed phrase.)

75
(226)(a) Mai Ganjuwa źigom nəa jiřeewa =
(b) Mai Ganjuwa źigom-ge jiřeewa
'King Ganjuwa was a truly brave warrior'

The two sentences of (226) were given as equivalent, the first literally being 'brave with truth', the second 'brave of truth'. źigom is probably used as an adjective in the first with MAN and in the second as a noun meaning 'brave warrior'.

When predicated of a plural subject, adjectives may be morphologically either singular or plural.

(227)(a) já gazbaařin =
(b) já gazbeř 'we are tall'

(228)(a) Felaatatin bawawin =
(b) Felaatatin bau 'Fulani are light-skinned'

(229)(a) gara ſu datakwsasin =
(b) gara ſu datakwa 'the goats are tied up'

(The latter example has a stative predicate – see section 4.3.3 – but the facts on plural agreement are the same as for true adjectives.)

The following rule accounts for adjective plural agreement:

(230) **(OPT) Pluralization of Adjectives**

\[
\begin{array}{c}
\text{NP} [\text{+[pl]}] [\text{+[ADJ]} \: X] \text{PRED} \quad \Longrightarrow \quad 1 \: 2 \: 3 \\
1 \quad 2 \quad 3 \\
\end{array}
\]
It will be assumed that the unmarked form for adjectives is the singular form and that they will be inserted in underlying structure in this form. Rule (230) optionally adds the specification [+pl] to predicate adjectives if the subject noun phrase is plural. (This rule will be generalized somewhat in Chapter 4, section 2.2 to allow pluralization of following adjectives when they are attributive modifiers as well.)

Following are a few more examples of sentences with predicate adjectives:

(231) tluwii-gu lefiiit 'the meat is tender'
(232) gooro dëgwaagwëk 'kola is bitter'
(233) dëglewaat aarawai 'the camel is white'
(234)(a) dababkin bëlaalamín =
         (b) dababkin belan 'the young women are beautiful'
(235)(a) bufafin tku dukšañín =
         (b) bufafin tku dukší 'these bags are heavy'
(236) mësta bédlamú tétza bai; namboo kuteř baya
      'turning into a hyena isn't difficult; it's the lack of a tail'

The examples above all contain lexical adjectives. Adjectives can be derived from verbs by a productive process consisting, basically, of adding a prefix gá- and a suffix -ák to the verb root, e.g. gágádák 'broken off' < gàde 'to snap off (intr.)', gàmták 'dead' < mëta 'to die', gánáayák 'ground' < náaye 'to grind'.

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(237) ada-k zemanu gagadak  'the ostrich's head was broken off'

(238) iika revak ga'adlak naa vedau  
'she saw that the skin was soaked with urine'  
(cf. fâdle 'to get wet')

4.3.2. Quantifiers as Predicates

Quantifiers used as predicates are not specifically accounted for by my rules. In simple noun phrases, quantifiers are included in the category DET because of certain syntactic properties shared with demonstratives. They will have to be subcategorized so as to appear as predicates of matrix sentences.

(239) ii maâ da kaayak, zegêr-gu širin  
'I would have said of a squirrel that his legs were two'

(240) ãa kunu-k wujêr gayim, řap nen sau  
'among the activities of the cat, this is just a little'

(In (240) the subject, sau, has been focussed by postposing - cf. Chapter 5, section 3.1.)

(241) dlegemau maarem nen, kakera-gari ye gaawa  
'if a camel is big, his load too will be great [much]'
4.3.3. Stative Predicates

4.3.3.1. Statives Derived from Verbs

Stative predicates can be derived from verbs by adding a prefix dá- to the verbal noun, e.g. dámbásti 'seated' < mbáse 'to sit down', dákamâ 'finished' < dáame 'to finish', dándánkâ 'sewn' < dánkë 'to sew'. With a very few exceptions of frequent occurrence (dámbrásti 'seated', dâvëjî 'lying down', dâr'yi 'standing', and perhaps one or two others) statives can be derived only from transitive verbs. The subject of the stative predicate is always the semantic object of the verb. As with adjectives, when the subject is plural, the predicate may be morphologically plural or singular (see (228) above and (246)). The plural form is rarely used with statives, even when predicated of a plural.

(242) ii dar'yi 'I am standing'
(243) akeraucin dajiba 'the thieves are caught'
(244) ada-gara dayayâna naa arîyaaku 'her head was wound with a turban'
(245) ñau dangwa aa kunu-k fëna 'the manure is scooped up in the calabash'
(246)(a) akši dambasasin =
(b) akši dambasu 'they are seated'

Statives differ from true adjectives in a number of respects. First, statives can be used only as predicates, never as direct attributive modifiers (the same is true in

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Hausa). This is seen most clearly in prenominal cases. Whereas the \( \text{gá-ák} \) adjectives can be used as post- or prenominal modifiers (\( \text{zài gágádák} = \text{gágádák zài} \) 'broken rope'), statives are found only postnominally (\( \text{âw dámpâyî ≠ *dá-mpâyî-k âw} \) 'stored guinea corn'). All postnominal attributives are analyzed as relative clauses with the relative marker, \( \text{wàañá} \), deleted (see Chapter 4, section 2.1).

Second, statives may be used with both the Totality and Ventive verbal extensions. The Totality Extension takes the form of a suffixed pronominal copy of the subject attached to the stative.\(^{17}\) (The formative \( \text{-m-} \) found with verbs is absent with statives.)

(247) \( \text{ii dar'yi-gaa} \)  'I'm standing'
(248) \( \text{aci dambasu-geri naa amaatu-geri} \)
    'he is living [seated] with his wives'
(249) \( \text{daaɓeɗ dækəɓa-gara naa ŋuu-k tla} \)
    'the basket is smeared with cow dung'

That this is the Totality Extension is evidenced by the fact that it cannot be used in the negative.

(250)(a) \( \text{kwaarña dalaŋta bai} \) 'the donkey is not loaded'
(b) \( \text{*kwaarña dalaŋta-gara bai} \)

The Ventive Extension is marked by the suffix \( \text{-âyî} \) characteristic of this extension used with verbal nouns.

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(251) karee damasayi 'the goods are bought (and brought)'

(cf. damasa 'bought')

(252) miya mavgi dacimayi 'the door is closed (this way)'

(cf. dacima 'closed')

4.3.3.2. The words ngaa 'in good health' and fuu 'alone'

These two Kanuri loans share the characteristics enumerated above for statives derived from verbs: they cannot be preposed as attributives, and they take the Totality Extension in the form of a suffixed pronominal copy of the subject, which cannot appear in a negative predicate. Ngaa and fuu have no plural forms.

(253) ii ngaa-gaa 'I'm in good health'
(254) ci ng-aaci? 'are you well?'
(255) ng-akshi 'they're well'
(256) ii fuu-gaa 'I'm alone'
(257) baaci hal, veda-geri fuu-geri

'as for a temperamental person, he's in his quarter he alone'

The pronominal copy must always be used with fuu, but may be omitted with ngaa. Sentences with the negative marker were accepted even with these pronominal extensions, but note the Hausa translations that were given and compare especially the contrast between (259)(a) and (b). These translations indicate constituent negation of the sentence
rather than predicate negation.

(258) ŋuugara bai  'she's not alone'
(Hausa: ba ita kadai ba)

(259)(a) ii ngaa bai  'I'm not well'
(Hausa: ba ni da lafiya)

(b) ii ngaa-gaa bai  'I'm not well'
(Hausa: ni ba lafiyata ba)

4.4. Predicates Using bàaci, mài, and ndà

Predicates formed with the nouns bàaci (m.sg.), mài (f.sg., becomes [mii] medially), and ndà (pl.) 'one who does/has/is characterized by' share features of both predicate nouns and adjectives.¹⁸ Like nouns, they must agree in plurality with the subject:

(260)(a) Felaatatín ndà-k tladin  
'the Fulani (pl.) are owners of cattle'

(b) *Felaatatín baaci tladin

Like adjectives, they can take modifiers of the category MAN:

(261) Ŝuwa-šuwa dagai aa cad baaci-k ža ſankata  
'a certain Shuwa Arab in the east was a great warrior'
(Hausa: ... mai yaƙi sosai)

(262) zega-w mii lawan ſankata  
'the sorceress was a real seer'
(Hausa: ... mai gani ce simun)
(Note that ɾâŋkâtà cannot modify true NP's: *tluwii tku bedlamu ɾâŋkata 'that animal is a very hyena'.)

The reason for these facts is that the head of the construction (bàaci, mài, nàdà) is \([^{+N}_{-ADJ}]\) while the entire phrase is adjectival. We may therefore either want to rewrite the category ADJ so that it has the structure of a BAACI-phrase as one of its options, or we may want to add further material in the rewrite of AP. See (219)-(220) and Chapter 4, section 2.3 for further examples of this type of phrase used as a predicate and attributively.

5. Associative ('have') Predicates and Existential Sentences

5.1. Associative Predicates

Structurally, associative, or 'have' sentences, are composed of the subject NP directly followed by a predicate introduced by nàa 'with'. The Independent Pronouns are used as subjects. If the subject is understood from previous context, it may be entirely deleted, as in (263)-(269).

(263) ii nàa duuka bai  'I don't have a horse'
(264) ci nàa kwaaña  'you (m.sg.) have a donkey'
(265) nèn âa rawa âa piima-n, aci nàa jìrëe bai
    'if a person is running and looking over his shoulder, he is not innocent' [... he doesn't have truth]
(266) zaabanu nàa pampeeri-n, zëmanu nàa debaaba
    'if the guinea fowl has the pamperi-hair style, the ostrich has the debaaba'

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(267) Kwaana naa tam? 'what does Kwana have?'

(268) tla-k masyim naa anyi, naa fula bai
'a boy's cow has milk, (but) it doesn't have butter'

(269) mà nci kwam wasána naa awayau
'I want a bull that is strong' [...] has strength]

5.2. Existential Sentences

The neutral form of existential sentences is nàa + NP, i.e. identical to an associative sentence with no subject. The source of such sentences is open to question and hence the ?Exist in rule (8). My own preference is to derive these from associative sentences with Ø subject underlying.

(270) naa beeza 'there is salt'

(271) naa mérak bai 'there is no oil'

(272) ká këma gemsek áa mezem men, naa tetaa aa teka-geri
'if you hear a man groaning, there is pain in his body'

(273) damtau naa tluwii bai 'nearby there are no animals'

Very commonly, the complements of existential predicates are fronted. Existential sentences with no overt complement meaning 'there is' or 'there is/are none' are also possible. In such sentences nàa will be followed by a Ø anaphoric element (cf. p. 53 and Chapter 9) and the following morphophonemic rule will apply:

(274) nàa ---> wàrà / [____ [FRO] +Ø ] X [FRED

Condition: X does not contain NEG

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That is, when no complement in an affirmative existential S follows nàa it is replaced by wàrë, a formative of uncertain etymology. Interestingly, when a negative existential S has no overt complement after nàa, the result is nàa bái, which is retained on the surface. This is the only construction in the language where a preposition is allowed without an overt complement. In effect, the negative marker, bái, becomes the surface complement of nàa.

(275) nàa sëkàr bi? 'is there any sugar?'
aawo, wàra / o'o, nàa bái 'yes, there is / no there isn't'

(276) bëeza wàra 'there is salt'
(277) mërëk nàa bái 'there is no oil'
(278) tamëk ë duwnëyà aa rii tënu wàra 'there was everything in the world at that place'
(279) këka bëdlamù nàa bái 'the hyena's grandfather is no more' (i.e. he's dead)

Another morphological variant of existential sentences is accounted for in the following morphophonemic rule:

(280) ... [nàa NP bái]_PRED ... ====> ... gòo 2 Ø ...

That is, the negative existential nàa ... bái can be replaced by the word gòo 'there is no ...'. Gòo must always be followed by an overt complement. Unlike nàa ... bái, gòo can be used as an adverb to mean 'without', as in (283) and
(284). (Cf. the associative adverbial use of nāa.)

(281)(a) mēse-gara, nāa laabaŋ bai =
(b) mēse-gara, goo laabaŋ

'as for her husband, there was no news (of him)'

(282) goo nēn waaŋa nā yka-w

'there was no one that I saw'

(283) ngalko nā dlabi goo ama

'it's best that I remain without a wife'

(284) zaaman Mai Maadi dā bencī goo ża

'the time of King Madi passed without war'

Some evidence that existential sentences should be derived from underlying subjectless or Ø subject associative sentences comes from sentences like the following. These are equivalent to sentences with normal associative word order as in (263)-(269).

(285) alaji dagwda wara    'Alhaji has money' [Alhaji money there is]
(286) iyu keekee nāa bai    'I don't have a bicycle'
(287)(a) ii nāa duuka bai =
(b) ii goo duuka    'I don't have a horse'
(288)(a) Iīsa nāa kam bai, sai yaamanci =
(b) Iīsa goo kam, sai yaamanci

'Isa doesn't have a farm, just a little side plot'

These sentences show the same morphophonemic alternations as simple existential sentences. If associative and
existential sentences had different sources, the rules governing these alternations would have to be duplicated for associative and existential predicates. On the other hand, if the sentences above were derived from existential sentences it would appear that there would be no source for the "subject". I'm not so sure that this last problem is insurmountable, however. One possibility is that the "subjects" of (285)-(288) come from underlying locative phrases. Thus, (285) would be underlyingly,

(285') /naa dagwda aa rii-k alaji/

'there is money at the place of Alhaji'

Alaji would then be topicalized and the locative phrase deleted. If the "subjects" of (285)-(288) are topicalized noun phrases (a possibility for which I am aware of no strong evidence, since I could detect no pause intonation or other features characteristic of topicalization), then their source may be ADV as introduced at the sentential level in rule (1). This source for topicalized noun phrases is argued for in Chapter 8.

6. Deictic Sentences

I have tentatively introduced a category Deictic in rule (8). This rule introduces one of the deictic words in (289), corresponding to French voici, voilà and Hausa gàa. They have singular and plural/mass forms, though the "singu-
lar" is usually used even with plural referents. I have found only one textual example of ndåw and none of ndiyù. These deictic words fit into the larger demonstrative system (see Chapter 4, section 5.2).

<table>
<thead>
<tr>
<th>(289)</th>
<th>Singular</th>
<th>Plural/Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>'here is ...'</td>
<td>såw(täi)¹⁹</td>
<td>ndåw</td>
</tr>
<tr>
<td>'there is ...'</td>
<td>sii(täi)¹⁹</td>
<td>ndiyù</td>
</tr>
<tr>
<td>'there is ...', 'consider ...'</td>
<td>sänà(täi)¹⁹</td>
<td>ndénà</td>
</tr>
</tbody>
</table>

There is a certain amount of freedom, especially between såw and sänà, as to whether reference is to a thing seen or a thing in a place of reference not seen. Såw is the more frequent in both usages. Sii, besides being used with distant things in sight, can be used with reference to things distant in time or a place not seen.

(290) saw jaka tku 'here's this bag'
(291) saw nda-k bara ye ñee-n-aakši ii damaatu 'there are some hunters, they have come near'
(292) saw iyu 'here I am'
(293)(a) saw-tai 'here (it) is'
(b) saw-tii kakkadi 'here is paper'
(294) ndå ram maa ndaw bii-k sadak-aakši 'one said here are their things for alms'
(295) sëna, áa mi ñlakwak tiyu 'there it is, take that rake'

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(296) Am maayim! Ndêna amaatau åa wunduw-aakun, kà ram maa kàa ya ii maka-k zëba?

'Oh, my boy! There (they) are women at your house, and you say you are going to look for marriage?'

(297) sii wunduwa-k gayim-gu

'there's the cat's house'

(298) sii-tai duk ndiiwa åa teka gamas-kun

'there were all the people laughing at you'

In narrative these deictics, especially saw, are frequently used to introduce a new element or call special attention to some facet of the story.

(299) saw ye, kuku-gu gazber

"and we see that" the Baobab was tall'

(300) saw maya dà ma-naa bedlamu

"now we see that" hunger had overcome the hyena'

(301) saw belan saw gamas naa ñtuu-k capari

'there was beauty there was laughter and a cheerful disposition'

(302) sëna, tem-w ta-naa atu

"thus we see that" the mortar ate her up'
Footnotes to Chapter 3

1 Case grammar, outlined in Fillmore (1968) and put into practice on a Chadic language by R. Newman (1971), is designed to handle just those problems mentioned here. Case grammar has problems of its own, however, and outside of giving a way to explicitly separate underlying categories, I haven't found that it is particularly helpful in a primarily descriptive study, such as the present one.

2 Ngizim is typical of many Chadic languages, but unlike Hausa, in having no third person auxiliary pronouns used in conjunction with, or alone as, aspect markers.

3 Evidence that the Independent pronoun was used in pre-Ngizim as the subject of so-called Imperfective constructions is seen in Bade. Consider the following (partial) paradigm from Bade:

<table>
<thead>
<tr>
<th>Pronoun</th>
<th>or</th>
<th>Pronoun</th>
<th>or</th>
</tr>
</thead>
<tbody>
<tr>
<td>nää nayi</td>
<td>ayu aa nayi</td>
<td>'I will come'</td>
<td></td>
</tr>
<tr>
<td>yaa nayi</td>
<td>agi aa nayi</td>
<td>'you (m.sg.) will come'</td>
<td></td>
</tr>
<tr>
<td>gwaa nayi</td>
<td>agwa aa nayi</td>
<td>'we (incl) will come'</td>
<td></td>
</tr>
<tr>
<td></td>
<td>awun aa nayi</td>
<td>'you (pl) will come'</td>
<td></td>
</tr>
</tbody>
</table>

In Ngizim, all persons except third require AUX pronouns (which phonologically blend with the Imperfective marker aa). In Bade (one dialect at least) in some persons, we see that it is possible to use the AUX pronouns (left-hand column) or Independent pronouns + aa (right hand column). It is not possible to use the AUX pronoun in second person plural in Bade, though this is now required in Ngizim.

Development of an Imperfective or Progressive from a locative construction is by no means unprecedented, having also taken place in English: he is hunting < he is a-hunt-
ing < *he is on hunting.

4 The mark of deleted object seen in (36)(b) is not obligatory when an indirect object is present. aâ taetka-wi degem 'he will show it to the chief' is also possible.

5 What is particularly strange about this tonal alterna-
tion is that it applies only to the neutral verb stem. When the Ventive Extension is added to verbs in the Subjunctive, they are given all low tone, regardless of lexical tone.
Used with Ventive verb stems in the Subjunctive, direct object pronouns do not take low tone, even though the verb is low.

(i) ... ndá růrůři iyũ  
    cf. ...ndá růrůři iyũ  
       '...that one call me (here)'  
       '...that one call me' (neutral Subjunctive form)

(ii) ... kã jibî áci  
    cf. ... kã jibî áci  
       '...that you catch (and bring) him'  
       '...that you catch him' (neutral Subjunctive form)

6 The hyphenated -g(ɨ)- and -a- are historically suppletive allomorphs of the associative linker. They will henceforth be written as units with the pronoun. The parenthesized -a- is used only when following words lexically ending in a, i, or u.

7 The Totality Extension, -nãa cannot be used in the negative (see Chapter 10, section 2).

8 There is a striking homophony with certain intransitive verbs + Transitizer and intransitive verbs + ASSOC. The allomorphs of the Transitizer are -nãa before direct objects, -dů elsewhere. The preposition 'with' is nãa (----> nãa before Lo) and rule (99) gives -dů as a possible ASSOC pronoun. Thus, the following sentences (with each morpheme written unattached) could have two different, but synonymous translations:

nã de nãa kaře  
'I brought the loads/I came with the loads'

nã de nã du  
'I brought it/I came with it'

9 Time adverbs, while generated in the base at sentence level rather than predicate level, can be shuffled with predicate level adverbs.

10 This is an unusual feature from a comparative viewpoint. Other Chadic languages as diverse as Hausa, Kanakuru (Newman, 1972, p.2-15 ff.), and Tera (Newman, 1970, pp. 17-18) allow no preposition before locative goals of intransitive motion verbs.
11 This is one strong reason for believing it to be neces-
sary to separate LOC predicates and Imperfective verbal con-
structions in the base, although it is quite certain that
historically the latter derive from the former. Clearly,
the head of an Imperfective verb phrase is not a locative,
yet it never requires râi. This is in contrast to sentences
such as (164) which have verbs or verb-like words as com-
plements in LOC phrases and thus require râi.

12 Like all adjectives in Ngizim, dâmtâu and pédêm can be
used as substantive nouns (cf. section 4). Used in this way
they do require prepositions:

(i) gwangurak iika-naa metu-n-gara dee-n-gara ii damtau
    'the old woman sees that her death has drawn near'
(ii) gaafa dagii-n åa damtau; gaafa-n åa pedem
    'sometimes it was nearby; sometimes it was distant'

I don't believe that dâmtâu and pédêm can take comple-
ments when used in this way. The obvious reason is that a
sentence like ?*Ngwajin åa damtau-k Peeskëmu would be anom-
alous in the same way as its translation '*Ngwajin is at the
closeness of Potiskum'. Sentences with nàa rather than the
linker, such as kam-gaa åa pedem nàa keci 'my farm is far
from yours', were acceptable, though not the first versions
given. This would correspond to English 'my farm is at a
distance from yours'.

13 Informants judged (190) to be ungrammatical, while the
facts cited in the preceding footnote suggest that it should
be grammatical. The difference between (190) and the sen-
tences in fn. 12 may have to do with whether the thing "lo-
cated" by the sentence is stationary with respect to the
subject or not. Note that in English, the sentences 'the
fighting is (still) at a distance', 'we are (still) at a
distance from Maiduguri' seem to imply motion on the part of
the located element or the subject with respect to the lo-
cated element, while the sentences 'the war is distant',
'Maiduguri is distant' do not.

14 There is a hierarchy of syntactic adjectivity: (1)
Some adjectives can appear in three construction types: as
predicates of adjectival sentences, e.g. duuka-w aarawai
'the horse is white', as attributive modifiers following the
noun, e.g. duuka aarawai 'white horse', and as attributive
modifiers preceding the noun, e.g. aarawii-k duuka 'white horse'. (2) Some adjectives appear only in the first two construction types, i.e. predicates of adjectival sentences and following attributive modifiers, e.g. kwatanko-gu dukši 'the sack is heavy', and kwatanko dukši 'heavy sack'. In the third type, preceding a noun, words of this group are treated as substantives, e.g. dukši-k kwatanko 'weight of the sack'. (3) Finally, there are words like awayantu 'strength' as seen in (195) which can never be directly predicated of nouns, either attributively or as predicates of adjectival sentences. In this chapter, classes (1) and (2) will be treated as a group (adjectives) as opposed to (3) (nouns).

15 Hausa statives derived from intransitives are invariably rendered by the gâ- -ák adjective seen in the preceding section, e.g. (Hausa) a mace 'dead', (Ngizim) gantáy.

16 Ngizim differs in this respect from Hausa as well. In Hausa, either the subject or object (and perhaps other NP's as well) may be the subject of stative predicates. Thus, in Hausa either yaro yana dauke 'the boy is being carried' or mutum yana dauke da yaro 'the man is "loaded up" with the boy' are possible. The latter is not possible in Ngizim.

17 The Totality Extension also appears with true adjectives:

(i) ama-geri gaššu-gara 'his wife is ugly'
(ii) iyu gazbeŋ-gaa 'I am tall'

I discovered this late and was unable to investigate it fully. This usage is definitely not as common nor as freely volunteered as the use of the Totality Extension with statives. True adjectives, even those derived from verbs, cannot take the Ventive Extension.

18 In Chapter 4, section 2-3, I propose rules for deriving such phrases from relative clauses.

19 What the formative tâi (--- tîi medially) adds, if anything, is not clear.
Chapter 4

THE NOUN PHRASE

Associative NP's and other Direct Adnominal Adjuncts, Relative Clauses and their Reduced Forms, Conjoined NP's, Determiners, and Quantifiers

0. Base Rules and Introductory Comments

The following base rules are an adaptation of the rules in UESP (1967):

\[ (\text{NP} \quad (\text{PP}^*) \quad \{ \{ \text{S} \quad \{ \text{DET} \} \quad \{ \text{NOM} \} \} \} \]

(1) \text{NP} \rightarrow \{ \{ \text{S} \quad \{ \text{DET} \} \quad \{ \text{NOM} \} \} \}

(2) \text{PP} \rightarrow \text{PREP} \quad \text{NP}

(3) \text{NOM} \rightarrow \{ \{ \text{N} \quad (\text{NP}) \quad (\text{NP}) \quad (\text{ADV}) \} \}

(4) \text{DET} \rightarrow (\text{QUANT}) \quad \text{ART} \quad (\text{POST})

(5) \text{ART} \rightarrow (\text{REF}) \{ (\text{INDEF}) \}

(5) \text{ART} \rightarrow (\text{REF}) \{ (\text{DEM}) \}

The first line of (1) gives "conjoined" NP's. These have the surface form \( \text{N with N with N} \ldots \) (FP* indicates infinite recursion of PP). Only the preposition \( \text{màa} \) 'with' will be lexically subcategorized to occur in a PP directly dominated by NP. S as a rewrite of NP (line 2 of rule (1)) will not be covered until the chapters on sentential complements (Chapter 7) and sentence level adverbs (Chapter 8). The constituent NOM is needed principally for establishing co-ref-

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ference between the antecedent of a relative clause and the equi-noun phrase in the relative clause. In the model assumed here, a relative clause is a sentence embedded in a noun phrase where there is a noun phrase within the embedded sentence which is co-referential to the head of the full noun phrase. For this co-reference relation to exist, the head noun of the embedded NP and adjuncts to it must be identical to the antecedent, but the determiners on the embedded NP and the antecedent need not necessarily be the same. While the determiner of the antecedent to a relative clause is virtually unrestricted, the determiner of the equi-NP within the relative clause must meet certain conditions to achieve the co-referential interpretation (it cannot, for example, be [-SPEC]). These determiner requirements are of a language universal nature and are discussed fully in UESP (1967) and (1968). ¹

The nature of other constituents in (1)-(5) will be clarified below.

In order to limit the scope of this study, I have not included a chapter on noun morphology. Briefly, the relevant facts are these: Ngizim has no overt gender marking except in pronouns, where second and third person singular distinguish masculine and feminine. Agreement patterns of these pronouns with nouns always correspond to the sex gender of human referents. Gender agreement with animals varies considerably, and in folktale texts, for example, it
may change from masculine to feminine and back in a single paragraph for the same referent. Inanimates always have feminine agreement.

Nouns may be morphologically marked for plural, though this is often not done where plurality is evident from context (cf. section 2.2). One plural type is overwhelmingly the most common: the final consonant of the root is reduplicated and a suffix -ín is attached, e.g. dûkâ 'horse', (pl.) dûkâkîn; gûbês 'warthog', (pl.) gûbêzâzîn; mácâkûwâ 'giraffe', (pl.) mácâkûwâwîn. Another common plural type, especially for nouns referring to humans, is formed by the addition of a suffix -cîn, e.g. gázgârê 'mature person', (pl.) gázgârâucîn; kâkâabû 'fool', (pl.) kâkâabâucîn. Several minor types and a few suppletive plurals are also found.

1. Associative Noun Phrases and Direct Adnominals

1.1. The Need for Direct Adnominals

Line 1 of rule (3) provides for the generation of NP's and/or ADV as a direct adjunct to the head noun of a noun phrase. While a number of direct surface adjuncts to head nouns can be derived from other sources, e.g. attributive adjectives and certain possessive phrases from relative clauses, it is necessary to derive others in the direct manner of (3). There are essentially three types of syntactic argument for a direct adnominal source: (i) the need for
lexical derivation, (ii) ambiguous constructions, (iii) lack of any reasonable syntactic source.

Chomsky (1970) has argued that, for a variety of syntactic and semantic reasons, constructions containing nominals derived from verbs should not be transformationally derived, but rather generated from base structures. Chomsky's arguments apply equally well to Ngizim, and I therefore propose to derive NP's like the following from the first line of rule (3).

(6)(a) akar soono 'sandal thief' [thief of sandal]  
        cf. kàre 'to steal'

(b) makur-aaci 'your enemy'  cf. kùre 'to refuse'

(c) maveji giina 'someone lying on his back' [a liar on the back] cf. vède 'to lie down'

The head nouns in (6)(a) through (6)(c) are all derived from verbs and all may have similar complements in related sentences containing verbs (kàre soono 'he stole a sandal'; kùre ci 'he dislikes you' [he refused you]; vède giina 'he lay down on his back'). However, none of the head nouns are related to the corresponding verbs by a productive process, morphological or syntactic. Moreover, we will see below that nouns with no corresponding verb form can bear the same types of semantic relations to their adjuncts as seen in (6).

The second type of syntactic reason for generating direct adnominal adjuncts is ambiguity. The clearest type of ambiguity is seen in the alienable/inalienable distinction.
Ngizim no longer makes any such formal distinction, but semantically the ambiguity exists in phrases like *zeg'ar nen 'the man's leg', where it could mean either the leg on his body or a leg (say, of mutton) in his possession. A similar ambiguity is seen in *am duwa 'water of the well', which could mean either 'well water' (a type of water) or 'the water in (some particular) well', as in 'the well's water is contaminated'. A third example is *metu-gara, which could mean 'her death' or 'her dying' (< 'she dies'). In each case I would generate the first meaning given by rule (3), the second by transformation. Finally, adnominals from rule (3) are required where there is no other possible syntactic source. Thus, *ka'gur maya 'a remedy for hunger' could not have a relative clause source *ka'gur waafi ke maya 'a remedy which is for hunger'.

1.2. Types of Adnominals

The UESF (1967) rule from which rule (3) is adapted gives a somewhat more complex rewrite, viz. NOM ---> N (ADV)(ADV)(NP)(ADV). The most complex adnominial constructions I have observed in Ngizim have been of the form N NP ADV or N NP NP, and accordingly I have included only the machinery needed for constructions of this complexity. (I am not claiming, of course, that more complex constructions cannot be formed, only that I have not so far attested any.)
This rewrite of NOM is one source of associative noun phrases. The associative NP construction is indicated by an associative linker and, where applicable, the Associative Tone Dissimilation rule. The linker has the phonologically conditioned allomorphs [k], [g], and [g̪], or, optionally in all environments, [Ø], (see section 1.3 for a full discussion of the forms of the linker). The allomorphs in the following examples are as found in my notes. The Associative Tone Dissimilation rule raises a final low tone before a low tone. Thus, dùukà 'horse' + dègàm 'chief' becomes dùukà-g dègàm 'horse of the chief'. If the associative noun phrase is a pronoun, the bound pronouns are used. (See Appendix for the bound pronoun paradigm.)

The semantic range of the associative construction is quite broad. To show this, I have given rough semantic labels to the examples in (7). The labels are not meant to exhaust the types of semantic relationship, or even to be entirely accurate for these examples.

(7) "Dative"
aikwak maayim 'boy's hand'
wunya-k ama 'woman's daughter'
nenuwa-k waka 'tree's shade'
devu-k Kano 'the Kano road'
dlèra-k kunu 'stomach ache'
"Dative" (continued)

geši aarawii-ge akərak  'thief's happiness' [white heart of the thief]
seřem-ge Kaisala  'a substitute for Kaisala'

"Object"

akər soono  'sandal thief'
kaŋγun-k akər  'remedy against thieves'
labaf-ge degem  'news of the chief'
maaka-k zəba  'seeking marriage'
devaara aikwak  'pointing a finger'

"Subject"

metu-gara  'her death'
garu-k afek  'wearing out (aging) of a loincloth'
bena-k anaatakau  'favorite wife's cooking'

Head N is Instrument

aka-k baka-w  'fire for roasting it'
temā-k zaata  'mortar for pounding'
duuka-k ża  'war horse'
riik debes  'place to hide'

Assoc. NP is "material" composing head N

beri-k kunamu  'grove of deleb palms'
duuka-k duuyak  'iron horse' (i.e. bicycle)
genaaawa-k ja  'the form of a dog'

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Assoc. NP states characteristic of head NP

am-k aka 'hot water' [water of fire]
duuka-k mayi 'cocky horse' [horse of strutting]
devu kuru 'means to refuse' [road of refusal]
buuči-k žirau 'folly' [mat of shame]

A specific case of the "Dative" relationship involves locative words plus their adjuncts, e.g. kunu-k daa 'in the town' [interior-of town], kema-k kuku 'in front of the Baobab' [forepart-of Baobab], akwu-k mendoza 'behind the compound' [back-of compound] (cf. Chapter 3, section 3.1).

NOM --> N NP NP

NOM's of this type have two adnominal NP's to the head noun. In a sense, the second NP modifies the head N plus the first NP, e.g. in (8)(a) it seems to be 'meat eating' that is modified by 'vulture'. However, a phrase structure such as (8)(b) is chosen over that in (8)(c) or some similar structure since the structure in (8)(c) places diišaw higher in the phrase structure than kiida, implying that diišaw dominates kiida, the head noun in the NP. The fact that diišaw in (8)(a) modifies the entire phrase 'eating of meat' is a result of the word tluwai 'meat' being within the scope over which diišaw 'vulture' must work in order to modify the head, kiida 'eating'.
(8)(a) kiida-k tluwii-k diišaw  
'eating meat by a vulture' [eating-of meat-of vulture]

(b)  
[Diagram showing the structure of the phrase]

(c)  
[Diagram showing a different structure of the phrase]

(9) šuu kunu-k adiyu  
'the pulp of the gourd' [shit-of interior-of gourd]

(10) dabar-gaa ke ndaagem-aawa  
'my plan for getting us together' [plan-my of joining-our]

Phrases like those in (8) and (9) are ambiguous. kiida-k tluwii-k diišaw could mean 'eating vulture meat', in which case diišaw 'vulture' would be an adnominal to tluwai 'meat'. Likewise, in (9), kunu-k adiyu could form a constituent meaning 'interior of the gourd'. (As I have analyzed it, šuu kunu 'shit-of interior' would probably best be translated as a compound in English, viz. 'intérieur shit'.) Notice, however, that (10) is not ambiguous, since -gaa is a pronoun form marked as being bound to the preceding noun (see section 1.3 below). The pronoun -gaa could not therefore be the head of a noun phrase with a following
adnominal. As a matter of fact, it is difficult to imagine any personal pronoun having adnominal adjuncts except perhaps in constructions like 'we (people) of Potiskum', etc.

Noun phrases of the form N NP NP, where the middle constituent is a substantive noun (as in (8) and (9)), tend to be disfavored in Ngizim, though those where the middle constituent is a pronoun are met with fairly frequently (as in (10) and also in (25) below). The ambiguity problem undoubtedly contributes to this statistical correlation.

There is no reason in theory why there could not be an indefinite number of adnominal NP's strung out after a single head noun. However, the most I have found is two. In all cases where more than two adnominals are strung together, the structure is either continuously right branching as in (11), or the first adnominal NP itself has an adnominal within it, as in (12). (Determiners of embedded NP's have been omitted for simplicity's sake.)

(11) duuka-k degem-ge daawa

'the horse-of the chief-of our-town'

```
NP
  NOM
  NNP
    NOM
      NNP
        NOM
          duuka degem  daa wa
            horse chief  town us
`∅`
```

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(12) ši-k 'yuwa-geri ke mata 'his right armpit' [underside-off (?)arm-his of right]

underside (?)arm⁵ him right

NOM ---> N ADV

A number of adverbial types found in full sentences are also possible within NOM's. (Some of the examples in (13) might be derivable from nominalized sentences.)

(13) LOC: nya ii saafeř 'going [to] trading'
gaaya ii desku 'climbing [to] upward'

MAN: mbasu kelappiya 'living in good health'

maveji giina 'one who lies on his back'

ASSOC: mangliina naa gayim 'friendship with a cat'

INST: viya naa am-k aka 'washing with hot water'

TIM: raakan devid 'traveling at night'

wana afa 'working at midday'

BEC: sadaka gaafa 'alms for the sake of God'

Kaakasku

In some cases, it is possible to use a similar constituent adverbially, or , with different meaning, as an asso-
ciative NP.

(14)(a)(i) mpii-k aw ii gadlai NOM + ADV
'putting guinea corn in the granary'
(ii) mpayi-k gadlai NOM + NP
'something stored in a granary'

(b)(i) zaabanu aa ši gapta NOM + reduced
relative clause
'a guinea fowl under the arm'
(ii) zaabanu-k ši gapta NOM + NP
'an under-the-arm guinea fowl' (i.e. a guinea
fowl characterized by being under the arm as
opposed to running free)

(c)(i) wana afa NOM + ADV
'working at midday'
(ii) wana-k afa NOM + NP
'midday work'

(d)(i) viya näa am-k aka NOM + ADV
'washing with hot water'
(ii) viya-k am-k aka NOM + NP
'hot water washing'

NOM --> N NP ADV

I have found very few clear examples with this struc-
ture. However, because of examples like (15), it must be
a structure which the grammar can generate.

(15) maaka-k lēman näa ajala 'seeking wealth hurriedly
[with haste]'

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1.3. Forms of the Linker /ke/

With one exception, all forms of the associative linker in contemporary Ngizim derive from the proto-Chadic linker *k. (The one exception is -áa- or Ø used with certain personal pronouns). A zero allomorph, Ø, is an optional possibility in all environments except before pronouns. This phonologically Ø form could be a reflex of the proto-Chadic inalienable possessive construction, but I suspect rather that it is an Ngizim innovation resulting in part from the linker being redundant in many cases (because of Associative Tone Dissimilation in addition to the phrase structure itself), and in part because of confusion of the linker with a final lexical -k in some nouns.7

An account of the linker requires two rules, one syntactic and one morphophonemic:

(16) **Linker Insertion**

\[ ... [N X NP Y]_{\text{NOM}} \rightarrow ... 1 \ 2 + \text{ke} \ 3 \ 4 \ ...
\]

Condition: 3 is directly dominated by NOM

The Linker Insertion Rule places the linker /ke/ before each adnominal NP within a single NOM. The linker ke is attached by rule (16) to the constituent preceding the adnominal NP (that constituent may be the head noun itself if X in (16) is null). The linker is not attached to the adnominal NP for two reasons: (i) the linker phonologically be-
comes part of the preceding word if it is reduced by rule (19) below, and (ii) it may stand alone to mean 'that of...'. In this latter case it is assumed that the underlying noun to which it was attached has been anaphorically deleted, leaving only the linker ke as a surface indication of it's having been present (this is discussed and illustrated below in Chapter 9, section 5). In neither case, then, does it appear to be bound to the adnominal NP. The form of the linker may be modified by rule (19).

The Linker Insertion Rule is recursive in that it applies to an indefinitely long string of right branching NP's, as in (11), repeated here for convenience. Each time the structural description of the rule is met when descending through the NP, a linker is inserted. (The phonological form of the linkers, as shown boxed in the trees in (11) and (8) immediately below, will be modified by rule (19).)

(11)

```
NP
  /\  \
NOM  DET
  /\     /
NP  NOM
  /\  /\  /
N  NP  N  NP
 /\  /\  /\  /
NOM NOM NOM
 /\  /\  /\  /
N  N  N  N
  /\  /\  /\  /
NOM NOM NOM
           /\  /
NP  NOM
     /\  /
NP  NOM
      /\  /
NP  NOM
       /\  /
NOM  NOM
        /\  /
NP  NOM
         /\  /
NP  NOM
          /\  /
NP  NOM
           /\  /
NOM  NOM
             /\  /
NP  NOM
              /\  /
NP  NOM
               /\  /
NP  NOM
                /\  /
NOM  NOM
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NP  NOM
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NOM  NOM
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NP  NOM
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NP  NOM
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NOM  NOM
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NP  NOM
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NP  NOM
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NOM  NOM
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NP  NOM
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NP  NOM
                              /\  /
NOM  NOM
                               /\  /
NP  NOM
                                /\  /
NP  NOM
                                 /\  /
NOM  NOM
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NP  NOM
                                                                                                                             horse-of  chief-of  town-of  us
```
The Linker Insertion Rule is also recursive in that it must apply to all adnominal NP's dominated by a single NOM. (The maximum number of such NP's is two, according to my base rules, though as I mentioned on page 98, I see no reason in principle why there should be a limit of two.) In (8), repeated here for convenience, the linker is inserted between the head noun, kiida, and tluwai, illustrating a case where X in the Linker Insertion Rule is null. The linker is also inserted between tluwai and diišaw where X = tluwai.8

(8)

```
NP
 /   \
|    |
NOM  DET
 /   /
|   |
NP  NP
```

kiida-[ke] tluwii-[ke] diišaw Ø
eating-of meat-of vulture

The syntactic environment given in (16) does not require that the construction be of the simple N + N type with both N's dominated by one NOM. The linker may attach the first noun to an NP of considerable internal structure. For example, in (17) the linker attaches the head noun to an entire conjoined structure. Note that the insertion of the linker is conditioned by the circled N and NP, not by the NP mii wunduwa. The condition on rule (16) requires that the adnominal NP be directly dominated by NOM. If this
condition were not part of the rule, a linker would also appear before the NP abancin-gara 'her co-wives'.

(17) rama-k mii wunduwa naa abancin-gara

'\text{the talk of the head wife and her co-wives}'

The structure of (17), where a single linker appears before an entire conjoined structure, differs from (18), where the linkers (boxed) appear before each conjunct:

(18) saaya-gara [ke] wura naa [ke] akau

'\text{her necklace and girdle}': \text{[stones-her-of neck and of back]}$

While I am not entirely sure what the underlying structure of such a phrase should be, it seems evident that the ke's repeated before wura 'neck' and akau 'back' are not the result of linker insertion operating from the head noun saaya to those embedded nouns. Rather, the underlying structure should probably be something more like (18'), where the ke's that appear in surface structure are inserted directly into both conjuncts, which have saaya as head. Saaya in the conjuncts is then deleted anaphorically because of saaya appearing as head of the entire NP (see Chap-

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ter 9, section 5), leaving only the linker ke as a surface manifestation of the underlying presence of saaya. (As above, determiners in embedded NP's are omitted for simplicity.)

(18')

The following morphophonemic rule, (19), determines the phonetic form the linker will take:

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(19) **Phonological Shape of the Linker**

(I) **reduced form**

If the environment for ke is \( \ldots N \) \([-\text{PRO}] \) \( \ldots N \),
then /ke/ \( \longrightarrow \)

(a) \(-g \) or \( \{(i) \ -\acute{\alpha}a-\} \) / ___ pronoun \( \{(i) \ i,u,a___\} \)

(b) \( \emptyset \) / OPTIONAL

c) \( \acute{\text{g}} \) / \( \{C____C \) \( \text{OPT} \text{ in } \) \( \text{C} \) ___\( \text{+son} \) \}

(d) \( g \) / ___[+voice], \( \text{OPT} \) \( \longrightarrow \) \( n___[+\text{nasal}] \)

e) \( k \) / ___[\text{voice}]

(II) **full form**

Otherwise, /ke/ \( \longrightarrow \) [kė]

Rule (19) (or rules 19) is a forbidding representation of what are essentially simple facts. The sub-cases (I), (II), and (a) through (e) in (I) are disjunctively ordered from top to bottom. That is, one starts applying the rule with (I)(a), and if any sub-part of the rule is applied to a particular environment, no later sub-parts may apply.

(I)(a)

The pronouns have special linker allomorphs. First and third person singular always have \(-\text{g(\text{ê})-}\). All other persons have \(-\acute{\alpha}a-\) for nouns ending in the lexical vowels \( i, u, \) or \( a, \) and \( \emptyset \) elsewhere, i.e., after nouns ending in lexical consonants, in the vowels \( e \) or \( o, \) or in diphthongs.

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(20) wúnyâ 'daughter'
    wúnyá-g-àa(nái)  'my daughter'
    wúnyá-cí        'your (m.sg.) daughter'
    wúnyá-kèm       'your (f.sg.) daughter'
    wúnyá-gé-ri     'his daughter'
    wúnyá-gá-râ      'her daughter'
    wúnyá-àa-jâ    'our (excl.) daughter'
    wúny-àa-wâ      'our (incl.) daughter'
    wúny-àa-kûn     'your (pl.) daughter'
    wúny-àa-kšî   'their daughter'

máayîm 'boy'
    máayîm-g-àa(nái)  'my boy'
    máayîm-cí        'your (m.sg.) boy'
    máayîm-kèm       'your (f.sg.) boy'
    máayîm-gé-ri     'his boy'
    máayîm-gá-râ      'her boy'
    máayîm-jà        'our (excl.) boy'
    máayîm-wâ        'our (incl.) boy'
    máayîm-kûn       'your (pl.) boy'
    máayîm-kšî      'their boy'

(1)(b)

No overt linker need appear between two nouns. A few cases of this were seen in (7), and any of the following examples could optionally have Ø linkers.
(I)(c)

The form [gê] is required when /ke/ falls between two consonants, (21)(a). This form is also possible when the second noun begins in a sonorant consonant, (21)(b). This is due to a phonological constraint against a sequence Obstruent - Sonorant. This constraint is absolute within words, but as seen in the present case, it is in force only optionally across word boundaries.

(21)(a) gûzôg-ğé dêgêm 'slave of the chief'
    žîgôm-ğé jîrêwâ 'a truly brave warrior' [warrior of truth]
    hâl-ğé gûsêskû 'the character of the present time'

(b) sêsûwâ-ğé mãrdû 'stalks of millet'
    âdâ-ğé nèn 'person's head'

(1)(d)

Before voiced sounds, including obstruents, vowels, and sonorants if [gê] was not chosen, the linker has the form [gâ]. Note that this is not an automatic phonetic rule. It must specify that the linker is involved since voiceless obstruents can occur between vowels word internal, e.g. âkâ 'fire'.

(22) sêsûwâ-g gâvérkâ 'stalks of sorghum'
    miyá-g dlêrâi 'language [mouth] of the Karekarens'
    mêtú-g âfêk 'wearing out [dying] of a loincloth'

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(22) continued

åawi-g riidùwà 'leaves of beans'

Before nasals there is an optional further assimilation of $g$ to $η$: jà-g máayim 'boy's dog' O\textsuperscript{OP}$\rightarrow$ jà-$η$ máayim.

(I)(e)

Before all voiceless consonants, including glottalized, which are structurally $[-$voice$]$, the associative linker is phonetically $[k]$.

(23) jà-k pátà 'dog of the bush'
kìidá-k tlúwai 'eating meat'
kùmà-k dàa 'in the town'

In the bulk of this study, I have not distinguished the $[k]$ and $[g]$ allomorphs of the linker, writing both as "k".

Examples like (8) show that phonological reduction of the linker by (19)(I) is a process working on juxtaposed items in surface structure. Note that in (8), tlúwai 'meat' is actually dominated by NP, not simply NOM. If we refer to base rule (1), we see that DET should intervene between tlúwai and dìišaw. But since there is no overt DET here, rule (19) applies. It is not possible to get the reduced forms of the linker if an overt determiner intervenes between two nouns, i.e., if (8) were 'eating of this meat by a vulture', we would get kìida-k tluwii tku ke dìišaw, not *kìida-k tluwii tku-η dìišaw.\textsuperscript{10}

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(II)

If the first of the two surface constituents between which the linker falls is not a substantive noun in the same NP, the full, or independent form of the linker must be used. The independent form of the linker is [ké], e.g. ké dàgàm 'that of the chief'. The independent associative pronouns consist of ké (with minor vowel assimilations) plus the pronominal part of the Bound Pronouns (seen in (20)).

(24) **Singular**  
    1  kàa(nái)  
    2m  kácì  
    2f  kákèm  
    3m  kářì  
    3f  kárà  

**Plural**  
    1 excl  kéjá  
    1 incl  kúwá  
    2  kúkàn  
    3  kákšì  

Three environments where the constituent preceding ké is not a substantive noun in the same NP are found: the linker may follow an overt determiner on the preceding noun, it may follow a pronoun, or it may stand alone because the head noun to which it was attached has been deleted. In all these environments, the independent form of the linker, [ké], must be used.

The independent form of the linker will be retained if the constituent to the left of it is an overt determiner. Hence, the example *kiida-k tluwi tku ke diišaw* 'eating of
this meat by a vulture' is accounted for.

The second environment where the full form, ke, is retained is following a pronoun. Some linguists, in fact, have analyzed personal pronouns as deriving from determiners (Postal, 1966) and following such an analysis, these first two uses of the independent form of the linker would automatically be accounted for by restricting linker reduction to application between nouns. The only post-pronoun environment that I have found for the linker is directly after an associative pronoun, itself an adnominal adjunct to a noun. One example of this type was seen in (10), others are seen in (25).

(25) manga-ge-ri ke waka-w 'his friend up above'
    [friend of his of upward]
    ram-aa-kun ke gazgeraucin 'your words of elders'
    hale-kši ke tapai 'their habit of fornication'

The final environment where the independent form of the linker must be retained is where the head noun to which the linker was attached has been deleted. This will take place when a noun formally the same as that head noun appears earlier in the sentence. Normally the resultant phrases, where in effect the linker is the head, are translated 'that of ...' or 'one of ...', or in the case of pronouns, as 'mine', 'yours', etc. In Chapter 9, section 5, deletion of nouns before ke is shown to be part of a wider deletion
As the following examples show, the noun which conditions deletion may be within the same NP as the deleted noun, or it may appear earlier in the sentence. I illustrate in (26) with conjoined adnominals, in (27) through (29) with appositive phrases, and in (30) and (31) with equational sentences (see (18) above for a further example).

(26) wana-k sekwai naa ke gaaderi
    'work with a sickle and that with a hoe'

(27) muwanak ke Dawura < /muwanak, waağa muwanak ke Dawura/
    'the messenger he of Dawura' < /messenger, that the
    messenger was one of Dawura/

(28) Mai ke Maamedo       'the King, he of Maamedo'

(29) laabař waağa ká deede-du ke bekú-w
    'the news that you brought (that) of the celebration'

(30) mantuu keriinakau ke venaakuu bai
    < /mantuu keriinakau mantuu-k venaakuu bai/
    'a lover of frogs is not one of fish'
    < /a lover of frogs is not a lover of fish/

(31) viya-k am-k aka ke ama miiwa
    'washing with hot water is for a nursing woman'

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In (32) the independent linker is used first in an
appositive phrase (kərî 'his'), then in an associative NP
(kê ədâ-gé-rî) to the NOM of which the pronominal kərî is
a part.

(32) duukakin keri ke ada-gə-ri
    'horses of his of his own [of his head]'

1.4. The Word jân 'things like ...', '... and the others'

Phrases corresponding to Hausa su Adu 'Adu and the
others' can be formed in Ngizim by using a word jân- as the
head of a noun phrase. jân syntactically behaves like a noun,
undergoing Associative Tone Dissimilation and taking the
associative linker (jâ-g Adu 'Adu and the others', jâ-g
Demza 'Demza and the others'). Jân matches whatever noun
follows it in the features of humanness, animacy, and con-
creteness. It can be used with both human and non-human
animates, and with both concrete and abstract inanimates.
It is frequently used with conjoined noun phrases meaning
'things/people like X and Y'.

(33) ja-k degem daa (naa maayim-gərî)
    'the chief of the town (and his son) and the others'
(34) ja-k maayim tku (naa gazu̲gara-gərî)
    'this boy (and his big brother) and the others'
(35) ja-k kwâʃa wâʃa masee-w
    'the donkey that he bought, etc.'
(36) ja-k jaunak naa kaakamii-k tluwii-k pata
    'those including the elephant and the rest of the wild animals'

(37) ja-k am 'things like water'

(38) ja-k awuk naa gaamanak saurak
    'those things including bones and aged meat strips'

(39) ja masa (naa saafeř)
    'things like bartering (and itinerant trading)'

Jà is used to form the plural of question words:
ja + xee 'who?' > jà-g-êe 'who all?', ja + mòo 'what?' >
jà-gë-mòo 'what all?'.

In a more formal grammar, this formative would have a
more abstract source, say, an indefinite NP conjoined with
another NP and matching the first NP in features of human-
ness, animacy, and concreteness.

2. Relative Clauses

2.1. Full Relative Clauses

The only special rule needed for relativization is

(40):  

(40) Relative Marker Insertion

    ... NOM S ... ==> ... 1 waarã + 2 ...

    1 2

The relative marker, waarã, is inserted at the begin-
ning of a relative clause. This relative marker is invari-
able regardless of features of the antecedent noun, or the function of the equi-NP within the clause. It is optionally deletable under most circumstances by rule (86) below. However, I have felt it preferable to obligatorily insert it, then optionally delete it where possible, rather than have an insertion rule containing conditions on obligatory and optional application. In this way the essential simplicity of relative clause formation in Ngizim can be shown.

Besides rule (40), the regular anaphoric processes needed elsewhere in the language will operate from the head NOM into the relative clause, to give a surface pronoun or to delete the NP within the clause. Anaphoric pronominalization and anaphoric deletion are equivalent processes in Ngizim, and will be discussed in detail in Chapter 9. The following pairs of sentences illustrate the equivalence of pronominal and Ø anaphora in various functions in relative clauses. Note that Ø anaphora is not always phonological Ø. For example, in (44)(b), Ø anaphora is indicated by the suffix -w and in (43)(b) by a suffix -du on the verb. I have put Ø into the sentence position occupied by the non-deleted equivalent. The anaphoric pronouns are underlined.

(41)(a) maayim waafa aci dee-naa senaasen =
        (b) maayim waafa Ø dee-naa senaasen
            'the boy who brought the fried cakes'

(42)(a) mageraf waafa na ndem aci =
        (b) mageraf waafa na ndemu Ø
            'the visitor that I greeted'

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(43)(a) laayima waaña nåa ya naa _atu_ ii da-k afa =
(b) laayima waaña nåa ya-ðu ꞧ ii da-k afa
    'the umbrella with which I will go into [the eye of] the sun'

(44)(a) gwangurak waaña Cauºuwa wunu aa wunduwa-ðara =
(b) gwangurak waaña Cauºuwa wunu aa wunduwa-w ꞧ
    'the old woman at whose house Cauºuwa spent the night'

(45)(a) rii waaña ndiiwa rege ii _riyu_
    'the place where the people migrated to'
(b) rii waaña goomak regu ꞧ
    'the place the ram migrated to'

Relativization has been formulated here as involving no movement, yet this transformation has usually been regarded as a paradigm example of a movement rule in English. Some of the indications that movement is involved in languages like English are as follows: (i) a "hole" is left in the relative clause (it is a "chopping rule" in the terminology of Ross (1967)), e.g. in 'the man that I spoke to', the preposition 'to' has no complement. As a result of such holes, relative clauses, if extracted from their NP's, would not be well-formed matrix sentences. (ii) "Case marking" associated in underlying structure with the equi-NP within the relative clause is transferred either to the antecedent of the clause (as in Berber, where prepositions from within the clause are suffixed to the antecedent) or is transferred to the relative pronoun at the head of the clause (as in
English, where relative pronouns in oblique cases may be case-marked: *whom, whose, from whom*, etc.). (iii) In English, French, German, and probably many other languages, the formatives used to introduce relative clauses are pronominal, i.e. they have variant forms for such features as gender, animacy, and syntactic function. Yet they appear in a syntactic position not available for insertion of NP's (and hence pronouns) in underlying structure. They must therefore have been moved into their surface position from some other position in underlying structure.

Relative clauses in Ngizim have none of these characteristics which indicate that movement rules have applied. Taken in the order given above, (i) "relativization" leaves no holes in the clause in Ngizim. If a relative clause is extracted from the NP in which it is embedded, it always a well-formed Ngizim sentence, assuming the relative marker, ẃàfà, is removed, of course. This includes clauses like the (b) examples in (41) through (45), where anaphoric deletion has applied. (ii) No "case markers" such as prepositions are moved from their underlying positions. (iii) The relative marker is not pronominal, and thus does not represent a constituent taken from some place in the relative clause and moved forward.

The types of sentences which can occur within relative clauses are unrestricted except for universal conditions, viz. the sentence may not be imperative or interrogative,
and it must contain an NP co-referential to the antecedent. Interestingly, sentences with focussed constituents can appear in relative clauses in Ngizim, though many languages disallow such structures, e.g.

(46) masâ'âmi waâ'â naayî-n Zaara
     'the corn that (it was) Zaara (who) ground'

This is further illustrated and discussed in Chapter 5, section 3.1 and fn. 11 of that chapter.

Of the various verb aspects, only the Imperative and Second Subjunctive are prohibited in relative clauses. Perfective and Imperfective are the most common verb aspects, but the Subjunctive is also found. I have had to study the use of the latter solely on the basis of examples from texts. Nearly all such examples have indefinite antecedents and many are embedded within the scope of negation. In such contexts, the Subjunctive has the sense of a potential or indefinite future. The Subjunctive is not obligatory for clauses with future meaning and indefinite antecedents. Compare, for example, (52) and (53) which contain the Subjunctive, with examples (50) and (51) which contain the Imperfective. I have also found a single example with a definite antecedent, (69), where Subjunctive indicates obligation.

Examples below are listed according to function of the equi-NP within the clause. Where relevant, verbal predi-
icates in all aspects are given, as well as non-verbal pre-
dicates. I have listed only the head NOM plus clause ex-
cept for the Subjunctive examples, where context helps in
interpreting the meaning of the clause.

Subject of clause

(47)(Perf.aff.) nen waağa waneē yu
    'the man who sent me'

(48)(Perf.neg.) dem gatla waağa deka-naa ja gaiy bai
    'green wood which doesn't exceed a cubit'

(49)(Imperf.aff.) manga-gaa waağa âa zedapa-naa yu
    'my friend who is going to put me up'

(50)(Imperf.aff.) (ii maa da nà ram ii-kêm) bee waağa â
    mpaata-naa kêm
    '(I thought I should tell you) something
     that will be useful to you'

(51)(Imperf.neg.) baaci ruwai waağa âa ruwii bai
    'a farmer who doesn't farm'

(52)(Subjunctive) Ganduwa, ii bii-n, nà yka nen waağa dá
gem(i) atu da rii-gaa bai
    '(as for) Ganduwa, if not me, I haven't
     seen the man who might get her away from
     me'

(53)(Subjunctive) nd-sakun bal, naa bee waağa dâa b(i)
akši da rii nd-aaja bai, baree ci
    'all your people, there is nothing that
     might happen to them from our people,
     let alone to you'

(54)(Equational S with focussed subject)

Maina Umar Ibn Iderisu waağa Mai nen aṣi
(54)(continued) 'Prince Umar Ibn Iderisu who would become King' 

[Prince U. I. I. that he would be King]

(55)(pred.adj.) agwai waafā aarawii-gu
'the eggs which were white'

(56)(assoc.pred.) maayim waafā aci naa tla
'a boy who has a cow'

(57)(loc.pred.) wurji waafā áa wura-gara
'the scorpion that was on her neck'

Direct object of clause

(58)(Perf.aff.) sëma waafā ndá dee-d ii-kši
'beer that one brought to them'

(59)(Perf.neg.) sëma waafā ná sa bai
'beer that I didn't drink'

(60)(Imperf.aff.) dëvu waafā akši áa déga-w
'the road that they will follow'

(61)(Imperf.aff.) keci waafā kàa ya-du ii wunduwa
'yours that you're going to take home'

(62)(Imperf.neg.) ama-geri waafā aci á noi atu bai
'his wife that he doesn't like'

(63)(Subjunctive) lambe tases-w bee waafā dá lambeeci bii-n, naa lambe bai
'if a need doesn't find something that needs it, there's no need'

(64)(Subjunctive) bee waafā kà rami ngum naa bai
'anything that you might say does not exist'
Indirect object of clause

(65)(Perf.) kwam waaña nä bar-aw araawa
    'the bull that I gave potash to'

(66)(Perf.)
  (a) gwangurak waaña ndá ben ii-tu semagarem =
  (b) gwangurak waaña ndá bene semagarem-gara
    'the old woman for whom one performed a second burial'

    [... cooked [(a) to her semagarem] ll
    [(b) her semagarem]

(67)(Imperf.aff.) wakil waaña ndáa bar ii-ci laabañ
    'the representative to whom one will take
    the news'

(68)(Subjunctive) ñego zam wâ ba nen waaña wà bar ii-ci bai
    'not yet have we found anyone to whom we
    might give it'

(69)(Subjunctive) Gooraka waaña wà bar(i) ii-ci ñoota-k dàa
    'Gooraka to whom we should give control of
    the town'

Instrumental or associative adverb (see also (43))

(70)(Perf.aff.) ñega waaña ndá v(a) aci naa atu
    'the arrow that one shot him with (it)'

(71)(Imperf.aff.) ii naa dabañ-gaa waaña näa bii-gara
    'I have my plan with which I'll get her'

Locative adverbs (see also (45))

(72)(Perf.) rii waaña goomak règu
    'the place where the ram migrated'
(73) (Imperf. aff.) ḏevu waara akṣi ḏa ya ii ḏa-k ja-k Kuyuk Tera-w
   'the road on which they will go to the town of Kuyuk Tera's people'

(74) (Imperf. neg.) ḏaa waara nda-a sa-k am bai
   'a town where they don't drink water'

(75) (Imperf. aff.) ḏaa waara jaa wana saa riyu
   'the town that we work in [the place]'

(76) (Subjunctive) ḏa buuki-naa rii waara akṣi ḏaa b(i) am dā ʂi
   'they failed (to find) a place where they might get water to drink'

Locative predicates

(77) rii waara Anku-k Bagaja ḏa riyu
    'the place where Lake Bagaja is [at the place]'

(78) rii waara vek kaayayin gaawa
    'a place where lots of squirrel holes are'

Temporal adverb

(79) lakwatu waara aci ḏa nii 'the time when he is coming'

Purpose or reason adverb

(80) bee waara nā rauree kəm gaada-w
    'the thing I called you for'

Predicate in associative sentence

(81) gaazadin waara aci naa akṣi
    'chickens that he has [them]'
(82) bendegi waafa aci naa atu
    'a gun that he has [it]'  

Predicate of existential sentence

(83) naa bee waafa wara    'there's something wrong'
    [there's something that there is]

Associative noun phrase (see also (44))

(84) agwai waafa taka-w dageva
    'eggs that are decorated' [eggs that the bodies of
    them are decorated]

(85) wunya waafa afku-w daaw atu ii ra-k mardu
    'a girl whose father set her to guarding the millet'
    [a girl that her father ...]

The relative marker, waafa, can be deleted by rule (86):

(86) (OPT) Deletion of Relative Marker

    ... NOM [waafa X]s ... ==> ... 1 Ø 3 ...
    [-FRO] 2 3

Condition: Subject of clause cannot be an overt personal pronoun co-referential to
        the antecedent. (The qualification "overt" is necessary so as to allow
        the rule to apply if the subject is a Ø anaphoric element.)

The relative marker is deletable regardless of sentence function. Deletion is particularly common where the antecedent
        is indefinite and the entire NP is used as a conditional phrase, as in (87) and (88) (see Chapter 8, section 8.1

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for many examples). Clauses are bracketed.

(87) tamke [ama-w â noil-n, âa nii-d ii-tu
    'everything [his wife wanted], he would bring (it) to her'

(88) naa nen [ba] bai      'nobody got it' [there was no person [that got it]]

(89) baaci vayi [va gubes] temu
    'the hunter [who shot the warthog]'

(90) gaskam [âa kwarya] temu
    'a rooster [which is going to crow]'

(91) dèvu [jâ degu]    'the road [we followed]'

(92) dabaku [â noi-gu] 'the girl [he likes]'

(93) rii [akši âa riyu] 'the place [they are at]'

(94) lakwte [akši daame-naa wana]
    'the time [they finished work]'

Rule (86) automatically gives various adnominal modifiers, formally like those introduced directly by rule (3), (cf. examples in (13)).

(95) apta [aa kunu-k jaka daama]
    'flour [in a different bag]'  

(96) aliibařam [naa geñazan [aa ten-gu]]
    'a needle [with a thread [ in its eye ("nose")]]

Rule (86) also gives attributive adjectives after the head noun (the most common position for such adjectives), (97) and (98), and appositives, (99) and (100). The
examples of appositives I have chosen seem to me to be restrictive, and thus derived from restrictive relative clauses. I did not investigate the distinction between restrictive and non-restrictive relatives in any detail, but where I observed such a semantic distinction, I found no corresponding syntactic differences.

(97) dêm [gaatla] 'green wood' [wood green]
(98) dababkin [belaalamin] 'beautiful girls' [girls beautiful]
(99) bii veju-w [zadak ke garvaucin]
'a coverlet like chiefs use' [a thing (of) lying-on type of chiefs]
(100) nd-aakši [temamin] 'their people the sheep'

The condition of (86) is meant to prevent deletion of wâafa to give phrases like dababkin akši belaalamin (cf. 98). Such strings were always interpreted as full sentences, meaning '(as for) girls, they are beautiful', not head nouns plus relative clauses. The specification [-PRO] on the antecedent NOM prevents deletion when the antecedent is pronominal. If a [+ PRO] antecedent is anaphoric Ø, which it usually is, wâafa alone indicates that an underlying NP with embedded relative is involved. This function of wâafa should be compared to use of the independent linker ke, illustrated in (26) through (31). This particular deletion process is covered in Chapter 9, section 5.

(101) dabaku-n see wâafa kâ nou kâ cik'yi
'girls, just the ones you want you should pick out'

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(102) káa bii-naa waafa åa rama-k Ngæzem, tuwaye bai
    'you will find those who speak Ngizim, they haven't forgotten it'

(103) waafa aarawii-gu    'those that are white'

This [-PRO] condition on the head NOM in (86) as now formulated, would prevent deletion of waafa after all pronouns, not just nouns deleted before waafa, as in (101) through (103). For example, waafa could not be deleted after koci 'yours (m.sg.)' in (61). I do not know if this is the case or not.

If rule (86) deletes waafa from a relative clause where the equi-NP is the complement of an associative sentence, rule (104) must then operate on it to give an alienable possessive (formally = associative) construction. (But cf. fn. 4.)

(104) **Alienable Possession**
    ...
    ...
    ...
    ...
    ...
    [ NP  naa + PRO ]
    ...
    ...
    ...
    ...
    ...
    1  2  3
    Condition: 1 is co-referential to 3

The effect of this rule in terms of constituent structure is illustrated in (105):

(105)

```
  (105)  
  NOM  ---->
        S  
        NP  PREP  
              naa  PRO
```

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With deletion of all the constituents of \textsc{pred} by (104), the S-pruning convention (cf. Ross (1966)) automatically comes into play so that NP is attached directly to the same NOM node as the antecedent NOM to the relative clause. This structure will be recognized as the environment for Linker Insertion, (16). The noun phrases in (106) (a) through (b) have the derivations in (107) (a) and (b), starting from the point after \textsc{wààrà} insertion and pronominalization of the equi-NP.

(106)(a) tla-k maayim 'the boy's cow'
(b) zanii-gëri 'his gown'

(107) \textbf{Partially derived}

(a) tla [\textsc{wààrà maayim naa atu}]
(b) zanii [\textsc{wààrà aci naa atu}]

(86) \textsc{wààrà} Deletion

(a) tla [maayim naa atu]
(b) zanii [aci naa atu]

(104) \textbf{Alienable Possession}

(a) tla [maayim]
(b) zanii [aci]

(16) \textbf{Linker Insertion and (19) morphophonemics}

(a) tla-k maayim
(b) zanii-gë-ri

2.2. \textbf{Attributive Adjectives}

Almost all quality words in Ngizim are syntactic
adjectives (contrast with Hausa, where many if not most quality words are nouns). A fairly complete list of lexical adjectives found in my materials is given here.

<table>
<thead>
<tr>
<th>English</th>
<th>Chichewa</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>white</td>
<td>guřjem</td>
<td>huge</td>
</tr>
<tr>
<td>cheap</td>
<td>gwaŋdrak</td>
<td>old (person, animal)</td>
</tr>
<tr>
<td>yellow</td>
<td>ngúdị</td>
<td>poor (person), disrespectful</td>
</tr>
<tr>
<td>nice, good, beautiful</td>
<td>kàaràk</td>
<td>pleasant (to touch, taste, smell)</td>
</tr>
<tr>
<td>bastard(ly)</td>
<td>kàakàabù</td>
<td>fool(ish)</td>
</tr>
<tr>
<td>red</td>
<td>kàaràk</td>
<td>pleasant (to touch, taste, smell)</td>
</tr>
<tr>
<td>beautiful</td>
<td>lèfiid</td>
<td>soft (not hard, e.g. ground)</td>
</tr>
<tr>
<td>sweet</td>
<td>lèmeis</td>
<td>soft (as cushion)</td>
</tr>
<tr>
<td>deaf (person)</td>
<td>lëyì</td>
<td>cool, cold</td>
</tr>
<tr>
<td>near</td>
<td>tlemtù</td>
<td>deceased, the late</td>
</tr>
<tr>
<td>heavy</td>
<td>tlerët</td>
<td>green (in color)</td>
</tr>
<tr>
<td>bitter</td>
<td>dlúguyú</td>
<td>blind (person)</td>
</tr>
<tr>
<td>lame (person)</td>
<td>dlúguwám</td>
<td>brave (warrior)</td>
</tr>
<tr>
<td>sour, strong (esp. in smell or taste)</td>
<td>màarèm</td>
<td>big</td>
</tr>
<tr>
<td>ugly</td>
<td>mukàà</td>
<td>deaf mute</td>
</tr>
<tr>
<td>short</td>
<td>péèm</td>
<td>distant</td>
</tr>
<tr>
<td>unripe, raw, green (wood), uncooked</td>
<td>pàrák</td>
<td>broad, expansive; bright (well-lit)</td>
</tr>
<tr>
<td>small</td>
<td>repàllà</td>
<td>blue</td>
</tr>
<tr>
<td>middle-aged (person); senior (e.g. mi gëz-gàrà, tätàa mother', i.e. older maternal aunt)</td>
<td>tálúus</td>
<td>soft, tender</td>
</tr>
<tr>
<td></td>
<td></td>
<td>difficult; painful</td>
</tr>
</tbody>
</table>

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Adjectives can also be derived from verbs by a productive process adding a prefix ǧâ- and a suffix -âk to the verb root, e.g. ǧântâk 'dead' (< mèta 'die'), ǧântâyâk 'ground' (< náaye 'grind'). Note that several of the lexical adjectives given above have initial ǧâ-. I have not found lexical roots from which they may be derived.

Attributive adjectives may either follow a head noun (97) and (98) or precede it (to be described below). Another feature of Ngizim noun phrases containing attributive modifiers is that in the plural, there need be only one overt sign of plurality. This may be the plural form of the noun, the plural form of the adjective, or a cardinal number greater than one. Following are the possible noun plus attributive adjective combinations (cardinal numbers, which always follow the N, are omitted from this chart).

(108) \( N_{sg} \ A D J_{sg} \ (97, 109-110) \ A D J_{sg} \ N_{sg} \ (133-134, 137) \)

\( N_{pl} \ A D J_{pl} \ (112-114, 117-118) \ A D J_{pl} \ N_{pl} \ (138-139) \)

\( N_{pl} \ A D J_{sg} \ (112-115) \ A D J_{pl} \ N_{sg} \ (140-141) \)

\( N_{sg} \ A D J_{pl} \ (117-119) \ *A D J_{sg} \ N_{pl} \ (127-128) \)

The only combination not possible is to have a formally singular adjective preceding a formally plural noun. No

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informants would ever accept this combination. Informants always accepted NP's where N and ADJ were either both singular or both plural in form. The other combinations were sometimes accepted, sometimes rejected, on the basis of criteria that were not clear. Informants were not consistent with each other in which NP's they accepted, and sometimes they were not consistent with themselves from one day to the next. The rules below will generate (or prohibit) the combinations in (108) as if they were unrestricted. I will illustrate only with NP's accepted or generated by at least some informants.

Examples of singular nouns with following singular attributive adjectives are given in (109) and (110) and also (97) above.

(109) maayim gagwven 'short boy'
(110) zeger aarawai 'white foot'

(111) (OPT) Pluralization of Adjectives

\[
\begin{array}{c}
... N \ X \ ADJ \ \ldots \ \Longrightarrow \ \ldots \ 1 \ 2 \ 3 \ \ldots \\
[+pl] \ \ldots \ 1 \ 2 \ 3 \\
\end{array}
\]

Condition: ADJ is predicated of the NOM of which N is the head

This rule will be recognized as being a slightly generalized version of rule 230 in Chapter 3. Rule (111) allows pluralization not only of predicate adjectives in a matrix sentence, but also of attributive adjectives within

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an NP.\textsuperscript{12} The adjectives in (115), from a text, are singular in form, demonstrating the optionality of (111).

\begin{enumerate}[(a)]
\item dababkin belan =
\item dababkin belaalamin 'beautiful young women'
\item ndiiwa gazbeř =
\item ndiiwa gazbaarin 'tall people'
\item goomamin maarem =
\item goomamin maaremamin 'big rams'
\end{enumerate}

(115) Mainaucin kaarara naa gaamana
'princes recent and ancient'

\begin{enumerate}[(a)]
\item dababkin belaalamin=
\item dabaku belaalamin 'beautiful young women'
\item duukakin aarawawin=
\item duuka aarawawin 'white horses'
\item daawai gangaamin 'small pots'
\end{enumerate}

I have no record of having elicited pairs with quantifiers, one with a singular noun, one with a plural. Both combinations are common in texts.

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(120) maapendaawad širin 'two young men' (sg. màapéndì)
(121) terarin řap 'a few months' (sg. tèrá)
(122) kenasaaf gaawa 'many victories' (pl. kənasářērin)
(123) aaman guuma ayaawa-w kudkuvda 'nineteen years' (pl. āamâ mín)
(124) nen kwan 'three people' (pl. ndiivâ)
(125) jaunak vaad 'five elephants' (pl. jəunánín)

Rule (116) must be restricted to application within an NP. In a matrix sentence, a singular subject cannot appear with a plural adjective or quantifier in the predicate (see Chapter 3, section 4).

(126) (OPT) Preposing of Attributive ADJ

\[
\begin{array}{cccc}
0 & N & \text{ADJ} & X & \text{NP} \\
\text{[PREPOSE]} & \text{...} & \Rightarrow & \text{...} & 2 + 1 & \emptyset & 3 & \text{...} \\
1 & 2 & 3
\end{array}
\]

Condition: Blocked if 1 is [+pl] and 2 is [-pl].

Most attributive adjectives may precede as well as follow the head noun. The condition prevents getting phrases of the form *ADJ \text{sg} \ N \text{pl} (cf. 108).

(127) goomamin maarem 'big rams'
\quad \Rightarrow \quad *maarem goomamin
(128) bufafin dukši 'heavy sacks'
\quad \Rightarrow \quad *dukši-\text{k} bufafin

The feature [PREPOSE] on the adjective is necessary since a few adjectives in Ngizim may be used attributively
only after the noun. Of these, some may not be preposed at all, (129)-(130). These all appear to be ideophones as evidenced from their phonological shape. A few other adjectives, when preprosed, are invariably interpreted as the head noun with the following noun being understood as an associative NP, (131)-(132). I am not sure how many adjectives of this latter type there are, but they certainly constitute a minority of all adjectives.

(129)(a) rovēk lefiid' a soft hide'
          (b) *lefiid rovēk
(130)(a) bii sukta-k ada lemis 'a soft pillow' [thing for raising the head soft]
          (b) *lemis bii sukta-k ada
(131)13 (a) kwatanko dukši 'heavy bag'
          (b) dukši-k kwatanko (can only mean) 'weight of the bag'
(132)(a) dlugwan kaarak 'delicious sauce'
          (b) kaarak dlugwan (can only mean) 'deliciousness of the sauce'

ADJ + N is, on the surface, an associative noun phrase, i.e. a form of the linker /ke/ appears between the ADJ and the N and where appropriate, Associative Tone Dissimilation applies.

(133) /kááarà́â + dàa/ --- [kááarà́â-k dàa] 'new town'
       new
town
(134) /búu + násáafá/ --- [búu-k násáafá] 'light-skinned European'
       red
Europeán

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In constructions where the attributive adjective follows, no such associative markers are found. The (b) version of (135), where Associative Tone Dissimilation has been applied, was translated into Hausa as miyan dadi 'sauce of deliciousness'.

(135)(a) /dlugwan + kaarak/ \rightarrow [dlugwan kaarak]
sauce delicious
'delicious sauce'
\ne (b) ?[dlugwan kaarak]

The explanation for these facts is to be found in the phrase structure. After deletion of waara, a phrase like (135) has the structure of (136)(a). In effect, the following adjective is still a relative clause (witness the intervening PRED), and therefore the conditions necessary for the application of rules providing the signs of an associative construction are not met, for a linker is inserted only before an NP. A phrase like (133), on the other hand, has the structure of (136)(b). Since all adjectives are nouns (cf. example (194) of Chapter 3), (136)(b) will meet the structural description of the Linker Insertion rule, (16), with slight modification.

(136)(a) Structure of (135)(a)  (b) Structure of (133)

```
  NOM
   \   
  NOM  PRED
       \   
     ADJ
   dlugwan kaarak

  NOM
   \   
  ADJ  NOM
       \   
     kaarara daa
```
Following are examples of NP's with preceding adjectives:

(137) gaamana-k saurak 'old meat strips' (sg. mass N)
(138) maaremamin goomamin 'big rams'
(139) buwawin-ge nasaařaucin 'light-skinned Europeans'
(140) maaremamin goomak 'big rams'
(141) dukšašin bufu 'heavy bags'

2.3. BAACI 'one who does/has ...' Constructions (= Hausa mai/masu)

From relative clauses, constructions using one of the head words bàací (m.sg.) (bèabù for some speakers), mài (--- > [mi] medially) (f.sg.), ndà (pl.) can be formed by rule (142):

(142) (OPT) BAACI

\[
\begin{align*}
... & \text{wàařà} + \text{NP} + \left\{ \begin{array}{c} \text{AUX} \\ \text{+PRO} \\ \text{apl} \\ \text{βfem} \\
\end{array} \right\} \left\{ \begin{array}{c} < V > \\ X \\
\end{array} \right\} ... \implies \\
& \phantom{\left\{ \begin{array}{c} \text{AUX} \\ \text{+PRO} \\ \text{apl} \\ \text{βfem} \\
\end{array} \right\}} \text{BAACI} \left\{ \begin{array}{c} < 2 \text{[+N]} > \\
\end{array} \right\} ... \\
& \phantom{\left\{ \begin{array}{c} \text{AUX} \\ \text{+PRO} \\ \text{apl} \\ \text{βfem} \\
\end{array} \right\}} 2
\end{align*}
\]

Condition: NP following wàařà is equi to the antecedent of the clause.

If the subject of a relative clause is equi to the antecedent of the clause, the relative marker, wàařà, plus the clause subject can be replaced by BAACI. The abstract lexi-
cal item BAACI will be converted to bàací (or bàbabú), mài, or ndà in a second lexical look-up. Features of gender and plurality are assigned by the values of α and β. The clause must have either a verbal predicate (introduced by AUX) or an associative predicate (introduced by the preposition nàa 'with'), i.e. relative clauses where the predicates are locative, adjectival, or stative are not susceptible to this transformation. If the predicate is verbal, the verb must be nominalized (accounted for by the < >). The words bàací, mài, and ndà are nouns and are therefore attached to their complements by the linker /ke/, and they undergo Associative Tone Dissimilation.

The English translation of BAACI phrases depends on the type of predicate in the clause. If the predicate is verbal, BAACI is rendered 'one who does/did...'. If the predicate is associative, BAACI is rendered 'one who has/owns...'. BAACI phrases can be used alone as surface NP's if the antecedent to the underlying relative clause is pronominal, (143) through (152). They can also be used as attributive modifiers on nouns, (153) through (156).

(143) baaci ruwai 'farmer' [one who does farming]
(144) baaci gaaya ii ďeskú ii karam
       'one who climbs up for chopping'
(145) baaci ďeboa-k źabuwa ii bačlamu
       'the one who sold honey to the hyena'
(146) mii-k diyi-k maa̯im-gu 'the one who bore the boy'

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(147) nda ruwai 'farmers'
(148) nda-k nya ii degema ii Leegas 'those who go to the west to Legcs'
(149) baaci wunduwa 'one who has a house, "sir"' (Hausa mai gida)
(150) baaci guzep 'one who has a slave'
(151) baaci bembekshi aarawai 'one with a white rump'
(152) mii-k wunduwa 'mistress of the house, "head wife"' (Hausa uwargida)
(153) maalem baaci gugza-k kefa 'teacher who teaches reading'
(154) ama mii nakwana 'loyal wife' [wife possessor of loyalty]
(155) gawa mii kukka 'an axe which comes unhafted'
(156) Ngezamcin nda-k sa-k sema 'Ngizims who are beer drinkers'

3. Conjoined Noun Phrases

I have investigated only co-ordinate conjunction of NP's. I found no NP's joined by the conjunctions âmmá or átân 'but', and I suspect NP's corresponding to English 'not John but Bill' would be handled in a different way syntactically in Ngizim. Noun phrases can be joined by the words ḋa (< Kanuri), kóo (< Hausa), or bii-n (probably < bái 'not' + Alabama), all meaning 'or'. (See Chapter 6, section 3, for further discussion of bii-n.) I have not studied the syntax of such phrases.
(157)  am ŋa anyi 'water or milk'
(158)  koo gadlai koo tam yaaye
    'whether a granary or whatever'
(159)  aw bii-n diugwanku 'guinea corn or Baobab
    flavoring'

Conjoined NP's corresponding to English co-ordinate
conjoined NP's are actually joined by the preposition nåa
'with'. Any number of NP's may be so conjoined. nåa
must appear before every NP in the conjoined structure
except the first. Following are examples of conjoined NP's
in various sentence functions. Examples containing pronouns
are avoided for the moment.

**Subject**

(160)  kwam nåa gaskam áa kunu-w
    'a bull and a rooster were inside'
(161)  Mai Dabera nåa nda-geri dambasu aa Ngwajin
    'King Dabera and his followers were established
    at Ngwajin'
(162)  garvancin nåa nda-k leman nåa kaakenii ndiwa captee-
    n-aakši
    'the chiefs and wealthy people and the rest of the
    people gathered'

**Direct Object**

(163)  "nåa zegaya" áa yva-k maalem nåa zega bai
    '"had I only known" never leaves scholars and
    sorcerers'
(164) daaci wunya-k goomak dá taanyi-naa afku-w naa gedancin-gara
\[\text{'the ram's daughter recalled her father and her younger siblings'}\]

**Indirect Object**

(165) dá bar(i) aw ii ama-geri naa wunya-gara
\[\text{'he gave guinea corn to his wife and her daughter'}\]
(166) sai dá wanai ii kaayak naa bëlamu naa akši dá yi
\[\text{'then he sent (word) to the squirrel and the hyena that they should come'}\]

**Associative NP**

(167) dá tarnyi pata iì rii-ge maguru naa ama-geri
\[\text{'he headed for the bush to the place of the jealous man and his wife'}\]
(168) à baami kää këmi rama-k mii wunuwa naa abancin-gara
\[\text{'hide and listen to the talk of the head wife and her co-wives'}\]

**Complements of various prepositions and adverbs**

(169) ža tlarde-n-gara naa Ngwajin naa Mesau
\[\text{'war broke out between Ngwajin and Misau'}\]
\[\text{(The first } naa \text{ introduces an adverbial phrase.)}\]
(170) kumu-w naa debiino naa gooro
\[\text{'inside it there were dates and kola nuts'}\]
\[\text{(The first } naa \text{ introduces an existential predicate; cf. the following where the complement of the existential predicate is preposed.)}\]
(171) lardi nna lardi nna rii waafa aci raakene bii ngum, nna bai
 'district upon district and (other) places where he hadn’t traveled, there were none'

(172) âa kalau gaada-k belan-gara nna sekentu-gara
 'they were afraid because of her beauty and her haughtiness'

(173) nen nna bii-geri-n, âa ta-w ñevid nna afa
 'if a person has the wherewithal, he eats night and day'

Before continuing with specific syntactic rules affecting conjoined NP’s, I will make a few theoretically oriented remarks about these structures. I am considering all conjoined NP’s to be phrasally conjoined in the base. Various syntactic and semantic arguments have been mustered in the literature for both phrasal and derived sources for conjoined NP’s (see the chapter on ’Conjunction’ in UESP (1968) for a summary). The majority of students have assumed that at least some conjoined phrases are derived from conjoined S’s by a rule of Conjunction Reduction, and UESP (1968), among others, concludes that there is no phrasal conjunction in the base at all. My main arguments for having only phrasal conjunction are negative ones. In the first place, there is only weak evidence in Ngizim that we need to generate conjoined sentences in the base, at least in the sense of sentence conjunction in English (see Chapter 6). Second, there is little evidence that a Conjunction Reduction rule exists in Ngizim. If co-ordinate con-
joined sentences did exist and Conjunction Reduction were a transformation, we would expect all types of structures to be conjoinable - V's, VP's, prepositional phrases, etc. In fact, the only phrasal type which allows "conjunction" is the NP. I think it not insignificant that NP's are "conjoined" by the preposition 'with'.

In Chapter 6, section 1.1, I suggest that there is a typological split between languages having a true co-ordinating conjunction like 'and', and those which have no such conjunction. The former type of language would expectedly have a Conjunction Reduction process yielding all sorts of conjoined phrasal types. On the other hand, languages with no co-ordinating conjunction would have no Conjunction Reduction process. Phrases could be "conjoined" only where there was some independent means (i.e. some means which did not involve true conjunction) to link phrases of that particular type. An example would be the comitative preposition 'with' which could be used to link NP's.

If nà in Ngizim is a preposition, what evidence is there that so-called conjoined noun phrases have the structure (174)(a) rather than (174)(b), where the nà phrase is an adverbial adjunct to the head NOM? Moreover, what is the evidence that such structures are not of the form (174)(c)?
A structure such as (174)(a) or (174)(c) is to be favored over one like (174)(b) for several reasons. First, the Ngizim structures that we are dealing with are like conjunctions rather than simple comitative 'with'-phrases, in that the number of NP's that can be joined in this way is unlimited (cf. (162) and (171)). Thus, while the number of NP's which can be conjoined by 'and' in English is unlimited, the number of NP's that can be associated by comitative 'with' is limited to two (*I came with Bill with Bob). Second, in the structure of (b), where there is a head N with the ADV subordinated to it, we would expect agreement patterns to be only with the head N. However, in the Ngizim conjoined structures in question, pronoun agreement is plural (cf. 162) and (166) and numerous examples below). 16 Third, the structure of (174)(b) is needed in addition to some other structure, such as (174)(a), because there is a semantic contrast between NP's conjoined by nàa and those containing an adnominal modifier introduced by nàa. Compare, for example, (13) and (96) with the NP's in (160) through (173).

The structure of (174)(a) is to be preferred over (174)(c). The latter implies that nàa is a pivotal link between two NP's and is not bound to either. But there is

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absolutely no question that nàa goes with the second NP. By introducing the NP "conjunct" as a prepositional phrase as in (174)(a), we show the bound nature of nàa as well as retaining only one node in the phrase structure, PREP, where prepositions can be inserted. We will see furthermore that nàa conjunction has certain prepositional phrase characteristics.

For conjoined NP's containing pronouns, the ordering relation in (175) is strongly preferred:

(175) 1st person > 2nd person > 3rd person pronoun > noun(s)

(For >, read "precedes".)

In some Chadic languages, within each person, masculine precedes feminine, singular precedes plural. I assume the same is true of Ngizim, but did not check it. Newman (1970), p. 44, states that the order in (175) is obligatory for Tera. While it is definitely preferred in Ngizim, it is not obligatory. Informants accepted phrases such as cì nàa iyù 'you (m.sg.) and me', and an occasional example is found in texts, e.g. maarem pata nàa ja 'the Lord of the Bush and us (excl.)'.

A stylistic possibility in conjoined NP's containing a pronoun is generated by rule (176):

(176) *(OPT) PRO Pluralization

\[
\ldots [\text{NP} \quad \text{nàa} + \text{NP} + X \text{NP} \ldots \rightarrow \ldots 1 \quad \text{NP} \quad \begin{array}{c} 2 \\ [+\text{pro}] \end{array} \quad \begin{array}{c} 2 \\ [+\text{II}] \end{array}]
\]

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If the first of conjoined NP's is pronominal, it may optionally be made plural even though the referent for the underlying pronoun is singular. The angle bracket condition is necessary to give the first person inclusive pronoun in case the first NP is first person and the second is second person (see 180). I am assuming that first person singular and first person plural exclusive are \([+\text{I}][-\text{II}]\), all second person is \([-\text{I}][+\text{II}]\), and all third person is \([-\text{I}][-\text{II}]\). The phrases given below are ambiguous, coming either from underlying plurals or underlying singualrs pluralized by (176). Only the underlying singular meanings are given.

(177) aksi naa Audu day-n-aakshi

'he and Audu got lost'

(= in one reading aci naa Audu ... 'he and Audu ...')

(178) aw-gu, jà mee-n ja naa waane

'that guinea corn, it was me and so-and-so who took it' (focussed subject)

(= in one reading ... iyu naa waane '... me and so-and-so')

(179) kun naa Audu kwá day-n-aakun

'you and Audu got lost'

(= in one reading ci naa Audu ... 'you (m.sg.) and Audu ...')

(180) wa naa ci wà day-n-aawa

'me and you (wa 'we (incl)) got lost'

(= in one reading iyu naa ci ... 'I and you ...')
The optionality of (176) is seen in (a) and (b) of (181) with identical meaning (two referants) which were found in consecutive sentences of a text.

(181)(a) ke-ci naa wun-gaa 'yours (sg.) and my son's'
(b) ku-kun naa wun-gaa 'yours (pl.) and my son's'

[that of you and my son]

Rule (176) has been formulated so as to apply as a free option. This may not be entirely the case. Note the following examples where a singular pronoun is found at the head of a conjoined structure.

(182) aci naa ama-geri naa maayim dà pi waawuri, tiiye á gwa-w

'he and his wife and the boy set to scrambling, each one scooping them (cauries) up'

(183) kem naa kutlii-wa bal kwá nai wà yi

'you (f.sg.) and our children all (of you) come and let's go'

(184) aci naa nda-geri ji ii ŋa-n, áa nii-naa kenasəf gaawa

'when he and his followers went to war, they brought back many victories'

(185) ii náa dlama-naa devu-k dayi-gara naa wun-gara

'me, I'll find a way to get rid of her and her son'

[me, I will do the road of losing her and her son]

Most of the examples I have found with a singular pronoun head have involved a socially "higher ranking" referent for the person conjoined with social "subordinates". This extra-linguistic fact may in part condition the choice of a
singular head pronoun. On the other hand, the choice may be purely syntactic. All examples that I have found with a singular pronoun head have had possessive pronouns involving the first conjunct as a referent on the following conjuncts. A plural pronoun head with an underlying singular referent may cause co-reference problems under such circumstances. Needless to say, further research needs to be done here.

A final surface possibility in NP conjunction permits nàa before the first conjunct. This is not unlike English 'both ... and', but the total number of NP's in the construction is not limited to two as it is in English. This surface construction is possible only when the conjoined structure is in a "free" position, i.e. not governed by some subordinating element such as a preposition, the mark of a focussed subject NP (nàn), or the linker.

(186) naa ii naa Demza jà ji ii Kano
     'both I and Demza went to Kano'

(187) naa Audu naa Muusa zëgëm aw tku
     'both Audu and Musa planted this guinea corn'

(188) zëgëm naa riiduwa tku naa gwàdanu tku-n tai?
     'who planted both these beans and these peanuts?'

(189) *nà taatke miya vëda dëgëm ii naa mageraf naa manga-geri
     'I showed the emir's entrance to both the visitor and his friend'

     (Ungrammatical because of the preposition ìì preceding nàa.)

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(190) *zégem gaverka tku-n naa Demza naa Maakwai
    'it was both Demza and Makwai who planted this sorghum'

(Ungrammatical because of the mark of an emphasized subject, -n, preceding naa.)

(191) *jåa ndema-k naa Demza naa Maakwai
    'we will greet both Demza and Makwai'

(Ungrammatical because of linker -k preceding naa.)

4. Extraposition of Relative Clause or Conjuncts from NP

4.1. Scope of the Extraposition from NP Rule

The rule of Extraposition from NP can be stated as in

(192): 

(192) (OPT) Extraposition from NP
    ...
    [ NOM X ]\_NP
    Y \# ===>
    ...
    1 \Ø 3 + 2 4
    
    1 2 3 4

    Condition: 2 is not NP or ADV directly dominated by the same NOM as 1

That is, a relative clause or all but the first of conjoined NP's may be extrapoosed away from a head NOM to the end of a sentence.17 There are undoubtedly numerous further restrictions on the operation of this rule. One such restriction is that a relative clause cannot be extrapoosed over an embedded S node. Thus, (195)(b) is ungrammatical because the relative clause waaña åa fera 'who was sick' has been extrapoosed over an NP containing a relative clause
(waarə əa kuruwa 'who were shouting'). Examples (194)(b) is ungrammatical because the relative clause waarə akši sa–w 'that they experienced' is extraposed over a sentence complement (akši bare jiřeewa ii Kaakasku bai 'they didn't believe in God). In both sentences Extraposition from NP operates from a direct object over a subject postponed for focus.

(193)(a) daameete–nəa [gwangurak waarə əa fera]–n maamau waarə əa kuruwa

'(it was) the children who were shouting (that) bothered [the old man who was sick]'

(b) *daameete–nəa [gwangurak]–n maamau waarə əa kuruwa [waarə əa fera]

(194)(a) dee–d ii–kši [boonee waarə akši sa]–n akši bare jiřeewa ii Kaakasku bai

'(it was) that they didn't believe in God (that) brought to them [the trouble they experienced]'

(b) *dee–d ii–kši [boonee]–n akši bare jiřeewa ii Kaakasku bai [waarə akši sa–w]

I have not discovered any other easily stated restrictions on the operation of (192). 18

Extraposition of relative clauses from NP is fairly straightforward, and is a well-established rule in English as well (cf. Ross (1967), p.1). Extraposition of a relative clause from a subject NP to the end of the sentence is given in (195). A number of examples of extraposition from NP's in other grammatical functions will be given below.
(195)(a) [gawa waağa náa karam naa atu] kupke-n-gara =
'[the axe that I was chopping with] unhafted'
(b) [gawa] kupke-n-gara [waağa náa karam naa atu tenu]
'[the axe] unhafted [that I was chopping with']

Extrapolation of NP conjuncts may prove to be somewhat more controversial, in particular since it appears to violate Ross's Co-ordinate Structure Constraint, which would prevent movement of any constituent out of a conjoined structure by a transformation (see Ross (1967), p.89). Before entering into a theoretical justification for applying (192) to NP conjuncts as well as relative clauses, I will give a number of examples of extrapolation from various NP constituents. In each pair of examples, the first illustrates extrapolation of a relative clause, the second extrapolation of an NP conjunct. I will give only the extrapolated Ngizim version but a non-extrapolated translation. All these sentences were accepted in Ngizim with or without Extrapolation from NP applied. Extrapolation of NP conjuncts from subject involves a number of additional problems. Section 4.2 will be devoted to this type of construction. Extrapolation of relative clause from subject was already seen in (195).

Extrapolation from direct object over indirect object

(196) dán sanda dee-naa [aker] ii alkali [waağa akšiti jibu tenu]
'the police brought [the thief they had caught] to the judge']
(197) gedən-gaa dee-naa [am] iī mageraf [naa gooro]
    'my brother brought [water and kolas] to the visitor'

Extraposition from direct object over adverb

(198) vengə-naa [səma] gacaře [waařa jə sa ba tenu]
    'she just now poured out [the beer that we didn’t
    drink]'

(199) jà taatemə [riiduwa] garvaca [naa tukurwa]
    'we picked [beans and Bambara ground nuts] yesterday'

Extraposition from direct object over emphasized subject

(200) nà rauree [məyiim] nən iyu [waařa āa dəbet senaasən]
    '(it was) I (who) called [the boy who was selling
    fried cakes]'

(201) gaunə [gadə tiyu]-n Audu [naa gadlii tiyu]
    '(it was) Audu (who) plaited [that zana-mat and that
    granary]'

Extraposition from indirect object over emphasized subject

(202) nà bare gavreka ii [amə]-n iyu [waařa dee ii allaa๑ро
    tenu]
    '(it was) I (who) gave sorghum to [the woman who
    came begging]'

(203) bare gavreka ii [dəgəyu]-n mii-k wunduwa [naa mətəmac-gəri]
    '(it was) uwargi̱da (who) gave [the blind man and his
    son] sorghum'

Extraposition from emphasized subject over indirect object

(204) va gubəs nən [baacı bara] ii afek-gaa [waařa zədaŋ
ii wunduw-aaja tenu]

'(it was) [the hunter who stayed at our compound] (who) shot a warthog for my father'

(205) dlam bari-k salla-n [degem] ii ndaawa [naa diyo]

'(it was) [the emir and the district officer] (who) gave salla gifts to the people'

Following are a few more examples where I did not elicit both relative clause and conjunct counterparts. I have no reason to believe that both would not be possible.

Extraposition of relative clause from direct object over NEG

(206) kà tuwaya [rama-gaa] bai [waafa Baaba ram maa na ram ii-ci-w]

'don't forget [my words that Baba said I should tell you]'

Extraposition of relative clause from adverb over adverb

(207) naa yka-naa aci naa [kaʃe] aa aikwa-geri [waafa aci keru tenu]

'I saw him with [the goods that he stole] in his hand'

Extraposition of conjunct from indirect object over adverb

(208) jà bar aw ii [dłe quyu] ii miya mavgì [naa matkam-geri]

'we gave guinea corn to [the blind man and his son] at the doorway'

Extraposition of relative clauses includes following attributive adjectives, as in (209) and (210) and BAACI phrases (cf. section 2.3 above) as in (211).
(209)(a) va [tluwi ꙃ뉴 gušu tku]-n tai? =
(b) va [tluwi]-n tai [gušu tku]?
 'who shot [this ugly animal]?'

(210)(a) næmë ['menduwa kaarara tku]-n Audu =
(b) næmë ['menduwa]-n Audu [kaarara tku]
 'it was) Audu (who) built [this new house]'

(211) [dagai] næa jamaa-geri dee-w da Berni [baaci-k
dlugun næa Diikannen]
 '[a certain person] and his entourage came from
Birni [who had the name Diikannen]'

Let us return now to some theoretical justifications
for allowing (192) to operate on NP conjuncts. One strong
justification is the fact that it is difficult to imagine
what source some of the sentences in (197) ff. might other-
wise have. For example, in (199) the phrase næa tukuufwa
{'with'} Bambara groundnuts' cannot come from a reduced re-
relative, an instrumental phrase, or a comitative phrase.
A related, and perhaps even more convincing type of phrase
with no source other than extraposition from NP is seen in
(212)-(213). In both these examples, the næa phrases, which
presumably are attached to the matrix PRED (or perhaps ma-
trix S) node, are associated with NP's embedded within NP's.
The suggested derivation for (212) is given in (214).

(212) da gusu, manjiin-aaja waayi-n-gara næa gayim
 'from today, my friendship with the cat is finished'
 [from today, our friendship is dispersed with the cat]
(213) saapi yaaye gež-aakši gadjemata ak naa ama-w
'all the time he and his wife are at odds' [always their heart is spoiled with his wife]

(214) Suggested derivation for (212) (adverb omitted)

Underlying

```
(214) Underlying
S
  NP            PRED
    NOM          VP
      N            DET
        NP         PP
          N         NP
            PP
              mangiina  iyu
              friendship
        naa gayim  ∅
        and cat
        it has dispersed
         waayi-n-gara

Pluralization of PRO (176)  ===>  
Extraposition from NP (192)

S
  NP            PRED
    NOM          VP
      N            DET
        NP         PP
          N         NP
            PP
              mangiina  ja
              us (excl)
        ∅
         waayi-n-gara
        naa gayim
```

Further evidence that Extraposition from NP must affect
NP conjuncts involves pro-pluralization by (176). A naa
phrase associated with a pronoun may be separated from that
pronoun by intervening material. It is possible for the
pronoun to be plural, even though the sentence is understood
to have only one additional referent connected with the

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referent in the nå phrase. I see no way that the pronoun could be pluralized under such circumstances if it and the nå phrase had not been part of the same NP at some stage.

The only sentences I have of the type just described involve a plural subject pronoun with an associated nå phrase somewhere after the verb. I have no reason to believe that the same would not be true in other sentence functions. In (215), the surface subject pronoun is plural even though the sentence is understood as having only two actants.

(215) jà ndaagam-n-aaja nåa atu

(free translation) 'she and I met' [lit: we (excl.) met with her]

4.2. Conjoined Subjects

The following surface structures are all possible where the phrase nåa-NP has some sort of comitative relation with the left-most (= subject) PRO or N. The structures are somewhat simplified.

(216)(i) PRO\textsubscript{pl} nåa-NP VP

(ii) PRO\textsubscript{sg} nåa-NP VP

(iii) N nåa-NP VP

(iv) PRO\textsubscript{pl} VP nåa-NP

(v) PRO\textsubscript{sg} VP nåa-NP

(vi) N VP nåa-NP

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It is safe to assume that structures like (i) through (iii) are generated as conjoined structures in the base. A number of examples of these three types have already been seen above: type (i) is seen in (182) through (184), (ii) in (177) through (180), and (iii) in (160) through (162). The only rules affecting any of the types (i) through (iii) are order of persons (if (175) is considered a rule), and pluralization of a head pronoun (176). Of course, these rules are not restricted to subject NP's.

Our main problems will involve accounting for (iv) through (vi). It is certain that some naa-NP phrases in the predicate are generated in the base as predicate constituents. This is clear in (217) and (218), since the sentence with the NP in the predicate is semantically distinct from the similar sentence with conjoined NP's in the subject. (The (b) examples were not checked with informants and may require some surface modifications.) In (219), a conjoined subject source is impossible since naa 'one' cannot be conjoined with other NP's any more than can French on, German man, or Hausa an.

(217)(a) náa lawan-gu kàa ta'yi-k kun-aaci naa iyu bai
'I see that you don't relax (don't release your stomach) with me'

≠(b) ? ... iyu naa ci ta'yi-k kun-aawa bai
'... that you and I don't relax (don't release our stomachs)'
(218)(a) dlam rawa naa ii pedem
    'he ran a long ways with me' ('on his back' - understood from context)
≠ (b) ? iyu naa aci dlam rawa pedem
    'he and I ran a long ways'
(219)(a) ndâa s-ak aagaw naa manga-k zaata-w
    'one drinks gruel with the pounding companion'
    (i.e. one who helps in pounding the grain to mix into the gruel)
(b) *ndâa naa manga-k zaata-w sa-k aagaw

On the other hand, we know that Extrapolation of Con-
joined NP's is a required process in Ngizim since it is
needed to derive the sentences in (197) ff., which would
have no source otherwise.

Sentence types (iv) through (vi) in (216) therefore .
have two potential sources: the naa phrase may be generated
in the base as a predicate constituent, or it may be gener-
ated in the base as part of the subject NP and then extra-
posed.

Sentences of type (iv) where the naa phrase could be
in the predicate through extrapolation (i.e. its having been
extrapolated would not be ruled out as in (217) through (219))
are always structurally ambiguous. They could involve just
one or more than one actant besides the one(s) in the naa
phrase. The first interpretation always seems to be the
"one actant" interpretation. In the "one actant" interpre-
tation these sentences have to have undergone the following
A number of examples of this construction type are given below. Only the "one actant" translation is given, though all could potentially have the "more than one actant" interpretation as well.

(221) jà šawarts-du naa atu
'she and I discussed it' [we (excl) discussed it with her]

(222) tamke jàa dlama-w naa aci, jà dambas-aaja naa aci
'we were doing everything together, he and I were living together' [everything we (excl) were doing with him, we (excl) were seated with him]

(223) waaña jà dlam tapai naa aci, caaman mëren-gaa
'the one I fornicated with, for a long time he's been my lover' [the one we (excl) did fornication with him,...]

(224) saw iyu, ii rawanke wàa ya naa kem
'here I am, wherever it may be, you (f.sg.) and I will go together' [.... we (incl) will go with you]

(225) nà nci wà yi-n-aawa naa ci
'I want to go with you (m.sg.)' [I want (that) we (incl) go with you]

(226) wà kalakte-n-aawa naa ci
'you (m.sg.) and I returned' [we (incl) returned with you]

(227) sai kwa dlam zeba naa atu
'you and she should get married' [then you (pl) do marriage with her]
(228) aten ci-n, kwáa ndaageme-n-aakun naa akši

'but as for you (m.sg.), you and they will have a run in' [but if you, you (pl.) will meet up with them]

(229) akši dá dlam nděma naa gwangurak

'she and the old woman exchanged greetings' [they did greeting with the old woman]

(230) day-n-aakši naa Audu

'he and Audu got lost' [(they) got lost with Audu]

Some of the sentences in (221)-(230) can be shown to be unambiguously derived from extraposition, e.g. in those examples where context (224, 228) or facts about the real world (223, 227) show that only one actant besides the one(s) in the naa phrase is reasonable or possible. For types (v) and (vi) it is sometimes possible to know that a comitative phrase in the predicate could not have come from extraposition, as in (217)-(219). Note also (231) where we know on purely syntactic grounds that the comitative phrase had to have been generated in the predicate in the base since the subject pronoun is first plural exclusive (cf. 226).

(231) já kalakte-n-aaja naa ci

'we (excl.) returned with you'

In examples like the following, however, it is impossible to know on syntactic or contextual grounds whether the comitative phrase was generated in the predicate in the base or extraposed from the subject.²⁰

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(232) nà kalakte-n-gaa naa ci
'I returned with you (m.sg.)'

(233) nàa ya-n-gaa naa ci nà yvi nen vatku-w
'I'm going with you and leave this worthless person'

(234) kà day-n-aaci naa mang-aaci
'you (sg.) got lost with your friend'

(235) kà ndàagèmè naa hefm-aaci-gù-n, kà ram ii-ci dá nai
'when you meet up with that friend of yours, tell him to come'

(Notice that in (235) the verb ndàagèmè means 'to come a-
cross, meet' whereas in (228), where we know that the pre-
dicate nàa phrase is extraposed, the verb means 'to come up
against, have a run in with'. I do not know if this is
systematic.)

(236) aci dambàse-geri naa amaatu-geri
'he was living with his wives'

(237) badlamu áà vera naa ja akšì áà suwaari
'the hyena was going out with the dog and they were
dancing'

(238) kaayak ji ii kaawa naa kutlii veji ii kumù-k am
'the squirrel went to play with the monkey's chil-
dren in the water'

A final comment to be made on the operation of Extra-
position from NP on NP conjuncts in the subject has to do
with placement of the extraposed elements. As formulated,
rule (192) would put the extraposed elements at the end of
the sentence. The surface comitative phrase is not necessarily always in this position, as seen from the ordering possibilities in (239)-(240). This can be accounted for by adverb scrambling needed independently for adverbs generated as predicate constituents (see Chapter 3, section 2.5).

(239)(a) jà ji ii Kano naa Demza =
(b) jà ji naa Demza ii Kano
   'I [we (excl.)] went to Kano with Demza'

(240)(a) jà karme dem naa aci garvaca =
(b) jà karme dem garvaca naa aci
   'I [we (excl.)] chopped wood with him yesterday'

5. Constituents of the Determiner (DET)

The node DET is generated at the end of the NP. The rules giving the internal constituency of DET are repeated here for convenience:

(4) DET ---\( \rightarrow \) (QUANT) ART (POST)

(5) ART ---\( \rightarrow \) (REF) \( \{ (INDEF) \} \)
\( \{ (DEM) \} \)

These rules are formulate strictly on the basis of surface order. In regard to this it is interesting to note a typological fact about Ngizim. Greenberg (1966), Universal 20, notes that languages which preferentially put the adjective before the noun, such as English, invariably have the order DEM-NUM-ADJ-N, e.g. 'those two tall trees'. Languages

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which preferably have the ADJ after the noun, such as Ngizim, have the order N-ADJ-NUM-DEM, e.g. waka gazbeŋ širin tiyu 'tree tall two those'. That is, the order of elements in each language is the mirror image of the other. To this mirror image may be added yet another element, called POST in (4). This constituent in Ngizim corresponds to what has been called "pre-determiner" in some studies of English syntax, i.e. quantifiers and other words like 'all', 'many (of)', 'merely', etc. Thus in English we find 'just those two tall trees' corresponding to Ngizim waka gazbeŋ širin tiyu jaɓ.

This section will describe first the category REF or Previous Reference Marker, then the demonstrative system (DEM), followed by an account of noun phrases having indefinite qualifiers (INDEF). Following this will be a discussion of quantifiers (QUANT), the category POST, and finally an account of some of the order options involving elements of the category DET.

5.1. The Previous Reference Marker (REF)

To indicate that a noun phrase has a referent already mentioned in previous context, a formative -w or -gu is suffixed to the noun phrase. While the use of REF does not seem to be syntactically obligatory, its textual frequency is high, possibly being greater than that of the corresponding Hausa -n/-n. The contexts conditioning choice between

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these allomorphs of the Previous Reference Marker are phono-

logical:

\[
(241) \quad \text{REF} \rightarrow \begin{cases} 
(a) & \text{w} \\
(b) & \text{gú} 
\end{cases} / \begin{cases} 
(a) & \text{(OPT) -a, -i, -u} \\
(b) & \text{elsewhere}
\end{cases}
\]

That is, w (the ' before w means that a preceding low
tone is raised) is optionally but nearly always chosen after
the vowels a, i, u. The allomorph -gú is used as a rare
option after these vowels as well as after consonants, diph-
thongs, and the vowels e and o. 22 Nouns ending in lexical
-k drop this k when REF is added. REF in either allomorph
is usually added to the very last constituent preceding DET
in the NP of which it is a part. It may be suffixed, say,
to the last constituent of a relative clause, but have every-
thing preceding it within the NP in its scope. The examples
below are translated 'the . . .' or 'that . . .', but REF should
not be entirely equated with these English words. It cannot
be used, for example, as a generic determiner or to indicate
uniques ('the sun') as can 'the' in English.

\text{REF on simple N}

(242) \begin{tabular}{lll}
\text{Neutral form} & \text{Form with REF added} \\
wáká & wáká-w & 'the tree' \\
máùí & máùí-w & 'the beard' \\
márdû & márdû-w & 'the millet' \\
zádák & zádák-w & 'the seed'
\end{tabular}

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\[\begin{array}{lll}
\text{dasák} & \text{dasú-w} & \text{'the market'} \\
\text{gędzép} & \text{gędzép-gú} & \text{'the slave'} \\
\text{dlúgwàn} & \text{dlúgwàn-gú} & \text{'the sauce'} \\
\text{kářée} & \text{kářée-gú} & \text{'the loads'} \\
\text{sóonóo} & \text{sóonóo-gú} & \text{'the shoe'} \\
\text{káfáí} & \text{káfáí-gú} & \text{'the cobra'} \\
\text{gáråu} & \text{gáråu-gú} & \text{'the goats'} \\
\end{array}\]

**REF and associative NP construction**

(243) nda Šira-w \hspace{1cm} 'those people of Shira'

**REF on N + associative pronoun**

(244) buwa-gaa-gu \hspace{1cm} 'that trip of mine' \\
mamuu-wa-w \hspace{1cm} 'those children of ours' \\
maspář-ci-w \rightarrow [maspář-cuu] \hspace{1cm} 'that charm of yours (m.sg.)' \\
manga-geri-w \rightarrow [manga-geruu] \hspace{1cm} 'that friend of his' \\
d-aakši-w \rightarrow [d-aakšuu] \hspace{1cm} 'that town of theirs' \\
auđu-k kaka-gaa-gu \hspace{1cm} 'the grave of my grandfather' \\
wunya-k gazgar-aakem-gu \hspace{1cm} 'the daughter of your (f.sg.) older sister'

**REF at the end of a relative clause**

(245) agwai waařa aarawii-gu \hspace{1cm} 'the eggs which were white'

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bee waarchinga kā bar ii wunya-gaa-gu
'the thing that you gave to my daughter'
devu waaarchinga akši ḥa ya ii ḥa-k ḥa-k Kuyu-k Tera-w
'the road that they will go on to the village of
Kuyuk Tera's people'

When REF co-occurs with other constituents of the
determiner, it seems to fall preferably to their left, espe-
cially in the case of numerals. It optionally may come to
their right, however.

(246) nda-w kwan 'the three people'
aarawii-gu kwan 'the three white ones'
gooro-gu tku = gooro tku-gu
'these kolas previously mentioned'
gwangurakuu-gu dagai = gwangurakuu dagii-gu
?q 'a certain old woman previously mentioned'

(Informants accepted the latter example, which has an inde-
finite determiner. REF and INDEF together seem self-contra-
dictory to me, but on the basis of this example I have al-
lowed them to co-occur. I have found no such examples in
texts, but see (292)-(293) below where N-REF-INDEF means
"some from a previously mentined group or mass".)

Besides the simple previous reference meaning, REF has
two further uses which may or may not be directly relatable
syntactically. First, when a set has been referred to, REF
can be used in conjunction with a numeral or other quanti-
fier or quantifier-like word to mean 'the other 1, 2, 3, etc. of that set', 'the remaining member(s) of that set previously referred to', 'some from that set' (cf. 292-293). The quantifier may be used alone or with a noun. REF is underlined in the following examples:

(247) dá tadaí gayi-w 'she dropped the (remaining) one'

(248) dáa mi gayi dá dlogi ii ŋi-k 'yuwa-geri dá mi gayi-w wam dá dlogi ii ŋi-k 'yuwa-geri ke mata

'he took one and slung it under his arm, he took the other one and slung it under his right arm'

(249) kunamu waafi dekà-naa kaakenii-gu ii gazbeł

'the deleb palm that exceeded the rest in height'

(250) á jib ii-wa jaka-w gayi

'carry for us the (other) one sack'

(251) dáa ṣgwi waafi daguwa-w kwan

'she took out the three that were decorated'

The last use of REF to be mentioned here is as indication of anaphoric deletion of an associative NP. This may be either an associative NP within a noun phrase, (252)-(254), or the direct object of a verb in the Imperfective aspect, (255)-(257), which, by virtue of being a verbal noun, requires that its objects be in an associative relationship with it.

(252) kwaañi ve-da-n, matkan-gu ye áa veji

'if a donkey lies down (out of stubbornness), his son too will lie down'
(253) nda ya nasaadi haf ii Kurumci nha bi laabah-gu
    'I will go expressly to Kurumci to get its story'
(254) daaci miik maayim-gu da genyi reseug-gu aha perta-k
    maayim-gu ii da-w
    'then the mother of that boy took the skin and was
     laying her son on it'
(255) dababkin aha suwaari, akhi aha lawan-gu
    'the girls were dancing, and they (the boys) were
     watching them'
(256) bee waara nda a dlama-w
    'the thing that one was doing (it)'
(257) laabah-gu Maamedo yee, nake-a-k tabta-w da rii-k
    gazgareucin
    'the story of Maamedo as well, I am busy asking about
     it from the elders'

5.2. The Demonstrative System

Ngizim has a formally neat system of demonstrative
words. There are three function types distinguished: what
I will refer to as "Deictic Predicators", Pronouns, and Ad-
jectives. The first two of these have morphologically dif-
ferent singular and plural/mass forms. Finally, there are
three deictic relations distinguished: near, distant, and
previously referred to. The entire system is given in para-
digm form in (258).

While I have written these demonstratives as units,
they are clearly morphologically complex at some level.
Roughly the basic deictics are -w/-k (? < *-kw; cf. the
linker ke) 'near', -y 'distant', and -a 'previous reference'.
These are combined with s- 'singular', nd- 'plural' (cf. ndâawâ 'people', ndâ 'those who ...'), t- 'adjective'.

I hesitate to say whether these formatives have any separate reality in contemporary Ngizim.

<table>
<thead>
<tr>
<th>(258)</th>
<th>Deictic Predicators</th>
<th>Pronouns</th>
<th>Adjectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>near</td>
<td>sing.</td>
<td>sâw(tâi)</td>
<td>sâu</td>
</tr>
<tr>
<td></td>
<td>pl/mass</td>
<td>ndâw</td>
<td>ndâu</td>
</tr>
<tr>
<td>distant</td>
<td>sing.</td>
<td>sîi(tâi)</td>
<td>sîyû</td>
</tr>
<tr>
<td></td>
<td>pl/mass</td>
<td>ndîi</td>
<td>ndîyû</td>
</tr>
<tr>
<td>previous reference</td>
<td>sing.</td>
<td>sénà(tâi)</td>
<td>sênû</td>
</tr>
<tr>
<td></td>
<td>pl/mass</td>
<td>ndânà</td>
<td>ndênû</td>
</tr>
</tbody>
</table>

The semantics and syntactic distribution of these demonstratives are not as neat as implied by this paradigm, which is based purely on formal grounds. I haven't investigated their syntax or semantics systematically, either with an informant or through texts. Comments below amount to random observations.

5.2.1. Syntax of the Demonstratives

Deictic predicates

These words, corresponding to French voilà/voici, are
discussed and illustrated somewhat more fully in Chapter 3, section 6. They can be used alone to mean 'here it is', 'there it is', there it was', or they can be followed by a nominal or pronominal complement (the Independent Pronoun forms are used). The singular forms at least can be followed optionally by a formative tāi (\textarrow{tii} medially) which adds nothing semantically so far as I can tell.

(259)(a) saw(tai) 'here it is'
(b) saw(tii) kakkadi 'here is paper'
(c) saw(tii) aci 'here he is'

(260) ndaw bii-k sadak-aakši 'here's their alms' [here's their thing of alms]

(261) ndena agwai 'there are eggs, 'you'll see eggs' (in a place not visible at this moment)

(262) sii wunduwa-k gayim-gu 'there's the compound of that cat'

Though formal plural/mass forms exist, the "singular" forms may also be used in reference to a plural or mass noun.

(263) saw akši aa pata 'here they were in the bush'
(264) saw nà-k bara ye, deë-n-aakši ii damtau 'here were hunters as well, they had come close'
(265) sii tai amaatuun-kun áa teka-k aadan 'there were your wives (and they) were crying away'

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Adjectives

The demonstrative adjectives usually come at the end of the noun phrase, except for POST and QUANT, which may follow them. Demonstratives may follow or precede a cardinal number with no apparent meaning difference, and it is even acceptable to repeat the demonstrative adjective before and after the number. (See section 5.5 for further discussion on order of determiner elements in the NP.)

(266) mageraf tku  'this visitor'
dlakwak tiyu  'that rake'
aa rii tenu  'at that place (in question)'
(267) ama-gaa tku  'this wife of mine'
ram-aakem tku  'this talk of yours (f.sg.)'
(268) bee waafa da d-aaci tku  'this thing that is on your head'
gaskam waafa da mangina naa gayim tenu  'that rooster that was friends with the cat'
(269) maamau širin tku = maamau tku širin = maamau tku širin tku  'these two children'

The previous reference adjective, ténú, is almost totally limited to NP's containing embedded sentences, such as relative clauses, or to NP's entirely dominating S, as in certain types of adverbs (see Chapter 8). With non-complex noun phrases the previous reference function is filled by
REF in the form -w or -gá. The use of ténu with a simple noun as in the example in (266) is unusual in the corpus available to me.

Pronouns

(270) sau, nàa ya-du naa boone
    'this, I'll carry it (only) with difficulty'

(271) suu tam?    'what is this?' [this is what]

(272) Senu bi? Senu ada-k ssau kufu naa ssau wam.
    'That? That's the roof of a hut and also the hut as well.'

(Example (272) was said in answer to a riddle, nen maarem kufu dà gudve nen maarem wam 'a big man and he takes a big man on his back as well'.)

The demonstrative adjectives can be used along with the demonstrative pronouns.

(273) suu tku bangai 'this is a baboon'

(274) siyu tiyu kuku    'that's a Baobab'

An example suu tku tenu 'this very thing in question was found in a text. T(é)kú modifies sau and ténu modifies that combination.

5.2.2. Semantics of the Demonstratives

The previous reference meaning is available to all the demonstratives. In fact the "near" forms are textually more
frequent in this usage than are the "previous reference" forms themselves. I am not sure of the meaning difference between these two if there is any. Both may refer to abstract events or concrete objects (see (272) for sēnd used with reference to a concrete). The "distant" forms are fairly consistently used in reference to something remote in time or space.

(275) suu papiya 'that's a lie'

(276) biì-kun tku, aì żiruu nee

'that way of acting of yours [this thing of yours], well it was shameful'

(277) da senu akši då tlaì då nai ii Googaram

'upon that they set out and came to Gogaram'

(278) kambi tiyu dampay-gara 'that bowl was put away'

The deictic predicators are frequently used in narrative, not to mean 'here it is', 'there it is', but simply to call attention to some element in a narrative or to introduce a new element. (For further examples, see Chapter 3, section 6.)

(279) saaw belan saw gamas naa ñtuu-k capari

'here was beauty, here was laughter and happiness'

(280) sii tɛɛaaku maa â nci kem ii gudugum

'hey (there she is) the ewe says she wants you for a companion'

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5.3. Indefinites (INDEF)

Two syntactic features in particular are needed to characterize the elements of ART in the determiner. These are definiteness [+DEF] and specificity [+SPEC]. Of these features, UESP (1968), p. 115, says, "... with [+DEF] the referent is assumed known by the hearer, while with [+SPEC] the speaker makes no such assumption regarding the hearer (in both cases the speaker knows the referent)." These comments correctly characterize these two features as I understand them to be used in Ngizim.

The elements REF and DEM discussed in section 5.1 and 5.2 are all [+DEF]. All [+DEF] are [+SPEC], so the [+SPEC] distinction is crucial only to a description of [-DEF].

Three types of indefinites must be distinguished for syntactic purposes. Since the differences between these types are manifested in the behavior of the noun phrases containing them, I will discuss them in the context of full NP's, not as quantifiers or articles alone.

\[
\begin{array}{l}
(281) \quad [-DEF] \quad \text{dágài (sg/pl/mass)} \\
\quad [+SPEC] \quad \text{jígàp (pl/mass)} \\
\end{array}
\]

Both may be used alone as pronouns or as modifiers of nouns.

\[
\begin{array}{l}
(282) \quad [-DEF] \quad \emptyset \\
\quad [-SPEC] \\
\quad [-COLL] \\
\end{array}
\]

Can be used with any noun. The following words with \(\emptyset\) determiner correspond to English indefinite pronouns. The parenthesized "any-" forms listed under the English translations indicate that this would be the translation in a negative context:

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<table>
<thead>
<tr>
<th>Basic lexical meaning</th>
<th>English indefinite translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>nàn</td>
<td>person</td>
</tr>
<tr>
<td>bèè/bàyè</td>
<td>thing</td>
</tr>
<tr>
<td>rîi</td>
<td>place</td>
</tr>
<tr>
<td>lâkwâlû</td>
<td>time</td>
</tr>
<tr>
<td>someone (anyone)</td>
<td>something (anything)</td>
</tr>
<tr>
<td>someplace (anyplace)</td>
<td>sometime (anytime)</td>
</tr>
</tbody>
</table>

(283) \([-\text{DEF} \ \ -\text{SPEC}] +\text{COLL}\)

Indefinite words derived from question words:\(^{24}\)

- tîiyè/tîikè (< tâi) 'everyone, whoever'
- tâmkè/tànkè (< tâm) 'everything, whatever'
- tâwànkè (< tâwân) 'every (one), whichever (one)'
- râwànkè (< râwân) 'everywhere, wherever'
- fàtâwànkè (< fâtâwân) 'always, whenever'

The need for the feature \([\text{COLL}]\) "collective" will be explained below. Briefly \([+\text{COLL}]\) means the indefinite word refers to a set, \([-\text{COLL}]\) means it refers to individuals in a set. The specification \(\emptyset\) for the \([-\text{DEF} \ \ -\text{SPEC}] -\text{COLL}\) indefinite in (282) is not a distinctive way to mark NP's having such a quantifier, i.e. \([+\text{DEF}]\) NP's may also have a phonologically null article with only context showing that they are \([+\text{DEF}]\). However, the presence of any overt article is a sign that the features are not \([-\text{DEF} \ \ -\text{SPEC} \ \ -\text{COLL}]\).
5.3.1. The [+SPEC] Indefinite Words, dágāi and jīgāp

Skinner (1972) characterized the Hausa words wani/wata/wasu, to which Ngizim dágāi and jīgāp correspond, as having the features $[-\text{previous reference}]$. These features, of Skinner's invention based on his study of Hausa usage, have much to recommend them in my opinion. However, they appear to be translatable as $[-\text{DEF} +\text{SPEC}]$, and in deference to the practice in the theoretical literature, I will use the latter terminology.

In the following discussion I will be treating dágāi and jīgāp as syntactic equivalents. Jīgāp is restricted to plural and mass referents (tlaadin jīgāp 'some cattle', leman jīgāp 'some wealth', but *nen jīgāp 'some person'). Dágāi can be used with singulants, plurals, or mass nouns (nen dāgāi 'a person', ndiwa dāgāi 'some people', tlan dāgāi 'some phlegm'). There may be some slight distinction between the two when used with plural or mass referents, but it does not involve the features [DEF] or [SPEC]. Both dágāi and jīgāp can be used alone as indefinite pronouns or as noun modifiers. In both uses, jīgāp is restricted to use with plural/mass referents.

Two usages can be distinguished with the $[-\text{DEF} +\text{SPEC}]$ range. I will refer to these as (i) Specific Referent, and (ii) Contrastive Referent. The Specific Referent usage is the
mention of some specific referent known to the speaker, but assumed not known by the hearer. The speaker may be able to pinpoint the referent (cite it by name, as it were), or he may only be able to vouch for the existence of such a referent, but not necessarily pinpoint it. Thus, in (284), the speaker has in mind a particular individual, named Benderkuku. In (287), on the other hand, the speaker is affirming that certain birds fear the water, though he may not be able to cite just which ones by species, etc. The Contrastive Referent usage of dágái and jígāp is contextually determined. If the NP containing dágái or jígāp is in contrast with a specific referent elsewhere in the sentence or in preceding context, it will be rendered in English as "another (different)", "others", "some X else".25

(i) Specific Referent

Singular

(284) nén dágái maarem, ndáa raura-geri maa Benderkuuku
    'a certain big man was called Benderkuuku' [... one called him B.]

(285) dā yi ii rii-k gwangurak dagai aa damtau
    'they went to [the place of] a certain old woman nearby'

(286) damba Mai Dabera dá garvaaci-n, dagai naa jamaa-geri
deew da Bernyi
    'before King Dabera reigned, a certain (person) and his followers came from Birni'
(287) *duuta dagai* dà kaluñ am; ndakam áa wuna aa kunu-w
'some birds [some bird (sg.)] fear the water; the
duck spends the night in it'

(288) dàa ki *rii dagai* dà mbaši-n-sakši
'they looked over a place and sat down'

(289) *gaafa dagai* kàa lawan ...
'some day you will see ...'

Plural/mass

(290) *jagadlau kke meaadla ngum, gaamanak tlèn dagai*
dà verai
'when the lion coughed [beat cough], some old phlegm
came out of his chest and he spit'

(291) dà yi-n-geri dàa ki wunduwa-k ndìiwa dagai dà
wunyi-n-geri
'he went and looked over some people's house and
spent the night'

(292) jà yka bedlamu áa nii tenu, nda-w *jigap* dà raw-n-sakši
'when we saw the hyena coming, some of the people
ran away'

(293) *spta-w jigap* dà yvi gaada-k calma-k am aa rii-k bara-w
'some of the flour he left in order to mix it with
water at the hunting place'

(294) dà *kii'yi ŋap* dà yvi *jigap*
'he ate a little and left some'

(ii) Contrastive Referent

(295) *terku šaalu metu-k mii-k dagai* bai
'an orphan doesn't pay attention to the death of
somebody else's mother'
(296) káa lawan ja-k dagai gaada-k j-saci

'you see somebody else's dog because of your dog'

(The following examples contain an indefinite of type (i) contrasted with one of type (ii).)

(297) dagai buuke nan, dagai dáa bi

'if somebody lacks, somebody else gets'

(298) kañgun waaña dagai sa tenu, dagai zuwa ii baazí-gari-n, áa wnu aa mazgai

'the medicine that one drinks, if another rubs it on his belly, he'll pass the night in heaven'

(299) jigan belan, jigan belan bai

'some are nice, others are not nice'

(300) jigan ndá rebe-du, jigan dagam-n-aakshi gaada-k kalau

'some were killed [one killed them], others passed out because of fear'

Before turning to the other indefinite words I would like to give some further justification to the claim that dagáí and jígáí are always [+SPEC]. In the first place, in several dozen textual examples, I have found none where context unambiguously dictates a [-SPEC] reading. UESP (1968), p.113 notes that "[SPEC] has surface structure relevance [for English] in that only [-SPEC] articles are candidates for undergoing some-any suppletion and hence any-no supple-
tion. Thus, the [+SPEC] distinction is clearer both seman-
tically and syntactically in negative sentences." While Ngizim has no such suppletion, it makes sense to look for
negative sentences containing dagâi or jîgâp to see whether or not the English rendering requires the any ([−SPEC]) or some ([+SPEC]) form of the article. Out of several dozen textual examples, I found only two negative cases. This is in itself probably significant since contexts where [+SPEC] in a negative environment is required are somewhat more unusual than those where [−SPEC] is required (cf. the semi-strangeness of 'I didn't see someone' as opposed to 'I didn't see anyone'). One of the negative examples is (295) above, where the [+SPEC] translation is clearly the correct one. The other negative example is the following:

(3C1) daawai zebrayi-n áa yva-k rii ñagai lai bai

'when a pot boils, it doesn't leave {?someplace} cool'

This is a proverb of which I don't fully understand the meaning, but the [+SPEC] interpretation of rii ñagai certainly makes sense. Unfortunately I did not do any extensive work on dagâi and jîgâp with an informant, but textual evidence certainly offers no counterevidence to their always being [+SPEC].

5.3.2. The [−SPEC] Indefinite Words

5.3.2.1. Words Translated by English some–any

The Ngizim non-specific indefinites corresponding to those words undergoing some/any suppletion in English are
given in (282) as having the features \([-\text{DEF}]\) \([-\text{SPEC}]\) \([-\text{COLL}]\). Ngizim has no article or special pronoun form to mean 'some', 'someone', 'something', etc. in the non-specific sense. Rather, nouns with no overt determiners at all are used. As was pointed out on p. 178, lack of an article does not make it certain that a word is \([-\text{DEF}]\), but presence of any article is a sign that it does not have these features. Corresponding to English pronominal 'someone', 'something', etc., Ngizim uses the most neutral lexical nouns having the appropriate features: nən 'person', bëe or bąvə 'thing', rąi (→ [rii] medially) 'place', ląkwə 'time'. These words can be used in affirmative sentences and translated as "some" words.

(302) nən maa ãa ḙta-naa gawa-n, ã gaf ii-ci geji-w
    'if somebody says he is going to swallow an axe, hold the handle for him'

(303) vək-gu náa dlama-du gazbeŋ, nən ãa demau-naa ʔda
    ii kunu-w ...
    'that hole, I'll make it high, somebody will be able to crawl in it ..'

(304) nda-k duuniya ãa ya-naa nən ii rii waaŋa Seku ji-naa
    aci bai
    'people of the world will take someone where God wouldn't take him'

(305) ná verkai baya 'I'll throw something'

(306) aci bee bee balen nən, kaa tluai kaa ŋabuwa ...
    ãa bar ii mii-k diy-k maayim-gu
    'when he got something nice, like meat like honey ...
    he would give it to she who had borne the son'

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It is also these words which appear in negative sentences where 'any' replaces 'some' in English and where 'no' replaces 'any'. Subjects of the sentence present a special situation so I will illustrate first from other functions.

(307) ná yka nen waara dá gəny atu da rii-gaa bai
'I haven't seen anyone who might take her from me'

(308) saw akší ãa pata, naa nen bai
'there they were in the bush, there was no one (there)'

(309) ná yka bee bai 'I didn't see anything'

(310) ná zaga-du tən-ci-w ãa dəbsa-k bee bai
'I knew that that nose of yours wouldn't hide anything'

(311) kwása v(a) atu gaada dà kiida bee bai
'you're going to sting her lest she eat anything'

(312) məs-aakəm áa yv-aakəm ká ver ii rii bai
'your husband won't let you go out anywhere'

In the case of subjects there is a special indefinite form which can be used where an agentive subject is involved. This is the AUX pronoun nda, corresponding to French on, German man, Hausa an. It can be used in both affirmative and negative sentences and is often translatable as English someone/no one, though in affirmative contexts, the more usual translation would be 'they', 'you', 'people', etc. or a passive sentence (cf. 314).

(313) gwangurak dá marwayi-n-gara rama ii Canduwa maa ndá wane atu
'the old woman was afraid to tell Chanduwa that some-

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one had sent her'

(314) da kuu-k metu-k Mai Dabera ndá yaidè-naa Bežek ii Mai

'after the death of King Dabera, they appointed Bežek King/Bežek was appointed King'

(315) ndá bata ndá ram bai: gadaaguri-k wunduwa-k Baawuya

'no one's prepared to say it: (there's) syphilis at Baawuya's compound' (Baawuya is a stock name used for a prestigious person)

(316) aa Ngwajin ndá maake Maina Ndëmaaru ndá b(a) aci bai

'at Ngwajin they looked for Prince Ndëmaru but no one found him'

(317) ndá saqkaat atu bai  'no one cheated her'
(318) ndá bedla bai  'let no one dig!'

There is another way to render non-specific indefinite subjects of negative sentences. For agentive subjects, this is an alternative to ndá. The subject is made the complement of a negative existential sentence and the rest of the "underlying" sentence is a relative clause with the indefinite noun as antecedent. Recall that negative existential sentences may be formed either with a word gòo preceding the complement or nda ... bai surrounding the complement (see Chapter 3, section 5.2). Examples are as found in texts or in my notes.

(319) gòo nen waaža dee-w  'nobody came' [there was no one who came]
(320) naa nen ba bai  'no one got it' [there was no one who got it]
(321) naa nen waaña ãa nii dáa ki ama-gaa bai
    'there's no one who will come and see my wife'

(322) goo bee waakaatu   'nothing happened' [there was nothing that happened]

(323) nd-aakun bal, naa bee waaña dáa b(a) akši da rii nd-aaja bai
    'all your people, there's nothing that will happen to them [get them] from our people'

(324) goo baaci šafuwaata-k manga-w
    'nobody got the better of his friend' [there was no one who gets-the-better-of his friend]

(325) naa baaci nii-du bai   'no one brought any' [there was no one who brought]

The latter two sentences have undergone the change giving a BAACI phrase from a relative clause (see section 2.3 above).

The purpose of the structure illustrated in (319)-(325) is to bring the indefinite subject into the scope of the negative. The scope of normal predicate negation encompasses only the predicate of the sentence (see Chapter 10 for discussion of negation and its scope). With the subject outside the scope of the negative, it will be interpreted as [+SPEC], i.e. the sentence nen iika yu bai would be interpreted 'there is someone such that he didn't see me', not 'there is no one such that he saw me' (if, indeed, the sentence is grammatical - my guess is that an overt determiner would be (?semi-) obligatory on the subject in such sentences, e.g. nen dagai 'a certain person' or nen-gu 'the
I am not suggesting that sentences like (319)-(325) be derived from normal active sentences having indefinite subjects, but rather that sentences like (319)-(325) usually fill the semantic slot of the corresponding affirmative active sentences. Note that it is possible to form existential sentences of this type even if the indefinite word in the corresponding active sentence would be in the predicate, where it would be in the scope of the negative anyway.

(326) naa nen waaŋa ná yka bai
     'I didn't see anyone' [there was no one that I saw]

(327) goo beŋ waaŋa ná yka-w
     'I didn't see anything' [there was nothing that I saw]

This existential pattern to bring a subject into the scope of predicate negation isn't necessary (or even possible) for sentences with nda as subject since nda is invariably and unambiguously [-DEF -SPEC].

5.3.2.2. Words Corresponding to English 'every-

Words modified by or containing the quantifier 'every' in English are rendered in Ngizim by those words in (283), specified as [−DEF −SPEC], e.g. tiiyé 'everyone', tâmké 'every-
thing', etc. Lexical nouns may have the article tawânké
'every'. The feature [+COLL] is meant to indicate that
these indefinite words must always apply to a set, not to individuals in a set. Thus, the English rendering must be 'every', not 'each', 'any', or 'some'. This does not mean that these words are syntactic plurals. On the contrary, they are syntactic singulars as seen by the singular associative pronoun, *-geri* in (328) and the singular ICP, *-n-gara*, in (329). Further ramifications of the feature [3013] will emerge below.

These indefinite words may appear in any sentence function in affirmative sentences.

(328) tiike ba-naa dagwda-geri
     'everybody got his money'
(329) tanke dlame-n-gara kalkal
     'everything is [has become] just right'
(330) tiike då sa da gwabo tku!
     'everybody jump over [drink the head of] this gourd!'
(331) aapeno tawanke à noo gooro
     'every Hausa person likes kola nuts'
(332) kwiiitawa tawanke bau ndá ji-du ii da-k afa-n
     'every gauta-tomato is red if one takes it into the sun'
(333) ká yka tiike aa rii tiyu?
     'did you see everybody there?'
(334) ta tanke?       'did he eat everything?'
(335) nà noo duuka tawanke   'I like every horse'
(336) ama à nci-n, naa dabaf tawanke áa dlama-naa tapai
   'if a woman wants, with every scheme (possible) she
   will do fornication'

(337) wàà ya ii rawanke, naa aci akuu-gaa
   'everywhere we go [we go everywhere], (it is) with
   him behind me'

(338) rii waafia maayim dlam bayi, fatawanke áa gutka ii
      riyu
   'wherever a boy makes a find, he always bends down
   there'

Unfortunately I have found no textual examples of these
indefinite words in negative sentences other than as sub-
jects, not did I ever elicit any such sentences from my
informants. I have no reason to believe, however, that a
sentence like ná yka tiike bai is not possible with the
translation 'I didn't see everyone'.

There are a number of textual examples of negative
sentences where the indefinite word is object, and these
are particularly revealing.

(339) tiiye dà dlama marwai bai
   'let no one fear' [everyone don't fear]

(340) tiike dà zàgëma bee ii rii waka tiyu bai
   'no one plant anything by that tree' [everyone don't
   plant anything by that tree]

(341) tiike á ngwa-w bai, sai gafa gayi dá nai ii ngwa-w
      nan daakuya
   'nobody was gathering it until one day a deaf women
   came to gather it' [everybody was not gathering it..]
(342) ña dlama-w-n tiiye bai 

'not everyone does it' (focused subject)

(343) tiiye paatke aikwa-geri bii-n, kema kaarak dlugwan bai

'anyone who hasn't licked his hand hasn't tasted the deliciousness of the sauce' [everybody who hasn't licked his had ...]

The English renderings of (339)-(341) and (343) using 'everyone' as given in the literal translations sound bizarre. This is apparently because a negative activity cannot be predicated of universal quantifiers. The 'every' renderings sound perfectly all right when put into the scope of the negation, e.g. 'don't everyone plant something by that tree' (and with a little forcing, even 'everyone don't plant anything by that tree' can have this meaning). But this English sentence does not mean the same thing as the Ngizim sentence in (340). This is because 'not every' in English means 'some', i.e. the universal feature of 'every' is in part dependent on context in English.

In Ngizim this is not the case, i.e. tiiye, etc. are invariably universal in meaning. This feature is retained regardless of context. Thus (340) means something like 'of this set (tiiye) let the entire set not plant anything by that tree'. I am not prepared to say how sentences like (339) or (343) might differ in meaning from similar sentences have the indefinite nda in place of tiiye.
5.3.2.3. Function of the Feature [COLL]

The distinction between tiiye, tamke, etc. on the one hand and nën Ø, bëe Ø, etc. on the other is the distinction between noun phrases having a universal quantifier and those with a simple indefinite quantifier respectively. Both types of noun phrases are [-DEF [-SPEC]].

In generic noun phrases the two fall together in meaning.28 This type of phrase is extensively illustrated and discussed in Chapter 8, section 8.1 so I will give just a few examples here to aid in exposition.

(344) tiiye bake-naa gadlii-geri-n, zega-naa rii waafa bebeḏ âa dagwda

'{anyone who turns his granary knows where ashes are (worth) money'

(345) tamke ama-w å noi-n, âa nii-d ii-tu

'{anything his wife wanted, he would bring it to her'

(346) nen waafa ndá jib aci ii guzepna-n, ndagaem-e-geri naa kabiine

'{anyone who has been caught as a slave, he has come up against troubles'

(347) ama waafa tara daka-w åa buuka-k madau bai

'any woman that the month has passed (i.e. who has not menstruated) will not fail to be pregnant'

I have tried to capture the distinction seen in section 5.4.1-2 between tiiye, etc. and nën Ø, etc. by the feature
[COLL]. That is, while both are \([-\text{DEF} -\text{SPEC}]\), the [+ COLL] quantifier must refer to a set, the [-COLL] must refer to an individual. In generic clauses, however, the two quantifiers fall together in terms of logical implications at least, since all such sentences can be translated 'anyone who', 'whoever', etc. I am accounting for this by saying that the [±COLL] distinction is still maintained. The [-COLL] sense is applied "iteratively" to all individuals having the defining properties. The [+ COLL] sense is applied to the set of all individuals having the defining properties.

5.4. The Categories QUANT and POST

The category QUANT includes the cardinal numbers and the words for 'how many/huw much?', 'many/much', and 'a few/ a little'. It may include the ordinals, which I have not investigated.

List of words in the category QUANT

náwan 'how many/how much?'
ghâwâ 'many/much'
řáp 'a few/ a little'

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1. kéden (counting form only)
   gayî (enumeration form)
2. širîn
3. kwán
4. fêdû
5. vàad
6. zêdû
7. gâtkâsâ
8. dândafêdû
9. kûdkûvdû
10. gûumû

11 - 19: gûumû áyâawâ[w + 1-9] (often contracted to gûumû áa + 1-9)
   11. gûumû áyâawâ[w gayî
   19. gûumû áyâawâ[w kûdkûvdû

20, 30, 40 ... 90: gûumû + 2-9
   20. gûumû širîn
   30. gûumû kwán

21-29, 31-39, ... 91-99: gûumû širîn áyâawâ[w + 1-9
   25. gûumû širîn áyâawâ[w vàad

100. dánamâk
1000. dóbû

Numbers above 100 and above 1000 first give hundreds or thousands, followed by nàa 'with', followed by the rest of the number.
125. dánámák náa gùumú širín áyáawá-w vàad

5555. débú vàad náa dánámák vàad náa gùumú vàad áyáawá-w vàad

QUANT elements must always follow the head NOM of the NP (but see below). They can be reordered with demonstratives (see example (269)). With QUANT greater than one, a head NOM may be singular in form (see (116) and examples (120) through (125). QUANT's can also appear alone as surface NP's. It is assumed that all such cases are the result of deletion of an underlying head NOM (see Chapter 9, section 5). 30

(348) tause kwan 'he tied up three'
(349) bedlamu dà geji řap dà bar ii ja
 'the hyena cut off a little and gave it to the dog'

The following words belong to the category POST:

bál/cákcák/dérís/mák/cám 'all'
wàm 'another (in addition)'
káwài 'just, only'
jáb/bářám 'mere, just'
gâawá 'many, much'
řáp 'few, little'

It is difficult to accurately delimit the POST category. Some words categorized as POST look very much like ideophones, especially those meaning 'all'. Others are quantifier-like. Besides being able to co-occur with all other members of the determiner (ART and QUANT), POST has the

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defining characteristic that it must always be the last element of DET. Thus, while there is some freedom of movement between ART and QUANT (daawawin širin tku = daawawin tku širin 'these two pots'), the relative order of POST and other DET elements is invariable, POST always coming last.

(350)(a) dem tiyu cacacac 'all that wood'
(b) *dem cacacac tiyu

(351)(a) buucacin tiyu wam 'those mats in addition'
(b) *buucacin wam tiyu

(352)(a) jaka tku jāb 'this puny bag, merely this bag'
(b) *jaka jāb tku

The words gaawá and ŋāp are categorized as either POST or QUANT. Note the corresponding meaning differences in (353) and (354), (a = QUANT, b = POST).

(353)(a) daawawin gaawa tku 'these many pots'
(b) daawawin tku gaawa 'many of these pots'

(354)(a) sēma ŋāp tku 'this little bit of beer'
(b) sēma tku ŋāp 'a little of this beer'

5.5. Ordering of Constituents of the Determiner

The following ordering relations exist between determiners and the remainder of the NP:

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The indefinite determiner dágài must directly follow a non-complex head NOM (i.e. one not containing a relative clause). There is one exception, that being simple attributive adjectives, which dágài may precede or follow. The ordering as given in (355) also shows that dágài must precede QUANT.

(356)(a) ama dágài wààfa áa nema-k daawai
'a certain woman that moulds pots'

(b) *ama wààfa áa nema-k daawai dagai
(would be grammatical if dagai applied to daawai)

(357)(a) garuu dagai guuma ayaawa-w vaad
'a certain fifteen goats'

(b) *garuu guuma ayaawa-w vaad dagai

but cf.

(358)(a) nën dagai gazbeř =

(b) nën gazbeř dagai  a certain tall man'

Variable order of [+DEF] artibles and quantifiers has already been mentioned (illustrated again in (359)). An entire determiner containing [+DEF] and including QUANT and POST may appear before a relative clause. Another
possible option allows the repetition of a definite ART (DEM or REF) both before and after a QUANT or a relative clause.

(359)(a) maamau širin tku =
(b) maamau tku širin =
(c) maamau tku širin tku 'these two children'

(360)(a) revək waaṟa ḥa da-k rakii-ci tku =
(b) revək tku waaṟa ḥa da-k rakii-ci =
(c) revək tku waaṟa ḥa da-k rakii-ci tku
 'this skin that is on your bed'

(361)(a) magəraf waaṟa nā ndem-ru-gu =
(b) magəraf-gu waaṟa nā ndemu =
(c) magəraf-gu waaṟa nā ndem-ru-gu
 'the (previously mentioned) visitor that I greeted'

(362)(a) jaka waaṟa kā de-ru širin tku jaŋ =
(b) jaka širin tku jaŋ waaṟa kā de-ru
 'merely these two bags which you brought'

Another option not given in (355) is NOM-QUANT-S-ART.

(363) goomamin širin waaṟa nā zii-du-w tku
 'these two rams that I slaughtered'

(362)(c) jaka širin waaṟa kā de-ru tku jaŋ
 'merely these two bags which you brought'

The obligatoriness of the position of dāgāi is seen from the ungrammaticality of the (b) version of (356) and (357). To account for this, the following rule can be
formulated (formulated only for dagai since I have no facts on other [-DEF]).

(364) [-DEF] Movement

... [ NOM X dagai ]NP ... ==> ... 1 + 3 2 Ø ...

1 2 3

Condition: (a) NOM is not complex, i.e. does not contain relative clause

(b) Optional if 2 is a simple attributive adjective, Obligatory otherwise.

This rule could obviously have been formulated as an optional choice for [+DEF] determiners. However, I believe that the account of how the two types of determiners get to post-NOM position should differ. Though I at present have no way to prove it systematically, I believe that in the case of NOM dagai S, we have an indefinite head NOM with the relative clause appended to it as a further description. In NP's having [+DEF] determiner, the relative clause is part of what the definite determiner is applied to, not further description applied to an already known NOM. I would therefore suggest that the order NOM DET [+DEF] S is obtained not by moving the determiner in, but by extraposing the clause over the determiner. As we have seen (section 4), extraposition of relative clauses is an independently required rule. It only needs to be extended to operate internally within an NP. Note that to
get (363) and (362)(c) it would have to operate either over QUANT alone or over the entire determiner.

In conclusion, I would point out that rule (364) is given here only as a way to achieve correct surface order of constituents. I suspect that when the facts are more fully and carefully studied, there may be evidence for generating definite and indefinite determiners in different ways altogether.
Footnotes to Chapter 4

1 Schachter (to appear) questions the traditional source of relative clauses, namely, embedded S's containing NP's which match the heads of the phrases in which they are embedded. Instead he proposes that the head, or antecedent, to a relative clause be "promoted" from the clause itself into the matrix NP. Among other things this analysis gives a way to relate relative clause formation to focus constructions, a desirable outcome since these two types of construction share formal properties in many languages. I have not had a chance to evaluate Schachter's analysis in the light of Ngizim data, and in any case, I believe the traditional analysis is satisfactory for the principally descriptive job at hand here.

2 Non-productivity is shown in a number of ways. First, phrases of the types seen in (6) cannot be created from verbs at random. Usually, when I tried to make up phrases using a prefix ma-, as in (b) and (c), informants saw what I was doing but would substitute a phrase using baací 'one who does ...' (see section 2.3 below). Baací phrases, which are 100 percent productive and, I claim, are transformationally derived, can be used in place of (6)(a)-(c), e.g. baaci kera-k soono 'one who steals sandals'. Non-productivity is seen semantically from the fact that the meaning of the individual parts of the derived form have been lost and the meaning of the form as a whole has shifted, e.g. màtá 'right hand' < ma- + tā 'to eat' (i.e. 'the eater', 'the hand one eats with'). Diachronic semantic shift offers good evidence for the lexical nature of morphologically derived forms, but is not a type of argument explicitly used in Chomsky (1970).

3 Many Chadic languages make a syntactic distinction between the two types of possession, usually by use of some overt associative linker between a head noun and an alienable possession, but direct juxtaposition for inalienable. There are still fleeting signs of the distinction in Ngizim. One is the alternate linkers -āg-/Ø and -g- used with the Bound Pronouns, but now used as suppletive allomorphs conditioned by person. Another very infrequently found sign of the alienable/inalienable distinction is forms like mes-aanai 'my husband' where the expected form would have been mes-ēg-aaanai with the linker -ē-.

4 In deriving alienable possessives from relative clauses (see end of section 2.1 below) I am following the traditional analysis used in transformational grammar. It is in-
creasingly evident that this analysis may not be tenable. Among other indicators is the fact that phrases like 'John's book' and 'the book that John has' are not entirely equivalent in meaning.

5 The term "associative" is taken from Welmers (1963). This neutral term is preferable to "genitive" or "possessive", which are usually used in a more semantically restricted sense than that covered by the type of construction referred to here.

6 I'm not sure of the lexical meaning of 'yuwa'. The tones are the same as the word 'yuwa 'broom'. There is also a verb 'yuwe 'to pull out, extract' (VN: 'yuwâ). Neither lexical item lends itself to an obvious semantic relation to the expression ši-k 'yuwe 'armpit'.

7 Many nouns in Ngizim end in lexical -k which is not etymological, e.g. mərâk 'oil' (cf. Bolanci mor, Hausa mai), ārāk 'father' (cf. Hausa uba), jâunâk 'elephant' (cf. Hausa fiwâ, Tera juwan). There are also nouns ending in -k where the -k is etymological, e.g. sâ̄râk 'in-law' (cf. Hausa surukú), ūbâk 'bow' (cf. Hausa bâká). I believe the non-etymological -k's result from wrong cuts in Noun-k Noun constructions. I have no explanation for why all nouns in Ngizim, or at least those ending in vowels, do not have final -k for the same reason.

8 In a strict sense the type of recursion described here for (8) is probably prevented by the principle of disjunctive ordering as laid out in Chomsky and Halle (1968). Briefly, that principle requires that a rule be applied to its fullest possible environment and not be applied again. Thus, the Linker Insertion Rule would only apply to insert a linker before diišâw in (8) since the fullest environment of that rule is where X is not null - in this case, where X = tluwâi. It is not entirely clear to me, however, whether the principle of disjunctive ordering applies only where a specific optional constituent is present, e.g. (NP) instead of X in the Linker Insertion Rule, or whether it also applies to variables, such as X in that rule. I have tacitly taken the position that a variable is not included as part of this principle. If, on theoretical grounds, this position proves incorrect, the Linker Insertion Rule will have to be modified or given further conditions.

9 Nouns ending in -k lose the -k in all environments where something is suffixed to the noun, such as the associative linker. This includes both nouns ending in etymological and non-etymological -k's (cf. fn. 7). Thus, we find
âb-âaci 'your bow', âbá-g dègèm 'the chief's bow' < âbák 'bow'.

10 At present, I can find no examples either in my notes or in texts of the type where an overt determiner intervenes between nouns in an associative construction. Unlike Hausa, where a determiner is most frequently attached to the head noun of an NP and associative NPs to the head follow the determiner, in Ngizim the determiner most commonly comes at the end of the NP. Thus, where Hausa has abokin nan nasa 'this friend of his', Ngizim has manga-gari-w.

11 The sémágârèm "second burial" is a celebration performed on the anniversary of the death of certain old people. Central to it is preparation and drinking of beer (sémâ). The death of an old person is not considered an event to be mourned among the Ngizims.

12 The condition on (111) is broad enough to allow pluralization of adjectives which are complements of certain intransitive verbs. For example, following the verb dlâme 'be, become' (transitive sense: 'make, do') adjectives referring to plural nouns may be singular or plural:

(i) (a) gweebabin dlâme-n-aâkši kaarak =
       (b) gweebabin dlâme-n-aâkši kaararin
           'the guavas are delicious'

13 The conditions on preposability are even more complicated than indicated. Dûkši 'heavy; weight' in the singular can only mean 'weight' when at the head of a noun phrase. However, the phrase dukšāsin buřu, with dukši in the plural, was accepted in the meaning 'heavy bags'.

14 The node S dominating the relative clause is automatically deleted here because of the Ross (1966) convention for pruning an S node which does not branch.

15 We might modify the structural description of the Linker Insertion Rule (16) to read ... [N] X NOM Y ] NOM ... . [N] will encompass both adjectives and nouns. NOM replaces NP in (16). This latter modification is not really a substantive one. It simply makes the condition on (16) rather messy to state, especially for cases like (17).
16 This is by no means a logical necessity. Berber languages, which also "conjoin" NP's with a preposition 'with', have verb agreement only with the first noun. If this is a singular, verb agreement will be singular regardless of the number of nouns involved.

17 This rule is not formulated quite correctly for conjoined NP's. In the case of conjoined NP's, in the SD of (192) should be NP instead of NOM. I have left it as NOM in order to use the same rule, without all sorts of complicated conditions, for both extraposition of relative clauses and conjuncts. The difference between NOM and NP in 1 of the SD of (192) is whether or not the determiner is included.

18 One restriction that Ngizim does not share with Tera (cf. Newman, 1970, p.55) is a restriction on extraposing NP conjuncts from the subject if there is an adverb with the preposition 'with' in the predicate. Thus the following perfectly grammatical Ngizim sentence would be ungrammatical in Tera:

(i) Demza taatem riiduwa naa Maakwai naa fena tku
    'Demza picked beans with Makwai with this calabash'

19 Newman (1972), p.5-3, notes for Kanakuru that "if the object or locative [goal of an intransitive verb] is complex, i.e. if it contains an embedded rel clause or conjoined elements, then the emphasized subject intrudes into the natural constituent and is placed immediately after the head noun and before the other elements." As implied by rule (192), and as seen in examples (200) and (201), I have accounted for the same phenomenon in Ngizim in a different way, i.e., not as "intrusion" of the subject, but as movement of part of the object. Newman does not indicate whether extraposition of relative clauses or NP conjuncts is a general possibility in Kanakuru, though extraposition of conjuncts from subject is possible.

20 My impression, based on a study of over 200 pages of texts, is that it is considerably more common for N naa-NP (where the first N is not a pronoun) to appear in subject position than to have a comitative phrase in the predicate. For NP's where the first conjunct is a singular pronoun, it seems that about half of the time the conjoined NP is in subject position, half the time the comitative phrase is in the predicate. I have found no cases of PRO pl naa-NP in subject position where the pronoun was not plural in the base. It therefore appears that extraposition is obligatory if an NP initial pronoun of a subject is pluralized.
The N-ADJ-NUM-DEM order for languages which take following attributive adjectives is not universal, cf. French. What is striking is first that NUM and DEM must both come after the head, and second, that the preferred order is the mirror image of that in languages which take preceding adjectives. As we will see below, there is somewhat more freedom in ordering of qualifiers in Ngizim than there is in languages such as English or French, where DEM, NUM, and ADJ precede the head noun. It would be interesting to know if greater freedom of qualifier order is a general characteristic of "head N first" languages. Note finally, that in Ngizim, all adjectives can and most preferably do follow the noun. This correlates with Greenberg's Universal 19: "When the general rule is that the descriptive adjective follows, there may be a minority of 'jectives which usually precede...".

On rare occasions the two forms of REF are heard stacked onto each other, e.g. dûké-w-gû 'the horse'. This may be comparable to something like English 'that there horse'.

A similar t- formative of uncertain etymology is found in question words, e.g. tâ-i 'who?' < proto-Chadic *w-, and tâ-m 'what?' < proto-Chadic *m-. See Chapter 5, fn. 1.

Occasionally in an associative construction, yèeké 'everyone' and -môoké 'everything', from the bound question forms yèe and -môo are heard, e.g. diakwi-ge-mooke 'desire for everything', ja-ge-yeeké 'everybody', etc. These alternates are not obligatory with indefinites as they are with question words. Thus, sentences like the following are possible:

(i) wâa dege-k mënduwa-k tiiye
    'we will pass by everyone's house'
    cf. wâa dege-k mënduwa-g-ee?
    'whose house will we pass by?'
(ii) akši òa ta-k tanke    'they are eating everything'
    cf. akši òa ta-ge-moo? 'what are they eating?'

Another variant for these indefinites is to use the question word itself followed by yâayé 'even, ever', e.g.
(iii) tai yaaye geṭłbes Seku bii-n, áa geḍleb-naa kabiinegeri

'whoever doesn't praise God will praise his troubles'

(iv) akši áa dlama nánà nana yaaye, zegaya see Seku

'however they're carrying on, only God knows'
(repetition of nánà 'how?' may be a slip of the tongue)

The Q-word-yaaye formation may be the only way to form an indefinite corresponding to English 'every way, however'.

25 Another indefinite word which probably should be generated as part of ART is the word dàama. This can be used only in the sense of 'another (one)', 'a different (one)' (= Contrastive Referent interpretation).

(i) nà nci buuci tku bai; à yen-naa daama

'I don't like this mat; bring another one'

(ii) kaayák dá pakai da rii daama

'the squirrel popped out from another place'

Dàama can also be used adverbially, a usage not possible with dágái or jijáp:

(iii) amžaru à yen nà dalm ii-kem daama

'tomorrow come and I'll fix it for you again/differently'

Note that 'another' in all translations of dágái, jijáp, and dàama means 'another different (one)', not 'another (one)' in the sense of 'additional, in addition to'. This meaning would probably be expressed adverbially or by the POST wàm.

26 "Underlying" is used advisedly. I'm not sure that the sentence type described here and illustrated in (319) ff. should be transformationally related to matrix sentences corresponding to the relative clause within them.
Through discussing this problem of interpretation with Bill Greenberg, it has become apparent that the feature [SPEC] on indefinites and the interpretation of the scope of negation are two sides of the same coin. That is, in a negated predicate, an indefinite can be interpreted as being or not being in the scope of negation. If it is interpreted as being outside the scope of negation, it must be interpreted [+SPEC], e.g. 'I didn't see someone' = 'there is someone such that I didn't see him'. If it is interpreted as being inside the scope of negation, it must be interpreted as [-SPEC], e.g. 'I didn't see anyone' = 'there is no one such that I saw him'.

We use a formal distinction in indefinite quantifiers in English to show how far the scope of negation extends, viz. we use the 'some-' form (= [+SPEC]) to show that an indefinite is outside the scope of negation, we use the 'any-/no-' form (= [-SPEC]) to show that an indefinite is inside the scope of negation. Note that this serves to explain the semi-strangeness of sentences like 'I didn't see someone', since in the most normal interpretation the negative should have the entire predicate as its scope, but here it is prevented from this by the 'some' quantifier.

In Ngizim, this scope restriction in a negative predicate is marked by presence of dagai, [+SPEC], or Ø determiner, [-SPEC]. Since a subject cannot be in the scope of normal predicate negation under any circumstances, a noun with Ø determiner cannot be interpreted as [-SPEC], but since the first interpretation of Ø determiner tends to be [-SPEC] unless context dictates otherwise, negative sentences with noun subjects having Ø determiners are avoided.

For reasons not clear to me, indefinite nouns such as nâm must be modified by a relative clause or be within a conditional clause in order to have generic interpretation. It happens that there is no formal surface distinction between conditional clauses with indefinite subjects and relative clauses with indefinite antecedents in many instances (see Chapter 8).

Ngizim does not use the construction "20 minus 2" (= 18), "20 minus 1" (= 19), "30 minus 2" (= 28), etc., found in Hausa.

One use of QUANT which could not be accounted for in a surface-oriented grammar such as the present study is illustrated in (i):
(i) nasara-\textit{w} d\text{á} wunyi \textit{\'\text{\text{\text{'}}}irin \text{\text{'}}} \text{\text{\text{\text{'}}}a Ngwajin

\textit{\'the European spent two nights at Ngwajin'} (\textit{spend-night} is a verb), (\textit{Hausa: } Baturen ya kwana biyu \text{\text{\text{\text{'}}}a Ngwajin)}

\textit{\text{\text{\text{'}}}irin \text{\text{'}}} \text{\text{\text{\text{'}}}two\text{\text{'}}} \text{\text{\text{\text{'}}} is used like an adverb, 'he spent the night twice'.}
Chapter 5

QUESTIONS AND FOCUS

with some remarks on pseudo-cleft

1. Yes/No Questions

There is no special morpho-syntactic marking associated with nes/no questions. Though I didn't carefully investigate the phonological characteristics of such questions, my impression was that there is a special question intonation, much as in Hausa, with an overall higher than normal pitch and with an extra high rise in pitch on the last high tone of the utterance.

A fairly common way to express surprise, anxiety, etc. in questions is to add the word \( \text{bf}' \) (with extra-high tone) to the end of the sentence.

(1) ja \( \text{áa yuwan bf}' \)?! 'is the dog sleeping?!'
(2) \( \text{áa ki da-gaanai; dlame-n-gara buu bf}' \)
'look at my eye; is it red?’
(3) \( \text{suu bf}' \)? 'is that it?’

Tag questions and echo questions were not investigated.

2. Word Questions

For reference purposes, and to avoid frequent parenthetical notes on usage in later sections, I list all the question words used in Ngizim in chart form, with short example sent-
ences, in section 2.1. Sections 2.2, 2.3, and 2.4 will describe in detail question words used as other than the subject, question words used as subject, and questions containing more than one question word. Briefly stated, question words fulfilling all functions but subject retain their underlying position. Subjects are moved to the end of the predicate and are preceded by a formative in or nón. These facts are covered in detail below.
2.1. List of Ngizim Question Words

'who?'  tāi  "free forms":

everywhere except after associative linker, viz. as the subject, object of finite verb, object of preposition, predicate of equational sentence

tamba ci-n tai?  kā tamba tai?

'who helped you?'

kā ram laabař ii tai?
suu tai?

'who did you help?'

kā diłam wana tku naa tam?
suu tam?

'who did you tell the news to?'

waakaate-n tam?
kwā ta tam?

'who is this?'

kā diłam wana tku naa tam?
suu tam?

'what happened?'

'what did you eat?'

'what did you do this work with?'

'what is this?'

'who?'  -gē-yee,  -gē-yee,  -gē-ëe2  "bound forms":

all environments requiring the associative linker

kāa tefə ii menduuwa-g-ëee?

'whose house will you enter?'

kāa jaaya-ge-yee?

'who will you ask?'

kāa ya ii wana-ge-moo?

'what kind of work [work of what] will you do?'

áa beña-ge-moo?

'what is she cooking?'

'what?'  -gē-mōo2

'what all?'  jā-g-ëe2

tamba ci-n jā-g-ëe?

'who all will you help?'
List of Ngizim Question Words, continued

'what all?' jà-gé-móò kwáa níi-naa jà-gé-móò 'what all will you bring?'

'which...?' tawán tamba ci-n ndaawa tawan? 'which people helped you?'

'which one(s)?' tawán ben aben nen tawan? 'which one(s) cooked food?'
ká karme waka tawan? 'which tree did you chop?'
ká tamba tawan? 'which one(s) did you help?'

'how much/many?' nàwán ká nci gooroo nawan? 'how many kolas do you want?'

'when?' fàtawán ká jibe kwàāfa fatawan? 'when did you catch the donkey?'

'where?' ràwán tluwii-gaa àa rawan? 'where is my meat?'
ká ya ii rawan? 'where are you going?'

'how, why (to what end)?' nànà ká raka kwàāfa nana? 'how did you chase away the donkey?'
nana maamaa-wa-w? 'how are those children of ours?'
nana ká raka kwàāfa? 'why did you chase away the donkey? [what do you think you're doing...]'
List of Ngizim Question Words, continued

<table>
<thead>
<tr>
<th>Question</th>
<th>Ngizim</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>'why?'</td>
<td>gàadà-gé-mòo</td>
<td>'why did you chase away the donkey?'</td>
</tr>
<tr>
<td>[because of what?]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'how?'</td>
<td>ndà</td>
<td>'good morning'</td>
</tr>
<tr>
<td>'where?'</td>
<td>ndà</td>
<td>'where is his mat?'</td>
</tr>
<tr>
<td></td>
<td>buucì-geri?</td>
<td>[how (was) passing-the-night?]</td>
</tr>
</tbody>
</table>
2.2. Questions Words in Functions other than Subject

For the most part, question words retain their underlying position in the sentence, i.e. they are not fronted or otherwise moved. The few deviations from this general observation will be covered below. Where I have examples available, I will illustrate both with the function exhaustively dominating a question word and with a question word serving as an adjunct within the function (associative NP, quantifier, etc.). See the list above for further examples of question words in all functions.

2.2.1. Direct Object

Question words as direct objects of finite verbs take the "free forms". In the Imperfective, where the verbal noun, rather than the verb, is used, the "bound forms" are used when directly after the verb. But if an indirect object or some suffix intervenes between the verb and direct object, the free form is used even in the Imperfective (cf. (5) where the Ø instrumental suffix, -dù, intervenes and (6) where the transitivity suffix, -náa, does).³

(4) ká jayei tae? 'who did you ask?'
(5) ñáa dlamá-dú tam? 'what will we do with it?'
(6) káa nii-náa tam ii mang-aaci?
    'what will you bring to your friend?'
(7) magarácin, ká táták-aw tam?
    '(as for) the visitors, what did you show them?'

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(8)(a) akši raure tai? 'who did they call?'
   (b) akši ńa raure-ge-yee? 'who will they call?'
(9)(a) ká masa tam? 'what did you buy?'
   (b) káa masa-ge-moo? 'what will you buy?'
(10) ká rauree tawan? 'which one(s) did you call?'
(11) wate náa zeba-k tawan? 'well which one will I marry?'
(12) kwá yka ja-g-ee? 'who all did you see?'
(13) ká nci zadak mendoowa tawan?
       'what kind (zadak) of house do you want?'
(14) ndá dlam garva nawan damba ká dlami?
       'how many reigns were there before you took over?'
       [one did how many reigns before you did?]
(15) káa nguŋnguŋ-ge-moo? 'what are you mumbling about?'
       [you are mumbling-of-what?]

(The noun nguŋnguŋ 'mumbling' has no related verb, so presumably this sentence would derive from something like 'you are doing mumbling of what?' with (?) optional deletion of 'do'.)

2.2.2. Indirect Objects

Question words as indirect objects always have the free form by virtue of their always being objects of the preposition ii. Although question words are in some ways pronominal, question word indirect objects retain the normal post-direct object position of nominal indirect objects.

(16) káa dadam metka ii t’ai?
     'who are you repairing the car for?'
(17) ká bare dagwda ii ja-g-ee?
    'who all did you give money to?'
(18) káa nii-naa kafée ii ja-g-ee?
    'who all are you taking loads to?'

2.2.3. Instrumental and Associative Adverbs

(19) ká jibe bedlamu naa tam?
    'what did you catch the hyena with?'
(20) káa nii naa tam?
    'what will you come with?'

2.2.4. Locative Adverbs and Predicates

    Used alone to mean 'where?', the locative question word is rawán. When an adjunct to another locative noun (such as 'inside', 'place of', etc.) the regular bound forms of 'who?' and 'what?' are used.

(21) tluwii-gu áa rawan?  'where is the meat?'
(22) aci áa wma aa rawan?  'where does he spend the night?'
(23) kàa ya-naa kafée ii rawan?
    'where are you going to take the loads to?'
(24) ká bee kukw-aaci dá rawan?
    'where did you get your Baobab fruit from?'
(25) kwáa wanyi-gaa ii rii-g-ayee?
    'who [whose place] are you sending me to?'
(26) káa tefa ii menduwa-g-ayee?'
    'whose house will you enter?'

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(27) kàa daawa ii kune-ge-moo?
    'what will you put it in?'
(28) kàa r'yi ii kama-g-ayse?
    'who will you stop in front of?'

To ask 'where is ...?', as in (21), the Kanuri loanword ndâ 'how, where?' may replace a locative predicate using râwân. See section 2.2.3.

2.2.5. The Manner Interrogative Word nânâ?

The word nânâ has a semantic range not covered by any single question word in English, though it is easy to understand its usages. First, it may be used in inquiries about health just as English 'how?', e.g. nana maamaa-wa-w 'how are those children of ours?'. Used alone in this way it means 'how's it going?'. (The answer is kàa sâu 'like that, thusly', probably a play on the manner sense of nânâ.)

As a predicate adverb, nânâ may mean 'how, in what manner?' as in (29) and (30). In an extension of this meaning, nânâ is frequently used with the verb dlâmâ 'do' to mean 'how should one conduct oneself, in what manner should one proceed' – cf. (31) and possibly (30). Related to this meaning is the use of nânâ as the predicate of a non-verbal sentence to mean 'what manner of thing?', as in (32).

(29) kà jibe kwaaâ¿a nana? 'how did you catch the donkey?'
(30) ndâ dlâm nana ndâ ziiji-naa gwamak tku?

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'how did one slaughter this ram?'
[one did how that one slaughter this ram?]
(31) wàa dlama nana?    'what will we do?, how shall we proceed?'
(32) suu nana?         'what's that?'

(said by people seeing a large cloud of dust in the distance)

Nàna can also appear at the head of a sentence. This is one of the few cases where fronting a constituent seems to make a semantic difference beyond simple topicalization. When used sentence initial in a verbal sentence, nànà means "why the devil", "for what earthly reason". One example is seen in the chart in 2.1, another is seen in (33). Initial in an equational sentence, nànà means "what the devil" (compare (34) to (32)).

(33) nana káa gamas?    'why the devil are you laughing?'
(34) nana suu?         'what the devil is that?'

(said by a hyena as a dog is trying to pull down his fence)

2.2.6. Purpose and Reason Adverbs

Purpose and reason adverbs are usually rendered by the phrase gàadà-gà-mòò 'because of what?'. Sentences such as (35) are potentially ambiguous (or perhaps simply vague) as to whether they have a purpose meaning ('what was the purpose of his stealing?') or a reason meaning ('what made him steal?').
(35)  aci ji ii kera gaळळा-झळा moo?
    'why did he go to steal?'

    In the reason sense at least, gaळळा-झळा moo can be pre-
    posed. The explanation for this is given in Chapter 8.
    Such adverbs are in general freely preposed, and in some
    cases preferably preposed. The preposed order is definitely
    not the preferred order for interrogative reason and time
    adverbs. Examples (36)(a) and (b) were said to be equiva-
    lent, with (a) being preferred.

    (36)(a)  kा jibe kwाफळा gaळळा-झळा moo? =
    (b)  gaळळा-झळा moo kा jibe kwाफळा?
        'why did you catch the donkey?'

    Purpose adverbs can be nominalized with gaळळा being re-
    placed by जळ (cf. Chapter 8, section 9.1). This construc-
    tion has a corresponding interrogative form using ता.

    (37)  kा ji ii ayeii tam?  'why did you go to the village?'
          [you went to the village for
          what?]

    An interesting type of purpose and reason interrogative
    formation based either on gaळळा or जळ is seen in (38)(a)-(b):

    (38)(a)  kा ji ii pata gaळळा-k ला मा-झळा moo?
        'you went to the bush for doing what?'
    (b)  kा ji ii pata ii ला मा-झळा moo?
        'you went to the bush to do what?'

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Unfortunately, I did no elicit examples with non-nominalized sentences in the complement, but I am sure they would be possible.

2.2.7. Time Adverbs

It is possible to front the interrogative time adverb fàtāwàn 'when?' in the same way it is with reason adverbs, but the sentence final position is without question the preferred position.

(39)(a) kwá daame wana-w fatawan? =
(b) fatawan kwá daame wana-w?
'when did you finish the work?'

2.2.8. Interrogatives in Predicates of Non-Verbal Sentences; the Word ndá

Equational sentences

Interrogative words in normal identificational sentences appear in the predicate in Ngizim. The interrogative word can be used as subject, but with an apparent semantic difference (see section 2.3.3).

(40) suu (tku) tam? 'what is this?' [(this) this one is what?]

(41) suu (tku) tai? 'who is this?' [(this) this one is who?]

(42) \{ci [këm] \} tai? 'who are you \{m.sg.\}?'

(43) \{kun [akši] \} ja-g-ee? 'who are \{you (pl.)\}?'

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(44) wunya-́w audu tawan? '(of) what tribe is the girl?'
(45) suu rama tawan? 'what kind of talk is that?' [this is which talk?]

Associative ('have') sentences

The free forms are used as complements of the preposition nàa 'with'.

(46) Kwaana naa tam? 'what does Kwana have?'

The quotation and name introducer, màa

Quotations, reported speech, and names are preceded by the word màa. When the content of a speech act or a name is being questioned, màa is followed by tâm 'what?'

(47) dlugun-ci maa tam? 'what is your name?'
(48) nàa rama-́w maa tam? 'what will I say?'

The word nàa 'how, where?'

The Kanuri loan, nàa, can be used as the head of a non-verbal sentence to mean 'how?' or 'where?', cf. (49). In the sense of 'how?' it is used principally in formulaic greeting phrases, to the exclusion of the potentially equivalent nànà?.

(49)(a) nda manda-gaa? =
     (b) manda-gaa aa rawan? 'where's my salt?'
(50) nda yuwan? 'good morning' (Hausa: ina kwana?)

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(51) nda duwatlu? 'how's the tiredness?' (Hausa: ina gajiya?)

(52) nda wana? 'how's the work?' (Hausa: ina aiki?)

ndá cannot be used in verbal sentences.

(53) *nda kwá mbase-n-aakun?
(c.f. kwá mbase-n-aakun aa rawan? 'where did you sit?')

2.3. Question Words as Subject

Subjects are the only constituents moved by virtue of their being interrogative. The following roughly formulated transformation will account for this:

(54) # NP [+E] PRED ... ==> 1 Ø 3 + nén + 2 ...

1 2 3

That is, a subject NP containing the feature [+E] is moved to a position following the predicate. A formative nén is inserted before the postposed NP. Nén has the form ñn after the vowels í, u, [ə], and a.6

The rule is formulated as applying to [+E] subjects, not [+Q] subjects or some such, for two reasons. First, exactly the same rule is needed for movement of focussed, non-interrogative subjects (see section 3). Second, there is evidence, given in section 2.3.2, that formally interrogative subjects need not necessarily be focussed. It is true, however, that interrogative subjects as used in
normal information questions always undergo rule (54).

A major simplification in the rule is the requirement that interrogative and other focussed subjects be put at the end of the predicate. This is not strictly true since the position of postposed subjects is fairly free with respect to predicate adverbs and indirect objects. The only absolute restriction is that a postposed subject may not intervene between a verb and its direct object. Thus only (a) examples in (55) and (56) are grammatical.

(55)(a) rauree aci-n tai? 'who called him (here)赓?
(b) *raure-n tai aci?
(56)(a) ba Muusa-n tam? 'what's the matter with Musa?'[what got Musa?]
(b) *ba-n tam Musa?

2.3.1. Interrogative Subjects in Verbal Sentences

The following examples should need no comment. Nén + subject are underlined for expository purposes. Examples (66) and (67) show the optionality of ordering of postposed subject and indirect object. The (a) versions with the subject following the indirect object were the first volunteered, but the (b) versions were fully acceptable.

(57) nem menduwa tku-n tai?
 'who built this house?'
(58) meta-n-geri-n tai? 'who died?'
(59) áa bena-k aben nen tai?

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(59) 'who is cooking food?'
(60) tek akši-n tam? 'what killed them?'
(61) vege-n-geri-n tam? 'what fell down?'
(62) ãa dlemte aw nen tam? 'what is ruining the guinea corn?'
(63) ãa tamb-sawa-n tawan? 'which one(s) will help us?'
(64) dee-naa dem tku-n ja-g-ee?
   'who all brought this wood?'
(65) vëg ii am nen ja-gë-moo?
   'what all fell in the water?'
(66)(a) taatke daa ii magerafcin-nen tai? =
    (b) taatke daa-n tai ii magerafcin?
       'who showed the town to the visitors?'
(67)(a) rauree ci ii dagëm nen tai? =
    (b) rauree ci-n tai ii dagëm?
       'who called you for the chief?'

When the head noun of the subject itself is not the interrogative word, there is some variation in the obligatory rule (54). If the noun phrase is modified by tâwàn 'which?', the postposed ordering is obligatory, as in (68) and (69). However, (70)(b), where the subject is modified by náwàn 'how many?', and (71), where the interrogative word is an associative NP within the subject NP, were acceptable without postposing. I believe postposing is still preferred, however. I have no non-postposed variant for (72).
(68) deka-d ii bii-k alheemi-n ndaawa tawan?

'which people get most good fortune?' [which people exceed in getting good fortune?]

(69) dlamaxo-n kafee tawan?

'which loads got spoiled?'

(70)(a) zedap li menduw-aaci-n ndiiwa nawan? =

(b) ndiiwa nawan zedap ii menduw-aaci?

'how many people stayed at your house?'

(71)(a) dlamte aw-ci-n garuu-g-ee? =

(b) garuu-g-ee dlamte aw-ci?

'whose goats ruined your guinea corn?'

(72) aa tapii-kem nen wun-g-ayee kaa sau ...

'whose son will fornicate with you like that ...?'

2.3.2. Rhetorical Questions with Interrogative Subjects

The following two questions, with interrogative words retained in sentence initial position, were found in texts.

(73) ama tawan aa tapii bai?

'what woman wouldn't fornicate?'

(74) nda-k bembe-da-w, ja-g-ee da remi-naa ja?

'highwaymen, who are they to overcome us?' [...who all might overcome us?]

In both field work and examination of texts, I had found rule (54) to be one of the best established and most consistently applied of any in the language. Why then has (54) not applied to (73) and (74)? The answer is that they
are information questions used rhetorically.

On the admittedly rather slim evidence of these two examples, I have made it a requirement of rule (54) that the subject be marked [+E], even if it is (or contains) an interrogative word. Questions like (73) and (74) seem to be questions where the interrogative words are unfocussed. To see what I mean by this, consider a question like (57). An English clefted translation means virtually the same thing as the non-clefted one: 'who was it that built this house?'. However, in the case of (73) and (74), the clefted translation is not possible. Thus, 'what woman is it who wouldn't fornicate?' can only be asking for information, i.e. 'indicate to me that woman...'. This cleft cannot be understood in the rhetorical sense that (73) is understood in, as the context from which this sentence was drawn (and, I believe, its grammatical form) shows.

I'm not sure how other types of rhetorical questions are differentiated from their non-rhetorical counterparts, since in other types of questions (yes/no or interrogatives with constituents other than the subject questioned), there is no formal way to make a distinction as there is when the subject is questioned.

2.3.3. Questioned Subjects of Non-Verbal Sentences

Equational

Sentences such as the following are grammatical:
(75) suu-n tam? 'what is this?'
(76) mai nən tai? 'who is king?'
(77) menduw-aaci-n tawan? 'which one is your house?'
(78) lamboo-gaa-n tam? 'what do I care?' [what is my need?]

I am not able to characterize the semantic difference between these sentences and the more usual type such as in (40) and (45), where the interrogative word forms the predicate.

Sentences like the following, without the question words postposed, are also found:

(79) tam suu tku? 'what is this?' ('what's this all about?')
(80) tai suu tku? 'who is this?' (translated as Hausa wane shi?)

These, again, are rhetorical questions. The Hausa translation of the latter can be rendered fairly well into English as 'who does he think he is?', 'what's so special about him?'

**Associative sentences**

(81) naa kağgun gadagüf nən tai?

'who has medicine against being cut?'

I have no examples of questions having adjectival predicates, such as 'who is beautiful?'.
2.4. Sentences with More than One Question Word, or a Focussed Subject as well as a Question Word

When a question word appears in a sentence in a position other than the subject, rule (54) may not apply, even if the subject is marked [+E]. Hence, (82)(b) is ungrammatical. Likewise, (83)(b) was rejected, possibly because temporal adverbs can freely appear sentence initial and there is a desire to keep question words separated if possible.

(82)(a) tai iika tai? 'who saw whom?'
     (b) *iika tai-n tai?

(83)(a) fatawan kàa ya ii rawan?
        'when are you going where?'
     (b) *kàa ya ii rawan fatawan?

(84) åa bare tam ii tai? 'he will give what to whom?'

Inapplicability of (54) is not restricted to interrogative subjects when a non-subject interrogative word is present. No subject may be postposed by (54) when an interrogative word appears elsewhere in the sentence, seen in (85)(b). (This example anticipates a description of focussed subjects in the next section.)

(85)(a) Audu dlam tam? 'what did Audu do?'
     (b) *dlam tam nen Audu?

3. Focus of the Subject
3.1. Subjects Focussed by Rule (54)

The subject is the only sentence constituent which can be focussed (corresponding to English cleft or contrastive stress) by special syntactic means.

Rule (54) may be applied to non-interrogative subjects without any change other than the simplifications already noted, and a few others which will come up below. Following are a number of examples with simple verbal predicates. Note that the AUX pronouns are still found before the verb, even with emphasized subject (except, of course, in third person Perfective where there is never an AUX pronoun). The focus rule (54) will therefore have to apply after AUX pronouns have been inserted. 8

(86) ná tamba aci-n iyu  'I helped him'
(87) ná rauree maayim waaça da débda senaasen nen iyu  'I called the boy who was selling cakes'
(88) jà tamba akši-n ja  'we helped them'
(89) ká dlam papiya-n ci  'you (m.sg.) lied'
(90) kwá dlamte kařee tku-n kun  'you (pl.) ruined these loads'
(91) mete-n aci  'he died'
(92) tamb ii-n aci  'he helped me'
(93) dayi-n-geri-n geden-gaa  'my brother got lost'
(94) viida guzeb jaunak bai; našk akši-n pata
(94) 'the rabbit is not the elephant's slave; it's the bush that brought them together'

(95) karmə dem waafa wə dee-du ten nen Audu
    'Adu chopped the wood that we brought'

(96) sa sema-n keriinaku, aa kuyo-n venaakau
    'the frog drank the beer, (but) the fish will get drunk'

(97) nəa gaaya-n iyu     'I will climb'

(98) nəa nii-naa sulee guuma-n iyu
    'I will bring ten shillings'

(99) aa kiida-k tluwii-k ja-n kerdadin
    'pagans eat dog meat'

(100) danka tlakate-n, aa tu-w-n⁹ taataru
    'if a falcon deteriorates, a dove will kill him'

Among verbal sentences, even imperatives may have focussed subjects.

(101) ai Baaba, à ji nen ci!
    'oh Dad, you go!'

(102) à tiina-n kun!
    'you (pl) eat it!'

When adverbs or indirect objects are included in or follow the predicate, the focussed subject may precede or follow them. A focussed subject may even be placed after the negative marker, bái, (106), though this is not a preferred option. A focussed subject can in no case precede a direct object, (107).
(103)(a) rauree ci ii dəgəm nen wəkiili =
(b) rauree ci-n wəkiili ii dəgəm

'the representative called you for the chief'

(104)(a) dəbde kəfe κa aasək nen Adu =
(b) dəbde kəfe-n Adu a aasək

'Adu sold goods in the market'

(105)(a) dəbde kəfe garvaca-n Adu =
(b) dəbde kəfe-n Adu garvaca

'Adu sold goods yesterday'

(106)(a) āa kwarya-n gaskam-ja bai =
(b) āa kwarya bii-n gaskam-ja

'our rooster isn't crowing'

(107)(a) gaune gadal-n Adu  'Adu plaited the zama-mat'
(b) *gaune-n Adu gadla

A fairly common stylistic option is to prepose the
direct object when focussing the subject by postposing.
There is no question, even in such sentences, that it is
the subject, not the object, which is focussed.10

(108) tluwii-k ja, āa kiida-w-n kerdadin  (cf. 99)

'(as for) dog meat, pagam eat it'

(109) aguratliima, ta-n aku-n, də mci-n baaci dawa (cf. 96)

'(as for) the Euphorbia lateriflora, if the goat
eats it, the shepherd will die'

(110) kam-gaanai, āa dəmta-w-n duutatin

'(as for) my farm, birds are ruining it'

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Subjects of non-verbal, as well as verbal, sentences are freely focussed by rule (54).

(111) gwani-k dlogid nen iyu 'I am the expert wrestler'

(112) malem maranta-n ci 'you (m.sg.) are the school-master'

(113) daegem daa-n aci 'he is the chief of the town'

(114) duuka-k kaayak nen mugba, duuka-k bedlamu nen viida
'a land monitor was the squirrel's horse, a rabbit was the hyena's horse'

(115) dlera-k kumu-geri-gu, ka'gun-gu-n ama
'(as for) that stomach-ache of his, a woman is its remedy'

(116) naa dagwda-n Alaji 'Alhaji has money'

(117) ëa kuu jaunak nen ajagum
'the hippopotamus (comes) after the elephant'
(This is an epithet translated into Hausa as bayan giwa sai dorina.)

Subjects can be postposed for focus regardless of internal complexity of the subject NP. Even subject NP's exhaustively dominating S can be focussed, as in (121) and (122).

(118) zagem gavreka tku-n Audu naa Muuse
'Audu and Musa planted this sorghum'

(119) da 'yawai gumsu-w-nen ama-geri waafa aci ëa ncu-gu bai
'his wife that he disliked gave birth to the male (child)'

(120) mete-ngeri-n gwangurak waafa ká yka-w garvaca
'the old man that you saw yesterday died'

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(121) daawu baana-w-n akši ankalte bai
   'that they didn’t pay attention (is what) caused the accident'

(122) iyu, nuuba-gaa-n nà ci na ši
   '(as for) me, that I eat and drink is my due'

Focussed subjects can appear in all types of embedded sentences, including relative clauses (123) through (125),\(^\text{11}\) complement sentences (126) and (127), complements of the formative mäa introducing direct or indirect speech (128), and various types of adverbiacl clauses, including 'because' (129), and conditional, already seen in (109). Example (130) illustrates subject focus in a sentence embedded after kàa 'like, as'.

(123) á benyi masāřmi waara naayi-n Zaara
   'cook the corn that Zaara ground'

(124)\(^\text{12}\) sai dá gaži-nen ama waara ba šuu-gu nen atu
   'the only one who remained was the woman who had shitted' [only it remained (nen, marking focus) the woman that got the shit (nen) her]

(125) ke sekūñ dá degai-naa Maina Umar Ibn Ideriissu waara Mai nen aci
   'the first (group) followed Maina Umar Ibn Idrissa who was King' [... King U.I.I. that was King him]

(126) kà zega-du dee-du-n naaci kee nan?
   'do you know that perseverance brought it?'

(127) nà ci dá ṭgalci ii-ja aw-n Aedu
   'I want Aedu to weigh the guinea corn for us'

(128) tiiye maa ãa gaaya-n aci

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(128) 'everybody was saying that he would climb'
(129) nà sa-naa sòma-w cakcak gaàda kà sa-n ci bai
    'I drank all the beer so that you wouldn't drink it'
(130) riyu dlám-e-n-gara kà miya-k gaàfu-k dàa-gù-n atu
    'the place became as if it was the gate in the city wall'

3.2. Other Subject Focus Options

A fairly well attested pattern of subject focus is (131):

(131) NPᵢ  PRED + nén PROᵢ

That is; a full subject NP appears sentence initial and a pronoun copy appears in the normal focus position. I cannot be certain whether the configuration of (131) is simple focus, or whether the subject noun phrase is topicalized and the postposed NP is pronominalized by the normal anaphoric processes. The configuration in (131) is common enough, especially in equational sentences, (135) and (136),¹⁴ so that it must be considered a true means of focussing subjects.

(132) Mài Dábéra da gaàfu ii Ngwajín nèn aci
    'King Dábéra built the town wall at Ngwajín'
(133) nèn gazgara da dwatle-n aci bai
    'the old man will not get tired'
(134) baaci-k tluwà da maàka-k aka-k baka-w-n aci
(134) 'the possessor of meat looks for a fire to cook it'
(135) baaci kuteru naa ja-n aci
    'the owner of a puppy has a dog'
(136) iyu Anku-k Bagaja-w-n iyu
    'I am Lake Bagaja'

Another possible focus option has the following pattern:

(137) NP_i PRO_i FRED

This is the pattern for topicalized NP's, usually translated 'as for ...' and not interpreted as involving focus. However, in some cases the interpretation given by informants, or the Ngizim translations they gave of Hausa sentences with focussed subjects, indicated that (137) may be an option for focus, though certainly less common than postposing.

(138) iyu ii gwani-k dlegid 'I am the expert wrestler'
(139) ci kāa ki waka dagai kâ gaayi-n-aaci
    'you will see a tree and climb it'
(140) Aamadu aci dlam-naa papiya
    'Amadu lied' [Amadu did lie]
(141) ná sa-naa sema-w cakcak gaada ci kâ sa bai
    'I drank up all the beer so that you wouldn't drink it'

3.3. Is Subject Focus Actually Pseudo-Clefting?

In comments from an unidentified reader of Schuh (1972),
it was suggested that focus as illustrated in section 3 is actually pseudo-clefting. This suggestion may prove to give a hint about the historical origin of focus by postposing, but it cannot be correct for the synchronic grammar. (Pseudo-clefting is examined in section 5.)

In the first place, when a noun phrase is pseudo-clefted, it should be replaced in the cleft part of the construction by a relative pronoun not inflected for person, e.g., if we pseudo-cleft 'I helped him', we get 'the one who helped him was me'. But in the subject focus construction in Ngizim, person, number, and gender marking of the focussed NP are retained (see examples (86) ff.).

Second, pseudo-clefts should be of the form "relative construction + BE + NP". Yet, as was amply illustrated in (103) through (106), the focussed NP (which would be the predicate NP if this were pseudo-cleft) may appear inside the predicate, indicating that it is in no way in an equational relation with the remainder of the sentence. To interpret (104)(b) as a pseudo-cleft would require the translation "*the one who sold the goods was Audu in the market".

Third, pseudo-clefts, by being equational sentences, cannot appear as imperatives. However, in (101) and (102), we see that subjects of imperatives can indeed be focussed by (54). (Note that this shows that (54) is not really a cleft transformation either.)
4. Focus and Negation

If we choose to use an English cleft construction to translate a negative Ngizim sentence containing a focussed subject, such as ná dée-n iyú bái (word for word: I came-n I not), we find that two possibilities exist: the focussed constituent may be negated (it wasn't I who came), or the event may be negated (it was I who didn't come). Both interpretations may be possible for the Ngizim sentence (I have not checked this with informants). However, the only interpretation in available examples is where the event is presupposed and the focussed NP is negated, i.e. the first English interpretation above. Examples of this kind are (106) and (129).

In Hausa, where focussed constituents are preposed, if the interpretation with negated focussed NP is desired, normal predicate negation cannot be used. Rather, the entire sentence must be negated.15

(142)(a) Hausa: ban zo ba 'I didn't come' (no focus)
(b) Hausa: ba ni me na zo ba
   'it wasn't I who came' (with focus), [it's not the case that it was I who came]
 cf.(c) ni ne ban zo ba 'it's I who didn't come'
   (only possible meaning)

In Ngizim, however, predicate negation does not "move up" to sentence level when subjects are focussed. Because of the fact that negation is always marked by a
single bāi at the end of the sentence, there is no formal
difference between predicate negation (= "sentence negation"
in the sense of Klima (1964); cf. Chapter 10) and constituent
negation of the entire sentence, as seen in the Hausa
examples above (142).

However, Ngizim has two good diagnostics for deciding
whether bāi is predicate negation or negation of the whole
sentence (cf. Chapter 10, section 2). First, the Totality
Extension cannot appear with verbs under predicate negation,
but can appear under constituent negation of the entire sen-
tence (Totality is manifested in the Intransitive Copy Pro-
noun, -n-geri, in example (143)). Second, under predicate
negation, Subjunctive is obligatorily replaced by Second
Subjunctive (see 144).

That we are still dealing with predicate negation, even
after subject focus, is seen in (143) and (144), where the
same restrictions on Totality and Subjunctive as in neutral
sentences are still in force.

(143)(a) mētē-n-geri-n Audu 'Audu died'
(b) mētē-n Audu bai 'Audu didn't die'
(c) *mētē-n-geri-n Audu bai

(144)(a) nā sa-naa sēmâ-w cakcak gaâda kâ sa-n ci bai
'I drank all the beer so that you wouldn't drink
it (Second Subjunctive)'
(b) *nā sa-naa sēmâ-w cakcak gaâda kâ ū-sī-n ci bai
(Subjunctive in embedded clause)
The reason for the different behavior of negation in Hausa (and in Kanakuru, cf. fn. 15) on the one hand and Ngizim on the other has to do with the scope of the negation. In normal predicate negation, the subject is outside the scope of the negation. This is evidenced, for example, in sentences with indefinite, non-specific subjects. In both Hausa and Ngizim (and I would guess Kanakuru), in order to express 'nobody went', the sentence must be rephrased 'there was no one who went': (Hausa) *ba wanda ya tafi*, (Ngizim) *naa nen ju bai*. It is necessary to rephrase in this way to bring the semantic subject into the scope of the negation, by putting it into the predicate. Now, in Hausa, an emphasized subject or any root constituent preceding the subject (i.e. elements proposed for focus) will fall outside the scope of normal predicate negation, and to get them back into the scope of negation, NEG has to be moved up. In Ngizim, on the other hand, postponing of a subject for emphasis has the very effect of moving the subject into the scope of predicate negation and hence NEG does not have to move up.

5. Remarks on the Derivation of Pseudo-Clefts

At the beginning of section 3, I stated that no constituent other than the subject can be focussed by special syntactic means. Ngizim, of course, can bring into focus noun phrases or other constituents corresponding,
say, to direct objects or complements. One such way is pseudo-clefting. There may be others. Unfortunately, I didn't work on this type of construction with an informant. However, I have enough examples from texts and from informant work done in other connections to at least give an idea of what is involved syntactically. The pseudo-clefted (a) versions in the following examples were found in texts. The presumed related neutral sentences (not elicited from or checked with an informant), are given in the (b) examples. In both cases, the clefted constituent is the direct object.

(145)(a)  bee waara ká bar ii wunya-gaa-gu ŕau?
     'the thing that you gave to my daughter was shit?

(b)  ká bar ŕau ii wunya-gaa?
     'you gave shit to my daughter?'

(146)(a)  bee waara kàa rama ii-tu-n sau
     'this is the thing that you will tell her'

(b)  kàa rama ii-tu sau
     'you will tell her this'

Example (145)(a) has what might be called the basic pseudo-cleft form of Cleft - NP (Cleft = 'the thing that...' clause; NP = ŕau); (146)(a) presumably has undergone the derivation below. I leave open the question of whether the "Basic pseudo-cleft" in l. of (134) is underlying or already partially derived.
(147) Let Cleft be bee waafa kâa rama ii-tu 'the thing that you will tell her'. Let NP be sau.

Then the following derivation obtains.

1. (Basic pseudo-cleft) Cleft NP
2. (Inversion)¹⁶ NP Cleft
3. (Subject Focus, rule (54)) Cleft nên NP

Thus, (146)(a) has, in a roundabout way, made use of the focus transformation (54), which can operate only on subjects.

I wish to stress that I have said that constituents other than subjects cannot be focussed by special syntactic means. While I will not try to formalize any Pseudo-Cleft transformation, I will point out that all recent analyses of this construction have seen fit to derive it from an underlying structure specially designed to yield surface pseudo-clefts (see UESP (1968), pp. 830-840 for a review of analyses and their own suggested analysis). That is, under such analyses, the pseudo-clefts in (145) and (146) would not be transformationally related to the corresponding simplex sentences of (145)(b) and (146)(b). On the other hand, there is good reason to want to relate directly, by the focus rule (54), sentences with focussed subjects and the corresponding simplex sentences.

But even if a direct relation between pseudo-clefts and simplexes could be made, this would still not change
the claim that true focus is restricted to subjects. Subjects can be pseudo-clefted, as in (148), just like any other constituent, but no constituent other than subject can undergo (54). Unfortunately, the only examples of pseudo-clefted subjects I have involve sentential subjects.

(148)(a) bee daawu baana-w akši Ṽkalte bai
     'what caused the accident was that they didn't pay attention'

(b) akši Ṽkalte bai bee wasařa daawu baana-w
     'that they didn't pay attention is what caused the accident'

(c) bee daawu baana-w-n akši Ṽkalte bai
     '(it was) that they didn't pay attention
     (which was) the thing that caused the accident'

See Chapter 7, section 2 for further discussion of sentences like (148).
Footnotes to Chapter 5

1 Most of the question words will be written as morphological units. Considered from a historical, and possibly a synchronic, point of view, many of them are complex. A recurrent formative, ta-, is seen in the "free" forms tāi 'who?', tām 'what?', tāwān 'which (one(s))?'. That ta- is historically separate is seen in the bound forms -yē 'who?' and -mō 'what?' (<proto-Chadic *w- and *m- respectively). In the case of tāwān, we see that ta- is not a historically integral part of the word because of tāwān 'where?' (< rēi 'place' + *-wān 'which?'). Fātāwān 'when?' is also complex, < ārā 'sun, day' + tā-wān 'which?'. Elsewhere in Ngizim, a probably related tv- formative is seen in the demonstrative adjectives tē(ē)kū 'this', tīyū 'that', tēmū 'the... in question', (see Chapter 4, section 5.2).

2 The -ge- or -g- is the genitive linker. The jà of jà-gē 'who all?' and jà-gē-mō 'what all?' is a morpheme which can be added to the beginning of virtually any NP to mean '... and the others'. 'those like ...', e.g. jà-k Audu 'Audu and the others'. See Chapter 4, section 1.4 for further discussion.

3 One example was found in a text where the free form was used after a verbal noun, viz. kāa bēdā-k tam? 'what are you digging up?'. One would expect kāa bēdā-ge-mō?. This may either have been a slip of the tongue, or it could be a sign that free form/bound form alternations required in some contexts are breaking down.

4 In fixed greeting phrases, nānā in this usage has been largely replaced by the Kamuri loan ndā 'how, where?'. See section 2.2.8.

5 As we have seen, Ngizim does not move question words other than subjects from their underlying position. The predicate is thus the underlying position for the question word in normal interrogative identificational sentences. This configuration for interrogative identificational sentences appears to contrast with English questions such as 'what is this?', where in surface structure 'what' seems to be the subject. It is necessary, however, to generate such English sentences as underlying /this is what/, with normal application of WH Fronting and AUX Attraction, as evidenced by answers to such questions, viz. 'this is a book on Ngizim', not *a book on Ngizim is this'. The phrase 'a book on Ngizim' replaces 'what'.

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The shape of this marker nán is identical to nán used with sentence level adverbial clauses (Chapter 8, section 1.1). Historically they are probably related in that they are both determiners. Evidence for the determiner status of nán with adverbs is given in Chapter 8. Evidence that nán used with question words is likewise a determiner is seen not only in its form, but also in a typological correspondence with Bolanci. That language, which also postposes [+E] subjects, adds ye before the postposed constituent. Ye is elsewhere in Bolanci a determiner meaning 'the ... in question'. I doubt that the two nán's can be related in the synchronic syntax. Their non-relatedness is supported by comparative evidence from Bade, where they have different phonological shapes. Semantically, they may play a similar role of backgrounding material preceding them.

Newman (1972), p. 5-3, states that in Kanakuru, if the direct object is complex (contains a relative clause or is formed of two or more conjuncts), the postposed subject must intervene between the head N of the direct object NP and the remainder. This type of construction is possible in Ngizim, but it is part of a larger phenomenon of extraposition from NP, i.e., I am accounting for it by extraposing material from the complex direct object over the postposed subject. This is described in Chapter 4, section 4.

Alternatives for doing this with intrinsic and extrinsic rule ordering are discussed in Schuh (1972).

tú-w < ták, which is the verbal noun of the verb ták 'to kill'. Nouns ending in -k delete the k when the previous reference marker (= mark of Ø anaphora) -w is added.

In Ngizim, there doesn't seem to be any particular preference for this option. In the closely related Bade language, however, preposing of objects when subjects are focussed by postposing is semi-obligatory, or at least a strongly preferred option.

Focussed subjects in relative clauses are interesting for a number of reasons. First, there is sometimes no way to render such constructions in English without a complete paraphrase. Clefting, which I have implied is equivalent to subject postposing in Ngizim, is impossible within a relative clause in English, e.g. 'the corn that it was Zara who ground'. Another means of focus in English is contrastive stress, e.g. 'the corn that Zara ground', but this is not possible if the antecedent is the subject of the
relative clause, e.g. "the man who was big". Subjects in relative constructions of the latter type can be focussed in Ngizim, e.g. (124) and (125).

Ngizim relative clauses with focussed subjects are also counterexamples to claims made by Rodman (1972). Rodman used Thai data, which in some respects is like Ngizim, especially in not moving most question words from underlying position. He suggests that the Ross (1967) Complex NP Constraint is incorrectly formulated. Instead of being a restriction on movement of constituents from a Complex NP, Rodman suggests that the constraint should prohibit "foregrounding" of material within a Complex NP. Clearly, focussed subjects represent foregrounded material, yet Ngizim sentences with focussed subjects in relative clauses are perfectly grammatical.

Example (124) focusses the subject of the matrix sentence, and that subject in turn contains a relative clause, the subject of which is focussed.

I have found a few examples, about five in well over 200 pages of text, of a type of construction which appears to be subject focus. In these examples, the subject appears sentence initial, followed by nen and the rest of the sentence.

(i) amme Mari nen tfe-n-geri ii ši rakai
   'but Mari entered under the bed'
(ii) ci-n kë jibi                      'you got it'
(iii) yauwa! kem nen bai!           'well! it's not you!'  
(iv) ai Baaba, suu-n ša dlama bai
    'well Dad, that's not possible'

As the translations indicate, subject focus seems to be involved. I was not able to elicit such constructions in informant sessions, nor were they ever volunteered.

According to Newman (1972), p.5-15, in Kanakuru a pronominal repeat at the end of the sentence is the only way subjects can be focussed in equational sentences. While this means of focus is common in equational sentences in Ngizim, it is not obligatory, as can be seen from (111) through (115).
Another possibility in Hausa is to negate just the subject, i.e., *ba ni ba ne na zo* 'it's not I *wọ* (I) came'. This type of structure is impossible in Ngizim. Kanakuru, which has a split negative morpheme like the Hausa *ba*...*ba*, works like Hausa in requiring that the negative "move up" from predicate to sentence level in order to get the negated NP reading. The interesting fact about Kanakuru is that it may focus subjects by postposing as does Ngizim, but even where this is done, there is evidence that the negative must "move up" (cf. Newman (1972), pp. 5-13, 14). It was these facts presented by Newman which made me look into the interplay of focus and negation in Ngizim.

UESP (1968), p. 829, mentions a rule of "copula switch" which "... can apply to apparently all pseudo-cleft sentences", but not to simple copular sentences (This is the apple $\rightarrow$ *the apple is this*). This transformation, which they do not formalize, must also be applicable in Ngizim.
Chapter 6

SENTENCE CONJUNCTION

with remarks on the Sequential aspect

1. 'And' Conjunction

1.1 The Nature of Ngizim 'and' Conjunction

The main question that needs to be answered about 'and' conjunction of sentences in Ngizim, is whether there is any. To answer this question, we must consider what criteria exist for determining that sentences are conjoined. I will enumerate eight possible criteria, (a) through (h) below, and evaluate the Ngizim data in the light of these criteria. My conclusion will be that sentences in Ngizim do cluster much like those structures analyzed as conjoined sentences in European languages, but this clustering is of a somewhat different nature from that of European languages.

(a) **Existence of a co-ordinating conjunction**

The most obvious indication that we are dealing with sentence conjunction would be the appearance of some sort of co-ordinating conjunction like 'and', which can be used between sentences or other constituents that show certain semantic connectedness, but which cannot be used in other contexts, say, at the beginning of a discourse. Ngizim has no such co-ordinating conjunction. There is a
word kющую 'moreover, furthermore' (< Kanuri, = Hausa kuma) which has some of the semantic properties of a co-ordinating conjunction, but it is not particularly common in narrative, and it is by no means obligatory between sentences which would be translated as conjoined. It seems rather to function like a few other words such as dàaci 'that being completed, following that, well, then' (= Hausa shi ke nan) and káanè 'well, it's surprising to report that', 'but it's discovered that' (= Hausa ashe), which relate a sentence to previous discourse. For example, in the passage from which (1) is taken, the author is describing how two towns, Fika and Ngwajin, are linked by marriage.

(1) ... dà bari wunya-geri ii Mai Seleeman. Wunya-w dà 'ywai Mai Diisa, kuru Mai Diisa dà maake zeba dà rii-k nda Ngwajin.
'... he (a man from Ngwajin) gave his daughter to King Suleman (the King of Fika). The daughter gave birth to King Disa (the subsequent King of Fika), and furthermore King Disa sought marriage from the people of Ngwajin.'

Typical examples of dàaci and káanè are given in (2) and (3).

(2) Tamke jàa dlama-w naa aci, ja dambas-aaja naa aci. Daaci gafa-w nà ram ii-ci maa, "Kàa kalau da miya-gaa."

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(2) 'Everything we were doing it with him, we were living together. Well, one day I said to him, "You're afraid because of me."'


'The hyena started following him (the goat), he began to run (with) the hyena after him. What do you know, the goat knew where there was a Baobab with a hollow.'

(b) **Semantic grouping**

Though Ngizim has no co-ordinating conjunction, there is no question that some pairs or groups of sentences do form units in a discourse while others do not. However, with no formal indication that sentences are conjoined, a decision as to which sentences form conjoined units and which do not is often quite arbitrary. Thus, in the following fairly long paragraph, there is no formal or semantic indication, with the possible exception of ðàaci in the sixth line, to indicate which, if any, of the pairs of sentences should be considered conjoined, or if indeed the entire paragraph should be one massive conjoined sentence. For expository purposes, I have made breaks which seem sensible in the English translation and numbered them. This expository device should not be taken as necessarily having any significance for the structure of the Ngizim discourse.
(4) (1) Bedlamu daa sa-k am daa sa-k am, wunya-wa daa daashi-naa veeki-k miyu naa temtem. (2) Bedlamu daa ji am gaawa daa mci-n-gara. (3) Wunya-k bedlamu daa ji da ram ii afku-w naa abancin miyu. (4) Akshi daa nai daa m(a) atu daa ji-du ii wunduwa daa dabgi. (5) Daaci nda wanyi ii d-aaksi maa bedlamu mete-n-gara. (6) Nd-aaksi naa ja-k miyu daa nai ii riyu. (7) Akshi daa jibi aikwak goomak naa metu-k amageri.

'(1) The hyena drank water and drank water, (then) her daughter stopped up the anus of the mother with a log. (2) The hyena drank a lot of water and died. (3) The daughter of the hyena went and told her father and her mother's co-wives. (4) They came and took her and carried her to the compound and buried her. (5) Then they sent (word) to her home town saying that the hyena had died. (6) Their relatives and those of her mother came there. (7) They gave their condolences to the ram [they took the hand of the ram] for the death of his wife.' (The ram was married to the hyena.)

(c) Scope of adverbs and negation

Further evidence that sentences must be syntactically conjoined comes from constituents like adverbs or NEG,
which must have more than one sentence in their scope. For example, in 'I didn't see them and help them', the negative has both conjuncts in its scope, and in 'he shot the duck and I cooked it yesterday', the adverb 'yesterday' can have both conjuncts in its scope in one reading. Evidence of this type for co-ordinate conjunction does exist in Ngizim. The (b) examples in (5) through (7) were acceptable, but in every case the first version volunteered was the (a) version, where the negative has only one matrix sentence in its scope. The Hausa sentences used to elicit (5) through (7) are given in brackets. Note that it is not possible to determine from Hausa surface structure how far the scope of kar 'let not' extends, while it is possible in Ngizim.

(5)(a) nà tuwaya Kaakasku jai ná cuuacaaci nda-gaa =

(b) nà tuwaya Kaakasku ná cuuacaaci nda-gaa bai

'let that I not forget God and cheat my relatives'

[kar in manta da Allah in cuci dan'uwana]

(6)(a) ndaawa dlagde-n-akši da dà devu gaada akši dà ndaagema-naa manga gaab-aakši bai akši dá dlam tleri =

(b) ndaawa dlagde-n-akši da dà devu gaada akši dà ndaagema-naa manga gaab-aakši akši dá dlam tleri bai

'the people turned off the road so that they wouldn't meet up with their enemies and fight [do fighting]'

[mutane sun tade hanya don kar su hadu da abokan gabansu su yi fade]

(7)(a) nà dábšè-naa dagwda gaada tefè-n, dàa ma bai

'I hid the money so that if he entered, he wouldn't take it'
(7)(b) ná débse-naa dagwda gaada då tèfa då mi bai
'I hid the money so that he wouldn't enter and take it'

[na boye kudin don kar ya shiga ya dauka]

I have no examples with adverbs whose scope extends over two sentences. My guess is that sentence (8)(a) would be possible, but that (b) would be preferable. (The notation [RGS] means that the sentences are of my creation.)

(8)(a) [RGS] akši taatème riiduwa{?dà karmì} gaverka garvaca
'they picked beans and harvested sorghum yesterday'

(b) [RGS] akši taatème riiduwa garvaca {?karme}
gaverka
'they picked beans yesterday and harvested guinea corn'

It appears from sentences like (5) through (7), and from (8) if my conjecture is right, that while Ngizim can include more than one sentence within the scope of some sort of sentence level modifier, this is not a preferred structural type. Rather, it is preferable to attach the modifier to the first of a series of sentences, and let following sentences be understood as being within the scope of that modifier by virtue of their being part of the same sequence of events, (or sequence of non-events, if the first is negated). That they are part of a sequence is indicated by the Sequential aspect, discussed below in 1.l.
In the grammatical model assumed in this book, that of Chomsky (1965), co-ordinate conjoined sentences are analyzed as having a structure something like (9), where the S conjuncts are all dominated by a single S:

(9)

There are a number of processes which delete material from S₂, S₃, etc., where the deleted material is identical to material in S₁. Conjunction Reduction and Gapping are such processes (see below). The existence of such deletion processes should offer evidence for conjoined structures like (9). This is assuming, of course, that S₁, S₂, S₃, etc. all are dominated by a single S, viz S₀. This requirement that transformations have a single S as their domain, in this case S₀, has proven fruitful in transformational studies to date, so that I am retaining this requirement.²

(d) Conjunction Reduction

A transformation or transformations of Conjunction Reduction must be interpreted as evidence for conjoined sentences in underlying structure. I wish to claim, with some conviction, that Ngizim has no such rule(s). The only structures which may appear as surface "conjoined"
structures are NP's, and perhaps AP's. The total lack of verb conjunction, VP conjunction, and conjunction of prepositional phrases shows that any rule of Conjunction Reduction would be of an entirely different character from that proposed for English.

In Chapter 4, I claim that all conjoined NP's are generated as phrasally conjoined. Two types of argument can be mustered against this position, one semantic and the other syntactic. The semantic argument is that the ambiguity of such sentences as Dəmza nam Kwaana ji-n-akši 'Demza and Kwana left' cannot be captured. This assumes that the Ngizim sentence is ambiguous, and I believe it is. (The ambiguity lies in whether they left together – one event – or whether they left separately – two events.) Although this is certainly the type of ambiguity generally handled by different syntactic derivation, there would be no great difficulty in formulating semantic interpretation rules to account for the two meanings. In the absence of independent syntactic arguments favoring a derivation from conjoined sentences, or syntactic arguments against only phrasal conjunction of NP's in the base, my inclination is to favor an analysis having underlying structures identical to surface structure in the relevant respects.

Syntactic arguments against there being only phrasal conjunction in the base center principally around surface conjoined structures, which could not have been phrasally
conjoined in the base. UESP (1968) gives a number of such examples from English, e.g. 'John went to the party and appeared to have a good time', 'we heard the fire alarm and were told to leave the building'. Since only phrasal conjunction of NP's is possible in Ngizim Surface Structure, there are no such problematic examples that could even arise. The only examples in English that can involve conjoined NP's arising from unrelated underlying sources, say, the object in one underlying conjunct and the subject in another, will also have conjoined structures of other type elsewhere in the sentence, e.g. 'John and his wife are easy to please and eager to please respectively'. While Ngizim could conjoin 'John and his wife', it could not conjoin 'easy to please' and 'eager to please', since they are not NP's. Thus, the valid counterarguments in English against the only-phrasal-conjunction position are irrelevant for Ngizim.4

(e) Gapping

Gapping is another transformation which indicates a need for underlying sentence conjunction. "Gapping" is the deletion of a repeated verb in the second of two sentences. The following three examples of what appear to be gapped constructions were found.

(10) Benderkuuku daati-geri rea-naa ja guumu fa'du, aadla-geri ja guumu fa'du

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"Benderkuku, his height surpassed forty cubits, his chest forty cubits"

'dagai âa verka kwakurai, dagai naa zawa, dagai naa dem
'some were throwing hurling-sticks, some with staffs, some with (fire)wood'

'da senu, nda-w dee nen, da Ngwajin jigap dáa mi-naa
akši Mesau, jigap devu-k Bauci

'after that, when the people came, from Ngwajin some
would take them (?by way of)Mesau, some the Bauci
road'"

These are the only examples of gapped sentence found so far, in over 250 pages of text and 350 proverbs, not to mention a large quantity of field notes, though I never tried to elicit such constructions directly. Furthermore, examples (11) and (12) have problems outside the gapping. In (11), the full sentence at the beginning has a verb followed by a direct object, but the gapped constituents following are formed such that the portion remaining from the gapped predicate would have been an underlying instrumental. This non-parallel structure is probably a slip of the tongue (the sentence is from a tape-recorded story). I apparently did not correctly record number (12). The referent for ákši 'them' in the underlined portion does not clearly emerge from preceding or following context, and the grammatical function of Mesau is unclear. If it is a locative, it should be preceded by some preposition. The latter portion, jigap devu-k Bauci, is definitely a gapped constituent, however. Gapping, then, does offer
some support for sentence conjunction, though the number and quality of examples does not permit a clear formulation of the process of gapping.

(f) **Non-constituent conjunction**

Another type of process which seems to require underlying conjoined sentences is "secondary" or non-constituent conjunction. This process essentially involves deletion of repeated material from one of two conjoined sentences, leaving as surface conjuncts, phrases which would not comprise constituents in underlying structure. Examples from English are 'Nick watered and Sue weeded the garden', 'I gave the boy a nickel and the girl a dime'. In the first example, 'garden' has been deleted from one of the conjuncts (which one?), leaving conjoined surface phrases 'Nick watered' and 'Sue weeded', neither of which are true constituents such as NP, VP, PP, etc. In the second example, the subject and verb (I gave) are deleted, leaving a phrase composed of the direct and indirect object, which together do not form an underlying constituent, to be paired with the parallel phrase from the first underlying sentential conjunct. I have located a single Ngizim example of non-constituent conjunction. It is parallel to the latter English example.

(13) dâ tauši dangwal-gu ii wura-k gaskam, gefaazan-gu ii wura-k kwam
(13) 'he tied the rope on the neck of the rooster, the string on the neck of the bull'

Along with gapping, this example of non-constituent conjunction appears to give evidence for needing sentence conjunction, assuming that transformations accounting for such relationships as gapped to non-gapped sentences are limited in scope to a single sentence, cf. comments on p. 253 and fn.2.

Now, Conjunction Reduction, Gapping, and Non-Constituent Conjunction viewed as transformation processes all involve deletion of redundant material. Yet Ngizim allows only the latter two. How do these processes, or perhaps this process, differ from Conjunction Reduction? The difference is in what the surface structure looks like. In the case of Conjunction Reduction involving, say, VP's, the transformation will have an effect something like that seen in (14).

(14)(i)  
```
    S   S
  /\   /\  
 NP  VP_a NP  VP_b
```

(14)(ii)  
```
    S
  /\  
 NP  VP_c
        \   /
         VP_a VP_b
```

That is, a new constituent, VP_c, is formed which dominates two constituents of the same phrase type. While it is not at all clear what the derived structure for gapped sentences and reduced sentences dominating non-constituents might be, it is fairly certain that it isn't anything like (14)(ii).
While I will not try to formalize a proposal in any detail, let me suggest that gapping and non-constituent "conjunction" may not necessarily be processes operating within a single sentence, or if they are, they are not processes requiring the formation of surface conjoined structures different from the original \( S \rightarrow S \) configuration. In the case of gapping in particular, the gapped sentence is still a skeleton of a normal sentence of the language, having both a subject and any predicate constituents which may have followed the verb, and it therefore would remain dominated by \( S \). It is somewhat more difficult to see how non-constituent phrases such as \( \text{əəfəaaan}-\text{gu li wura}-\text{k kwam}' \) 'the string on the neck of the bull' in (13) represents such a skeleton sentence, but it is by no means clear that this phrase is "conjoined" to anything that precedes it in the way that, say, noun phrases are conjoined.

I have mentioned above and will argue extensively in Chapter 9 for a process of anaphoric deletion of the latter of identical noun phrases, i.e. besides anaphoric pronominalization, Ngizim has the option of entirely deleting a noun phrase with the resultant \( \emptyset \) being interpretable as anaphoric to a preceding noun phrase. It may well be that anaphoric deletion is possible with other categories — in the case of gapping, we would have anaphoric deletion of verbs. Now, since \( \emptyset \) anaphora of noun phrases must be a possibility in base structures, where the referent for the
Ø is understood to be in the preceding context but not in the same sentence, we would expect the same to be true of verbs. But if this is the case, then gapped sentences would not have to be derived from conjoined structures. A gapped sentence would be a sentence generated with a Ø verb and interpreted as having the same verb as the preceding sentence. Since the information content of a sentence with no verb is very low, we would expect "gapped" sentences, i.e. sentences with Ø verbs, to show up only under rather special contextual conditions.

Needless to say, this proposal is extremely speculative. Much depends on the possible range of gapping and non-constituent conjunction. I think it is safe to say, however, that the derived structures resulting from Conjunction Reduction differ in a fundamental way from those resulting from gapping and non-constituent conjunction, and this accounts for the applicability of the latter two, but not the first, in Ngizim.

(g) Reciprocal pronouns

Reciprocal pronouns constitute another syntactic construction which could be taken as a sign of underlying conjoined sentences.

Ngizim can form reciprocals in two ways that I know of, one using the word tàkà 'body' plus plural associative pronoun, and the other using gàtkàn ( –> gàtkàn medially) 'each other' plus a plural pronoun.
(15) akši dá salamci tek-aakši
   'they took leave of each other'

(16) Maamedo naa Dawura bal áa šawař ii gatkuu-kši
   'all Maamedo and Dawura were consulting with each
   other' [... were advising to each other]

While a source from conjoined sentences would be
elegant and automatically avoid ungrammatical structures
such as *aci iika gatkuu-kši 'he saw each other', this in
itself is not enough to force acceptance of a derivation of
reciprocal pronouns from conjoined sentences. Rather, it
is spin off from an analysis which allows conjoined sen-
tences to be reduced.

(h) Embedded conjoined sentences

All the arguments involving evidence for sentence
conjunction thus far have dealt with conjoined sentences
dominated by a single matrix sentence. A final area of
inquiry as to what constitutes sentence conjunction involves
embedded sentences, e.g. 'I thought that S and S', 'the
man who S and S'.

It is possible to have a number of relative clauses
modifying a single head noun, as in the following sentences,
with clauses bracketed.

(17) ãa kalau bee [waaña ãa da-gaa] tku [waaña bau kaa
    aka] tku
   'he was afraid of this thing [that is on my head]
   [that is red like fire]'
It is questionable, however, whether these constructions need come from conjoined embedded sentences. In rule (3) of Chapter 4, there is provision for "stacking" of relative clauses. Relative clauses are specified by the rule NOM --> NOM S. Note that NOM on the left side of the rule may be of the form NOM S. Thus the noun phrases with the relative clauses in (17) and (18) could have the phrase structure of (19)(a). I believe it is open to question whether there is any valid semantic contrast between (19)(a) as opposed to (19)(b), which would presumably be the structure generated if series of relative clauses had sentence conjunction as a source.

I have no textual examples, nor did I elicit any examples of sentences with conjoined complement sentences such as 'I thought that S and S'. Now, if complement sentences are assumed to be dominated by NP, then there is al-
ready provision for generating conjoined complement structures in rule (1) of Chapter 4, viz. the rule specifying conjoined NP's. I suspect that indeed a sentence like akši bande suwaari naa ruwa 'they began dancing and singing' is grammatical, where the complements suwaari 'dancing' and ruwa 'singing' are nominalized and thus have the form of any substantive NP. The problem, then, is not how to account for conjoined complement sentences, but rather how to prevent sentences such as (20) and (21).

(20) *nà nci Audu dà yi ii aasek naa dá masai riiduwa
   'I want Audu to go to the market and buy beans'

(21) *na zega-du Audu kere goomak naa debde-du
   'I know that Audu stole a ram and sold it'

These sentences are ungrammatical because the preposition nàa 'with' (underlined) is used to conjoin sentences with finite verbs, the Subjunctive in (20) and the Perfective in (21). As my rules are now formulated, these sentences could be generated, but they should be blocked in some way since nàa can only link noun phrases having head nouns.

I will not pursue a solution to this problem here. As for (20), it would undoubtedly be grammatical if the underlined nàa were removed. The resultant sentence would still appear to contain something akin to sentence conjunction, for clearly both 'go to the market' and 'buy
beans' are complements of 'I want'. Moreover, we could not say that underlying we have two separate sentences beginning with 'I want...' where 'I want' is deleted from the second, since 'I want Audu to go to the market and I want Audu to buy beans' is not equivalent to (20). Turning to (21), I can only suggest the English sentence would have to be paraphrased something like na zega-du Audu ke re goomak, kuru debbe-du 'I know that Audu stole a ram, and moreover he sold it'. A sentence with two perfectives both dependent on one main verb would not be grammatical.

To summarize this section, I would conclude that there is evidence that Ngizim does not have co-ordinate sentence conjunction as it is known in English. The clearest indications of this are the absence of any formative used to conjoin sentences and the absence of a process or processes of conjunction reduction. Semantic evidence for requiring sentence conjunction is ambiguous. Only weak evidence for sentence conjunction in Ngizim can be drawn from sentence level adverbs and negation which take more than one sentence in their scope.

Gapping and non-constituent conjunction offer some support for underlying sentence conjunction if it is assumed that these are operations applying only within a single sentence. These operations are unlike Conjunction Reduction, however, in that the reduced surface form, e.g. the "gapped" sentence, would still be dominated by S and

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would not be collapsed to become part of some new surface constituent. Sentences translated in English as having embedded conjoined sentences (relative clauses or complement sentences) give less than clearcut evidence of a need for underlying sentence conjunction. Lack of certainty here results partly from lack of examples, partly from uncertainty as to what the surface phrase structure actually is.

As a subject for further research, I suggest that there is a typological split between languages having a productive co-ordinating conjunction, productive in the sense that it freely occurs between constituents, and languages without a co-ordinating conjunction. One major correlate of this typological difference would be that the former, but not the latter, would have a productive Conjunction Reduction process. Without a co-ordinating conjunction, a language must use other devices to "join" structures on the surface. This may be simple juxtaposition, as between Ngizim sentences, or it may be exploitation of some independent means of joining a specific constituent type, for example, joining noun phrases with a preposition 'with'.

1.2. Is Use of the Subjunctive as a Sequential Aspect a Sign of Co-ordinate Conjunction?

In some studies of Chadic languages, it has been suggested, in one theoretical form or another, that use of a Sequential aspect as the second and later aspect in con-
tiguous sentences is an indication that those sentences are conjoined. For example, Newman (1970), p. 136 (T.74) proposes a generalized transformation for Tera to conjoin pairs of sentence where the second is in the Sequential, a formally distinct aspect of that language. Eulenberg and Ritter (1967) take a more abstract approach and call the Subjunctive in Hausa a non-aspect, a gender-number carrier stripped of aspect marking. They then "reduce" the second and later members of putatively conjoined structures to the Subjunctive, leaving only the first conjunct to mark the aspect of the remainder. Their view, then, is that conversion to Subjunctive is a subcase of Conjunction Reduction.

The more I examine the facts of Ngizim, the more I am convinced that these analyses are wrong. The Sequential, whether formally distinct or formally identical to some other aspect, is an aspect inserted in the base, and in no way does it indicate syntactic subordination or co-ordination. The Sequential is virtually always the second or later of sentences in a discourse, but this is merely a result of its indicating an event in sequence to a preceding event.

Formally, the Ngizim Sequential is the Subjunctive. As I indicated in Chapter 2, this seems merely to be part of the larger meaning of the Subjunctive. The Subjunctive has a meaning of potentiality, eventualness, subsequence,
etc. in all its uses.

The Sequential is "transparent" to aspect, which is to say that a sentence in the Sequential can follow a sentence in any aspect, including another Sequential, and be understood as being in sequence to the first and in the same aspect. Following a Perfective, the Sequential is understood as representing completed action in sequence to the first; following an Imperfective, it represents action subsequent to some as yet uncompleted action; etc. While it reflects the immediately preceding aspect, the function of the Sequential is to impose the sense of subsequence. I will give examples below, (35) through (37), showing that use of the Sequential is not an automatic consequence of sentences in the same aspect following each other, for there is a meaning contrast between Aspect$_\alpha$ - Sequential and Aspect$_\alpha$ - Aspect$_\alpha$ where $\alpha \neq$ Sequential.

Following are examples of series of sentences, the first being in one of the various Ngizim aspects, the second being in the Sequential.

(22) Perfective - Sequential

tuway-naa tausa-k miya-k sesau, nää bi ná verai

'he forgot to lock the door, (and) I managed to come out'

(23) Perfective - Sequential

ná cacpe madlbak, nää-n ná gaunyi gadla, nää yí-d íi aasek, nää dëbji

'I gathered grass, then I plaited a zana-mat, I
(23) took it to the market, and sold it'

(24) Imperfective - Sequential
âte vera-n azem, dá kaci aayaawa
'grass will come out (and) become grains'

(25) Imperfective - Sequential
nàa ya, néa ki waka dagai nà gaayi-n-gaa
'I will go, will look over a certain tree, and will climb up'

(26) Imperative (sg.) - Sequential
á der iyu, né nai, wà yi
'wait for me, I'll come, and we'll go'

(27) Imperative (pl.) - Sequential
daa dà tlana, aci dàa ki
'let the dawn come, (and) he'll see'

(29) Second Subjunctive - Sequential
wà maaka zegege, wà yi, wà ndemai degem
let's look for a present, go, and greet the chief'

(30) Sequential following nominalized complement
ii maa da kà ncu zalemta-k dayak kà kii'yi-naa aci
'I would have said you want to tyrannize the goat
(and then) eat him'

Although sentences like (22) through (30) are very common, we nevertheless cannot formulate an automatic rule to reduce all but the first of like aspects to the Subjunctive (= Sequential). First, there is a semantic contrast between the Sequential on the one hand, and other aspects in similar contexts on the other. Second, the
Sequential appears in environments other than directly after a sentence in some other aspect. Third, the Sequential, because of its semantic nature, is restricted from appearing in certain sentence types, even though such sentences may follow another sentence in the same aspect. I will consider each of these arguments separately.

**Semantic contrast**

That the Sequential is in semantic contrast with other aspects is clearly seen in narrative. If an event mentioned in a narrative took place prior to the sequence where it is mentioned, it will be in the Perfective (usually translated by the English pluperfect). This is illustrated in (31) and (32). If an event mentioned in a narrative overlaps with or will occur later than the sequence of events where it is mentioned, it will be in the Imperfective, illustrated in (33) and (34).

(31) jagadladlin kema ŋgum, dá rakai ja, badlamu ram-d ji-ja maa, "Ndá rakee ci-n, ká nai káa ki kunu-k tenn-gaa ká tefi-n-aaci."

'When the lions heard, they chased the dog, (but) the hyena had said to the dog, "When one chases you, come, look inside my nose, and enter."'

(32) Ja dee ŋgum, dáa ki, iika kunamu daa deeda bai. Kunamu ji-n-gara ii deku.

'When the dog came, she looked (but) didn't see that the deleb palm was (bent) downward. The deleb palm had gone skyward.'

(33) daaci mii-k maayim-gu dá genyi rêvëk-gu ǝa perta-k maayim-gu ii da-w
(33) 'then the mother of the boy took the skin (and) she was laying (she kept laying) her son on it'

(34) maguru iika wuri ngum, aci naa ama-geri naa maayim da pi weawuri, tiiye ḳa ngwa-w

'when the jealous man saw the cauries, he and his wife and the boy set to scrambling, everyone was scooping (them) up'

Two or more sentences in the same (non-Sequential) aspect may occur in series, further demonstrating the contrast between Aspect\textsubscript{α} - Sequential and Aspect\textsubscript{α} - Aspect\textsubscript{α}. The only sentences of this type commonly found are series of Imperfectives. The same is evidently true in Tera. Newman (1970), p. 137, says, "Almost all affirmative verbal sentences are conjoined by T.74, the rule which conjoins a sentence in any aspect with a following one in the sequential. It is not possible to conjoin sentences with different auxiliaries if the second is not sat; nor is it usual to find conjoined sentences with identical auxiliaries, unless they are both continuous."

The implication of this statement is that the virtual non-appearance of Aspect\textsubscript{α} - Aspect\textsubscript{α} sentences other than Imperfectives (= Newman's continuous aspect) is a result of some grammatical rule. On the contrary, the rarity of such sentences is the result of the rarity of contexts where one would mention two discreet but connected events which were not in sequence. For example, 'I went to his house and (I) saw him' would invariably be interpreted in the first reading as a sequence, not as two events divorced
from each other in time and space. As in Tera, sentences in Ngizim where two or more Imperfectives are juxtaposed are common, (35) and (36). I have no examples of Imperatives or Second Subjunctives juxtaposed and no clear examples of juxtaposed Perfectives, though sentence (37) with two Perfectives was found. Bái + Perfective = 'must' and this may have some effect on aspect usage in this particular example.

(35) ãâ kiida-w ãâ samana 'he was eating and chatting'
(36) manga-geri-w ãâ daanau ãâ dagamu ãâ kuruwa 'his friend was crying, he was falling down, he was yelling'
(37) sai ká ji ká dee-d aa 'you must go and bring (it) to me'

I do not understand Newman's statement that two sentences with different with different auxiliaries cannot be conjoined unless the second is sequential. I feel fairly certain that sentences like (38) and (39) are possible in Tera, as they are in Ngizim. Of course one could simply say that these are not co-ordinate conjoined structures, but I do not see any clear syntactic or semantic evidence that the relationship between the sentences of (38) or those of (39) differs from that between the sentences in (35) through (37).

(38) Perfective - Imperfective
Gooraka dlam-naa terarin ãã ñoota-k Ngwajin

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(38) 'Goraka spent a few months in control of Ngwajin' 
[ Goraka did months he was holding Ngwajin ]

(39) Imperfective - Negative Perfective 
kāa bii-naa waaña āa rama-k Ngizim, tuwayne bai 
'you will find those who speak Ngizim, they haven't forgotten it'

Sequential in environments other than following Aspect. 
A Sequential can appear in the first sentence of a 
discourse. I assume this is stylistically not unlike the 
technique frequently found in books, stories, etc. in 
English, where the first sentence of a narrative contains 
a definite article as if the sentence was carrying on 
from previous context, e.g. "The hand emerged slowly from 
the coffin...". The following sentence is the first line 
of a folktale:

(40) Nen dagai, gaada-k guru, dâ yì ñáa ki aa kuu-k dâa 
dâ mpi ṣawuwa-gari ṣåu-gari. 
'A certain man, because of jealousy, went [Sequential], 
looked on the outskirts of town, and set up his 
house, him all alone.'

A sentence in the sequential can also appear after 
most types of adverbial clauses. This environment cannot 
fall within the domain of a Conjunction Reduction rule 
operating on aspect markers because the aspect in the 
adverbial clause is often not identical to the aspect 
implied in the main clause. For example, (41)(a) and (b) 
were said to be equivalent, yet the aspect in the adverbial 
clause is Perfective while the aspect in the main clause

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of (41)(a) is Imperfective. The main clause of (41)(b) is in the Sequential. By equivalent here I do not mean identical in meaning, since I doubt if (41)(a) and (b) are perfectly synonymous. Rather, I mean that in both cases the event of the main clause is viewed as uncompleted and that it will take place after the event in the adverbial clause.

(41)(a) lakwntu zayi gade-n-gara-n, kwaařa ąa ya-n-gara ii pata =

(b) lakwntu zayi gade-n-gara-n, kwaařa dą yi-n-gara ii pata

'when the rope breaks, the donkey will go into the bush'

Following are further examples of Sequentials following adverbial clauses:

(42) aker ąa lawan miya-k ssau darepta-n, dá tefi

'if a thief sees a door, open he'll go in'

(43) ká rede-naa aci bii-n, dą kii'yi-naa tluwi-gu

'if you don't stop him, he'll eat up the meat'

(44) ną kema gayim tenu, nąa-n ną rakiki-naa aci

'when I heard the cat, I chased him away'

(45) akuu debet tla, Demza dą tekii-naa dagwda-w

'after selling the cow, Demza spent the money'

(46) kaabe tamatl dą w'yi-n, ją kelbi-du

'before the mud dries, we'll spread it on'

(47) baaci manduwa, gaada ankal-geri ąa veje-nger, dą mpi-naa kambi ii rii-k ama-geri
(47) 'the master of the house, so that his mind will be at ease [so that his mind will lie down], he puts a kambi with his wife.'

In most cases the Sequential would be equivalent to a Perfective or Imperfective in the same environment, and indeed after conditional and 'before' clauses, the Imperfective is statistically more frequent than the Sequential. This raises the question of how the Sequential comes to be in sentences like (41)(b), (42), and others. Elsewhere, in Chapter 8, I have tried to justify generating adverbial clauses of the types seen in (41) through (47) at the end of the sentence, then fronting them by optional rule. If the clauses are fronted as in (41) through (47), there is no problem with generating the Sequential in the base. However, fronting of most adverbial clauses is not obligatory, and if this is not done, a sentence with a Sequential in the main clause will be unacceptable. Thus, (48)(a), with Imperfective in the sentence initial main clause is grammatical, as in (48)(b), with a Sequential in a main clause following the adverb. But (48)(c) has the Sequential in a sentence initial main clause and is unacceptable.

(48)(a) aw ãa žoomu-n-gara ná redlë-n

'the guinea corn will ferment if I wet it'

(b) ná redl aw nën, dá žoomi-n-gara

'if I wet the guinea corn, it will ferment'

(c) *aw dá žoomi-n-gara ná redlë-n
These facts can be accounted for in at least two ways. One is to have a Sequential Substitution Rule which would replace underlying aspects by the Sequential when following certain clauses. The other is to freely generate the Sequential in the base and rule out sentences like (48)(c) via surface structure constraints. I favor the latter approach. In the first place, I believe I have demonstrated that the Sequential is not inherently "empty", i.e., it carries semantic information which contrasts with other aspects on the surface, and hence underlyingly. We will therefore have to generate at least some Sequential sentences underlyingly, and it is difficult to see how we can avoid generating them in just those cases where a stylistic front-int of adverbial clause will not take place. In any case, sentences like (40) suggest that we do not want to avoid generating Sequentialss in the first sentence of a discourse, and it may therefore be the case that sentences like (48) (c) are rejected not on some absolute grammatical grounds, but on the basis of where a discourse initial Sequential can be used as a special stylistic device.8

Environments where Sequential is excluded

I have suggested that the Sequential not be absolutely excluded from a discourse initial environment, even though sentences of this type are invariably rejected by informants when offered as isolated sentences. There are deep struc-
ture environments where the Sequential must be absolutely excluded, however. These are negative predicates, questions, main clauses of imaginative sentences, and perhaps predicates with stative verbs.

Exclusion of Sequential from negative predicates

(49) bedlamu dàa ji kuruwa, dà daanyi, dà bezami, dà maaki, ba kutlii-gara bai

'the hyena let out a yelp, she cried, she became quiet, she looked, (but) she didn't find her children'

(50)(a) nà bar am ii duuka-n, dà ši (Sequential in affirmative clause)

'when I give water to the horse, he drinks'

(b) *nà bar am ii duuka-n, dà ši bai (Sequential in negative clause)

(would mean 'when I give water to the horse, he doesn't drink')

cf. (c) nà bar am ii duuka-n, dà sa-w bai (Imperfective in negative clause)

'when I give water to the horse, he doesn't drink'

(51)(a) dee-naa gwadan-geri-n, nà ngalci (Sequential in affirm. clause)

'if he brings his peanuts, I will weigh them'

(b) *dee-naa gwadan-geri-n, nà ngalci bai (Sequential in negative clause)

(would mean 'if he brings his peanuts, I won't weigh them')

cf. (c) dee-naa gwadan-geri-n, nàa ngalta-w bai (Imperfective main clause)

'when he brings his peanuts, I won't weigh them'
Exclusion of Sequential from questions

(52)(a) ðee tenu, ndem aci-n tāi? (Perfective in main clause)

'when he came, who greeted him?'

(b) *ðee tenu, dā ndem aci-n tāi? (Sequential in main clause)

(53)(a) kā bata ii wunduwa tenu, kā yka tāi? (Perfective in main clause)

'when you arrived at the house, who did you see?'

(b) *kā bata ii wunduwa tenu, kāa kī tāi?(Sequential in main clause)

Exclusion of Sequential from main clause of imaginative S

Sentences like (54)(a), with Imperfective in the main clause are grammatical, while sentences like (54)(b), with Sequential in the main clause, are rejected.

(54)(a) daa kā diina-naa gwadan-aaci-n, āa ṣgalta-du

'were you to bring your peanuts, he would weigh them'

(b) *daa kā diina-naa gwadan-aaci-n, dā ṣgalci-du

The semantic explanation for exclusion of Sequential from imaginative sentences is the same as for negatives, viz. a non-event cannot happen in sequence to some other event.

?Exclusion of Sequential with stative verbs

I have some question about whether the Sequential
should be excluded from use with stative verbs such as 'know', 'see', 'understand', etc. since a state of being is not something that can appear as part of a sequence with active verbs. The Sequential can be used with such verbs, but when it is, the verb generally does not seem to retain a stative meaning, e.g. zága 'know' in the Sequential might mean 'come to know', 'become aware', yika 'see' might mean 'catch sight of', 'look at'. The problem lies in knowing whether the non-stative meaning of these verb roots is a function of their being in the Sequential, or whether they can appear in the Sequential because stativity is only an optional feature in their meaning. Nonetheless, it is the case that there are examples in texts where a putative stative verb does not appear in the Sequential where we might otherwise expect it to, e.g. (55).

(55) Ar'ku-k Bagaja, da sau, dlam-naa raakan aaman guuma damba atu dã nai nen

'Bagaja Lake, from here, is a ten year trip [makes a trip of ten years] before she will get there'

Examples (49)-(55) were meant to show that while there are deep and surface structure constraints on where the Sequential cannot appear, these constraints are not dependent on contiguous verb aspects or adverbial types. They are rather a function of the very semantic nature of the Sequential, namely indication of subsequent action. None of the environments illustrated in (49)-(55) are susceptible to a
"subsequent event" interpretation and hence none may contain a Sequential.

To summarize this section on the Sequential, I have tried to show that the Subjunctive verb form in its special semantic function as a Sequential aspect must be in all cases inserted as a base form. This analysis is contrary to views of certain other students who have analyzed the corresponding forms in other languages as somehow dependent and thus derived by rule, or who have seen those forms as being indicative of syntactic subordination or co-ordination. I have justified my analysis by showing how the Sequential contrasts with other verb aspects in similar syntactic environments and by showing that any deep and/or surface restrictions on this aspect can be explained by the meaning of the aspect itself, not on its dependence on contiguous aspectual contexts.

2. 'But' Conjunction

I have not made any detailed study of 'but' or 'or' conjunction, so my comments will be brief and will signal areas for further research. In contrast to the 'and' conjunction situation, Ngizim does have at least two ways to overtly mark 'but' conjunction. One is the borrowed word, âmmâ(n) (< Hausa or Kanuri, ultimately < Arabic) 'but', the other is a word [át'én]. I believe the latter to be âtû 'her, it' + -n, a formative described elsewhere in this
study as an indefinite determiner (see Chapter 3, esp. section 1.1).

(56) nà nci amma ii naa wadaata-woi bai
    'I want one, but me I'm not rich'

(57) nà yka ssau gayi tak, amman wà da wà ři am
    'I see just one but, but let's go and drink water (there)'

(58) nàa rama ii-kém rama, aten kà rama maa ná ram ii-kém
    nen iyu bai
    'I will tell you something, but don't say that I was
    who told you'

(59) Akši dambasu goor gaařu, aten ndáa samana-k ñanda-wo.
    Aten ndá da gaařu bai.
    'They were living without a city wall, but they were
    talking about starting one. But no one made the wall.'

Although Ngizim now commonly uses these words to con-
join sentences, I am inclined to believe that their use as
conjunctions as we know them in English is a new develop-
ment in the language. Certainly åmmá(n) is a relatively
recent introduction. As for éten (< étän-n), the develop-
ment of conjunctions from pronouns has happened in a number
of languages (I currently have no explanation for the for-
mative -n). For example, in Chaouia, a Berber language of
northern Algeria, the pronoun níttà is used to conjoin sen-
tences in the meaning 'but' (Penchon, n.d., p. 277). The
Air dialect of Tuareg (also a Berber language, spoken in
northern Niger) uses enčen < enta 'him' to mean 'and'
(anonymous, n.d., p. 35). The development from pronoun to
conjunction is probably the result of using a resumptive
pronoun to refer to an entire preceding proposition.

It is at least as common to find sentences translated
with English 'but' conjunction marked in the same way as
those translated by English 'and' conjunction, i.e. with no
conjoining word at all.

(60) aa Ngwajin ndá maake Maina Ndēmaru ndá b(a) aci bai
'at Ngwajin they looked for Prince Ndēmaru (but) they
didn't find him'

(61) kakera dagai áa kakar-gu-n dlegemau, kwáraá áa
demuu-gu bai
'some loads, a camel carries them, (but) a donkey
can't.9

To see the equivalence of sentences with and without
àmmá(n) or ãtén, cf. the following discourse where the first
phrase in quotation marks contains àmmá while the second,
otherwise identical, phrase in quotation marks does not.

(62) Sai dá yí dá kkemi dlegemuu-k afku-w gayi sai dà ram
maa, "Nāa naa cii amma nāa nii-naa ci bai." Dà yí dá
kkem gayi wam, "Nāa naa ci, nāa nii-naa ci bai."

'Then he went and hit one of his father's camels and
said, "I'll take you but I won't bring you back." He
went and hit another one, "I'll take you, (but) I
won't bring you back."

3. 'Or' Conjunction

I can say almost nothing about 'or' conjunction of sen-
tences at this time, having never investigated it with in-
formants and having found almost no examples in texts. Ngī-
zim has three words meaning 'or': ƙâ (< Kanuri), kôo (< Hausa), and bîi-n, the latter apparently derived from the negative bâi + i' (a → [ii] medially by a regular rule). All three can be used to conjoin nouns (see Chapter 4, examples (157)–(159)). All three can probably be used to conjoin sentences as well. The following examples of sentence conjunction with ƙâ and bîi-n were found:

(63) ƙa ƙa nii ƙa ƙa nii bai
'war is coming or it isn't coming'

(64) kwâ bar aa kakkadi nà yi-du ii Nasara bîi-n nàa jibâ-naa Maina Aaman nà yi-naa aci ii Nasara-w
'you give me the document so that I might take it to the European or else I'll seize Prince Aman and take him to the European'

As with 'but' conjunction it is not unlikely that the introduction of true conjunctions is a late development in the language. The loanwords ƙâ and kôo are clearly of fairly recent origin. Bîi-n used as a conjunction, if indeed it is so perceived by Ngizims, must be syntactically something quite different in origin. A possible development of bîi-n into a conjunction would have seen the following stages:

Stage 1: X bîi-n, Y 'if not X, Y'
Stage 2: X, bîi-n, Y 'X, if not, Y'
Stage 3: X, bîi-n Y 'X, or Y'

At Stage 1, alternative sentences would have been of the form 'if Harry doesn't do it, John will (= 'Harry will
do it or John will'). The clause final bāi + ūn in such sentences would have always been phonologically a single syllable, [biin], and could well have been reinterpreted not as being an integral part of the conditional clause, but as a separate marker between two alternatives, giving Stage 2. The shift to Stage 3 would have arisen abductively by equating [biin] with other subordinating formatives in the language, especially the preposition māa 'with', which are bound to the following element in the string.

4. Bàrá / bálle 'let alone...'

The conjunctions bàrá or bálle 'let alone...', of identical meaning, are borrowings from Kanuri and/or Hausa, but are well integrated into Ngizim, as evidenced by their frequency in texts and proverbs. There are no ways that I know of to use inherited formatives in the same meaning, as for example, ātēn and bii-ūn meaning 'but' and 'or' alongside the borrowings, âmma and kọ. Conjunction by bàrá/bálle shares a number of features of 'but' conjunction: only two sentences can be conjoined by these words, and there must be at least one contrasting feature between the two conjoined sentences (cf. UESP (1968), pp. 394–397, for a summary of the features of 'but' conjunction). A third characteristic of 'but' conjunction, viz. that one of the conjuncts must have a negative expressed or implied where the other does not, is less clearly interpre-
table. This third criterion does apply to all my examples of "let alone" conjunction where two full sentences are conjoined (in (65)-(67) the negative appears in the form of bái in the first conjunct, in (68) as part of the lexical item dàpte 'refuse, prevent').

(65) źa ěa niì iï daamtau naa Ngwajin bai balle dá nai iì Ngwajin

'war wasn't coming close to Ngwajin let alone that it arrive at Ngwajin' 

(66) ěa rii tku źo naa nen waafra ěa niì dáa ki ama-gaa bai bare dá ram maa à nci atu

'here there is no one who will come and see my wife let alone that he say he loves her' 

(67) "źenzėn" ngum ndá dlam bai balle ndá dlam "asasa"

'(as for) "źenzėn" no one has said it let alone that one has said "asasa"'

(Reference in (67) is to the way riddles are introduced. The riddler says zėnzėn "here's a riddle" and the person asked says ėsāsā "let's have a go at it".)

(68) wiili, ndá bar ii-ci naa źireu balle ndá dape-d ii-ci

'beseeching, if one gives (something) to you, there's embarrassment let alone if one refuses (it) to you'

Bàráé and bâlîé can be followed by an NP alone. Sentences of this type raise certain structural questions. First, it is not clear what the negative element apparently in one conjunct of all the "full S" examples as in (65)-(68) might be. In fact, when the second conjunct is just an NP,
both conjuncts must agree in overt or impled negation or affirmation. Second, such sentences as (69)-(71) look as if they are derived from Conjunction Reduction, a transformation whose existence I have denied for Ngizim, at least in 'and' conjoined constructions. I will not pursue these problems further here.

(69) šiidarw ñgum àa dagamu balle baaci-k zeger širin
    'a millipede falls down let alone someone with two feet'

(70) metu ñgum, ndàa metu bare dégadu
    '(as for) death, people die let alone go lame'

(The NP conjunct in (70) is a verbal noun, not a finite verb as the translation might imply.)

(71) manda kaarak dlam sa bai, balle kaarak bai
    'good tasting salt can't be drunk let alone bad tasting'
Footnotes to Chapter 6

1 Examples (5)-(7) below all involve Subjunctives. I worked some on other aspects where a series of actions is negative with frustrating and inconclusive results. Informants accepted, rejected, or paraphrased examples according to criteria that were not obvious to me.

(i) ná vere ná yka bai (Perfective + Perfective) 'I didn't go out and see'
(ii) ná vere náa ki bai (Perfective + Subjunctive) 'I didn't go out to see' or 'I didn't go out and see'
(iii) ?náa vera náa lawan bai (Imperfective + Imperfective) 'I won't go out and won't see'
(iv) náa vera náa ki bai (Imperfective + Subjunctive) 'I won't go out and see'

(ýka, kî and lâwân are allomorphs of 'to see', conditioned by aspect.)

Sentences (i) and (ii) were accepted and said to mean the same thing. Example (i) should also mean 'I went out (but) I didn't see' and examples (ii) should have a purposive as well as a sequential meaning. It was not clear if all these interpretations were possible. Example (iii) was rejected on one occasion, accepted on another. Besides the translation given, it should mean 'I will go out (but) I won't see'. Example (iv) should have either sequential or purposive meaning for náa ki 'I see'.

Considerably more examination of texts will be necessary to shed some light on series of negative sentences. It is safe to say at this point, that sentences such as (i)-(iv) with more than one sentence in the scope of a single NEG (except where the Subjunctive is used in a purposive sense) are not a commonly used sentence type in Ngizim.

2 The generalized transformations of the early MIT school of transformational-generative grammar combined two or more sentences, as have rules in the theory of Zellig Harris and his students up to the present (see Harris (1969), for ex-
ample). The statements to be made below suggest that Ngizim has no transformations reducing already conjoined sentences. In Harrissian grammar or the MIT model using generalized transformations, the claims I make about Ngizim could be translated to mean that the only rules combining sentences are those which embed one sentence in another.

3 In Chapter 3, rule (10), I propose a base rule providing for conjoined adjectives. In section 4.3.1 of that chapter, however, I express my doubts about whether adjectives are really conjoined. What looks like ADJ naa-ADJ may really be an ADJ with a naa phrase modifying it.

4 The only problematic example of the type mentioned here which is conceivable to me would involve conjunction of adjectives in sentences like 'the warthog was ugly and hard to shoot'. I have already questioned whether adjectives can be conjoined in fn. 3. For whatever reason, I am sure that the Ngizim sentence translating the English sentence just given is ungrammatical: *gubes gabšu naa tetaa naa vayi.

5 Besides the fact that I think the analysis in Eulenberg and Ritter (1967) is wrong in general, some of the data they cite are wrong in fact, further weakening their hypothesis. They claim that the Subjunctive can be used in this aspect-neutral way following the Perfective in a sentence like suntafi masallacisuyrssallethey went to the mosque to pray'. I have checked this with numerous informants and have also discussed it with other Hausa specialists and there is virtual unanimous agreement that the Subjunctive in this sentence must be purposive ('... in order to pray'). In Hausa, the Subjunctive is an "Imperfective Sequential" whence its use after Future, Imperative, etc. but not Perfective. Its use after the imperfective aspects is a function of its being a Sequential, not a function of being "aspect-neutral". Hausa also has a "Perfective Sequential", formally the same as the Relative Perfective, which is used especially in narrative about past events or in story telling. The claims that I will make for Ngizim as to the base source, not transformational source, of Sequentials, are equally applicable to Hausa.

6 Perfective in an adverbial clause indicates that the event of that clause must be complete at the onset of the event in the main clause. This feature of aspect in adverbial clauses is described and illustrated in detail in Chapter 8, section 1.2.

7 A kàmbì is a calabash holding an allotted amount of grain, used in a polygamous household to assure that each
wife uses an equal amount of grain in preparing meals.

Paul Schachter points out in personal communication that ADV fronting could potentially be meaning changing. If Sequential is introduced in the base, its interpretation will be action subsequent to what immediately precedes, e.g. 'I'll do X. Then the guinea-corn will ferment (Sequential) if I wet it.' But if we front the adverbial phrase, 'if I wet it', the Sequential of the main clause is no longer interpreted as subsequent to something in preceding context, but subsequent to the event in the adverbial clause. Note, however, that substituting the Sequential for some other underlying aspect would not solve the problem. In this case there would be a meaning difference associated with whether we substituted the Sequential before or after ADV fronting and whether or not we applied the ADV fronting rule at all. I have no solution for this paradoxical situation.

This sentence is translated as if Conjunction Reduction has applied. In Ngizim the verb dëma 'be able' takes an NP complement so it is normal pro-ing of the underlying complement, áa kakar kakera dææ 'he's carrying some loads', which takes place.
Chapter 7

SENTENTIAL COMPLEMENTS

0. Introduction

Sentences used as complements to verb or other lexical categories were not investigated systematically with informants. This chapter is based almost entirely on examples gleaned from texts. The aim will be to give the range of surface structures found and raise issues for future investigation. I will make little attempt to bring in the issues with which recent literature on complementation has been concerned, such as factivity, the distinction between NP and VP complements, and the nature of complementizers in general.¹

Ngizim has only two formal complement types: nominalized and full sentence. The full sentence type can also be separated into complements which must always have verbal predicates in the Subjunctive and those which are unrestricted as to sentence type except for exclusion of interrogatives and imperatives. The two "full sentence" complement types may turn out to need different sources, but I will not pursue this here.

Two transformations will need to be referred to at several points in the discussion. These are Nominalization and EQUI-NP Deletion.
(1) **Nominalization**

(a) **Transitive**

\[ \ldots [ [ \text{NP} \quad \text{AUX} \quad \text{V} \quad \text{NP} \quad \text{X} ]_{S} ]_{\text{NP}} \ldots \implies \]
\[ \begin{array}{cccc}
1 & 2 & 3 & 4 & 5 \\
\ldots & \emptyset & \emptyset & 3 & 4 + 1 & 5 \ldots \\
\end{array}
\]

(b) **Intransitive**

\[ \ldots [ [ \text{NP} \quad \text{AUX} \quad \text{V} \quad \text{X} ]_{S} ]_{\text{NP}} \ldots \implies \]
\[ \begin{array}{cccc}
1 & 2 & 3 & 4 \\
\ldots & \emptyset & \emptyset & 3 + 1 & 4 \ldots \\
\end{array}
\]

I have broken the rule into two subparts for predicates with transitive and intransitive verbs. Parts (a) and (b) can be collapsed as in example (143) of Chapter 8.

Nominalization is a rule operating on embedded sentences functioning as noun phrases. Such sentences are of two types: sentential complements functioning as noun phrases (described in the present chapter), and sentential adverbs (described in Chapter 8). It is implied here that Nominalization can operate on any embedded sentence of the two types just mentioned. This is not entirely the case. Certain restrictions on its operation will be noted in the discussion in this chapter and in the relevant sections of Chapter 8, but I am not able to give any integrated picture of constraints on the rule.

The rule of Nominalization takes the subject of an embedded verbal sentence and moves it to a position after the

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verb and following the direct object if the verb is transitive. The underlying AUX is deleted and the verb is nominalized. The transition of (2)(a) to (2)(b) shows the effect of the rule given in (1). The node S will automatically be deleted by the convention deleting an S node which does not branch (cf. Ross, 1966). A nominalized sentence has all the characteristics of other noun phrases as described in Chapter 4. In order to bring the structure of nominalized sentences into conformity with other noun phrases, the structure of (2)(b) will have to be reduced to (2)(c) by some sort of "relabelling" conventions operating on derived structure.²

\[ (2) (a) \]
\[ \text{NP} \]
\[ \text{S} \quad \text{DET} \]
\[ \text{NP}_1 \quad \text{PRED} \]
\[ \text{VP} \]
\[ \text{AUX} \quad V \quad (\text{NP}_2) \]

\[ \text{Nom.} (1) \Rightarrow (b) \]
\[ \text{NP} \]
\[ \text{PRED} \quad \text{DET} \]
\[ \text{VP} \]
\[ V \]
\[ [+N] \]
\[ (\text{NP}_2) \quad \text{NP}_1 \]

\[ \text{Relabelling} \Rightarrow (c) \]
\[ \text{NP} \]
\[ \text{DET} \]
\[ \text{N} \]
\[ (\text{NP}_2) \quad \text{NP}_1 \]
\[ V \]
\[ [+N] \]
(3) **EQUI-NP Deletion**

\[ \vdash \left( \text{NP}_2 \right) \text{NP}_1 \ X \ \text{NP} \quad \Rightarrow \quad 1 \ 2 \ 3 \ \emptyset \ 4 \ \ldots \]

1 \ 2 \ 3 \ 4

**Conditions:**

(a) There is a NP co-referential to NP\(_1\) elsewhere in the sentence (either to the left or to the right).

(b) Obligatory if 2 is not null, optional otherwise.

**EQUI-NP Deletion** deletes the subject of a nominalized embedded sentence if there is a co-referential NP elsewhere in the sentence. The rule has been made obligatory if the verb has an overt direct object, NP\(_2\). That is, phrases of the type **kera-k dagwda-k Audu** 'stealing money by Audu' were always rejected by informants, though phrases like **kera-k dagwda** 'stealing money' and **kera-k Audu** 'Audu’s stealing' were acceptable, as were all instances of nominalized intransitive verbs with expressed subject as **tefa-gaa** 'my entering'. **EQUI-NP Deletion** is more fully discussed in Chapter 9, section 3.

The discussion in this chapter will take the following form: the first structures to be covered will be the various types of \(S\) complements found in the surface verb phrase; next will be those sentences presumed to be generated as subjects of sentences; some consideration will be given to the movement rules of Extraposition, Subject Raising, and Object Raising (= "Tough Movement") proposed for English. This much of the chapter will have covered complementation.

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proper. From there I will turn to a group of adverbial words, termed "Modal Adverbs", which seem to be analyzable as taking complement sentences. The last two sections will deal with direct and reported speech and indirect questions.

1. Complement Sentences Appearing in the Predicate

1.1. Sentences Having the Predicate Structure V-COMP

1.1.1. Verbs Taking Nominalized Complements

The verbs (and one noun, kâlû 'fear(ing)') listed in (4) were found to take nominalized complement sentences. If no further indication is given, the verbs require that the subject of the main verb be the same as the subject of the complement S, and EQUI-NP Deletion is obligatory. Those verbs marked [+same] may have same subjects or different subjects from the complement. If the subjects are different, the complement cannot be nominalized (see next section). The verbs may also be grouped as to whether they are transitive or intransitive. The transitives all take direct complements, as does one of the intransitives. The other intransitives require the preposition ñi before their complements. In a more abstract analysis than that impaled here, some of these verbs may have predicate complements only as a result of various transformations (see section 3).
(4) Verbs taking nominalized complements with EQUI subjects

<table>
<thead>
<tr>
<th>Transitive</th>
<th>Meaning as complementizing verb</th>
<th>Other meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>bátà</td>
<td>'be up to (task), be sufficient for, be prepared to'</td>
<td>'arrive'</td>
</tr>
<tr>
<td>bùuke</td>
<td>'fail to'</td>
<td>'lack'</td>
</tr>
<tr>
<td>bánde</td>
<td>'start'</td>
<td></td>
</tr>
<tr>
<td>dèma</td>
<td>'be able'</td>
<td></td>
</tr>
<tr>
<td>jìbe</td>
<td>'start, set about'</td>
<td>'catch, seize, hold'</td>
</tr>
<tr>
<td>kàwa</td>
<td>'be accustomed to'</td>
<td>'be fond of, be familiar with'</td>
</tr>
<tr>
<td>kùndë</td>
<td>'postpone'</td>
<td></td>
</tr>
<tr>
<td>kúre [+same]</td>
<td>'refuse'</td>
<td></td>
</tr>
<tr>
<td>ncú [+same]</td>
<td>'want, like'</td>
<td></td>
</tr>
<tr>
<td>tòde³</td>
<td>'stop'</td>
<td>'stop, remain standing'</td>
</tr>
<tr>
<td>tùumaate</td>
<td>'consider doing'</td>
<td></td>
</tr>
<tr>
<td>tùwaysë⁴</td>
<td>'forget to'</td>
<td></td>
</tr>
<tr>
<td>zàga</td>
<td>'know how to'</td>
<td>'know'</td>
</tr>
</tbody>
</table>

Intransitive

| mårwaysë                | 'be afraid to'                           | 'be scared'                         |
| bëdame ìi + S           | 'be impossible, be beyond; fall short in' | 'rebel'                             |
| tlá ìi + S              | 'set about, have in mind to, proceed to, undertake to' | 'stand up, fly up'                |

Noun

| kálàu [+same]           | 'fear, fearing'                          |                                     |

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Among these verbs, dêma 'be able' and nóú 'want, like' are usually in the Imperfective aspect, while the others are unrestricted as to aspect. Some of these verbs usually take the Totality Extension, e.g. dêma and kôre 'refuse' among the transitives and màrwayne 'be afraid' among the intransitives.

(5) apt-aaci bata bena bii-n, à tamtli ii akurna
   'if your flour isn't sufficient for cooking, mix it into gruel'

(6) baaci-k nyaw áa buuka piima bai
   'a slanderer doesn't fail to be looking over his shoulder'

(7) daaci kunamu dá banji niyi ii dêdâa
   'then the deleb palm began to bend downward'

(8) bedlamu ye bande-naa lawan genaawa-k ja
   'the hyena began to see the shape of a dog'

(9) kàa demuu-naa nii-naa gema-k jaunak gayi wa?
   'will you be able to carry one elephant haunch?'

(10) gaâda-k matlkatlka aci áa demuu fuwa bai
    'because of trembling he wasn't able to get down'

(11) jà jibe ma-w naa ankâl
    'we set to picking it (wood) up carefully'

(12) maguru, gaâda-k guru, kure-naa mbasu ii wiita-k ndiíwa
    'the jealous man, because of jealousy, refused to live among people'

(13) múnya-gaanai, nà nci dlam-d ii-wa bii-k rama
    'my daughter, I want to have a little word with you!
    [...] I want to do to us something of speech'
(14) ci fo, ká ṣega kaawa bai
   'you, you don't know how to play'
(15) ná marwayne-n-gaa rama ii-tu
   'I was afraid to tell her'
(16) ká ṣedamu ii jiiba bii-n, ká ṣedama ii zara bai
   'if you don't fall short in catching (game), don't
   fall short in dragging (it home)'
(17) kağun ṣedame-n-gara ii sa-n, áa ṣedam ii venga bai
   '(even) if the medicine is impossible to drink, it's
   not impossible to pour out'
(18) tla ii diyi nen, dā 'yawi ii miya gayi
   'when they undertook to give birth, they gave birth
   at the same time'
(19) nen áa kalau nya ii rii-k garva-n, aci naa jifee bai
   'if someone is afraid to go to the place of judgement,
   he is guilty [he doesn't have truth]'

I have found one verb which allows nominalization of
the complement when the matrix subject and the complement
subject are different:

(20) Verb taking nominalized complement, different subject
    ſtále       'pay attention to, care about'

The only example I have is

(21) terku ſtále metu-k mii-k dagii bai
    'an orphan doesn't care about the death of someone
    else's mother'
1.1.2. Verbs Taking Subjunctive Complements

Some verbs always take complements in the Subjunctive if the complement is not nominalized. For most verbs, it is the case that the complements cannot be nominalized when the embedded subject is different from the matrix (the only exception I have found being ƙáale in (20)). Some verbs may optionally retain a complement with an EQUI subject in the Subjunctive (ncú 'want' báta 'be sufficient for, prepared to'). For the others, I have not found examples of nominalized complements with EQUI subjects, though they may be possible (hence the '?'s in their classifications). The notation [+same] means the verb can have same subject in matrix and complement, [-same] means there can be different subjects. Those marked [+nom] can have nominalized complements if the subjects are the same, those marked [-nom] can not. A question mark means I have not attested the syntactic behavior in question but suspect that it is possible:

(22) Verbs taking complements in the Subjunctive

<table>
<thead>
<tr>
<th>Verb</th>
<th>Comp. meaning</th>
<th>Other meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bâ</td>
<td>[+same], [-nom] 'get, manage to'</td>
<td>'get, receive'</td>
</tr>
<tr>
<td>báta</td>
<td>[+same], [+nom] 'be sufficient for, prepared to'</td>
<td>'arrive'</td>
</tr>
<tr>
<td>dâawe</td>
<td>[-same], [-nom] 'cause'</td>
<td>'put (on)'</td>
</tr>
<tr>
<td>kâlåu</td>
<td>[+same], [+nom] [N] 'fear, fearing'</td>
<td></td>
</tr>
<tr>
<td>kâmaate</td>
<td>[-same], [-nom] 'be fitting that'</td>
<td></td>
</tr>
</tbody>
</table>

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(22) continued

kàsakà [-same], [-nom] 'agree to, be
?[-same], ?[+nom] satisfied with'

kùre [+same], [+nom] 'refuse'

ncù [+same], [+nom] 'want, like'

yìve [+same], 6 [-nom] 'quit doing' 'leave (tr.)'

? [+nom]

Subjunctive complements with different subjects

(23) ná daaw akši dà yay'yi-naa kaʃee-kši
'I made them bundle up their loads'

(24) nàa kalaʊ-ge kà dlama tafii bai
'I am afraid lest you fornicate'

(25) kàmàntu nà dlam-naa zëba dégo
'it is fitting that I get married first'

(26) nàa am-ge Anku-k Bagaja bii-n, ná kàsagàtu dá viy aa bai
'if it's not with water from Bagaja Lake, I don't
agree to her washing it for me'

(27) gatakàs sauràk, bedlamu kùre ndàan ndà terfe-daw
acì bai
'fetters of meat strips, a hyena doesn't refuse that
one fetter him with them'

(28) kà ncu ndà ʃaala ci bii-n, ò ji iì Kano
'if you want no one to pay attention to you, go to
Kano'

Subjunctive complements with same subjects

(29) ndà pa am ii gaaza-n, kàraagoomak dàa bi dà ķì
'when one pours out water for the chicken, the lizard
gets to drink'
(30) atu áa bii dà ta'yi kunu-gara bai
'she never got to relax' [she wasn't managing to release her stomach]

(31) ndà bata ndà ram bai: gadaguri-k wunduwa-k Baawuya
'no one is prepared to say it; (there's) syphilis at Bawuya's compound' (Baawuya is a stock name for a prestigious person)

(32) gaada-k sau nà nou nà taatk ii-ci dabañ
'because of that I want to show him wiliness'

1.1.3. Verbs Taking Unrestricted Sentence types as Complements

As a final type of predicate composed of V-COMP, there are verbs which take full sentences of unrestricted types (excluding imperatives and questions):

(33) Verbs taking full sentences as complements

<table>
<thead>
<tr>
<th>Meaning with comp.</th>
<th>Other meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>dàawe</td>
<td>'cause'</td>
</tr>
<tr>
<td>dlàba</td>
<td>'be possible that'</td>
</tr>
<tr>
<td>tása</td>
<td>'find that, discover that'</td>
</tr>
<tr>
<td>tùumàa (dà) [N]</td>
<td>'thinking that'</td>
</tr>
<tr>
<td>yika/láune7</td>
<td>'see that'</td>
</tr>
<tr>
<td>zàga</td>
<td>'know that'</td>
</tr>
<tr>
<td></td>
<td>'know, be acquainted with'</td>
</tr>
</tbody>
</table>

(34) Seku daawu Baraaya áa garvaata bai
'God caused it that Baraaya would not reign'

(35) áa dalabu dlan-du
'it's possible that he's done it'

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(36) akši ji ǹgum, då taši miyu gazgara dlam-naa bēna

‘when they arrived, they found that her aunt had done
the cooking’

(37) veji kōma ǹgum, då tuumāa amà-geri-w ...

‘when the monkey heard, he thought that is was his
wife ...’

(38) àa lawan ada-k gaskam buu tēnu, då tuumāa da avan-k aka

‘he was seeing that the rooster’s head was red, (and)
he was thinking that it was hot embers’

(39) gwangurak iika-naa metu-gara dee-n-gara ii damtau

‘the old woman sees that her death has come near’

(40) dāacci ja yka kutlii-gara jibë-naa geraayu tēnu, då
ram ii-kši maa ...

‘then when the dog saw that her children had begun to
be clever, she said to them ...’

(41) bedlamu dá tfi dáa ki naa ja bai

‘the hyena entered and saw that there was no dog’

(42) nāa lawan-gu kāa ta’yi-k kun-aaci naa iyu bai

‘I see that you don’t relax with me! [... don’t re-
lease your stomach with me]

(43) ndiīwa àa lawan beër tarmē-naa dāa

‘the people were seeing that (a cloud of) dust was
heading toward toward town’

(44) ndā ze-ga-naa veji naa wura, ndā tausa-w ii akuu-gu

‘one knows that a monkey has a neck, one ties him by
the back’

(45) kāa ze-ga-du bedlamu àa yv-aawa bai

‘you know that hyenas don’t leave us alone’

There is some question as to the phrase structure of
some of these sentences, especially those with tāsa ‘find

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that', *rîka/lâuna* 'see that', and *zêga* 'know that'. In the case of *tâsa*, the sentences could be interpreted either as a verb followed directly by a complement, as I have interpreted them here, or as a verb with a noun direct object followed by another sentence. In the latter interpretation, sentence (36) would be translated 'when they arrived, they found her aunt, she had done the cooking'. Sentences with this type of loose conjunction are not uncommon in Ngizim, e.g. *Gooraka dlam-nea terarín, áa foota-k Ngwajin* 'Goraka spent several months, he was in charge of Ngwajin'. (Cf. Chapter 6, section 1.)

All my examples with *tâsa* are of exactly the same form as (36) and have the same two potential interpretations. This is not the case with *rîka/lâuna* and *zêga*. Some examples with *rîka/lâuna* are susceptible to the same interpretation as *tâsa*, e.g. (38), (40), (43). Thus (43) might be translated 'the people were seeing dust, it was heading toward town'. Sentence (41) cannot have such an interpretation, however, because an existential sentence follows *rîka* (> *ki* in the Subjunctive) so that there is no noun following the verb which could be interpreted as a direct object. We must therefore conclude that *rîka/lâuna* can indeed have an embedded complement sentence.

Now we must ask what the phrase structure of the predicate is. The evidence is not clear. Before continuing with *rîka/lâuna*, consider sentences (44)-(45) with *zêga*. Unlike
tása 'find', and yìka/láune 'see', zège used in the sense of a factive verb (as it is here) could not take a concrete direct object in any language. We therefore know that in both (44) and (45) we have a complement sentence, not a direct object followed by another sentence.

Notice that in (44), zège has the allomorph of the Totality Extension, -náa, which is the form used only before direct objects, while in (45) it has the allomorph -dù, which is the form used in all environments except before a direct object. It seems, then that (44) suggests the phrase structure of (44') while (45) suggests the phrase structure of (45') or some such.

\[(44')\]

\[
\begin{array}{c}
S \\
/ \  \ \ \ \\
NP \\
/ \\
V \\
/ \\
NP \\
/ \\
nda zège-náa vaji naa wura \\
\small{one know monkey has neck}
\end{array}
\]

\[(45')\]

\[
\begin{array}{c}
S \\
/ \  \  \\
NP \\
/  \  \\
VP \\
/  \  \\
NP \\
/  \  \\
S \\
/  \  \\
kaa zège-du bedlamu áá yv-aawa bai \\
\small{you know it hyena doesn't leave us (alone)}
\end{array}
\]

It happens that nearly all my examples (ten or so upon which these remarks are based) are of the latter type. The solution to this conflict may have a syntactic, a semantic,
or a stylistic explanation.

Returning now to *yika/láuna*, we see in (39) the pre-
direct Totality Extension allomorph, –n̂a, which could be
conditioned by a tree structure as in (44') or by *metu-gara*
'her death' being a direct object with the remainder of the
example being a separate sentence. I have no examples with
the allomorph –dù, but in (42) we see the Ø anaphora marker
–gú suffixed to the verb. For our purposes, we can inter-
pret this as showing that what follows cannot be a direct
object, for –gú indicates that an underlying direct object
has been deleted. A very accurate translation of (42) would
be 'I see it that you don't relax with me'. Sentence (42),
therefore, must have a structure such as (45'). If (39) is
interpreted as having the structure of (43'), then the pro-
blems of assigning phrase structure are the same for both
'know' and 'see'.

1.2. Sentences Having the Predicate Structure V-NP-COMP

1.2.1. Verbs with Object Followed by Nominalized COMP

The following verbs meeting this description have been
found. Not enough examples are available to state any broad
generalizations.

(46) Verbs followed by an object and nominalized complement³

<table>
<thead>
<tr>
<th>verb</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>dâpte</td>
<td>'prevent'</td>
</tr>
<tr>
<td>jâpte</td>
<td>'be amazed at ... for ...'</td>
</tr>
</tbody>
</table>

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Two of the three available examples of dāptē introduce the complement by the preposition nāa 'with', (47)-(48), as does the one example of jāptē, (49). The third example of dāptē has an indirect object NP with a complement directly following, (50).

(47) gaada-k tluwi garva, ndāa daptē-k diišew nāa vayak bai
  'just because it's the chief's meat, one doesn't prevent the vulture from circling'

(48) nēn daptē-nāa ci nāa zeba nēn, āa lawan ci nāa kaka
  'if somebody prevents you from getting married, he'll see you with grandchildren'

(49) ndiïwa bal dā jibi jāptē-k maguru nāa tuwayu-k guru-geri
  'all the people became amazed at the jealous man for forgetting his jealousy'

(50) Maina tawanke, ndāa rama-d ii-ci hal-geri waafa āa daptē ii-ci dlama Mai
  'every prince, one would tell him his trait of character that would prevent him from becoming king' [... that would prevent to him becoming king]

1.2.2. Verbs with Direct Object Followed by Subjunctive COMP

(51) lāgoote 'persuade, coax'
yive 'allow'

(52) lāgoote iju nā dēr akshi 'they persuaded me to wait for them'

(53) mes-aakem āa yy-aakem kā ver ii rii bai
  'your husband won't let you go out anywhere'

(54) jā maa daa beba āa yy-aakem kā nii bai
  'we said if only your father wouldn't let you come'

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2. Complement Sentence as Subject of Higher Sentence

There exists what must be regarded as a surface constraint in Ngizim that a non-nominalized sentence cannot appear in sentence initial position before a verbal predicate. Thus, sentences like the following are ungrammatical:

(55) * [akši ankakte bai] daawu baana-w
    '[(the fact that) they didn't pay attention] caused
the accident'

This surface structure can be avoided in three ways: nominalization of the complement subject, post-posing of the complement by the Subject Focus rule, and pseudo-clefting on the complement. I will take these in the order given.

Nominalized subject complements should require no comment. In some cases, EQUI-NP Deletion has also applied (cf. rules (1) and (3) above):

(56) [raura-k baaci-k daawai] daameete-naa yu
    ' [the calling of the pot-seller] bothered me'

(57) [ŋgwa-k ŋau] dlemté-naa fena-gaa
    ' [scooping up manure] ruined my calabash'

(58) [mešta ii bešlama] bar-d aa kalau
    ' [turning into a hyena] scared me' [ ... gave me fear]

(59) [dabi-k moota wawai] tkê-naa Demza
    ' [driving the car recklessly] killed Demza'

(60) [iiva miya gaada-w] a niia-naa kemuu-k maya
    ' [leaving the mouth empty] brings a feeling of hunger'

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One alternative for removing a non-nominalized subject from sentence initial position is application of the Subject Focus transformation, see Chapter 5, section 3.1. Recall that this transformation lifts a subject from sentence initial position and transports it to the end of the predicate. A marker nɛn (---> ɛn after vowels) is placed immediately before the postposed subject.

(61) daawu ɓaana-w-n [akši ankalɛ bai]

'(it was) [that they didn't pay attention] (which) caused the accident'

(62) dee-d ii-kši Boone-n [bare jifeewa ii Kaakasku bai]

'(it was) [that they didn't believe in God] (which) brought troubles to them' [... that they didn't give truth to God]

(63) gaza-n [ká maakai aa mii-k nɛmə]

'(it is) [that you look for a potter for me] (which) remains'

(64) manga, gaza-n [ká ñkalci ad-aaci]

'friend, (it is) [that you watch out for yourself] (which) remains'

It is tempting to think of such examples not as involving subject focus, but as being cases of obligatory extraposition of subject. I have no convincing syntactic arguments against this proposal based solely on the few examples available to me where the rule has applied. Looking beyond these examples, however, we would have to say that a rule of Extraposition exist which formally exactly duplicates the Subject Focus rule. It remains to be discovered
whether or not the bracketed sentences in (61) through (64) are actually perceived by Ngizims as being focussed in the way I have translated.

Pseudo-clefting is a second means of removing a non-nominalized sentential subject from sentence initial position in a verbal sentence. Three possible surface structures are derivable from pseudo-clefts. From the basic Cleft-S structure (Cleft = "what" clause, S = pseudo-cLEFTed sentential subject) two other structures can be successively derived (pseudo-cleft with simple NP's is considered in Chapter 5, section 5). The following rule ordering relation is obligatory. I leave open the question of whether the basic pseudo-clefted construction is underlying or already partially derived. 10

(65) 1. Basic pseudo-cleft Cleft S
   2. Inversion 11 S Cleft
   3. Subject Focus Cleft nén S

Applying these three structures in their respective order to the sentences underlying (61) and (62), we get (66) and (67)(a) through (c). I didn't elicit the (c) forms and have indicated this by [RGS] preceding the sentences. I have no reason to doubt their grammaticality based on other attested sentences of similar structure. The portion indicated by S in (65) is bracketed in each example.
(66)(a) bee daawu baana-w [akši ankalte bai]

'what caused the accident was [that they didn't pay attention]'

(b) [akši ankalte bai] bee daawu baana-w

'[that they didn't pay attention] is what caused the accident'

(c) [RGS] bee daawu baana-w-n [akši ankalte bai]

'(it was) [that they didn't pay attention] (which) was what caused the accident'

(67)(a) bee dee-d ii-kši Boone [akši bare jifëewa ii Kaakasku bai]

'what brought trouble to them was [that they didn't believe in God]'

(b) [akši bare jifëewa ii Kaakasku bai] bee dee-d ii-kši Boone

'[that they didn't believe in God] is what brought trouble to them'

(c) [RGS] bee dee-d ii-kši Boone-n [akši bare jifëewa ii Kaakasku bai]

'(it was) [that they didn't believe in God] (which) was what brought trouble to them'

The rules of Inversion and Subject Focus have wider application than just pseudo-clefts. The limits of the Inversion rule are particularly poorly understood, but it is applicable to other types of equational sentences having sentential predicates. The word nụubà 'one's share, one's just due, one's fate' can take a sentential predicate, i.e. nụubà corresponds to the Cleft part of a pseudo-cleft. To facilitate understanding the derivation that I believe the following sentences have undergone, I give (a) through (c) in (68) and (69), parallel to (a) through (c) in (66)
and (67). Question marks replace missing derivational stages.

(68)(a) nuuba-k keriinakau [âa gaya ii desku bai]
    'the fate of the frog is [that he does not climb up]

(b) ?

(c) ?

(69)(a) ?

(b) ?

(c) iyu, nuuba-gaa-n [nà ci nà ši]
    'as for me, (it is) [that I might eat and drink]
    (which) is my due'

As a postscript to this section, I might note that
pseudo-clefting of complement S's is not restricted to
subjects. In (70), it is the complement S of ncu 'want'
which is pseudo-clefted.

(70) bee waafə nà ncu [káa m(i) iyu ii wura wà yi]
    'what I want is [that you take me on your back and
    we go]'

3. Movement Transformations Involving Complements:
Extraposition and Raising Rules

3.1. Extraposition and Subject-to-Subject Raising

There are no surface alternations in Ngizim, to my
knowledge, which provide direct justification for the rules
of Extraposition and Subject-to-Subject Raising such as
English alternations like 'that John will come is certain'
\textsc{extra} \rightarrow 'it is certain that John will come' \textsc{raising} \rightarrow
'John is certain to come'. There are two classes of verbs in Ngizim, the English correspondents of which have been dealt with by these rules: verbs with an impersonal subject 'it', and "transparent verbs", i.e. those verbs which are "transparent" as to selectional restrictions between their surface subjects and complements ('begin', 'stop', 'continue', etc.). Two verbs taking impersonal subjects have been seen, kàmaste 'be fitting that' in (22) and dlàba 'be possible that' in (33). A number of transparent verbs were seen in (4), e.g. bânde 'begin', bèdame 'fall short in'. Since the only grammatical surface structures containing these verbs are those given in section 1.1, I will propose no transformations to handle them. I simply wish to point out that there are structures in Ngizim, that semantically at least, are derived.

3.2. Subject-to-Object Raising

One verb, dàawa 'cause', has been found where the subject of the complement may be raised to become the object of the matrix.

(71) madta àa daawa kanjau ii daanau

'squeezing causes the drum to make noise' (reference is made to a variable pitch drum)

With this verb, there are syntactic alternatæs where the subject is not raised, e.g. (23). In terms of surface structure, (71) is comparable to those verbs seen in (46)
and illustrated in (47) through (50). Semantically, however, they are not comparable, and those verbs in (46) do not have alternates of the form V-COMP.

3.3 Object-to-Subject Raising

Consider the following paradigms:

(72)(a) vii-k aayu tetaa  'shooting a gazelle is difficult'
     (vii < vayi when medial in a phrase)
(b) aayu naa tetaa vayi  'a gazelle is difficult to shoot' [a gazelle is with difficulty of shooting]
(c) aayu tetaa naa vayi  'a gazelle is difficult to shoot' [a gazelle is difficult with shooting]

(73)(a) sa-k akurna kaarak  'drinking gruel is pleasant'
(b) akurna naa kaarak sa  'gruel is pleasant to drink' [gruel is with pleasure of drinking]
(c) akurna kaarak naa sa  'gruel is pleasant to drink' [gruel is pleasant with drinking]

(74)(a) gugza-k dlerai aʃa  'learning Karekare is easy'
(b) dlerai naa aʃa gugza  'Karekare is easy to learn' [Karekare is easy with easiness of learning]
(c) dlerai aʃa naa gugza  'Karekare is easy to learn' [Karekare is easy with learning]

The (a) versions are taken as underlying. The (b) versions were given as translations of the Hausa sentences barewa tana da wuyan harbi, kunu yana da dadin sha, etc.
They were claimed to be grammatical by informants, although the more idiomatic Ngizim way to express the meaning of these Hausa sentences is seen in the (c) examples, which are virtually word for word like the English translations. As the literal translations indicate, the words tetaa, kaarak, and aṛaha must be interpreted as nouns in the (b) versions, while they must be analyzed as adjectives in the (c) examples because they appear as predicates directly juxtaposed to the subject (cf. Chapter 3, section 4). In Hausa, the three equivalent words (wuya, dadi, saugi) are nouns and nouns only. I suspect that the (b) versions are loan translations from Hausa, which all my informants spoke fluently. I have found no examples of this type of construction in texts or proverbs, though I have found both the (a) and (c) types, e.g.

(75) mesta bedlamu tetaa bai, namboo kuteṛ baya
    'turning into a hyena isn't hard, it's lacking the tail'

(76) am kaarak naa sa-n, ña gazu aa fenä bai
    'if water is good to drink, it won't remain in the calabash'

(77) rii tku ña dlama-n-gara belan naa mbasu
    'this place will be good for living at'
    (dlama-n-gara is a copular verb meaning 'be, become')

I will give no further account of the (b) cases. The (c) cases are what have been described for English as Object-to-Subject Raising (= "Tough Movement" in some studies).
The only problem with this account in Ngizim is the missing intermediate stage corresponding to English 'it is difficult to shoot gazelles'. This would be Ngizim *tetaa naa vii-k aeyu which, as far as I know, is ungrammatical. For Ngizim then, we might just as well formulate a rule shifting the verbal head of complements like those in (72)-(74) into the predicate.

As for the preposition naa following the adjectives in the (c) versions of (72)-(74), it is found with adjectives in other contexts to mean 'with respect to', e.g. dantau naa Yaifwa 'far from Maiduguri' [distant with respect to Maiduguri].

4. Modal Adverbs

A number of adverbial words can be used sentence initial followed by a complement sentence. These adverbs assign a semantic mode to their complements. It is somewhat difficult to draw a line between these "modal adverbs" and other types of adverbs or conjunction-like words such as wàm 'a-gain' or bàré '... let alone that ...'. Using perhaps arbitrary criteria, I will limit my discussion to those words which come sentence initial and which can be used initial in an utterance. Those words I have identified as modal adverbs are given in (78). Restrictions that I have observed on their complement sentences are given in brackets. None can embed questions or imperatives.
(78) câa, câamân 'it's long been the case that, it's long been known that, it was previously planned that, it was decided beforehand that'

[unrestricted complements]

dâa introduces imaginative sentences (see Chapter 8, section 2)

[cannot embed Subjunctive sentence]

(dâa) wânângê 'perhaps'

[?unrestricted]

ŋgalkô 'it would be better that'

[?Subjunctive S only]

ŋgalte 'to have ever done; (in NEG) to have never done'

[?verbal S in Perfective or Imperfective]

kûlûm, kûlûm 'always'

[?Imperfective]

nâkât ? 'now' in historical present sense, as in "and now he says to me ..."

[usually Sequential]

nânáadî 'to do expressly because of'

[?unrestricted]

(79) caaman jiřeewa zanii-k jejem

'it's long been known that the truth is a gown of thorns'

(This is a proverb embedded after câamân.)

(80) caa akši tuumaate nii da Ngwajin

'they had previously had in mind to come from Ngwajin'

(81) daawanange áa garvaata bai 'maybe he won't reign'

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(82) wanenge dagai da kumu-k nda-k Pateskum daa bari-naa laabar-gu

'maybe somebody from among the people of Potiskum will give its history'

(83) ngalko na dlabi goo ama

'it's better that I stay without a wife'

(84) ngalte ndaa daara-k resek ayaku ii dukwak bai

'one will never cut a tortoise hide into a bowstring'

(85) naa ja bii-ci tenu, ngalte aben dlam rama bi?

'who are you trying to kid, has food ever talked?' [there is this thing of yours, ever has food made speech?]

(86) kullum ndaa wuna aa rakii bai

'it's not always that one sleeps on a bed'

(87) nakat da daawi aikwa-geri ii liifi dâa dai albuuta

'and now he put his hand in his pocket and took out a handkerchief'

(88) naanaadi ndaa nema-k daawai gaada-k bena-k jaunak bai

'one doesn't make pots especially for cooking elephants'

While I have made no provision for modal adverbs in the Phrase Structure rules given in this study, these examples, especially the negative ones, suggest a phrase structure like (89):

(89)

```
S
  /\Modal
 S  \ ADV
  /\  (NEG)
  \/
```

That is, in some of the negative examples it is clear

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that the modal adverb must be within the scope of the nega-
tion to get the proper interpretation. Example (86) means
'it is not always that one sleeps on a bed' not 'one never
sleeps on a bed' (= 'it's always that one doesn't sleep on a
bed'). But from example (81), we see that provision must
also be made to embed a negative which does not include the
modal adverb in its scope. Such a negative would be within
the embedded S in (89).

5. Reported and Direct Speech: màa

Both indirect speech and direct quotations are invari-
ablely preceded by the word màa. Màa may be used with virtu-
ally any verb which can be used to report a speech act, e.g.
ràme 'say', jàaye 'ask', kòma 'hear', ngûme 'answer', etc.

(90) då ra maa, "To, akšì då diina."
'he said, "Well, let them come."

(91) ndàa ràma ii màata-k jaabi maa då şì am bai
'one doesn't tell someone eating beans to drink water'

(92) nàa jaaya-gèrì maa{[(a), "Kà noì beji bi?" ]
[(b) à noì beji
'I'll ask him [(a), "Do you want any bran?""]
[(b) whether he wants any bran']

(93) nà kòma maa gwàmna àa benta gusku
'I heard that the governor will pass by today'

(94) {ram
\[ngûme\]
'maà tam?
'what did he {say?'
\[answer?\]"}
When nothing intervenes between ráме 'say' and máa (such as an indirect object) the verb may be deleted, leaving máa alone:

(95) ṃədələmu máa, "To" the hyena said, "OK"

(96) ii máa avan-k aka ãa patla-k ad-aaci
    'I though that [I máa] it was hot embers in the middle of your head'

(97) dà ram ii-ci máa, "Manga, baaba máa kà yi."
    'he said to him, "Friend, father (says) that you should come."'

A phrase with máa and no overt verb can be extrapolosed over a direct quotation. In this case, máa precedes the NP naming the speaker. Ngizim thus uses a single word where Hausa has "suppletive alternates" (wai preceding, but in ji "according to" following).

(98) "Jàa gáaya," máa zadjii-k baaci duuka
    '"We're going riding," says the servant of the horse owner'

(99) "Kwá tla-n, jà tli," máa baaci dəmii gulvu
    '"When you get up we'll go," says the person waiting for a corpse'

6. Indirect Questions

Indirect questions are all of the form N[-DEF] + relative clause. Almost all the examples that I have found in texts are of the 'what' type.
(100) ná zga-naa waasá zegemul gwadamu
    'I know who planted peanuts'

(101) dà jaay ii maamuu-gara bee waasá waakaatu
    'she asked her children what had happened'

(102) aci zegu bee waasá atu àa kunu-w bai
    'he didn't know what she was up to [what she was in]'

(103) ná zga devu waaša waasteši àa nii ii ada-ge nen bai
    'I don't know how sneezing comes upon somebody'
    [I don't know the road (by which) sneezing comes to the head of a person]

This last example is apparently the way 'how' indirect questions are formed.

Indirect questions are not formally distinct from "pseudo-do-indirect questions" where the phrase cannot be interpreted as an embedded interrogative.

(104) dəgo zam wà ba nen waaša wà bar ii-ci bai
    'we haven't yet found anyone to whom we will give it'

(105) à dlamíina bee waasá kwáa dlama-w
    'do what you're going to do'

(106) dà jib bar ii-tu laabař bee waasá waakaat ii-kši ii pata
    'he began giving her the story of what had happened to them in the bush'

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Footnotes to Chapter 7

1. Ngizim lends little support to any theory which seeks to establish a category "Complementizer", e.g. Bresnan (1970). It will be seen that insofar as sentence complements are concerned, there is no such formative, at least in surface structure. Moreover, indirect questions, for which Bresnan wants to set up a complementizer WH for English, do not exist as a separate syntactic entity in Ngizim (see section 6 below). The only possible candidates for the category COMP (Complementizer) are the relative marker wàarà (see Chapter 4, section 2.1) and the reported speech introducer màà (section 5 below). I have suggested that the former is transformationally introduced and thus could not be a member of a lexical category. While I do not have a satisfactory analysis for the latter, I point out that it is not only used before reported speech but also when stating a name (see Chapter 3, section 4.2). A proper name could hardly be considered a complement sentence.

2. Properly assigning and labelling derived structure has always been a problem for transformational grammar, but it has been largely ignored. Various students are now turning to this problem, however. For example, Kac (1970) proposes that, in effect, the Phrase Structure rules step in after each transformation and reassign the correct structure.

3. The only example I have of this verb is the following:

(i) ká rde-naa déga-k dévù bii-n, dà ya-n-saci ii wënduwa

'if you don't stop following the road, you will reach home'

It is impossible to tell on the basis of this example whether -nàa is a transiting suffix added to the intransitive root rde 'to stop' or if the verb is used intransitively and nàa is the preposition 'with', giving something like 'if you don't stop with (you) following the road ...'. Cf. verbs in (46) which take nàa before complements.

4. Twàwa 'forget' can probably be used with a different subject in the sense 'I forgot that he didn't know Ngizim'. I have no examples of this type of sentence, but in any case it is factive while the sense intended in (4) is not.

5. This statement should be taken as tentative, based as
it is, on a relatively small number of examples from texts. Note that the two verbs taking Imperfectives are statives. This is not necessarily a characteristic of statives, however, since other statives (e.g. märweye 'be afraid', zëga 'know') usually take Perfective.

6 The verb Vive 'leave, quit doing' can be used with a different subject from that of the complement in the meaning 'allow'. See (51) and examples following (51).

7 Yika and láune are suppletive forms for 'see'. The root yika cannot be used in the Imperfective and moreover is shortened to k- for most speakers in the Subjunctive, Second Subjunctive, and Imperative. The root láune is used in the Imperfective and can also be used in other aspects though it rarely is.

8 Another verb which appears to be followed by an object and nominalized complement is dëka 'exceed, surpass' when used in a sentence like 'John exceeds Bill in running' (= 'John runs better/faster than Bill'). The following examples were found:

(i) dëka-d ii bii-k alheefi-n ndaawa tawan?

'which people get the most good fortune?' [exceed in getting good-fortune which people?]

(ii) Mai Zobee dëka-naa taaba tawanke ii masa aa daa pata

'Mai Zobe exceeds all (other) tobaccos in sales [selling] in villages'

Sentences like (i) and (ii) cannot be derived from sentences with underlying complements. What appears to be a complement is actually a verbal noun inserted as is in the deep structure. It cannot have had a sentential source since neither the subject of dëka nor its object could have been the subject of the complement verb. A sentence Andu dëka-naa Iisa ii rawa 'Andu exceeds Isa in running' cannot mean "Andu exceeds Isa with respect to Isa's running' nor "Andu exceeds Isa with respect to Audu's running'. Sentences like (i) and (ii) are structurally the same as sentences like Andu dëka-naa yu ii awayaunu 'Andu exceeds me in strength' (= 'Andu is stronger than me') where the noun in the ii-phrase is inserted in the base, not derived from a sentence.

9 The reason for this restriction may have to do with a
structural confusion which might result. Note that a sentence like (55) could potentially be interpreted as an equational sentence having full sentences for both subject and predicate. But sentences of this type are impossible in English and probably universally: "*that they didn't pay attention is that it caused the accident'.

10 A fourth structure would be S nén Cleft. English sentences corresponding to this would be clefts of the "what" clause of pseudo-clefts, which are ungrammatical: "*it was what caused the accident which was that they didn't pay attention' (< 'what caused the accident was that they didn't pay attention'). This structure is also impossible where a simple NP is substituted for S: "*it was the one who hit John who was Bill' (< the pseudo-cleft 'the one who hit John was Bill'). Though I didn't check this with informants, I assume such structures are also ungrammatical in Ngizim.

11 See Chapter 5, section 5 and fn. 16 for comments on this rule. It will be seen below to have wider application than pseudo-clefts alone.
Chapter 8

SENTENCE LEVEL ADVERBS

conditionals, time adverbials, topicalized noun phrases, purpose and reason adverbials

0. Introduction

A number of types of adverbial constituents are introduced by base rule (1). The constituent \( \text{ADV} \) is expanded in (2) and the relevant expansion for the \( \text{NP} \) of rule (2) is given in (3). Expansions of other categories are given in Chapter 3, rules (1)-(10).

(1) \( S \longrightarrow \text{NP} \quad \text{PRED} \quad (\text{NEG}) \quad (\text{ADV}^*) \)
(2) \( \text{ADV} \longrightarrow (\text{CONJ}) \quad \text{NP} \)
(3) \( \text{NP} \longrightarrow \{ \text{S} \} \quad \text{DE}\text{T} \)

\( \text{NOM} \) will be further expanded to give simple nouns and nouns plus various types of adjuncts such as relative clauses and associative phrases (see Chapter 4, rules (1)-(5).

\( \text{ADV} \) of rule (1) includes a semantically diverse group of constituent types. These include conditional clauses (of three types), temporal adverbs (clausal, phrasal, and simple), reason (explanatory 'because') clauses and phrases, and topicalized noun phrases.\(^2\)

The main justifications for grouping such constituent
types together are syntactic, as I will demonstrate. They
do have a certain semantic commonality as well, viz. they
all state antecedent conditions to the main clause, bring
into the foreground some aspect of the main clause, or both.
Following J. Schachter (1971), we can refer to the adverbial
constituent as the antecedent and the main clause the consequent, or simply the main clause.³

Before turning to syntactic characteristics of these
sentences, let me call attention to the asterisk on ADV in
(1), intended to indicate iterative application. This will
give sentences containing two or more adverbs which are
daughters of S.

(4) gusesku, gaada-k ná 'yawu wunya gaama, kure-naa yu
temporal reason
'now, because I have borne a girl child, he rejects me'

(5) bee waara am-k aka bane-n, am geji áa bena-w
topicalized indef. NP
naa kaanaadi-n
simple conditional
'whatever hot water cooks, cold water will cook if
there's patience'

(6) ká sa-naa aagaw-ge degem nen, kà nci biij yasye, kàa ya
simple conditional concessive condit.
iì ŋa
'if you drink the chief's gruel, even if you don't want
to, you will go to war'

In a more refined grammar, there would have to be restric-
tions on the iterability of ADV, and probably on the
surface order and even relative dominance of adverbial types derived by iterative application. I will not attempt to formulate such refinements here.

Let us turn now to the syntactic justifications for grouping all these adverbial types together. Two facts indicate that ADV in (1) must be at least a sister of the main clause constituents, i.e. it cannot be a daughter of, say, PRED. The first such fact has to do with negation of the main clause. Negation is marked by a single bái at the end of the clause to which negation applies. Whereas negation of the main clause always follows adverbs analyzed as being part of the predicate (locative, instrumental, manner, purpose), it always precedes those adverbs introduced in (1) if the ADV has not been fronted.

(7) wàa dlama wana bái amžaru  (temporal)
    'we won't finish the work tomorrow'
(8) ãa sa-k sema bái ká bar ii-ci-n  (simple condit.)
    'he won't drink beer if you give it to him'
(9) kwärbe gwadanu bái gaada kuram tatle-n-gara (reason)
    'he didn't dig up peanuts because his hoe broke'

But cf.

(10) tefe ii menduwa bái  (locative)
    'he didn't enter into the house'
(11) ná karme dem-gu naa gawa tku bái  (instrumental)
    'I didn't chop the wood with this axe'
If the negative marker in (7)-(9) were put at the end of the sentence, the sentences would be grammatical but interpreted differently, e.g. 'he dug up peanuts because his hoe didn't break'. If bái preceded the adverbs of (10) and (11), the sentences would be ungrammatical. (Negation and its scope are covered in Chapter 10.)

There is a second fact suggesting that ADV must be directly dominated by S, not by some lower constituent, viz. the freedom with which such adverbs may appear sentence initial or final. Sentence initial position is favored by all these adverbs, and it is obligatory for some types. Sentence initial position is a foregrounded position. Since all the adverbial types considered in this chapter express some sort of antecedent condition for the event in the main clause, it is not surprising to find such clauses or phrases foregrounded. However, there is no strong systematic meaning difference associated with fronted adverbs as opposed to those left sentence final. This is explained by the fact that simple fronting of a direct daughter of S produces no change in dominance relations. (Underlining in the following examples is for expository purposes, not emphasis.)

(12)(a) nàa masa keekee-gu dee-du-n
'I'll buy the bicycle if he brings it'

(b) dee-naa keekee-gu-n, nàa masa-w
'if he brings the bicycle, I'll buy it'
(13)(a) nák aci gusesku 'I see him now'

(b) gusesku nák aci 'now I see him'

(14)(a) ndáa nema-k araakau gaada-k aayu-k wayak 'one weaves a net (used as a trap) because of next year's gazelle'

(b) gaada-k kemangaŋ kaán ká danki buuge 'because of wickedness you sew a quilt armor'

There is further evidence that fronting of sentence level adverbs involves a simple "swiveling" of the ADV branch to the front of S, not movement out of some lower constituent. Within a subordinate clause, a fronted ADV moves only to the beginning of the clause, not to the beginning of the highest sentence. Such constructions as are seen in (15)-(17) are fairly common in Ngizim.

(15) (conditional clause within relative clause)
afku dá pi-d ii-tu dababar ak waaña, atu ji nen, dá gaaya ii da-w

'her father erected for her a platform which, when she went, she would mount on top of'

(16) (simple time adverbial in 'because' clause)
kwa degi ja gaada-k kullum mese-gaa dá dega-gaa

'follow us because always my husband is following me'

(17) (concessive conditional in negative purpose clause)
wáa da gaafru wá vaiki-naa d-aawa naa gaafru-w gaada-k nda-k ŋa dée yaañe, dáa ba dá dlama kanasaŋ kade naa wa bal

'let's build a wall and encircle our town with the wall so that even if war makers come, they won't manage to gain a victory over us quickly'
In contrast with sentence level ADV, ADV in the predicate (locative, instrumental, manner, purpose) cannot be fronted in normal speech. Noun phrases within such adverbs can be topicalized – see section 8.3 – but the adverb itself cannot be. Since movement of a predicate level adverb out of the predicate would radically alter the structural relations of the sentence, a well-defined and systematic change of meaning would be the expected result, e.g. the difference between cleft and neutral sentence. It happens that Ngizim has no provision for clefting such adverbs (cf. Chapter 5).

There are syntactic features which are internal to the adverb itself, which are shared by sentence level adverbs. For most clausal types having verbal predicates, the verb phrase is limited to two aspects: Imperfective, and a second aspect with a Perfective meaning. In some cases, an aspect other than Perfective itself may be used, but except for reason clauses, the three or four way aspektual distinction of main clauses is not possible. The semantic correlates of this two way aspektual distinction will be discussed in section 1.2.

The second internal syntactic feature shared by sentence level adverbs is what I have decided to characterize as definiteness and indefiniteness. This distinction will be discussed and illustrated in detail in section 1.1. Briefly, this distinction is based on the ability of all
these adverbial types to appear with a formative nán, which has certain properties of an indefinite determiner. Note that ADV always directly dominates NP, which in turn has an obligatory determiner.

A third feature shared by all clausal ADV, though not restricted to S within ADV, is the possibility of nominalization. Nominalized adverbs will be covered in section 7.

Certain features of the main clause are relevant to the discussion of sentence level adverbs. Most important for present chapter is whether or not the main clause is imaginative, i.e., whether or not it relates propositions about the real world. This is covered in section 2. The second important syntactic feature of the main clause relevant to the interpretation of antecedent adverbs is the aspect. In fact, predicate types in main clauses are pretty much unrestricted except for certain, probably universal, restrictions, such as disallowing imperatives and performatives in imaginative main clauses. Predicate types and the uses of the verb aspects are covered in separate chapters so examples will show all main clause predicate types without comment.

The development of the remainder of this chapter is as follows: first, simple conditional clauses and related 'when ... then' sentences will be used to illustrate the basic Imperfective/Perfective verb aspect distinction and Indefinite/Definite distinction of antecedent adverbial

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clauses. Following this, the imaginative/real world distinction will be discussed. Concessive conditionals, which share features of both imaginative and real world sentences, will then be covered. With this background, each of the remaining types of adverbs which may appear as ADV in rule (1) will be discussed. In the order discussed these are temporal adverbial clauses other than 'before', 'before' clauses, simple time adverbs, indefinite and definite topicalized noun phrases, and reason clauses and phrases, which are compared to purpose clauses and phrases.

1. Simple Conditionals and 'when ... then' Sentences: Illustration of the Basic Clausal ADV System

1.1. The Indefinite/Definite Distinction

Ngizim has no obligatory conjunction(s) translatable as 'if' or 'when'. A word ƙaƙaƙa, translated into Hausa as in or in dai 'if', is occasionally heard.

(18) ƙaƙaƙa kwá yka-naa aci-n, kwá ndem aci

'if you see him, greet him'

This word has extremely low textual frequency, and was rarely, if ever, volunteered in rendering 'if' sentences during informant sessions. Instead of a clause initial conjunction meaning 'if', a formative which I will cite as némon appears at the end of the clause. Némon has the shape [ʔn] after the vowels i, u, [ə], and a, and the shape [némon]
elsewhere. The tone mark preceding -n indicates that a low tone preceding -n is raised to high.

Before continuing the discussion on nën, I will give a number of examples of simple conditional sentences. Notice that Ngizim makes no formal distinction between what J. Schachter (1971, p.63) calls "unreality" conditionals of the "future simple type", translated with 'if', and what we might call "reality" conditionals, translated with 'when' or 'whenever'. The 'if/when' distinction in English relating to future events, seems to be one of uncertainty versus certainty. In Ngizim, this distinction is left to context. Formally identical sentence types in Ngizim can also be used to refer to events of the past, often translated by English 'whenever' + past tenses. This stems from the fact that the Ngizim verbal system is not one of time. Thus, clauses used to express conditions may indifferently express conditions of past, present, or future events. Nën is underlined in all examples to aid in locating it.

(19) ká ji ii Senaarin-ñ, káa nii bai gaada-k pedem yaaye
     'if you go to China, you won't come back because it's so far'

(20) ká rde-naa aci bii-ñ, dà kii'yi-naa tluwii-gu
     'if you don't stop him, he'll eat up the meat'

(21) ká tasa daa bal naa kuteñ nën, à maaki awai ká debi
     ii gudledliy-çi
     'if you find that everybody in town has a tail, look
     for some leaves and put them on your back'

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(22) ká yka-w nén naa kaceu nén, bande suwaari gafa-w bai
    'if you see a person has expertise, he didn't start
dancing on that day'

(23) yuwan ma kunu bii-n, áa ma-¨k da bai
    'if sleep doesn't take the stomach, it won't take the
eye'

(24) kwitaawa tawanke bau ndá ji-du ii da-¨k afa-n
    'any gauta tomato will be red if one takes it into the
sun'

(25) aker iika miya-¨k sau darepta-n, áa tfa
    'if a thief sees the door of a hut open, he will enter'

(26) ram ii-kem nén, kà kunda bai
    'when she tells you, don't put it off'

(27) masyim iika lakoodi-n, sai dá rami-n-geri
    'when(ever) a boy sees a whip, he runs away'

(28) jagadlau ba bii-¨k ta aa dus bii nén, dá verai ii patata
    'when(ever) the lion doesn't find food in the forest,
he'll come out on the plain'

(29) nà mase-n, nàa dëdda-w naa taaman aa rii thru
    'when(ever) I buy (things), I sell them for a profit
in that place'

(30) Benderkuuku ji ii bara-n, nda-k d-aakˇi áa dlama-naa
tera, tiiye áa kida-¨k tluwai
    'whenever Benderkuuku went hunting, the people of his
town would spend a month (with) everybody eating meat'

It is tempting to simply consider nén to be the con-
junction if, suffixed to the clause rather than prefixed.
This is clearly not correct, considering the broader frame-
work of Ngizim grammar. In the first place, as we shall
see in most of the following sections, nán appears after many types of clauses which are not conditional clauses in the narrow sense of the word, and indeed it can even appear after simple nouns. Secondly, by rejecting the 'if' analysis of nán, we can integrate the analysis of those clauses translated as simple conditionals with formally similar sentences which I refer to as 'when ... then' sentences.

What, then, is nán if it is not a conjunction? I suggest that nán is an indefinite determiner, which may appear at the end of adverbs by virtue of their being noun phrases. The semantic correlates of indefiniteness are of two sometimes overlapping types. Nán may indicate that the proposition expressed in the antecedent has not yet been enacted, or has not been enacted at some time of reference. This interpretation is seen in (19), (20), (26), and several others. Nán may also indicate that the proposition expressed in the antecedent has general relevance, i.e., it does not represent a single enacted event, which would be the definite case. This is seen, for example, in (30). As the translation indicates, based on the context from which this sentence was taken, a number of separate hunting events took place. The interpretation of (30) does not encompass the "futurity" meaning of nán, but a number of the examples, e.g. (21)-(25), could indicate futurity and/or general relevance.
Simple conditional clauses in Ngizim, then, are simply indefinite antecedent adverbial sentences. In contrast to these sentences are sentences with definite antecedent adverbial clauses. I will refer to these as 'when ... then' sentences. As with simple conditionals, the adverbial clause of a 'when ... then' sentence has no obligatory clause initial conjunction. I have found only an extremely small number of textual examples which might be construed as definite antecedent clauses with an introductory conjunction.

(31) afek wunya, dagadee tenu, då gaayi ii da-k dabarank
    'the girl's father, when he arrived, climbed on top
    of the platform'

The conjunction dàgâ is a borrowing from the Hausa preposition dâgâ 'from', and was found in texts from only one informant. In contrast, I have many hundreds of textual examples of the 'when ... then' type with no conjunction.

The adverbial clause of 'when ... then' sentences usually ends with ténú or ngûm, which I take to be definite determiners, in contrast with the indefinite nén. It is not surprising, however, to find occasional examples with no overt determiner. Ngizim, with other Chadic languages, does not usually require noun phrases to have overt determiners.?

(32) jà yka aci tenu, jà ndem aci
(32) 'when we saw him, we greeted him'  
(33) jagadladlin kema ngum, dá rakai ja  
   'when the lions heard (that), they chased the dog'  
(34) ñaa tlanu, ndâ zagem-naa sêma-w  
   'when it dawned, they poured out the beer (as an  
   ablution)'  
(35) ná ziide gwamak, dá nyi-du-n Ñemza  
   'when I slaughtered the ram, it was Ñemza who  
   skinned it'  
(36) ndâ yka aker tenu, waakate-n tam?  
   'when one saw the thief, what happened?'  
(37) deë tenu, ndëm aci-n tai?  
   'when he came, who greeted him?'  
(38) aayu reme-n-geri tenu, mezam maaku ba bai  
   'when the gazelle escaped, the hunter didn't look for  
   it'  
(39) atu mbasu tenu, atu ña daanau atu ña daanau  
   'when she sat down, she kept crying and crying'  

The antecedent in 'when ... then' sentences always  
refers to a specific enacted event. A clear illustration of  
how this can be interpreted as definiteness is seen in a  
type of narrative style where each sentence resumes the  
immediately preceding event, i.e., a definite or previously  
referred to event, before continuing with the following  
event. The adverbial clauses are underlined.

'On the arrival of her daughter's husband, they went and sat down and exchanged greetings. When they had exchanged greetings, he went and caught a goat. When he had caught the goat, he slaughtered it. When he had slaughtered it, he skinned the goat and it was cooked for her.'

Adverbial clauses of the type illustrated in (32)-(40) obligatorily appear in sentence initial position. Semantically equivalent definite 'when' clauses appearing S final are always expressed by a relative construction of the type 'the time when ...' (see section 8.2). This restriction seems to be the result of limiting clauses of this form to the first of actions in a sequence. A further consequence of this restriction is that the main clause nearly always appears in the sequential, as in (32)-(35) and all the sentences of (40). The sequential cannot appear in questions, (36)-(37), or in negatives, (38). Example (39) is an extremely rare case of an Imperfective in the main clause of a 'when ... then' sentence.

Perhaps slightly more justification for considering nén, ténú, and ngúm to be determiners is in order. Turning
first to ténú, we find it used elsewhere in a determiner function to mean 'the ... previously referred to', (see Chapter 4, section 5.2). It is rarely used with a simple noun, but it is frequently found in the "previous reference" meaning with a noun + relative clause, e.g., gaskam waafa daa mangiina naa gayim tenu 'that (previously referred to) rooster who was friends with the cat'. Ténú also fills a formal slot in the larger system of determiners in Ngizim (see chart on p.172). I have no independent justification for analyzing ngûm as a determiner other than its equivalence with ténú in constructions such as those above.

The evidence for the indefinite determiner status of nón is somewhat more tenuous than for ténú. It is never used as an indefinite determiner in a non-adverbial noun phrase. However, elsewhere in the Ngizim-Bade subgroup of Chadic, such a formative is used on all nouns which are not modified by some other direct nominal adjunct such as a definite determiner or associative noun phrase. Thus we find in Bade vak-én 'hole' (cf. Ngizim vak), dagâ-n 'arrow' (cf. Ngizim dagá), bâdlâmâ-n (cf. Ngizim bâdlâmû). Lukas (1968) argues that this -n which appears on the Bade nouns is a mark of indefiniteness (der unbestimmten Form des Nomens). Without further pursuing this here, I suggest that Bade gives evidence for an indefinite determiner -n within this subgroup of Chadic, and that furthermore, this determiner is preserved in Ngizim as an enclitic to certain
adverbs. 8

1.2. Verb Aspects in the Adverbial Clause

Only two verbal aspects are possible in simple conditional and 'when ... then' clauses: Perfective and Imperfective. Simple conditional clauses may be either affirmative or negative. The adverbial antecedent of 'when ... then' sentences apparently can only be affirmative. At least, I have found no examples and unfortunately have no record of having tried to elicit negative adverbs of this type. This is not unexpected, given the "first of a sequence" interpretation of such clauses, i.e., a negative event cannot be part of a sequence. The semantic correlates of these aspects are straightforward. If the adverbial clause is in the Perfective, the event has begun and ended before the onset of the action in the main clause. All the examples in the preceding section have Perfective adverbial clauses. Thus, in (29), the buying must be completed before the selling can begin, and likewise in (32), we had to have seen him before we greeted him. If the adverbial clause is in the negative, a paraphrase in English using weak negation will show why the Perfective is used. For example, by paraphrasing (23) as 'if it's not the case that sleep has taken the stomach, it's not the case that sleep will take the eye', we see that the event of the adverbial clause must be complete before the event of the main clause can take

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place. Finally, some stative verbs, such as 'know', 'see', 'hear' usually are used in the Perfective. For such verbs, the completedness interpretation may not be relevant, e.g. in (22).

The Imperfective used in adverbial clauses indicates incompletedness of the event in the adverbial clause with respect to the event of the main clause. Incompletedness may sometimes be interpreted as futurity, i.e., the action in the adverbial clause has not begun at the time the event of the main clause takes place.

(41) daacii, áa nii-n-gerti ii wunduwa-n, dáa mi gayi dá dlagi ii ñi-k 'yuwa-gerti
    'then, when he is going to go home, he takes one and straps it under his arm'

(42) kwáa zaata-n, kwá ma tema-w da gater-gu bai
    'if you're going to pound, don't take the mortar from its place'

(43) ... kaa ke ndáa tawas aaku ndáa ziida-w nen
    '... as one ties up a goat when one is going to slaughter it'

(44) ndáa ya ii karam dem, sai ká r'yi-naa yu
    'I was \{going\} to chop the wood when you stopped me'

(45) áa ya ii sa-k am, sai dáa ki-naa bee dagai aa kunu-w
    'he was \{going\} to drink the water when he saw something in it'

Incompletedness may sometimes be interpreted as pro-
gressive action, i.e., action continuing up to and usually overlapping, the event of the main clause.
(46) maamu-gara áa zaata-n, áa ruwa maa ...
   'while her children were pounding, they were singing
   saying ...'

(47) káa nii nén, nen gayi dá degai ci
   'when you're coming, a man should follow you'

(48) devid kwáa yuwan nén, náa nii ná āanji bedla-k vek ii
   akuu wunduw-aakun
   'at night while you're sleeping, I will come and
   begin to dig a hole behind your house'

(49) bedlamu áa bedla-w ñgun, kaayak dá pakai dá rii āaama
   'the hyena was digging away, when the squirrel popped
   out from another place'

(50) náa teka wana aa asek, sai náa kem laabaf tku
   'I was busy at work in the market, when I heard that
   news'

(51) áa raakan, dáa ki viida
   'they were traveling along, when they saw a rabbit'

There are a few stative verbs, e.g., 'be able', and
'want', which nearly always appear in the Imperfective.
The incompleteness interpretation may not be relevant to
these verbs.

(52) kwáa demuu-du-n, kwá yi kwáa kai bee waafa áa dlama
    ii.kun
    'if you can, go and see what he will do to you'

(53) ká nci-du-n, áa bi ŕau
    'if you want it, shit!'

1.3. Non-Verbal Predicates in the Adverbial Clause
The full range of non-verbal predicates can occur in the antecedent adverbial clause. All non-verbal predicates are stative, so the Perfective/Imperfective distinction is irrelevant. Following are examples of non-verbal predicates in simple conditionals.

(54) maayim, suu fər-aaci-n, gaafa kāa mētu
'.my boy, if that's your illness, someday you're going to die'

(55) ci naa rugżi-n, à waay ii kam-ci
'if you have fertilizer, spread it on your farm'

(56) akši dar'yi-n, dà mbasa-n-aakši
'if they're standing, they should sit down'

(57) in daa tku naa duwa bii-n, ndaawa āa bii-k am nana?
'if there's no well in this town (if this town has no well), how do the people get water?'

Non-verbal predicates are unusual in the antecedent adverbial clauses of 'when ... then' sentences, again because such clauses are used to indicate first of a sequence of actions and statives cannot normally be interpreted as part of a sequence. Unfortunately, I have no record of having tried to elicit such sentences. I have found only the following single example in a text.

(58) daaci, akši dambasu ṣgum, atu maa ...
'well, they were seated, when she said ...'
1.4. Nominalized Clauses

Nominalized conditional and 'when' clauses will be considered together with other nominalized temporal adverbs in section 7.

2. Imaginative Sentences

J. Schachter (1971, p.66) makes the following distinctions within unreality conditionals:

(59) **Unreality conditionals**

1. Future simple conditionals
2. Imaginative conditionals
   a. Hypothetical conditionals
   b. Counterfactual conditionals

The way Ngizim forms "future simple conditionals" was seen above. As in English, there is a formal distinction in Ngizim between future simple conditionals and "imaginative conditionals". This distinction conforms to the semantic distinction noted by Schachter: "... although the future simple conditional is like the imaginatives in indicating unreality, it differs from them in that it is never used to indicate divergence from this world; it is used to make claims about what this world will be in the future."

(J. Schachter, 1971, p.68).\(^9\)

One change from Schachter's terminology will be made. Where she refers to "imaginative conditionals", I will
substitute "imaginative sentences". It is not the condition-
al clause which is imaginative, but the entire sentence. ¹⁰
Imaginativeness is marked by a modal adverb, dàa, at the
beginning of the main clause. There are two reasons for
considering imaginativeness to be a property of the whole
sentence rather than just the conditional clause. First,
hypothetical or counterfactual sentences marked with dàa
alone are possible.

(60) dàa ná mas albasaŋ gaawa
    'would that I had bought a lot of onions'
(61) dàa ża tku tla bai
    'would that this war had not broken out'
(62) dàa dlame-n-gara belan
    'that would be nice' [dàa it-became nice]
(63) dàa á ngestu bai
    'would that he not be late'
(64) dàa afek-gaa naa dagwda gaawa
    'would that my father had a lot of money'

A second reason for considering imaginativeness to be
a feature of the entire sentence is that the adverbs that
may appear in such sentences need not be conditional clauses.
Imaginative sentences with adverbs other than conditional
clauses will be illustrated in 2.2.
2.1. Imaginative Sentences with Conditional Clauses

The same four way distinction is found for conditional clauses of imaginative sentences as for conditional and 'when' clauses of neutral sentences, i.e., any of the four possible combinations of aspect and determiner in (65) appear to be possible, (but cf. comments following (76)).

(65) Aspect of ADV        Determiner on ADV
     Second Subjunctive    Indefinite (nén)
     Imperfective         Definite (Ø, ?ténú, ?ngûm)

The only difference between the schema discussed in section 1 and that given in (65) is the use of the Second Subjunctive in place of Perfective in the conditional clause. Rule (66) will account for this. This rule has been formulated so as to apply if the adverbial clause is sentence initial, the overwhelmingly most common position for such clauses. To account for sentences where the adverbial clause has been left sentence final, as in (83)-(89), rule (66) will also have to apply if 1 and 2 of the rule are in reverse order.

(66) Second Subjunctive for Perfective

\[
\begin{align*}
\ldots & \quad V \quad \ldots \ 
[\text{perf}] & \quad \text{ADV} & \quad \text{dàa} & \quad \ldots \ 
\logytyx{1} \quad \ldots \ 
\logytyx{2} \quad \text{ADV} & \quad 2 \quad \ldots \\
\logytyx{1} \quad \ldots \\
\logytyx{2} \quad \ldots \\
\end{align*}
\]

In contemporary Ngizim, the Second Subjunctive functions principally as an obligatory replacement of the Subjunctive

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in the negative and as a command form for first and third persons, corresponding to Imperative in second person. Historically, the Second Subjunctive as used in imaginative conditional clauses is a continuation of a previously formally distinct Unrealized Perfective. That this is so is seen in Bade, which retains a formal distinction between Perfective, Unrealized Perfective, used as a replacement for Perfective in negatives and counterfactual conditionals, and Second Subjunctive.

(67)(a) (Ngizim: Second Subjunctive)
\[ \text{dà peluuta-}d \text{ aa-n, daa nà mase kařee-geri} \]
'if he had reduced the price for me, I would have bought his goods'

(b) (Bade: Unrealized Perfective)
\[ \text{aci peluutaata kwaya, na mase karee-ri} \]
'if he had reduced the price, I would have bought his goods'

(c) (Bade: Perfective)
\[ \text{aci peluute kwaya, na mase karee-ri} \]
'if he reduces the price, I will buy his goods'

(d) (Bade: Second Subjunctive)
\[ \text{aci de peluuta} \]
'he should reduce (the price)'

Following are examples of each of the four aspect-determiner combinations of (65). The meanings will be seen to be compatible with the explanations given in sections 1.1 and 1.2. In these examples, the indefinite/definite
distinction correlates in part with the hypothetical/counterfactual distinction of (59). Where it does not correlate is where the indefinite marker nén indicates that the proposition in the conditional clause has continuing or repetitive relevance, as in (70). That is, (70) has a clause marked by nén, but it is counterfactual, not hypothetical. Apparently the reason it has a "nén-clause" is that the events expressed had continued relevance. You will notice that some of the adverbial clauses are introduced by dâa. This will be explained below.

Indefinite determiner; Second Subjunctive (Perfective meaning)

(68) dâa ama gayi dâ'iyawa matkam gemas k nén, dâa atu åa lawan-nâa ñtau
    'if one of my wives were to give birth to a boy child, she would see real love'

(69) kâ ta aben-gu-n, dâa kâ mte-n-saci
    if you were to eat that food, you would die'

(70) nâa zëga-du-n, dâa nà dlam-nâa kaanaadi
    'if I had known, I would have been patient'

Indefinite determiner; Imperfective

(71) jagadlau âa biina bii-k ta aa dus nàn, dâa veree ii patata bai
    'if the lion were getting food in the bush, he wouldn't have come out on the plain'

(72) guve âa lawan nên, dâa âa lawan-nâa mantuu-geri
    'if a corpse could see, he would see his (true) friends'

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(73) kāa tēfa-k kwāf-aaci bii-n, dāa dłemte-naa masanmi-gaa

'if you didn't fetter your donkey, he would ruin my corn'

(74) dāa kāa bii-naa gēṣi-k bedlamu nēn, dāa gusku adla-w āa wuna aa tek-aaci bai

'if you were to get some hyena heart, that cough would not be with you past tonight' [...today that cough would not spend-the-night in your body]

Definite determiner; Second Subjunctive (Perfective meaning)

(75) mēs-aanai dā mta aa wunduwa maa,⁴¹ dāa ada-w nā dlam-du ii kurtu ...

'if my husband had died at home, then his head I would have made into a water gourd ...'

Definite determiner; Imperfective

(76) kāa bii-naa tluwii-k bedlamu, dāa kāa zēgi-du kaŋgun wara

'if you had been getting hyena meat, you would know what real medicine is'

Examples (75) and (76) are the only imaginative sentences that I have so far found which have what appear to be definite conditional clauses without any determiner. I have found none with the definite determiners tēnu or ngum. On the other hand, there are sentences like the following, which appear to be interpretable as having a definite adverbial clause, yet which have the determiner nēn.

(77) dā deka-naa yu awayuu-n, dāa karbe-naa yu
(77) 'if he had been stronger than me, he would have thrown me down'

(78) ꜱà redla aw nën, daa ꜱoome-n-gara
    'if you had wetted the guinea corn, it would have fermented'

The facts just cited make me question whether the definite/indefinite distinction is relevant for imaginative sentences. In a sense, conditional clauses of imaginative sentences can never be definite, since by definition they cannot refer to an enacted event in the real world. We will see below, with various types of temporal clauses and with reason adverbs, that it is possible to express clauses which are "indefinite" under the definitions here, without using the determiner nën. It may thus be the case that conditional clauses in imaginative sentences are always automatically indefinite, and sentences like (75) and (76) have optionally omitted the indefinite determiner.

Non-verbal sentences are possible in imaginative conditionals:

(79) daa ii ḍege ꜱaʁwana-n, daa ṣagii-wa-w ḏa ta ᵍuma
    'if I were the chief of Bornu, this land of ours would progress'

(80) daa ii naa dagwda-k kafere ttku-n, daa ná masu
    'if I had the price of those goods, I would buy them'

(81) dlabɑ kwam datakwasa bii-n, daa rarka kun
    'if the bull were not tied up, he would chase after you'
(82) dà dlaňa Gauži ãa menduwa-n, daa jà dlam skookuya naa aci  
'if Gauzhi were at home, we would chat with him'

Some Chadic languages, e.g. Kanakuru (cf. Newman, 1972, p.8-19) require that imaginative conditionals be sentence initial. This is not obligatory in Ngizim, though sentence final is even less common for imaginative conditionals than for other types of sentence level adverbs.

(83) daa aw ãa žoomu-n-gara kà redla-du-n  
'the grain would ferment if you moistened it'

(84) daa am cacpe-n-gara vek dà daasa-n-gara-n  
'the water would have collected if the hole had plugged up'

In verbal main clauses of imaginative sentences, only the Perfective and Imperfective aspects are allowed, the Subjunctive in all its uses (sequential, exhortative), the Imperative, and the Second Subjunctive being specifically disallowed. These restrictions are undoubtedly of a universal nature, being reflected in English, for example, where imperatives and performatives are disallowed and where the verb of the main clause must have a past tense form (cf. J. Schachter, 1971, p.82). Exclusion of the Subjunctive in this environment is further discussed on page 277. Questions should be allowed in imaginative sentences, but unfortunately, I have no examples of this.

There are a few variations on how imaginative sentences
are marked. ñàá may optionally appear before the conditional clause in addition to the ñàá before the main clause. This was seen in (68), (74), (79), and (80). ñàá is obligatory before a main clause in the Perfective, but if the main clause is in the Imperfective and the conditional clause is marked by ñàá, ñàá before the main clause may be deleted.

(85) ñàá ñàá diína-naa gwadan-acci-n, ñàá ñdígala-du
    'if you were to bring your peanuts, he would weigh them'

(86) ñàá kàa r'yi-naa aci bii-n, ñàá kíìda-naa tluwii-gu
    'if you weren't to stop him, he would eat up the meat'

Sometimes the phrase ñà dìlàbá or simply dìlàbá introduces the conditional clause, e.g. (81)-(82). Other examples are

(87) ñà dìlàbá kàa taká mbiikda-w nen, ñàá gaáde ci
    'if you had stepped on that snake, he would have bit you'

(88) (ñà) dìlàbá kwáa níi iì Kano wayak nen, ñàá kwáa lawan gwadanu gaawa
    'if you were going to Kano next year, you would see a lot of peanuts'

Dìlàbá is the Second Subjunctive (< *Unrealized Perfective) for the verb dìlàbá 'remain, become', which is obsolescent in Ngizim. Apparently it means here 'if it were that ...'.

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2.2. Adverb Types other than Conditionals Used in Imaginative Sentences

It was stated above that one reason for considering the main clause or the entire sentence to be "imaginative" rather than the conditional clause was that adverbs other than conditionals may appear with imaginative main clauses. One fairly common type is a 'because' clause or phrase. Such phrases are always negated. Note that the entire phrase is negated, not just the predicate within the phrase. Such adverbials are often best translated in English as conditionals of the type 'if it weren't that ...'. The Ngizim structures are not conditional clauses in the more narrow sense of section 1.1 or 2.1, however.

(89) gaada-k dà dlamà am bii-n, maare'mâmâ maalancin dâa dlan salla
    'had it not rained, the main priests would have said prayers'

(90) gaada-k kwàa yiv-aaja bai baya,12 dâa nâa zëba-naa kem
    'if it weren't for the fact that you don't leave us (alone), I would marry you'

(91) gaad-aaci bii-n, dâa nâe mte nàa ñtuu-gë Zaara aa kunu-gaa
    'if it weren't for you, I would have died with the love for Zara still in my heart'

I have found a number of examples of adverbial antecedents in imaginative sentences which are not conditionals in the strictest sense. I hesitate to give them any label,
but believe they should be dominated by ADV. One particularly common locution is gázá ġáp 'almost, it nearly happened that' (= Hausa saura kadan). The verb gázá means to remain, be left over; ġáp means 'a little'.

(92) gázá ġáp, daa ná dée bai
   'I almost didn't come' [it remained a little, I wouldn't have come]

(93) gázá ġáp, daa ná tadeé-naa ańoo-gaa
   'I almost lost my life' [it remained a little, I would have released my life]

(94) wi-it-ańoo daa aaman-gu áa säkuna wam
   'between us our mutual trust would increase'

(95) baya, daa já náa bai
   'were it not for that we would be dead' [baya -see fn.12- us there would be none]

3. Concessive Conditionals

Concessive clauses are those translated by English 'even if', 'although', and related expressions, e.g. 'even though'. Roughly, the meaning of such sentences can be characterized as the proposition expressed in the main clause being true for the real world, regardless of the reality of the proposition expressed in the antecedent clause. Characterized in this way, we see that sentences containing concessive clauses share features of both reality and of imaginative sentences.

Concessive clauses are marked by yåayé (occasionally
ýé) at the end of the clause. This formative seems to preempt the clause final position from the determiners seen in neutral conditionals, effectively neutralizing the definite/ indefinite distinction.\textsuperscript{13} I have found only a single example of nén co-occurring with yàayé:

(96) jaayi-n yaaye, àa bar ii-tu deve-k nya bai
    'even if she asked, he wouldn't give her the means to go'

On the other hand, either gàafà, seen on page 329 to be associated with simple conditionals, or dà dlàbà, seen to be associated with counterfactuals (p.349), can occur at the head of a concessive conditional clause:

(97) gaafa jagadlau ji-d ii-ci tläri yaaye, àa kaluu bai
    'even if a lion came at him [brought to him] fighting, he wouldn't be afraid'

(98) aci dà dlàbà degem dùuniya yaaye, nà tad kunu-gaa naa aci bai
    'even if he were king of the world, I wouldn't get along with him' [...] I wouldn't release my stomach with him]

The following verbal aspects may occur in concessive clauses:

(99) \[
    \begin{align*}
    \text{Perfective} \\
    \text{Second Subjunctive} \\
    \text{Imperfective}
    \end{align*}
\]

The Imperfective has the expected meaning of futurity

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or progressive action with respect to the main clause. The
Perfective and Second Subjunctive share the perfective
meaning of action completed with respect to the main clause.
I have been able to discover no meaning difference between
Perfective and Second Subjunctive, both of which are common.
Clearly the variation results from the fact that sentences
containing concessive clauses share both real and imaginat-
ive features. If it turns out that Perfective and Second
Subjunctive are identical in meaning in concessive clauses,
Rule (66) will have to be extended in some way to allow
for optional substitution.

**Perfective concessive clauses**

(100) badiitu wana pedek-pedek yaaye, wana gaza-n-gara afa
aa gadaava

'even though he started working early in the morning,
work remained at midday'

(101) ndá dlam am bai yaaye, ndá dlam-naa zegem

'even though it hadn't rained, one did the planting'

(102) gaafa ná ba-naa ayuwa yaaye, ná ncũ

'even if I got a black one (wife), I'd like her'

(103) ká kure bembekši ye, káa mbas ii da-k bembekši

'even though you refuse your backside, you'll sit
on your backside'

(104) ... nda-k ža deye yaaye, dåa ba dåa dlama kenasaš
kadee naa wa bai

'... even if war-makers come, let them not manage
to win victory quickly over us'
Second Subjunctive in concessive clause

(105) jagadlau dåa tliina ii ađa-gëri naa tleri yaaye, këma kaluu bai
   'even though a lion jumped up at him [at his head] fighting, he felt no fear'

(104) ndå kaaktla bai yaaye, liijam ñëka-naa miya-k gaaza
   'even if one doesn't measure, (one knows that) a bridle is bigger than a chicken's mouth'

(107) kâ da-n-aaci pëdem ii kun pata yaaye, kâa bii-k aayu bai
   'even if you go far into the bush, you won't find gazelle'

Imperfective in concessive clause

(108) maya âa t-aakší yaaye, akší âa kiïa-gaa bai
   'even if hunger were killing (eating) them, they wouldn't eat me'

(109) dùuniya âa tlayi yaaye, diïsaw âa ñëgume-k aru-k zaabamu bai
   'even if the world comes to an end, the vulture won't equal the guinea fowl (in beauty)' [...the vulture won't pay back the communal labor of the guinea fowl]

(110) kâa kemuu-gu bai yaaye, kâa taši-k gumbak-ge dëdem naa ke ankwak
   'even if you won't listen, you're going to come across a lake of blood and one of pus'

(111) nàa lawan-gu dagai âa maaka-w soosii bii yaaye, nàa atu temu wam
   '(suppose that) I see that although someone is not really looking for it, he (still) has it?' (i.e. wealth)
Non-verbal sentences in the concessive clause (see also (98))

(112) kuku maarem yaaye, bata mënëni ii awayuu bai
   'even though the Baobab is big, it doesn't equal the
tamarind in strength'

(113) aci maayim yaaye, ndâ bara ii-ci
   'even though he's a boy, one should give it to him'

(114) naa aßen aa menduwa bai yaaye, ëa bar-d ii-ci agaw
   kà ści
   'even if there's no food in the house, he will give
you gruel to drink'

Concessive clauses can appear sentence final:

(115) makur-saci ëa gedlab-ci bai kà jiba jagadluu kà
   bar-aw yaaye
   'your enemy won't praise you even if you catch a
lion and give it to him'

(116) ëeke-ëu nà tambi laabař Birni iyù nàa zegaya-k
   laabař-gù ñënkata bai yaaye
   'it is best that I touch on the story of Birni, even
though I don't know the story well myself'

4. Temporal Adverbial Clauses Introduced by Conjunctions
   Other than 'before'

Temporal clauses may be introduced by a number of
conjunctions or conjunction-like words. Some of these are
åkù 'after' (= 'back'); ëå 'upon, after, when' (which may
be the Ngizim preposition ëå 'from', or a borrowing from
Hausa, where ëå has the range of meanings given); ìggà
'upon, after, when' (< Hausa ìggà 'from'); tén 'since'
(? < Hausa); ñëgì 'since, ever since'; tétën 'immediately
upon, just when' (< tétèa 'difficulty' + n; cf. English 'hard upon').

Such clause types are far less common than clauses with no introductory word, and in fact, the interplay of aspect sequence, determiner on the ADV, and adverbs within the adverbial or main clause usually serve to convey the distinctions other languages convey by means of different conjunctions. I don't have as full a range of examples as for other types of clauses. Examples will be restricted to clauses introduced by àkóó 'after'. All my examples are in the Perfective, probably necessitated by the meaning of the conjunction. The distinction between indefinite clauses with final nén and definite clauses can be observed.

**Indefinite** (action not yet realized)

(117) akúu wà ji-n-aawa-n, ña gamas wa

'after we leave they will laugh at us'

(118) akúu kwá ji-n-aakun nen, akši dà maaki kun

'after you leave, they will look for you'

**Definite**

(119) akúu wà ji-n-aawa, dà gamši wa

'after we left they laughed at us'

(120) akúu ná cacpe madlebak, ná gaume gadla nà yi-d ii aasek

'after I collected gamba-grass, I wove a zana-mat and took it to market'
An example with đagâ was seen in (31). This type of clause will be further discussed in section 7 which is about nominalization of adverbial clauses.

5. 'Before' Clauses

'Before' clauses are introduced by one of the conjunctions đambâ or kâabi. They are identical in meaning. The same four-way formal distinction observed above for conditional clauses is found in 'before' clauses, the only difference being the use of the Subjunctive rather than the Perfective. Whereas Perfective would indicate completedness with respect to the main clause, Subjunctive indicates incompletedness of the adverbial clause. This of course follows from the very meaning of the conjunction 'before'.

(121) Aspect of 'before' clause  Determiner on clause
    Subjunctive          Indefinite
    Imperfective         Definite

'Before' clauses may appear sentence initial or final, though sentence initial is by far the more frequent position, as with other adverbial clauses.

Indefinite determiner; Subjunctive

(122) kaabe tamatl dâ w'yi-n, jáa kâlba-du
       'before the mud dries, we'll plaster it on'
(123) kaabe kâ karmi dem-gu-n, kâ n'yi gawa-w
(123) 'before you chop the wood, sharpen the axe'

(124) wà palta-naa rai damba sauraucin-gaa dá nii nen
'let's change our place (of abode) before my in-laws come'

Indefinite determiner; Imperfective

(125) áa zaaman waaci, damba kàa bii dàa waaña nàa awayau
taa ke Berni-n, kàa ya ii pedem
'in olden times, before you would find a city which
had power like that of Birni, you would travel far'

(126) damba akši áa tlayi da rakii nen, kàa ìguura-w ñgum,
saw ndiiwa sa miya-k suu-ci dá jibi-naa ci
'before they could get up from bed, as you were
about to look up, there were men at your doorway and
they would catch you'

Definite determiner; Subjunctive

(127) kaabe nà yi ooifis, ndaawa tla-n-aakši
'before I went to the office, the people had left'

(128) dá jiba Ngwajin damba ndáa bi Mai
'let him take control of Ngwajin before one gets a
king'

(129) kaabe dá dlam aaman 25 tenu, dá 'yawi-n-gara
'before she reached 25 years (of age), she gave
birth'

(130) ndá dlam garva nawan damba ká dlami?
'how many reigns had passed before you became chief?'
[one did how many reigns before you did?]

Definite determiner; Imperfective

(131) damba áa nii tenu, ža tlarm-e-n-gara nàa Ngwajin nàa Mesau
(131) 'before he arrived, war had broken out between Ngwajin and Misau'

(132) atu ji tenu, kaabe atu áa kalaktayi tenu, sai dáá ji zanii-geri

'when she had gone, before she had returned, he removed his gown'

(133) damba Mai áa metu ngum, áa zegii-naa baaci dlama Mai da kuu-k Mai-gu

'before a king died, they knew the successor [the one who would be king] of that king'

The definite/indefinite distinction already described holds true for 'before' clauses in most instances. The indefinite determiner nón is restricted to use with clauses describing events that have not yet taken place, (122)-(124), or for past, present, or future events of general relevance, (125)-(126). The definite form, ténú, ngûm, or Ø, is used for single, enacted events, (127) and (129)-(130). However, (128) is a future event and (133) is a past event of general relevance, yet neither have nón. Both these examples come from a historical text, which may have some bearing. Equally likely is that there may be neutralization such that nón may appear with future or general relevance clauses, but is not obligatory, while the overt definite determiners can never appear with such clauses. In this case, it would be possible for the definite and indefinite clauses to be formally neutralized if no overt determiner were present. We will see examples of the same phenomenon with other types of adverbs below.
I have not been able to isolate a meaning distinction between Subjunctive and Imperfective in 'before' clauses. All examples of Subjunctive indicate a single event, rather than a continuing or iterative event. However, a number of examples of Imperfective also seem to require the "single event" interpretation, e.g. (131)-(132).

6. Simple Time Adverbs

A number of words can be used without a preposition or conjunction as temporal adverbs. A fairly complete list of these from my materials is given here:

gàftà tiyú 'day before yesterday'
gárvàcá 'yesterday'
gúsñú 'today'
ámžàrú 'tomorrow'
aràdágài 'day after tomorrow'
máadèvèn 'last year'
dàvànàngú 'this year'
wàyàk 'next year'
pèdèk 'early morning'
gáanyà 'late morning'
árà 'midday' (= 'sun')
ááliyádliyá 'mid afternoon'
ázàwà 'late afternoon'
dàgàdàwà 'early evening'
dèvíd 'night'

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fàtàwàn? 'when?'
wàací 'in olden times'
cáamâñ 'formerly'
sèřàm 'some time ago'
gúlséskù 'now'
gácâařé 'just now'
yáagì 'at this time'
gáafâ 'some day, some time'
dège 'first; (w. neg.) not yet

The indefinite/definite distinction is marked by the presence of absence of nèn respectively. No determiner is normally used in the definite cases because most of these words used alone are inherently definite in normal cases.

**Indefinite**

(134) gaafa dagai nèn èa damtau, gaafa-n èa pedem
'sometimes it was nearby, sometimes it was distant'

(135) zenzen, à ji ká wnyi ii waka-k mešemù tiyu; anžaru-n nà taanyì kem
(closing formula of folktales) 'oh folktale, go and spend the night on top of yon tamarind, tomorrow I'll remember you'

(136) dève-gu belan bai dèman-nèn
'that road is not good (during) the rainy season'

**Definite**

(137) gaafa-k viya-k teka ndáa debès zabuu bai
(137) 'on the day for taking a bath, one doesn't hide his belly-button'

(138) anžaru wàa ya-n-aawa wà ndeņai degem
'tomorrow we are going to greet the chief'

(139) nen naa bii-geri-n, âa ta-w dëvid naa afa
'if a person has the wherewithal, he'll eat night and day'

Compare particularly (135) and (138). Anžaru 'tomorrow' in (135) clearly means "some tomorrow", i.e., 'tomorrow' is used figuratively to mean the future. In (138), anžaru means 'tomorrow' in its normal sense. All examples of time adverb + nen are indefinite in the way those adverbs in (134)- (136) are. There is the same asymmetry noted for 'before' clauses however, since some adverbs interpretable as indefinite are not marked with nen, e.g. (139), or the sentence gaafa kâa mtu 'someday you will die'. The (a) and (b) examples of both (140) and (141), where the adverb is interpretable as indefinite, were said to be equivalent. But the (b) example of (142) was rejected by informants. This is predicted by my hypothesis that nen is indefinite, since Gusku 'today' must be definite.

(140)(a) gaafa dagai nàa lawan-geri =
(b) gaafa dagii-n nàa lawan-geri
'someday I will see him'

(141)(a) wayak ŋa âa dass-n-gara =
(b) wayak nen ŋa âa dass-n-gara
'next year this war will come to an end'
(142)(a) gusku akši àa kiida-k venaakau
   'today they will eat fish'
(b) *gusku-n akši àa kiida-k venaakau

7. Nominalization of Conditional and Temporal Adverbial Clauses

With the exception of imaginative conditionals and concessive clauses, all the adverbial clause types so far considered can be nominalized. This is accomplished by the rule of Nominalization seen in (1) of Chapter 7, and repeated here for convenience, in a collapsed form.

(143) (OPT) Nominalization

\[
\begin{align*}
\text{... } &[[ \text{NP [AUX V (NP) X]}_{\text{VP}} Y]_{\text{S}} \text{ ]}_{\text{NP}} \text{ ... } \Rightarrow \text{ ...} \\
&1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \\
&\emptyset \quad \emptyset \quad 3 \quad 4 \quad 1+5 \quad 6 \quad ... \\
&[+N]
\end{align*}
\]

That is, to nominalize an embedded sentence, the subject NP is moved after the verb and direct object, if there is one, AUX is deleted, and the verb is given the feature [+N]. This will trigger replacement of the finite verb by a verbal noun. Equi-NP Deletion may apply, and does so obligatorily if there is an overt direct object following the verb. The rule of EQUI-NP Deletion is given in (3) of Chapter 7, and is discussed more fully in Chapter 9, section 3.

Nominalized adverbs are almost always of the definite
type, i.e., not marked with nón. In fact, I have found only one clear example of the indefinite type,¹⁵ this occurring in a proverb and moreover within another embedded clause. Another informant gave the same proverb, but with a finite verb in the clause in question.

(144) náá viya-k teta-k gaada-k țlana-k dāa-n, teka daan dā dlam teluus

'one takes a bath at night so that when the dawn comes [at the lighting of the town] the body will be soft'

The rarity of indefinite nominalized clauses probably has to do with the fact that nominalizations cannot be interpreted in a future simple sense, i.e., a nominalized clause could not be used as in English 'on his arrival, we will begin work'.

Nominalized adverbs can be interpreted in the "general relevance" sense of the indefinite adverbs, which probably explains the use of nón in (144). This sense is also found in (145) without nón. Following are examples of the various types of adverbial clauses we have seen so far.

"when" clauses

(145) bii-k patata, agurdaademak áa suwaari aa da-k afa

'having gotten an open space, a leper will dance in the glare of the sun'

(146) kalaktayi-gaa, ná tēfē-n-gaa ii mēnduwa

'having returned, I entered the house'
(147) mbasu ŋum, buuci dá rebgí naa atu dá vegi ii da
'after sitting down (when she sat down), the mat gave way with her and she fell to the ground'

Temporal adverbs other than 'before'

(148) akuu dëbed tla, Dëmza dá tèkì-naa dagwda-w
'after selling the cow, Dëmza spent the money'

(149) Dëmza na-naa goomak akuu ziìda-w tenu
'Dëmza skinned the ram after slaughtering it'

(150) da ve-r-sakšì ŋum, ii maa, "Nà ba-naa aëa-gaa"
'upon their exit, I said, "I've been given a reprieve" [...] I got my head

(151) tetan nya-k bëdlamu ŋum, dá mbašì
'immediately upon the hyena's arrival, she (the hyena) sat down'

(152) tetan rëpta-w ŋum, see foowa
'immediately upon opening it, there was nothing but stench'

'before' clauses

(153) kaabe tlay-saja tenu, já serme-naa bìì-k t-àaja
'before our departure, we prepared our food'

(154) dá n'yi-naa yaanuu gawa-geri kaabe karam dem-gu tenu
'he should sharpen the blade of his axe before cutting that wood'

8. Noun Phrases Used as Sentence Level Adverbials

8.1. Indefinite Noun Phrases
Generic indefinite noun phrases containing relative clauses can be used as a type of antecedent adverbial.\textsuperscript{16} Formally, these constructions are of two types. They may take the form of a generic pronominal, seen in (155), modified by a relative clause (see Chapter 4, section 5.3, and especially 5.3.2.2, for a full description of these words);

\begin{itemize}
\item[(155)]
\begin{align*}
tliyé/tliiké & \quad \text{'whoever, anyone who, everyone'} \\
támké/tánké & \quad \text{'whatever, anything which, everything'} \\
tâwànkwé & \quad \text{'whichever (one), any(one) that, every(one)'} \\
fàtâwànké & \quad \text{'whenever, any time that, every time'} \\
râwànké & \quad \text{'wherever, anywhere that, everywhere'}
\end{align*}
\end{itemize}

Or, they may take the form of an indefinite noun plus a relative clause. The nouns most commonly used in this way are nèn 'person', bèe 'thing', lákwtul 'time', and rài (--- [rli] non-final) 'place', but in theory any indefinite noun should be possible (see Chapter 4, section 5.3, and especially 5.3.2.1, for a discussion of this type of indefinite noun). These two types of generic constructions were shown in section 5.3.2.3 of Chapter 4 to be logically equivalent. The formations with the words in (155) apply to a set taken as a whole, the formations with nèn, bèe, etc. apply to all the individuals of a set.

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These constructions always have the indefinite determiner nén. Fronting is apparently obligatory. My informant rejected (156)(b) while accepting (156)(a). I believe the facts in (156)(a) and (b) are a function of these constructions, being a sub-type of topicalized noun phrase which, by definition, must appear sentence initial.

(156)(a) tiiye dlam waateši nen, malaiiku lint aci
        'anyone who sneezes, an angel has touched him'

(b) *mailaiiku linte tiiye dlam waateši nen

In some cases, it is impossible to know whether we have a relative construction or a simple conditional clause. This is the case when the indefinite word is the subject of the clause and no relative marker, wàarà, appears after it. Recall that wàarà can be optionally deleted from any relative clause (Chapter 4, section 2.1).

(157) tiiye tlempiy-naa zanii-geri-n, zega-naa rii geʃaazan
        'if someone tears his gown, he knows where the threads are' or 'whoever tears his gown, he knows...'

(158) tamke aarawii nen, bii-k ūtau, amma anyi-k paaraakuu bai
        'if something is white, it is a thing to like, except for the milk of the Dead Sea apple' or 'whatever is white, it is ...'

(159) nen dëka yu ii diina bii nen, dà p(a) aanii jankaʃ bai
        'if a person doesn't have better rags than me [doesn't exceed me in rags], let him not shake his lice on me' or 'a person who doesn't have better rags than me, let him not ...'

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(160) nan pte-naa awuk nan, kaakenii mbasu naa bai

'if a person swallows a pestle, he won't be able to sit down any more' [... remainder of sitting there is none]
or 'a person who swallows a pestle, he won't ...'

(161) rii naa gergiya-n, ndá ñgalta naa aikwak bai

'if a place has a measuring bowl, one doesn't measure with the hand'
or 'a place which has a measuring bowl, one doesn't ...'

(162) am kaarak naa sa-n, ña gazu aa fena bai

'if water is good to drink, it won't last in the calabash'
or 'water which is good to drink won't last in the calabash'

Some indefinite constructions are clearly phrasal, either because wañá follows the head noun (163)-(164) or because the indefinite word doesn't function as subject of the embedded clause and could not stand at the head of the clause if it were not a relative construction. If the head noun of such a construction also would be the subject of the main clause, the construction in question could conceivably simply be the subject noun phrase of the sentence with the clause final nan being a normal determiner as in (163)-(164).

(163) nan wañá ba-naa dlama-k tapai naa Canduwa-n, bata-naa maapendi

'a person who manages to fornicate with Canduwa (-n) has reached manhood'

(164) bee wañá ta-naa geñan nen, ña yva-k mugba bai

'a thing which eats a water monitor (nen) will not
(164) leave a land monitor'

However, the phrase need not be the subject of the matrix sentence, as in (156) and (165)-(170), which demonstrates that it is at least not in a neutral position in the matrix. I suggest that such phrases have not been moved forward by some rule of "topicalization", but that they are one of the constituent types which may appear under ADV as introduced in (1). I will return to this claim below.

(165) (phrase = direct object of matrix sentence)
    tamke ama-w â nci-n, âa nii-d ii-tu
    'whatever his wife wanted (-n), he would bring it to her'

(166) (phrase = associative complement)
    tamke ká dlam-naa kaanaadi-n, káa lawan-naa akuu-gu
    'whatever you are patient with (-n), you will see the end of it'

(167)18 (phrase = temporal adverb)
    fatawanke gaskam bände dlama ii-ci samana-n, gayim âa bari-k teka-geri bai
    'whenever the rooster began to make conversation with him (-n), the cat would not come close' [... wouldn't give his body]

(168) (phrase = direct object of main clause)
    bee waaña miya tause-n, aikwak âa fetka-w bai
    'what the mouth "ties up" (-n), the hand can't "untie"'

(169) (phrase = direct object of simple conditional clause)
    bee waaña dagai dlamu-n, dagai dlamu-n, âa wna kələppyə bai
(169) 'what someone does (-n), if somebody else does it, he won't spend the night in good health'

(170) (phrase = locative phrase)

rii waafa maayim dlam bayi nen, fatawanke aa gutka ii riyu

'a place where a boy finds something [does a finding] (nen), he always stoops down at that place'

(See also section 8.2 for examples with lakwta 'time'.)

The association of the marker nen with the indefinite nature of these relative constructions should have emerged clearly from the examples above. A particularly interesting pair of sentences in this respect is the following:

(171) bee waafa akshi aa dlama-w nen, da yka gayim nen, sai remau

'the thing that they should do (nen), if they see a cat, (they should) just run away'

(172) bee waafa nada ncu kaa m(i) iyu ii wura wa yi

'what I want (is that) you take me on your back and we go'

Both sentences appear to be pseudo-clefts, yet in (171) the clefted construction ends in nen, in (172) it does not.19 The reason clearly is that the clefted phrase in (171) has the indefinite sense of "general relevance", while the one in (172) refers to a specific event.

I have found a number of cases of indefinite noun phrases formally like those above, but with no clause final nen.
(173) bee waaña tapa kooko òà tapi bertektek bai
'a thing which catches a (small) frog will not catch a bullfrog'

(174) aliibañam naa geñaaazan aa ten-gu òà day bai
'a needle which has a thread in its eye ("nose")
does not get lost'

(175) òà dlamiina bee waaña kwáa dlama-w
'do whatever (the thing that) you're going to do'

(176) òà rii thu òoo nen waaña òà rii òaa ki ama-gaa bai
'in this place there's no one who will come and see my wife'

Nearly all the examples like (173)-(176) are explained by
the fact that they are simply NP's appearing in the normal
sentence position for that particular function, e.g. (175)
is a direct object and appears directly after the verb as
direct objects normally do. ²⁰ That is, the clause final
nen seems to indicate that an indefinite noun phrase is
functioning in some capacity other than a neutral direct
object, subject, etc. As I will explain in section 8.3-4,
phrases such as those in (163)-(169) are topicalized
indefinite noun phrases, and topicalized noun phrases are
a type of antecedent adverbial, not unlike conditional
clauses.

8.2. Adverbial Phrases with lákwţù 'time'

A specific case of ADV of the form N + relative clause
is expressions formed with lákwţù 'time'. Such expressions

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are frequently equivalent to the simple conditionals or adverbs of 'when ... then' sentences. The same four way distinction of indefinite/definite crosscutting with Perfective/Imperfective in adverbial clauses holds for lakwuŋ clauses. All the examples here will be translated 'when' or 'whenever', though a more literal translation would be 'the time when...'.

**Indefinite: Perfective**

(177) lakwuŋ ndá badiite am nɛn, jâa dlama-naa zægæm

'when it starts to rain, we will do the planting'

(178) lakwuŋ ká deew da rii-ƙ saafəʁ, kâ debši-n-aaci ii rii-gæz

'when you return from trading, you should hide at my place'

(179) lakwuŋ ká kema vərek nɛn, iyu

'when you hear something thrown, it's me'

**Indefinite: Imperfective**

(180) lakwuŋ aci ƙa ya ii maaka-ƙ dem nɛn, ƙa tausa-naa miya sesau

'whenever he was going to look for wood, he would lock the door'

(181) lakwuŋ nâ nći kem nɛn, nâ taanyi kem

'whenever I want you, I'll remember you'

(182) lakwuŋ gaskam ƙa wujeʃ nɛn, gayim ƙa baanaata-garin

'whenever the rooster was (engaged in some) affair, the cat would help him'
Definite; Perfective

(183) lakwtu zayi gade-n-gara, kwafa ji-n-geri ii pata
    'when the rope broke the donkey went into the bush'
(184) lakwtu ná cacpe-naa sesuwa, ná debji-du
    'when I had gathered stalks, I sold them'

Definite; Imperfective

(185) lakwtu wunya-k bedlamu áa rama-w tenu, goomak á kemuu-gara
    'when the daughter of the hyena was talking, the ram
     was listening to her'
(186) lakwtu aci áa verayi tenu, veree-w naa ndiwa gaawa
     akši dá tarnai dekema
    'when he was about to go out, he came out with many
     people and they headed west'

Lákwta phrases can be non-verbal, (187)-(188), and they can be nominalized, (189).

(187) lakwtu akši áa kema-k audu, atu dá rami ...
    'when they were in front of the grave, she said ...'
(188) lakwtu akši maamau, nasaañaucin dee-w
    'when they were children, the Europeans came'
(189) lakwtu tefi-geri tenu, tiyye dlamé-n-geri širiyyu
    'when he went out (at the time of his going out),
     everyone became quiet'

Unlike most other types of indefinite noun phrases used adverbially, lákwta phrases may appear sentence final.

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(190) miyu ̀ a ba r ii-kẹm bẹya lakwụtụ kàa ya-n-aakẹm nẹn
    'her mother will give you something when you're
    about to leave'

8.3. Topicalized Noun Phrases

In all the adverbial types described in sections 1-6, we have seen both indefinite and definite phrases or clauses, marked by the presence or absence of nẹn respectively. What, then, is the definite counterpart to the indefinite phrases such as those seen in 8.1? The answer is topicalized noun phrases. A noun phrase corresponding to any sentence function may appear at the beginning of the sentence for topicalization, usually translated 'as for ...'. Such topicalized noun phrases are sometimes accompanied by tẹmú, ngụm, or yé 'also'.

Noun phrases formally similar to those noun phrases in 8.1, but differing from them by being definite, may be topicalized. Such phrases have no final nẹn.

(191) tamke waakaatu, ná kẹma-du
    'everything that happened, I heard (about) it'
(192) bee waara akṣi ram-gu, ná kẹma-du
    'everything that they said, I heard it'

Clearly we would like to relate the process which fronted the NP's in section 8.1 to the one which fronted those of (191)-(192). But to go a step further, there is no motivation for separating the process fronting the NP's
in (191)-(192) from that which fronts any non-complex NP, as in (193)-(201). Note that when noun phrases in prepositional phrases are topicalized, it is only the NP that appears sentence initial. The phrase within the matrix has the corresponding pronoun or is deleted entirely. 21

**Subject topicalized**

(193) muyi-gaa ngum, zëga-naa nëma belan

'as for my friend, she knows how to make pots well'

(194) ii ye nää tfa-n-gaa ii kune-k vek-gu

'me too I will enter into that hole'

**Direct object topicalized**

(195) aw-gu, jà mee-n ja nää waane

'as for that guinea-corn, it was so and so and me that took it' [... we took it we and so and so]

**Indirect object topicalized**

(196) Maakwai, ná taatk-aw kam-gaa

'as for Makwai, I showed him my farm'

**Instrumental noun phrase topicalized**

(197) kuku tiyu, atu dà jibi ii aikwa-gara dà dlam-du suwaari

'as for that Baobab fruit, she held it in her hand and danced with it'

**Locative phrase topicalized**

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(198) beše-k bedlamu, ja åa ya i saafer bai
'as for the hyena's town, a dog doesn't go there for trading'

Associative noun phrase topicalized

(199) Benderkuku, daati-geri rema-naa ja guumu fudu
'as for Benderkuku, his height exceeded forty cubits'

(200) iyu, nuuba-gaa-n nà ci nà ši
'as for me, that I eat and drink is my due'

(201) nda-w, tek-aakši, ndáa lawan-gu bai da miya-k
kaacum-kši
'those people, their bodies, one couldn't see them because of their clothes'

The last example has two topicalized NP's, one an associative NP from the second, which is the direct object of the matrix.

With a definite noun phrase, the marker nén never appears, as in (191)-(201). In fact, it usually does not appear with simple indefinite or generic noun phrases which are topicalized, either, as for example in proverbs, where topicalization is a common stylistic device.

(202) baaci kumakumi, kasakšá åa bii dà karm aci bai
'the wearer of chain mail, a sword will not manage to chop him'

(203) fënša-k waana, ndáa nğwa-daaw rugži bai
'as for a milking calabash, one doesn't scoop manure with it'

(204) baaci hal, vëda-geri fuu-geri
'a temperamental person, in his quarter he is all alone'

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I did find a very few examples of simple indefinite noun phrases with nén.

(205) garvucin naa nda-k leman nén, à ncu dáa ki Canduwa, ba ba

'chiefs and rich men (nén), they wanted to see Canduwa (but) didn't manage it'

(206) dabaku-n, see waafa kà ncu kà cik'yi

'girls (-n), just the one you like you pick her out'

Thus we see the same asymmetry observed above in sections 5 and 6, where nén could be used with indefinites or not, but definites could not use it.

8.4. The Derivation of Topicalized Noun Phrases

Several facts have now emerged. A dichotomy which I have characterized as indefinite/definite exists among sentence level adverbs. This dichotomy is marked by the presence or absence of a determiner nén, which cannot be used with noun phrases within a matrix sentence. Another feature of these adverbs is their preference for sentence initial position.

Sharing syntactic and semantic characteristics of these adverbs, especially simple conditionals, is the class of generic indefinite complex NP's, seen in section 8.1. In order to capture these similarities, it seems responsible to allow these generic indefinite NP's to be among the objects generable under ADV in rule (1). But looking very much like these NP's is the entire class of

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topicalized NP's. How should these NP's be generated?

I would suggest that they, too, be generated under ADV in rule (1). To derive topicalized NP's by transformation would at best require some ad hoc symbol, say [+Topicalized], to trigger the transformation. By generating them as part of the class of ADV, such a problem is avoided. Furthermore, lexical strict subcategorization will be simplified since no N will be prevented from appearing in the NP dominated by ADV.

Another problem, illustrated in (207)-(208), is obviated by this derivation:

(207) miy-aaci jegum, kà kata-du bai
'as for your mouth [i.e. watch your mouth], don't repeat it'

(208) dlèra-k kunu-k asyu, òa bar-aw aaraawa-n Kaakasu
'as for a gazelle's stomach ache, it's God who gives it (i.e. the gazelle) potash'

The topicalized NP's in these sentences correspond to no NP function in the matrix sentence. If topicalized NP's were derived by fronting an NP from the matrix, there would be no source. Derived as the NP dominated by ADV, there is no problem of source. 22

9. Reason and Purpose Clauses

9.1. Syntactic Distinctness of Reason and Purpose Adverbs

Clauses and phrases giving a reason or explanation and
clauses and phrases expressing purpose must be generated at different syntactic levels:

\[(209)\] **Reason**  
\[S \quad \text{NP} \quad \text{PRED} \quad \text{ADV}\]  

**Purpose**  
\[S \quad \text{NP} \quad \text{PRED} \quad \text{VP} \quad \text{ADV}\]

Both types of adverbs are introduced by the word *gàadà.* This fact, plus the facts on the syntactic complementary distribution of purpose and reason adverbs, suggest that they are not really two types of adverbs, but a single type which can vary in its scope. The scope of "purpose" adverbs is the VP, and the scope of "reason" (explanatory) adverbs is the entire event. These scope differences are reflected by the tree structures in (209). Keeping in mind the fact that we are really dealing with a single type of adverb, I will continue to use the terms "purpose" and "reason" to simplify the exposition.

Purpose adverbs require a VP in the Subjunctive, reason adverbs are unrestricted as to predicate type. Purpose and reason adverbs differ syntactically in a number of other ways as well. First, there is the placement of the negative marker, *bái*, of the matrix predicate. With reason phrases, negation of the matrix predicate precedes the adverb, while with purpose phrases it follows. This is a direct result of purpose adverbs being within PRED, which also dominates negation, while reason adverbs are...
outside FRED (see Chapter 10):

**Reason**

(210) (Perfective in ADV)

kwarbe gwadamu bai gaada kuram tatl-en-gara
'he didn't hoe up peanuts because his hoe broke'

(211) (negative adjectival predicate in ADV)

*ta aben bai gaada aci ngaa bai*

'he didn't eat food because he wasn't well'

(212) (Subjunctive in ADV)

*ná daawo am ii nenuwa bai gaada dà demi*

'I didn't put the water in the shade so that it would get warm'

(213) (NP in ADV)

*jà rawa bai gaada bedlamu gayi tak*

'we didn't run away because of one hyena'

**Purpose**

(214) *veru gaada-k dà ɔi sama bai*

'he didn't go out to drink beer'

(215) *ná rauree aci gaada-k dà dlam wana bai*

'I didn't call him to work'

(216) *naanaadi ndàa nema-k dawai gaada-k bëna-k jaunak bai*

'one doesn't make pots especially for cooking elephants' (purpose clause is nominalized)

A negative marker following a reason adverb is invariably interpreted as negation of the predicate of the
ADV, or if there is no predicate, of the entire ADV.

(217) jà ju gaàda ndà dálam am bai
      'we went because it didn't rain'
(218) jà rawe-n-aaja gaàda badlamu gayi tak bai
      'we ran not because of a single hyena'

When the adverbial clause is in the negative Subjunctive, where the Second Subjunctive verb form is required, there is a problem of whether or not the clause is interpretable in both the purpose and reason sense. Note that the VP's of (219)-(220) are unambiguously negative, while in (214) the VP is unambiguously affirmative, because of the obligatory replacement of Subjunctive by Second Subjunctive in the negative.

(219) nà sa-naa sema gaàda-k kà sa bai
      'I drank up the beer {so you wouldn't} drink it'
(220) ...kwàa v(a) atu gaàda dà kiída bee bai
      '...sting her {so that she won't} eat anything'

Newman (1972, p.8-12) requires that such negative adverbs be translated as 'lest' clauses, and be interpreted only in the reason sense, i.e., as an explanation for the event of the matrix clause. However, it seems to me that a sentence like (219) can have a purpose sense, especially if we give a translation 'I drank up the beer to prevent your drinking it'. The problem lies in the nature of the Subjunctive

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aspect. The "purpose" meaning of a Subjunctive purpose clause is just one of the shades of meaning associated with the basic Subjunctive meaning of subsequence, eventuality, potentiality. A negative event is not something that can be subsequent to some other event. However, if we substitute a verb which incorporates negation, such as 'prevent', it is easier to interpret a notion of subsequence, and in turn, a purpose meaning. (See Chapter 10, section 3, for further discussion of negation and its scope relative to embedded sentences.)

A second syntactic reason for separating reason and purpose phrases is the forms they may take when reduced. In the first place, istogram is optionally deletable from purpose phrases, but never from reason phrases.

(221) bar aa ka' gün ná dlám 'yale
    'he gave me medicine so that I would feel better'
(222) káa dláma nana káa b(a) atu?
    'what [how] are you going to do to get her?'

If nominalized, reason phrases still require istogram, while purpose phrases may retain istogram or be further modified into a phrase introduced by the preposition ții. The "ți-purpose" phrases require subjects co-referential with an NP in the matrix.

**Nominalized reason phrases**
(223) nä teke-naa bedlamu gaada namboo ṭta-w
'I killed the hyena because of dislike for it'

(224) gaada-k metu ndaa kur diyi bai
'because of dying, one doesn't refuse to give birth'

Nominalized purpose phrases retaining ancock

(225) dá yvi da-gara ṭap ii veda gaada-k lawan
'she left a little of her eye out in order to see'

(226) ká veree-w gaada-k maaka-w?
'did you come out in order to look for it?'

ii purpose phrases

(227) nä dee-w ii viya-k bii-k veji-k aba-gaa
'I came to wash my co-wife's thing for lying on'

(228) gandervu-k bedlamu, ja åa ya ii sekookuya bai
'as for the hyena's compound, the dog doesn't go there to chat'

(229) ṭde ii dere-k rama-k gwangurak-gu bai
'she didn't stop to wait for the words of the old woman'

(230) wunya-gaa, ká dee-w ii maaka-go-moo?
'my daughter, what did you come to look for?'
[... you came looking for what?]

The verb 'go' plus an ii-purpose phrase can be used in the sense of simple futurity, just as English 'going to' ("gonna"). This is most commonly found in the Imperfective to give a future meaning, (231), but it apparently can also be used in the Perfective to give a "future in the past"
sense, (232).

(231) näa ya ii takda wurji tku
    'I'm going to step on that scorpion'
(232) ja ji ii daama-du ...
    'the dog was about to finish it (meat) off ...'

A final syntactic reason for separating reason and purpose phrases is the freedom with which the former, but not the latter, can be fronted. We have already seen that fronting is possible, and even much preferred, for adverbs which are direct daughters of S. On the other hand, constituents of the predicate are rarely fronted, and then probably only for special stylistic effects.

9.2. Reason Phrases and Antecedent Adverbs

Reason phrases have the same syntactic characteristics as other adverbs which are direct daughters of S. Besides frontability, the same aspect distinctions hold in reason clauses as in other adverbial clauses. Perfective aspect in the clause indicates completedness of the event before the main clause event is begun, (210, 217, 233). Imperfective represents incompleteness, (234)-(235). Nonverbal predicates carry no implication of this kind, (211), (236).

(233) gaada degem zada-n-geri, dá badiici naanma ganga
    'because the chief had arrived, they started beating the drum'

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(234) naa baaci moota bii aa rii-kši gaada akši əa maaka-w bai?

'there's no car owner among them because they aren't looking for one?' (i.e. a car)

(235) mbasu naa garva ŋak naa mbasu ii rii kefa gaada-k kāa skuna-k ankal

'staying with the chief is the same as staying at a school [place of reading] because you will increase (in) knowledge'

(236) wā dlagda-n-aawa ii kunu-k pata gaada-k devu naa vayak

'let's cut through the bush because the road makes a detour (has a circling)'

Reason phrases allow the Subjunctive, (212), (219)-(220), allowed also in 'before' clauses. This aspect indicates that the event of the adverb begins subsequent to the event of the main clause.

Reason clauses and phrases can also take the indefinite determiner něn. I have had some difficulty in stating clearly how its use with reason clauses is integrated with its use in other adverbs. The following can be said: něn is never used if the reason adverb asserts the reason for something. Nor is něn used with gąadą-gé-mōo? 'why?', which requests such as assertion, e.g. ká dlam kaa sau gaada-gé-moo? 'why did you do that?'. My examples of něn with reason phrases are all of two types. They may be negative clauses used with imaginative main clauses. Examples of this have already been seen in section 2.2, examples (89) and (91). Cf. also

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(237) gaada-k tla bii-n, ŋaanok áa bii vavid bai
'were it not for the cow, the cattle egret would not get ticks'

The second type of reason clauses and phrases using nén are translatable into English as 'just because (of) ...'.

(238) nén waáfà ndåa ziida-du, gaada-k ndá karmé-naa zéger-gu-n, áa šzálú bai
'as for a man who's going to be executed, just because one has cut off his foot, he's not going to pay attention'

(239) gaada-k revek juwak nén, maazam áa dlama-k kutoo bai
'just because of a fly's skin (nén), a blacksmith won't work his bellows'

(240) gaada-k suu nén, kà jikta bai
'just because of that, don't get upset'

If we compare all the other examples with (237)-(240), we see that the reason phrases and clauses in the latter are not making assertions to explain the event in the matrix clause.

There are examples with the same type of interpretation as (239)-(240), but without nén.

(241) gaada-k sau áa dláraata-gaa nà yi bai
'just because of that I won't get flustered and go'

(242) gaada-k tlwii-k garva ndáa dpta-k díjáw naïn vayak bai
'just because it's the chief's meat, one won't prevent the vulture from circling'

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This is the same type of asymmetry we have already seen, with 'before' clauses and other temporal adverbs, i.e., no definite adverbs (here, adverbs asserting a reason) may take the determiner nén, but indefinite adverbs (here, adverbs not making an assertion about the reason for the event of the main clause) need not necessarily take nén either.
Footnotes to Chapter 8

1. It might be argued that the rule should be $S \rightarrow S'$ (ADV*) and then $S' \rightarrow NP \ \text{PRED} \ (ADV)$, or some similar expansion. I am not concerned with the exact levels at which adverbs are introduced. The main requirement is that adverbs appear at two levels. Certain adverbs (instrumental, locative, manner, purpose) show somewhat different syntactic behavior from the adverbs being discussed in the present chapter. These syntactic differences will be outlined immediately below. See also section 9.1 of this chapter, where syntactic differences between purpose (predicate level) and reason (sentence level) adverbs are noted, even though both these adverbial types have in common the introductory word gâadâ 'because (of)'. Other predicate level adverbs are discussed in Chapter 3.

2. Omitted from this chapter is a discussion of the word sée (or sâi), which may mean 'only, except, until, unless', depending on a number of factors. My understanding of the uses of sée is far too sketchy to say anything meaningful.

3. A number of other terms here are from J. Schachter (1971), e.g. imaginative conditionals, simple conditionals, and others. I am not attempting to stay strictly within the bounds she defines for these terms, e.g., my use of antecedent and consequent.

4. Working under the assumption that movement either to the left or the right is involved, I have chosen to generate these adverbials at the end of the sentence, then move them forward as a kind of topicization. Besides sentence final position being the intuitively correct place for adverbs, it is hard to imagine what semantic or syntactic motivation there might be for an "anti-topicization" rule moving things from the front of the sentence to the end.

5. This word may come from the word âfâ 'sun, day'. Cf. gâafâ 'some day', clearly derived from âfâ, and also other words derived from this root, such as âfâdagâ 'day after tomorrow', and âfâtâwan 'when?'.

6. Cushing (to appear) argues that the feature [DEF] ("definite") is not restricted to NP's. In his paper, he notes that sometimes it and sometimes so are used as proforms for a sentence, e.g. 'They said Ngizim was hard, and now I believe it', vs. 'when they asked if Ngizim was hard,
I said I guessed so'. He goes on to assert that the use of it or so depends on the stance which the speaker takes vis-
à-vis the truth value of the "pro-ed" sentence. That is, if the speaker wishes to affirm the truth value of the sentence, he uses it; if he doesn't want to commit himself, he uses so. He then argues that in fact, the choice of it is governed by the feature [+DEF] on the sentence, and the choice of so by the feature [-DEF]. He shows that by allowing our grammar to assign [DEF] to constituents other than NP, in this case, to a full sentence, various other facts fall into place. In the grammar presented here, adverbial clauses have been analyzed as being dominated by NP, in part because I considered [DEF] to be a feature relevant only to NP's. Cushing's work suggests that this reason for requiring adverbs to be dominated by NP may be ill-founded. However, the fact that most, if not all, types of adverbial clauses can be nominalized (cf. sections 1.4 and 7) offers further support for analyzing such clauses as being dominated by NP. It is difficult to see how something which was not an NP could become an NP.

While témú and ngâm are optional (though usually chosen), nên is obligatory for simple conditionals. This may have any of a number of explanations. First, if nên were omitted, a conditional clause would not be distinct from the adverb of a 'when ... then' sentence. It is also likely that these clauses are like plain noun phrases where indefinite determiners are obligatory, at least under certain circumstances. In a narrative, after the first mention of a noun phrase having a specific referent, subsequent repetitions of the same noun phrase may be marked with definite determiners or not. However, if a formally identical noun phrase with a different referent is introduced, it is obligatorily marked with an indefinite determiner in order to distinguish it from the first.

In texts, I have found a few examples of clauses having the nên determiner, but which from context appear to require the definite interpretation, i.e. a single enacted even:

(i) tla ii diyi nên, dâ 'yawi ii miya gayi
    'when they proceeded to give birth, they gave birth together'

(ii) daaci Benderkuuku ji ii teka-k waka-n, dâ dlam wur'yi
    'then, when Benderkuku went next to a tree, he farted [did fart]'
The interpretations I have given for those clauses ending in nén and those ending in téni, ngó, or Ø are so consistent over such a range of examples, both from texts and from direct informant work, that I can only assume that examples like (i) and (ii) have to be explained within this framework. One possibility is that I am misinterpreting the meaning of the text. A second possibility is that I have not defined the semantic correlates of indefiniteness in enough detail. A final possibility is that nén is being "grammaticalized" as a conjunction, and is being extended to cases not originally within its domain.

9     This statement is even more strictly applicable to Ngizim than it is to English, since English distinguishes a questionable prediction about the future ('if'), and a certain predication about the future ('when'), a distinction not made in Ngizim.

10     This is not a fact specific to Ngizim. Citing facts noted in Hall (1964), J. Schachter (1971), p.52, states, "It is the auxiliary of the then-clause [my underlining - RCS] which provides a basis for [the distinction between simple and imaginative conditionals]. The imaginative conditional requires past tense plus one of the modals will, shall, can, may, while the neutral conditional allows the present tense, with any modal optionally, or the past tense, with no modal."

11     måa may be related to Hausa ma, as in (Hausa) shi ma, bai iya kome ba 'as for him, he can't do anything'. I suggest that this ma in Hausa, generally considered to be some sort of topicalization particle, is historically a definite determiner. Similar words are found in other Chadic languages in this function.

12     The word bánj seems to be some sort of negative counterfactual word, probably related to the negative marker bán. Cf. also (95).

13     Concessive clauses hold a relation to main clauses which is different from that of simple or imaginative conditionals. This suggests that the definite/indefinite dichotomy is not sufficient to characterize the relationship of antecedent adverbial clauses to their consequents. The word yàavia may thus be a third, different kind of determiner from nén and tén/ñun.

     There are other facts that appear to be relevant here. yàavia can be used with simple NP's to mean 'even':

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(i) gusesku yaaye aa Ngwajin vedadin tku wara
    'even today at Ngwajin these quarters exist'
(ii) kakancin-wa yaaye áa nii dáa ki wana waaña và dlamu
    'even our grandchildren will come and see the work
    that we have done'

A combination of question word + yáayé is also a
variant for the generic indefinite words formed by suffix-
ing -ké to the question words, such as tám-ké 'everything'
< tám 'what?' (see Chapter 4, section 5.3.2.2 for a dis-
cussion of the properties of these words). Thus we find,
for example, tám yáayé 'everything'.

Yet another apparently related fact is the use of the
word yé with simple NP's, to mean 'also, too' (it was
noted that yé was an occasional variant of yáayé with
concessive clauses):

(iii) kwaña ve-dé-n, matkam-gu ye áa veji
    'if the donkey lies down (out of stubbornness),
    his son too will lie down'

It is clear that there is some way in which all the
uses of yáayé and yé 'even if, although, even, every, also,
too', are related. This relatedness is evidenced by the
fact that other languages use a single formative in much
the same way, e.g. Hausa ko. What the relationship is
and how to capture it is far from clear.

14 I have found one example in a text which appears to
have to be interpreted as a definite, yet uses nén:

(i) kaabe atu dá daami ta-ğ nén, Muusa dá yi-n-gari pèdem
    'before she had finished eating, Musa had gone far
    away'

15 Another possible example is gaayì-n-gara-n, dá rem maa
   ...'on climbing it, she said ...'. This sentence appears
   in the text where example (i) in fn.8 occurred. Since this
   one folktale (out of about a dozen by the same informant),
   contains nearly all the apparent counterexamples to the
semantic correlates I established for the definite/indefinite distinction, I have reason to believe I may be misinterpreting the entire text.

16 The semantic relationship between conditional clauses and generic relative formations of the type discussed in this section is well-known. Kuroda (1968) pointed out that sentences containing definite relative constructions are paraphrasable as a discourse of two sentences ('what lay on the table was the tissue' = 'something lay on the table; it was the tissue'), because "... the matrix and constituent sentences are independent of each other as logical propositions ..." (p.262). However, in sentences containing generic relatives, the proposition of the relative clause and the proposition of the matrix are in a "premise-conclusion relationship" (what is being called an "antecedent-consequent" relationship here). They cannot, therefore, be expressed as independent propositions, but as clauses conjoined by 'if' ('whatever surprised Mary pleased John' = 'anything pleased John if it surprised Mary').

What is interesting in Ngizim is that both simple conditionals and generic relative constructions are marked in the same way (suffixed nën), the only difference being the internal structure of the adverb itself, viz. S or N + S.

17 The relative marker wàafa is rarely used after the indefinites of (155). It is found occasionally, however, e.g. (156)(c) was given as a variant of (156)(a).

(156)(c) tiiye wàafa dlam waateši nen, malaiku lint aci 'whoever sneezes, an angel has touched him'

18 This sentence contains a case of backwards pronominalization, a construction type always categorically rejected in direct informant work. The explanation may be that the pronoun is anaphoric to the referent in previous context, and the mention of the noun phrase to which the pronoun appears to be anaphoric in (167) is simply a return to the full noun phrase.

19 Example (171) has a conditional clause (da yka gayim nen) intervening before the predicate. I doubt that this makes any difference, since a conditional clause can certainly intervene between a topicalized NP without nën and a main clause, e.g. wiili, ndá bar ii-ci-n, naa žirau, balle ndá dapte-á ii-ci 'as for begging, if one gives to
you, there's shame, let alone when one refuses you'.

20 As in the foregoing portion of this chapter, there is some recalcitrant residue, e.g.

(i) tiiye kiide albasař, faw-gu áa miya-geri

'whoever eats an onion, the smell is on his breath'

Here, the phrase tiiye kiide albasař is co-referential to -geri 'his'. It is therefore a topicalized indefinite NP, yet has no nān. The number of such unexplained cases amounts to less than five, as opposed to several dozen examples explained by my hypothesis regarding determiners, dominance by ADV, etc.

21 An occasional example of topicalized locative with preposition is found, e.g.

(i) aa Ngwajin ye Mai Dabeña naa nda-geri dambasu

'at Ngwajin as well Mai Dabeña and his people were living'

Such constructions are not common in folklore texts, and were invariable rejected in formal informant work. A number of such examples appear in a historical narrative, however. This construction may thus have some special stylistic value.

22 The source proposed here for so-called "topicalized" NP's is a fairly radical departure from various rules proposed in the literature that simply front NP's from their normal sentence position. My analysis receives independent support from Kuno (1970), who discusses "thematic sentences" in Japanese. Thematic sentences are what I have called here sentences with topicalized noun phrases. Kuno notes that these are sentences like 'speaking of fish, red snapper is best', 'speaking of chemistry, X was synthesized in 1970'. Such sentences have no "themeless" counterpart, i.e. there is no source within the main portion of the sentence for the theme (= the topicalized NP). Kuno proposes the following structure (I have somewhat modified the exact tree he gives):
The structure I propose, viz. that the theme or topicalized NP be a sentence level ADV, is in the same spirit. My examples (207)-(208) are not the most convincing of sentences with no themeless counterparts. I'm sure that Ngizim allows sentences like Kuno's just above, but unfortunately I didn't elicit any.

23 I hesitate to call gādā a conjunction. It shares certain features of nouns, viz. it requires the associative link /ke/ even before full sentences, and its final syllable undergoes Associative Tone Dissimilation to high when followed by low, e.g. gādā-ken bēlān-gārā 'because of her beauty'. These features may be a vestige of a period where prepositions (? and conjunctions) required that their complements be bound, as part of a grammatical phenomenon which encompassed associative noun phrases. Such is still the case in Bade. Another possibility is that gādā has a nominal origin, e.g. < ādā 'head'.

24 Phrases of the ii-purpose type can be formed with substantive nouns, e.g.

(i) āa ya ii pata ii dem
'she is going to the bush for wood'

cf. (in similar context) āa ya ii maaka-ken dem
'she is going to look for wood'

(ii) ndā ktlai ĺiruu-gaa ii vatku
'one has embarrassed me [broke my shame] for nothing' < vātkā 'something useless'

(iii) kā ji ii auye ii tam? = ('for what?')
kā ji ii auye gaada-ge-moo? ('because of what?')
'why are you going to the village?'

If ii-purpose phrases are to be derived from full sentences, (i)-(iii) present a problem, since there is no way to determine what the "deleted" verb in such sentences may be.
ANAPHORIC ELEMENTS AND PROCESSES

0. Introduction

When two identical constituents are found in underlying representation within a single sentence, one of those two identical elements usually appears in reduced form in surface representation. The reduced form may be \( \emptyset \) (total deletion of the repeated material) or some pro-form. The best understood and most commonly found pro-forms are pronouns, but other constituents such as verbs and even full sentences have their corresponding pro-forms. I will refer to any rule that yields such reduced forms as an anaphoric process. The corresponding reduced form will be referred to as an anaphoric element. For my purposes, segmental \( \emptyset \) will be referred to in this way just as are segmental forms such as pronouns. Only those anaphoric processes affecting noun phrases will be considered.

There are two types of relationship between a full noun phrase and an anaphoric element: token anaphora and type anaphora. An anaphoric element represents token anaphora when it is co-referential to some other noun phrase, e.g. in 'I knocked John down and kicked him', 'him' refers to the same real world referent as 'John'. Personal pronouns always represent token anaphora.

Type anaphora is involved when two noun phrases are a-
like in kind but are not co-referential, e.g. in 'I want a Mercedes-Benz and John wants one too', 'one' is an anaphoric element understood to replace 'Mercedes-Benz', but the Mercedes-Benz to which 'one' refers does not have the same referent in the real world as the first occurrence of the word 'Mercedes-Benz' in the sentence. In English, the anaphoric element for type anaphora is usually 'one'.

Most of this chapter will be devoted to token anaphora since I have a better understanding and fuller data on that process. Type anaphora will be discussed briefly. The break-down of this chapter is as follows:

Token anaphora

1. Pronominal Anaphora and Ø Anaphora
2. Copy Processes
3. EQUI-NP Deletion
4. Reflexives

Type anaphora - section 5

1. Pronominal Anaphora and Ø Anaphora

Corresponding to English personal pronouns are two types of anaphoric elements in Ngizim: personal pronouns and Ø. Following a discussion of the formal and syntactic characteristics of these two types of anaphoric element, a large number of examples of each will be given, listed by syntactic function.
1.1. Characteristics of Pronominal and Ø Anaphora

1.1.1. Ø Anaphora

In Ngizim and other Chadic languages it is usually possible to delete an underlying noun phrase entirely rather than replace it by a pronominal form. In some cases, anaphoric deletion leaves no overt trace of the deleted noun phrase, but the interpretation of the sentence is such that we know that a noun phrase was present in underlying representation. Thus, in sentence (1), the subject noun phrase of the second clause has been deleted and in sentence (2), the object noun phrase has been deleted. A Ø has been added in each case to show where the deleted noun phrase appeared.

(1) ká yka-w nen naa kacau nen, Ø bande suwaari gafa-w bai
    'if you see that a person has expertise, (he) didn't start dancing on that day'

(2) dagwar fiit aka-n, kudera dáa yi Ø
    'if the devil lights a fire, misfortune will feel (it)' (i.e. the warmth of the fire)

In other cases, when a noun phrase is deleted, some overt marker of a deleted phrase is inserted. Thus, in (3) an instrumental phrase has been deleted, as is evidenced by the non-pronominal morpheme, -dáw. In (4) an associative noun phrase appears in Ø form, -gå (= Previous Reference Marker).

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(3) fêna-k waana, ndá ṅgwa-daw rugžî bai

'(as for) a milking calabash, one doesn't scoop up manure (with it)'

(4) ká ntuute-naa venyi-n, á ntuuci-naa matkam-gu

'if you like a grinding quern, you must like (its) son' (i.e. the small stone used to grind on the quern)

Although there are overt elements marking deleted noun phrases in (3) and (4), there are a number of reasons for considering them to be manifestations of Ø anaphora rather than true pronouns. In part this depends on how we wish to define pronouns. In Ngizim, features of both gender and number are distinguished in true pronouns. Ø anaphora elements are invariable regardless of gender and number. Moreover, certain segmental characteristics are associated with the pronouns, e.g. third singular feminine is characterized by t. None of the Ø elements resemble the segments associated with true pronouns (see below for details concerning the forms of pronouns and Ø). More important than the facts about the form of the Ø elements themselves is that true personal pronouns can appear in identical syntactic contexts to those in which the Ø elements occur.

1.1.2. Interplay of Pronominal and Ø Anaphora

In the case of token anaphora, every sentence function filled by a noun phrase that allows anaphoric deletion of that noun phrase allows pronominal anaphora as well. The converse is not true. Whether pronominal or Ø anaphora is
chosen depends on several factors, in particular, the sentence function, semantic features of the affected NP, and stylistic factors.

Where both pronouns and Ø are possible, they are equivalent in meaning. I hesitate to say identical in meaning because there may be subtle stylistic factors at work (cf. (13) below). Syntactically they are entirely equivalent. This can be seen in sentences like the following. The (a) and (b) versions of (5) were given by different informants as translations of one Hausa sentence, seen in brackets.

The (a) and (b) versions of (6) were given as variants of the same proverb. An in (7), the same noun phrase, ama-geri 'his wife', is referred to by anaphoric elements twice, first by Ø (-gâ) and second by a pronoun (átu).

(5)(a) akši iika aker tenu, sai dá jib aci dâ tke-naa aci
    'when they saw the thief, then they caught him and killed him'

(b) akši iika aker tenu, akši dá jibe-du Ø dâ tke-du Ø
    'when they saw the thief, they caught (him) and killed (him)'

[Hausa: da suka ga ãarawo, sai suka kama shi suka kashe shi]

(6)(a) zebay-u-k daawâi bake wura-ga-ra =

(b) zebay-u-k daawâi bake-naa wura-w
    'the pot's boiling has burned its neck'

(7) dá 'yawai gumsu-w nen ama-geri waafa ac à ncu-gu bai,
    dá 'yawai nen waafa ac à nc atu bai
    'it was his wife that he didn't like (her) who bore the son, it was the one he didn't like [her] who bore

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(7) continued

(him)' (the subject has been focussed by postposing in each clause)

[she bore the male his wife that he didn't like (her),
she bore (him) the one that he didn't like her]

In the model assumed in this grammar, pronominal and Ø anaphora are processes which affect fully specified noun phrases if an identical noun phrase appears elsewhere in the sentence. Either type of anaphoric element can also be chosen in the base, i.e.

(8) ná jibe aci       'I caught him'
(9) ná jibu Ø         'I caught (it/him)'

are both grammatical Ngizim sentences, even if cited in isolation. It is assumed that context outside the sentence would allow us to fully interpret the referents for aci and Ø. From the use of a pronoun or Ø we can also infer certain features of their referents since the choice of a pronoun or Ø is dependent in part on features of the referents.

Anaphoric processes are relevant only for definite third person referents. First and second person referents cannot be deleted. Thus, if either of the underlined pronouns in the following sentence were replaced by a Ø form, the referent for Ø would be taken to be other than 'you'.

(10) baaž-aa-ci tlaatlare-n, vekš-aa-ci dáa ri ci
    'if your belly swells up, your anus will relieve you'

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Likewise, the indefinite agent pronoun, ndá, 4 corresponding to French on, German man, Hausa an, cannot be otherwise pronominalized or deleted. To delete the underlined ndé in (11) would give the sentence another interpretation.

(11) ká kema maa ndáa kuru-n, ndé ba-naa devu kuru-w

'if you hear that one refuses, one has found the means to refuse'

By definition, indefinite agents appear only as subjects of sentences. Since they are in fact only subject fillers which have no referent, there can be no later pronominal or Ø reference to them in a sentence, even if the syntax appears to require it.

(12) ndáa viya-k teka-k devid gaada-k tlaâ-k daa-n, teka daan dá dalam teluus

'one takes an evening bath so that when the dawn comes, the body will be soft'

The underlined word, teka 'body', appears semantically to have the underlined ndáa as its possessor. However, there is no mark of Ø anaphora (which would give teka-w) as would be required if a noun phrase with a referent, such as a proper name, were the subject. Thus, we have a case where phonological Ø shows that we don't have Ø anaphora!

It should be no surprise that first and second person and indefinite agents are not subject to anaphoric deletion. These forms always appear in underlying structure as pronouns. Anaphoric processes operate to reduce full noun
phrases, which will always be third person. Note furthermore, that pronominalization and Ø must be considered alternatives of a single process, i.e. pronominalization must not be considered a sort of first stage of anaphora with Ø being a further reduction of this intermediate pronominal stage. If this were the case, there would be no obvious reason why first and second person pronouns would not be subject to reduction to Ø anaphora.

Let us turn now to the conditions governing the choice of pronominal or Ø anaphora for any given NP. At this point, general remarks will be made. The specific facts for each constituent type will be covered in 1.2.1-8. The general semantic determinants for choice of Ø or pronoun in each syntactic function are given in Table 1 on page 403.

Referring to Table 1, we see that objects of prepositions can undergo either pronominal or Ø anaphora. If Ø anaphora is chosen, the entire prepositional phrase, including the preposition, is deleted. The only true prepositions in Ngizim are ìå 'at', îî 'to', ìå 'from', and nàë 'with'. In the case of deleted indirect objects, which require the preposition îî when nominal or pronominal, and deleted nàë phrases, there is a surface indication, in the form of a bound suffix on the verb, that there has been deletion of a prepositional phrase. For other prepositional phrases, if anaphoric deletion takes place, only context indicates the underlying presence of the phrase.

These general remarks require some qualification. Cer-
### Function of the anaphorically reduced noun phrase in the sentence

<table>
<thead>
<tr>
<th>(A) - Subject</th>
<th>(B) - Associative NP's</th>
<th>(C) Temporal adverbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Direct object</td>
<td>- Objects of prepositions</td>
<td></td>
</tr>
<tr>
<td>- Indirect object</td>
<td>- Complements in existential predicates</td>
<td></td>
</tr>
</tbody>
</table>

### Semantic determinants for choice of pronoun or Ø anaphora

- **Inanimates** almost invariably take Ø,\(^5\) except in a few cases where other syntactic rules force the use of an overt anaphoric element and no Ø element is available (see fn. 8); **human referents** usually take pronouns but can also take Ø; **animate, non-human** referents more often than not take Ø but may take pronouns depending on factors such as personification, domesticity, etc. All my examples of indirect objects are human or personified animate.

- All referents can freely take Ø or pronouns, though statistically Ø is probably used more commonly with non-human referents and pronouns with human. When the object of a preposition is Ø, the entire prepositional phrase, including the preposition, is deleted.

- A word lákwțú-w 'the time (previously referred to)' is used as a sort of time pronoun, but temporal adverbs require Ø in some environments where other constituent types allow either Ø or a pronoun (see section 1.2.8.).

| Table 1 - Determinants of anaphoric types |
tain types of prepositional phrases can be used alone as predicates, viz. nàa is used as the head of existential and associative predicates, ãâ is used as the head of locative predicates. When they are used as predicates, anaphoric deletion of prepositional phrases is not possible. Associative and locative predicates simply do not allow anaphoric deletion. Existential predicates do allow anaphoric deletion, but special words replace the underlying prepositional phrase (see section 1.2.5). In passing, I might mention that anaphoric deletion of other non-verbal predicates is not possible either.

The criteria (A)-(C) in Table 1 outline what the syntactically possible choices are for pronominal and Ø anaphora. In cases where the choice between the two is optional, many stylistic factors come into play. As an example of what I mean by this, consider the following paragraph.

A man and his wife are setting out on a trip but they must pass the night in the bush. There are thus three possible referents: the man, his wife, or the two of them together. In general, where an ambiguity as to the referent would otherwise result, a pronoun is used, since personal pronouns distinguish gender and number. Otherwise, Ø is used. The pronouns and Ø's are numbered in order to key with the explanations below for the apparent reasons for choosing the anaphoric element type.
(13) Šiikeenan, sai aci (1) dà kasci duuka-w akši (2) dà jibi devu nya ii pata. Akši (3) dà ya, Ṣ (4) dà ya tenu, sai Ṣ (5) dà tfi ii kunu-k pata puwii. Ṣ (6) ji tenu, devid dà dlami. Šiikeenan Ṣ (7) dà benyi-d ii-ci (8) aben. Aci (9) ta-du tenu, sai akši (10) dà veji.

'Well, then he (1) saddled the horse, they (2) took the road going to the bush. They (3) were going, (they) (4) were going, and then (they) (5) entered far into the bush. When (they) (6) had gone, night fell. Then (she) (7) cooked him (8) food. When he (9) had eaten, then they (10) lay down.'

(1) Masculine singular pronoun because it could have been him, his wife, or both who saddled the horse; (2) plural pronoun to show they were both going; (3) pronoun probably used because of a new sentence; (4), (5), (6) Ṣ can be used since the context clearly establishes that the referent is still the two of them; (7) Ṣ can be used in part because of the cultural context (the man would never cook), in part because of the pronoun numbered (8); (8) masculine singular pronoun since she could have been cooking for herself, her husband, or both; (9) masculine singular pronoun because of the same potential ambiguity as (8); (10) plural pronoun needed since Ṣ would have implied only the last mentioned referent, 'he', was involved.

Certainly other, much more subtle stylistic factors are
involved in the choice of pronoun or Ø as well. Based on very impressionistic observations, a pronoun generally is preferred when it constitutes the first mention of a referent in a new sentence or paragraph within a larger discourse. Ø seems to be preferred within a sentence, e.g. when a full noun phrase is mentioned in an adverbial clause and an anaphoric element refers to the noun phrase in an immediately following main clause. In relative clauses, Ø is strongly preferred for the subject when it is equi to the antecedent of the clause. Otherwise pronouns and Ø seem to have about equal preference as the anaphoric element within the clause referring to the antecedent.

1.1.3. Restrictions Shared by Pronominal and Ø Anaphora

Pronominal and Ø anaphora can only operate to the right, i.e. an anaphoric element can never stand to the left of a noun phrase to which it refers.6

(14) jà yka aci, jà ndemi nan
    'when we saw him, we greeted the man'

(15) nà bake-naa kam-ge-ri ii Audu
    'I burned his farm for Audu'

Whereas the pronoun in each of these sentences in the English translations can refer to the underlined noun, this is not possible in Ngizim. The only possible interpretations require that the pronouns and nouns have different referents.
Two pronouns agreeing in number and gender can be co-referential, e.g. the underlined pronouns in (16), as seen from the context of the folktale from which the sentence is taken, must be interpreted as co-referential. Likewise, ∅ and a pronoun in the same sentence can be co-referential, as in (17) and (18). See also (13) above for a longer passage showing the interplay of pronouns and ∅.

(16) tetan nya-naa miya-ga-ra, wurji dāa v(i) atu  
'upon bring her mouth (to the meat), the scorpion stung her'

(17) nā jibai aci nāa dai ∅  'I'll catch him and bring (him) out'

(18) ∅ dee tenu, ndem aci-n tai?  
'when (he) came, who greeted him?'

1.2. Illustrations of Pronominal and ∅ Anaphora by Function

Examples will now be given of pronominal and ∅ anaphora in each grammatical function. In each case a number of different kinds of illustrations will be given: sentences containing an anaphoric element without a co-referential NP in the same sentence; sentences with a topicalized NP and an anaphoric element co-referential to it in the main part of the sentence; relative clauses where, within the relative clause, there is an anaphoric element co-referential to the antecedent;7 compound or complex sentences, or pairs of sentences from a discourse, where one clause contains a full NP and the other contains a co-referential anaphoric element.
1.2.1. Subject

Pronominal anaphora of subjects always has the form of one of the Independent Pronouns, áći 'he', átû 'she', ákši 'they'. See Chapter 3, example (19) or the Appendix for the complete Independent Pronoun paradigm. Ø anaphora of subjects is always phonological Ø. These facts are true for both verbal and non-verbal sentences (see Chapter 3). In verbal sentences, there is an aspect marker, aa, used in the Imperfective, and an aspect marker da, which appears in the Subjunctive and Second Subjunctive, but these two aspect markers are not pronominal in that their presence is obligatory regardless of whether the subject is nominal, pronominal, or Ø.

The general facts governing pronominal and Ø anaphora are the same for subjects of both verbal and non-verbal sentences. Examples of both are included below. Recall that inanimate referents almost invariably require Ø anaphoric subjects, while humans can freely take pronominal or Ø anaphoric subjects, depending on the various stylistic factors mentioned at the end of section 1.1.2. Animate, non-human referents vary a great deal as to whether they take a pronoun or Ø.

Examples of pronominal subjects

(19) akši dar'yi 'they are standing'
(20) aci naa zayi 'he has a rope'

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(21) aci/atu/akši ðlam wana  'he/she/they did work'
(22) akuw kwá ji-n-aakun nen, akši ða maak-aakun
  'after you (pl.) leave, they will look for you'
(23) anarva, maa atu mii sakantu
  'the bride, well she was a haughty person'
  [... possessor of haughtiness]
(24) mese–gaa, waaci aci ða nc iyu
  'my husband, previously he loved me'
(25) maayim waaña aci naa tla
  'a boy who has a cow'  [a boy that he has a cow]
(26) tiiye dlama-naa bee waaña aci ða nci-n, ða ndaagmu-n-
    geri naa kabiine
  'whoever does whatever he wants, he will meet up with
   trouble'
(27) naa ngumuu-kši bai akši ðlam wana bii-n
  'I won't pay them if they don't do work'
(28) sai dá wanai ii keayak naa bedlemu maa akši ða yi
  'then he sent (word) to the squirrel and the hyena
   that they should come'
(29) miyakuwa dlebgena-n dá ji gepta maa aci furda
  'if a black ant deteriorates, he lifts his shoulders
   and says he's a winged termite'
(30) nen ða kalau nya ii ri–k garva-n, aci naa jifee bai
  'if a person fears going to the place of judgement,
   he is guilty'  [... he is not with truth]
(31) gaada maamaan zega–du ndàa bar ii–kši kwabo kwabo,
    akši ða cacpi gaawa
  'because the children knew one would give them a penny
   each, they gathered in great numbers'

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Examples of Ø subjects\(^9\)

(32) Ø ja bii-n, Ø tam? 'if (it's) not a dog, what is (it)\?' [... (it) is what?]

(33) Ø naa sulee gayi tak yaaye, kà nci-du-n, ña ñeëmuu ñà bar-d ii-ci

'even if (he) has only one shilling, if you need it, he could give it to you'

(34) Ø dlam wana '(he/she/they) did work'

(35) ten lakwuža tku, Ø ta garva

'since the time of that war, (he) became chief' [... (he) ate chiefdom]

(36) myi-gaa ŋgum, Ø zega-naa nema belan

'my friend, (she) knows how to mould pots well'

(37) pekurauçin, gaada Ø dá dlam kaña Ø dá cacpi ii Pateskamu

'the Koranic students, so that (they) might do reading, (they) assembled in Rotiskam'

(38) agwai waàfà Ø aaraaï-gu

'those eggs that Ø were white'

(39) dugul tluwaì áa garu áa miya-k nen waàfà naa yaanuu bai

'a morsel of meat will spend a long time in the mouth of a person that Ø has no teeth'

(40) nen waàfà Ø waànë yu 'the person who Ø sent me'

(41) baaci ruwai waàfà Ø áa ruwii bai

'a farmer who Ø doesn't farm'

(42) atu fiit aka gaada Ø dá dlam bana

'she started the fire in order that (she) do cooking'

(43) tla-k maayim naa anyi, Ø naa fuula bai

'a boy's cow has milk, (it) doesn't have butter'

(44) jagadlau áa bii-naa bii-k ta áa dus nen, daa Ø varee ii patata bai

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(44) continued

'if the lion were getting food in the forest, (he) would not come out on the plain'

(45) tetan nya-k bedlamu ngum, Ø dá mbaši

"when she arrived, the hyena sat down" [immediately on the arrival of the hyena, (she) sat down]

Example (45) is of particular interest for constraints on direction of pronominalization. In English, 'hyena' and 'she' cannot be co-referential in the word for word translation of the Ngizim sentence, given in brackets. Yet in the context of the folktale from which this sentence is taken, it is clear that they are co-referential.

1.2.2. Direct Objects

Pronominal anaphora of direct objects of finite verbs takes the form of the Independent Pronouns, áci 'him', átú 'her', ákši 'them'. Ø anaphora is phonologically Ø. Finite verbs are those verb forms used in all aspects except the Imperfective. The Imperfective requires the verbal noun. When a direct object pronoun directly follows a verbal noun stem, the Bound Suffix form of the pronoun is required. The third person Bound Suffix Pronouns are -rí 'him', -rā 'her', -kši 'them'. See Chapter 3, example (44) or the Appendix for the complete paradigm. These pronouns are always used with a linker and in the bulk of this study I have written them as units with the linker included, viz. -gáři 'of him', -gáraj 'of her', -ákší/-kši 'of them' (-áa- is used with
-kši when suffixed to nouns ending in a vowel). I will depart from this practice in the examples immediately below and in section 1.2.6, separating the actual pronoun form from the linker by a hyphen.

In the Imperfective, Ø anaphora takes the form of -w or -gš suffixed to the verbal noun. The form -w is used after vowels, -gš elsewhere and also optionally after vowels. These suffixes are allomorphs of the Previous Reference Marker, and can also be used with regular substantive nouns to indicate Ø anaphora, as we will see in section 1.2.6. See Chapter 4, section 5.1 for a fuller exposition of the Previous Reference Marker.

As with subjects, inanimate referents are almost exclusively restricted to Ø anaphora. Human referents freely take pronouns or Ø, non-human animates vary. Examples will include both those aspects having finite verbs, and the Imperfective, where the verbal noun is used.

Examples of pronominal direct objects

(46) à yiv akši 'leave them alone'
(47) ná kkəm aci bai 'I didn't beat him'
(48) baacì kumakumi, kasakař áa bii dà karm aci bai
   '(as for) a wearer of chain mail, a sword doesn't manage to chop him'
(49) magerař waarə ná ndəm aci
   'the visitor who I greeted [him]'
(50) manga-gaa waarə ná ndəma-ge-ri

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(50) continued

'my friend that I will greet [him]'

(51) sai ká rarki gayim tenu ká kem aci-n

'you should chase away the cat if you hear it'

(52) nda-k duuniya ââ ya-naa nen ii rii waaââa Seku ji-naa aci bai, daan då raven aci

'people of the world will take a person where God won't take him and they will trouble him'

(53) viida guzep jaunak bai; neâk ak̩i-n pata

'the rabbit is not the slave of the elephant; (it's) the bush (that) brought them together'

(54) gaadagum ââ lawan vek, aka ââ ta-gi-ri bai

'the rat sees a hole, the fire will not get [eat] him'

(55) baaci debdâ-k źabuwa ii bedlamu sëfkaate-naa a̱tu

'the one who sold honey to the hyena cheated her'

(56) vëra-k aker, jàâ k(i) aci

'on the thief's exit, we saw him'

(57) kawa naa gaaza ââ dapta-k ziida-ga-ra bai

'familiarity with a chicken doesn't prevent slaughtering it'

Examples of Ø objects (cf. fn. 9)

(58) maazam dà dalm ii-tu Ø 'the blacksmith fixed (it) for her'

(59) nàâ rama-w bai 'I won't say (it)'

(60) zanii-k jajem, megëyi-w ñgum tade Ø bai, balle baaci-k saaru-w

'(as for) a gown of thorns, (its) owner doesn't wear (it), let alone (its) borrower'
(61) balan mbii-kde, ndaa tausa-w ii wura bai
    '(as for) the beauty of a snake, one doesn't tie (it) around the neck'

(62) kulaabi-k aka, ndaa gu-dav-gu bai
    '(as for) a "fire baby", one doesn't carry (it) on the back'

(63) nen waara ndaa ziida-du Ø
    'a person that one is going to execute (him)'

(64) feru waara ja dlamu Ø, daa tli; dlamu Ø -n aaku-n, sai zayat
    'an illness which a dog suffers (it), he will get up (from it); if it is a goat which suffers (it), there's only the slaughter:'

(65) ama-gari waara aci ò ncu-gu bai
    'his wife that he doesn't like (her)'

(66) kwitaawa tawanke bau nda ji-du Ø ii da-k afa-n
    'every gauta-tomato is red if one carries (it) into the eye of] the sun'

(67) åa mai sa kutlii-gaa nàa ki Ø
    'bring me my children so that I might see (them)'

(68) dababkin åa suwaari, akši åa lawan-gu
    'the girls were dancing and they (i.e. the boys) were watching (them)'

(69) apa-aaci bata bëna bii-n, da tantli Ø ii akurna
    'if your flour doesn't suffice for cooking, mix (it) into gruel'

(70) zeeger-ci åa bacì duwal bii-n, å kaiši Ø daan da yi kalkal
    'if your foot doesn't reach the stirrup, tie (it) so that it comes out right'

(71) danka tlakate-n, åa tu-w -n taataru
    'if a falcon deteriorates, even a dove will kill (him)'
    [... will kill (him) a dove]
1.2.3. Indirect Objects

For indirect objects, pronominal anaphora consists of pronouns which are essentially the same as the independent pronouns preceded by ći 'to': ći-ci 'to him', ći-tu 'to her', ći-käi 'to them'. See Chapter 3, example (64) or the Appendix for the complete paradigm. Ø anaphora is indicated by a bound suffix on the verb, -äw. As far as I know, this suffix cannot co-occur with an overt indirect object, nominal or pronominal. This is in contrast to the bound instrumental suffix which, when used alone, indicates deletion of an instrumental phrase, but which can co-occur with an overt instrumental phrase (cf. section 2.3).

I have tentatively classed indirect objects in Table 1 among those constructions which do not allow pronominal anaphora for inanimates. Unfortunately, I have no examples of inanimates in this function, nor do I have a large range of examples containing Ø anaphora for indirect objects. As expected, human referents freely take pronominal or Ø anaphora.

Examples of pronominal indirect objects

(72) daaci Benderkuuku dá gej ii-ci gama-w gayi
    'then Benderkuuku cut off one leg of it for him'
(73) ná dee-d ii-tu dagwda 'I brought money to her'
(74) náa rama-w ii-käi 'I will tell (it) to them'

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(75) **maveji giina, ndàa taatka ii-ci tera bai**

'(as for) one lying on his back, one doesn't show him the moon'

(76) **nda wakil waara ndàa bar ii-ci laabar?**

'where is the representative to whom one will give [him] the news?'

(77) **ø ãa sa-k sema bai kà bar ii-ci-n**

'(he) won't drink beer if you give (it) to him'

(See also (31) for an example of a plural indirect object pronoun in an embedded sentence, with the antecedent in the main clause.)

(78) **nen maa áa nta-naa gawa-n, å gaf ii-ci gaju-w**

'if a person says he is going to swallow an axe, hold the handle for him'

(79) **bedlamu dee tenu, maazam dá dalm ii-tu**

'when the hyena came, the blacksmith fixed (it) for her'

(80) **tamkee ama-w å nci-n, áa nii-d ii-tu**

'anything (his) wife wanted, he would bring (it) to her'

**Examples of Ø indirect objects**

(81) **jà ji-d-aw**

'we carried (it) (to him)'

(82) **dlara-k kunu-k aayu, åa bar-aw araawa-n Kaakasku**

'(as for) the gazelle's stomach ache, (it's) God (who) gives (it) potash'

(83) **Maakwai, ná taatk-aw kam-gaa**

'(as for) Makwai, I showed (him) my farm'

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(84) məvəcji giina, ndàa taat-k-aw tera bai

'(as for) one lying on his back, one doesn't show (him) the moon'

(85) sunu kwam waařa nà bar-aw araawa

'that's the bull that I gave potash (to it)'

(86) makur-aači əa gədləp ci bai kà jiba jagadluu ká bar-aw yəaye

'your enemy won't praise you even if you catch a lion and give (it) (to him)'

1.2.4. Instrumental and Associative Adverbal Phrases

Nominal and pronominal instrumental (INST) or associative (ASSOC) phrases are headed by the preposition nàa 'with'. If the complement of nàa is a pronoun, the Independent Pronoun forms, already seen with subjects and objects, are used. ø anaphora of INST or ASSOC involves deletion of the entire phrase, including the preposition. A surface manifestation of underlying INST or ASSOC remains in the form of a bound suffix, -dù or -dəw, on the verb. (In (87), the suffix deletes the final vowel before ìi by an automatic rule deleting the first of abutting vowels.)

(97) nà karm-d ii-ci  'I chopped (it) for him (with it)'

This morpheme -dù/-dəw could be inserted as part of the anaphoric deletion rule. I don't believe such an account would be correct, however, mainly because -dù/-dəw can co-occur with a full nàa phrase. In section 2.3, I will argue that -dù/-dəw is inserted by a Copy Rule and that ana-
phoric deletion of INST or ASSOC is dependent on the application of this rule.

As indicated in (B) of Table 1, both human and inanimate referents can take pronominal anaphora in prepositional phrases, including INST and ASSOC.

**Examples of pronominal INST or ASSOC phrases**

(88) ná ziide gwamak *naa atu* 'I slaughtered the ram with it'

(89) á fuwen *naa atu* 'come down with it!'

(90) Ndena *agwai*. Áa ƞgwi ká niyi fen-sakem *naa atu*.

'Here are some eggs. Take some and fill your calabash with them.'

(91) déga waañ̃̃ a ndá v(a) aci *naa atu*

'the arrow which one shot him with [it]'

(92) áa mi *dla̯ kwak tiyú* ká dab aci *naa atu*

'take that rake and push him with it'

**Examples of Ø INST or ASSOC phrases**

(93) ná ziide-*daw* gwamak

'I slaughtered the ram (*with it*)'

(94) vege-*daw* ii aikwa-geri

'he fell (*with it*) in his hand'

(95) gatakas saurak, bedlamu kuru ndaán ndá terfi-*daw* aci bai

'(as for) fetters (made of) meat strips, a hyena doesn't refuse that one tie him up (*with them*)'

(96) laayima, ndáa raakan-ɗu tenu; nenuwa-k waka, ndáa yva-w aa tenyi-w

'an umbrella, one walks (*with it*); the shade of a tree, one leaves (it) in (its) place'
(97) *ayayin jaɓ, wàa dlama-du tam?  
'mere gazelles, what will we do (with them),'

(98) apta òa kunu-k jaka daama waafa akši òa calma-du am  
aa rii-k bara-w

'flour was in a different bag which they would mix (it) 
into water at the hunting place'

[flour ... that they would mix (with it) water ...]

In Chapter 3, section 2.3 it was pointed out that not 
all predicate phrases introduced by nàa behave like INST and 
ASSOC. Thus, neither manner adverbs introduced by nàa, (99), 
nor nàa phrases derived from postposing a subject conjunct, 
(100), can be anaphorically deleted or evidenced in surface 
structure by -dà/-dáw.

(99) ta bii-k ta nàa nyanya ≠→ *ta-daw bii-k ta  
'he ate the food with disgust'

(100) jà dlam wana nàa aci ≠→ *jà dlam-daw wana  
"he and I worked" [we did work with him]

The starred sentences are, of course, grammatical if 
interpreted as having a deleted instrumental phrase.

1.2.5. Complements in Existential ("there is") and Asso- 
ciative ("have") Predicates

The structure of existential and associative sentences 
has been described in detail in Chapter 3, section 5. The 
facts will be repeated briefly here. Predicates of both 
types of sentence have the preposition nàa 'with' as head. 
Associative sentences are formed by simple juxtaposition of
the subject and the predicate.

(101) ci nāa kwārā  'you (m.sg.) have a donkey'
(102) Kwaana nāa tam?  'what does Kwana have?'  [Kwana with what?]

Existential predicates in surface structure appear to be associative predicates without subjects.

(103) nāa beeza  'there is salt'
(104) nāa merak bai  'there is no oil'

Because Ø subjects are possible, sentences like (103) and (104) are potentially ambiguous, meaning either 'there is salt' or 'he has salt', etc.

Pronominal anaphora is possible in associative predicates just as it is in associative adverbs, e.g.

(105) gaazadin waʃa aci nāa akši  'the chickens that he has [them]'
(106) bendegi waʃa aci nāa atu  'the gun that he has [it]'

Unfortunately I seem to have no examples of existential predicates with pronominal complements among my data. In Hausa, sentences such as (Hausa) akwai ta 'there is some/one' and (Hausa) babu su 'there are none' are possible and I see no reason in principle why the parallel Ngizim sentences, (107)-(108), would not be possible. These will have to be verified with an informant.
(107) naa atu 'there is some/one'
(108) naa akši bai 'there are none'

Ø anaphora is possible with existential predicates. In the affirmative, a special word, wàrâ, of uncertain etymology, replaces the entire existential predicate introduced by nàa. In the negative, the complement is simply deleted, leaving nàa bâi. This is the one case in the language where a proposition does not require an overt complement. In effect, the word bâi 'not' is the complement of nàa.

(109) Q: naa sekař bi? 'is there any sugar?'
     A: aawo, wara / o'o, naa bai
        'yes, there is / no, there isn't'

(110) beeka wara '(as for) salt there is some'
(111) mardu naa bai '(as for) millet there is none'
(112) goo beeka waafa naa bai
        'there was nothing which lacked' [there was no thing which there wasn't]
(113) naa beeka waafa wara
        'there's something wrong' [there's something that there is]

There is no possibility for Ø anaphora of the complement of an associative predicate. If we continue to pursue the observation that existential sentences look like associative sentences with no subject, then we might expect wàrâ and nàa bâi to be used as Ø associative predicates. Thus, in answer to the question Alaji naa dagwda? 'does Alhaji have money?', we might expect ii, Alaji wara. However, the
latter sentence can only mean 'yes, Alhaji exists' or 'yes, Alhaji is to be found there' (cf. 110). Likewise, to answer ci naa dagwda? 'do you have money?', one could not say iyu naa bai, since the latter sentence would only mean 'I don't exist' (cf. 111), which happens to be a euphemism for 'I'm dead'.

It was mentioned in Chapter 5, p. 86, that sentences like (114) and (115) are equivalent in meaning to associative sentences.

(114) Alaji dagwda wara 'Alhaji has money' [Alhaji money there-is]
(115) iyu keekke naa bai 'I don't have a bicycle' [me a bicycle there-is not]

It was suggested there that these might be analyzed as underlying associative sentences of the form Alaji naa dagwda 'Alhaji has money' with both the subject and complement of naa topicalized, i.e. 'as for Alhaji (and) as for money, there is some'. An alternative source would be something like naa dagwda aa rii-k Alaji 'there is money at Alhaji's place', with 'Alhaji' topicalized and the underlying locative phrase deleted. There is yet another source, not mentioned in Chapter 5, but suggested in the light of the analysis of topicalized noun phrases in Chapter 8, esp. fn. 22 of that chapter. That is, Alaji in (114) would be a "theme" for the remainder of the sentence. In the analysis of Chapter 8, the theme would be dominated by sentence level ADV. The sentence would thus mean something like 'speaking
of Alahaji, there's money'. Alhaji would thus not need to have any "source" within the main existential clause. I have no strong syntactic arguments for choosing among these alternative analyses for (114) and (115), although the last one given is my preference.

1.2.6. Associative Noun Phrases

An unusual feature of Ngizim syntax is the possibility of using Ø anaphora for associative noun phrases.¹⁰ The formal units used for pronominal and Ø anaphora for such noun phrases have already been seen in 1.2.2 where anaphora with verbs in the Imperfective aspect was discussed. Pronominal anaphora takes the form of the Bound Suffix Pronouns, Ø anaphora the form of the Previous Reference Marker, 'w or -fů. The only additional comment required here is that pronominal anaphora is fairly free in associative noun phrase constructions, even with inanimate referents.

Examples of pronominal associative noun phrases

(116) saw jampel-ge-ri å wiída kaa tera
    'consider his face which was bright like the moon'
(117) saw Canduwa åa gadaav-aa-kši dambasu
    'there was Canduwa among them seated'
(118) baaci hal, ved-a-ge-ri řuu-geri
    '(as for) a temperamental person, he's all alone in his quarter'
(119) gwangurek waafá Canduwa wunu aa wunduwa-ge-ra
    'the old woman who Canduwa stayed at her house'
(120) agwai waafa teka-ga-ra dagoeva
"eggs with decorated shells" [eggs that their bodies (are) designed]

(121) bedlamu shaale bai, see suwaari-ga-ra deruup-deruup
'the hyena paid no attention, (there was) only her
dancing "deruup-deruup"

(122) saw ja naa rawa, bedlamu akuu-ga-ra; ja-k jaunak naa
kaakenii-k tluwii-k pata akuu-ksei
'there was the dog running, the hyena behind her;
the elephant and the rest of the wild animals behind
them'

(123) digemau maarem nen, kakera-ge-ri ye gaawa
'if the camel is big, his load will be great'

(124) mii-k deka daaadla bii nen, zuwak mest ii da-ga-ra bai
'if the thresher doesn't cough, the wind hasn't ...
swirled above her'

Examples of Ø associative noun phrases

(125) dega-k dasu-k aamen, selke aa kaangu-gu bai
'(as for) the arrow "with your name on it", chain
mail is no remedy for (it)" [the arrow of finishing
years ...]

(126) gwangurak waafa Canduwa wumu aa wunduwa-w
'the old woman who Canduwa stayed in (her) house'

(127) agwai waafa teka-w dagoeva
'eggs whose shells are decorated' [eggs that (their)
 bodies are designed]

(128) bee waafa bedlamu naa ja aa kumu-w, ba dela aa
launa-w
'the things that the hyena and the dog were (engaged)
in (them), all of them the jackal was seeing (them)'

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(129) ndá ba zaabenu bii nen, daifarán áa těnyi-
'if one doesn't catch a guinea-fowl, the francolin is (still) in (its) hole'

(130) tiiye kiide albasari, foo-su áa miya-geri
'whoever eats an onion, (its) smell is on his breath'

(131) wunyak badlamu då yi då ram ii afku-w naa abancin miyu-w
'the daughter of the hyena went to tell (her) father and the co-wives of (her) mother'

(132) dàa dai albuuta, kunu-w naa debiino naa gooro
'he took out a cloth, inside (it) were dates and kola nuts'

(133) Ka yka-naa kunamu tiyu? Ja naa kutlii-gara åa waka-w.
'You see that deleb palm? The dog and her children are on top of (it).'

(134) tênu-w gafradlak ... maayim dlam-naa vedau ii da-w
'the skin was wet ... the boy had urinated [done urine] on (it)'

1.2.7. Locative Phrases

The locative pronominal expressions are rií tó 'here' [this place], rií tìyù 'there' [that place], riíyù 'there' [the place (previously referred to)]. Ø anaphora involves total deletion. All locative phrases must be introduced by a preposition. As with other prepositional phrases, when the complement of the preposition is deleted, so is the preposition. Therefore, a deleted locative phrase leaves no surface trace. Both pronominal and Ø anaphora are common for locative adverbs. Choice between the two seems to be stylistically determined. I stress that the choice between pro-
noun and Ø is possible only for locative adverbs. When the locative phrase itself is the predicate, as in (135) and (136), Ø anaphora is not possible since this would entail deletion of the entire predicate.

(135) rii waaña Anku-k Bagaja áa riyu

'the place where Bagaja Lake is' [the place that Bagaja Lake is at the place]

(136) see ná kema Canduwa áa riyu-n

'only when I hear that Canduwa is there' [only I hear Canduwa is at the place]

(See ... –n means 'not until, only when'.)

The following examples will involve only locative adverbs.

Examples of pronominalized locatives

(137) wà mbasu ii rii tku

'let's sit here'

(138) ná kema maa kafee áa taman aa riyu

'I hear that goods bring a profit there'

(139) rii waaña ndiwa rege ii riyu

'the place where the people migrated to [the place]'

(140) daa waaña jàa wana aa riyu

'the town that we work in [the place]'

(141) ñuwa waaña nà zaa ree maayim da riyu

'the well that I pulled the boy out of [the place]'

(142) rii waaña maayim dlam bay nen, fatawanke áa gutka ii riyu
(142) continued
'(as for) a place where a boy makes a find, he always bends down there'

Examples of Ø locative phrases

(143) berni-k bedlamu, ja āa ya ii saafeØ Ø bai
'(as for) the town of the hyena, the dog does not go trading (there)'

(144) aa Ngwajin ye Mai Dabera naa nda-geri dambasu Ø
'at Ngwajin as well King Dabera and his followers were staying (there)'

(145) rii waara vek kaayayin gaawa Ø
'a place where the squirrel holes were numerous Ø'

(146) rii waara goomak regu Ø
'the place that the ram migrated (to Ø)'

(147) dva waara nda sa-k am Ø bai
'a town where no one drinks water Ø'

1.2.8. Temporal Adverbs

If there is a pronominal form for time expressions corresponding to English 'then', it is lakwto-w 'the time (previously referred to)'. This "pronominal" form can be used when referring to a time specified in previous context, as in (148), where lakwto-w is the subject of the sentence, and in (149) where it is a time adverb.

(148) lakwto-w lakwto-k ŋa 'that time was a time of war'
(149) ŋa ye, lakwto-w vede-n-gara, naa ŋa bai
'war as well, at that time it had quieted down, there was no war'

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However, if in some sense, lakwu- would be a "copy" of an earlier mentioned time word in the same sentence, then only Ø is possible. Let me explain what I mean by "copy" here.

Suppose that we think of a topicalized noun phrase as one which has its source within a matrix sentence. The Topicalization Rule would then move the noun phrase to the head of the sentence, leaving a pronoun or Ø copy of that noun phrase in underlying position. When a temporal adverb is topicalized, only a "Ø copy" is possible, even though either Ø or pronominal anaphora is possible for copies of other topicalized sentence functions, as we saw above.

The two environments that I know of where such copy processes are involved are where the temporal phrase is topicalized, and where it is the antecedent of a relative clause. I have not analyzed either of these constructions as involving movement or copying, but in some semantic sense they are characterizable in this way. In the examples below, Ø is not replaceable by lakwu-, as seen, for example, by the ungrammaticality of (150)(b).

(150)(a) zaaman waafa akshi aa za Ø
    'the period during which they were warring Ø'
(b) *zaaman waafa akshi aa za aa lakwu-

(151) gafa waafa ja yk aci Ø bai
    'the day that we didn't see him Ø'
(152) \(\text{aa zaaman Mei Ganjuwa, Šuwa-Šuwa dagai áa nii da cad gaada-k za ŏ} \)

'in the time of King Ganjuwa, a certain Shuwa Arab was coming from the east for war ŏ'

2. Copy Processes

Pronominal and ŏ anaphoric elements as discussed in section 1 have one of two sources in surface structure: they are introduced in underlying structure or they result from the reduction of a full NP which was present in the underlying structure. Resembling these anaphoric elements are formally similar elements which do not appear in underlying structure in any form but are introduced by rule. These elements will be called Copy Pronouns or ŏ Copies and the rules which introduce them will be called Copy Rules. Three such elements in Ngizim are known to me: Intransitive Copy Pronouns, Indirect Object Copies, and ŏ Instrumental Copies.

2.1. Intransitive Copy Pronouns (ICP)

The Intransitive Copy Pronouns (ICP) are pronominal suffixes attached to intransitive verbs. The ICP reflects person, number and gender of the subject. In Ngizim, the ICP is formally the appropriate Bound Suffix Pronoun preceded by the formative \(-n\). The full ICP paradigm is seen in example (29) of Chapter 2. The ICP is added only if the Totality Extension has been chosen in underlying structure for the verb. The meaning of the Totality Extension and
the reasons for including the ICP as one of its manifestations are given in Chapter 2, section 3.2.

The ICP rule is formulated in (153). Pers is a cover symbol for features of person, number, and gender. The indefinite, nda, corresponding to Hausa an, takes third person plural ICP agreement (cf. 158).

\[
\begin{array}{ccccccc}
\text{(153) } & \# & \text{NP} & \text{AUX} & \text{V} & X & \# \\
\text{[opers]} & \underline{\text{[ctors]}} & \underline{\text{[tr}}} & \underline{\text{[TOT]}} & \underline{\text{1}} & 2 & n + \text{PRO} & 3 \\
& 1 & 2 & 3 & \text{opers} & \text{opers}
\end{array}
\]

Strict subcategorization features on different pronoun paradigms will assure that the Bound Suffix Pronouns are inserted.

Following are some examples of sentences containing ICP's:

(154) ná ji-n-gaa 'I went away'
(155)(a) ká ji-n-aaci 'you (m) went away'
     (b) ká ji-n-aakem 'you (f) went away'
(156) garwa zukte-n-gara, am dáa yi-n-gara 'the can became punctured and the water ran out'
(157) ndaawa áa fuwa-n-aakši da metke 'the people will get out of the car'
(158) ndá captee-n-aakši 'a gathering took place' \[\text{[one gathered]}\]
(159) dayi-n-geri-n gedan-gaa '(it was) my brother (who) got lost'
(160) me te-n-geri-n tai? 'who died?'

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Sentences such as (159)-(160) are of particular interest. Questioned or focussed subjects are postposed in Ngizim. This puts the referent for the ICP to the right of it. We thus have what appears to be a violation of the alleged restriction against backward pronominalization, noted in section 1.1.3. To claim that we do have backward pronominalization would reveal a failure to appreciate the difference between anaphoric processes and copy processes. Whereas an anaphoric element replaces a semantically present NP in a specific syntactic function, copy elements replace nothing. Their insertion and their interpretation depend on the presence of another NP elsewhere in the sentence. Because of his knowledge of the grammar of his language, an Ngizim speaker knows that an ICP is inserted on the basis of the underlying subject of the sentence and he knows where to look for that subject. If he has not found it before the verb, he knows it will appear later in emphasis position. In the case of an anaphoric element, if he has not found a possible co-referential noun phrase for it earlier in the sentence, he can only assume that the referent is in previous context for it cannot come later in the sentence. Similar observations are applicable to Indirect Object and Instrumental Copies (2.2 and 2.3) where an apparent backward reference relation also holds.
2.2. Indirect Object Copies

Some Chadic languages allow, and in some cases may require, an anticipatory indirect object pronoun agreeing in gender and number with a following indirect object. Such constructions are rare in Ngizim, but are grammatical.

(161) ná taatk ii-ci kam-gaa ii Maakwai
     'I showed [to him] my farm to Makwai'
(162) då bar ii-ci dabi ii kaayak
     '(then) he gave [to him] a hoe to the squirrel'

There is good reason to suppose that the pronouns here are introduced by a different rule than that which gives us normal sentences such as (72)–(80) containing indirect object pronouns. These sentences seem to mean something different from the same sentences without the pronoun, though it was difficult to interpret informants' explanations as to what the difference was. Furthermore, this anticipatory construction is possible even with a first or second person indirect object, while neutral sentences with these persons always have a single indirect object pronoun directly after the verb (see Chapter 3, section 2.2 for relevant examples).

(163) taatk aa kam-geri ii iyu
     'he showed [to me] his farm to me'

As further support for the claim that copy pronouns such as those in (161)–(162) differ from anaphoric pronouns,
consider the following sentences which are structurally similar, but where the underlined pronouns must have a referent other than 'Audu'.

(164) ná baked-naa kam-ga-ri ii Audu
    'I burned his farm for Audu'
(165) ná baked-d ii-ci kam-k Audu
    'I burned for him Audu's farm'

These examples show that the indirect object copy rule inserts only an indirect object copy pronoun and that pronoun can copy only an indirect object. Thus an Ngizim hearer's strategy for interpreting sentences such as (161) and (162) is limited to a very specific construction.

2.3. Instrumental Copies

The marker -dù/-dàw, described in 1.2.4 as indicating anaphoric deletion of an instrumental or associative adverb, may appear in a sentence containing an overt adverb.

(166) náa karam-du dem naa gawa tku
    'I will chop [with it] the wood with this axe'
(167) Demza na-du aayu naa atu
    'Demza skinned [with it] the gazelle with it'

We would not expect -dù/-dàw to co-occur with an instrumental phrase if its presence were simply part of the Ø anaphora process. Thus, it seems reasonable to consider it
to be introduced by a copy process, with ∅ anaphora of instrumental or associative adverbs being dependent on its presence. This copy process will be sensitive only to the categories INST and ASSOC and hence will not operate for måa phrases dominated by other nodes. Thus, -dù/-dàw will not appear in sentences like those in (99) and (100) unless the sentence also contains underlying INST or ASSOC. See pp. 53 ff. for a formulation of the rule inserting -dù/-dàw and further discussion.

3. EQUI-NP Deletion

The rule of EQUI-NP Deletion was given in section 0 of Chapter 7 and is repeated here for convenience:

(168) **EQUI-NP Deletion**

\[ \text{[\[ V (NP₂) \text{NP}_1 X \]}_{\text{NP}} \text{ ... } \Rightarrow \text{ ... 1 2 3 } ∅ 4 \text{ ...} \]

1 2 3 4

Conditions: (a) There is an NP co-referential to \text{NP}_1 elsewhere in the sentence, either to the right or left.

(b) Obligatory if 2 is not null, optional otherwise.

I will first enumerate the characteristics of EQUI-NP Deletion in Ngizim, giving justification for my interpretation where necessary. I will then present a number of examples with comments relating to particular examples.

(1) EQUI-NP Deletion deletes subject noun phrases of of nominalized embedded sentences of several types. These

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nominalized sentences may be complement sentences functioning as either subjects of verbs or as predicate complements, usually direct objects (cf. Chapter 7); they may be embedded in 'because' or 'in order to' phrases (cf. Chapter 8, section 9); or they may be embedded in one of several types of temporal adverbial clauses (cf. Chapter 8, section 7). Note that EQUI-NP Deletion is made contingent on nominalization of the clause rather than nominalization being one of the effects of EQUI-NP Deletion. This interpretation has been chosen because non-nominalized structures where EQUI-NP Deletion has applied are impossible in Ngizim. On the other hand, EQUI-NP Deletion seems to be obligatory in nominalized structures only as a result of surface oriented problems of interpretation (see the comments numbered (4) just below). That is, to first apply EQUI-NP Deletion to a non-nominalized structure, and then to make nominalization of such structures obligatory would require that we propose an ungrammatical intermediate stage. But those nominalized structures where EQUI-NP Deletion is obligatory do not seem to be totally ungrammatical, even if the rule has not applied. Rather they seem to be "unacceptable" surface structures (cf. Ross (1967) for the distinction between "ungrammatical" and "unacceptable"). Thus, no ungrammatical intermediate stage is required if Nominalization takes place first.

(2) EQUI-NP Deletion is not to be equated with $\emptyset$ anaphora. $\emptyset$ anaphora entails no syntactic modifications other

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than deletion of an NP. EQUI-NP Deletion requires nominalization of the clause in which it takes place. Next, EQUI-NP Deletion does not leave the Previous Reference Marker as a trace of deletion, even though the structure of nominalized verb + subject is structurally N + associative NP. Furthermore, EQUI-NP Deletion deletes any subject, including those in first and second person. Ø anaphora is applicable only to third person noun phrases.

(3) EQUI-NP Deletion works to the right or to the left. Neither Ø anaphora nor pronominal anaphora can operate to the left. This is counterevidence to the claim in Postal (1970) that EQUI-NP Deletion must have pronominalization as an intermediate stage. The only reason for Postal's making this claim is that in English the environments for EQUI-NP Deletion are a proper subset of the environments for pronominalization and hence an apparent generalization is missed if the two processes are not somehow related in the grammar. But in Ngizim the environments for EQUI-NP Deletion are not a proper subset of the environments for pronominalization because pronominalization cannot operate to the left while EQUI-NP Deletion can. Thus, the reason for wanting to relate the two processes formally is considerably weakened.12

(4) I have not deeply investigated the question of where EQUI-NP Deletion is obligatory and where it is optional. There are certain verbs whose complements require EQUI-NP Deletion (see Chapter 7, section 1.1.1). One fairly clear restriction in the language would make EQUI-NP Deletion
obligatory in a nominalized sentence with a transitive verb and an overt direct object. Such nominalized sentences would have the form \[ V \quad NP \quad NP \quad [+N][object][subject] \]. Thus, sentences like (169) were consistently rejected by informants.

(169) *tatle-k kukutešam keri dameet aci bai

'_his breaking the mirror didn't bother him'

Noun phrases of this structure were discussed on pp. 101-103 and it was suggested (p. 103) that the rejection of such structures might result from a possible ambiguity. That is, a phrase 'kkema-k masyim-k Audu' would be interpreted as 'beating Audu's boy' instead of 'beating of the boy by Audu'.

The requirement that EQUI-NP Deletion apply to the structures in question is widespread in Chadic, being true of Kanakuru (Newman (1972), p.7-39) and Tera (Newman (1970), p. 65). According to Newman, EQUI-NP Deletion is absolutely obligatory in these languages in the structures in question. I hesitate to be quite so absolute for Ngizim. The following proverb was found where 'kiida-k tluwii-k diišaw 'eating meat by a vulture' does indeed seem to be a nominalized sentence with a transitive verb having an overt object, and EQUI-NP Deletion has not applied:

(170) 'kiida-k tluwii-k diišaw: sai takde-n, da 'yuwi, da ci

'_eating meat by a vulture: when he steps on it, then he jerks and eats_'

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Example (170) is a proverbial epithet, and some of the restrictions of the mainstream of the language may be relaxed in the stylized language of proverbs.

Embedded sentences with intransitive verbs were readily accepted with or without the subject being deleted by EQUI-NP Deletion.

(171) tefa(-gaa) ii duwa bar-d aa kalau'
      '(my) entering the well frightened me' [gave me fear]

In examples, the clause in which EQUI-NP Deletion has taken place is underlined.

EQUI-NP Deletion in complement sentences

To the right

(172) baaci-k nyaw áa buuka piima bai
      'a slanderer does not fail to look over his shoulder'

(173) maguru, gaada-k guru, kure-naa mbasu ii wiita-k ndiwa
      'the jealous husband, because of jealousy, refused to live among people'

(174) kā maaki gwabo kā banji bii-k šau ii kunu-w
      'look for a gourd and start shitting into (it)'

(175) akši tla ii diyi nen, dà 'yawi ii miya gayi
      'when they undertook to give birth, they gave birth at the same time'

(176) gaada-k tluwii-k garva, ndāa dapta-k diišaw naa vayak bai
      'just because it's the chief's meat, one won't prevent the vulture from circling'

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To the left

(177) mesta(-gaa) ii bedlamu bar-d aa kalau
    '(my) changing into a hyena frightened me'
(178) ngwa-k ūsau dlamte-naa fena-gaa
    'scooping up manure ruined my calabash'

At the moment I am able to locate only these examples of nominalized sentences serving as the subject of a verb and having a subject identical to an NP in the main S. Example (177) without the parenthesized -gaa 'my' and (178) are ambiguous in Ngizim as they are in English, being interpretable either as having a subject coreferential to the later NP or as having an indefinite subject. The intransitive verb maste 'turn into' optionally allows its subject to appear, while the transitive VP, ngwa-k ūsau 'scooping up manure', does not.

EQUI-NP Deletion in temporal adverbs

To the right

(179) dá n'yi-naa yaanau gawa-geri kaabe karam dem-gu tenu
    'he should sharpen the blade of the axe before chopping the wood'
(180) Demza na-naa goomak akuu ziida-w tenu
    'Demza skinned the ram after slaughtering it'
(181) bedlamu, da lawan ja, see tek
    '(as for) a hyena, on seeing a dog, (he does) nothing but killing'

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EQUI-NP Deletion is not obligatory in intransitives, as seen in (182).

(182) já serme-naa biì-k t-aaja kaabe tlay-aaja tenu

'we prepared our provisions before our departure'

To the left

(183) lawan wunduwa, ja là nange bedlamu

'on seeing the house, the dog insults the hyena'

(184) kalaktayi-gaa, ná tefe-n-gaa ii menduwa

'on my return, I entered the house'

(185) nya ii menduwa, magaráf dà ndem iyú

'arriving at the house, the stranger greeted me'

(186) akúu karam dem nèn, dà dèbda-w

'after chopping the wood, he will sell (it)'

(187)(a) akúu tlay-aakší pedek, dà yi ii kam dà kwambe gwadamu

'after their getting up in the morning, they went to the farm and dug up peanuts'

(b) akúu tla-n-aakší pedek, dà yi ii kam dà kwambe gwadamu

'after they got up in the morning, they went to the farm and hoed up peanuts'

For some reason (184) was not acceptable if EQUI-NP Deletion was applied. Example (185) is ambiguous in Ngizim, potentially having either 'stranger' or 'me' as subject of the adverbial clause. In (187)(a) EQUI-NP Deletion has not applied, the suffixed -aakší being the subject. In (187)(b) the clause isn't nominalized. The suffixed -n-aakší is the
Intransitive Copy Pronoun (cf. section 2.1). This is another environment where EQUI-NP Deletion would most certainly obligatory.

**EQUI-NP Deletion in purpose or reason phrases**

**To the right**

(188) dá yivi da-gara ṭap ii veda gaada-k lawan
    'she left her eye (exposed) a little in order to see'

(189) ná teke-naa bedlamu gaada nambo nta-w
    'I killed the hyena because of dislike for it'
    [...] because of lack of liking (it)]

(190) ká veree-w gaadak maaka-w?
    'did you come out to look for (it)?'

(191) nää ya ii ŋdama-k degem
    'I'm going to greet the chief'

(192) ká dee-w ii maaka-ge moo?
    'what did you come looking for?' [you came for searching of what?]

**To the left**

(193) gaada-k metu nää kur diyi bai
    'because of dying one doesn't refuse to give birth'

(194) ii dlama-ge moo ká ji ii pata-w
    'in order to do what did you go into the bush?'

4. Reflexives and Reciprocals

The anaphoric processes discussed in the foregoing sections involved co-referential noun phrases which appeared in
different simplex sentences. In Ngizim, as in English and probably universally, a special reflexive formation is required when co-referential NP's appear in the same simplex sentence. I did not investigate reflexivization with an informant and therefore a full statement will depend on examination of texts and correspondance with informants. For the moment, I will simply give a few examples found in texts. Ngizim shares the normal Chadic method of forming reflexives with the word for 'head', ádá.

(195) ná ba-naa áda-gaa 'I have saved myself' [I have received my head]
(196) ii yaaye ná ta alwaaši-k áda-gaa bai 'even me, I'm not bragging' [...] I didn't eat boastfulness of my head]
(197) ká nkalci ad-aaci 'watch out for yourself (m.sg.)'
(198) dá dabgi-naa áda-geri 'then he buried himself'
(199) tiiye áa gedleô áda-geri 'everyone was praising himself'
(200) Saku waarâ iivu zegaya ii ada-geri 'God who has rendered knowledge to himself'

Intensive reflexives also use the word head, e.g. atu naa ada-gara 'she herself' [she with her head]. Example (201) also seems to contain an intensive reflexive.

(201) Mai Badaayo naa duukakin keri ke ada-geri 'King Badayoy had his own horses' [King B. had his horses of his head]
There are two ways to form reciprocals. The more frequently used is the word gâtkâu (--- [gâtkû] medially) 'each other'. The plural possessive pronoun of the appropriate person is attached. Gâtkâu is illustrated in (202) and (203). The second way of forming reciprocals is to use the word têkâ 'body', also with the appropriate plural pronoun suffixed. This is illustrated in (204).

(202) Maamedo naa Daawura bal áa šawař ii gatkuu-kši
'Maamedo and Dawura were all advising each other'

(203) ndâ-k Mesau ji-n-sakši tenu, ndâ-k Ngwajin dá dlam tleri-w ii gatkuu-kši
'when the people of Misau had left, the people of Ngwajin fought with each other'

(204) akši dá salamci tek-sakši
'they took leave of each other'

5. Type Anaphora

The preceding sections of this chapter have dealt with token anaphora, i.e., anaphoric reduction of a noun phrase which is co-referential to a noun phrase occurring earlier in the discourse. Type anaphora in Ngizim always consists in the deletion of material which is formally identical to, but not co-referential with, a noun phrase or part of a noun phrase in preceding discourse. The following rule will account for type anaphora. The relation of the process described by this rule to the closely related Ø token anaphora will be outlined immediately below.
(205) **(OPT) Type Anaphora**

\[
\begin{array}{cccc}
... & \text{NOM} & \ldots & [ \text{NOM} \ x \ ]_{\text{NP}} & \ldots \\
1 & 2 & 3
\end{array}
\quad \Rightarrow \quad
\begin{array}{cccc}
... & 1 & \ldots & \varnothing & 3 & \ldots \\
\end{array}
\]

Conditions:
(a) 1 and 2 are formally identical but not co-referential.
(b) 3 is not phonological \(\varnothing\)

This rule deletes a NOM when preceded by a formally identical NOM. Recall that NOM could be a simple noun, a noun with various direct adjuncts including associative NP's, or a head NOM plus a relative clause. In formulating a rule called "Type Anaphora", I imply that this anaphoric deletion process differs from token anaphoric deletion, called "\(\varnothing\) anaphora" above. I believe, however, that there is only one anaphoric deletion process involved here. The conditions on (205) would have to be modified by removing the restriction in (a) that the two NOM not be co-referential, and perhaps by removing (b) altogether. This new rule, which we could simply call "Anaphoric Deletion", would then delete material from a noun phrase when it was formally identical to a preceding noun phrase. One of the applications of the rule would be to completely delete the second of co-referential NP's. The rule itself would need no special statement about whether the material deleted under identity was a noun phrase co-referential to or non-co-referential to a preceding noun phrase.

Token anaphora obviously requires total formal identity of the deleted noun phrase to a preceding noun phrase.\(^{14}\)
Type anaphora, on the other hand, deletes only as much of a
noun phrase as is formally identical to the preceding NP.
Any non-identical qualifiers to the deleted NOM are retained.
Such qualifiers may be any of the following types: attribu-
tive adjectives, quantifiers, demonstratives, indefinite
words, associative NP's, or relative clauses. Each of these
is illustrated in (206)-(219). In these examples, Ø is in-
serted where deletion has taken place and that material
which is identical to the deleted portion is underlined.

Adjective remains after deletion

(206) Nainaucin kaarara naa Ø gaamana dà tli ii maaka-k
garva
     'the Prince new and Ø old set to seeking the chieft-
tainship'

(207) menda kaarak dlam sa bai, balle Ø kaarak bai
     'good-tasting salt is not drinkable, let alone bad-
tasting Ø'

Cardinal number remains after deletion

(208) ... dà jibi zegar ijanak dà tauši naa zayi-w, dà yi
dàa ki Ø daama wam dà tauši. See tause Ø kwan nan
... dàa mi Ø gayi dà dlegi ii ši-k 'yuwa-geri, dàa
mi Ø gayi-w wam dà dlegi ii ši-k 'yuwa-geri ke mata.

'... he took an elephant haunch and tied it with the
rope, he went and looked at another Ø and tied it.
When he had tied three Ø ... he took one Ø and slung
it under his arm, he took one other Ø and slung it
under his right arm.'

(209) gwanguraucin nda-k aaman guumu zëdu naa Ø guuumu
     gatkasa maa aksi yka nan gaaye bai
     'old men of sixty and seventy years said they hadn't
     seen anyone climb it! [old men possessors of years
     sixty and Ø seventy ...]

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Demonstrative remains after deletion

Example (210) consists of two sentences to give context for understanding the Ø's in the second of the two sentences. In the first sentence, anaphoric deletion has taken place before a number (Ø gayi). In both (210) and (211), the surface demonstratives left after deletion of the noun take the form of demonstrative pronouns (see Chapter 4, example (258) for a chart of the demonstratives). Literally, the demonstratives are '... this one ... this one ...'.

(210) Wurji gayi ña jiganå-gara ke mata, Ø gayi ña ke madlat-wai. Ø Suu va-n, Ø suu ña npi.

'One scorpion was on her right cheek, one Ø was on the left. When this (one) would sting, then that (one) would sting.'

(211) mbase-k duuniya palta-k aara: ká këma kaarak Ø suu bii-n, ká palci Ø sau

'the way of the world is changing sides: if you don't like this (one), you change to that (one)' (i.e. as in rolling over in bed)

Indefinite word remains after deletion

(212) [RGS] jaaye zëga dagai, ná jaayi Ø dagai

'he asked a certain seer and I asked another Ø'

(213) (tluwi 'meat' is understood from previous context)

dà kii'yi Ø ŋap dá yvi Ø jigap

'he ate a little Ø and left some Ø'

In examples (206)-(213) above, the modifier left after deletion of the head NOM would have been a direct modifier
of the head, i.e. there would have been no linking element between the head and the modifier. If the material in the NP following the NOM to be deleted is an associative NP or a relative clause, there is a linking element which is left which shows deletion has taken place. In the case of an associative NP this is the independent linker, kà (see Chapter 4, section 1.3). For relative clauses it is wàara (see Chapter 4, section 2.1).

**Associative NP remains after deletion**

(214) bii-k ta naa Ø ke sa 'food and drink' [thing of eating and Ø of drinking]

(215) tla tiyu Ø keci bi? 'is that cow yours Ø?'

(216) dlerwan-gu Ø ke bar ii mageraf bai 'the sauce is not (one) to give to guests'

(217) kakera-k ši gapta àa ta'yi Ø ke ada 'a load carried under the arm will cause one to drop the load on the head' [a load of under the arm will release (one) of the head]

**Relative clause left after deletion of antecedent**

(218) dabaku-n, see Ø waara kà ncu kà cik'yi 'as for girls, just (the one) that you want you choose her'

(219) ... dàa ñgwi agwai waara sarawii-gu dàa ñgwi Ø waara daguwa-w kwà '... she took out the eggs that were white (and) she took out three Ø that were decorated'

All the examples of type anaphoric deletion above have

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left behind some portion of the noun phrase from which ma-
terial was deleted. But what would Ngizim do with examples
like the following where English uses 'one'?

Subject: a monkey ruined my farm and one
ruined Audu's farm too

Direct object: I saw an elephant and Audu saw one too

Indirect object: I gave money to a beggar and Audu
gave money to one too

Object of prep.: I cut a Baobab with an axe and Audu
cut a Tamarind with one

Associative NP: I pulled a donkey's tail and Audu
pulled one's ear

In these examples, the reduced NP has no modifiers not
shared by the identical NP earlier in the sentence. We
would therefore expect total deletion in Ngizim. But if we
translated the sentences above into Ngizim, putting Ø in
place of English 'one', the interpretation would not be one
of type anaphora, but one of token anaphora, for these sen-
tences would be of exactly the form as those given in sections
1.2.1-8 as examples of Ø (token) anaphora.

One possible candidate in Ngizim as a counterpart to
English 'one' in the sentences above would be one of the in-
definite words dágâi or jîgâp (see Chapter 4, section 5.3.1).
But this would not give the correct interpretation either.
For example, in the first sentence above, if dágâi replaced
'one' in the Ngizim translation, the English rendering would
be 'a monkey ruined my farm and {another one 7}
a different one} ruined
Audu's farm'. I am not sure what the actual difference in meaning between this sentence and the English sentence with 'one' is, but it is clear that there is some difference, perhaps of focus.

The only conclusion that I can reach is that Ngizim has no way to anaphorically reduce noun phrases to give a counterpart to English 'one' as in the sentences above. The appropriate noun phrase with Ø determiner must simply be repeated. Thus, the Ngizim translation of the first sentence above would apparently be veji dlemte-naa kam-gaa, kufu veji dlemte-naa kam-k Audu 'a monkey ruined my farm, and (moreover) a monkey ruined Audu's farm'.

Type anaphora is one of the many subjects of Ngizim syntax which will require further investigation with informants.
Footnotes to Chapter 9

1 The model presupposed here is the traditional transformational model where pro-forms and semantically recoverable deleted elements are derived from non-reduced deep structure forms, i.e. 'John wants to save himself' has underlying [John_i wants [John_i save John_i]]. Pro-ing and deletion are done by transformations. I also assume that referentially identical elements, especially noun phrases, are indexed in some way so that transformations have access to this information. The description to be given below could easily be translated into other current models, e.g. an interpretative model where interpretative rules determine whether or not a pronoun can be co-referential to some full NP in surface structure.

2 An interesting discussion of the role of ø anaphora in distinguishing transitive from intransitive verbs is found in Newman (1971).

3 In English translations, pronouns which are rendered in Ngizim by ø anaphora will be parenthesized.

4 The word ndà is etymologically the word 'people', but for a number of reasons it must be considered pronominal when used as an indefinite agent. One such reason is the fact that it cannot be pronominalized by the plural pronoun ékàñ. Also, it undergoes exactly the same phonotactical alternations as the other subject pronouns while it is variable in its use meaning 'people' (cf. AUX pronoun paradigms for the various verb aspects, Chapter 2, sections 2.1-2.5).

5 To say that ø is required for inanimates would be overstating the case. In direct informant work, sentences with pronominal anaphora were occasionally found, e.g. the sentence dann anai metka 'he repaired for me the car' was given as dann anai atu 'he repaired it for me' when metka 'car' was pronominalized. Likewise, after pronominalization of metka in nà dannë metka ii Audu 'I repaired the car for Audu', we find nà dann atu ii Audu 'I repaired it for Audu'. Pronominal anaphora is nevertheless extremely rare for inanimates in texts, if it is found at all, and it was not commonly found in informant work.

6 The restriction against leftward anaphoric reference, i.e. the situation where an anaphoric element stands to the left of a full noun phrase to which it refers, was confirmed repeatedly in work with informants, and in fact I believe
that such a restriction is fairly widespread in languages of the world. An occasional counterexample to the restriction has been found in texts, however. Two such examples are seen in Chapter 8, examples (40) and (167). In fn. 18 of Chapter 8, I suggest that while this appears to be backward pronominalization given the sentences in isolation, it is not backward pronominalization when we consider the larger discourse context. Both examples mentioned were drawn from texts where the referents had been established in preceding context. The anaphoric elements thus refer to NP's in preceding context, while the full NP's in the particular sentences cited are simply repetitions of the earlier NP's. They are not the particular NP's to which the anaphoric elements refer.

Recall that relative clause formation in Ngizim consists of inserting a relative marker, ṭèrè, and anaphoric reduction of the NP within the clause which is co-referential to the antecedent. See Chapter 4, section 2.1.

As we saw in fn. 5, pronominal anaphora is not to be totally ruled out for inanimates, though it is infelicitous stylistically and under some circumstances it would probably result in sentences which were semi-grammatical at best. There are cases where a pronoun subject rather than Ø must be used in reference to an inanimate. Consider (i):

(i) ciranda nāa bai zama -n atu
haste there-is-not good mark of it
luck focussed subject

'it is lack of haste which is good luck (in hunting)'

This means of subject focus was explicated in Chapter 5, section 3.2. Essentially, the subject is left in sentence initial position and a pronominal copy is put at the end of the sentence, following the mark of an emphasized subject, -n. In (i), atu, an Independent Pronoun, refers to ciranda nāa bai 'lack of haste', an inanimate referent which is, moreover, abstract. Notice, however, that in this case there is no Ø alternative to the pronoun. Sentence (i) without a pronoun (or a noun) in the focussed subject position would be nonsense.

Another case of what might appear to be pronominal subject reference to an inanimate is the pronoun atu at the end of the following exchange:
(ii) Kaayak maa, "Soo tai, audu-k "The squirrel said, "Here kaka-gaa-gu." it is, the grave of my grandfather."

Bedlamu maa, "Suu bi?" "The hyena said, "Is that really it?"

Kaayak maa, "Atu." "The squirrel said, "(It's) it."

The pronoun atu here is not the subject of the last sentence. The subject is indeed Ø, as we would expect with an inanimate referent. Atu is a predicate nominal and as I mentioned above, p. 404, predicates of non-verbal sentences are not deletable by Ø anaphora.

9 The symbol Ø is placed in the examples below and also those of Ø direct objects only for expository purposes. It has no phonological significance. The pronoun in English corresponding to the deleted NP in Ngizim is parenthesized.

10 Recall that the term "associative", taken from Welmers (1963), encompasses possessive noun phrases as well as a number of other semantic relations (see Chapter 4, section 1, esp. 1.2). It will be noticed that "associative" is applied here to three types of construction: associative adverbs ("go with X"), associative predicates ("have X", lit: 'be with X''), and associative noun phrases. While the use of this single term to refer to constructions of three different syntactic levels could potentially cause some confusion, I believe its use is justified because of the semantic relatedness of the three construction types.

11 "Copy" here is used somewhat differently from the immediately preceding section. In the present case, a "copy process" introduces a formative not present in underlying structure. In the preceding section, "copying" was employed simply for exposition to explain the pronominal or Ø repeat left in the underlying position of an element that was moved elsewhere in the sentence. While I believe "copy processes" as described in the present section to be true grammatical processes of the language, I don't believe copies as employed in the preceding section to be the result of such processes. The term copy there expresses a semantic relation between pairs of elements having different syntactic sources.

12 Obviously there would be no difficulty in formulating an Ngizim grammar which used pronominalization as an inter-
mediate stage for EQU1-NP Deletion. Various proposals (all
totally ad hoc as far as I can see) have been suggested to
me for doing this, e.g. making EQU1-NP Deletion obligatory
in case the deleted NP was pronominal and had a nominal co-
referent later in the sentence, etc. My answer to such pro-
posals is that the only evidence we have for what underlying
and intermediate structures might look like is surface struc-
tures. In surface structure, anaphoric elements can never
stand to the left of the co-referential full NP to which
they refer. Why, then, should we ever allow underlying and
intermediate structures that violate this very clear res-

13 See Chapter 7, esp. sections 1.1.1 and 1.2.1 for a de-
scription of the various complement types.

14 The formal identity does not encompass the determiner.
The first mention of a noun phrase may have any determiner,
including indefinite. However, the anaphoric reference to
that noun phrase must clearly be definite since by defini-
tion, definite noun phrases are those known to both speaker
and hearer, and if a noun phrase has been mentioned in pre-
vious context it falls within the bounds of this definition
(see Chapter 4, section 5 for a discussion of determiner
features). I have omitted problems with determiners above
so as to avoid complicating the discussion with purely tech-
nical details.

Another qualification to my statement that token ana-
phora "obviously requires total formal identity" involves
what has come to be known as "Bach's paradox" (see Bach,
1970). Bach points out that in a sentence like 'the man who
shows he deserves it will get the prize he desires', the un-
derlined pronouns would have to refer to noun phrases with
infintely deep embedding of relative clauses. Since Bach's
paradox involves a very special type of sentence, and one
that I doubt is even possible in Ngizim, I have chosen to
ignore it.
Chapter 10

NEGATION AND ITS SCOPE

1. The Form of Negation and its Introduction in the Base

The constituent NEG must be introduced in at least two levels in the base, and possible a third. The two levels where it must be introduced are seen in (1) and (2), (see other Chapters, especially Chapter 3, for expansion of other constituents). A deep structure constraint will allow NEG in (2) to be chosen only if NEG in (1) has not been.

(1) $S \rightarrow NP \ FRED \ (NEG) \ (ADV^*)$

(2) $FRED \rightarrow \begin{cases} VF \ (INST)(ASSOC)(LOC)(MAN)(PUR) \\ LOC^* \ (ASSOC) \\ STAT \ (LOC) \end{cases} \ (NEG)$

Another NEG may have to be introduced following $(ADV^*)$ in (1). This would be constituent negation of the entire $S$, encompassing sentence level adverbs. Since such a NEG node would undoubtedly be mutually exclusive with the NEG introduced in (1), an alternative formulation would be to have a transformation move the NEG in (1) to the end of the sentence. This would be possible only if NEG in both positions served essentially the same semantic function. Inconclusive results obtained with informants in this area will be returned to briefly in section 3.2.
With one exception, negation always takes the form bái and appears on the surface exactly where it is introduced in (1) or (2). The one exception to the bái negative is the negative existential marker ŋóo 'there is no ...' or, used adverbially, 'without', (see Chapter 3, section 5.2).

(3) mese-gara, ŋóo laabař 'as for her husband, there was no news'
(4) zaaman Mai Maadi dá benc ci ŋóo ŋa 'the time of King Madi passed without war'

The bái negative is used in all types of verbal and nonverbal sentences, in matrix and embedded sentences. Bái ---> [bíi] medially by a regular phonological rule.

(5) cee ii Ngwajin bai 'he didn't come to Ngwajin'
(6) ndiwa áa tẹfa bai 'the people aren't entering'
(7) kwà ma dem bai 'don't take wood!' (2nd pl.)
(8) iyu Fiika bai 'I'm not a Bole man'
(9) mesta bedlamu tetaa bai 'changing into a hyena is not difficult'
(10) ii naa duuka bai 'I don't have a horse'
(11) Demza áa wunduwa bai 'Demza is not at home'
(12) naa merak bai 'there's no oil'
(13) ká rde-naa aći bii-ŋ, då kii'yi-naa tluwiį-gu 'if you don't stop him, he will eat up the meat'
(14) ná sa-naa sama gaada kà sa bai 'I drank up the beer so that you wouldn't drink it'
(15) baaci ruwai waařa áa rawii bai
(15) 'a farmer who doesn't farm'

2. Syntactic Effects of NEG at the level of PRED

NEG as introduced at the level of PRED (rule 2) is regular "sentence negation" in the sense of Klima (1964). To avoid confusion, I will call this NEG "predicate negation", and NEG as introduced in (1) "constituent negation of the S".

Predicate negation has two formal effects: it conditions replacement of the Subjunctive or Imperative by the Second Subjunctive, and it is mutually exclusive with the Totality Extension. The first restriction will be handled by a simple replacement rule:

(16) Subjunctive/Imperative $\Rightarrow$ Second Subjunctive

$$\ldots \left[ \begin{array}{c} \text{Imperative} \\ \text{Subjunctive} \end{array} \right] \times \text{NEG} \left[ \begin{array}{c} \text{PRED} \end{array} \right] \ldots \Rightarrow$$

$$\begin{array}{c} 1 \\ 2 \\ 3 \end{array} \ldots$$

$$\ldots \text{2nd-Subjunctive} \begin{array}{c} 2 \\ 3 \end{array} \ldots$$

The Subjunctive and Imperative are characterized by lexical verb tone, polar tone AUX, and final -i on the verb (final -a in plural Imperative). Second Subjunctive is characterized by a verb with tones Lo ... Hi, Lo tone AUX, and final -a on the verb.

(17)(a) à kásaśi "sweep!" (sg. imper.)

(b) kâ kásaśá bái "don't sweep!"
(17)(c) *á káaší báí
(18)(a) á tlèmpiyá 'tear (it)!' (pl. imper.)
    (b) kwá tlèmpiyá báí 'don't tear (it)!
    (c) *á tlèmpiyá báí

(19)²(a) ná ràrké gàrúu gàdà dá tèfí ìì wùndwà
'I chased the goats so they wouldn't enter the
the compound'
(b) ná ràrké gàrúu gàdà dá tèfà ìì wùndwà báí
'I chased the goats so they wouldn't enter the
compound'
(c) *ná ràrké gàrúu gàdà dá tèfí ìì wùndwà báí

(20) ìì máa nà ktlí ůgûm, òì máa nà ktlá báí
Subj. 2nd Subj.
'when I said I should break it, you said I shouldn't
break it'

The second effect of predicate negation, exclusion of
the Totality Extension, is easy to describe, less easy to
explain. At some level of abstraction, the Totality
Extension may be thought of as an adverb having the entire
PRED (or entire S) in its scope, as in (21).

(21)

```
S
    NP  PRED  Totality
```

If we take a rough translation of the Totality
Extension to be 'do completely', we can understand how this
relative scope interpretation might explain mutual exclusi-
vity with NEG, i.e., one cannot "completely not do" something. I leave as an open question whether we want to state the mutual exclusivity of NEG and Totality as a condition on deep structure well-formedness, or whether we want to allow the two to be generated together in the base. In the latter case, Totality could be deleted by rule, or surface structures containing both Totality and NEG could simply be rejected as ill-formed. The mutual exclusivity of NEG and Totality applies to both the -néa/-dù allomorphs of Totality with transitive verbs and the Intransitive Copy Pronouns used with intransitives (see Chapter 2, section 3.2 for arguments as to why these two formatives are both considered Totality Extensions).

(22)(a) ná sa-naa sema 'I drank up the beer'
    (b) ná sa sema bai 'I didn't drink beer'
    (c) *ná sa-naa sema bai

(23)(a) à kii'yi-du 'eat (it) up!'
    (b) kà kii'da bai 'don't eat (it)!'
    (c) *kà kii'da-du bai

(24)(a) gwangurak mete-n-gara 'the old woman died'
    (b) gwangurak metu bai 'the old woman didn't die'
    (c) *gwangurak mete-n-gara bai

Note that this mutual exclusivity of NEG and Totality applies only to predicate negation. In constituent nega-
tion of the matrix $S$, the Totality marker can appear. Thus, (22)(c) is grammatical in the reading 'it's not the case that I drank up the beer' (Hausa: ba na shanye giya ba).

It was usually difficult to get informants to accept sentences like (22)(c), probably because there is no distinction between surface strings with predicate negation and those with constituent negation of the matrix sentence, and certainly predicate negation is the more usual reading. However, on several occasions, informants volunteered the information that they would accept sentences like (22)(c), but only in the sense of the Hausa translation given above.

3. Scope of Negation

Since the negative báí falls to the right of constituents within its scope, it would seem that scope of negation works from right to left. I believe, however, that it is incorrect to talk about direction of scope. It is, rather, relative dominance that determines scope. I will claim that the scope of báí encompasses all those constituents dominated by that node which most directly dominates báí. Besides stating what the scope of báí is, two further implications are found in this claim: the scope of negation is not defined in terms of direction, and the scope of predicate negation takes in neither subjects nor sentence level adverbs, since FRED directly dominates NEG but does not dominate either of these nodes. Justification for
this latter statement will be covered below, sections 3.2 and 4. That scope of bi cannot be defined as working from right to left is clearly evidenced by the negative existential göc, illustrated in (3) and (4) and in Chapter 3, section 5.2.

3.1. Negation where Sentences are Embedded in the Predicate

A sentence of the structure in (25) should potentially have at least three, possibly four, interpretations when bi occurs at the end: (i) predicate negation in the matrix, (ii) predicate negation of the embedded sentence, (iii) constituent negation of the matrix sentence, and (iv) constituent negation of the embedded sentence.

\[(25)\]

I can say nothing about case (iv). The interpretation of case (iii) is very similar to case (i), the difference being what has been called weak and strong negation. Strong negation denies that a predicate is true of its subject. Weak negation denies that the sentence as a whole is true. Thus, in (26)(a), the interpretation could be (i), the strong negation interpretation, denying that going out to drink beer is something that the subject did. Or it

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could be (iii), the weak negation interpretation, denying that the event as described took place, i.e., denying that there was a sortie on his part for beer drinking. Both such interpretations seem to be possible, but it is easy to imagine the difficulties of pinning down such subtle meaning distinctions with informants not wholly certain of what I wanted, while working through a language which was not native for either of us (Hausa). In the following illustrations, I will discuss only predicate negation (cases (i) and (ii)).

The interesting cases are, of course, those where the embedded sentence comes at the end of the predicate. These are of three types: sentences containing purpose clauses, complement sentences, and relative clauses embedded in NP's of the predicate. For purpose clauses, which are always in the Subjunctive and complement sentences in the Subjunctive, there is never an ambiguity because of the obligatory replacement of Subjunctive by Second Subjunctive in the negative. Thus, if the predicate of the matrix is negated, the embedded sentence will be in the Subjunctive. If the predicate of the embedded sentence is negated, it will be in the Second Subjunctive. In the following illustrations, the (a) examples have predicate negation of the matrix, the (b) examples have predicate negation of the embedded clauses. I don't have minimal pairs in most cases.
(26)\(^5\)(a) veru dà ši sema bai 'he didn't go out to drink beer'

(b) veru gaadæ-k dà sa sema bai

'he went out to not drink beer/lest he drink beer'

(27)(a) nà nci kà tefi bai 'I don't want you to enter'

(b) nà nci kà tefi bai 'I want you to not enter'

(28)(a) nà nci kà yì kà yvi ja bai

'I don't want you to go and leave us'

(b) kà nci ndà šaala ci bii-n, ñà jì ii Kano

'if you want that no one pay attention to you, go to Kano' [if you want that one not pay attention to you ...]

(29)(a) nàda rema ii maate-k jaabi maa dà ši am bai

'one doesn't tell an eater of beans that he should drink water'

(b) ram ii-kši maa ñaci beji bai

'he said to them that he didn't want any bran'

In (30)(b) we know that it is the embedded sentence which carries the negation since the matrix is in the Sequential (dàa kì), but would be in the Perfective if it were negated.

(30)(a) akši yka nɛn gaaye bai gaadæ-k ðà gaaya bai

'they hadn't seen anyone climb it because it wasn't climbable'

(b) bedlamu dà tìfì dàa kì nàa jà bai nàa kutlii-gara bai

'the hyena entered and saw that there was no dog and there were none of her children'
The verb *zèga* 'know' always takes the Totality Extension except in the negative, where this extension is excluded. Thus, in (31)(a), we know that it is the matrix predicate which is negated, because of the absence of the Totality suffix -dù. In contrast, we know that in (31)(b) the NEG is in the embedded sentence, because -dù appears on *zèga*.

(31)(a) ná zèga devu wa-payment áa nií ii ada-ge nên bai

'I don't know how [the way that] sneezing comes upon a person'

(b) ná zèga-du ten-ci-w áa debsa-k bee bai

'I knew that nose of yours wouldn't hide anything'

If the Subjunctive and Totality diagnostics are not present, it is possible to construct ambiguous sentences where the NEG could be interpreted as being either in the matrix or the embedded predicate. This is possible either when the predicate ends in a relative clause, (32), or when it ends in a complement sentence. In both (33) and (34), the contexts from which the sentences were drawn indicate that it is the embedded predicate which is negated, but I believe (a) interpretations with the matrix predicate negated are also possible.

(32) náa nên waafá ná yka bai

(a) I didn't see anyone' [lit: there is no one that I saw]
(32) (b) 'I didn't see someone' [lit: there is someone that I didn't see]

(33) náa lawán-gu kàa ta'yi-k kun-aaci nàa iyu bai
   (a) 'I don't see that you relax around me' [... you release your stomach with me]
   (b) (reading suggested by context) 'I see that you don't relax around me'

(34) Sekú daawu Baraaya áa garvaata bai
   (a) God didn't cause that Baraya will reign'
   (b) (reading suggested by context) 'God caused that Baraya will not reign'

It should be possible to have negative of both the matrix and embedded predicates, e.g., 'I don't want him not to go', 'I don't know the boy who didn't get sugar-cane'. Though I didn't work on such sentences with informants, I am positive that it is not possible to end a sentence with two báí's. Thus, I can only assume that a sentence like nà rcsi dà da bai 'I want that he not go' (with Second Subjunctive in the embedded clause) is potentially ambiguous, with báí doing double duty for the matrix and embedded clause. In the case of the negative relative clause embedded in a negative predicate, I suspect that a speaker would tend to make use of the Extraposition from NP rule (Chapter 4, section 4) to move the relative clause away from the head noun and after the matrix predicate negative marker. Example (35) will have to be checked with informants.
(35)(a) /ná zéga mayim [waařa ba ambaawa bai] bai/

EXTRA from NP

(b) ná zéga mayim bai [waařa ba ambaawa bai]

'I don't know the boy [that didn't get sugar-cane]' 

3.2. Negation in Sentences having Sentence Level Adverbs

Sentence level adverbs have been described as including temporal adverbs (both clauses and phrases), conditional clauses, and reason (explanatory) clauses and phrases. When such adverbs are part of a sentence, the only possible way to get an interpretation of predicate negation of the matrix sentence is to place bai after the matrix predicate and preceding the adverb.

(36) wàa dlama wana bai amżaru

'we won't finish the work tomorrow'

(37) kà bara ii-ci sama bai kaabe dà daami wana

'don't give him beer before he finishes work'

(38) ná yka aci bai akuu ji-n-geri tenu

'I didn't see him after he left'

(39) vere bai lakwtu ná dee tenu

'he didn't go out when I came'

(40) ña sa-k sama bai dá bar ii-ci-n

'he won't drink beer if you give it to him'

(41) kwàrbe gwàdanu bai gaáda kurem tattle-n-gara

'he didn't hoe up peanuts because his hoe broke'

(42) ná daawe am ii nemuwa bai gaáda dà demi

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(42) 'I didn't put the water in the shade so that it would get warm'.

(43) já rawa bai gaada bědlamu gayi tak
    'we didn't run because of just one hyena'.

(44) ta aben bai gaada aci ṅgaa bai
    'he didn't eat food because he wasn't well'.

    (Note that both the matrix and the adverbial sentences are negated in (44)).

Often, sentences like those in (36)-(44) are susceptible to two interpretations, one with predicate negation of the matrix, the other with constituent negation of the matrix, i.e. NEG as introduced in rule (1).

(45) kure bai gaada nambo dagwda
    'he didn't refuse because of a lack of money'.

(a) (predicate negation) he did not refuse [he took the nasty job because he needed money]

(b) (constituent neg of S) if he refused at all, it was for other reasons than lack of money.

(46) sa sema bai gaada ná bar ii-ci
    'he didn't drink the beer because I gave it to him'.

(a) (predicate negation) he did not drink the beer [he hates me and wouldn't accept anything from me]

(b) (constituent negation of S) he likes beer and would have drunk it no matter who gave it to him.

If the negative marker báí follows the adverb it is always taken as applying only to the adverb. If the adverb is sentential, báí can be taken as either predicate negation, (47) and (a) versions of (48)-(49), or constituent negation,
(b) versions of (48)-(49) and examples following (49). The constituent negation readings always imply something to follow, i.e., '... not yesterday, but ...'.

(47) veru lakwtu ná dee bai tenu  
     'he went out when I didn't come'  
     (cf.39)

(48) kwarɓe gwadaŋu gaada kuram tatle-n-gara bai (cf.41)
     (a) 'he dug up peanuts because his hoe didn't break'  
     (b) 'he dug up peanuts not because his hoe broke ...'

(49) já ju gaada ndá dlam-naa am bai
     (a) 'we went because it didn't rain'
     (b) 'we went not because it rained ...'

(50) wàa dlam wana amʒaru bai
     'we will do the work not tomorrow ...'

(51) ja rawa-n-aaja gaada bedlamu gayi tak bai (cf.43)
     'we ran away not because of just one hyena ...'

It is possible to construct sentences where the negation is unambiguously either predicate negation or constituent negation of the adverb. This is the case where the adverb has a predicate in the Subjunctive. Thus, the (a) examples of (52)-(53) have predicate negation of the adverb, shown by the Second Subjunctive in the adverb, while the (b) examples have constituent negation, shown by the Subjunctive.

(52)(a) ná sa-naa sèma gaada kà sa bai
     'I drank up the beer so that you wouldn't drink it/
(52)(a) lest you drink it'
(b) nà deê-naa same gaada dà ši bai
'I brought the beer not so you might drink it ...'

(53)(a) akši ma-naa rakai gaada nà veda bai
'they took away the bed so that I wouldn't lie
down/lest I lie down'
(b) akši deê-naa rakai gaada dà vëji-n-akši bai
'they brought the bed no so they might lie down...'

On page 454 I suggested that it may be necessary to
have constituent negation of an entire S, including sentence
level adverbs, generated as NEG following such adverbs. This
would give a reading such as 'it's not the case that we ran
away because of just one hyena' for (51). Such a reading
would leave open the question of whether we ran away or not,
but would deny that we did it for this particular reason if
we did happen to have run away. In discussing this with
informants, the only reading that seemed acceptable for sen-
tences like (51) was the reading in which we did, in-
deed, run away. The non-existence of the reading of consti-
tuent negation of the full S in (51) and others seems ques-
tionable to me, but it will take a close investigation with
carefully constructed contexts to become certain of the facts.

Sentences like (50) and (51) raise some questions as to
the source of the negation. As I have formulated rules (1)
and (2), NEG can be generated only as part of PRED or as a
direct daughter of S. A simple time adverb such as amžaru
'tomorrow' provides neither of these environments. I will not attempt to account for this here, but point it out as a problem for my present base rules. Other constituents cannot be singled out for negation. For example, to translate a sentence like 'it's not Audu who helped us', the normal focus transformation for subjects is applied (Chapter 5, section 3.1). This puts the subject Audu into the scope of the predicate negation.\footnote{8} 

(54) tamba wa-n Audu bai 'it's not Audu who helped us'  
\hspace{1em}cf. Audu tamba wa bai 'Audu didn't help us'

4. Scope of Negation and Subjects

Evidence from indefinite quantifiers in the subject shows that subjects in normal sentence initial position are not within the scope of predicate negation. Indefinite quantifiers are covered in detail in Chapter 14, section 5.3, so only a very sketchy review of the facts will be given here. The facts as outlined in this section have not been carefully checked with an informant and should be taken as tentative.

In a negative predicate, the non-specific, indefinite article is \( \emptyset \). Thus, in (55), \( \text{n\text{	extdegree}m} \) 'person' is translated by 'anybody', the non-specific, indefinite human pronoun in English. That is, since an NP in a negative predicate is within the scope of negation, it must be interpreted 'there is no one such that I saw him'.
(55) ná yka nēn bai 'I didn't see anybody'

When nēn is used as the subject of a negative sentence, however, I feel fairly certain in saying that it would be interpreted as specific. Although I have not checked this with an informant, I believe that the tendency in (56) would be to substitute nēn-gā 'the man' for nēn alone.

(56) nēn dee bai 'the man didn't come'

The specific reading of (56) indicates that the subject is outside the scope of negation, i.e., the sentence is interpreted there is someone such that he didn't come', not 'there is no one such that he came'. The way the sentence 'no one came' is rendered in Ngizim is to form an existential sentence of the form 'there was no one who came'.

(57) nāa nēn waafa dee bai = goo nēn waafa dee-w 'there was no one that came'

This construction has the effect of putting the semantic subject into the predicate where it will be within the scope of negation.

Similar evidence that the subject is outside the scope of predicate negation is seen in words corresponding to the English quantifier 'every'. Sentences like 'no one (from a given set) should come' may be rendered in Ngizim as in (58).
(58) tiike dá diina bai

'no one should come' [lit: everybody shouldn't come]

The literal translation is not acceptable in English, but of possible interpretations, the strongest seems to be 'not everybody should come'. But this sentence is exactly what the Ngizim sentence does not mean. 'Everybody' has been brought into the scope of negation. The Ngizim interpretation required that tiike 'everybody' be outside the scope of negation: 'let everybody act such that he not come'.

5. Constituent Focus and Negation

When constituents are focussed in some Chadic languages, NEG must be moved from the predicate up to the sentence level. This is not done in Ngizim. The reader is referred to the discussion in Chapter 5, section 4.
Footnotes to Chapter 10

1 Another correlation between verb forms and predicate negation is that the Sequential aspect cannot appear in the negative. This is not a formal effect of NEG per se, but a result of a universal semantic fact that negative events cannot occur in sequence with other events. However, if it is a question of a whole sequence of events which did not/ will not/ should not take place, then the Sequential may be used within the bounds of the whole negated structure as in (1). (Cf. Chapter 6, section 1.2.)

(i) kà da ká mbaşi naa ndiwa bai 'don't go and sit with the people!'

Sequential

2 I have no minimally distinct sets in purpose clauses like (17)(a)-(c) in my materials, so I created (19)(a)-(c) myself. I have no question about the correctness of the general facts and interpretations as given, but there may be minor corrections such as addition of the Totality Extension to one or both verbs.

3 This explanation is a little suspicious in that numerous other Chadic languages have a semantic correlate to the Ngizim Totality Extension, yet no other Chadic language, to my knowledge, has this relation of mutual exclusivity with NEG. It seems unlikely that of all the Chadic speakers, only the Ngizims could see a logical inconsistency in the co-occurrence of Totality and NEG.

4 Case (iv) seems to be logically equivalent to case (ii), e.g. (ii) 'I want him to not come!', (iv) 'I want it to not be the case that he come'; (ii) 'I went out in order to not watch television/lest I watch television', (iv) 'I went out so that it not be the case that I watch television'.

5 It was mentioned on pp. 381-382 that for Kanakuru, Newman (1972) analyzes all negative Subjunctive phrases such as in (26)(b) as being sentence level "explanatory" adverbs rather than predicate level purpose adverbs. The reason why negative clauses tend to not be interpreted as purpose phrases has to do with the meaning of the Subjunctive of Subsequence or potentiality. If paraphrased using a "negative" verb rather than the overt mark of negation, sentences like (26)(b) do seem to be interpretable as having purpose clauses, viz. 'he went out to avoid drinking beer'.

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I am somewhat disturbed to find in my notes that (48) and (49) were accepted by my informant in the predicate negation reading. Note, however, that both sentences have the Totality Extension added to the verb in the adverbial clause. I am absolutely positive that the restriction disallowing the co-occurrence of predicate negation and the Totality Extension is correct. Therefore, (48)-(49) should be ungrammatical in the (a) readings. There are a number of possible explanations, the most likely being that I recorded the examples incorrectly.

I wish to stress that the translation given in (50) is the only possible reading for this sentence. This differs from Hausa where the final negative ba may fall to the right or left of a time adverb with little if any meaning difference, e.g., ba zamu yi aiki gobe ba = ba zamu yi aiki ba gobe 'we won't do work tomorrow'. The difference, of course, is that the sentence initial ba in Hausa serves to keep the matrix predicate in the scope of negation whereas the sentence level time adverb in Ngizim pre-empts the negative scope, since the only mark of negation is at the end of the sentence.

Paul Schachter points out in personal communication that to move Audu from outside the scope of negation into its scope changes the meaning of the sentence. It has emerged from syntactic studies in the last few years that the model of grammar as proposed by Chomsky (1965), which is essentially the model assumed here, will have to be modified to allow for rules of interpretation for the scope of logical elements such as negation and quantifiers. These interpretation rules will come into effect after transformations have moved deep structure constituents in such a way as to affect relative scope of logical elements. I assume the existence of such interpretation rules in the present study, but have not tried to formulate them.
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APPENDIX

pronoun paradigms and grammatical formatives

This Appendix is meant to provide a convenient reference to all the pronouns and grammatical formatives covered in the book. The sections where the formative in question is given special attention are cited in the following manner: 3-2.1, i.e. Chapter 3, section 2.1.

Pronoun Paradigms

Independent Pronouns

Functions: Subjects of all sentence types, direct objects of finite verbs, objects of prepositions, predicates of equational sentences, all disjunctive uses (topicalized or focussed noun phrases, etc.). See Chapter 3; esp. sections 1, 2.1, 4; also 9-1.2.1, 1.2.1, 1.2.4.

1 fyû   1 excl já
       1 incl wâ
2m ci  2  kûn
2f kêm
3m áci  3  ákšî
3f átû

AUX Pronouns

Function: Subjects of verbal sentences and sentences

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with locative predicates. The forms given here are the base forms. Except for first person plural, tone is governed by aspect and basic verb tone. In the Imperfective and with locative predicates, these pronouns combine with the AUX, \( \text{aa} \), to give long vowels. For tone and vowel lengths in individual aspects, see Chapter 2, sections 2.1-5. See also Chapter 3, section 1. See \( \text{nda} \) in the list of grammatical formatives for references to the use of the Indefinite AUX pronoun.

\[
\begin{array}{llll}
1 & \text{na} & 1 \text{ excl } & \text{jâ} \\
 & & 1 \text{ incl } & \text{wâ} \\
2m \text{ or } f & \text{ka} & 2 & \text{kwa} \\
\end{array}
\]

No third person AUX pronouns

Indefinite \( \text{nda} \)

**Indirect Object Pronouns**

See 3-2.2; 9-1.2.3, 2.2.

\[
\begin{array}{llll}
1 & \text{âa(näi)} & 1 \text{ excl } & \text{fi-jâ} \\
 & & 1 \text{ incl } & \text{fi-wâ} \\
2m & \text{fi-ci} & 2 & \text{fi-kùn} \\
2f & \text{fi-kêm} \\
3m & \text{fi-ci} & 3 & \text{fi-kši} \\
3f & \text{fi-tû} \\
\end{array}
\]

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Bound Suffix Pronouns

Functions: Associative noun phrases, objects of verbs in the Imperfective (where the verbal noun is used), Intransitive Copy Pronoun. The hyphenated -g- or -aab- is the associative linker, obligatorily used with these pronouns. The linker is now fused with the pronoun in this form. The long -aab- is used only after words ending in vowels, not elsewhere. See 2-3.2; 3-2 and 2.1; 4-1.3; 9-1.2.2, 1.2.6, 2.1.

1  -g-âa(nái)  1 excl  (-âa)-jâ
    1 incl  (-âa)-wâ
2m  (-âa)-cî  2   (-âa)-kûn
2f  (-âa)-kêm
3m  -gê-ri  3   (-âa)-kšî
3f  -gâ-râ

Independent Associative Pronouns

Function: Independent associative forms corresponding to English 'mine', 'yours', 'his', etc. See 4-1.3.

1  k-âa(nái)  1 excl  ké-jê
    1 incl  kû-wâ
2m  ké-cî  2   kû-kûn
2f  ké-kêm
3m  ké-ri  3   kâ-kšî
3f  kâ-râ

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Grammatical Formatives

ànga
(1) 'at'; '(be) at, in'. See 3-1, 3; 9-1.1.2, 1.2.7.
(2) Imperfective AUX. See 2-2.5; 3-1.
-ànga-
Associative linker used with certain pronouns. See Bound Suffix Pronoun paradigm above.
àngaì 'ever since'. See 8-4.
àngaì 'after'. See 8-4, 7.
àmmá 'but' (cf. átèn). See 4-3; 6-2.
átienn 'but' (cf. àmmá). See 4-3; 6-2.
-àw
Bound suffix on verb optionally used in place of third person indirect object pronoun. See 3-2.2; 9-1.2.3.
bàbabú See bàacı.
bàacı [m.sg.] 'one who does ...'; 'one who has ...'. Some speakers use bàbabú instead. Cf. also màì, ndà. See 3-4.4; 4-2.3, 5.3.2.1.
bái 'not'. See 4-5.3.1, 5.3.2; 8-9.1; all of Chapter 10.
bàllè 'let alone ..., let alone that ...' (= bàré). See 6-4.
bàré = bàllè
bàyà 'if it weren't for ...'. See 8-2.2 and fn. 12.
bí Marker of yes/no questions. Used especially to indicate surprise, anxiety, etc. See 5-1.
bíi-n 'or' (cf. kóò, fá). See 4-3; 6-3.
dà Third person AUX used in Subjunctive and Second Subjunctive. See 2-2.2, 2.3; 3-1; 9-1.2.1.
dá (1) 'from'. See 3-3; 9-1.1.2.
(2) 'when', 'upon (doing)'. See 8-4, 7.
dà dlàbá "were it that ..." (can be used to introduce
conditional clause of imaginative sentence). See 8-2.1, 3.

dâa
Introduces main clause of an imaginative sentence; less commonly it can also introduce a conditional clause in an imaginative sentence. See 7-4; 8-2.1.

dàaci
'following that', 'then' (= Hausa shi ke nna as used at a break in a narrative). See 6-1.1.

dàgà
'when', 'upon (doing)'. See 8-4.

dàdamâ
[pron. or adj.] 'another (one), other(s), a different (one), different (ones)'. See 4, fn. 25.

dàmbà
'before' (= kàmbì). See 8-5.

-dèw
"with it" (= -dù (3); bound suffix on verb indicating presence of an instrumental or associative adverb). See 3-2.3; 9-1.2.4, 2.3.

-dù
(1) Totality Extension used on transitive verbs when not directly followed by a direct object. Cf. -nàa (1), -n-. See 2-3.2; 3-2.3; 9-1.2.2; 10-2.

(2) Transitizer used with basic intransitive verbs when not directly followed by a direct object. Cf. -nàa (2). See 2-4; 3-2.3.

(3) "with it" (= -dèw); bound suffix on verb indicating presence of an instrumental or associative adverb. See 3-2.3; 9-1.2.4, 2.3

nda
"one", indefinite agent AUX pronoun (cf. AUX pronoun paradigm above). See 2-2; 4-5.3.2.1; 9-1.1.2, fn. 4, 2.1.

ndà
[pl.] 'those who do ...!', 'those who have ...'. Cf. also bàaci, màì. See 3-4.4; 4-2.3, 5.3.2.1.

dàgài
[pron. or adj.] 'a, some, a certain (one), certain (ones), another (one), other(s), some X else'. Cf. jìgàpì. See 4-5.3 (esp. 5.3.1), 5.5; 9-5.

-g
See ké.

-gè
See ké.

gàdàdù
'because, because of, so that, in order to'.

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See 5-2.2.6; 8-2.2, 9.1, fn. 23.

gâafâ 'if'. See 8-1.1, 3.

gâtkáu 'each other'. See 6-1.1; 9-4.

gâawá 'many, much; many of, much of'. See 4-5.4.

góo 'there is no ...'. Cf. nåa (3), wârá. See 3-5.2; 4-5.3.2.1; 9-1.2.5; 10-1.

-gú (1) 'the ... previously referred to' (cf. -wâ, -wá form of the previous reference marker used everywhere except after i, u, a, æ). See 4-2.1, 5.1.

(2) Suffix on noun indicating deleted associative noun phrase, suffix on verbal noun in imperfective indicating deleted direct object (cf. -wâ, -wá is used everywhere except after i, u, a, æ). See 3-2; 4-5.1; 9-1.2.2, 1.2.6.

(Setting up two meanings for -gú is not meant to imply that two unrelated grammatical morphemes are involved.)

ŋgûm Used after certain types of adverbial clauses and topicalized noun phrases; sometimes translated in English as 'when' or 'as for' at the beginning of the clause or phrase. Cf. téná. See 8-1.1, 2.1, 5, 8.3.

ii (1) 'to' (locative goal); 'at' (stationary locative; cf. åå (1)). See 3-3; 9-1.1.2, 1.2.7.

(2) 'for the purpose of'. See 2-2.5; 5-2.2.6; 8-9.1.

(3) 'with respect to'. See 3-2.4.

(4) 'to' + indirect object. See 3-2.2; 5-2.2.2; 9-1.1.2, 1.2.3.

(5) Introduces nominalized complement sentences with certain verbs. See 7-1.1.1.

jà '... and the others', 'things like ...', '... etc.'. See 4-1.5; 5-2.1, fn. 2.

jîgâp [pron. or adj.; plural or mass only] 'some, certain (ones), other(s), some other(s)'. Cf. dâgâi. See 4-5.3 (esp. 5.3.1), 5.5.
See ké.

'of'. Associative linker. Used independently in the meaning 'that of' or 'one of', it has the phonetic form ké. When used between nouns it may have the phonetic forms -k, -g, -ge, or -l, depending on phonetic environments given in rule (19) on page 111. The linker can always be optionally omitted, except when used independently or with Bound Suffix Pronouns (g.v.). See 3-2.1, 2.4; 4-1.2, 1.3, 2.1 (end), 2.2; 5-2.1 (fn.2); 9-5.

kàa
'like'; kàa ké 'as'. See 3-2.4.

kàabī
'before' ( = dàmbà). See 8-5.

kàsanè
'what do you know', 'it's surprising that', 'well, now' (= Hausa ashe). See 6-1.1.

kóo
'or' (cf. bìi-n, ðà). See 4-3; 6-3.

kùrú
'moreover', 'furthermore' (= Hausa kuma). See 6-1.1.

klàbà
= dà dèlàbà

màa
(1) Introduces a speech act, direct or indirect. See 7-5, fn. 1.

(2) "is", used when citing names, as 'his name màa John'. See 3-4.2; 5-2.2.8; 7-fn. 1.

mài
[f. sg.] 'one who does ...', 'one who has ...'. Cf. bàccì, nà. See 3-4.4; 4-2.3, 5.3.2.1.

-n-
Totality Extension used with intransitive verbs; obligatorily followed by the Bound Suffix pronouns (n- + Bound Suffix Pronouns = Intransitive Copy Pronoun). Cf. -dà (1), nàa (1). See 2-3.2; 3-2, 2.3; 9-2.1; 10-2.

-n-
(1) See nàn (1).

(2) See nàn (2).

nàn
(1) Marker inserted directly before a subject which has been postposed for focus or question. The form is -n after the vowels ì, ìì, ò, ò (′ indicates a preceding Lo tone is raised), nèn elsewhere. See 4-4; 5-2.3, 3, 4.
(2) Marker placed at the end of various kinds of sentence level adverbs and adverbial clauses; sometimes translatable as 'if', but analyzed in Chapter 8 as indicating that an adverbial is "indefinite"; has allomorphs -n and nên with same conditioning as nên (1). See 8-1.1, 2.1, 3, 5, 6, 8.1, 8.3.

nàa  
(1) 'with' in instrumental, associative, manner, and comitative adverbial phrases. See 3-2.3, 2.4; 4-4; 9-1.2.4.

(2) "have" when used as the head of an associative predicate. See 3-5.1, 5-2.2.8; 9-1.2.5.

(3) "there is..." when used as the head of an existential sentence. Cf. gôó, wârá. See 3-5.2; 9-1.2.5.

(4) 'and' as a "conjunction" between noun phrases. See 4-3,4; 6-1.1.

(5) Introduces nominalized complement sentences with certain verbs. See 7-1.2.1.

-nàa  
(1) Totality extension used with transitive verbs when directly followed by a direct object. Cf. -dù (1), -n-. See 2-5.2; 3-2.3; 9-1.2.2; 10-2.

(2) Transitizer used with basic intransitive verbs when directly followed by a direct object. Cf. -dù (2). See 2-4; 3-2.3.

řâ  'or' (cf. bîi-n, kôó). See 4-3; 6-3.

řáp  'a few, little'; 'a few of, few of'. See 4-5.4.

tén  'since'. See 8-4.

ténú  Previous reference marker, used principally after noun phrases containing a relative clause or after sentential adverbial clauses. Cf. ngûm. See 4-5.2; 8-1.1, 2.1, 5, 8.3.

táta-n  'immediately upon (doing)'. See 8-4, 7.

-w  Perfective marker, suffixed to verbs in the Perfective Aspect when they appear phrase final; does not appear medially. See 2-2.1.
**w**  
(1) See -řú (1).  
(2) See -řú (2).

**wàrá**  
'there is one, there are some'. Cf. góó, nàa  
(3). See 3-5.2; 9-1.2.5.

**wàafà**  
Invariable marker used to introduce relative  
clauses. See 4-2.1; 8-8.1; 9-5.

**yàayé**  
(1) 'even though, even if, although' used at  
the end of concessive clauses. See 3-3 and  
fn. 13.

(2) 'even', used after a noun. See 8-fn. 13.

(3) '-ever', used as an optional replacement  
of suffix -kè used on question words to form  
indefinites. See 4-fn. 24; 8-fn. 13.

**yé**  
(1) Occasionally replaces yàayé (1).

(2) 'too, also, as well' following a noun.  
See 8-fn. 13.

**Other Lists, Charts, and Tables**

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Deictic predicators: 3-6 (p.88), 4-5.2 (p.172)  
Demonstrative adjectives and pronouns: 4-5.2 (p.172)  
Indefinite words ('whoever', 'whatever', etc.): 4-5.3  
(p.178); 8-8.1 (p.366); see also 4-5.3.2.2 and  
fn. 24 of Chapter 4.  
Locative relational words: 3-3.1 (p.63)  
Manner adverbs: 3-2.4 (p.57)  
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Verbs - Verb classes: 2-1.1, 1.2 (p.14)

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'go' and 'come': 2-1.4 (p.17)