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THE MORPHO-SYNTAX OF BABA 1.

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DEDICATION

This work is dedicated to my parents, wife and daughter and all other family members.

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SUMMARY

This work is aimed at a study of grammatical categories or linguistic units that have both morphological and syntactic properties in Baba 1. We will take into consideration the set of rules that govern linguistic units whose properties are definable by both morphological and syntactic criteria. As a matter of fact, we will present and analyse the structures of nouns and verbs in Baba 1 with particular emphasis on their internal constituent elements. This means that we have to concentrate more on the critical and substantive analysis of nominal and verbal forms that constitute the morphology of the language.

Thus, nominal morphology in this light precisely consists of regrouping the nouns in this language into different classes according to attested morphological properties shown by nouns of each given class. It will also be shown that in Baba 1 there are some typically, but by no means completely consistent, semantic correlation manifested by nouns of some of the classes. Furthermore, noun related elements like determiners and pronouns are studied both in isolation and in collocation with nouns so as to show their linear order of occurrences in such utterances. This will help in determining the order of modification assumed by each category of noun related elements occurring in a noun phrase in Baba 1. In addition we will go further to consecrate a chapter on the various positions that the nominal constituent can assume in a larger information structure. This has to do with syntax since it involves examining the syntactic operations that will mediate in the positional variation of the noun phrase in a Baba 1 sentence. The changes that are to be observed in these varying positions of the nominal constituent will be interpreted as movements. This will give us a gist on the different types of movement operations that may operate within the language as a whole.

With respect to verbal morphology, a critical analysis is done not only to determine the internal constituent structure of basic verb forms of the various verb types, but also to isolate and bring out the semantic values of all verbal affixes identifiable in this language. This thorough analysis is also undertaken in order to identify and define the verbal morphemes and determine their relative position in the affixal string. This will enable us to convincingly assign or postulate the segmental or non-segmental markers of the different verbal modalities (tense, aspect, and mood) realized whenever verbs are conjugated in different constructions within this language.

The whole work, in addition to a general introduction and a conclusion, consists of parts I, II, and III, each of which is still subdivided into chapters.

Since Baba I has not yet been an object of any detailed linguistic description, we feel that any work geared towards an adequate and consistent analysis of this language should, as a matter of fact obviously begin with a phonological description. This will enable us establish the sound system that will serve as a base for our morphological analysis as well as for any other future study to be carried out on the language. Consequently, part I which is complementary but indispensable to the entire study is devoted to phonology and tones. Chapter one presents the data, on which the phonological analysis is based, it also discusses some general phonological principles and related issues so as to relate them to the data. Chapter two reviews some phonological processes attested in Baba I as well as establishes phonological rules to account for the behaviour of some segments in well defined contexts in the language. Furthermore, the basic tonemes in Baba I are established, general tonal phenomena discussed and some tone rules formulated. Then chapter three establishes the orthography based on the sound inventory resulting from the analysis of the data in the two previous chapters.

Part II could be considered as the beginning of the study proper, and consists of chapters four, five and six. Chapter four treats the noun classes and gender system of Baba I. Nouns are grouped into two broad groups based on morphological and semantic considerations respectively. A link is established between these two broad groupings. In chapter five, the various attested noun related elements are examined both in isolation and in concatenation with nouns in a noun phrase so as to determine the permissible linear order in which they co-occur. Chapter six seeks to illuminate the different movements within the noun phrase, and this will serve as tacit evidence that movements operate within the language.

Part III deals exclusively and essentially with verbal morphology. It consists of chapters, seven, eight and nine, each chapter concentrating on a separate verb related element. Chapter seven treats the different tenses and their specific references attested in this language, chapter eight deals with aspects, while chapter nine concentrates on mood. There is chapter ten, an appendix provision wherein an overview of the whole work will be presented; the findings clearly brought out and some proposals for future research made.

RESUME

Le but de ce travail est de faire une étude de catégories grammaticales ou des unités linguistiques qui, à la fois ont des propriétés morphologiques et syntaxiques en baba 1. Ceci consiste à présenter et analyser les structures des noms et des verbes dans cette langue, avec une emphase particulière sur leurs constituants internes et l'enchaînement avec d'autres éléments. L'analyse qui sera essentiellement paradigmatique mettra l'emphase sur la morphologie nominale et verbale.

La morphologie nominale dans ce sens consiste à regrouper les noms dans les classes morphologiquement attestées dans cette langue en se basant sur les critères morphologiques communément manifestés par les noms d'une classe donnée. Il est démontré qu'en baba 1 il y a un rapport ou quelques corrélations sémantiques manifestées d'une manière inconsistante par les noms de certaines de ces classes nominales. En plus, les éléments étroitement liés aux noms comme les déterminants et les prénoms sont étudiés en isolation et en enchaînement avec les noms. Ceci est fait afin de déterminer l'ordre d'apparition assumé par chacun de ces éléments lorsqu'ils apparaissent avec le nom dans un syntagme nominal. D'ailleurs, les différents sites d'un syntagme nominal dans une chaîne de communication en baba 1 seront vérifiés. La variation de site par ce constituent dans une phrase sera interprété en terme de déplacement.

En ce qui concerne la morphologie verbale, il ne s'agit pas seulement de présenter et identifier la structure interne de la base verbale et les différents types de verbes dans cette langue, mais également de les isoler et déterminer les valeurs sémantiques de tous les affixes qu'on puisse trouver dans cette langue. Ceci nous permettra d'identifier les formes segmentales et non segmentales de toutes les modalités verbales, à savoir, temps, aspect, et mode dans les différentes constructions grammaticales dans la dite langue.

L'étude entière, en dehors d'une introduction et conclusion générales comporte trois parties, chacune étant subdivisée en chapitres.

Puisque baba 1 n'a jamais fait l'objet d'une description détaillée, nous avons pensé que pour faire une analyse adéquate et consistante de cette langue, il faudra évidemment commencer d'abord par une description phonologique. Ceci établira le système phonique qui servira comme la base de notre analyse morphologique et pour d'autres études ultérieures à faire sur cette langue. Par conséquent, la première partie sera complémentaire mais indispensable à l'étude entière. Cette partie qui est consacrée à la phonologie et les tons comporte deux chapitres. Le chapitre I présente les données sur lesquelles l'analyse phonologique est basée. Il fait le point sur quelques phénomènes

phonologiques, employant des règles bien formulées pour expliquer les comportements de quelques segments dans les contextes bien précis. En plus, les tonèmes de base dans cette langue sont établis et les comportements tonals sont examinés et les règles tonales formulées. Le chapitre II jette un regard sur des processus phonologiques et tonals aussi bien que la formulation des règles qui expliquent les différents phénomènes observés dans l'enchaînement des segments. Le chapitre trois établit l'orthographe basée sur l'analyse des données de deux chapitres précédents.

La deuxième partie est le début de cette étude proprement dite, et elle comporte les chapitres IV, V et VI. Le chapitre IV traite des classes nominales et le système de genre en baba I. Les noms sont regroupés en deux groupes suivant des critères morphologiques d'une part, et sémantiques d'autre part. Au chapitre V les éléments étroitement liés aux noms sont examinés et traités en isolation et en combinaison avec les noms et d'autres éléments y afférents dans un syntagme nominal. Le chapitre VI fait part de différents déplacements qui peuvent effectuer le syntagme nominal dans une phrase. Ceci nous donnera une idée générale de tous les déplacements qui pourront être effectués dans cette langue.

La troisième partie est exclusivement et essentiellement consacrée à la morphologie verbale. Elle comporte les chapitres VII, VIII et IX, chacun traitant un élément verbal différent. Le chapitre VII traite les différents temps et leurs référents spécifiques, le chapitre VIII fait l'étude des aspects, et le chapitre IX qui est le dernier de la partie analyse les modes. Un bref chapitre d'annexe qui servira comme une conclusion générale clôturera le travail entier. Ceci fera une revue de chacune de sections et il contiendra les résultats auxquels on a aboutis sous forme de résumé.

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LIST OF SYMBOLS AND ABBREVIATIONS USED IN THE STUDY

| | |
|---------|-----------------------------------|
| // | Absolute utterance final position |
| AM | Associative marker |
| ANT | Anterior |
| appr | appropriation morpheme |
| ASS | Associative |
| AUX | Auxiliary |
| C | Consonant |
| Cl | Class |
| Cons | Consonantal |
| CONT | Continuant |
| COR | Coronal |
| CP | Complementizer phrase |
| Del Rel | Delayed release |

| | |
|-----------|------------------------|
| [e] | Empty category (trace) |
| F1 | Recent future |
| H | High tone |
| Ij | Floating high tone |
| HAB | Habitual |
| HORT | Hortative |
| IC | Iterative construction |
| IMP | Imperfective |
| IND | Indicative |
| Inf | Infinitive |
| IP | Inflectional phrase |
| IT | Iterative |
| L | Low tone |
| lj | Floating low tone |
| N | Non syllabic nasal |
| Nj | Syllabic nasal |
| N1, 2 etc | Noun in association |
| NAS | Nasal |
| NEG | Negation marker |
| NP | Noun phrase |
| OBJ | Object |
| OM | Object marker |
| Po | Immediate past |
| P1 | Recent past |
| P2 | Distant past |
| P3 | Remote past |
| PER | Perfective |
| PFT | Perfect |
| pl | Plural |
| px | Prefix |
| SON | Sonorant |
| SR | Surface representation |

| | |
|-----|---------------------------|
| Sfx | Suffix |
| T | Tone |
| ṽ | Floating tone |
| TM | Tense marker |
| TR | Tone rule |
| UR | Underlying representation |
| V | Vowel |
| VB | Verb base |
| VP | Verb phrase |

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0 General Introduction

Undertaking the analysis of yet an unanalysed language could often be likened to venturing into a virgin forest. There is therefore the need to clearly have in mind the precise objective of such an enterprise, and how to go about it. This presupposes the identification of the task and a selection of the appropriate tools for its accomplishment. The analysis of the Baba I language appears to neatly fit with the above analogy. In that perspective, we need to specify the areas the study is supposed to cover, the theoretical framework to be employed and the method of data collection and elicitation. It is also important to present the geographical location of the area in which the language is spoken, those who speak it, as well as its linguistic classification.

0.1. Goal and Scope.

The study seeks to carry out a detailed morphological description of the Baba I nouns and verbs. This means that focus is on nominal and verbal stems and affixes as well as other related forms which are closely linked to nouns and verbs when they occur in a communicative chain in this language. The work will also determine what constitutes a noun phrase in the language and further examine the various syntactic slots which this constituent can fill in a sentence. The varying positions that the noun phrase is seen to occupy in a larger syntactic structure will be interpreted in terms of movement, a phenomenon that is generally observed in human languages. This will not only give us an idea of movement operations attested in the language, it will also keep us abreast with recent developmental trends in the field of linguistic research as a whole. In addition to this main area, there is a brief analysis of the sound system of the language, that is, phonology and then tones, the result of which will permit us come up with a proposed orthography for the language. Moreover, this area will provide data for the study because through it, the data presented will clearly reveal some phonological and tonal phenomena likely to be recurrent in the morpho-syntactic analysis of the language.

The Morpho-syntax of Baba I is taken as an object of this study because this is the first descriptive study carried out on this language, and secondly, morphological studies carried out on many Grassfields Bantu languages in general, and the Nun group of languages in particular, are most often based on either nouns or verbs. This study hopes to narrow the gap and check the undue preference given to just an aspect of a language in future studies.

0.2. Theoretical framework.

As the study purports to cover many research areas, it might not be easily achieved by the simple application of a unique theoretical model. Consequently an eclectic approach will be adopted with emphasis on relatively current theories. Precisely, the tenets of two linguistic theories, generative and autosegmental approaches will predominantly be employed in the morphophonological analysis of data. The generative model will be widely employed for phonology and morphology, while the basic assumptions of the autosegmental theory will be used to explain tonal phenomena attested in the language. As concerns the syntax of the noun phrase (NP) or precisely its movement, we will readily rely on Chomsky's Principles and Parameters theory which aptly spells out or states the phrase structure rules of various constituents in any natural language.

0.2.1. The Generative Theory

This is a linguistic theory that emerged in the late fifties and finally reached prominence with the publication of the monumental work (The Sound Pattern of English) of Chomsky and Halle (1968). This book offered a fundamental thesis on:

- i) a theory of the internal structure of sound segments,
- ii) a theory of levels and derivation and
- iii) a theory on the link up between syntax and phonology.

This theory is highly committed to rule formalism, having as a basic format for a phonological rule thus:

$$A \longrightarrow B/C \longrightarrow D.$$

The formula presents 'A' as the structural description, 'B' is the structural change and 'CD' is the context in which this change takes place. This theory upholds the following tenets:

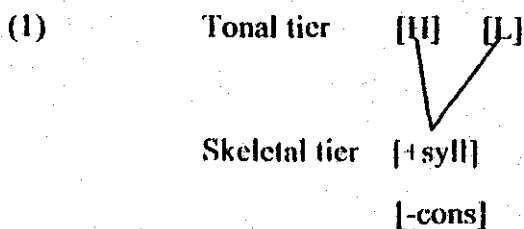
- i) There are two levels of representations; underlying and surface representations respectively which are connected by linearly ordered rules.
- ii) The rules for combination and transformation must be couched in symbolic notation and formally defined. This provides a standard way of expressing the relationship between phonemes and their different realizations.

- iii) Underlying representations are abstract but regular, and only indirectly mirror surface representations.
- iv) Phonemes are decomposable into features, thereby permitting statements of generalization to be expressed in a simple and natural way.
- v) Rules of a language interact in complex ways. They are disjunctively ordered, hence simplifying redundancies by preventing the formulation of many rules for the same unified process.

With these claims, we notice that the theory, unlike its predecessor (structuralism) is more observationally, descriptively and explanatorily adequate. Apart from avoiding redundant statement of rules, it can distinguish significant generalizations from those that are insignificant or false, and can therefore be considered a better working tool in linguistic analysis.

0.2.2. Autosegmental Theory

This model is a radical departure from the view of the generativists that phonological representation is simply depicted as a linear or string-line arrangement of segments and boundaries. The autosegmentalists uphold the view that phonological representation should be seen as multi-tiered. In this case, different features may be placed on separate autonomous levels. This theory was originally designed to handle tonal phenomena (which concerns us here), but its domain was readily extended to other areas such as complex segments, vowel and consonant harmony, pitch accent, etc. Let us examine how this theory would look at the occurrence of contour tone in the demonstration below:



The two tiers are underlyingly independent and autonomous, but are finally synchronized on the surface with tones superimposed on tone bearing units following some well-formedness conditions (cf Goldsmith 1976). This representation requires that there should be rules inserting, deleting or changing elements on one autosegmental tier without necessarily affecting

elements on the other tiers. In addition, it requires rules to be posited to manipulate not the features themselves but rather the associations between one tier and the other. This can explain in a straightforward and natural way the surface representation derived from this Baba I underlying form.

(2)

/ ndzə́ ηmè/ → [ndzə́ ηmè] 'a person's garment'

a)  Underlying representation.

b)  Association line deletion.

c)  Tone docking.

d) [ndzə́ ə́ ηmè] Surface representation

In Baba I, as shown above, there is a tone docking rule whereby in an N₁ + N₂ combination; the floating associative tone marker docks to the left. This only happens when a rule must have deleted the word boundary association line as shown in (2b). It is only by resorting to the autosegmental model that we can give a well principled account of the ordered processes in the derivation above. With the linear framework, we cannot account for the associative floating tone because it is claimed that tones are inherent parts of their tone bearing units such that if any segment is deleted, it drops away together with its tone. This is the reason why we have chosen a non-linear approach for our tonal analysis, coupled with the fact that we have a better working knowledge of the model.

0.2.3 Principles and Parameters framework.

This is a concept of grammar introduced in Chomsky (1981), which takes natural language, that is, our linguistic competence to be a complex network of subsystems of principles, each with one or more parameters of variation, and grammars of particular languages to be determined by fixing parameters in these (sub)systems. These subsystems or

sub-theories and principles work concertedly in mapping the relationships that exist between the various levels of language. Writing about this theory Koopman (1998) claims that:

The framework provided powerful analytical tools that allowed substantial broadening of empirical coverage language internally and cross linguistically, leading to a much better understanding of properties of syntactic representations. It lent itself to the discovery of many new patterns in ever expanding areas of inquiry and in languages that had been little studied previously, or that had not been studied at all...

With this assertion, we feel that this theory will serve as an instrumental tool for our syntactic representation with respect to the analysis of noun phrase (NP) movement in Baba 1 which is a language being studied for the first time.

not interested - your feelings

0.3. Data Elicitation and Analysis

As a native speaker of the language under study, I will for the most part act as an auto-informant, presenting data that will be used to provide an adequate account of my intuition through rules and rule applications. However, elderly native speakers have been consulted for clarifications as to the acceptability of certain forms or items.

This study which is essentially paradigmatic starts off with a survey of the phonology and tonology in order to acquaint the reader with the sounds of the language as well as the basic tonemes and possible tonal phenomena that are attested. The study proper begins with the grouping of the nouns into various classes on the basis of their structural constituents. There will be an attempt to find out any possible correlation between morphological classes and semantic categories of the nouns. Noun related forms in this language are also to be examined both in isolation and in collocation with nouns, and statements will be made on the possible variations that might be observed in the forms presented. With respect to verbs, the various basic verb stems will be determined, the different verbal affixes and their semantic properties examined, analysed and explained. At the end of the operation, selected texts, if necessary, will be presented so as to bring out the wide range of verbal features that could be more

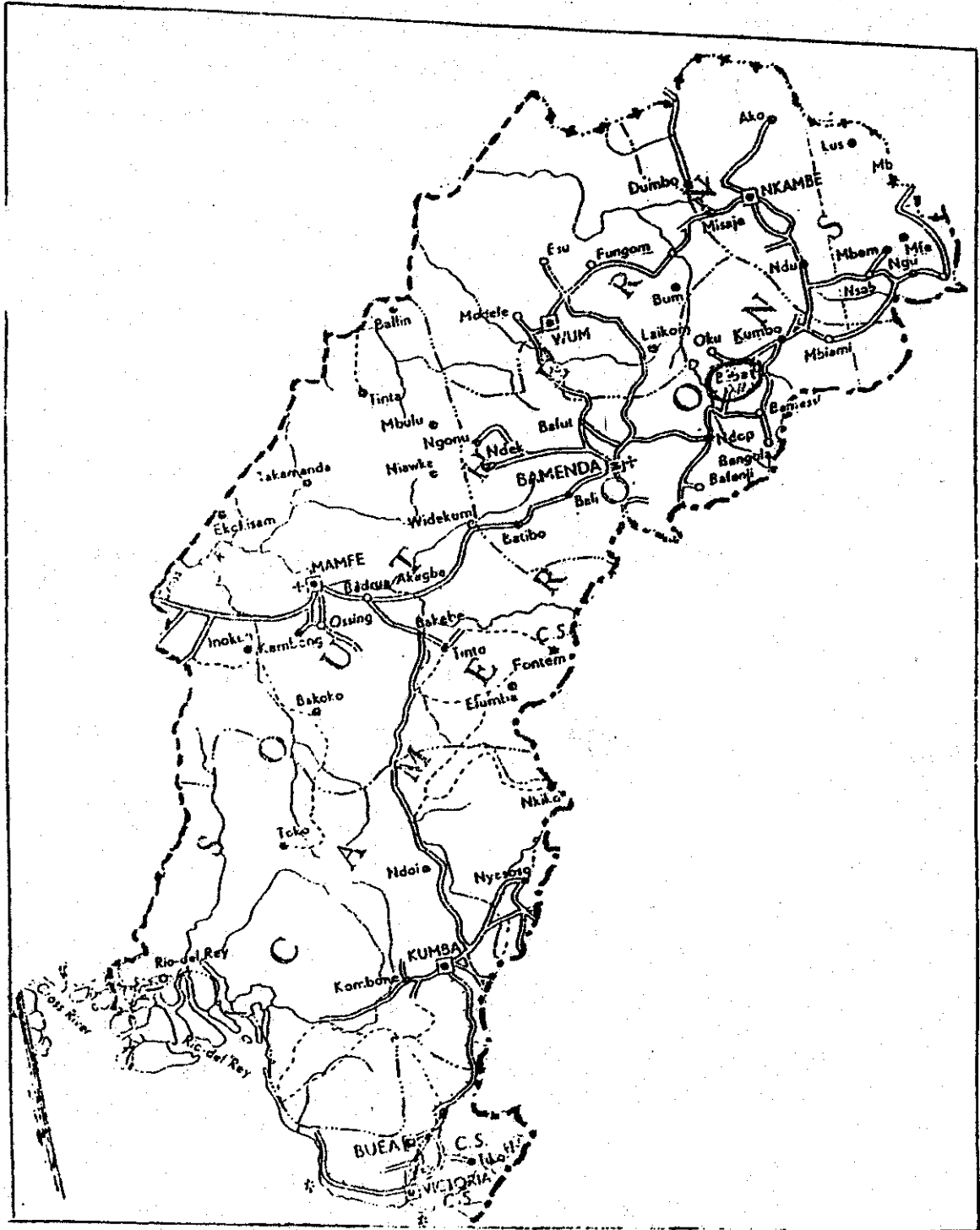
illuminating when verbs are used in context.

0.4 Geo-political presentation of Baba I

The people whose language is the object of this study live in one of the thirteen villages that make up Ndop plain (cf page 13), the newly created Ngoketunjia division in the North-West Province of Cameroon. This village is situated at about forty kilometres from Bamenda, along the ring road that leaves Bamenda through Kumbo (Nso). It has a population of about 15,000¹ people living under a unified "fondom". The predominant activities here include pastoral agriculture, woodwork, weaving, fishing, rice cultivation, etc.

The history of this people is marked by migration. They make up part of the large Tikar tribe who migrated from Bornu, in the North-East of Nigeria and settled in the north around the Adamawa high plateau. The Baba I people decided to leave and move southwards, sojourning in many places. After several devastating warfares, disagreements and desertions in their ranks, they finally arrived and settled in the present site as clearly indicated on the maps found on the following pages.

THE LOCATION OF BABA 1 IN ANGLOPHONE CAMEROON



1:750,000
 Second Edition - F.H.
 Published by Federal Survey Department, Nigeria, 1958
 CROWN COPYRIGHT RESERVED

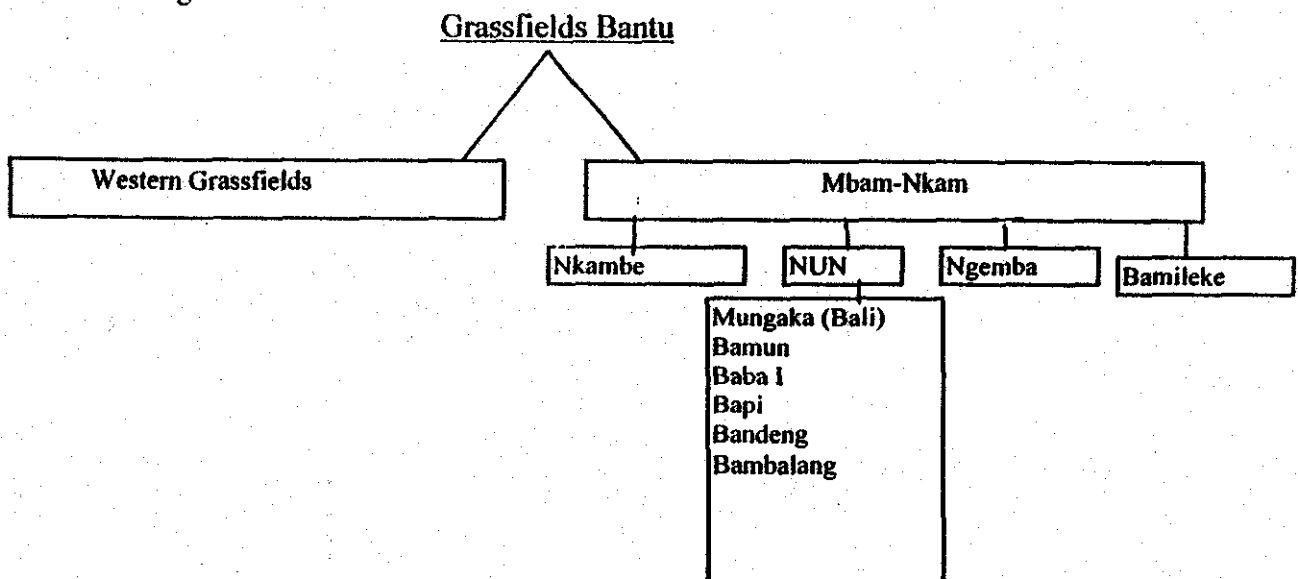
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0.5 Linguistic classification of the language.

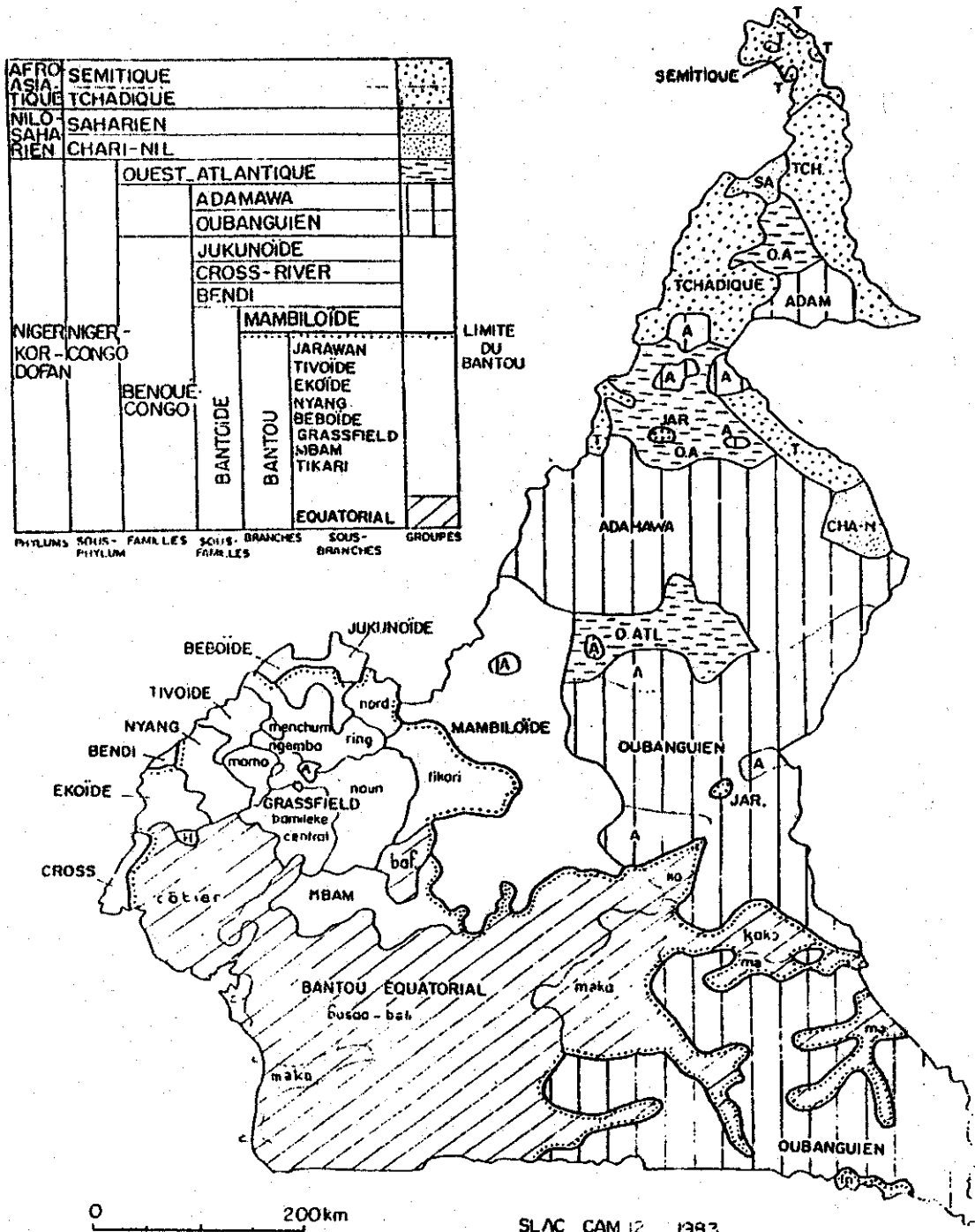
Baba I is one of the many Grassfields Bantu languages assigned to the Benue-Congo subdivision. This sub-division falls under one of the major African language families referred to as Niger-Kordofanian (cf Welmers 1973:16-18). More specifically, Baba I constitutes one of the languages under the Nun language group. The Nun group in turn is among the other subgroups forming a larger group which is variably referred to as Eastern Grassfield and Mbam-Nkam. The Grassfields languages in general have been the object of many linguistic classifications, notably that of Tesson (1955:13) among others. He puts together such languages as Bangam, Bati, Bandeng, and Bapi which he calls Bamileke languages. However, he establishes a link between these and some other languages in the Bamenda area. He observes that the resemblance shown by languages of these two geographical areas indicates a common linguistic parentage that could be traced from a very distant origin.

Later, Voorhoeve (1971) regrouped under the appellation of Mbam-Nkam, the following language subgroups: Nkambe, Ngemba, Bamileke, and Bamoun, while referring to the rest of the Grassfields Bantu as Western Grassfields. In like manner, Stallcup (1977:43-57) divides the Grassfields Bantu languages into two major groups namely: Western Grassfield and Mbam-Nkam. In this classification, Baba I is assigned to the Mbam-Nkam group as represented below:

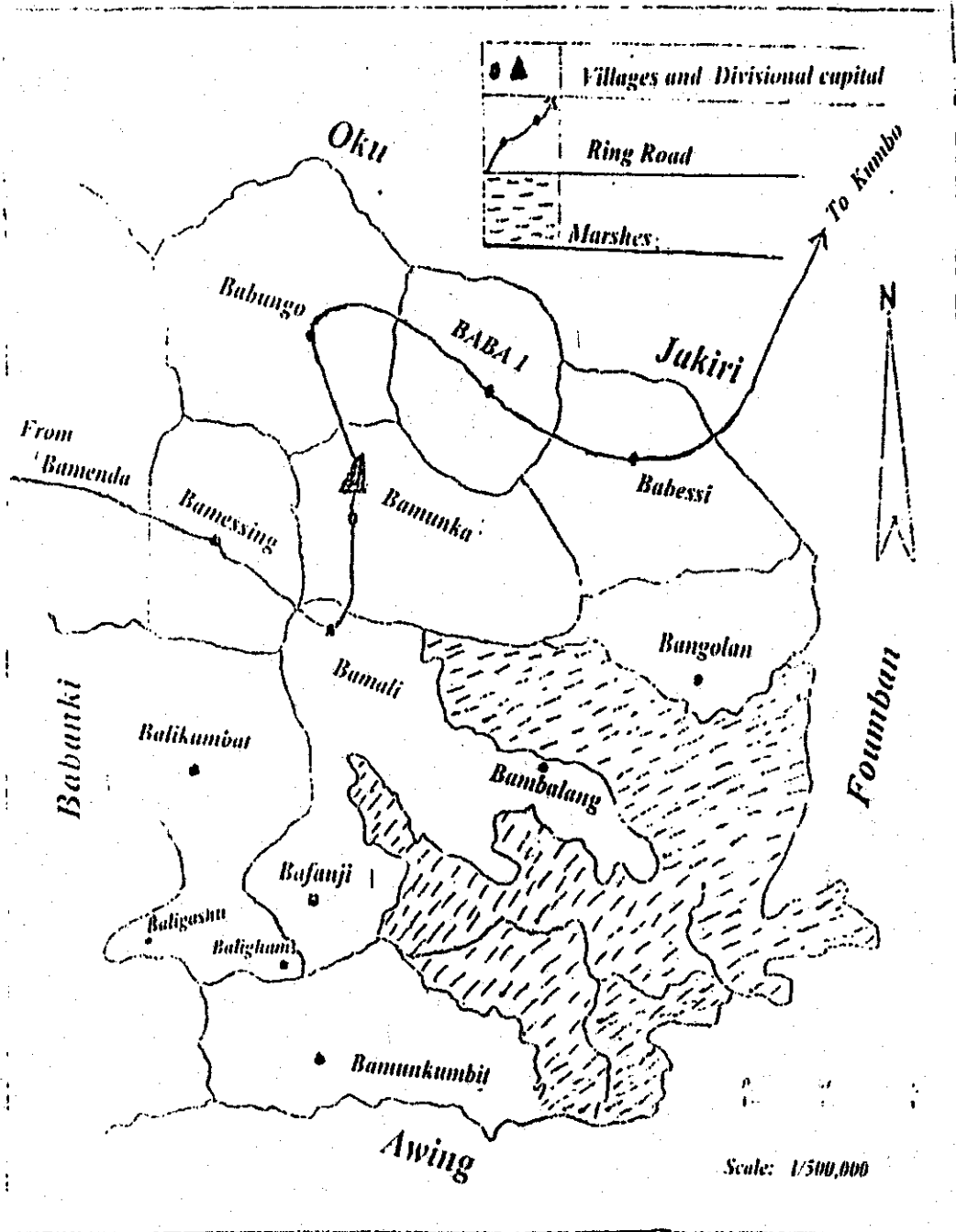
Fig.1



FAMILLES ET GROUPES LINGUISTIQUES AU CAMEROUN



THE VILLAGES OF NDOP PLAIN SHOWING BABA 1



Source: *L'Atlas Linguistique du Cameroun, (1933).*

Recently, Dieu et al (1983) have carried out a seemingly less detailed reclassification of the Nun languages where they give Baba I an identification index of 900ⁱⁱ under zone 9. Mungaka is considered the main language of this zone, while Baba I, Bati, and Bandeng are considered dialects. Nevertheless, a more plausible classification seems to be that of Stallcup where these speech forms are considered as related languages. This is because no detailed comparative studies have yet been carried out on all these languages and Dieu's recent study was based on an approximative and hasty approach. The result is that some of the speech forms referred to by Stallcup were left out. A similar study carried out by the author of this present work on some of the Nun languages showed that they are not dialects of the same language. This is because the highest similarity rate did not attain the sixty to ninety percent, which is the range exhibited by dialects of the same language (Guarisma and Möhlig 1986: 21)

- 1 *Baba I in this study invariably refers to the language and the village. More precision will be made wherever such an appellation is deemed ambiguous.*
- 2 *This figure is an estimate based on the 1987 census results that gave this village a population of 12935 people.*
- 3 *The language is referred to by Dieu et al (1983) as Bapakum, Bapa and the speakers call it sú pá-píáx or pá-píákù.*

PART I

SOUND SYSTEM

CHAPTER ONE

1. Phonology and Tones

This part deals with two subsidiary areas which are deemed indispensable to our main topic "The Morpho-syntax of Baba I". In this respect, the analysis of these subsidiary areas will be brief but accurate, with more emphasis only on those aspects that are considered relevant to our main area of study which is morphology.

The generative approach as indicated will readily be employed for our phonological analysis. This is because, as earlier stated, this theory has proven to be more efficient and explanatory than the structuralist model. In the course of our analysis, the generative phonological theory will be reconstructed on the basis of concrete linguistic data, rather than characterizing it in terms of similarities to, and differences from other linguistic theories. On the other hand, with respect to our tonal analysis, we will adopt the auto-segmental theory which is shown to have significant advantages over linear or segmental analysis.

1.0 Phonetic Inventory

This chapter sets out to present all the sound segments that are observable in Baba I. Emphasis here is on an exhaustive enumeration without distinction, of the sum total of all surface sounds found in morphemes in this language, starting with the consonants.

1.0.1 Consonants

In the table below, a synopsis of all the consonants in Baba I is presented. Included in the table are all the phonetic features characterizing all the consonants. It will be noticed that some of the sounds listed here can only occur on the surface while in combination with other sounds, and others have completely different realizations. These will all be presented and their varying manifestations within the different contexts will be explained by the help of phonological rules.

| | | | | | | | |
|-------|-------|-------|--------------|---------|------|--------|--------------|
| (3) | | | | | | | |
| i) | /p/ | pàm | 'bag' | xv) | /tʃ/ | tʃí | 'salt' |
| ii) | /b/ | sòbó | 'pierce it!' | xvi) | /ɔ́/ | ɔ́í | 'eat!' |
| iii) | /m/ | múʔ | 'fire' | xvii) | /ɲ/ | ɲím | 'sun' |
| iv) | /f/ | fíŋ | 'wound' | xviii) | /y/ | yàŋ | 'noise' |
| v) | /v/ | vəm | 'stomach' | xix) | /k/ | kám | 'crab' |
| vi) | /l/ | tán | 'neck' | xx) | /g/ | gíéʔlǎ | 'kernel' |
| vii) | /n/ | nám | 'bead' | xxi) | /x/ | xìò | 'lion' |
| viii) | /nd/ | ndán | 'cup' | xxii) | /ɣ/ | ɣé | 'thief' |
| ix) | /ndz/ | ndzòx | 'wine' | xxiii) | /ŋ/ | ŋánlǎ | 'sugar cane' |
| x) | /ts/ | tsò | 'kola nut' | xxiv) | /w/ | wú | 'death' |
| xi) | /l/ | líŋ | 'name' | xxv) | /r/ | ríʔ | 'eye' |
| xii) | /s/ | sàŋ | 'teeth' | xxvi) | /kp/ | kpǎr | 'toilet' |
| xiii) | /r/ | ràn | 'chair' | xxvii) | /gb/ | gbé | 'sell' |
| xiv) | /ʃ/ | ʃán | 'illness' | xxviii) | /ŋm/ | ŋmè | 'person' |

1.0.2 Vowels

In Baba I there are two main vowel types: simple and complex vowels. Simple vowels or monophthongs here refer to single vowels within the same syllable while complex vowels are two or more vowels within the same syllable. Complex vowels can be divided into diphthongs and long vowels. Diphthongs are clusters of unidentical vowels within the same syllable while long vowels are double identical vowels within a single syllable. We will first of all present all the surface vowels observed in words in this language.

Fig. 3 Surface vowels (phonetic).

| | FRONT | | CENTRAL | BACK |
|----------|-----------|---------|-----------|---------|
| | UNROUNDED | ROUNDED | UNROUNDED | ROUNDED |
| HIGH | i | ü | ɨ | u |
| MID-HIGH | e | | | o |
| MID-LOW | | | ə | |
| LOW | | | a | |

The above table gives a glimpse of the surface vowels which are arranged at four different levels of aperture. Below are a few examples showing some words containing the

different vowels in the language under study. We are concerned here with the single vowels or monophthongs.

(4)

- | | | | | | | | |
|------|-----|-------|-----------|-------|-----|--------|-----------|
| i) | /i/ | /ji/ | 'blood' | v) | /ə/ | /ndzə/ | 'garment' |
| ii) | /i/ | /pɪ/ | 'camwood' | vi) | /a/ | /təŋ/ | 'navel' |
| iii) | /u/ | /tsú/ | 'head' | vii) | /o/ | /pó/ | 'hand' |
| iv) | /e/ | /pé/ | 'fufu' | viii) | /ù/ | /gúí/ | 'buy!' |

As already mentioned above, diphthongs are generally sequences of two or more unidentical vowels having the structure $cv_1 v_2$, while long vowels are sequences of identical vowels occurring in the form $cv_1 v_1$.

In Baba I, high vowels combine with non-high vowels or with other high vowels to form diphthongs as shown below:

(5)

- | | | |
|----|------|----------------|
| a) | pié | 'boundary' |
| b) | xìò | 'lion' |
| c) | tíí | 'tree' |
| d) | tiàŋ | 'ceiling' |
| e) | gúáx | 'throw away' |
| f) | glà | 'type of juju' |
| g) | fùè | 'fon' |
| h) | ngúí | 'wife' |
| i) | kúí | 'bed' |

These examples show that only a restricted number of vowels can follow high vowels when they are in immediate sequence within the same morpheme (cf fig 6). However, when morphemes come together in derivational environments, any two vowels, be they identical or unidentical, are capable of occurring together as shown below in these combinations of nouns + possessive constructions:

(6)

- a) /ndzǎ + à/ -[ndzǎ-à] 'my garment'
- b) /ŋkǐ + í/ -[ŋkǐ-í] 'his/her/its rope'
- c) /só + ú/ -[só-ú] 'your hoe'
- d) /pó + í/- [pó-í] 'his/her/its hand'
- e) /sǎsǎ + ú/ -[sǎsǎ-ú] 'your thread'
- f) /sú + á/ -[sú-á] 'my fish'
- g) /ŋgúí + à/ -[ŋgúà] 'my wife'

It should be noted that the two contiguous vowels illustrated by the examples above are separated by a morpheme boundary in each case. The first vowel before the morpheme boundary (+) is the stem vowel while the following one marks the possessive suffix.

Also present in this language are long vowels which, as earlier said, occur in the order $cv_1 v_1$ as shown by these minimal pairs below:

(7)

- a) kóó 'crow' kó 'take!'
- b) táátǎ 'stitch!' tátǎ 'stir' (soup)
- c) púú 'sky' pú 'them'
- d) [íí 'cut!' [í 'know'

These opposing items serving as examples explain two phenomena in Baba I. They give empirical evidence that long vowels exist, and secondly, that vowel length is phonemic in this language.

1.1 Syllable structure of morphemes.

The syllable of a morpheme is the internal arrangement of segments in the said morpheme. This arrangement is usually in such a way that segments are distributed following a well defined pattern in any language. The distribution of phonemes within a syllable following a specified pattern in a given language gives the canonical shape of morpheme in the said language.

Jurgen and Ennulat (1971: 15) consider a syllable to be a phonetic unit made up of an obligatory central element called the nucleus and two marginal elements which may be optional depending on the language in question. Each language has a preferred syllable structure such that if this structure is violated when morphemes come together in word derivation, the language would adopt a number of mechanisms to reconstruct the segments to be in conformity with the required syllable structure of the said language. This is one of the reasons why the study of syllable structure of a language is important, since it is through this that one can explain sound segmentation and interpret some phonological processes that are geared towards maintaining a preferred syllable structure in languages.

In examining the corpus from a given language one might discover that the said language does not permit a sequence of two or more consonants. In such a language, affricates like [dʒ], [tʃ], [dz] and [ts], if present in this language would be considered as complex segments rather than a succession of two consonants.

Baba I is one of those languages that do not allow consonant clusters especially in initial positions of words. This is justified by the fact that foreign words having consonant clusters, when borrowed into Baba I are restructured to suit the structural pattern of indigenous words in the said language as shown below:

(8)

| English | Baba I | Gloss |
|---------|--------------------|----------|
| [skul] | [ʃəkúr] | 'school' |
| [brik] | [bəlɪx] | 'brick' |
| [klas] | [kərár] or [kəlár] | 'class' |
| [spun] | [ʃəpún] | 'spoon' |

Basically a schwa is seen to be inserted to break a cluster of consonants word initially since it is an impermissible sequence in this language.

1.2 Complex Segments

Complex segments refer to segments of the same natural class in immediate sequence, and these would include prenasals and affricates since they are found in Baba I, the language

under study. Bloomfield (1933) considers affricates as single units though they are made up of "compound phoneme" where two simple phonemes act as a unit.

On the other hand, prenasalized stops have the distributional and phonological properties of single segments. As Anderson (1976: 331) puts it:

In a variety of languages of Africa, South America, New Guinea and various areas of the Pacific, elements transcribed as [mb, nd, ng] etc, clearly behave as single units.

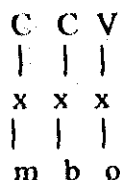
Furthermore, Herbert (1977: 16) regards prenasalized consonants in formal terms as a necessary homorganic sequence of nasal and non-nasal consonant segments which together exhibit the approximate surface duration of simple consonants. Following the views of the above authors we can conclude that prenasalized consonants are underlyingly sequences of nasal and non-nasal segments which, at the phonetic level, surface as single units since they have a shorter articulatory duration than normal bisegmental clusters. This can be illustrated below:

(9)

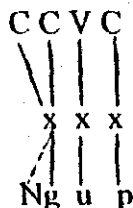
a) [mbó] 'hands'

b) [ngùp] 'mat'

The morpheme in (a) above can have the following simplified abstract representation:



while (b) will be represented as follows:



The articulatory duration of the nasal and non-nasal segments in (a) is longer than that in (b) meaning that one can talk of a bisegmental cluster in (a) but for the fact that /m/ is syllabic while (b) is a prenasal. The bilabial nasal in (a) cannot be considered as part of the complex

segment /mb/ because it bears a tone. This is because segments that bear tones are syllabic and they can function as the nucleus of a syllable.

In Baba I most nasals especially in initial positions are capable of being syllabic and can normally carry a tone. In this language one can duly establish a difference between a prenasal and a syllabic nasal especially from the phonetic point of view. Phonemically there are no two words in this language which differ simply because one begins with a prenasal and the other with a syllabic nasal as in the two items below:

Ngùp 'mat'

N-gùp 'Ø'

The absence of a minimal pair as the two words above indicate justifies the hypothesis that in Baba I one cannot phonemically make a clear-cut distinction between prenasals and syllabic nasals. Prenasals and syllabic nasals in this language can often overlap especially if the latter bear a low tone and moreover employed in fast speech. However, syllabic nasals are used in well defined contexts to convey grammatical rather than lexical information.

It is important to note here that homorganic nasals are often used to form the plurals of certain nouns for the few nouns that form their plurals by the use of a syllabic nasal prefix as the examples below show:

(10)

pó 'hand' mbó 'hands'

kù 'foot' ŋkù 'feet'

kàŋ 'spear' ŋkàŋ 'spears'

The fact that the labial stop in /po/ becomes voiced when a nasal precedes it in initial position while the velars remain voiceless can be explained. This is probably because, in this language, voiced bilabial stops never occur in initial positions in indigenous words. Also we do not have prenasalized voiceless bilabial stops in the language in any environment. For the velars they can occur initially both as simple and prenasalized voiced and voiceless velar consonants respectively as these few examples below show:

(11)

ngàŋ 'country' ŋkàŋ 'spears'

| | | | |
|-----|-------------|-----|-----------|
| ngè | 'crocodile' | ɲkè | 'message' |
| ngɪ | 'grass' | ɲkɪ | 'rope' |

From these examples above we realize that voicing and voicelessness are phonemic when they concern velar and other consonants but not with bilabial stops because the voiced bilabial stop can never occur in initial position without being prenasalized, while the voiceless counterpart can never be prenasalized in any context whatsoever.

If we consider that initial nasals are rather prenasals, problems will arise when we come to cases as the words below:

(12)

| | | | |
|------------|---------------|------------|------------|
| i) nté | 'market' | vi) ntʃi | 'water' |
| ii) mbé | 'nail/breast' | vii) ndzɔ | 'clothes' |
| iii) ndzám | 'ax' | viii) ndán | 'cup/horn' |
| iv) ɲké | 'monkey' | ix) ɲgùp | 'mat' |
| v) ntíí | 'vomit' | x) ndíí | 'race' |

The problem here is that if the two initial consonants in each word are actually single phonic units, we expect that phonologically the second consonant would naturally be voiced through assimilation in all the cases considering the environment in which it occurs. Likewise, if we consider the initial nasals as prenasals we would expect no opposition between voiced consonants and their voiceless counterparts as illustrated by the minimal pairs below:

(13)

| | | | |
|------|-----------|------|-------------|
| ɲkùp | 'debt' | ɲgùp | 'mat' |
| ntíí | 'vomit' | ndíí | 'race' |
| ɲkè | 'message' | ngè | 'crocodile' |
| ntʃi | 'water' | ndzɪ | 'hunger' |

Following the facts presented above by our analysis we would conclude that most initial nasals in Baba I can be syllabic in slow speech. The assignment of syllable structure in this language will thus be in agreement with the views of Kaye and Selkirk (1982), Vergnaud, Halle et al (1978). According to their assumption the syllable is divided into two parts: the onset, containing all material prior to the syllabic peak or nucleus, which usually consists of a vowel;

though in other languages other segments may function as syllabic peak, (Van der Hulst and Norval Smith 1982: 258). In Baba I, nasals besides vowels are those segments which can function as syllabic peaks because they can bear tones.

1.3 Syllable types

This section seeks to examine the various syllable shapes that exist in Baba I. It should be noted that there is hardly a clear cut distinction between a monosyllabic morpheme and a syllable because in some cases, some syllables constitute whole morphemes.

1.3.1 Monosyllabic shapes

These are forms which are initiated or realized in an utterance by what Ladefoged (1975: 221) calls a single chest pulse. In the language under study, monosyllabic shapes are varied with regards to the number of segments that could constitute such shapes as shown below:

(14)

- | | | | | | |
|----|-----|----------|----|------|---------|
| a) | pé | 'fufu' | c) | ɲkùp | 'debt' |
| b) | kòp | 'forest' | d) | pián | 'canoe' |

In Baba I, morphemes with monosyllabic structure generally predominate manifesting various segmental arrangements. They sometimes begin with an initial nasal as in (c) above, and the nasal is capable of being syllabic mostly in slow speech. We can thus postulate a formula to capture the generalized syllable structure in this language as shown below:

(N)(C₁)V(V)(C₂)

This frame shows that /N/ is an abstract nasal that can readily assimilate the features of a contiguous consonant at initial position, C₁ is the first consonant, and V is the vowel serving as the nucleus of the syllable while C₂ is the second consonant. The elements in parenthesis mean that their occurrence is optional. This is indicative of the fact that we can have different kinds of monosyllabic shapes in Baba I as discussed below.

1.3.1.1 The V shape

Baba I has no initial vowel except for a few pronoun forms and other isolated morphemes which consist of only a vowel. These single segmental syllables are quite few in this language. They can also be made up of syllabic nasal, and in the case of vowels, /a/, /i/ and

/u/ are so frequent in such forms which are usually grammatical rather than lexical morphemes as shown below:

(15)

- i) /tsú + á/ -[tsú-á] 'my head'
- ii) /ɲór + ù/ -[ɲór-ù] 'your body'
- iii) /ràx + í/ -[ràx -í] 'his/her/its yam'
- iv) / ǎ sù/ - 'It is a fish'
- v) / ǎ wó ɲù/ - 'who is there?'

It is who there

- vi) /á kú-mǎ/ 'It has died'

It die (asp)

The constructions above show that /a/, /i/ and /u/ are used as singular possessive pronoun morphemes in associative constructions (cf 15i-iii) while /a/ with varying tonal manifestations can function as subject of interrogative or declarative constructions as indicated by (15 iv – vi). These are only bound morphemes as opposed to free morphemes because the former do not usually make sense in isolation.

1.3.1.2 The CV form

This structural morphemic shape often referred to as open syllable, is relatively predominant in Baba I. This form can take practically any of the vowels in this language as shown below:

(16)

- a) pǎ 'hand' d) pǎ 'camwood' g) ndzǎ 'garment'
- b) té 'palm tree' e) ʃí 'blood'
- c) sù 'fish' f) fǎ 'kind of bird'

1.3.1.3. The CVC form

Morphemes having this shape are referred to as closed syllables because they end with a consonant, unlike open syllables that end with a vowel. It should be noted that, just like open syllables, these can have a sequence of two vowels:

Open CV syllables

Open CVV syllables

(17)

- | | |
|---------------|-------------------|
| a) pé 'fufu' | d) pié 'boundary' |
| b) vú 'ash' | e) xìò 'lion' |
| c) fi 'blood' | f) kúí 'bed' |

Closed CVC syllables

Closed CVVC syllables

(18)

- | | |
|-------------------|---------------------------|
| a) pàx 'mushroom' | d) fiè? 'case /judgement' |
| b) sàŋ 'teeth' | e) tiàx 'snail' |
| c) kíŋ 'pot' | f) fiàŋ 'thunder' |

The examples above show that when a sequence of two vowels occurs in lexical morphemes, the first in most cases is always a high vowel. This is true for both open and closed syllables. In cvc structures, /e/ has not yet been attested especially in nominal forms in Baba I. This shows that such structures are discriminatory in terms of the vowels they take. It should however be noted that any initial high vowel in a complex syllable can readily undergo glide formation particularly in fast speech.

1.4 The distribution of segments

Having enumerated the various segments and the forms that syllables assume in Baba I, it is necessary to examine the manner in which consonants and vowels are distributed in the various forms of the syllable types we have discussed above, notably CV and CVC.

1.4.1 Segmental distribution in CV structure

In this type of syllable structure, the following consonants have been attested to occur in initial C position:

/p/, /y/, /w/, /k/, /g/, /v/, /f/, /ts/, /tʃ/, /r/, /l/, /x/, /dʒ/, /dz/, /kp/, /t/, /m/, /n/, /ŋ/, /s/, /ʃ/, /gb/, /ŋm/.

In the position occupied by V, practically all vowels can occur except /u/ which occurs only before another vowel. The examples below illustrate the occurrence of the various vowels that are found in V position in a CV structure:

(19)

- | | | | | | |
|------|-----|------------|-------|-----|-----------|
| i) | dʒí | 'eat' | vii) | só | 'hoe' |
| ii) | tsò | 'kola-nut' | viii) | tʃí | 'salt' |
| iii) | sé | 'elephant' | ix) | pó | 'hand' |
| iv) | wú | 'death' | x) | sú | 'fish' |
| v) | pí | 'camwood' | xi) | pá | 'madness' |

1.4.2 Segmental distribution in CVC structure

In this type of structure, practically all the consonants that occur in C in (1.4.2.1) also appear in the same position here. The only difference is that the consonants that occur in C₂ in C₁VC₂ are not many. We can say that the final position in this syllable type is discriminatory in terms of the type of consonants it accepts, and the restricted number of consonants occurring here can be enumerated thus: [m], [ŋ], [ʔ], [p], [t] and [x]. These final consonants can be found in the words below:

(20)

a) cvm

- | | |
|------|--------------|
| kám | 'crab' |
| lám | 'iron' |
| tʃúm | 'sardine' |
| rám | 'witchcraft' |
| vám | 'stomach' |

b) cvŋ

- | | |
|-----|----------|
| tàŋ | 'navel' |
| sàŋ | 'teeth' |
| fòŋ | 'owl' |
| síŋ | 'needle' |
| táŋ | 'neck' |

c) cvʔ

- | | |
|-----|--------|
| múʔ | 'fire' |
|-----|--------|

súʔ 'pepper'

lóʔ 'sleep'

fíʔ 'fever'

d)cvp

táp 'shoe'

kùp 'bark'

láp 'coward'

tʃùp 'swamp'

e)cvr

pòr 'war'

tòr 'bush'

fòr 'relative'

tír 'type of mushroom'

yòr 'satisfaction'

g) cvx

ràx 'yam'

róx 'hip'

káx 'ladder'

póx 'parcel'

sóx 'pounded cocoyams'

Since it is too lengthy to enumerate the occurrence of all the consonants in the different positions by analysis, it will be preferable to put them in the form of a table as shown below. The vertical axis contains consonants in C₁ position while the C₂ consonants are contained in the horizontal axis of table 3.

Fig. 4: Distribution of consonants

| c ₂ c ₁ | m | ŋ | ʔ | b ^h | p | r | x |
|----------------------------------|---|---|---|----------------|---|---|---|
| p | + | + | + | | | + | + |
| m | + | | + | + | + | | + |
| f | + | + | + | | | + | + |
| n | + | + | + | | | + | + |
| v | + | + | + | | | + | + |
| t | + | + | + | + | + | + | + |
| s | + | + | + | + | + | + | + |
| l | + | + | + | + | + | + | + |
| r | + | + | + | + | + | + | + |
| ʃ | + | + | + | + | + | | + |
| ʒ | + | + | + | | | + | + |
| y | + | + | + | + | + | + | + |
| w | | + | + | | + | | |
| ɣ | + | | + | + | + | + | |
| ŋ | + | | + | | | + | + |

Our analysis so far shows that apart from prenasalized consonants which occur in initial position, there are no consonant clusters in this position in Baba I. Nevertheless, there occur consonant clusters in specific and well defined environments. These clusters are found mostly in compound words as a result of derivations and compounding.

It should be noted that these consonants appear medially but never initially or finally as shown below:

(21)

tóŋlǎ 'ear'

wùmtǎ 'umbrella'

ndzǎplǎ 'porcupine'

kóxlǎ 'knee'

mbùmtà 'weevil'

When we look at the words above, the consonant clusters show a high degree of unnatural combinations. Even nasals which in this language are so ready to assimilate the point of articulation of the following consonants, they remain unchanged in medial positions. This would enable us to constrain our rule of nasal assimilation to apply exclusively in word initial position as shown below: In word initial position, a nasal assimilates the point of articulation of the following consonant. It is represented formally as:

R 1: Homorganic nasal assimilation.

$$[+nas] \longrightarrow \begin{bmatrix} \alpha \text{ ant} \\ \beta \text{ cor} \end{bmatrix} \# \text{---} \begin{bmatrix} \alpha \text{ ant} \\ \beta \text{ cor} \end{bmatrix}$$

This rule will apply on the forms in (a) below and not in (b)

(22)

| | | | | | |
|-------------|----------|----------|----------|----------|------------|
| (a) | | | | (b) | |
| /N + kàŋ/ | [ŋkàŋ] | 'spears' | / tónlǎ/ | [tónlǎ] | 'ear' |
| /N + pǎ/ | [mbǎ] | 'hands' | /wùNtǎ/ | [wùmtǎ] | 'umbrella' |
| /N + kù/ | [ŋkù] | 'feet' | /mbùNtǎ/ | [mbùmtǎ] | 'weevil' |
| /N + kóxtǎ/ | [ŋkóxtǎ] | 'knees' | /ǎNtǎ/ | [ǎŋtǎ] | 'to count' |

1.4.3. Disyllabic morphemes

Many morphemes that have more than two syllables in this language are mostly compound words as well as foreign words that have partially or totally been restructured to fit into the system of the language as the following examples show:

(23)

| | | |
|-----------|----------|-----------------------|
| ŋkǎŋámǎ | 'cobweb' | (rope of spider) |
| ŋámǎkǎlǎ | 'horse' | (animal of white man) |
| kǎŋndǎpǎ? | 'pipe' | (pot of tobacco) |
| tsúndǎp | 'roof' | (head of house) |

These words above show disyllabic morphemes which have been brought together through compounding while those below are loaned words from English and their correspondences in Baba I:

(24)

| | |
|----------------|---------------|
| English | Baba I |
| flower | fàráwà |
| bicycle | básókù |
| table | tébàrà |
| bottle | pótàrà |

1.4.3.1 Occurrence of vowels within the morpheme.

Like consonants, vowels also show a degree of restricted occurrence. The table below presents a summary of the occurrence of vowels in the different syllable types that have been discussed in Baba I.

Fig. 5: Distribution of vowels

| Syllable types | i | e | ɪ | u | o | ə | a |
|----------------|---|---|---|---|---|---|---|
| V | + | | | + | | | + |
| Cv | + | + | + | + | + | + | + |
| Cvc | + | + | + | + | + | + | + |

The table shows that only /i/, /u/ and /a/ can occur as morphemes without consonantal segments. The type of morphemic structure, as already mentioned, is grammatical rather than a lexical morpheme. For the CV and CVC forms, practically all vowels can occur in V position. It should be noted that as indicated earlier, no nominal form in this language has been attested with /e/ in interconsonantal position. Interconsonantal /e/ is found only in verbal forms as the examples below illustrate:

(25)

| Verbal forms | | nominal forms | |
|--------------|-------------------|---------------|-------------|
| séntó | 'break!' | pé | 'fufu' |
| kpéntó | 'fill in!' | yé | 'thief' |
| séló | 'separate' | ké | 'tiredness' |
| gbéló | 'settle!' (price) | sé | 'elephant' |

The above opposition between verbal and nominal forms shows that the mid-high front vowel occurs uniquely in open syllables in nominal forms, but inter-consonantly in verbal forms.

1.4.3.2 Possible vowel combinations

As earlier mentioned, Baba I distinguishes two types of vowel combinations within a single syllable in a morpheme. This means that we can have structures like CV₁V₁ and CV₁V₂ respectively occurring each in a given syllable of a morpheme. In the case of CV₁V₂, V₁ is always mostly a high vowel which may undergo some phonological processes like deletion or semivocalization (usually in fast speech). The table below illustrates this type of vowel combination.

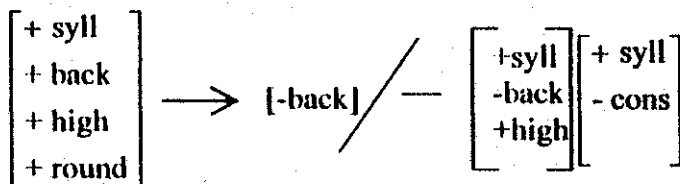
Fig. 6: V₁V₂ Combination

| v ₂ | i | ü | e | ɨ | u | o | ə | a |
|----------------|---|---|---|---|---|---|---|---|
| v ₁ | | | | | | | | |
| i | | | + | + | | + | | + |
| ü | + | | + | | | | | + |
| e | + | | | | + | + | | + |
| u | + | | + | | | | | + |

It should be noted that the high front rounded vowel /ü/ is not a basic vowel in this language. It is derived by rule of vowel coalescence which states that: a high back rounded vowel is fronted when it precedes a high front vowel and another vowel in contiguous environment as formally represented below:

R 2: High back vowel fronting.

/u/ → [ü]/ — i V



This rule applies to the forms below to give the surface phonetic representations as shown:

(26)

- | | | |
|----------------|----------|---------------|
| a) /ngúíí + à/ | [ngúí-à] | 'my wife' |
| b) /kúíí/ | [kúí] | 'file' (verb) |
| c) /gúíí/ | [gúí] | 'buy' |
| d) /gúíáx/ | [gúíáx] | 'throw away!' |
| e) /kúíí?/ | [kúí?] | 'feed!' |

In example (a) above, another rule, this time a vowel deletion rule is needed to give the correct surface form. This means that this language does not permit a sequence of three vowels to appear at the surface phonetic level. Our rule therefore states that the second of three vowels in a sequence is deleted. It can be represented formally as follows:

R 3: Deletion of the second of three vowels in a sequence.

$$|v| \rightarrow \emptyset / v _ v$$

$$\left[\begin{array}{l} + \text{syll} \\ - \text{cons} \end{array} \right] \rightarrow \emptyset / \left[\begin{array}{l} + \text{syll} \\ - \text{cons} \end{array} \right] _ \left[\begin{array}{l} + \text{syll} \\ - \text{cons} \end{array} \right]$$

This rule can derive the surface forms of the underlying constructions below:

(27)

- | | | | | |
|----|-------------|-----------|-----------|--------------------|
| a) | /púú + á/ | sky my | -[pú-á] | 'my sky' |
| b) | /ndzìò + à/ | sheep my | -[ndzì-à] | 'my sheep' |
| c) | /kóó + í/ | crow his | [kó-í] | 'his/her/its crow' |
| d) | /xìò + ù/ | lion your | [xì-ù] | 'your lion' |
| e) | /tíí + á/ - | tree my | [tí-á] | 'my tree' |

Having discussed lengthily about unidentical vowel sequences and their behaviour in contiguous environment, we now examine long vowels or identical vowel sequences.

Fig. 7: V₁V₁ Combination

ii uu
 ee oo
 aa

The postulation of long vowels in Baba I is justified by the fact that they contrast with short vowels and therefore play a phonemic role as shown by the minimal pairs below:

(28)

| Long vowels | | Short vowels | |
|-------------|---------------|--------------|------------------|
| a) táátó | 'stitch' | f) tátó | 'stir' |
| b) kóó | 'crow' | g) kó | 'take!' |
| c) ʃíí | 'cut' | h) jí | 'know!' |
| d) púú | 'sky' | i) pú | 'them/they' |
| e) téé | 'recount' | j) té | 'palm tree' |
| f) yáálǎ | 'showing off' | l) yálǎ | 'pool of liquid' |

This is why we have decided that instead of considering our high vowels as glides whenever they precede another vowel, they rather remain as full vowels and form complex nucleus with the following vowel.

Having systematically examined the various sounds and their permissible combinations, as well as the distribution between short and long vowels within morphemes, it is now worthwhile to determine the generalized morpheme structure in Baba I.

1.5 Morpheme structure.

From the data 1-28 in the preceding illustrations, it is evident that morphemes in Baba I have the structures as represented by the examples below:

(29)

| | Morphemes | | | | Shape | |
|----------|------------|--------|----------|-------|-----------|-------|
| a) tá | 'kick' | ntʃi | water | ɔmí | 'moon' | cv |
| b) píé | 'boundary' | xlò | 'lion' | tíé | 'run!' | cvv |
| c) tám | 'pit' | núm | 'bite!' | múʔ | 'fire' | cvc |
| d) fièʔ | 'judge!' | niàx | 'cow' | mblàŋ | palm nut' | cvvc |
| e) sàtó | 'insult!' | móndzò | 'goat' | mbárá | 'hill' | cvcv |
| f) tətàx | 'frog' | mòŋkiʔ | 'basket' | məmòx | 'dew' | cvcvc |

In their basic forms, verbs as well as nouns in this language are predominantly monosyllables, and to a lesser extent, there are some bisyllables. Nominal forms with more than two syllables are mostly borrowed items or compound morphemes as earlier noted. From the different shapes presented by the different groups of morphemes, we could establish a canonical shape representing a generalized morpheme structure in this language as shown:

+ (C) V ((V) (C)) ((C) V(C)) +

This formal representation of morphemes in Baba I shows that morphemes in the language can either begin with a vowel or consonant, though no lexical morpheme has yet been attested beginning with a vowel. The segments in parenthesis denote optionality. This means that the minimum morpheme is made up of a segment but a lexical morpheme must have two or more segments. The morpheme boundary marked (+) is an indication that these morphemes could take affixes.

From the data used in the whole of this chapter, we have been able to elicit the sound segments that are observed at surface level in morphemes in Baba I. We cannot say that these same sounds are those that can be found in the underlying representation of the same morphemes. For that reason, we will examine some general phonological processes and apply them to the behaviour of sound segments in our language. This will enable us to determine the basic sound segments and postulate rules that account for the possible differences between some surface and underlying forms. This is the preoccupation of the following chapter.

REFERENCES TO CHAPTER I

1. *All high vowels except [ɨ] are capable of undergoing gliding when they precede other vowels especially in fast speech, but our objective is not to describe fast speech in this study.*
2. *In this language, /b/ never occurs in word initial position without being preceded by a homorganic nasal except in loan words. The language has only voiceless stops /p/, /t/, and /k/ as basic and all the voiced counterparts /b/, /d/ and /g/ are derived through phonological rules.*

CHAPTER TWO

2. Phonological and Tonal Processes

This chapter sets out to discuss some general principles of phonological processes while situating them within the realm of the data already discussed in Baba I. These general processes will serve as guiding principles for the establishment of rules that will account for segmental alternations observed in our data. In addition, the general tonal pattern as well as some tonal phenomena exhibited by the language will be examined. This will enable us to establish the number of contrasting tone levels and postulate rules to account for tonal alternations in different types of constructions.

2.1 Phonological processes and rules

A phonological process is a phenomenon whereby a segment is partially or totally changed in a given phonetic environment. On the other hand, a phonetic rule is the explicit specification of the sum total of all the phonetic conditions which must come together for a phonological process to take place. As earlier mentioned, the canonical form of a phonological rule in the generative format is represented thus:

$$A \longrightarrow B/C \quad - \quad D$$

This means 'A' becomes 'B' in the environment 'CD', where either 'C' or 'D' may be null. Phonological processes and rules make up one of the essential features of generative phonology. They serve as a bridge between phonetic inventory and phonemes, or better still, between surface and underlying representations, enabling the systematic passage from one to the other. A phonological rule permits us to understand that the phonetic qualities of a given sound depend often on the phonetic environment in which it finds itself. Consequently, the same sound can be realized in different forms, determined by contextual variation.

Phonological processes reinforce the idea of language structure being a system as seen by Saussure. It makes more obvious the fact that the elements of a language are interrelated and dependent.

Schane (1973) distinguishes four major categories of phonological processes namely: assimilatory, syllable structure, strengthening or weakening processes and finally

neutralization. In Baba I, assimilatory and syllable structure processes are predominantly attested.

2.1.1 Assimilation

A sound usually takes some or all of the phonetic qualities of a neighbouring sound by virtue of their co-occurrence in contiguous environment. This phenomenon concerns consonants as well as vowels. Practically all consonants in this language could undergo either labialization or palatalization in fast speech when they precede rounded high back vowel and front high unrounded vowel respectively. Since our objective is not to describe fast speech, a rule may not be necessary in this case

2.1.1.1 The case of nasal preceding a consonant

In such an environment, the nasal takes on the place feature values of the following consonant with respect to their contiguity. This type of assimilation is frequent in Baba I, and as earlier indicated, a rule can be formulated as follows: a nasal assimilates the point of articulation of the following consonant in initial position as formally represented below:

$$[+ \text{nas}] \longrightarrow \left[\begin{array}{l} \alpha \text{ ant} \\ \beta \text{ cor} \end{array} \right] / \# \text{---} \left[\begin{array}{l} \alpha \text{ ant} \\ \beta \text{ cor} \end{array} \right]$$

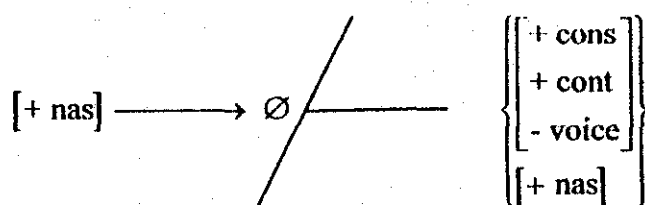
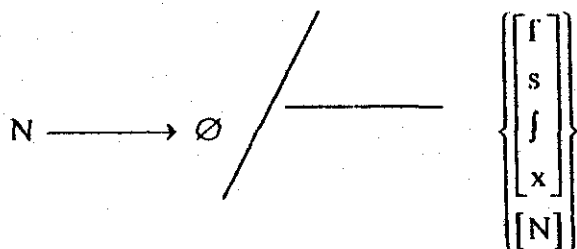
The feature specification of the consonant that the nasal precedes are represented by the variables in the rule above. This rule accounts for the changes manifested by the nasal in the forms below:

(30)

| | | | |
|------------------------------|---|--------------------------|---------------|
| a) /n-tóNlǎ/ | - | [ntóŋlǎ] | 'ears' |
| b) /n-kóxtǎ/ | - | [ŋkóxtǎ] | 'knees' |
| c) /n-pó/ | - | [mbó] | 'hands' |
| d) /n-tié-mǎ/ I run (asp) | - | [ntié-mǎ] I run (asp) | 'I have run' |
| e) /n-ɣè-mǎ/ I go (asp) | - | [ŋè-mǎ] I go (asp) | 'I have gone' |

In this language, a sequence of nasal and voiceless fricatives is impermissible. This leads us to formulate a rule which states that a nasal is deleted when it precedes a voiceless fricative or another nasal in immediate sequence. This rule can be represented formally thus:

R 5: Nasal deletion before a voiceless fricative.



The first person singular subject marker in this language is a homorganic nasal with a low tone and is usually prefixed to the immediate verb or verbal element. The nasal deletion rule above enables us to account in a systematic manner for the seeming irregularities in the constructions below:

(32)

a) /ṇ-fá-mǎ mbám mbò fùè/ [fá-mǎ mbám mbò fùè] 'I have given 'money to the fon'

I give (asp) money to fon

b) /ṇ-[í-mǎ nù / [í-mǎ nù] 'I have known something'

I know (asp) something

c) /ṇ-xò-mǎ/ [xò-mǎ] 'I have laughed'

I laugh (asp)

d) /ṇ-sùʔ-mǎ ndzǎ/ [sùʔ-mǎ ndzǎ] 'I have washed the dress'

I wash (asp) dress

When the nasal serving as the subject of the sentences above is deleted, each sentence then begins with a sort of glottal release indicated by the struck marked (') before each sentence. This looks like an evidence that glottal stop in this language was introduced to fill the slot left by consonants that were lost in course of the diachronic evolution of the language.

We would now examine the behaviour of /l/, /r/, /y/ and /ɣ/ in the data that follow.

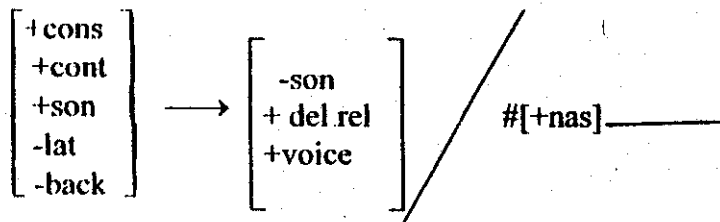
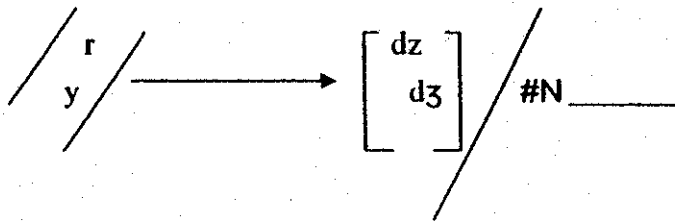
(33)

| | | | | |
|------|-----------------------|---------------------------------|----------------|--------------------------|
| A i) | li 'sleep' | /n-li-mó/ I sleep (asp) | [n-dí-mó] | 'I have slept' |
| | ii) lúé 'beg!' | /n-lúé-mó ɲmè/ I beg (asp) | [n-dúé-mó ɲmè] | 'I have begged a person' |
| | iii) láá 'pass!' | /n-làá-mó/ I pass (asp) | [n-dàá-mó] | 'I have passed' |
| B i) | ril 'say' | /n-ril-mó/ I say (asp) | [n-dzil-mó] | 'I have said it' |
| | ii) rùtá 'shake' | /n-rùtá-mó/ I shake (asp) | [n-dzùtá-mó] | 'I have shaken it' |
| | iii) ráʔlǎ 'rinse' | /n-ráʔlǎ-mó/ I rinse (asp) | [ndzáʔlǎ-mó] | 'I have rinsed it' |
| Ci) | yé 'see!' | /n-yé-mó/- I see (asp) | [n-dzé-mó] | 'I have seen it' |
| | ii) yóʔ 'bask!' | /n-yóʔ-mó/- I warm (asp) | [n-dzóʔ-mó] | I have basked it |
| | iii) yáʔlǎ 'dry' | /n-yáʔlǎ-mó/- I dry (asp) | [n-dzáʔlǎ-mó] | I have dried it |
| D i) | ɣě 'go!' | /n-ɣè-mó/ I go (asp) | [ɲ-gè-mó] | I have gone' |
| | ii) ɣǎ 'do!' | /n-ɣǎ-mó/- I do (asp) | [ɲ-gǎ-mó] | 'I have done it' |
| | iii) wúplǎ 'imitate!' | /n-ɣúplǎ-mó/ I imitate (asp) | [ɲ-gúplǎ-mó] | 'I have imitated it' |
| iv) | wǎ 'fall!' | /n-wù-mó/ I fall (asp) | [ɲ-gù-mó] | 'I have fallen' |

The data in (33) above clearly show that /l/, /r/, /y/ and /ɣ/ become /d/, /dz/, /dʒ/ and /g/ respectively when preceded by a nasal in word initial position. In order not to miss a linguistically significant generalization, we divide these sounds into two natural classes and formulate rules to explain their behaviour, since they actually describe a unified process.

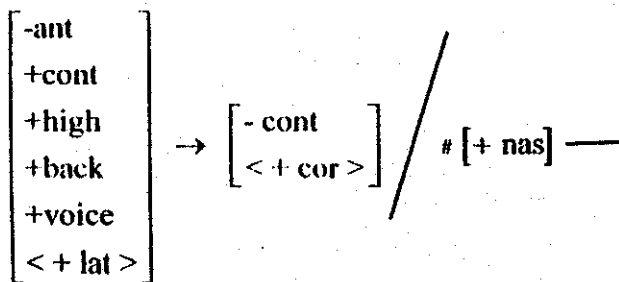
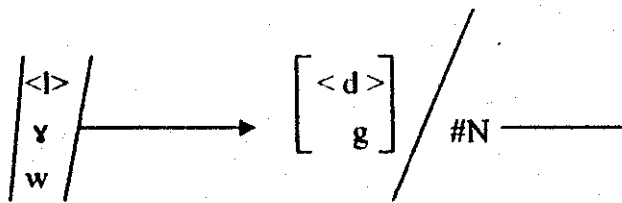
There is a rule which states that a trill and palatal glide become affricates when preceded by a nasal. It can be formally represented as

R 6: Trill and palatal glide affrication.



The above rule will account for the forms in (33.B and C). There is a strengthening rule which states that a lateral and a voiced velar fricative and labio-velar approximant become stops when preceded by a nasal in word initial position. This rule is formally represented as:

R 7: Lateral and approximant strengthening.



This rule above will account in a systematic manner for the forms in (33 A and D) above.

As opposed to rule six, this rule is sensitive to word boundary (cf 33 A) as concerns the behaviour of //.

The analysis up to this point has brought out rules that can apply indiscriminately across the board in Baba I. However, there are some forms which need an adhoc rule. These forms involve bilabials which in final position, are deleted in collocational environment in certain forms as shown below:

(34)

| | | |
|--------------------|-------------|-------------------------------|
| i) /ndáp + à/ | [ndá-à] | 'my house' |
| ii) /ndáp + ɲmè/ | [ndá ɲmè] | 'house of a person' |
| iii) /kòb + á/ | -[kò-á] | 'my forest' |
| iv) /kòb + fǎr/ | [kǒ fǎr] | 'the forest of the relatives' |
| v) /ntáp + á/ | [ntà-á] | 'my hut' |
| vi) /ntáp + mǎmví/ | [ntǎ mǎmví] | 'the hut of the dog' |
| vii) /pám + á/ | [pà-á] | 'my bag' |
| viii) /pám + sú/ | [pǎ sú] | 'the bag of fish' |

To account for the surface forms of the constructions above, we could postulate a rule which deletes all bilabials in final position when they precede another word or morpheme. Such a rule will not apply across the board since it will be noticed that this deletion process in this particular case takes place in very few morphemes of our data, and in an environment that cannot be determined phonologically or morphologically. We would rather consider the above forms as being accidental in this language because there are similar forms which are in the majority in this language where the above principle does not apply as illustrated below:

(35)

| | | |
|-------------------|--------------|--------------------------|
| i) /ɲgbám + à/ | [ɲgbám-à] | 'my maize' |
| ii) /ɲgbám + ɲké/ | -[ɲgbám ɲké] | 'maize of monkey' |
| iii) /ɲkám + í/ | [ɲkám-í] | 'his/her/its bee hive' |
| iv) /ɲkám + nté/ | -[ɲkám nté] | 'the bee hive of market' |
| v) /ntám + fùè/ | -[ntám fùè] | 'the fon's heart' |

| | | | |
|-------------------|---|-------------|--------------------------|
| vi) /ntám + á/ | - | -[ntám-á] | 'my heart' |
| vii) /táp + á/ | | -[táb-á] | 'my shoe' |
| viii) /táp + ɣmè/ | | -[táp ɣmè] | 'the shoe of the person' |
| ix) /ɣkɪp + ù/ | - | -[ɣkɪb-ù] | 'your left' |
| x) /ɣkɪp + wó/ | | -[ɣkɪp wó] | 'the left of stone' |
| xi) /sàp + yòyò/ | | -[sàp yòyò] | 'our proverb' |
| xii) /sàp + ù/ | | -[sàb-ù] | 'your proverb' |

This gives empirical evidence that the forms in which labials delete in final position in collocational environment are actually exceptions rather than a rule in Baba I. But if we want to consider the process as a general rule in the language, we need to explain why it does not apply in certain cases. A probably plausible explanation is to assume that the deletion of final bilabial in collocational environment is determined by semantic factors, but this goes beyond our scope of phonology. Where the application will bring about an ambiguity, the rule does not apply as shown by the data below:

(36)

| | | | | | |
|----------|-----|-----------------------|------|-----|--------------------|
| i) ɣgbām | fùè | "the maize of fon " | ɣgbá | fùè | "the side of fon" |
| ii) ntám | fùè | " the heart of fon " | ntá | fùè | "I kick the fon" |
| iii) táp | fùè | "shoe of fon" | tá | fùè | "sting the fon" |
| iv) ɣkɪp | fùè | "the fon's left hand" | ɣkĩ | fùè | "I strike the fon" |

The data above give us ample evidence to believe that the labial deletion phenomenon is a general rule in the language, but this language adopts a mechanism whereby the rule is blocked whenever its application is likely to create ambiguity. Nevertheless, this cannot be a convincing reason to make us believe that this is a general rule in the language which is blocked for reasons of ambiguity since these apparently similar words are of different lexical categories. A likely explanation maybe that since these forms are statistically few, they are exception in the language or they are forms subject to a new rule just introduced in the language but is not yet well developed to apply to all forms having similar shapes.

Another linguistically plausible explanation could be that these words have geminate vowels of the form cvvc such that in collocation with other words or morphemes the final

consonant becomes unreleased and then drops. All these attempts to explain what happens in the data might not convince our reader. A better solution at this point of the analysis is to assume that these cases are exceptions in the language, and that it could be subject to a diachronic interpretation which of course is not the focus of our description. As a sort of speculation, we could imagine that at a given moment in the history of this language, there would have been a process whereby many close syllable morphemes were reduced to open syllable through the deletion of final consonants. This may account for the predominance of open syllable morphemes in this language.

2.2 The inventory of phonemes

A phoneme is usually a sound that plays a distinctive function or role in the language in which it occurs, or better still, it is an abstract mental representation of a phonological unit in a language. Our objective here is to make a phonic inventory of the sounds which are considered basic in Baba I as shown below:

2.2.1 Phonemic vowels

Here, we are concerned with vowels which are basic or underlying in this language and only appear on the surface after the application of some rules. These vowels are represented in the figure below:

Fig 8: Basic vowels

| FRONT | CENTRE | BACK |
|-------|--------|------|
| i | ɪ | u |
| e | | o |
| | ə | |
| | a | |

Baba I thus has seven basic vowels as represented in the chart. The minimal pairs below will illustrate the distinctive role of these phonemic vowels:

(37)

| | | | | | |
|-----|----|---------|-----|----|---------|
| i/e | pí | 'dance' | u/í | kú | 'die!' |
| | pé | 'fufu' | | kí | 'burn!' |

| | | | | | |
|-----|-----|---------------------|-----|-----|------------------|
| a/ə | sám | 'miss' | a/o | mbá | 'madman' |
| | sám | 'buttock' | | mbó | 'hands' |
| i/ə | só | 'pus' | i/i | lí | 'sleep' |
| | sí | 'infront' | | lí | 'light' (weight) |
| u/a | sú | 'fish' | i/a | sín | 'needle' |
| | só | 'pus' | | sán | 'pipe' |
| u/o | sú | 'fish' | i/a | pí | 'dance' |
| | só | 'hoe' | | pá | 'madness' |
| u/a | wú | 'death' | e/a | té | 'palm tree' |
| | wá? | 'type of vegetable' | | tá | 'kick!' |

2.2.2 Phonemic consonants

Just like the phonemic vowels, these consonants are underlyingly represented in this language and are therefore considered basic unlike surface sounds that are generally determined by phonological context. They are represented in the consonant chart below:

(38)

| | | | | | |
|-------|--------|-----------------|-------|-------|---------------------|
| m/n | mé | 'tomorrow' | f/l | fɪŋ | 'wound' |
| | né | 'body of water' | | fɪŋ | 'name' |
| t/l | tóŋlɔ́ | 'ear' | ʔ/t | pàʔtá | 'dodge it!' |
| | lógɔ́ | 'be proud' | | pàtá | 'turn it!' |
| t/s | táŋ | 'neck' | v/p | várɔ́ | 'explode!' |
| | sáŋ | 'hollow tube' | | párɔ́ | 'transplant!' |
| t/g | ntè | 'grasshopper' | y/m | yé | 'see!' |
| | ŋgè | 'crocodile' | | mé | 'tomorrow' |
| k/t | kám | 'crab' | p/y | pú | 'them' |
| | tám | 'pit' | | yú | 'something' |
| l/n | láj | 'calabash' | k/s | kó | 'take!' |
| | ŋáj | 'garden egg' | | só | 'hoe' |
| g/k | ŋgàŋ | 'country' | w/k | wú | 'death' |
| | ŋkàŋ | 'spear' | | kú | 'die!' |
| p/k | pé | 'fufu' | kp/k | ŋkpè | 'slave' |
| | ké | 'tiredness' | | ŋké | 'message' |
| l/p | láj | 'illness' | dʒ/tʃ | ndʒù | 'kind of groundnut' |
| | piáj | 'canoe' | | ntʃù | 'mouth' |
| y/w | yóʔá | 'bask!' | m/p | má | 'river' |
| | wóʔá | 'swim!' | | ɸá | 'madness' |
| kp/ŋm | kpárɔ́ | 'throw away!' | y/f | yàŋ | 'noise' |
| | ŋmárɔ́ | 'carry!' | | ʃàŋ | 'root' |
| l/r | lám | 'iron' | f/v | fám | 'abandoned house' |
| | rám | 'trace' | | vám | 'stomach' |
| k/x | kíó | 'pluck!' | kp/gb | kpé | 'load!' |
| | xíó | 'laugh' | | gbé | 'sell!' |
| ts/tʃ | tsá | 'kola nut' | ŋ/n | ŋú | 'there' |
| | tʃá | 'without' | | ŋú | 'honey' |

| | | | | | |
|-----|-----|----------|-----|--------|-------------|
| x/ɣ | xíó | 'laugh!' | g/ɣ | gíéʔlǎ | 'kernel' |
| | ɣíó | 'bowl' | | ɣáʔlǎ | 'difficult' |

As could be seen from these words above, some sounds which are assumed to be attested in this language do not occur as single segments on the surface. This is the case with /ʒ/ and /z/ which only occur on the surface when combined with /d/ to form affricates. Even /d/ shows that it is a realization of /l/ when preceded by a nasal. We would consider /g/ as a realization of /ɣ/ when preceded by a nasal. This assumption seems faulty because /g/ and /ɣ/ both occur in words as simple segmental units but they occur in exclusive environments. The only plausible explanation for the behaviour of /g/ and /ɣ/ is that, /ɣ/ undergoes a strengthening process and becomes /g/ in initial position when it precedes a high front vowel. This process can be explained by a rule which states that a velar fricative becomes a stop when it precedes a high front vowel in word initial position.

R6: Velar strengthening.

The rule is formally represented as below:

$$/\gamma/ \longrightarrow [g] / \# \left[\begin{array}{c} i \\ u \end{array} \right]$$

$$\left[\begin{array}{c} -ant \\ +cont \\ +voice \\ -son \end{array} \right] \longrightarrow [+son] / \# \left[\begin{array}{c} +syll \\ +high \\ -back \end{array} \right]$$

This rule above will account for the existence of the following forms in this language:

- (39)
- i) gím hold
- ii) gíéʔlǎ kernel
- iii) gī mourn

- iv) gúf buy
- v) gúáx throw away
- vi) gíʔlǎ reshape
- vii) gúàŋ sector

With respect to these data above it is evident that /g/ is not a basic phoneme; it is rather the realisation of /ɣ/ when preceding a high vowel.

If the various segmental phenomena observed in this language have been given plausibly sound explanations, it is thanks to the notion of rule generalization. The idea of generalizing rules lies in the conception of universal phonetic motivation. Different phonetic systems are governed by different processes operating within the language in question, but the internal logic of the rules stemming from these diverse processes has a universal character. It is claimed that segments are made up of a certain number of phonetic features. In a contiguous environment a segment can lend one or more of its features to another segment or borrow some from it. This process which is actually assimilatory could be referred to here as a law of segmental contiguity. Each rule that consists of a sum total of homogeneous features will inevitably have a universal character, for it is as a result of what we have referred to above as a law of contiguity. This means that if a rule voices segments in the environment of voiced segments, this will be a natural rule. On the other hand, if a segment changes without taking anything from its neighbouring environment, we begin to ask ourselves the reason for this change, for it looks unnatural. Rules are therefore formulated to meet some natural criteria. It is on these grounds that we have been able to postulate rules to account for segmental variations in Baba I and these same assumptions will serve as guiding rules to our tonal analysis.

2.3 Tones in Baba I

This section is aimed at acquainting the reader with the tone patterns and possible tonal phenomena attested in Baba I which is a tone language. Steven Bird (1999d) considers a tone language as one in which voice pitch on an individual syllable may carry either a lexically or grammatically contrastive meaning. Welmers (1959: 2) sees a tone language as one in which both pitch phonemes and segmental phonemes enter into the composition of at least some morphemes. This means that some morphemes may lack a pitch phoneme while others may be exclusively made up of a tone without any segmental components or tone bearing units. It is in line with the above view that our analysis of Baba I tonal system is based. To account for floating tones, tone stability, contour tones etc. in a consistent manner, we have decided to adopt the autosegmental approach, whose choice here is justified by what Goldsmith (1976) refers to as its problem solving efficiency.

In Baba I there are principally two basic or underlying tones; high and low which manifest themselves on the surface in varying patterns and levels depending on the nature of the morpheme or segment over which they have domain and the environment in which they occur.

2.3.1 Level tones

These are single tonemes assigned to single tone bearing units in well defined contexts.

2.3.1.1 Monosyllabic morphemes

These are single syllables that may constitute either lexical or grammatical morphemes in this language as exemplified by the items below:

(40)

- a) (H)H
- i) kó 'take'
 - ii) nké 'monkey'
 - iii) pié 'boundary'
 - iv) nkíáŋ 'vegetable'
 - v) pí 'dance'
- b) (L)L
- i) fōŋ 'owl'
 - ii) ndʒìò 'sheep'
 - iii) tiàx 'snail'
 - iv) ʃi 'blood'
 - v) fù 'medicine'

2.3.1.2 Bisyllabic morphemes

These morpheme types in this language could consist of simple as well as complex nucleus, with the common characteristic that they are considered to have two syllables as illustrated by the samples below:

(41)

- a) H(H)-H
- i) ɲúéʔé 'sand'
 - ii) gíéʔlǎ 'kernel'
 - iii) mǎndzǎ 'goat'

- | | | |
|----|-------------|-------------|
| | iv) mǎyáŋ | 'ring' |
| | v) mǎmví | 'dog' |
| b) | II(II)-L | |
| | i) mǎfi | 'cricket' |
| | ii) kíáŋá | 'pan' |
| | iii) pǎrè | 'peanut' |
| | iv) mǎŋkíʔ | 'basket' |
| | v) kǎfíʔ | 'cat' |
| c) | L(L)-II | |
| | i) xǎʔlǎ | 'frighten!' |
| | ii) fǎèntǎ | 'pick!' |
| | iii) yǎwúm | 'kite' |
| | iv) rǎtǎ | 'shake!' |
| | v) kǎèntǎ | 'stumble' |
| d) | L(L)-L | |
| | i) wǎmtǎ | 'umbrella' |
| | ii) tǎtǎfǎm | 'cassava' |
| | iii) ndǎpǎʔ | 'tobacco' |
| | iv) tǎtǎx | 'frog' |
| | v) sǎŋlǎ | 'beetle' |

2.3.2 Contour tones

Here, we refer to more than one toneme on a single syllabic unit. This language permits only a maximum of two tonemes on a single tone bearing unit. Since the language permits long vowel sequences within a syllable, contour tones are more obvious only in collocational environments. In that respect, they are to be considered as grammatical tones rather than lexical tones that are supposed to be inherent in the morpheme. Contour tones are mostly found in syllable final position as seen in the following tone patterns below:

(42)

a) (L)LH

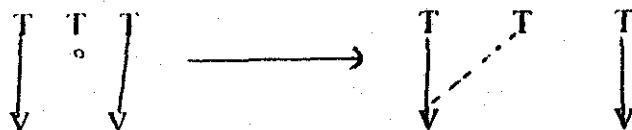
- i) /fɫāx Ij ntè/ - [fɫāx ntè] 'big job'
job AM big
- ii) /ndzòx Ij ɲké/ - [ndzòx ɲké] 'wine of monkey'
wine AM monkey
- iii) /gim Ij tí/ [gĩm tí] 'catch tree!'
OM
catch! tree
- iv) /fiè Ij ɲmè/ - [fiè/ ɲmè] 'judge a person!'
OM
judge! person
- v) /tòtāx Ij fùè/ [tòtāx fùè] 'frog of fon'
frog AM fon

b) (H)LH

- i) /ɲkián Ij mósíŋ/ - [ɲkián mósíŋ] 'vegetable of bird'
vegetable AM bird
- ii) /móyán L ɲké/ [móyán ɲké] 'ring of monkey'
ring AM monkey
- iii) /móndzò L fùè/ - [móndzò fùè] 'goat of fon'
goat AM fon
- iv) /ɲgáyá L mbìŋ/ - [ɲgáyá mbìŋ] 'termite of rain'
termite AM tree
- v) /móŋgóp L tí /- [móŋgóp tí] 'fowl of the tree'
fowl AM tree

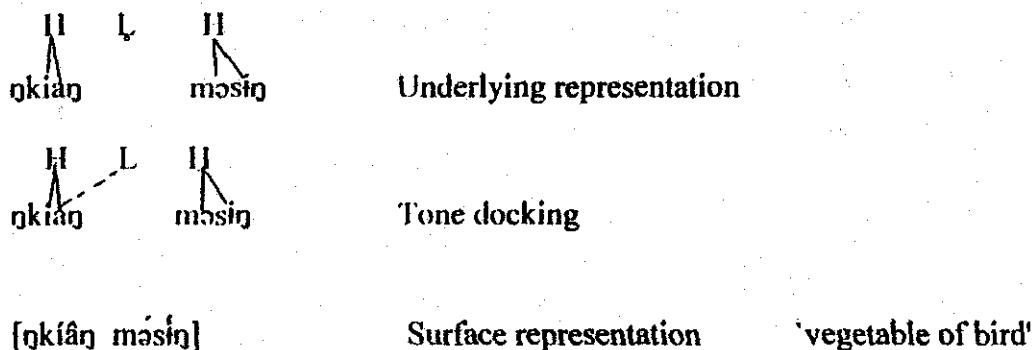
These forms in (2.3.2 a-b) confirm a leftward tone docking process in Baba I. This requires that a floating associative or grammatical tone docks to the left in collocational environment. It is formally represented as TR₁ below.

TR 1: Floating tone leftward docking



The derivation in (41b) can be autosegmentalized as shown in (43) below:

(43)



Our tone docking rule can consistently account for the presence of contour tones on morphemes in collocational environment as exemplified by (43ib). The data presented by Baba I reveal certain tonal phenomena that can be explained by morphophonemic tone rules as discussed by Hyman (1973b); Hyman and Schuh (1974). Only those rules that are attested in this language will be reviewed.

2.3.3 Morphophonemic tone rules

These are grammaticalized rules having a common characteristic in that they refer to specific morphemes or constructions as discussed below:

2.3.3.1 Spreading

This is a process whereby a morpheme, most frequently a grammatical morpheme such as pronoun is considered to have no underlying tone of its own, but rather receives a tone from an adjacent morpheme. This is the case with some morphemes in Baba I, especially the noun-dependent possessive forms that associate with nouns to express possession as follows:

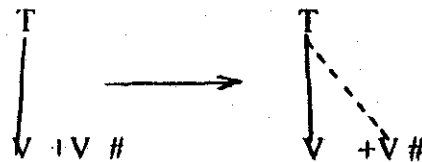
(44)

- | | | |
|--|--------------------|---------------------|
| <p>a) /ndzə́ ɿ́ a/</p> <p>garment AM my</p> | <p>-[ndzə́-à]</p> | <p>'my garment'</p> |
| <p>b) /ntʃí ɿ́ mu/</p> <p>water AM your</p> | <p>-[ntʃí mú]</p> | <p>'your water'</p> |

- c) /pɔ́nām ɪ] pəxo/ -[pɔ́nām pɔ́xó] 'our animals'
 animals AM our
- d) /ɲkàŋ ɪ] máp] -[ɲkàŋ máp] 'their spears'
 spears AM their

These examples illustrate that the toneless possessive forms partially assimilate the tone of the associative marker, or that they take on the end tone of the contour tone on the final syllable of their head nouns at the surface level. We could state a tone spreading rule which states that a toneless morpheme acquires a tone identical to the last tone of the final syllable of the preceding morpheme. It could formally be represented as shown:

TR 2 Possessive forms tone acquisition.



It should be noted that the spreading process is progressive to subsequent syllables within the same morpheme until it is blocked by a word boundary. This is why our tone rule above has been constrained by the use of word boundaries.

It should be specified that TR₂ is a restricted rule that applies only to morphemes that are claimed to be toneless in this language. These are usually grammatical or bound morphemes unlike lexical morphemes like nouns and the verb bases which have their inherent tones in the language.

2.3.3.2 Replacement

This is a type of tone spreading but different in that the inherent tone of a morpheme is replaced by the tone of a preceding morpheme (cf TR3). In Baba I, such a process takes place in the verb paradigm. An example is the present progressive verb form whose tone in the citation form is different from that in a construction as seen below:

(45)

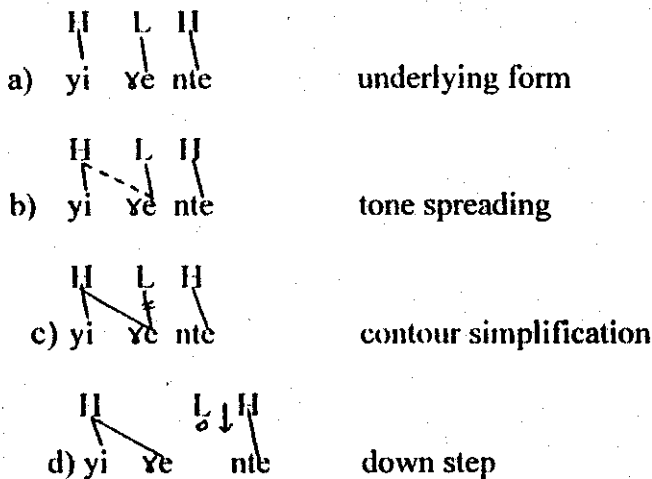
/ɣè/ 'go'

/yí ɣè nté/ - [yí ɣé ↓ nté] 'He is going to the market'

He/she go market

The construction above has no tense marker, and aspect is indicated by variation in the tone of the verb as will be discussed in part three of our study. We could derive our surface form from the underlying representation by going through the various stages below:

(46)

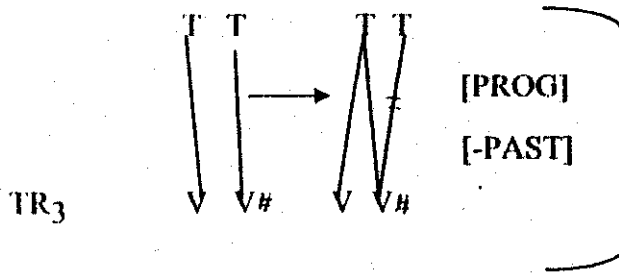


It will be noticed from the derivation above that tone replacement is made up of a number of ordered processes. In addition to spreading already discussed above, there are contour simplification and downstepping of a high tone. This down stepping is provoked by a preceding surface dissociated low floating tone adjacent to a high tone (cf 46d) above.

2.3.3.2.1 Contour simplification

In this process the end tone of a contour on the final syllable of a progressive verb form is dissociated. This is stated as saying that the initial tone(s) of a morpheme is/are deleted when a preceding tone docks rightward and creates a contour tone or tones on the said morpheme. It is formally represented as TR₃

TR 3: Inherent tone replacement.

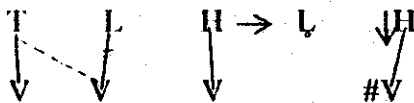


The above tone rule is a morphologized one restricted only to progressive non past verb forms. Hence, there is the need to constrain it so that it does not apply to any type of morpheme or construction, and its application ends where the following verb and its affixes end, that is, its domain is limited to verb base and its accompanying affixes. Tone simplification is closely followed by another process known as downstepping, where a dissociated low tone provokes downstepping of high tone in the preceding morpheme or word (cf TR4).

2.3.3.2.2 Downstep

This is a process whereby a floating low tone resulting from tone simplification precedes a high tone, at the surface, thereby causing this high tone to be realized at a phonetically lower level than its normal level. This usually happens when the following high tone is found across a word boundary as formally represented below as TR4:

TR 4: Low floating tone deletion and downstepping.



The rule above states that a preceding floating low tone on the surface will downstep a high tone across morpheme or word boundary. This downstep rule is progressive and only stops where it meets a following low tone. In addition, this rule is only at the surface when tone spreading rule has already applied. This is to avoid the floating tone from re-associating with adjacent segments, since this is a regular principle in the language (cf 5.1.2). Let us now examine the motivation for floating tones.

2.3.3.2.3 Floating tones

These are tones which have lost the tone bearing unit with which they were originally associated. Since we assume that tones and their tone bearing units exist on separate tiers, these dissociated tones remain underlyingly without segments and may only be re-associated when morphemes come together in constructions. As already mentioned, this is the case of the associative marker which in this language is considered as a tonal morpheme. The recognition of floating tones in the language is very crucial. In many cases where we might be tempted to write a morphologized rule of tone alternation, an underlying tone without any underlying segments can be posited. Such floating tones often explain otherwise baffling tonal modifications which occur when words and morphemes are strung together.

Empirical supports from the data with respect to our tonal analysis have tacitly demonstrated that Baba I has low and high as its basic tones (cf 2.3.1). These two basic tones manifest some variations at the surface level and these variations can only be explained by postulating some tone rules to readily account for what looks like irregularities. We could clearly distinguish three tone types in this language namely:

- i) Lexical tones which are inherent tones are borne by morphemes in their citation forms.
- ii) Grammatical tones which normally occur when words or morphemes are strung together.
- iii) Floating tones which are tones supposed to have lost their tone bearing units and only occur on the surface when re-associated to adjacent tone bearing units in the course of derivation.

The tone rules that have been postulated to account for tonal variations in this language have shown that some can apply only when particular constructions are concerned. This has led us to constrain them in such a way that the environment and also the constructions in which they apply (if necessary) are clearly stated. This has enabled us to account in a straightforward manner for some quasi-anomalous tone patterns that are observed in this language.

It can however be observed that the function of tones in Baba I, just like in many tone languages in general and grassfields Bantu languages in particular is very instrumental. This is because the language is seen to use tones in distinguishing lexical items and some grammatical constructions. Tonal manifestation follows a number of well ordered rules and processes that run across the whole language

Having stated the importance of tones in languages in general and explored the different tonemes in our language under study as well as explained their varying patterning in various contexts, it is important to postulate a way by which these tonemes and the segmental phonemes of the language can be systematically represented graphemically. This can readily be done through the establishment of a proposed orthography for Baba 1, and this is going to be the subject of the next chapter.

CHAPTER THREE

3 Orthography

This chapter seeks to lay down the ground work for the alphabet of Baba 1 and propose the basic principles for writing and reading the language. The alphabet to be postulated is based on the sound inventory and subsequent analysis carried out in the two previous chapters. The notions of alphabet and orthography are so closely related that one cannot be discussed without making reference to the other. This fact is confirmed by the various definitions of these two concepts found in the literature of the discipline.

Pike (1971:224) defines orthography as the symbolization of phonemes using letters of the alphabet. He however acknowledges that the orthography of a language is not determined by purely linguistic factors, but by social and technological considerations, and therefore is subject to modification.

Gudschinsky (1973:116) on his part views orthography as: "a set letters by which the phonemes of a language are symbolized.....more simply an alphabet." This in effect illustrates that orthography of a language consists of a systematic manner in which the phonemes of the said language are represented using graphic symbols. According to Williamson (1984:4-5),

Orthography consists of the rules that are used in writing a language, while an alphabet consists of the symbols that one uses in writing the sounds of a language.

Tadadjeu and Sadembouo (1984:4), along the same reasoning claim that:

An alphabet comprises all graphemes (letters) or characters used in writing a language, [and] by orthography is meant all the conventional principles for writing and reading a language correctly.

Looking at the above definitions and claims of the different authors, it is quite obvious that the alphabet refers to the graphemes used in representing a language in its written form and orthography is the sum total of the rules and principles that guide and facilitate the writing and reading of the written form of a language. Having made a distinction between alphabet and orthography, this will enable us to accurately make an inventory of the symbols of the alphabet of Baba 1.

3.1 Inventory of the symbols of the alphabet.

As already stated above, our alphabet is based on the sounds elicited in the analysis of the data on Baba 1. Here we are to postulate a systematic way of representing the sound by means of graphemes and then tones in the written form of the language.

3.1.1 Grapheme.

This refers to a unit, letter/letters of a writing system representing one phoneme; a single sound that has one phonemic correspondent. As Tadadjeu and Sadembouo (1979:3) put it, a grapheme is "a letter or group of letters representing a single sound and forming part of the alphabet of a language." In the orthography of Baba 1, just like in the written form of many languages, we will have both vocalic and consonantal graphemes. These could be called segmental graphemes as opposed to tones which are supra-segmental graphemes or better still, diacritic marks.

3.1.1.1 Vocalic graphemes.

From the phonemic point of view, there are 7 vocalic graphemes in Baba 1 thus: **a e ə i i**
o u. The presence of a high front rounded vowel [ü] in certain words in this language is phonologically conditioned since it occurs only after palatalized velar stops. It can therefore not be given a graphemic correspondence in our orthography since it is not a basic phoneme and is also shown to be found in very few words in this language.

3.1.1.2 Consonantal graphemes.

The consonant system of Baba 1 just like that of many grassfields Bantu languages is rather complex with a total of 32 consonants as presented below:

b c f g gb gh gy j k kp ky l m mb mv n nd ndz ny ŋ ŋm p r s sh t ts v w x y '

These consonantal graphemes could be classified under monograph; a single symbol whose phonetic value is a single sound, and diagraph; a group of two or more symbols which really stand for one sound.

a) Monographs: **b c f g j k l m n ŋ p r s t v w x y '**

b) Diagraphs: **gb gh gy kp ky mb mv nd ndz ny ŋm sh ts**

We could merge both the vocalic and consonantal graphemes in this language and arrange them in alphabetical order as presented below:

a b c e ə f g gb gh gy i i j k kp ky l m mb mv n nd ndz ny ŋ ŋm o p r s sh t ts u v w x y '.

As a whole, Baba 1 has an alphabet of 39 letters or graphemic symbols which can be used to represent the language in its written form. Closely related to these segmental graphemes are supra-segmental graphemes or tone symbols.

3.1.2 Tone symbols.

In tone languages tone functions as a pitch element or register added to a syllable to convey grammatical or lexical information. In effect, they are phonemes since they play a distinctive role just like consonants and vowels. For the orthography of a tone language to be complete, provisions must be made on how the tones are to be represented graphemically.

Baba 1 is a four-tone language with two level tones (low and high) and two contour tones (rising and falling). The level tones are the basic tonemes in this language and the contour tones occur as a result of connected speech or compounding. These contour tones are few and their marking will not overload our orthography. The choice of which tone to be marked or not will be between the level tones, low and high. Here the tone to be marked will be determined by Mfonyam (1988:527) orthographic tone principles whereby he lays down a number of guide lines and hypotheses for designing tone orthography. He holds that:

- Tones should be marked in a systematic and consistent manner such that the principles apply across the board.
- Surface tones should be marked rather than underlying tones because in some cases the lexical tones of some words change when these words are used in grammatical constructions.
- An orthography that marks many tones should be avoided and a balance should be struck between too many and too few tone marks.
- The more stable level tone should be marked and tone whose pitch value changes greatly should not be marked.
- Since most of the tone systems we are dealing with have developed basically from two basic tones, low and high, our choice of which tone to mark should begin with low and high.
- In Bantu languages, low tone is relatively more stable than high; and more easily perceived by the native speaker who is learning to read and write tone, and so, it should be marked rather than the high tone.
- The frequency of tones should be taken into consideration in the choice of which to mark such that the more frequent tone should not be marked.

These guide lines and principles proposed by the author though quite elaborate seem to be limited in scope because they seem to fit mostly with grassfields Bantu languages and may be found wanting when applied to other languages especially non Bantu languages. We have simply adopted them because they neatly fit with what obtains in Baba 1, a grassfields Bantu language.

The aim of laying down these guiding principles for tone orthography is to render our orthography more practicable, less difficult and cumbersome for the users, because according to Bird (2001:23:25):

An orthography should not present unnecessary obstacles to the learner who may have severely limited access to basic pedagogical resources.....[and] the task is to facilitate and enable the users of the orthography. This, the linguist must see as the primary objective.

The emphasis here is on the fact that in the process of designing an orthography, issues that will render it cumbersome for the users should be avoided as much as possible .

3.2 The alphabet of Baba 1

The objective of this section is for us to indicate how to write and read the various graphemes that have been proposed to serve for the written form of our language. We are using concrete data to illustrate each phoneme, its corresponding grapheme, its phonetic value and words in which it is found. Before we present this information in the form of a table, it is worth giving the IPA equivalence of some of these graphemes so that they are not confused with graphemes of English which is the inherited system that native speakers of Baba 1 are versed with.

(47)

| Grapheme of Baba 1 | IPA |
|--------------------|--------------------------------|
| c | tʃ |
| gh | ɣ |
| j | dʒ |
| ny | ɲ |
| sh | ʃ |
| x | x (voiceless counterpart of ɣ) |
| , | ʔ |

Below is a table giving precise information on the representational method of the correspondence between phoneme, phone and grapheme in the written form of Babal

(48)

| No | Phoneme | Phonetic value | Grapheme | Sample Words | Gloss |
|----|---------|----------------|----------|-------------------------------|---|
| 1 | /ɪ/ | [ɪ] | | ké kú múéfú | tiredness to die child |
| 2 | /i/ | [i] | | shì ŋkìnə mbiàŋ | blood potato palm nut |
| 3 | /ɨ/ | [ɨ] | | ŋgbām kīŋndəpá' fūŋgáp | maize smoking pipe feather |
| 4 | /ɨ/ | [ɨ] | | pāmvi pāsɪŋ fū ŋmè | dogs birds corpse |
| 5 | /a/ | [a] | a | kàŋ ndáp ŋgàŋ | spear house country |
| 6 | /b/ | [b] | b | mbó bəlìx sòb-í | hands brick stab him/her ! |
| 7 | /dʒ/ | [dʒ] | j | ǰì njòm njáŋ njónjóm | steal back/behind xylophone/thorn darkness |
| 8 | /e/ | [e] | e | sé fìè kè | elephant slap oath |

| | | | | | |
|----|------|------|----|----------------------------------|--|
| 9 | /ə/ | [ə] | ə | pər rəm fər | war trace relative |
| 10 | /f/ | [f] | f | fɪŋ fɔŋ fiè' | wound owl case |
| 11 | /g/ | [g] | g | gié'lə ŋgè gim | kernel crocodile to hold |
| 12 | /gb/ | [gb] | gb | gbì'lə gbàr gbé | surprise to cut to sell |
| 13 | /ɣ/ | [ɣ] | gh | ghé ghàmtə ghàalə ghàlə | thief help showing off a pool of liquid |
| 14 | /gy/ | [gy] | gy | gyàŋ gyí gyáx | section to buy to throw away |
| 15 | /i/ | [i] | i | kí' sí ndír | cough black traditional spoon |
| 16 | /ɪ/ | [ɪ] | ɪ | pɪ kɪŋ sɪŋ | camwood mortar needle |
| 17 | /k/ | [k] | k | káx kóxtə ŋkùm | ladder knee box |
| 18 | /kp/ | [kp] | kp | kpě kpór | to nail toilet |

| | | | | | |
|----|-------|-------|-----|-----------------------------|---------------------------------------|
| | | | | ɲkpi | back (body part) |
| 19 | /ky/ | [ky] | ky | kyí' kyé'ó ɲkyé | feed leprosy firewood |
| 20 | /l/ | [l] | l | liŋ lox là'lò | name poison forgetfulness |
| 21 | /m/ | [m] | m | mú' mò'ólò mòmòx | fire visit dew |
| 22 | /mb/ | [mb] | mb | mbiŋ mbiàx mbám | rain cloud money |
| 23 | /mv/ | [mv] | mv | mvòx mvi mómvi | type of raffia hole dog |
| 24 | /n/ | [n] | n | nám né niàx | bead large body of water cow |
| 25 | /nd/ | [nd] | nd | ndáŋ ndùè ndà ndóm | cup ill luck thing clay soil |
| 26 | /ndz/ | [ndz] | ndz | ndzàŋ ndzà ndzúí | bamboo garment full |
| 27 | /ny/ | [ny] | ny | nyàŋ nyim nyú | root sun/watch honey |
| 28 | /ŋ/ | [ŋ] | ŋ | ŋáŋlò | sugar cane there |

| | | | | | |
|----|------|------|----|-----------------------|-----------------------------------|
| | | | | ṅĩ mǎṅki' | basket |
| 29 | /ṅm/ | [ṅm] | ṅm | ṅmè ṅmí ṅmá'lò | person moon/month book |
| 30 | /o/ | [o] | o | só fó kòp | hoe mosquito forest |
| 31 | /p/ | [p] | p | pí pèlò púéfú | dance hatred children |
| 32 | /r/ | [r] | r | rǎṅ rí' ràx | chair eye yam |
| 33 | /s/ | [s] | s | sú súf sǎṅ | fish friend teeth |
| 34 | /sh/ | [ʃ] | sh | shǎṅ shí'tò shé | illness intelligence profit |
| 35 | /t/ | [t] | t | tám tónlò tiàṅ | pit ear ceiling |
| 36 | /ts/ | [ts] | ts | tsǎ tsú ntsǎ | kola nut head height |
| 37 | /tʃ/ | [tʃ] | c | cùm cí cóx | sardine salt night |
| 38 | /u/ | [u] | u | wú kùr | death work |

| | | | | | |
|----|-----|-----|---|--------------------------|--|
| | | | | fù | medicine |
| 39 | /v/ | [v] | v | vú vâ' vàm | wood ash dirt stomach |
| 40 | /w/ | [w] | w | wó' wá' wóx | swimming type of vegetable pride |
| 41 | /x/ | [x] | x | xìò pàx lâx | lion mushroom calabash |
| 42 | /y/ | [y] | y | yər yàŋ yòm yár | satisfaction noise plum fool |
| 43 | /ʃ/ | [ʃ] | ' | fí' sú' fí' | cold/fever pepper indian bamboo |

We are at the end of part one of our study which in reality constitutes the foundation or the building blocks upon which the whole study depends. In this first section of the work, we have been able to meticulously make an inventory of all the sounds used in this language. Through the behaviour of some of these sounds in different contexts, we have been able to determine those that are basic or underlying and those that only appear on the surface as conditioned by the phonological contexts in which they find themselves. The phonotactics of the language has been clearly brought out and this specifies the permissible sound sequences that can be found. In addition, the different syllable structures found have been examined and analysed so as to come out with a generalized syllable structure for the language.

At the suprasemantal level, we have established in our analysis that this language has two basic tonemes, low and high, though with various manifestations which are characteristic of most grassfields Bantu languages. Some tonal phenomena in the literature have been discussed and applied to what is observed in this language. This has enabled us to systematically explain the behaviour of tones in Baba 1.

The above achievements have been realised thanks to the use of generative and autosegmental theoretical frameworks which have enabled us to formulate well motivated rules that apply across the board.

A crucial aspect of our segmental and suprasegmental analysis is that it does not only serve as a base for the ongoing study, but most importantly, this has provided the language with a phonemic writing system or an orthography. This therefore means that we have prepared our language to serve as an effective vehicle for literacy and education which is very instrumental at this era of globalization.

The next area to be examined is the structure of nouns in this language. Bantu languages are usually characterized by a nominal class system. Part two of this study concentrates on showing that Baba 1 like other Bantu languages has a nominal class system which may however be morphologically reduced.

PART II

**NOUN
MORPHOLOGY**

CHAPTER FOUR

4 Noun Morphology

This chapter will examine the structure of nouns in the language and make an interpretation or explanation of all the nominal affixes that are morphologically marked in the said language.

4.1 Noun Classes

Here we will explain what is meant by noun classes in Bantu languages as a whole and try to see whether this ties with Baba I nouns.

4.1.1. Introduction

Generally, Bantu languages consist of a class system whereby nouns are usually marked by prefixes referred to as nominal prefixes. By means of these nominal prefixes, nouns in any given Bantu language can be grouped into different morphological classes. These classes, by virtue of their prefixes can in turn be paired up in oppositional relationship marking singular and plural. A pair of prefixes marking singular and plural opposition in a Bantu language is referred to as a gender (Welmers 1973: 161).

Unlike in many Indo-European languages where gender correlates with sex, in African languages, gender generally brings about the idea of an opposition of singular and plural noun classes. There are genders which however do not exhibit this singular/plural dichotomy, and are referred to as single class genders. The most remarkable examples of this nature are the groups of liquid mass nouns generally found in class 6 in most Bantu languages.

In many Bantu languages as well, we can nevertheless notice a certain degree of correlation between morphological classes and semantic categories. In Baba I therefore, we would examine the nouns under morphological as well as semantic groupings so as to find out whether at all, there are any correlations between these different groups.

4.2 Noun class system of Grassfields Bantu languages

Many authors working on the Grassfields languages notably Dunstan (1971); Hyman (1972); Hyman, Voeltz and Tchokokam (1970) and Voorhoeve (1968; 1971b), have repeatedly shown that the noun class system of the Grassfields languages could be compared to the system

reconstructed for Proto Bantu (P.B.). They have clearly shown that in the majority of these languages, the noun class system appears very often in a reduced form. The Baba I language is definitely not going to be an exception to this observation as will be seen later in our foregoing examination and analysis.

As is generally the case with some Grassfields Bantu languages, noun prefixes do not suffice in themselves as criteria to identify the class affiliation of all the nouns because in some cases, nouns have no prefixes. For this reason, there is the need for noun class concords and tones which can assist in clearly bringing out the complete range of distinction of the various noun classes found in any of such given Grassfields Bantu languages.

4.3 Morphological Noun class system of Baba I

Baba I as earlier noted above has a relatively morphologically reduced noun class system. However, traces of a morphologically richer system which might have displayed an elaborate system of class concords can be detected in the nominal affixes and particularly in the pronouns. The possessive pronoun has preserved the greatest diversity in form, and thus the nominal classes of Baba I which are still functional can be identified by their nominal prefix, their class pairing and the form of the class concord, that is, the form of the possessive pronouns. There are five distinct classes with some subclasses which have so far been identified. There are two main plural classes and three main singular classes which may have other subclasses within them respectively. The plural classes are 2 and 6, having 2a and 2b as well as 6a and 6b respectively; all based on morphological considerations. Strikingly missing is plural class 4 which Hyman (1977: 230) claims that it has a very weak representation in the Ring group as well as other subgroups of the Grassfields Bantu languages.

Baba I is not totally devoid of noun class prefixes. The problem is that while nouns have prefixes that can easily determine their noun classes, others do not have, and only concord consonants as earlier mentioned, can successfully determine their individual classes as will be represented in the chart below.

4.3.1 Morphological Noun classes, concord consonants and tones

Fig. 10. Noun Classes of Baba I.

| Noun Classes | | Noun Prefixes | Sample Nouns | Concord Consonants | Tones | |
|--------------|-------------------|---------------------------------|---|---|-------|--------|
| BABA I | P.B. | | | | | |
| I | 1,9 | mə - 1a N- 1b Ø - | másìŋ məpùl məŋàm məŋgəp ŋklé ŋgbè ŋmè sùl pərə | 'bird' 'squirrel' 'animal' 'fowl' 'mate' 'cane' 'person' 'friend' 'peanut' | (l) | L ◦ |
| II | 2(4) 8, 10 | pə 2a N- 2b Ø - | pəsìŋ pəŋàm pəpùl ŋklé ŋká ŋkl fər té tíí | 'birds' 'animals' 'squirrels' 'bones' 'raffia palms' 'ropes' 'relatives' 'palm trees' 'trees' | p | H ◦ |
| III | 3 7 | N- 3a Ø | ntè mbé jó ŋkl pé tíí kù | 'grasshopper' 'nail' 'snake' 'rope' 'fufu' 'salt' 'foot' | (l) | H ◦ |
| V | 5 | Ø - | fòx wú kúf pí fàx líŋ vəm | 'fortune' 'death' 'bed' 'dance' 'job' 'name' 'stomach' | s | H ◦ |
| VI | 6(4) | N- 6a Ø - | mblàŋ ntíí ndíí ŋkúl ŋkàŋ sàŋ jí | 'testes' 'water' 'saliva' 'beans' 'spears' 'teeth' 'blood' | m | H ◦ |

4.3.1.1 Interpretation of chart

The chart above gives a synopsis of the noun class system of Baba I. The first two adjacent columns on the left containing numerals represent the Baba I noun classes with their possible correspondences in Proto Bantu respectively. The various classes will be examined and discussed individually below.

4.3.1.2 Characteristics of the noun classes

Class I: This class in Baba I corresponds to Proto Bantu classes 1 and 9 in the sense that nouns usually in these two classes in other Bantu languages fall in class 1 in Baba I probably because of the reduced nature of the Baba I noun class system. It will be observed that just like in other related languages, especially of the Mbam-Nkam and other sub groups of the Grassfields Bantu, Proto Bantu classes 1 and 9 have undergone fusion to give class 1 just like in Baba I (cf Tadjadjeu and Stallcup 1977).

In this language, nouns in this class are characterized by the following prefixal shapes: mǝ-, N- and Ø -. In possessive collocation, this class is marked by a lateral and a low floating tone serving as concord consonant and tone respectively, and these nouns form their plurals in class two. These sample derivations below will better illuminate our explanation.

(49)

N + my

| | | | |
|---------------|---|------------|--------------|
| a) ŋkié + là | → | [ŋkié là] | 'my mate' |
| b) ŋgbí + là | → | [ŋgbí là] | 'my farm' |
| c) mǝŋgǝp là | → | [mǝŋgǝb-à] | 'my fowl' |
| d) ndú + là | → | [ndú-à] | 'my husband' |
| e) kúnàm + là | → | [kúnàm-à] | 'my pig' |

When we examine the forms above, we notice that some morphophonological processes have come into play in the course of derivation. In (49c), there is the voicing of the bilabial stop in between two vowels as explained by Rule 4. The behaviour of the lateral concord consonant in our derivation needs a rule to render the forms consistent. There is a lateral deletion rule which states that a lateral is deleted when preceded by a vowel other than front unrounded or a

consonant across morpheme boundary, and if that lateral is immediately followed by another vowel and a morpheme boundary. This rule can formally be represented thus:

R 8 Lateral deletion

$$/l/ \rightarrow \emptyset / \left\{ \begin{array}{l} [+v] \\ [+c] \end{array} \right\} + \text{---} v$$

$$[+lat] \rightarrow \emptyset / \left\{ \begin{array}{l} [+syll] \\ [+back] \\ [+cons] \end{array} \right\} + \text{---} [+syll]$$

This rule will account for the forms in (49c-e) above.

What we have successfully illustrated here is that class 1 nouns in Baba I have a number of prefixal forms that make us regroup them under 1, 1a and 1b. We have also shown by the help of a rule that the apparent inconsistency of the lateral has a plausible explanation that makes it consistent at the surface level of our derivation.

Class II These are plural nouns characterized by the following prefixes: pə-, N- and Ø -. These prefixal shapes correspond to 2, 2a and 2b respectively. This class has as its concord marker a voiceless bilabial stop and a floating high tone. It corresponds to Proto Bantu classes 2, 4, 8 and 10 by virtue of the fact that all nouns that fall under the above classes in Proto Bantu are all in class 2 in Baba I. Since class 4 is non-existent in Baba I, nouns which would have formed their plurals in this class now form their plurals in classes 2 or 6. This is the case with some class 3 nouns, while class 1 nouns typically form their plurals in this class as illustrated by the examples below:

(50)

Singular classes 1&3

Plural class 2

Noun + my

Noun + my

a) /ndzɔ́ + là/ → [ndzɔ́-à] 'my garment' /ndzɔ́ + pá/ → [ndzɔ́ pá] 'my garments'

cl₁

cl₂

- | | |
|--|---|
| b) /táp + lá/ → [táb - á] 'my shoe' | /táp + pá/ → [táp pá] 'my shoes' |
| cl ₃ | cl ₂ |
| c) /tsú + lá/ → [tsú-á] 'my head' | /tsú + pá/ → [tsú pá] 'my heads' |
| cl ₃ | cl ₂ |
| d) /mósíŋ + là/ → [mósíŋ-à] 'my bird' | /pósíŋ + pà/ → [pósíŋ pá] 'my birds' |
| cl ₃ | cl ₂ |
| e) /ŋkúé + là/ - [ŋkúé lá] 'my wood' | /ŋkúé + pà/ → [ŋkúé pá] 'my woods' |
| cl ₃ | cl ₂ |
| f) /té + lá/ → [té lá] 'my palm tree' | /té + pá/ → [té pá] 'my palm trees' |
| cl ₃ | cl ₂ |
| g) /ŋkĩ + lá/ → [ŋkĩ á] 'my rope' | /ŋkĩ + pá/ → [ŋkĩ pá] 'my ropes' |
| cl ₃ | cl ₂ |

To account for the surface forms of the derivations in (50b-g) (cf lateral and tone docking rules: R8 and TR1) respectively.

Class III This is a class of singular nouns and it corresponds to Proto Bantu 3 and 7. The nominal prefixes exhibited by nouns of this class are: N- and Ø -. It appears as if nouns with a nasal prefix in this class will correspond to Proto Bantu class 3 which has mu- as its nominal prefix. This is supported by the fact that as languages evolve, there is possibility for partial or total drop in nominal prefixes, and in addition, nouns that normally fall in class 3 in Proto Bantu are found mostly in class 3 in Baba I. The nouns with zero prefix in class 3 may therefore correspond to Proto Bantu class 7 which has ki- as nominal prefix. This reasoning is plausible if one imagines that nouns with nasal prefix might have lost /-u/ and those with zero prefix have lost all the prefixal morphemes in the course of evolution of the Baba I language. There is more evidence to support this if we consider that some class 3 nouns belong to Proto Bantu 7, because these nouns are generally in class 7 in those Grassfields languages that happen to have it (Hyman 1972: 9). These two Grassfields languages below can once more help to illuminate our explanation.

Fig. 11: Illustration of nominal prefix loss

| LANGUAGE | SINGULAR | PLURAL | GLOSS |
|----------|-------------------|------------------|---------|
| LAMSO | kiɽi | viɽi | tree(s) |
| BABANKI | kaɽu | ɔɽu | |
| LAMSO | kitu | vitu | head(s) |
| BABANKI | ka ^h u | ɔ ^h u | |

When we look at Babanki, we notice that not only has there been a change of the prefixal vowel from /i/ to /ɔ/, there has been a complete loss of the labio-dental voiced fricative /v/ which combines with /ɔ/ to form the plural prefix for the nouns 'head' and 'tree'. The mutation of prefixal vowels noticed in the two languages and the loss of the prefixal consonant in Babanki can readily be explained in the light of evolution in the history of the language.

The behaviour of nouns in this class in Baba I is illustrated by the sample nouns below:

(51)

| Singular nouns | | plural | |
|----------------|------------------|--------|-------------------|
| a) ntè lá | 'my grasshopper' | ntè pá | 'my grasshoppers' |
| b) tsú-á | 'my head' | tsú pá | 'my heads' |
| c) só-á | 'my hoe' | só pá | 'my hoes' |
| d) ŋkí-á | 'my rope' | ŋkí pá | 'my ropes' |
| e) sú-á | 'my fish' | sú pá | 'my fishes' |

Class V This class has a zero prefixal morpheme as its noun class marker. It has a voiceless alveolar fricative and a high floating tone as concord marker. This is the only class where all the nouns exhibit a symmetrical loss of prefixal morpheme, which in Proto Bantu is /le-/ and form plural in class 6. This class in Baba I rather forms its plural in the two plural classes as shown by the sample derivations of possessive formations below:

(52)

| | | | |
|-----------|------------|---------|-------------|
| a) kãŋ sá | 'my spear' | ŋkãŋ má | 'my spears' |
|-----------|------------|---------|-------------|

cl₆

| | | | |
|-----------|-----------|-----------------|------------|
| b) kǒ sá | 'my belt' | kǒ pá | 'my belts' |
| | | cl ₂ | |
| c) kīŋ sá | 'my pot' | kīŋ pá | 'my pots' |
| | | cl ₂ | |
| d) ǰáŋ sá | 'my tail' | ǰáŋ pá | 'my tails' |
| | | cl ₂ | |

Class VI: This is a plural class by virtue of morphological consideration. This class in Baba I is subdivided into 6 and 6a in accordance with the morphological shapes of the various prefixes namely: N- and Ø -. In addition to these, it has a bilabial nasal and high floating tone as its concord marker. This class corresponds to Proto Bantu classes 4 and 6 with prefixes m- and ma- which in Baba I have all been partially or totally dropped in some nouns. Since class 4 is absent in this language, some class 3 nouns form their plurals in class 2 while others are in class 6. Class 3 nouns with plurals in class 6 include:

(53)

| Singular (class 3) | Plural (class 6) |
|-------------------------|--------------------------|
| a) kù-á 'my foot' | ŋkù má 'my feet' |
| b) tóŋlǒ - á 'my ear' | ntóŋlǒ má 'my ears' |
| c) kóxtǒ - á 'my knee' | ŋkóxtǒ má 'my knees' |
| d) pǒ-á 'my hand' | mbó má 'my hands' |
| e) ǰǰǰlǒ á 'my buttock' | ntǰǰǰlǒ má 'my buttocks' |

4.3.1.3 Genders

As earlier indicated, gender in Bantu languages has nothing to do with sex; it rather expresses the relationship between paired singular-plural classes of nouns. Following our treatment of nouns in Baba I, we have observed that there are two plural classes and three singular classes. These classes in turn pair up in a singular-plural relationship or function exclusively as singular or plural to designate the notion of gender. Singular-plural pairs are referred to as paired class gender while single classes which are either exclusively singular or plural respectively are single class genders.

4.3.1.3.1 Paired class gender

Gender 1/2: This gender in most Bantu languages usually contains human nouns in the majority. Since class 1 has fused with class 9 in Baba I, and class 9 is known to contain mostly animal nouns, we expect human and animal nouns in class 1 in Baba I. Nouns in this gender include:

(54)

- | | |
|-----------------------|-----------------------|
| a) ɲkpě lá / ɲkpě pá | 'my slave / slaves' |
| b) mǎɲám-à / pǎɲám pá | 'my animal / animals' |
| c) mǎsɪŋ-à / pǎsɪŋ pá | 'my bird / birds' |
| d) fùè là / fùé pá | 'my fon / fons' |
| e) sú-à / súi pá | 'my friend / friends' |
| f) ɲgbè là / ɲgbè pá | 'my cane / canes' |
| g) ɲkié là / ɲkié pá | 'my mate / mates' |

Gender 3/2: This gender is what would be 3/4 in Proto Bantu, but as there is no class 4 in Baba I, some class 3 nouns have their plurals in class 2 while others have theirs in class 6. Nouns in this gender include:

(55)

- | | |
|------------------------|---------------------------------|
| a) ntè lá / ntě pá | 'my grasshopper / grasshoppers' |
| b) tsú-á / tsú pá | 'my head / heads' |
| c) ɲgàŋ-á / ɲgàŋ- pá | 'my country / countries' |
| d) wùmtà -á / wùmtǎ pá | 'my umbrella / umbrellas' |
| e) sǎsǎ-á / sǎsǎ pá | 'my thread / threads' |

Gender 3/6: Nouns in this gender include the following:

(56)

- | | |
|---------------------------|-------------------------|
| a) kóxtǎ -á / ɲkóxtǎ má | 'my knee / knees' |
| b) tóŋlǎ -á / ntóŋlǎ má | 'my ear / ears' |
| c) kù-á / ɲkù má | 'my foot / feet' |
| d) tʃiŋlǎ -á / ntʃiŋlǎ má | 'my buttock / buttocks' |

Gender 5/2: This gender has nouns such as:

(57)

- | | |
|----------------------|---------------------|
| a) kīŋ sá / kīŋ pá | 'my pot / pots' |
| b) kúi sá / kúi pá | 'my bed / beds' |
| c) fiáx sá / fiáx pá | 'my job / jobs' |
| d) pí sá / pí pá | 'my dance / dances' |
| e) tàŋ sá / tàŋ pá | 'my navel / navels' |
| f) fié? sá / fié? pá | 'my case / cases' |

Gender 5/6: This gender gives the impression of a vestigial class in Baba I in the sense that only a single noun of class 5 is attested as having its plural in class 6. Apart from kàŋ "spear", all nouns in class 5 have their plurals instead in class 2 (cf 49a-f).

4.3.1.3.2 Single class genders

As earlier said, these consist of nouns which by their very nature denote singular or plural entities exclusively. In the language under study, we realize that all the noun classes have single class gender nouns as presented below:

Gender 1 This is a singular single class gender consisting of predominantly uncountable nouns such as:

(58)

- | | | | |
|----------------|---------------|------------|-------------|
| a) ndzǎndzǎm-à | 'my darkness' | f) kǎkám-à | 'my rust' |
| b) ndzǎndzǎ -à | 'my smoke' | g) ngí-à | 'my grass' |
| c) mbìŋ-à | 'my rain' | h) pǎrè là | 'my peanut' |
| d) mǎmòx-à | 'my dew' | i) ntǎb-à | 'my soup' |
| e) núé?é-à | 'my sand' | j) ndzǎb-à | 'my meat' |

Gender 2: These are nouns exclusively used in the plural and they include:

(59)

- | | | | |
|------------|-----------------|------------|------------|
| a) n̄r pá | 'my jiggers' | e) n̄n pá | 'my roots' |
| b) s̄7õ pá | 'my worms' | f) n̄m pá | 'my hairs' |
| c) n̄x pá | 'my catarrh' | g) ykúé pá | 'my bones' |
| d) tóó pá | 'my intestines' | | |

Gender 3: This is another singular single class gender having nouns which include:

(60)

- | | |
|---------------|----------------------|
| a) pé lá | 'my fufu' |
| b) t̄fí-á | 'my salt' |
| c) víé lá | 'my thatching grass' |
| d) vú-á | 'my ash' |
| e) d̄zi7l̄á-á | 'my breath' |

Gender 5 This gender contains nouns like:

(61)

- | | |
|-----------|---------------------|
| a) páá sá | 'my madness' |
| b) p̄i sá | 'my camwood' |
| c) kié sá | 'my present/reward' |
| d) líŋ sá | 'my name' |

Gender 6: This is usually considered as a plural class by virtue of the concord marker that the nouns take. Surprisingly there are nouns here existing in wholes that cannot be separated into their component parts, and one cannot convincingly consider them as plural entities. These nouns here include some liquid and solid mass nouns as presented in (62):

(62)

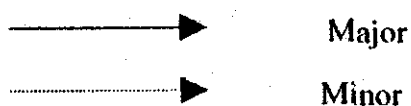
- | | | | |
|-------------|---------------|------------|----------------|
| a) n̄fí má | 'my strength' | f) nkúí má | 'my beans' |
| b) n̄fi má | 'my water' | g) s̄n̄ má | 'my teeth' |
| c) ndzõx má | 'my wine' | h) mbór má | 'my excrement' |
| d) ngb̄r má | 'my oil' | i) mb̄p má | 'my wings' |
| e) ndl̄í má | 'my spittle' | j) f̄i má | 'my blood' |

Our analysis above shows that Baba I has five paired and single class genders respectively. Single class gender 6 consists of diverse nouns such as liquid and mass nouns, abstract, concrete and countable nouns which, in Baba I, are used either exclusively as singular or plural, but not both.

It is true that the number of nouns represented in each gender, be it paired or single class gender, is not statistically the same. Some genders are highly represented while others are less so. We will refer to genders having a high number of nouns as major classes while those with few nouns are minor classes as the diagram below illustrates.

Fig. 12 : Major and minor class genders

| Concord Consonants | Concord Tone | Singular Class | Plural Class | Concord Consonants | Concord Tone |
|--------------------|--------------|----------------|--------------|--------------------|--------------|
| (l) | L | I | II | p | H |
| (l) | H | III | VI | m | H |
| s | II | V | | | |



On the diagram, a line linking one class to another by means of an arrow indicates a gender. The unbroken thick lines indicate major class genders while dotted lines link minor class genders. Since Baba I depends mostly on concord consonants and tones rather than nominal prefixes in determining the individual classes of the various nouns, we have clearly listed these consonants and the respective tones against each class on our diagram.

The lateral serving as concord consonant for classes 1 and 3 has an ambivalent character when nouns of these classes are used in possessive collocation. The presence or absence of a lateral in such construction is accounted for by a morphophonological rule, which deletes a lateral preceded by a non front unrounded vowel across morpheme boundary and followed by another vowel and a word boundary (cf Rule 8).

4.3.2 Noun Structure

Having examined and analysed the various noun classes found in Baba I, we deem it necessary to look at the forms of these nouns and their related prefixes. Though Baba I has a quasi non-existent nominal prefix system, there is, all the same a residual prefix system exhibited by some nouns in the language. When we look at these residual prefixes we realize that the shape varies from one class to the other and even within prefixes of the same class. These prefixal shapes are of the form cv-, c- and Ø - respectively as analysed below:

4.3.2.1 Nominal prefix with cv form

Singular as well as plural classes take this prefixal shape. In the singular, the initial consonant of this type of nominal prefix is invariably a bilabial nasal while a bilabial voiceless stop serves as initial consonant for plural class 2. For the vowel which is usually the second segment in such a sequence, it is for the most part a schwa /ə/ for both singular and plural classes. One peculiarity with these prefixes is that they all bear high tones, no matter their classes. These prefixes are illustrated below:

(63)

- | | |
|--------------------------|---------------------------|
| a) mǎ-ŋǎb-à / pǎ-ŋǎp pá | 'my fowl / fowls' |
| b) mǎ-nǎm-à / pǎ-nǎm pá | 'my animal / animals' |
| c) mǎ-puì là / pǎ-puì pá | 'my squirrel / squirrels' |
| d) mǎ-ŋì là / pǎ-ŋì pá | 'my cricket / crickets' |
| e) mǎ-ní là / pǎ-ní pá | 'my knife / knives' |

4.3.2.2 Nominal prefix with c form

The consonant here is invariably a homorganic nasal assimilating the point of articulation of the following consonant. This nasal can serve as prefix for both singular and plural classes as the examples below indicate:

(64)

- | | |
|----------------------|-----------------------|
| a) n-té là / n-té pá | 'my market / markets' |
| b) ŋ-ké là / ŋ-ké pá | 'my monkey / monkeys' |
| c) m-bé lá / m-bé pá | 'my nail / nails' |

- d) η-gàη-á / η-gǎη pá 'my country / countries'
 e) n-tfù-á / n-tfũ pá 'my mouth / mouths'
 f) n-dzám-à / n- dzám pá 'my ax / axes'
 g) m-bié lá / m-bié pá 'my cockroach / cockroaches'
 h) η-kí-á / η-kĩ pá 'my rope / ropes'

4.3.2.3 Nouns with Ø prefixal morpheme

Just like nouns with nasal prefix, zero prefix nouns can either be singular or plural. But it should be noted here that some nouns with zero prefix in the singular usually take a nasal prefix in the plural. These are nouns of class 3b which take their plural in class 6a. These nouns include:

(65)

- a) Ø-kù-á / η-kũ má 'my foot / feet'
 b) Ø -pó-á / m-bó má 'my hand / hands'
 c) Ø -pà-á / m-bā má 'my bag / bags'
 d) Ø -tónlǎ -à / n-tónlǎ má 'my ear / ears'
 e) Ø -tʃɪlǎ -á / n- tʃɪlǎ má 'my buttock / buttocks'

These nouns, apart from having a common morphological characteristic, they all denote parts of the body. Nevertheless, there are other nouns with invariably zero prefix both in the singular and plural classes as the examples below illustrate:

(66)

- a) Ø -té lá / Ø -té pá 'my palm tree / palm trees'
 b) Ø -tí-á / Ø -tíí pá 'my tree / trees'
 c) Ø -wó-á / Ø -wó pá 'my stone / stones'
 d) Ø -lǎm-á / Ø -lǎm pá 'my metal / metals'
 e) Ø -kúnám-à / Ø -kúnám pá 'my pig / pigs'
 f) Ø -só-á / Ø -só pá 'my hoe / hoes'
 g) Ø -pònǎ-à / Ø -pònǎ pá 'my dove / doves'
 h) Ø -ràŋ-á / Ø -ràŋ pá 'my chair / chairs'

Following our analysis of the various noun prefixal morphemes attested in Baba I, we discover that they have the following shapes: mǝ-, pǝ-, N- and Ø -. Despite the seemingly diverse structure of these morphemes, we can precisely postulate a formula that can capture the basic generalization for noun prefixes in the language as represented below:

$$\#(c(v)) + - \#$$

This formula stipulates that a noun in Baba I can have a CV-, C- or zero prefix. The sequence in parenthesis indicates that the occurrence of the individual or group of segments is optional. This explains why the formula is valid even for nouns with zero prefix since it gives provision for the complete absence of the segmental prefix sequence. The formula can account for both singular and plural class nouns (cf1.5).

In the foregoing analysis, we have systematically and consistently demonstrated that Baba I nouns do not fully exhibit nominal prefixes on which we can solely depend to group them in their various morphological classes. With the aid of the possessive construction of the form (my + noun), and a haphazard manifestation of nominal prefixes by some nouns, we have been able to assign these nouns into different classes. Each of these classes has a precise concord consonant and an appropriate floating tone to indicate the required class.

The concord tone for class 1 nouns is a floating low tone, while a floating high tone serves as concord tone for the rest of the classes as earlier hinted. One noticeable phenomenon characterizing all the classes is that, no one class contains nouns which can be considered as having an identical semantic origin. Class 1, which usually comprises human nouns in most Bantu languages, in Baba I bears assorted nouns such as human, animal, insect and even objects. This can partially be explained by the fact that, as earlier mentioned, there is a fusion between classes 1 and 9 in this language and the language as a whole has a relatively reduced noun class system consequently leading to a shift in some of the classes.

The absence of class four in the language has given it a complete asymmetrical noun class system. This is why we notice a degree of inconsistency in the way nouns form their plurals. Instead of class 5 nouns forming their plural in class 6 as is the case with most Bantu languages with a rich class system, they rather mostly form their plurals in class 2. Only one noun in class 5 has been attested as forming its plural in class 6, making it look absurd, and the

only possible explanation being that, as stated earlier, gender 5/6 is a vestigial class in this language.

In our derivations using nouns + possessive or noun + noun, we have tacitly postulated a floating associative tone that always docks to the left in each case. This associative tone is determined by the noun class of the head noun; low for class one nouns and high for the rest of the classes. It could be said that this floating tone which we consider as associative is actually the tone of the corresponding noun class prefix that was lost in this language¹. This argument is justified by the fact that the associative tone in each case is always identical to the tone of the proto Bantu noun class prefix of the corresponding following noun in such an association (cf fig 10).

4.4 Semantic noun classes

This section is aimed at examining Baba I nouns under such traditional terminologies as proper, common, abstract, concrete, count and non-count nouns. This will enable us to establish any correlation that might exist between nouns under any of the semantic classes with those of the various morphological classes already discussed.

4.4.1 Proper nouns

We will use the term "proper noun" here to refer to names which denote people or places whether in Baba I or other languages. As it is clear that nouns in Baba I do not consistently take nominal prefix, we will use our possessive construction with proper nouns in order to determine their morphological classes in this language.

(67)

| a) Name of place + my | Singular |
|---------------------------------------|---------------|
| /Ø -Nàndzóróyà + à/ → [Nàndzóróyà -à] | 'my Nigeria' |
| /Ø -Kàmàrón + à/ → [Kàmàrón-à] | 'my Cameroon' |
| /Ø -Mórəkà + à/ → [Mórəkà-à] | 'my America' |
| /Ø -Ndùwáró + à/ → [Ndùwáró -à] | 'my Douala' |
| /Ø -Píáx + à/ → [Píáx -à] | 'my Baba I' |

b) Names of places + my

Plural

| | |
|--|-------------------------------|
| /Ø -Nàndzàróyà + pá/ → [Nàndzàróyà pá] | 'my (more than one) Nigeria' |
| /Ø -Kàmàròn + pá/ → [Kàmàròn pá] | 'my (more than one) Cameroon' |
| /Ø -Màròkà + pá/ → [Màròkà pá] | 'my (more than one) America' |
| /Ø -Ndúwàró + pá/ → [Ndúwàró pá] | 'my (more than one) Douala' |
| /Ø -Píáx + pá/ → [Píáx pá] | 'my (more than one) Baba I' |

c) Name of people + my

| | |
|---------------------------------|--------------|
| /Ø /-Pátò ró + à/ → [Pátòró -à] | 'my Patrick' |
| /Ø /-Àbdù + à/ → [Àbdù-à] | 'my Abdou' |
| /Ø /-Sámá + à/ → [Sámá-à] | 'my Sama' |
| /Ø /-Tàtá + à/ → [Tàtá-à] | 'my Tita' |
| /Ø /-Súndzò + à/ → [Súndzò -à] | 'my Sundzé' |

Looking at all the forms discussed under proper nouns, we notice that they have the morphological characteristics of nouns in class 1. Indeed, they can be grouped as class 1b nouns because they all have a zero nominal prefix marker and also they take the floating low tone in possessive construction, and this tone is the concord tone as well as associative tone marker for class 1 nouns in Baba I. In addition, all these nouns used in turn as plurals behave typically like class 2 nouns in this language. This can be enough empirical evidence for us to conclude that all proper nouns in Baba I neatly correlate with morphological noun class 1. They can generally form their plural in class 2, thereby constituting the gender 1/2.

4.4.2 Common nouns

Common nouns here will be understood as words which generally refer to things. We could still subdivide these words into those that refer to abstract, concrete, countable and uncountable things respectively. These nouns are examined below in the light of the above subdivisions.

4.4.2.1 Abstract nouns

These are nouns which refer to concepts that are hardly seen with the naked eyes, but their effects might be felt. These concepts may be states, qualities, notions or actions. Such nouns include:

(68)

- | | |
|-------------|-------------------|
| a) ló? sá | 'my sleep' |
| b) fí?tò -á | 'my intelligence' |
| c) fí?-á | 'my fever' |
| d) ndùè là | 'my bad luck' |
| e) ké sá | 'my tiredness' |
| f) ndzi là | 'my hunger' |
| g) rām sá | 'my witchcraft' |
| h) pí? sá | 'my sin' |
| i) ndzám mà | 'my dream' |

We notice from the examples above that these nouns fall under different morphological noun classes as indicated by their concord consonants and tones in possessive construction. The only common characteristics binding them are that they do not have plural forms and they refer to concepts that are not physical but exist only in the mind. There is thus no correlation between this semantic class and any given morphological class in this language.

4.4.2.2 Mass nouns

These are nouns existing as whole entities that cannot be separated into parts. They can either be in the form of liquid or solid, hence, they can be divided into liquid and solid mass nouns respectively.

4.4.2.2.1 Liquid mass nouns

As the name implies, these nouns denote liquid and they include:

(69)

- | | | | |
|------------|------------|-----------|-----------|
| a) nifi má | 'my water' | g) mbíŋ-à | 'my rain' |
|------------|------------|-----------|-----------|

- | | | | |
|-------------|--------------|------------|-----------|
| b) ntʃié má | 'my urine' | h) ntʃəb-à | 'my soup' |
| c) ʃi má | 'my blood' | i) mòmòx-à | 'my dew' |
| d) ndíí má | 'my spittle' | | |
| e) ndzòx má | 'my wine' | | |
| f) ngbòr má | 'my oil' | | |

Though some of the liquid mass nouns fall under morphological noun class 1 in Baba I, the majority of them, all the same, fall in class 6. This partially confirms the fact that Baba I is a Bantu language since liquid mass in Bantu languages are generally found in class 6. Despite the fact that these nouns take plural concordal consonant and tone in class 6, they still remain singular. A possible explanation may be that these nouns express totality of a whole without any distinguishable parts.

4.4.2.2.2 Solid mass nouns

These nouns are concrete but generally uncountable and such nouns include:

(70)

- | | |
|-------------|------------|
| a) tʃí-á | 'my salt' |
| b) vú-á | 'my ash' |
| c) ŋkúí má | 'my beans' |
| d) ŋgí à | 'my grass' |
| e) nuéʔé là | 'my sand' |
| f) tótòb-à | 'my mud' |

Unlike the liquid mass nouns which can be identified with a particular morphological class, solid mass nouns belong to non homogeneous classes. Their only common characteristic uniting them is that they cannot be expressed in the plural.

4.4.3 Kinship nouns

These nouns which are mostly inalienable in this language usually denote human relationship and they include item such as those presented below:

(71)

| sg | | pl | |
|-----------|-------------------------|----------|----------------------|
| a) sù-à | 'my friend' | súi pá | my friends |
| b) mú-à | 'my child' | púé pá | my children |
| c) ndú-à | 'my husband' | ndú pá | my husbands |
| d) ngúí-à | 'my wife' | ngúí- pá | my wives |
| e) fàr-à | 'my relative / kinsman' | fàr pá | my relatives/kinsmen |

All these nouns above neatly correlate with morphological class 1 and all of them form their plurals in class 2, therefore constituting gender 1/2 in Baba 1.

4.4.4 Weather nouns

These are nouns denoting specific conditions of the weather or climatic variations. They describe phenomena whose effects can either be seen or felt. Such nouns include:

(72)

| | |
|------------------|-------------------------|
| a) sàsù7-à | 'my wind' |
| b) lùm-à | 'my year / dry season' |
| c) kón-à | 'my rainstorm' |
| d) fiàng-à | 'my lighting / thunder' |
| e) ntùèntò ñkù-à | 'my drought' |

These nouns which mostly correlate with morphological class 1 in Baba 1 are relatively few. This is probably because Baba 1 in particular and Africa as a whole unlike Europe, doesn't experience many climatic changes, consequently there are few terms in African languages for describing this limited range of climatic changes.

Following the two types of nominal classifications in Baba 1, we are able to come out with different degrees of correlation between semantic and morphological groupings. We can talk of a complete morpho-semantic correlation of proper and kinship nouns which neatly fall into class 1 and form their plurals in class 2. There is what could also be referred to as partial correlation whereby nouns of a given semantic group have a majority of them identifying with

one or others of any given morphological classes. This is the case with liquid mass nouns mostly corresponding to morphological noun class 6 while weather nouns on the other hand, correspond to class 1 nouns. Finally, there is absence of correlation noticed for some semantic noun groups; notably abstract and solid mass nouns which show no correlation with any morphological noun class. Nouns belonging to these two groupings can be assigned to one or the other of the five morphological noun classes in Baba I depending on the concord consonant and tone that each noun takes.

With respect to the evidence presented by our data, we can observe with a degree of certainty that Baba I, just like many Bantu languages, shows a certain degree of correlation between morphological noun classes and semantic category. This is more so if we cite the cases of proper nouns and kinship terms in this language.

4.5 Pronouns

This section focuses on pronouns and their related elements. By pronouns here, we refer to those proforms that can be used in place of nouns or have nouns as their referents.

Given this definition, Baba I has both animate and inanimate pronouns which manifest themselves in various morphological forms depending on their functions. The animate pronouns which make reference to living things like humans and animals are preponderant in this language. They generally assume different forms marking subject, direct and indirect object functions. On the other hand, the inanimate pronouns which are few and restricted function basically as subjects and on some rare occasions as objects.

4.5.1 Animate pronouns

These are pronouns which usually make reference to living things that are capable of deliberate movement from one place to the other.

4.5.1.1 Animate subject pronouns

These forms that allude to living things can be said to serve subject function because they syntactically occur in the position usually occupied by nouns or noun phrases functioning as subject in a simple declarative sentence. This means that a subject pronoun will normally

precede the main verb and its related elements. These subject pronouns in Baba I are represented in the table below:

Fig. 13: Animate subject pronouns

| Number | SINGULAR | | | PLURAL | | |
|--------|----------|-----|-----------|---|----------------------|----------------------|
| Person | 1 | 2 | 3 | 1 | 2 | 3 |
| | N | wù | yí | tí pùxíí pòxò pùxápurú pápà pápápurú | pè píí píápurú | pú púápurú púí |
| Gloss | I | You | He/She/It | We | You | They |

Unlike in many Bantu languages in which subject pronoun is dependent on the noun class of the noun to which the pronoun makes reference, in Baba I, it is sensitive rather to person and number distinctions only.

The table above shows that first, second and third person singular pronouns have each a unique morphological form in Baba I. On the other hand, the plural subject pronouns show a high degree of morphological variation, especially the first person plural having up to six different forms. These variations in the forms of the plural subject pronouns specify the distinction between the various referents made in their usages.

We could make a distinction between dual, inclusive and exclusive usages of the subject pronouns. A dual usage is when the subject has two persons, things or groups as referent. Inclusive usage is when the referent(s) include(s) the addressee, while exclusive usage is when the referent(s) exclude(s) the addressee. Dual inclusive usage of subject pronoun therefore is when the latter refers to the addressee and a third party. On the other hand, dual exclusive is when the subject makes reference to the speaker and a third party, excluding the addressee.

Having made ample clarifications on the meanings of the above terms, we now explain our table with more consistency and precision. The first person plural subject pronoun as earlier mentioned, presents six different morphological shapes, each having a specific usage in terms

of dual, inclusive and exclusive referents. We have tí referring to the speaker and addressee, pùyí refers to the speaker and another animate other than the addressee. Similarly, pòyò makes reference to a group other than the addressee, but including the speaker, while pápápú refers to speaker, addressee(s) and additional group(s) of animates. Finally, pùyápú refers to the speakers and other groups excluding that of the addressee, while pápò includes the speaker, addressee and other animates around him.

Looking at the second person subject pronoun, the forms are not as varied as for the first person. It consists of three different morphological forms; pè, píí and piápú, denoting different referents respectively. When pè is used as subject, it refers to the addressees only, while píí refers to an addressee and one other animate not involved in the conversation. The last form, piápú denotes the addressee(s) and some other animates.

Just like the second person, the third person plural subject pronoun exhibits three different morphological forms corresponding to the different referents it makes. We have pú which alludes to a group excluding the addressee, púí, which refers to two animates excluding the addressee while púápú denotes more than two animates forming two respective groups. The explanation so far can be summarized as shown on the table below:

Fig. 14: Specification of animate plural subject pronouns

| PRONOUNS | PARTICIPANTS | GLOSS |
|--|---|--|
| 1st. Person tí (dual inclusive) pùxí (dual exclusive) pòxò (exclusive) pùxápú (exclusive) pəpəpú (inclusive) pəpə (inclusive) | I + you (sg) I + he/she/it I + they I/We + they I + you + they I + you | two of us we (without you) we, (without) you (sg/pl) we, (without) you (sg/pl) we, you and they I and you (pl/sg) |
| 2nd. Person pè (inclusive) píí (inclusive) píápú (inclusive) | you (pl) + you (pl) you (sg) + you (sg) you (sg) + you (pl) | all of you two of you all of you |
| 3rd person pú (exclusive) púí (exclusive) púápú | them he/she/it + he/she/it they + they | all of them two of them all of them |

For the purpose of illustration, these forms are used in the sentences below:

(73)

- a) tí nǎŋ ndzàp
 we Ø -Pr cook meat "Both of us are cooking meat"
- b) pùxí nǎŋ ndzàp
 we Ø -Pr cook meat "I and he/she/it are cooking meat"
- c) pè nǎŋ ndzàp
 You Ø -Pr cook meat "(Many of) you are cooking meat"
- d) píí nǎŋ ndzàp
 You Ø -Pr cook meat "He/she/it and you are cooking meat"
- e) pú nǎŋ ndzàp
 They Ø -Pr cook meat "They are cooking meat"
- f) púí nǎŋ ndzàp
 You Ø -Pr cook meat "He/she/it and he/she/it are cooking meat"

Having discussed the various forms assumed by animate subject pronouns in Baba I, we now turn our attention to animate object pronouns.

4.5.1.2 Animate object pronouns

Animate object pronouns just like any object pronouns occur after the verb in a simple complete sentence of the form s.v.o. We can still subdivide object pronouns in Baba I into two groups: those that come immediately after the verb (call them verbal object pronouns), and those that come after a prepositional particle (call them prepositional object pronouns). We begin by examining verbal animate object pronouns in the table that follows:

4.5.1.2.1. Animate object pronouns of verbs

These are pronouns referring to entities having life and ability to move as they are presented in the table below:

Fig 15

| Number | SINGULAR | | | PLURAL | | |
|--------|----------|-----|------------|--|-------------------|------|
| Person | 1 | 2 | 3 | 1 | 2 | 3 |
| | a | ú | í | wórò wóró wúrí wúràpu wúpə | wí wé wúàpú | wáp |
| Gloss | Me | You | Him/Her/It | Us | You | Them |

As evident in our presentation above, we notice that all the singular verbal object pronouns just like their subject counterparts each has a unique *morphological form*. The variation noticed in forms as usual begins with the first person plural and diminishes this time towards the third person where we have just a single form, wáp. As a matter of fact, these varying forms especially in the first person and relatively so in the second person plural respectively correspond to the specific referents they make. Here, we also have a distinction between dual, inclusive and exclusive usages denoted by the various verbal object pronouns.

The various levels of referents distinction are well illustrated by the table below:

Fig. 16: Specification of animate verbal object pronouns.

| PRONOUNS | PARTICIPANTS | GLOSS |
|---|--|---|
| <u>1st. Person</u> wóʒò (inclusive) wúʒí (exclusive) wóʒó (exclusive) wúʒápú wúpə | me and you (sg) me and him/her/it us us and them us and you (sg) | us (speaker + addressee) us (speaker + another animate without addressee) us (speakers) us (speakers + other animates) us (speaker(s) + addressee(s)) |
| <u>2nd. Person</u> wíí wé wúápú | you and him/her/it you you and them | you (speaker + another animate) you (addressees) you (addressees and other animates) |
| <u>3rd person</u> wáp | them | them (a group) |

The sentences below amply illustrate how these verbal object pronouns are used in Baba I and the verb *gim* means 'catch' while *xìò* stands for 'laugh'.

(74)

- | | | |
|----------------------|--------------------------|-------------------------|
| a) <i>gim-á</i> | 'catch me!' | 'Catch me!' |
| b) <i>gim wúʒí</i> | 'catch me + him/her/it' | 'Catch us!' |
| c) <i>gim wúʒápú</i> | 'catch us + them' | 'Catch us!' |
| d) <i>gim wúápú</i> | 'catch you + them' | 'Catch you!' |
| e) <i>xìò wíí</i> | 'Laugh you + him/her/it' | 'Laugh at you and him!' |
| f) <i>gim wáp</i> | 'catch them' | |

Having looked at the various forms that serve as object pronouns of verbs, we now examine another type of pronoun, this time, the prepositional object pronoun.

4.5.1.2.2 Animate prepositional object pronouns

Fig. 17 :

| Number | SINGULAR | | | PLURAL | | |
|--------|----------|-----|------------|---|--------------------|--------------------|
| Person | 1 | 2 | 3 | 1 | 2 | 3 |
| | mè | wù | yí | ìlì rùxí ròxò rùxápurú pápá pápápurú | pè píi piápú | pú púápú púí |
| Gloss | Me | You | Him/Her/It | Us | You | Them |

This table shows that the object form of prepositional pronouns in the singular exhibits each a unique morphological structure in the various persons while the plural counterparts show variations in relation to referents.

Apart from the first person singular pronoun form that manifests a different morphological shape, the rest of the persons and number are all identical with those of the animate subject pronouns (cf 1.3.1.1). Morphologically, there is a glaring difference between the forms of the singular animate verbal object pronouns and those of their prepositional counterparts. The former are not only made up of a single vocalic morpheme structure, in addition, they all bear high tones while the latter which have a cv morpheme structure bear low tones for the first and second persons and a high tone for the third person. For reasons of tonal and segmental predictability, the animate singular pronoun objects of verb may obviously be considered the basic form of singular pronouns while the other forms are derived by means of morphophonological and even morphologized tone rules in Baba I.

It should however be noted that, the prepositional object pronouns in this language appear before such particles like mbò, mó and nó, which in this context can roughly be the equivalence of English 'for', 'on' and 'with' respectively as shown in these sentences below:

(75)

- a) náŋ ñkúí mbò mó 'Cook beans for me'
 cook beans for me

- b) wù tʃiè-mó mó pòɔ̀ò 'You have urinated on us'
 You urinate (asp) on us
- c) tʃé nò pùɔ̀í 'Run with us!'
 Run with us

We have so far illustrated in the foregoing discussion the various morphological structures assumed by animate pronouns. The structure that each pronoun exhibits is dependent on whether it is the first, second or third person singular or plural respectively and whether it is functioning as subject, object of a preposition or of a verb. Having said this, we will now discuss the structures of the inanimate pronouns in Baba I.

4.5.2 Inanimate pronouns

These are pronominal forms which usually have as their referents things which do not have life per se, or which cannot leave from one place to the other on their own accord. Examples include such things as house, vehicle, stone, tree, mountain, etc. Unlike in many noun class languages, the form of the inanimate pronoun in Baba I is not determined by the noun class of the noun the so called pronoun substitutes for.

As subject, the inanimate pronoun assumes a unique morphological structure, a, invariably representing plural as well as singular referents. On the other hand, the object form of the pronoun is represented by two different morphemes, nə and muu, depending on whether it is a verbal or prepositional object pronoun respectively.

With respect to plural referents, subject of an inanimate pronoun does not undergo any morphological alteration often observed in the forms of inanimate pronouns. In such a case, the idea of plurality is discernible in the form of the verb that immediately follows this pronoun. The verb bears some aspectual features often associated with iterativity to denote that the apparently singular pronoun subject denotes a plural referent. These few sentences below could help make our explanation more lucid:

Fig. 18: Use of animate and inanimate object pronouns

| 1. Inanimate verbal objects | Animate verbal object |
|-----------------------------------|---------------------------------|
| a) glmə 'catch it' | glm-í 'catch him/her/it' |
| b) kpərə 'eat it' | kpər-í 'eat him/her/it' |
| c) númə 'bite it' | núm-í 'bite him/her/it' |
| 2. Inanimate prepositional object | Animate prepositional object |
| a) xě mùú 'go with it' | xě ná yí 'go with him/her/it' |
| b) kpă r mùú 'pour on it' | kpăr mə yí 'pour on him/her/it' |
| c) káx mùú 'climb on it' | káx mə yí 'climb on him/her/it' |

We notice that the inanimate prepositional object pronoun maintains a regular morphological structure, but the meaning often changes depending on the type of verb that precedes it, a direct object as in fig 18 (1), and no direct object in fig 18 (2) above. On the other hand, its animate counterpart is generally preceded by a prepositional particle that can vary in form with meaning (cf 2a-c) of fig 18.

4.6 Possessives

This is a blanket term used here to refer to all the morphological forms used to express possession in Baba I. Possessives could be regarded as situated mid-way between nouns and pronouns because in this language they exhibit properties that are common to these morphological categories. Some of them not only substitute for substantives, but they are also used as nominal premodifiers. On the other hand, others are used uniquely as noun dependent forms, post modifying their head nouns. The former would be referred to in this study as independent possessives while the latter are noun-dependent possessives. This dichotomy is aimed at making us distinguish clearly the difference between the various types of possessives, as well as between possessives and pronouns of various types.

4.6.1 Noun-dependent possessives

As earlier stated, these are possessive forms which depend entirely on their head nouns to express possession. They can be regarded as bound morphemes or suffixes because they do not make sense in isolation. In terms of linear ordering, they invariably follow their head nouns. These forms are represented in the table below:

Fig. 19: Specification of noun-dependent possessives.

| Number | SINGULAR | | | PLURAL | | |
|--------|----------|------|-------------|------------------------------------|--------------------|-------|
| Person | 1 | 2 | 3 | 1 | 2 | 3 |
| | a | u | i | yóɔ̀ò yúɔ́í yúɔ́ápú yóɔ̀ó | yé yíàpù yíí | yáp |
| Gloss | My | Your | His/Her/Its | Our | Your | Their |

Looking at the forms from a morphological point of view, they look more like animate object pronouns of verbs. This is especially true for the singular persons and less so for the plural forms. The difference between these forms and their pronoun verbal object counterparts is that, while the former follow their head nouns, the latter generally post modify verbs, functioning like verbal direct objects.

These constructions below further clarify the use of noun dependent possessive forms.

(77)

a) Singular noun + singular possessive

- | | | | |
|--------------------------------|--------------------|------------------------------|----------------|
| i) ɣmè lá Cl ₁ | 'my person' | iv) kù-á Cl ₃ | 'my foot' |
| ii) ntè lú Cl ₃ | 'your grasshopper' | v) ndzə-ù Cl ₁ | 'your garment' |
| iii) vəm sí Cl ₅ | 'his stomach' | vi) líŋ sá | 'my chin' |

(78)

Singular noun + plural possessive

- | | | | |
|-----------------------------------|-------------|----------------------------------|----------------|
| i) mǎsɪŋ yòɔ̀ò Cl ₁ | 'our bird' | iv) pàx sóɔ̀ó Cl ₅ | 'our mushroom' |
| ii) pé yé Cl ₃ | 'your fufu' | v) fùè yáp Cl ₁ | 'their fon' |
| iii) fíáx sáp Cl ₅ | 'their job' | vi) fájŋ sé | 'your tail' |

c) Plural noun + singular possessive

- | | |
|--------------------------|----------------------------------|
| i) pāsīŋ pá 'my birds' | vi) ŋkǎŋ mí 'his/her/its spears' |
| Cl ₂ | Cl ₆ |
| ii) ŋkū má 'my feet' | v) kīŋ pú 'your pots' |
| Cl ₆ | Cl ₂ |
| iii) sāŋ mú 'your teeth' | vi) ŋkǐ pí 'his/her/its ropes' |
| Cl ₆ | |

(79)

Plural noun + plural possessive

- | | |
|-----------------------------|------------------------------|
| i) sāŋ móxó 'our teeth' | iv) pǎŋǎm pǎxó 'our animals' |
| Cl ₆ | Cl ₂ |
| ii) pǎŋgóp pé 'your fowls' | v) ntóŋlǎ mé 'your ears' |
| Cl ₂ | Cl ₆ |
| iii) mbǎp mǎp 'their wings' | vi) pómví pǎp 'their dogs' |
| Cl ₆ | Cl ₂ |

Our examples above clearly show a lot of morphemic alternations, both at the level of tones and segments. It should be noted that our examples concern only the six principal possessive forms in Baba I. We have not taken into consideration what Hyman and Tadadjeu (1976: 83) call compound possessives. This is because these forms go beyond mere morphology since they seem to encode information that is generally expressed through syntactic mechanism. This is more so because the forms of these compound possessives violate some general phonological rules in this language. When we look at these pronoun forms, we realize that there are voiceless bilabial stops occurring intervocalically; and this violates our bilabial voicing rule (R4). This is clearly shown by the data presented in figs 13, 14, 15 and 16. We can then consider these compound pronouns as whole phrases made up of the combination of words marked by word instead of morpheme boundaries. The presence of word boundaries blocks our voicing rule which applies within and across morphemes rather than words. Hence /pǎpǎpu/ meaning (us) can better be represented as #pǎ#pǎ#pu#. This can be empirical evidence that word boundaries exist in Baba I and they are capable of blocking the application of rules.

Looking at the various segmental alternations exhibited by the noun-dependent possessive forms, it is quite clear that they are sensitive to their head nouns. As concerns the singular possessive forms, they take initial consonant identical with the concord consonant marking the noun class of their respective head nouns. The singular concord consonants are *l* and *~∅* for classes 1 and 3 while class 5 has *s* (cf 79i-ii). The plural persons differ from their singular counterparts in terms of prefixed concord consonant, only at the level of the first person. While the singular persons variably take a lateral and zero prefix consonant, when in collocation with classes 1 and 3 nouns as mentioned above, the plural persons invariably take a palatal glide when modifying nouns of the above two classes. With respect to nouns of the other classes, the prefixed concord consonants are the same for both plural and singular persons of the possessive forms as exemplified by the preceding data.

Having elaborately demonstrated that the initial consonants of noun dependent forms are conditioned by the noun classes of their preceding nouns, we now examine tonal alternations in the different morphemes. Hyman and Tadadjeu (1976: 75) have shown that all Mbam-Nkam² languages, of which Baba I is one, possess associative markers which are either segmental or tonal morphemes. These associative markers bear low tone for classes 1 while the rest of the classes carry high tone. Comparative and internal evidence has shown that associative marker in Baba I is a tonal morpheme that occurs between the associated nouns or pronominals. In association with any noun or possessive form, the associative floating tone 'docks' to the left (cf TR₁). This tone which is identical with the concord tone of the first noun in the sequence, i.e N₁, generally creates a contour tone on the preceding syllable. This happens only when the floating associative tone is unidentical to the tone of the preceding syllable.

Given these developments, we can be able to explain our tonal and segmental variations in a more principled and predictable manner. This will require us to posit some morphological statements as well as tonal rules. The statement is that 'the initial consonant of a noun-dependent possessive is identical with the concord consonant of its preceding noun; but if it is plural first person, the initial consonant is invariably a palatal glide for classes 1 and 3 nouns. A tonal statement requires a floating associative tone to 'dock' to the left when a noun precedes a

possessive or another noun (cf TR₁). Furthermore, there is a phonological rule that deletes a lateral in a given environment (cf R₇). Our morphological statement makes us assume that the underlying forms of our noun-dependent possessives are as enumerated below:

Fig 20: U.R of noun – dependent Possessives

| Number | SINGULAR | | | PLURAL | | |
|--------|----------|------|-------------|--------|-----|-------|
| | 1 | 2 | 3 | 1 | 2 | 3 |
| Person | 1 | 2 | 3 | 1 | 2 | 3 |
| | -à | -ú | -i | -oɔ̀ | -é | -áp |
| Gloss | My | Your | His/Her/Its | Our | You | Their |

As mentioned above, when the noun –dependent possessive form is in the plural, that is first, second and third persons plural, and its noun belongs to class 1 or 3, the concord consonant which is usually a lateral when dealing with singular person becomes a palatal glide (cf Figs 21 and 22).

It should be noted that, for the sake of predictability and coherence, we would decide that the underlying forms of the noun-dependent possessives all bear high tones (cf 1.3.1.2.2). We could have also argued that these forms do not have any inherent tones, and only acquire the floating concord tone of their preceding nouns. This is a more plausible argument since concord tones are floating tones which can readily be associated to these toneless possessive forms. This will save us the pains of formulating new tone replacement rules to derive the same surface possessive forms that could be simply obtained using our already existing tone rules. Having said this, we now by way of examples demonstrate how our assumption could operate to give us well-formed surface structures in Baba I as these figures below illustrate:

Fig. 21: Singular possessive forms.

| U.R. N+possessive | Noun class | Concord Consonant + tone | Possessive Prefixation | Tone rules & other rules | S.R | Gloss |
|----------------------|---------------|--------------------------------|---------------------------|---|-----------|--------------------|
| a) ɲgɪ + -á | 1 | l L | ɲgɪ + lá | L-deletion + concord + Ass. tones docking | ɲgɪ -à | my grass |
| b) pé + -ú | 3 | l H | pé + lú | Ass. + concord tones docking | pé lú | your fufu |
| c) fiàx + -í | 5 | s H | fiàx + sí | Ass. + concord tones docking | fiàx sí | his/her/its job |
| d) pɔ̀nàm + -á | 2 | p H | pɔ̀nàm + pá | concord + Ass. tones docking | pɔ̀nàm pá | my animals |
| e) ɲkǎɲ + -ú | 6 | m H | ɲkǎɲ mú | concord + Ass. tones docking | ɲkǎɲ mú | your spears |

S.R=surface representation

U.R=underlying representation

Ass=associative

Fig. 22 : Plural possessive forms

| U.R. | Noun class | Concord Consonant + tone | Possessive Prefixation | Tone rules & other rules | S. R | Gloss |
|-----------------|------------|--------------------------|------------------------|------------------------------|------------|-------------|
| a) ηγḡ + ὀχό | 1 | y L | ηγḡ + ὀχό | L-deletion | ηγḡ ὀχό | Our grass |
| b) πέ + -έ | 3 | y H | πέ + γέ | Ass. + concord tones docking | πέ γέ | Your fufu |
| c) fiāx + -áp | 5 | s H | fiāx + sáp | Ass. + concord tones docking | fiāx sáp | Their job |
| d) pāñām + πόχό | 2 | p H | pāñām + πόχό | Ass. + concord tones docking | pāñām πόχό | Our animals |
| e) ηκḗη + -έ | 6 | m H | ηκḗη + μέ | Ass. + concord tones docking | ηκḗη μέ | Your spears |

The two tables above illustrate the various stages undergone by nouns in combination with their dependent possessive forms. As earlier mentioned, it could be assumed that these noun-dependent forms all bear high tones. These high tones are subsequently replaced by the preceding end tone of their preceding nouns to give the appropriate tonal pattern when in combination with nouns of different noun classes. This will still give us the required output of our surface representations. However, if we assume that these noun-dependent forms are toneless as illustrated on our two tables above, the desired surface representations will easily be arrived at. We opt for the latter because it is simpler and requires only a tone docking rule to

give the right phonetic forms, unlike the former that requires a tone spreading rule followed by a tone simplification rule. The fact that the differences between the underlying and surface forms of our derivations in the tables above are unequivocally accounted for by a fewer number of rules proves that our rules are well motivated. They also maximally apply to our underlying forms as elaborately demonstrated above.

4.6.2 Independent possessive forms

These are morphemes which, by combining with nouns or existing alone, generally express possession in Baba I. They behave in many respects like nouns in the sense that they independently can function like subjects in sentences, and are freely modified by nouns. They condition the associative marker, a characteristic generally shown by nouns in such environments. However they exhibit properties of pronouns in that they can substitute for substantives, and these qualities have led us to regard them as independent pronouns.

These forms are different from their noun-dependent counterparts in that, apart from the morphological shape especially of the singular persons, their position in a collocational environment is quite the reverse of that of the noun dependent forms. This clarification is important because, as will be seen later, there is an overlapping in the morphological structure especially in the plural persons of the two forms. A distinction can only be drawn from their linear ordering when they occur with nouns. These forms are clearly represented in the table below:

Fig. 23: Independent possessive forms

| Possessive | Referent | Gloss |
|------------|---|--------------|
| a) yá | speaker | mine |
| b) yú | addressee | yours |
| c) yí | third party | his/hers/its |
| d) yóχó | speakers | ours |
| e) yé | addressees | yours |
| f) yáp | third party (pl) | theirs |
| g) yóχó | speaker + addressee | ours |
| h) yúχí | speaker + third party (sg) | ours |
| i) yúχápú | speaker(s) + third party (pl) | ours |
| j) yəpə | speaker + addressee(s) + third party (sg) | ours |
| k) yíí | addressee + third party (sg) | yours |
| l) ylàpú | addressee(s) + third party (pl) | yours |

The forms (a-f) above constitute the simple independent possessives while the rest are their compound counterparts. These compound forms, both independent and dependent are formed through some complex processes which, as earlier mentioned, go beyond mere morphological mechanisms.

The behaviour of the independent possessives is well illustrated in the derivations below:

(80)

- a) /yá + ndzòx/ → [yá ndzòx] 'my own wine'
 b) /yú + pə́nám/ → [yú pə́nám] 'my own animals'
 c) /yí + mə́ngəp/ → [yí mə́ngəp] 'his/her/its own fowl'
 d) /yóχó + flàx/ → [yóχó flàx] 'our own job'
 e) /yé + ŋghə́r/ → [yé ŋghə́r] 'your own oil'
 f) /yáp + pəsíŋ/ → [yáp pəsíŋ] 'their own birds'

The derivations demonstrate that our independent possessive forms are segmentally consistent both underlyingly and at the surface. There are only tonal alternations that are observed on the surface structures. One could hurriedly conclude that these forms behave like class 1 nouns and take floating low concord tone in an associative construction, and the tone docks to the left to create a contour. From mere observation, this is what apparently happens. However, a critical observation will prove the previous assumption faulty. This is because these forms are made up of both singular and plural persons, and it will be unconvincing to claim that the semantically plural forms belong to noun class 1 where only singular nouns are generally grouped. A more reasonable explanation is that, in those constructions, there are two floating tonal morphemes representing the associative marker and the morpheme for appropriation 'own' respectively. In the course of derivation, the normal leftward tone docking process occurs. Where this tone process creates a complex tone sequence on a single syllable, there is simplification since empirical evidence has shown that the language does not allow more complex tone sequences on a single tone bearing unit.

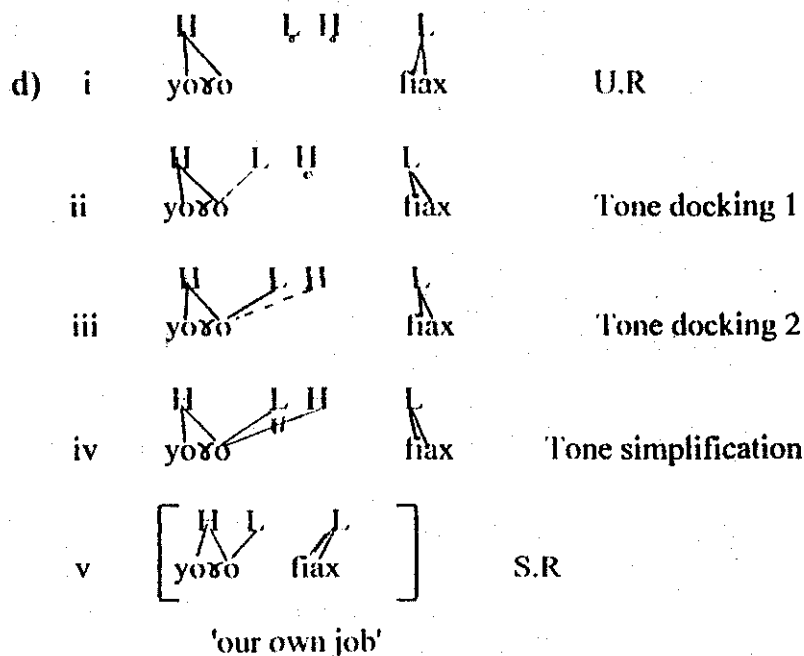
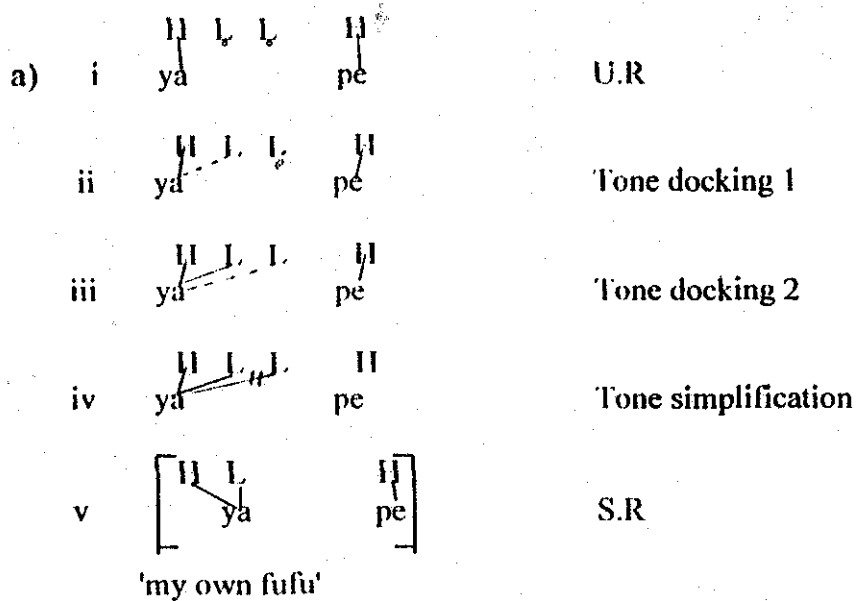
These derivations which are explicitly represented below and subsequently autosegmentalized will better clarify our explanation above. It should be noted that the first low floating tone represents the morpheme for appropriation 'own'. The second floating tone which may be low or high depending on the noun class of the independent pronouns is the associative marker.

(81)

- | | | |
|---------------------------|---|-----------------------------------|
| a) /ya + ɓ + ɓ + pé/ | → | [yâ pé] 'my own fufu |
| appr AM | | |
| b) /yú + ɓ + ɓ + só/ | → | [yû só] 'your own hoe' |
| appr AM | | |
| c) /yí + ɓ + ɓ + fù/ | → | [yî fù] 'his/her/its own medicine |
| appr AM | | |
| d) /yóɔó + ɓ + H + fi àx/ | → | [yóɔó fi àx] 'our own job' |
| appr AM | | |
| e) /yé + ɓ + H + nàm/ | → | [yé nàm] 'your own head' |
| appr AM | | |
| f) /yap + ɓ + H + nté/ | → | [yâp nté] 'their own market' |
| appr AM | | |

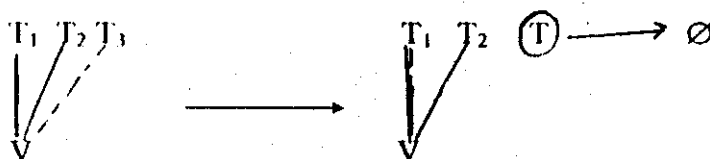
Our sample derivations in 81(a) and (d) can be autosegmentalized as in (82) below:

(82)



Following the postulation of a low floating tonal morpheme marking appropriation in our constructions above, we have been able to unequivocally derive the required surface forms from the underlying representations. Our tone simplification requires a tonal rule which states that the final end tone of more than two tonemes on a single tone bearing unit is deleted. This is formally represented below as TR₅.

TR5: Complex tone simplification



The autosegmentalized derivations above presuppose that we have tacitly considered singular independent possessive forms as belonging to morphological noun class 1 while their plural counterparts fall in class 2. This is why the associative marker for the former is a floating low tone while for the latter it is a floating high tone (cf 81a-f).

From the information provided by the various sample derivations based on possessives, there is enough internal evidence to support our claim that the two groups of possessives are morphologically different. The only common characteristic they have is that they express possession at various levels and degrees; while yielding subtle shades of meanings in the different utterances.

The overall analysis based on pronouns has shown that different sorts of pronominal forms exist in Baba 1, each making reference to a more specific entity. This language is shown to have an elaborately rich pronoun system employed in a wide range of contexts. In each of these contexts, the appropriate pronoun employed helps to narrow down and make more specific the range of possible referents alluded to.

REFERENCES TO CHAPTER FOUR

- 1) *We have illustrated that Baba 1 has a reduced noun class prefix systems; meaning that most of the prefixes that originally existed had been lost in the course of the diachronic development of the language. This looks like a widely attested fact about languages of this sub group. Nkennji (1994) making exclusive reference to Bafanji, another language of the sub group, comes up with only four nominal classes based on noun class prefixes.*
- 2) *Mham-Nkam is a sub group of the Grassfields Bantu languages.*

5.0 NOUN PHRASE

This section is basically concerned with a close examination and analysis of what constitutes a noun phrase in Baba I. We have to take into consideration the morphological forms and possible alternations attested when noun related elements come into collocation with their head nouns. In addition, we will establish the linear conditions or constraints of the different occurrences of the various morphological structures so far related to nouns and the relationship created by such an association.

According to Jack Richards et al. (1985: 251) and Wiesmann et al. (1984: 58), the most determinant element of a noun phrase is the head which is of course a noun. The former authors consider a noun phrase to be a group of words having a noun or pronoun as the main part, while the latter look at it as a string made of a noun and all other optional or obligatory elements attached to it. Drawing inspiration from the above authors as well as the data presented so far by Baba I, we can consider a noun phrase to be a nominal form co-occurring with other related elements in a well defined sequence in order to convey information beyond what is individually conveyed by these forms in isolation. Noun related elements in Baba I, just like in other related Bantu languages include: determiners, adjectives, numerals, ordinals, and in some cases, other nouns. All these would constitute an important aspect of noun modification in Baba I. Given this background, it is necessary now to examine the structure of noun phrase.

5.1 Structure of Noun Phrase

By structure here, we refer to the morphological sequence a noun phrase would assume. We would be able to establish whether specific sequences are conditioned by well defined morphological categories and to determine the possible morphophonemic alternations observed at various levels. It is necessary at this level to introduce two terms that will run throughout our analysis in this area. We refer to noun related elements that precede their head nouns as premodifiers while those that follow their head nouns will be called post modifiers. Having delimited our scope and defined our terms we now begin our analysis by examining the various forms that concatenate to produce a noun phrase in Baba I.

5.1.1 Determiners

This will be used as a general term to refer to those qualificative forms that help to specify a noun or noun phrase. This will regroup forms such as interrogatives, demonstratives, definite and indefinite articles as well as pronominal associations. Each of the above forms will be examined in relation to the noun it collocates with, as well as their linear ordering.

5.1.1.1 Interrogative determiner

This refers to a determiner which is a marker of question, or better still, a question word. In Baba I, this is usually represented by the morpheme *yê*, and it is sensitive to morphological noun class 2 in the sense that, when in collocation with a noun of this class, it takes the concord consonant associated with this noun class as illustrated below:

(83)

- a) *ngòm Ø -yê* 'which plantain?'
Cl₃
- b) *mángóp Ø -yê* 'which fowl?'
Cl₁
- c) *pángóp p-yê* 'which fowls?'
Cl₂
- d) *fàx Ø - yê* 'which job?'
Cl₅
- e) *ntfi Ø -yê* 'which water?'
Cl₆
- f) *nkù p-yê* 'which feet?'
Cl₆

The constructions above clearly show that the interrogative determiner undergoes morphophonemic alternations or allomorphy when it modifies a noun, especially a semantically plural noun.

In the forms in (83c and f), the interrogative morpheme *yê* becomes *pyê* because their head nouns belong to plural classes 2 and 6 respectively. We notice that the form in (83 f), instead of taking concord consonant of class 6 nouns which is usually a bilabial nasal, it still

takes but a voiceless bilabial stop which is rather a concord consonant of class 2 nouns. This can readily be explained by the fact that morphological noun class 2 is the only homogeneous plural class in Baba I. In class 6, there are some nouns regarded as plural simply because they fall in a morphological class generally considered as plural. This is the case with liquid mass nouns in class 6 which are morphologically plural but semantically and syntactically used as singular nouns in Baba I.

5.1.1.2 Demonstrative determiner

The demonstrative morpheme has three forms in Baba I namely: ye, yi and ya, corresponding to different referents. The form ye designates referent near the speaker, yi represents referent far away from the speaker and addressee, while ya indicates either referent near addressee or previous referent. All these forms generally post modify their head nouns, and in addition, ye and yi take concord consonants of classes 2 and 6 when they modify nouns of these morphological noun classes respectively. This is made clearer by the constructions below:

(84)

- | | | |
|---------|-----------------|-----------------|
| a) ndáp | yè | 'this house' |
| | Cl ₁ | |
| b) ndáp | pyè | 'these houses' |
| | Cl ₂ | |
| c) fíŋ | yè | 'this wound' |
| | Cl ₃ | |
| d) flàx | yè | 'this work/job' |
| | Cl ₅ | |
| e) ŋkàŋ | myè | 'these spears' |
| | Cl ₆ | |
| f) sàŋ | myè | 'these teeth' |
| | Cl ₆ | |

- g) ndáp yi `that house'
Cl₁
- h) ndáp pyi `those houses'
Cl₂
- g) ndáp yǎ `that house'
Cl₁
- h) ndáp pǎ `those houses'
Cl₂
- i) sàŋ pǎ `those teeth'
Cl₆
- j) íŋ yǎ `that wound'
Cl₃

The forms in the constructions above show that the morpheme for near addressee or previous referent has two alternants yǎ- and pǎ- corresponding to singular and plural referents respectively. We can say that the form is sensitive not to morphological noun class but rather to semantically singular and plural nouns. This might be because each of the forms is capable of being ambiguously used as demonstrative and pronominal form for previous referent, without any change in morphological structure as these constructions below indicate:

(85)

- a) ndáp yǎ `that house' or `the aforesaid house'
Cl₁
- b) ndáp pǎ `those houses' or `the aforesaid houses'
Cl₂
- c) kúf yǎ `that bed' or `the aforesaid bed'
Cl₅
- d) tsú yǎ `that head' or `the aforesaid head'
Cl₃

However, when the forms are used uniquely for previous referent, a further distinction can still be made with regards to something very shortly referred to and something referred to a little further in time. In this respect, the forms become sensitive to noun classes manifesting

varying morphological structures conditioned by the noun class of the noun each form modifies. This is especially so when referring to something that has been very shortly referred to. In addition, there is an additional morpheme /rɪ/ suffixed to the forms of what could be called recent previous referent as opposed to remote previous referent as shown below:

(86)

- a) nté yó `the aforesaid market' (remote referent)
Cl₁
- b) pǎḡḡǎp pǎ `the aforesaid fowls' (remote referent)
Cl₂
- c) nó yó `the aforesaid snake' (remote referent)
Cl₃
- d) kúf yó `the aforesaid bed' (remote referent)
Cl₅
- e) ḡkè yó `the aforesaid message' (remote referent)
Cl₆
- f) ḡgbè yǎrí `the aforesaid cane' (recent referent)
Cl₁
- g) pǎsíḡ pǎrí `the aforesaid birds' (recent referent)
Cl₂
- h) tíf yǎrí `the aforesaid tree' (recent referent)
Cl₃
- i) líḡ yǎrí `the aforesaid name' (recent referent)
Cl₅
- j) ḡgbǎr mǎrí `the aforesaid oil' (recent referent)
Cl₆

With reference to remoteness in time, the morpheme y alternates with p, designating semantic singularity and plurality respectively (cf 86a - e). We realize that though /ḡkè/ 'message' in Baba I is morphologically in a plural class, it is semantically singular (cf 86e).

Proximity in time is expressed by the other pronominal forms: yəri, pəri and məri with clear indication that their forms are determined by the morphological noun classes with which they collocate. This observation is evident in the fact that the initial consonants of the pronominal forms in (86g and j) above are identical with the concord consonant of noun classes 2 and 6 which these forms respectively are modifying. As for the rest of the forms expressing recent referent, or proximity in time, there is no resemblance between the initial consonant and the concord consonants of the noun classes they are modifying (cf 85 f, h, i). This gives the impression that the form yəri can modify exclusively nouns of classes 1, 3 and 5, while pəri and məri go only with nouns of classes 2 and 6 respectively.

From our discussion so far, it is clear that demonstrative forms for 'near speaker' and 'far from speaker and addressee' referents are sensitive to the morphological noun classes of their head nouns. This is true only with noun classes 2 and 6 (cf 84b, e, h). The form for near addressee referent and previous remoteness in time referent alternates between yə and pə, designating semantic singular and plural referents respectively (cf 85a -d). With respect to forms for previous referents, a further distinction as earlier indicated is made between something said a long time ago and something just said. The former is designated by yə and the latter by yəri. Unlike yə which alternates only with pə, yəri alternates with pəri and məri depending on the morphological noun classes of the head nouns as shown by the constructions below:

(87)

- | | | | |
|----|-----------------|------|-----------------------------------|
| a) | ndzəp | yəri | 'that meat' (just mentioned) |
| | Cl ₁ | | |
| b) | ndzəp | yə | 'that meat' (mentioned earlier) |
| | Cl ₁ | | |
| c) | pəsŋ | pəri | 'those birds' (just mentioned) |
| | Cl ₂ | | |
| d) | pəsŋ | pə | 'those birds' (mentioned earlier) |
| | Cl ₂ | | |

- e) *fiŋ yóri* `that wound' (just mentioned)
 Cl₃
- f) *fiŋ yá* `that wound' (mentioned earlier)
 Cl₃
- g) *fiè? yóri* `that case' (just mentioned)
 Cl₅
- h) *fiè? yá* `that case' (mentioned earlier)
 Cl₅
- i) *fi móri* `that blood' (just mentioned)
 Cl₆
- j) *fi yá* `that blood' (mentioned earlier)
 Cl₆

Looking at these constructions, it is clear that previous remote referent and recent previous referent have different morphological forms. Moreover, unlike the forms for previous remote referent which have only two alternations marking semantic singularity and plurality, recent previous referent makes a distinction between classes 1, 3 and 5 nouns, class 2 nouns and finally class 6 nouns (cf 86a - j) above.

Empirical facts from our analysis reveal that demonstrative forms in Baba I are used to express temporal and spatial locations. This enables us to subsume these forms under two broad groups. Those that make general reference to the spatial location of something in relation to speaker and addressee include, *yə*, *yi* and *yə* with possible structural alternations conditioned by the noun classes of their preceding nouns (cf 84a-j). The others which make temporal reference to something already mentioned include, *yə*, *pə yəri*, *pəri* and *məri* whose forms are also determined to a certain degree by noun class of the respective preceding nouns (cf 86a-j). We could still sub-divide these forms denoting temporal referent into two groups based on morpho-semantic consideration. These are forms for recent referents which include *yəri*, *pəri* and *məri*, while the second sub-group consists of forms that denote remote referent and include *yə* and *pə*.

It is quite clear that the division made above especially between spatial and temporal demonstratives is not consistent. This is because there is an overlapping in the forms representing 'near addressee' referent and those for remote referent as indicated by the examples in (85a-e). For us to make a clear distinction void of such overlapping among forms of the two broad groups, there is need for contextual information as the forms are used in utterances. These morphemes for remote and recent referents are often used as anaphoric pronouns in that they re-echo something earlier alluded to in the utterance.

Other types of word categories usually considered as determiners are definite and indefinite articles. The data presented by Baba I show that articles are not morphologically marked in this language. For this reason, definite and indefinite articles do not constitute part of our analysis, since our aim is to examine the internal arrangement of morphologically marked categories in Baba I, and account for observable alternations. This leads us to examine the form and behaviour of possessive determiners.

5.1.1.3 Possessive determiners

Numerous references have already been made in preceding sections concerning possessive constructions with pronominal attribution. Since we have regrouped these forms under the broad category of determiners, they will be treated here with more emphasis on their linear ordering when they co-occur with other determiners in a noun phrase and the shades of information they convey in each case will be revealed.

Possessive qualifiers behave in many respects like demonstrative forms for 'near addressee' and 'far from speaker and addressee' referents. This is because they do not only follow the nouns they modify; they are also sensitive to the morphological noun classes of any noun that they specify (cf 4.1.1.2). Since possessive and demonstrative determiners all post modify their head nouns, it will be interesting to find out if the two forms can co-modify a single noun, and if so, what are their respective positions in such a string.

In our foregoing analysis involving possessives, we have upheld the view that underlying possessive forms in Baba I are: -a, -u, -i, -oxo, -e and -ap representing the first, second and third person singular and plural respectively. Furthermore, we have noted that the

initial consonants these forms manifest in their surface representations are identical with the concord consonants of the morphological noun class of the preceding noun. In the same vein, demonstrative determiners include the following forms: ye, yi, yə, yəri, which are also sometimes conditioned by their preceding nouns. These constructions below are aimed at determining the right order of linear occurrence of possessive and demonstrative determiners in a situation where they modify a single noun:

(88)

| | Singular persons | |
|--|------------------|----------------------------|
| a) /səsù? + -á + ye / wind my this Cl ₁ | [səsù?-á yè] | 'this wind of mine' |
| b) /ŋkí + -á + yə / rope my this Cl ₃ | [ŋkí - á yə] | 'that rope of mine' |
| c) /nəkàŋ + -ú + yi / gun your that Cl ₃ | [nəkàŋ-ú yi] | 'that gun of yours' |
| d) /ŋgbè + -í + ye / 'cane his this Cl ₁ | [ŋgbè li yè] | 'this cane of his/hers' |
| e) /pəpàm + -í + yi / animals his that Cl ₂ | [pəpàm pí pyl] | 'those animals of his/her' |
| f) /flàx + -ú + ye / job your this Cl ₅ | [flàx sú yè] | 'this job of yours' |
| g) /ŋgbór + -á + yi / oil my that Cl ₆ | [ŋgbór má myl] | 'that oil of mine' |
| h) /kám + -ú + yi / crab your that | [kám yl ú] * | |

(89)

Plural persons

- a) /mǎngǎp + -óyó + yǎ/
fowl our that
Cl₁ [mǎngǎp yòxò yǎ] 'that fowl of ours'
- b) /pǎsǐŋ + -é + ye/
birds your these
Cl₂ [pǎsǐŋ pé pyè] 'these birds of yours'
- c) /tsú + -áp + yi/
head their that
Cl₂ [tsú páp pyì] 'those heads of theirs'
- d) /tǎŋ + -óxó + yè/
prison our this
Cl₃ [tǎŋ yóxó yè] 'this prison of ours'
- e) /tsə + -é + yǎ/
kola nut your that
Cl₅ [tsə sé yǎ] 'that kola nut of yours'
- f) /mbó + -áp + yi/
hands their that
Cl₆ [mbó mǎp myì] 'those hands of theirs'
- g) /mǎngǎp + -óxó + yǎ/ [mǎngǎp yǎ yòxò] *
fowl our that

The constructions above have readily highlighted a number of issues on the behaviour of possessive and demonstrative determiners. They demonstrate that these two forms can co-occur as modifiers of the same noun. The demonstrative could not be considered as modifying the possessive determiner because, as earlier indicated, these possessive forms are bound morphemes which make sense only when they occur with their head nouns. This is the more reason why they appear nearer to their head nouns than the other modifying elements. If any element occurs between a noun and its possessive modifier, this will result in ill-formed structures as illustrated by the constructions in (88h and 89g). The asterisks against the two constructions indicate that they are unacceptable forms in Baba I. Further evidence to show that the demonstrative forms modify the nouns but not the possessive is that these demonstrative forms have undergone alternations seen especially in their initial consonants. These consonants are identical with the concord consonants of the noun classes of the respective nouns serving as head nouns in the constructions.

Looking at the tones of the constructions above, we notice that only the tones of the demonstrative determiners remain stable. We had earlier maintained that, for the purpose of predictability, the basic underlying forms of the dependent possessive in this language are all toneless. The tonal variations noticed at the surface level of these derivations are well accounted for using some tonal phenomena which include tone docking, assimilation and replacement, which are all general principles operating in the language (cf tone rules).

Our analysis of possessive and demonstrative determiners has established that they can co-occur with the same noun in a collocational environment. They are similar in that they all post modify their head noun and their forms are often conditioned by the noun in question. They are different in that their position of occurrence is highly restricted when they co-occur with a noun. While the possessive determiners cannot allow anything to appear between them and their head nouns, the demonstratives can be separated from their head noun and the construction still remains well-formed.

5.2 Adjectives

Welmers (1973: 250) has remarked that in most African languages, concepts generally expressed by adjectives in European languages are expressed by other types of constructions using nouns or verbs or both. We are going to demonstrate that, this assertion to a greater extent is true for Baba I. In this language we will apply the term 'adjective' to designate any form which is reflected by an English adjective, or which helps to assign a particular quality to the noun or nominal form it modifies. Qualificative forms in Baba I consist of those that are shown to be derived from verbs or are cognate with verb stems, while others, by their very nature are inherently adjectives. The former which predominate in this language are referred to as adjectivals while the latter which form a restricted but substantial class are called non-derived adjectives.

5.2.1 Adjectivals

These are essentially seen to be verbal cognates used as qualificative forms. It could be shown that in constructions, they assume the morphological properties of verbs, taking tense

and aspectual morphemes unlike their non-derived counterparts as will be seen later. Hence, they are not adjectives per se, and are supposed to be derived from verbs mostly with inceptive meaning such as 'get dirty', 'become old', 'become wet', etc. When these forms are used predicatively, they refer to present state, and in attributive association they often undergo morphophonemic alternations. The examples below show the verb stems and the corresponding cognate forms used as adjectivals.

Fig. 24 Verbs and Adjectivals compared

| Verb forms | | Adjectivals | |
|------------|------------------|--------------|----------------------|
| a) -rúf | 'become full!' | ndáj ndzúf | 'a full cup' |
| b) -ríf | 'become old!' | fiáx ndzil | 'an old job' |
| c) -pláŋə | 'get ripe!' | ngõm piáŋ | 'ripe plantain' |
| d) -lámə | 'become sweet!' | ndzõx lámkər | 'sweet wine' |
| e) -yúmə | 'get dry!' | ngɪ ndzúmtə | 'dry grass' |
| f) -kántə | 'become short!' | ŋmè ŋkántə | 'a short person' |
| g) -kúf | 'become strong!' | tí kúfər | 'a strong/hard tree' |
| h) -sàʔə | 'become tall!' | máʃl sàʔkər | 'a long road' |
| i) -límə | 'get dirty!' | kɪŋ límkər | 'a dirty pot' |
| k) -wóʔə | 'get fat!' | mámvi wóʔkər | 'a fat dog' |
| l) -páŋə | 'become good!' | tsə mbàŋkər | 'good kola nut' |

These constructions above adequately illustrate that adjectivals in Baba I are shown to be derived from cognate verb forms; and the verbs associated to these forms are mostly inceptive in meaning.

The derivation of adjectivals from the cognate verb forms is done in a number of ways: prefixation, suffixation or both. The various derivational strategies have provoked some morphophonological processes which include assimilation, deletion, and tonal variations. The adjectival counterparts of the forms in fig 24 (a, b, c and g) have all taken a nasal prefix leading to some initial stem segmental alternations. Those in fig 24(d, f, i, j and k) have taken a suffixal morpheme, /kər/, while the form in 24(l) has undergone both suffixation and nasal prefixation. The prefixal morpheme in these cases has no independent existence in this language.

It should however be noted that, among the structures considered here as verb forms, nouns could be derived from those in 24(i, k and l) by simple deletion of the final vowel. This will result to /lɪm/, /wóx/ and /pàŋ/ which can respectively be rendered in English as 'dirt', 'fatnes's and 'goodness/beauty'. The illustrations given above are valid empirical evidence to justify the assertion that concepts in Baba I expressed by adjectives, are often expressed by constructions using nouns, verbs or both in English.

It is worth noting here that adjectives or adjectivals in Baba I are capable of existing as independent forms premodified by the morphemes yə and pə. These morphemes in this context represent 'one' and 'ones' respectively used as pronominal forms to designate noun or nouns already mentioned in a construction. These examples will help to illuminate our explanation:

(90)

| A | | B | |
|---------------|--------------------|-----------|------------------|
| a) fiáx ntè | 'a big job' | yə ntè | 'a big one' |
| b) mbláŋ mbíʔ | 'a raw palm nut' | yə mbíʔ | 'a raw one' |
| c) ŋkáŋ ndùl | 'different spears' | pə ndùl | 'different ones' |
| d) ndáŋ ndzúf | 'a full cup' | yə ndzúf | 'a full one' |
| e) kīŋ límkór | 'a dirty pot' | yə límkór | 'a dirty one' |
| f) pómvlè ntè | 'big dogs' | pə ntè | 'big ones' |

In the forms in B, yə and pə refer to the singular and plural nouns respectively, used in the attributive constructions in A.

We could further illustrate that adjectivals, verbs and nouns could be derived from a common underlying form as shown in (91a, b and c) on the one hand, and (91d and e)on the other as shown below.

(91)

- a) á kíʔtá-mó 'It has become small'
 It small (asp)
- b) á rúf-mó 'It has become full'
 It full (asp)

- c) à wóx-mó 'It has become big'
 It big (asp)
- d) à pó pàṅ 'It is goodness'
 It be good
- e) à pó wóx 'It is fatness'
 It be fat

These constructions reveal that forms which can take prefix or suffix or both to function as qualificatives can also take temporal or aspectual affixes to function as verbs as in (91a-c). At the same time they can stand independently without affixes to function as nouns as in (91d and e). However, we can find some forms in this language that can legitimately be called adjectives because they cannot be said to be derived from other lexical categories.

5.2.2 Non-derived adjectives

These are qualificative forms, as said earlier, which exhibit a unique morphological structure, showing that they are not derived from any word category in this language. This is a restricted class of forms though having a reasonable number of attested examples in Baba I. Just like their derived counterparts, they are not generally affected by the morphological noun class of the noun they modify as shown by the examples that follow:

(92)

- a) fùè ntè 'a big fon'
 Cl₁
- b) kám ntè 'a big crab'
 Cl₃
- c) fláx ntè 'a big job'
 Cl₅
- d) ndzǎ ndùl 'a different garment'
 Cl₁

- e) nó lénó 'a green snake'
Cl₃
- f) jáŋ sá 'a new illness'
Cl₁
- g) mbián mbí? 'raw palm nut'
Cl₃
- h) ŋkúí pù? 'unripe beans'
Cl₆

These forms are similar to their derived counterparts in that they attribute qualities to their nouns and can also take yə and pə to function as independent nominals. They have an exceptional characteristic in that they undergo reduplication when they modify a semantically plural noun. They are not as well affected by morphological noun class of their head noun and in addition, they are highly restricted to post modification. The examples below further clarify the explanation:

(93)

- a) fiáx nténtè 'big jobs'
- b) ŋkáŋ ndùlndùl 'different spears'
- c) ndzó sósó 'new garments'
- d) ndó mbí?mbí? 'raw things'
- e) yóm pù?pù? 'unripe plums'

Having analysed adjectives in Baba I and demonstrated that some are non-derived while others are derived or cognates with other morphological categories, we now examine ordinals which in many respects behave like adjectivals.

5.3 Ordinals

These are forms which show order or position in a series in Baba I. As said earlier, they behave in some respects like adjectivals since they can be shown to derive from other word

categories especially verb stems. This class forms a highly restricted category with only three attested items as shown below:

(94)

- a) fùm ηmè 'the first person'
- b) ηkótò ηmè 'the second / next person'
- c) ndziʔtò ηmè 'the last person'

Just like adjectival forms, they can function like independent forms modified by some bound suffixal morphemes i and pi, representing semantic singularity and plurality markers respectively. These morphemes, unlike ya and pa which premodify independent adjectival forms, rather post modify ordinals as shown below:

(95)

| Singular | Plural |
|----------------------------------|--------------------------------|
| a) fùm-i 'the first one' | a) fùm pí 'first ones' |
| b) ηkótò-i 'the second/next one' | b) ηkótó pí 'second/next ones' |
| c) ndziʔtò-i 'the last one' | c) ndzitō pí 'last ones' |

Though these suffixal morphemes do not have any independent meaning in the language, rather in this context, they usually refer back to a noun cited earlier, or to something already known to the addressee.

Using the same line of reasoning as for adjectivals we could demonstrate that ordinals are verbal forms used to show order or position in a series. This is because these same forms are used as verbs exhibiting all the temporal and aspectual properties of verbs as demonstrated below:

Fig. 25: Verb and ordinal compared

| Verb forms | Ordinals |
|---|---|
| a) yí fùm-má 'He has come first' He first (asp) | yí pá fùm ñmè 'He is the first person' He to be first person |
| b) wù kótá-má 'You have followed' You follow (asp) | wù pá ñkótá ñmè 'You are the next/second person' You to be second/ next person |
| c) ñ-dzi?tá - má 'I have been the last' I last (asp) | ñ-bá ndzi?tá ñmè 'I am the last person' I be last person |

These illustrative constructions give empirical support to our claim that ordinals are derived from verbs; or rather they are derived from the same cognate root in Baba I as verbs and some adjectivals.

Closely related to ordinals are numerals whose analysis is our next preoccupation.

5.4 Numerals

These are forms in Baba I having numerical properties generally used to express quantitative notions. They present various morphological shapes depending on whether they are used in counting, as independent pronominal forms or attributive noun modifiers. This structural disparity presented by numerals in the various functions becomes unified as we move to higher digits.

In counting, the following forms are used:

(96)

- | | |
|----------------|-----------------|
| a) mò? 'one' | d) kúá 'four' |
| b) mbá 'two' | e) tè 'five' |
| c) ntí 'three' | f) ntíó?ó 'six' |

As independent pronominal forms, a morpheme yá generally introduces the numerals as shown:

- | | |
|--------------------|--------------------|
| g) yá màrà 'one' | j) yá kpà 'four' |
| h) yá pá 'two' | k) yá tè 'five' |
| i) yá tárá 'three' | l) yá ntíó?ó 'six' |

Finally, numeral forms for noun attribution are as follows:

| | | | |
|----------|---------|-----------|--------|
| m) ntíáx | 'one' | p) kpà | 'four' |
| n) pá | 'two' | q) tè | 'five' |
| o) tár | 'three' | r) ntíóʔó | 'six' |

Looking at the various forms above, it can be noticed that the morphological shapes of the numerals vary with their functions. This is true especially for forms denoting the first four digits in Baba I. When numerals above four are used, whether in counting, as independent pronominal forms or in the attributive modification of a noun, there is no change in the segmental constitution (cf 96 e, f, k, l, q, and r).

The forms for counting represented in (96 a-d) do not seem to show that they have something in common with similar forms in (96g-i and m-o). Instead of considering them as being derived from a common form with those for independent pronominal and noun attributive forms, it would be more convincing to consider them as completely different morphemes which may have been adopted from other languages. This is supported by the fact that these forms are also attested in many unrelated languages of the grassfield region, and represent the same numerals for counting. This argument is made more valid by Welmers' (1973: 289) observation that straightforward decimal systems without extensive adoption of words for numerals from other languages is not common in Africa.

From our observation, we can establish a link between the numeral forms for independent pronominals and their attributive counterparts. This is especially true for forms representing digits from 'two' onward in the two functional groupings. The only morphological deviant form is the morpheme denoting 'three' in the two groups. This disparity can be accounted for by assuming that two forms which are cognate are used as independent and noun attributive numerals respectively. Instead of looking for rule to derive one from the other, we simply consider that taró is an independent numeral form while tar is an attributive adjectival form as shown below:

(97)

- a) yó tǎró `three'
b) tǎr ñmè `three persons'

These constructions show that when the numeral for 'three' is used as an independent pronominal, the form tǎró is used, but when expressing numerical attribution with a noun in immediate sequence, the final schwa is deleted. With this demonstration, we could be justified to say that the forms for numerals representing independent pronominal and numerical attribution are closely related in Baba I, except for the morpheme representing 'one' in both cases.

Formal disparity between numerical forms for the different functions reduces to the barest minimum as we consider numerals from 'ten' upwards.

Expressions for 'eleven' through 'nineteen' are combinations of either the independent or attributive numerical forms with another morpheme, /ntfǒp/. The distinction here is at the level of linear ordering of these morphemes as well as slight segmental differences as shown below:

(98) a)

- | | |
|--|------------|
| i) ntfǒp yó màxà above ten by one | 'eleven' |
| ii) ntfǒp yó pá above ten by two | 'twelve' |
| iii) ntfǒp yó tǎró above ten by three | 'thirteen' |
| iv) ntfǒp yó fómó above ten by eight | 'eighteen' |
| v) ntfǒp yó šipó above ten by nine | 'nineteen' |
| vi) pǎngóm two tens | 'twenty' |

b)

- | | |
|---|-----------------|
| i) ntfáx ntfǒp ndáj one above ten cups | 'eleven cups' |
| ii) pá ntfǒp ndáj two above ten cups | 'twelve cups' |
| iii) tǎr ntfǒp ndáj three above ten cups | 'thirteen cups' |

- | | |
|----------------------------|-----------------|
| iv) <i>ʃipó ntʃòp ndán</i> | 'nineteen cups' |
| <i>nine above ten cups</i> | |
| v) <i>páŋgám ndán</i> | 'twenty cups' |
| <i>two tens cups</i> | |

The forms in (98a) are used as independent pronominals to refer to a quantity that has already been mentioned, while those in (98b) are used attributively with a noun. The alternation of tone from low to a rising contour on the morpheme *ntʃòp* can be explained by a general principle of associative tone docking process which is well attested in the language (cf TR₁)

As we examine numerals from twenty upwards, we realize that they consist of the plural of 'ten' /*ŋgám*/ and the independent pronominal forms as shown below:

- (99)
- | | |
|----------------------------------|---------------|
| a) <i>pá ŋgám ntʃòp yá màxà</i> | 'twenty one' |
| <i>two tens above by one</i> | |
| b) <i>pá ŋgám ntʃòp yá pá</i> | 'twenty two' |
| <i>two tens above by two</i> | |
| c) <i>pá ŋgám ntʃòp yá ʃipó</i> | 'twenty nine' |
| <i>two tens above by nine</i> | |
| d) <i>tár ŋgám ntʃòp yá màxà</i> | 'thirty one' |
| <i>three tens above by one</i> | |
| e) <i>tár ŋgám ntʃòp yá ʃipó</i> | 'thirty nine' |
| <i>three tens above by nine</i> | |
| f) <i>kpà ŋgám ntʃòp yá màxà</i> | 'forty one' |
| <i>four tens above by one</i> | |

Multiples of 'ten' are expressed by a combination of single digits from 'one' to 'nine' and the plural of 'ten' as shown in (99a, d and f). To express numerical attribution with these forms above, the head noun is placed immediately after the plural of 'ten' as illustrated below:

- (100)
- | | |
|---|---------------------|
| a) <i>pá ŋgám pánŋòp ntʃòp yá màxà</i> | 'twenty-one fowls' |
| <i>two tens fowls above ten by one</i> | |
| b) <i>tár ŋgám pánŋòp ntʃòp yá ʃipó</i> | 'thirty nine fowls' |
| <i>three tens fowls above ten by nine</i> | |
| c) <i>kpà ŋgám pánŋòp ntʃòp yá lé</i> | 'forty five fowls' |
| <i>four tens fowls above ten by five</i> | |

- d) tè ɲám páŋgáp ntjòp yá ntíóʔó 'fifty six fowls'
 five tens fowls above ten by six
- e) fómá ɲám páŋgáp ntjòp yá fómá 'eighty eight fowls'
 eight tens fowls above ten by eight

The above illustration serves as empirical evidence that multiples of 'ten' are made up of numerals from 'one' to 'nine' preceding the plural morpheme for 'ten'. Furthermore, it shows that the noun is always placed immediately after the plural of 'ten' in attributive constructions. In the constructions, páŋgáp denotes 'fowls', indicating that in Baba I, numerals determine their head nouns from the point of view of semantic plurality and singularity.

Hundred and thousand are designated by the morphemes /ɲkí/ and /ɲkám/ respectively. They cannot exist independently without being modified by other numerals, or they themselves may modify nouns. This can be made clearer by the constructions that follow:

(101)

- a) ntíáx ɲkí 'one hundred'
- b) pá ɲkí 'two hundred'
- c) tè ɲkí 'five hundred'
- d) lípó ɲkí 'nine hundred'
- e) ntíáx ɲkám 'one thousand'
- f) pá ɲkám 'two thousand'
- g) kpá ɲkám 'four thousand'
- h) ntíóʔó ɲkám 'six thousand'
- i) ɲkí ɲkám 'one hundred thousand'
- j) lípó ɲkí ɲkám 'nine hundred thousand'

'One hundred' and 'one thousand' can optionally be used without the preceding morpheme /ntíáx/, especially when they precede another morpheme (cf 101 i). In this case, the following morpheme will function like a nominal form. This is why when the forms representing the multiples of 'ten' 'one hundred' and 'one thousand' respectively are used as independent forms; they mostly function like value nouns alluding to sums of money. In this light they freely take possessives as shown in the constructions below:

(102)

- | | |
|-------------------|---------------------------------------|
| a) pá ngóm-à | 'my twenty (francs)' |
| b) tár ngóm-ù | 'your thirty (francs)' |
| c) ntíáx ñkĩ-i | 'his/her/its one hundred (francs)' |
| d) xóm ñkám-à | 'my ten thousand (francs)' |
| e) tè ngóm ñkám-i | 'his/her/its fifty thousand (francs)' |
| f) ñkĩ ñkám-ù | 'your one hundred thousand (francs)' |

If we consider that these forms are actually nouns, then we need to establish their morphological noun classes. We have convincingly demonstrated earlier that morphological noun class affiliation for any noun can be determined by the use of possessive constructions (cf 1.1.3.1). In such a construction, the possessive morphemes, represented here by -i, -a and -u for the singular persons usually bear a low tone when in collocation with morphological noun class I and a high tone for all the remaining classes. Following this line of argument, all our value nouns above are considered as class I nouns by virtue of the tone of their possessive morphemes. Despite the fact that these nouns denote huge sums, they belong to a singular class. A possible explanation is that these huge sums are in effect looked upon as single indivisible entities.

When these forms are used in association with other nouns which are morphologically and semantically plural, they usually function as quantifiers and their nouns are in the plurals as indicated below:

(103)

- | | |
|---------------------------|-------------------------------------|
| a) pá ngóm pónám p-á | 'my twenty animals' |
| b) tè ñkĩ ñ-kán m-á | 'my five hundred spears' |
| c) ñkám pónngóp p-ú | 'your one thousand fowls' |
| d) kpátár ñkĩ pó-ñkí? p-i | 'his/her its seven hundred baskets' |

The following analysis has amply demonstrated that numerals often assume different morphological shape and linear order, depending on the various functions we have enumerated

in our discussion. Those few whose forms cannot be identified as having been derived from the same underlying morphemes with the rest have been considered having been borrowed from other languages.

Right up to this point, we have been concerned with the occurrence of nouns with noun dependent morphemes and at times, some are seen to behave too like nouns. These morphemes combine with nouns following various linear arrangements to form noun phrases. The relationship expressed in such a combination is usually attributive. However, nouns can also be shown to combine with other nouns to produce compound-like noun phrases. These types of phrases may be referred to as associative noun phrases.

5.5 Associative noun phrases

These constructions in Baba I are made exclusively of morphemes that could inherently be considered as nouns. In such a construction, one noun functions as the modifier of the other. This is what Welmers (1973: 281) refers to as nominal association in Bantu languages.

In Baba I, just like in many other Bantu languages, when two or more nouns in a well defined sequence occur in collocation, a variety of semantic information is usually expressed. These varying pieces of information include: material, contents, place of origin and place of use, function, time of use, quantity and even possession as illustrated by the following examples.

(104)

- | | |
|-----------------|----------------------------------|
| a) ndá ndzàŋ | 'house made of bamboo' |
| house bamboo | |
| b) kīŋ gkúí | 'a pot of beans' |
| pot beans | |
| c) ŋmè dzámàn | 'a person from Germany' |
| person German | |
| d) tǎx tsú | 'decoration for the head' (cap) |
| decoration head | |
| e) ntóm ndáp | 'support for the house' (pillar) |
| support house | |

- f) pé sàʔlǎ 'fufu for the afternoon' (lunch)
 fufu afternoon
- g) ŋkám fiàx 'a thousand of jobs'
 thousand job
- h) mǎmyí fùè 'fon's dog'
 dog fon

The constructions illustrate noun collocation that occurs in the order $N_1 + N_2$. In this type of a structure, the following noun gives more specification to the preceding one in the sequence. We can therefore talk of post modification when referring to noun + noun association.

Some tonal variations are however observed; the N_1 nouns which generally bear level tones in citation form are seen here most often bearing contour tones (cf 104a, b, d, g, h) above. We have established in previous sections that in an associative construction, there is a floating tonal morpheme marking association (cf 4.1.1). In the present case, this tonal morpheme is determined by the morphological noun class of N_1 nouns. This floating tone is low for class 1 nouns and high for the rest of the classes as earlier remarked. In associative constructions, this tone, following a general principle observed in Baba I, usually docks to the left and affects the tone of the final syllable of N_1 noun in such an association. In the case where the tonal associative marker is identical with the tone on the final syllable of the preceding noun, no effect is observed. This could be well illustrated by the derivations below:

(105)

- a) Cl₁ mǎní ŋká/ [mǎní ŋká] 'tapping knife'
 knife raffia palm
- b) Cl₂ /pǎŋàm pǎmvi/ [pǎŋàm pǎmvi] 'animals of dogs'
 animals dogs
- c) Cl₃ /tǎŋlǎ ŋké/ [tǎŋlǎ ŋké] 'monkey's ear'
 ear monkey
- d) Cl₅ /fiàx mǎsɪŋ/ [fiàx mǎsɪŋ] 'bird's job'
 job bird

e) Cl₆ /ndzòx té/ - [ndzòx té] 'palm wine'
 wine palm

The class specification is only for N₁ nouns to illustrate that they condition the nature of the associative tone marker which, as earlier said, is low for class 1 and high for the rest of the classes. This assumption has in a straightforward manner accounted for the surface forms of our derivations.

We have so far presented and analysed the various aspects of noun modification that could possibly result in the formation of a noun phrase in Baba I. Apart from forms like ordinals and to a certain extent numerals which premodify their head nouns, the rest of the noun related forms in this language have been shown to generally postmodify their head nouns. In addition, some of the morphemes like demonstratives can invariably postmodify and premodify their head nouns. In the latter case, some grammatical or syntactic information like focussing is expressed, since this reversal of word order is for emphatic purposes in such a context.

It has also been demonstrated that when modifying elements concatenate with their modified heads, some tonal and segmental alternations are manifested. These alternations have well been accounted for by means of morphophonological and tonal statements that are in accordance with general principles observed in the language.

The order of occurrence of the various noun modifying elements discussed above are summarized in the table below. This will in a global manner present a general view of the notion of post and premodification in this language.

Fig 26: position of noun-modifying elements in Baba I

| Noun modifying elements | Premodification | Postmodification |
|---------------------------------|------------------------|-------------------------|
| Interrogative determiners | + | + |
| Demonstrative determiners | + | + |
| Singular possessive determiners | - | + |
| Plural possessive determiners | + | + |
| Adjectivals | + | + |
| Non-derived adjectives | - | + |
| Ordinals | + | - |
| Numerals | + | + |
| Nouns as modifiers | - | + |

The preceding analysis on the noun phrase has clearly determined what constitutes this constituent in Baba 1. Accordingly, it has ended up with a concise summary of the various positions the internal constitutive elements within the noun phrase take as they co-occur with their head noun. In order not to treat this constituent as an isolated entity in the language, it will be interesting to examine its behaviour as it co-occurs with other constituents in the information building process. The varying positions often assumed by this constituent when it occurs in a complex syntactic structure will be construed in terms of movement. This is what will be the principal object of discussion in the following chapter.

CHAPTER SIX

6.0 MOVEMENT

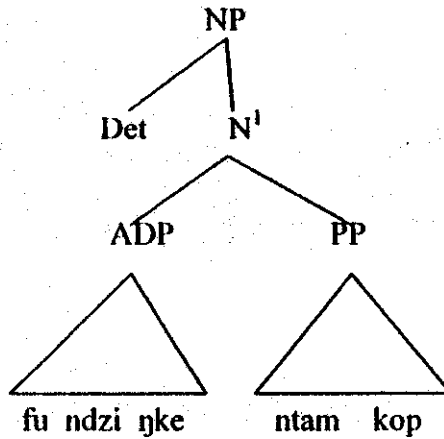
According to linguistic theories there are at least two levels of representation for non-canonical sentences: the D-structure and the S-structure. The D-structure is akin to the basic pattern of the linear arrangement of subject verb and object in any given natural language, and the S-structure refers to the structure derived once certain sentence constituents such as NP, VP, PP, etc are displaced from their canonical positions. The syntactic operations that dislodge these constituents from their original location and reorder them within the same structure are usually referred to as movement operations or transformation (Chomsky 1981, 1995; Radford 1988; Koopman 1994; Kayne 1994) among others. This general transformation is often known in recent literature as 'move alpha' and it replaces the large number of structure and language specific transformations that existed in earlier theoretical accounts of non-canonical sentences.

6.1 Introduction

This chapter has as objective to determine constituents that are considered noun phrase. We will then go further to examine the configurational distribution of these units within larger structures as well as the internal distribution of the individual elements that make up nominal structural projections. The observed variation in the position occupied by the constituents or their satellite element at both d-structure and s-structure will be accounted for in terms of movement operations. We have decided to examine exclusively movement of the noun phrase because we barely want to show that Baba 1 is a [+ movement] language, although the noun phrase (NP) is only one of the many constituents that exhibit movement. This consideration will however situate our work within current trends in linguistic research which look at the reordering of elements within syntactic structure in terms of movement. Moreover, our choice of the noun phrase is motivated by the fact that we imagine it to be the basic constituent around which the other constituents like verb phrase, adjective phrase prepositional phrase among others, all conglomerate in many languages in general and in Baba 1 in particular to give well formed acceptable utterances. This in effect shows the important position occupied by this constituent in information structure. The central position of NP in any syntactic string can be illustrated by this Baba 1 expression which in turn is represented on the syntactic tree below:

(106)

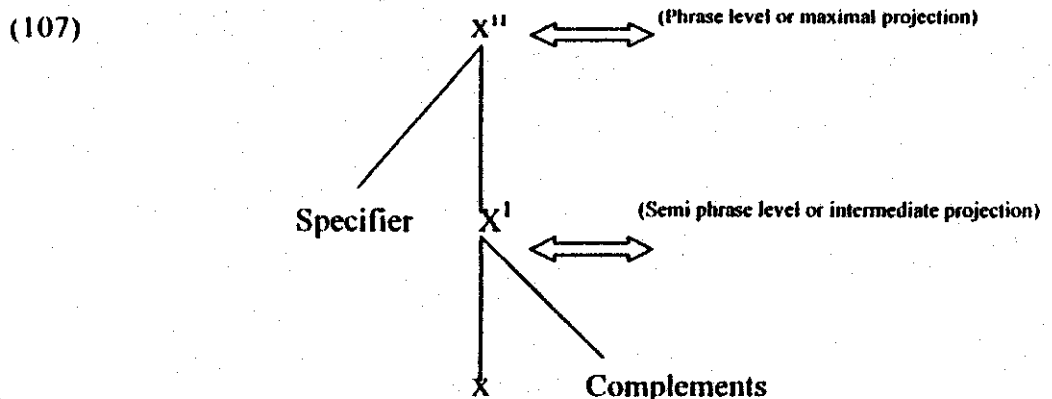
fu ndzi nke ntam kop
dead old monkey in forest → the dead old monkey in the forest.



This simplified representation above shows us how the adjectival phrase (ADP) and the prepositional phrase (PP) are all formed from the node of the noun phrase (NP) which is the highest projection in the hierarchical level of this syntactic tree following the framework of the x-bar syntactic theory.

6.1.1 X-Bar theory.

This theory calls for two levels of head projection where the head is the part of the linguistic unit or phrase which gives this unit its essential characteristic. This head is first of all projected by complements to a first order projection called X-bar. This X-bar is further projected by specifiers to a second order projection known as X-double bar. This explanation can be made clearer using a schematic representation given below:

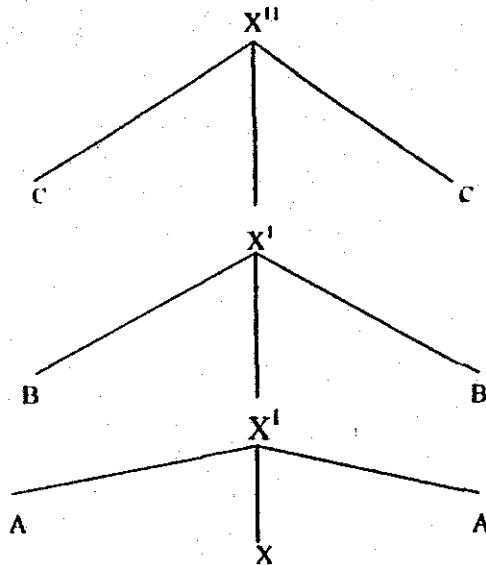


The X-bar schema above is appropriate for English and other related languages with word phrasal order similar to that of English. This would not exactly fit into the Baba 1 phrase

structure whose word phrasal order slightly differs from that of English. Consequently, we will use the extended schema proposed by Haegeman (1991) since this covers all types of word-order languages.

This extended schema is represented in the diagram below:

(108)



On the diagram above there are three hierarchical levels represented A, B, C on either side of X. The symbol x stands for a variable that could be over a noun, verb, adjective, preposition, adverb etc. The label A represents complements which are used to project the word categories cited above to a higher level or phrasal categories x-bar (X^1) just like B stands for adjuncts that project word categories to phrasal categories. The label C represents specifier that projects x-bar (X^1) to x-double bar (X^{11}) which is referred to as maximal projection.

In English, demonstratives precede adjectives which in turn precede the noun, but in Baba I it is generally the reverse as shown by this adjectival phrase.

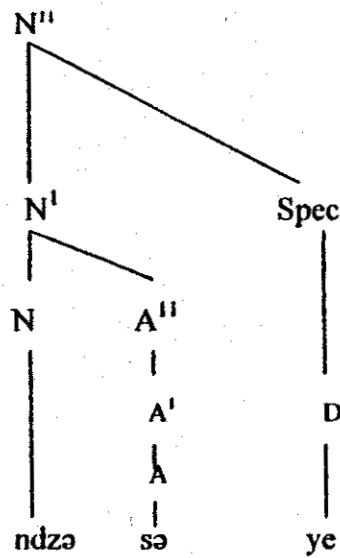
(109)

ndzə sə ye

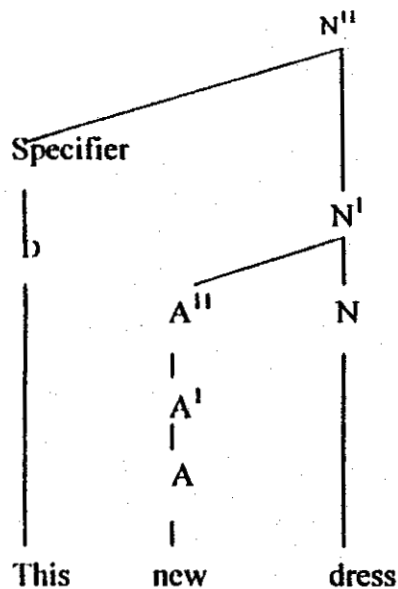
dress new this → this new dress

This Baba I phrase as well as its English equivalence can both be successfully represented on an X-bar schema as shown below in (109) and (110), thanks to the extended schema of Haegeman already noted above.

a) Baba I: ndzə sə ye.



b) English: this new dress.



Having examined the functioning of X-bar theory and its application, we would now use this phenomenon to analyse and schematise NP movement in Baba I. It is important to note here that the X-bar system can be extended to clausal structures. According to Abney (1987) and Chomsky (1993, 1994) among others, this extension will permit functional categories like I (INFL) and C (COMP) to be considered as values of X. Consequently S is reinterpreted as a projection of (INFL); S¹ is reinterpreted as a projection of (COMP). Analogously, the

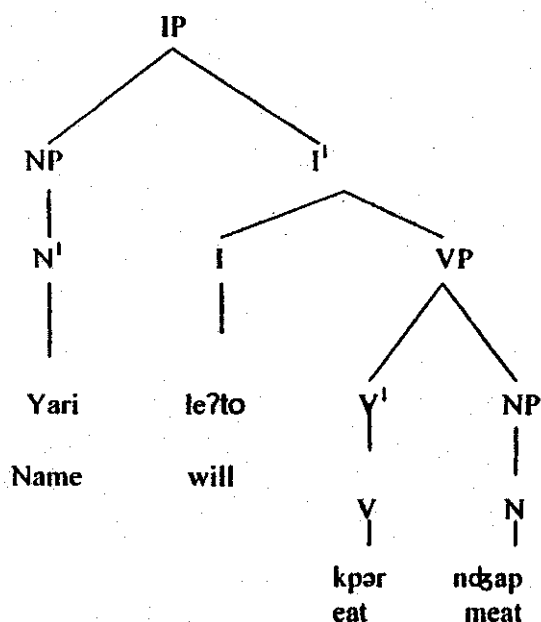
functional category D (Determiner) can be incorporated into the X-bar system such that NP is reinterpreted as part of a DP. It is within this reasoning that our analysis of Baba 1 NP-movement will be based, though we will limit our analysis to the movement of NP as an entity.

6.2 Sentence word order in Baba 1

In Baba 1, just like in English, the basic sentential word order which is unmarked is SVO, though this order can be altered when certain transformations like, clefting and related focus constructions come to play as will be illustrated in our on-going analysis. At this point a declarative sentence which shows the canonical position of individual constituents in Baba 1 in (110) and its representation on a tree diagram is given below:

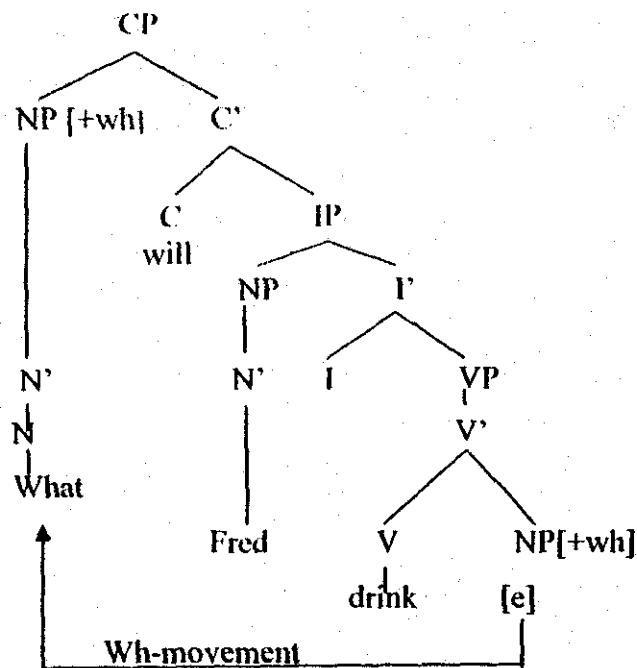
(110) Yari léʔtó kpər ndɔ̀p

Name F1 eat meat. → Yari will eat meat.



Looking at the tree structure above, we see that a simple declarative sentence in Baba 1 has a structure similar to that of English, beginning with a subject and ending with an object, which in most cases are NPs. However, when we examine more complex structures like questions and relative constructions in the two languages, they will be seen to vary considerably. Though our objective is not to carry out a contrastive analysis of the structures in the said languages, we will all the same look at WH-movement in Baba 1. This is motivated by the fact that Thompson et al (1996) hold that wh-movement is generally subsumed under NP movement since it moves

an NP with [+wh] feature, when mapping representation from d-structure onto s-structure as illustrated in the tree in (111) below:



The structure above illustrates the derivation of the question “What will Fred drink?”, and this serves as proof that wh-question words are NPs. At d-structure the NP ‘what’ is the object of the verb ‘drink’ and is inside IP occupying the direct object argument position. But at s-structure it is extracted from its initial position and moved to the specifier of CP which is outside IP, thereby leaving a trace marked [e] at its original site as indicated by the direction of the arrow line.

6.3 WH-Movement.

This is a transformation that usually involves the movement within a wh-phrase. This type of movement always moves an element to an A-bar position, particularly to the specifier position of CP especially in English and related languages as shown above. Languages differ in whether this movement is overt or not. According to Chomsky (1992), Lasnik & Saito (1991) among others, this movement is overt in English and appears to be covert in Chinese and may be covert or overt in French. This means that not only does the nature of a wh-element differ from one language to the other; the type of movement such an element or constituent undergoes as well as their landing sites also vary with the language. Consequently, we will have to examine the nature of wh-element in Baba 1 and the type of movement associated with it as well as its landing site.

6.3.1 The nature of wh-element in Baba 1.

The general view is that wh-words in English are used to ask questions whose answers require giving specific pieces of information that the speaker wants to know. Generally these words start with wh- except 'how', although it manifests the same syntactic behaviour like the rest of the members of this group. In Baba 1 just like in other languages there are a number of forms which correspond to these wh-words in English as enumerated below:

(112)

- i) wô who
- ii) kô what
- iii) yà where
- iv) ndákô when
- v) mbéʔé why
- vi) yê which
- vii) lâ how
- viii) yásóyó how many

These forms in this language are question markers as evident in their English equivalences. Unlike in English where these question markers generally occur in question-initial position at s-structure, in Baba 1, they appear in question final position and may be moved to initial position through such syntactic operations like clefting, relativisation and other forms of focus constructions as will be illustrated below.

6.3.2 Wh-movement in Baba 1.

As presented above, there are about eight wh-question words in Baba 1 which differ from their English counterparts significantly in form. As already indicated, they are usually found in question final position in this language, that is, inside IP in post verbal position and practically can readily be moved to pre-IP position. Unlike in English, the movement of wh-element in Baba 1 is optional and if it fails to move, the construction will still have a question interpretation. This is what usually obtains in most Bantu languages as could be seen in Biloa (1991) in his analysis of Tuki, a Bantu language. Baba 1 unlike Tuki does not have a focus marking particle and focalization is achieved through clefting and related constructions. Though our objective is not to analyze focus construction in this language, we are concerned with all types of constructions that will illustrate NP-movement.

6.3.2.1 Cleft sentences in Baba 1.

Generally, clefting involves placing a sequence of words within a structure beginning with 'It is/was' followed by the syntactic constituent one wants to bring into communicative prominence. Obviously clefting is a syntactic device whose function is related to highlighting certain pieces of information conveyed by the utterance. A cleft sentence is therefore a type of focus construction and it is used as a normal device for focusing mostly in languages where focus is not marked by prosodic prominence. This is exactly the type of form Baba 1 employs in order to bring into focus its argument structures. It is however important to show here that, as earlier noted, in this language wh-question words usually occur in post verbal positions in questions where they act as verbal objects or complements as presented below:

(113)

- i) Yèwó kə ɲax wə?
Yewo P2 kill who
'Who did Yewo kill?'
- ii) Wù kpɔr kə?
You 2sg eat what
'What are you eating?'
- iii) Sama ɣé yà?
Sama go where
'Where is Sama going to?'
- vi) Yari fá yê pàm mbò mə?
Yari give which bag to me
'Which bag is Yari giving me?'
- v) Sundze léʔtò tɔ ndəkə?
Sundze will come when
'When will Sundze come?'

These examples above clearly show that the unmarked position of wh-question words in Baba 1 is post verbal and within IP. In cleft sentences they are moved out of their original position and placed in pre-IP position as illustrated in the forms below where the square bracketed material in each construction represents an inflectional phrase (IP). Typically, the cleft sentences below highlight the constituents in the 'it-clause'.

(114)

- i) à mbó wó yəlá [Yewo kə ɲax là ?]
It was who that Yewo P2 kill emph.
'Who did Yewo kill?'

- ii) à pó kó yólá [wù kpèr lá?]
It is what that you 2sg eat emph
'What are you eating?'
- iii) à pó yá [yólá Sama xé lá?]
It is where that Sama is going
'Where is Sama going to?'
- iv) à pó yê pàm yólá [Yari fá mbò wù lá?]
It is which bag that Yari give to you 2sg emph
'Which bag is Yari giving you?'
- v) à pó ndókó yólá [Sundzə lé? tó lá]
It is when that Sundzə will come emph.
'When will Sundzə come?'

Wh-movement in Baba I shown in the data above exhibits similar traits as would be noticed in the movement of verbal direct object as will be explained below.

6.3.2.1.1 Movement of VP-internal NP

Verb phrase internal NPs refer to those arguments Spencer (1991) holds must be realized within the maximal projection of a VP. The movement of wh-question words in this language manifests the same characteristics as the movement of VP-internal NPs or verbal objects. This is because, as earlier indicated, they occupy the same syntactic position serving as verbal objects or complements. The only difference is that wh-question words are attested in interrogative structures while non-wh-NPs serve as VP-internal arguments in declarative structures. The latter also undergo movement in cleft sentences as illustrated below:

(115)

Non- cleft declarative sentences

- i) Sama kò gbär tíí
Sama P2 cut tree
Sama cut a tree.

- ii) Yewo kpór ndzàp
Yewo eat meat
Yewo is eating meat

Cleft declarative sentences.

- à pó tíí yólá Sama kò gbär lá
It is tree that Sama P2 cut emph.
It is a tree that Sama cut.

- à pó ndzàp yólá Yewo kpór lá
It is meat that Yewo eat emph.
It is meat that Yewo is eating.

iii) Wù lǎp mómví
 You 2sg beat dog
 You are beating a dog.

à pǎ mómví yǎlá wù lǎp lá
 It is dog that you beat emph.
 It is a dog which you are beating.

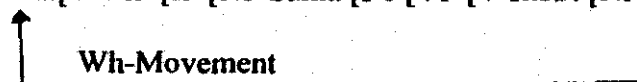
iv) Sundzə kò tǎm ɲmè
 Sundzə P2 shoot person
 Sundzə shot a person.

à pǎ ɲmè yǎlá Sundzə kò tǎm lá
 It is person that Sundzə P2shoot emph
 It is a person who Sundzə shot.

Looking at the forms above, we notice that cleft construction in this language involves the use of a copula à pǎ 'it is' at sentence initial position before the NP that is to be focussed. This focussed NP is in turn followed by an obligatory complementizer yǎlá, which in English could variably be translated as 'that, which, who, whose, or whom'. Another important characteristic of such a construction is that it ends with an emphatic particle lá. All the sentences above dealing with cleft construction have to do with the extraction of an NP within a VP which is taken out of IP and placed in a focus position at the beginning of the entire construction. This is a type of movement which Thompson et al (1997) call object cleft. Such a movement occurs when an NP is extracted from direct object position and the moved constituent lands in the specifier of CP [Spec, CP] and a chain is formed between the trace site and the moved constituent. Such a process is similar to what Grundel (1983) quoted in Drubig (2000:24) refers to as focus topicalisation. This can be illustrated using wh-movement in English as shown in 116 below:

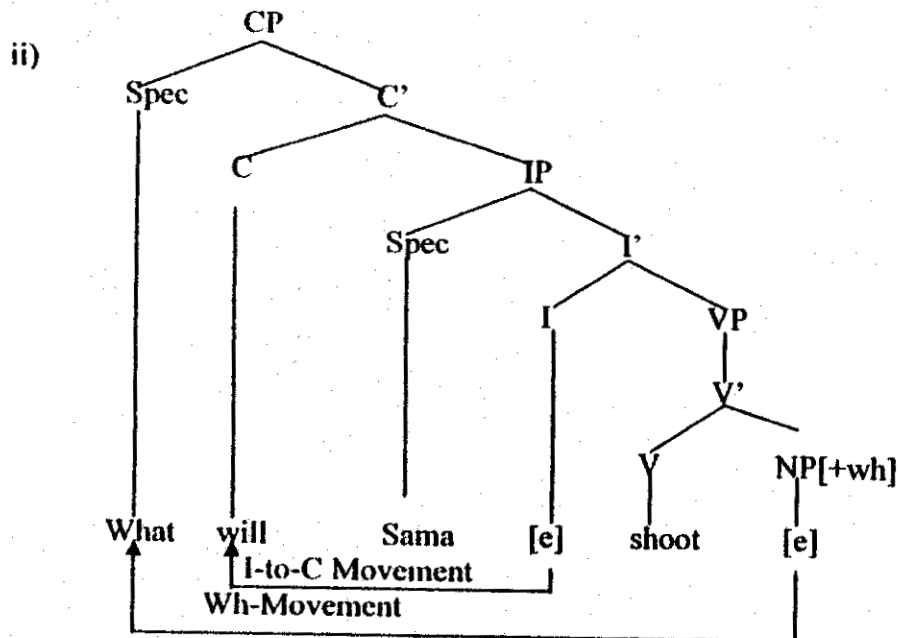
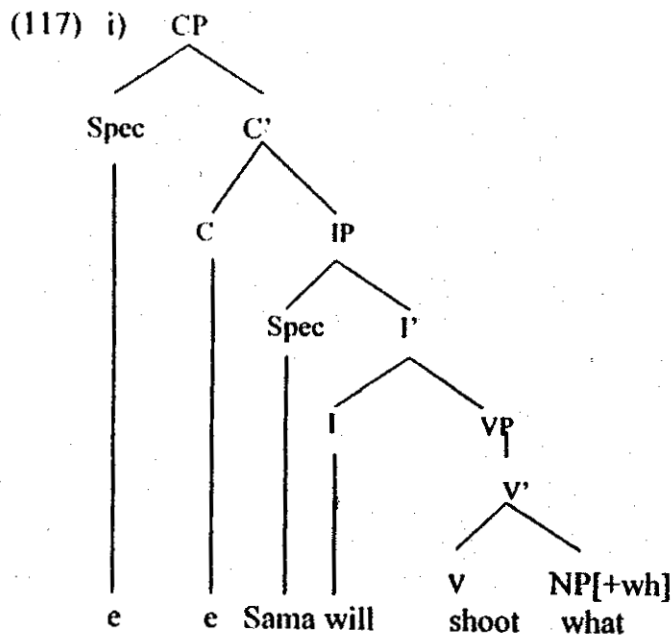
(116) i) [Cpe [IP [NPSama [I' will [VP [Vshoot [NP what]]]]]]

ii) [CP, specWhat[C'will [IP [NP Sama [I'e [VP [V shoot [NPe]]]]]]]]



What we notice in the two bracketed sentences above represented on a tree in 117 below is that sentence 117 (ii) is derived from the abstract d-structure in 117 (i) through the movement of the auxiliary 'will' which we have termed I-to- C movement, and the NP with wh-features 'what'. These two constituents have moved to different sites indicated by the arrow lines. It should however be observed that auxiliary movement does not concern us in this study. This is because it does not fall within the scope of our proposed study and moreover, auxiliary

movement does not operate in Baba 1, our principal language of concern. We can however represent this bracketed sentence on a tree diagram so that various landing sites of the moved constituents can be clearly seen as the s-structure in 117(ii) is derived from the d-structure in 117(i) as already indicated.



The structural representation above has CP as its highest functional projection and this is adequate only for the analysis of English wh-movement. Conversely in Baba 1, wh-movement

is achieved through clefting as earlier mentioned or through what Drubig (2003) calls cleft-based focus construction. Consequently the structural configuration of wh-elements in Baba 1 is different from their English counterparts and the structural frame used for their analysis is bound to vary. From the English analysis we notice that the analytical frame is:

[XP [IP]]

In this frame XP stands for the focussed constituent which precedes the inflectional phrase (IP). In Baba 1 on the other hand, the focussed constituent is both preceded by a copula a pə 'it is' and followed by an obligatory complementizer yəla, which is variously translated in English as explained in (6.3.2.1.1) above. In addition, there is an emphatic particle la introduced within the IP in a post VP position. It should however be noted that the emphatic particle la does not constitute the focus of our analysis here and we just have to simply postulate a slot for it at the end of IP. For the current frame to incorporate data from Baba 1 there is need for it to be modified. Consequently we propose a frame for Baba 1 wh-movement as represented below:

[Copula [XP [COMP [IP emph]]]]

For us to test and confirm the validity of our proposed analytical frame, we will use it to represent this Baba 1 wh-cleft construction below:

(118)

à mbá wó yá lá Yewo kə ɲáx lá?

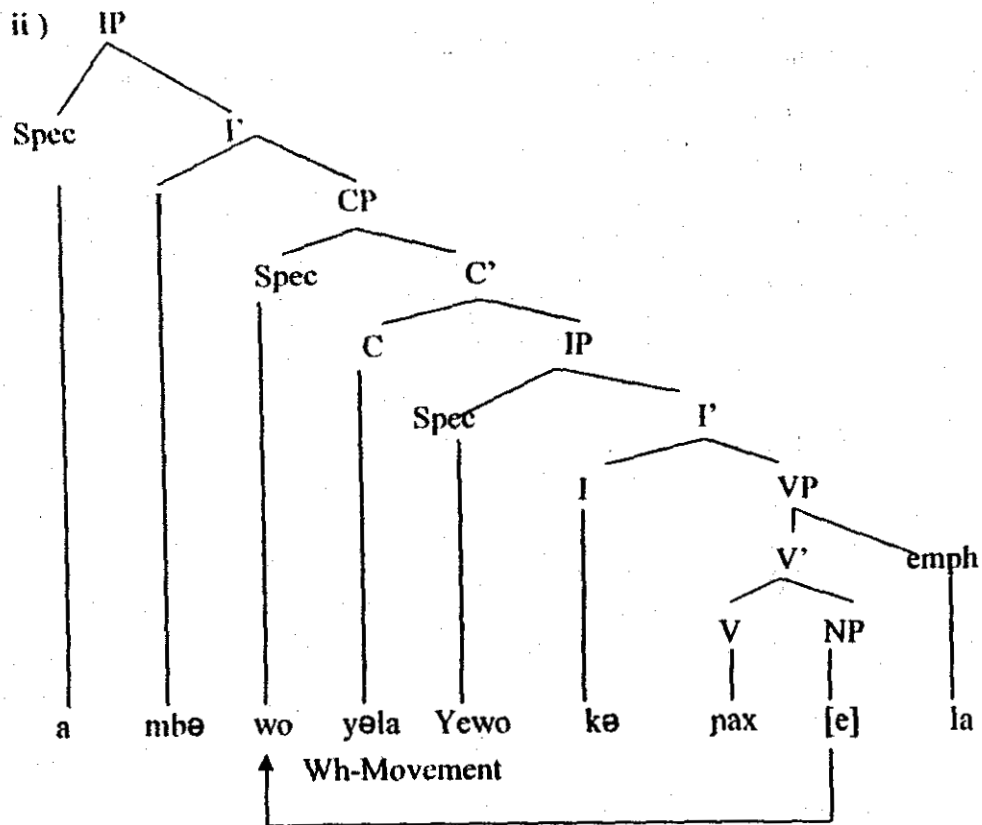
It was who that Yewo P2 kill emph.

'Who did Yewo kill?'

This sentence above can be bracketed as in 119(i) and subsequently represented on a tree diagram in 119(ii) below:

(119)

i) [IPà [I mbá [CP wó[C yá lá [IPYewo [I kə [VP[V ɲáx [e] [emp lá]]]]]]]]]]



Our proposed syntactic frame has aptly taken into account Baba 1 data with respect to wh-movement as well as VP-internal and external arguments movement. However, up to this level the on-going analysis has concentrated basically on wh-movement as well as the movement of non-wh VP-internal arguments (cf 6.3.2.1.1). In order to exhaustively examine NP movement in this language, there is need to examine all kinds of possible constructions where an NP is believed to have been moved either overtly or covertly. Closely related to clefting is a type of construction referred to in the literature as left dislocation (Smith 1995, Rizzi 1997). This form of information structure is also attested in Baba 1 as discussed below.

6.3.2.1.2 Left dislocation.

This is another syntactic strategy used to highlight a constituent with the aim of bringing it into communicative prominence. Here a constituent is removed from its initial position within a sentence and placed in front of the sentence. However, this moved constituent is associated with some kind of pronoun occupying its supposedly extracted site as illustrated in these English sentences (i) and (ii) below:

(120)

- i) I have already read **that book**.

- ii) **That book, I have already read it.**

In sentence 120(i) 'that book' is the direct object of the verb 'read' and in sentence (ii) this constituent has been fronted and its original position is occupied by the pronoun 'it'. Smith (1995) refers to this type of construction as 'hanging topic left dislocation' and feels that no overt movement is involved in such a situation. Evidently, this is a case of covert movement in English. Similar constructions of this nature are attested in Baba 1 as illustrated below where the highlighted verbal objects in 121(i), (ii) and (iii) are fronted in 121(iv), (v) and (vi):

(121)

- i) Sundzə kò kàŋ yəŋgúf yè
Sundzə P2 love woman this
'Sundzə loved this woman'
- ii) Yewo léʔtó lóp mámví yá
Yewo F1 beat dog that
'Yewo wil beat that dog'
- iii) Fred kò fàxtó yəmbíáŋá yé
Fred P2 greet man this.
'Fred greeted this man.'
- iv) yəŋgúf yè, Sundzə kò kàŋ í.
Woman this, Sundzə P2 love her.
'This woman, Sundzə loved her'
- v) mámví yá, Yewo léʔ lób í.
Dog that Yewo F1 beat it
'That dog, Yewo will beat it'
- vi) yəmbíáŋá yé, Fred kò fàxtó í
Man this Fred P2 greet him
'This man, Fred greeted him'

It should be noted that Baba 1 in its use of pronouns does not make a distinction between masculine and feminine as in (iv) and (vi) and human and non-human as in (v) and (vi). A distinction is made rather between animate and inanimate references. See (4.5.1.2.1 and 4.5. 2) for an exhaustive analysis of pronouns in this language.

However when this type of construction refers to an inanimate entity as its verbal object, a co-referential pronoun is not used when this object is fronted as illustrated below:

(122)

- i) **Yembe lé?tó sé ndán yá**
 Yembe F1 break cup that
 'Yembe will break that cup'
- ii) **Fùè kò fě nkúm yé**
 Chief P2 lock box this
 'The chief locked this box'
- iii) **ndán yá, Yembe lé?tó sé**
 Cup that Yembe F1 break
 'That cup, Yembe will break it'
- iv) **nkúm yé, fùè kò fě**
 Box this chief P2 lock
 'This box, the chief locked it.'

Empirical evidence from the data presented above shows that with respect to left dislocation in Baba 1, there is an obligatory co-referential pronoun that occupies the site of the fronted verbal object. This only happens if the fronted constituent refers to an animate entity. When the fronted constituent has an inanimate reference, the vacated site is empty. Unlike in English whereby the vacated site is always filled by a pronoun in all cases in such constructions, Baba 1 shows a type of restrictive usage of the co-referential pronoun in such a context as explained above. Consequently we can observe that Baba 1 manifests both overt and covert movement whereas English exhibits only covert movement with respect to left dislocation.

It is however important to note here that the fronted verbal objects in Baba 1 in such constructions usually take an obligatory demonstrative determiner, one among a class of words Van de Weijer (2004) refers to as definite determiners. The use of this word by Baba 1 is probably to make the reference of the NP definite since this language lacks the definite article. The absence of demonstratives in such constructions above will lead to ungrammaticality as illustrated by the highlighted NPs in 123(i),(ii)and(iii)which are fronted in 123(iv),(v) and (vi) below:

(123)

- i) Yembe lé? sé ndáŋ
Yembe F1 break cup
'Yembe will break a cup'

- ii) Yewo lé? lóp mómví
Yewo F1 beat dog
'Yewo wil beat a dog'

- iii) Sundzə kə kəŋ yəŋgúí
Sundzə P2 love woman
'Sundzə loved a woman'

- iv) * ndáŋ Yembe lé?tó sé
Cup Yembe F1 break
?? 'A cup Yembe will break'

- v) * mómví Yewo lé? lóp
Dog Yewo F1 beat
?? 'A dog Yewo will beat'

- vi) * yəŋgúí, Sundzə kə kəŋ
Woman Sundzə P2 love
?? 'A woman Sundzə loved'

Another closely related construction where Baba 1 exhibits covert movement concerns the fronting of clausal subjects. Whenever a verbal subject is fronted, the vacated site is occupied by what Chomsky (1982) calls a resumptive pronoun. This is true for both animate and inanimate subjects alike as will be examined below.

6.3.2.1.3 Movement of VP-external NP.

As mentioned above, this involves the movement of a clausal subject, usually the subject of the matrix clause out of its normal site to a higher position. It is similar to what

Thompson et al (1997:4) term subject- raising construction. These authors claim that in this type of sentence, movement is from the subject position of a sentential complement to subject position of the matrix sentence. Verb-external NP movement in Baba 1 and subject-raising construction in English are similar in that they both involve the movement of an NP constituent which originally occupies a subject position. The data in 124(i) and (ii) illustrate subject raising in English:

(124)

- i) [- seems [the biker to have lifted the student]
- ii) [The biker seems | - to have lifted the student]]

The space preceding the verb 'seems' in (i) indicates the subject position which is empty at d-structure, and it is subsequently filled at s-structure following the movement of the subject NP 'the biker'. The d-structure in (i) and the derivation of its s-structure in (ii) will be compared with the Baba 1 NP subject movement in (iii) and (iv) below:

iii) Yari kò kpór ndzàp.

Yari P2 eat meat

'Yari ate the meat'

iv) à mbó Yari yólá yí kò kpór ndzàp lá

It was Yari that he/she P2 eat meat emph.

'It was Yari who ate the meat'

It is evident that the constructions in 124 (i)-(iv) above all involve the overt movement of subject NP as indicated earlier. The difference is that in (i) and (ii) movement occurs because the infinitive verb in the sentential complement clause cannot assign nominative case to the subject position, meanwhile a subject is required in the matrix sentence in all English sentences. The verb 'seem' is one of what Chomsky (1981) calls raising verbs in English which do not have external arguments in their representation, consequently their matrix subject position is vacant.

Conversely, the sentences in 124 (iii) and (iv) are well formed in Baba 1 and movement is triggered by the fact that the subject in (iii) needs to acquire focus feature in the position in (iv) which is usually obtained in Baba 1 and related languages through fronting.

When we look at the movement of NP object and NP subject in Baba 1 cleft constructions, we notice that when the former moves, a trace is left at the extraction site unlike

movement of the latter which leaves a trace which is subsequently filled by a co-referential pronoun. This is illustrated in the sentences below:

(125)

i) Yari kò kpór ndzàp

Yari P2 eat meat

'Yari ate the meat'

ii) [IP à mbó [CP ndzàp yólá [IPYari [VP kò [V kpór [e] lá]]]]

It was meat that Yari P2 eat. emph

'It was meat that Yari ate'

iii) [IP à mbó [CP Yari yólá [IP yi [VP kò [kpór [NP ndzàp [lá]]]]]]

It was Yari that he/she P2 eat meat emph

'It was Yari who ate meat'

It should be noted here that when the moved subject refers to an animate entity, the pronoun takes a different form from that which it takes when the reference is inanimate as shown below:

(126)

iv) tǫrò kò ġim ñmè

Trap P2 catch person

'A trap caught a person'

v) [IP à mbó [CP tǫrò yólá [IP á [VPkò ġim[NP ñmè lá]]]]]

Considering the forms in (ii) and (iii) above, we notice that when an object moves, its trace remains without any phonetic content as indicated by the square bracketed [e] in (ii). Contrary to the object, when a subject moves, its trace has a phonetic content, a pronoun having nominative case as the moved subject. A co-referential relation is created between the supposedly moved animate subject Yari and its antecedent 'yi' in (iii) as well as the inanimate subject tǫrò and its co-referential pronoun a. This can be explained by Chomsky's (1981) extended projection principle (EPP) which requires that clauses have subjects. The occurrence of the nominative pronoun yi in the supposedly extracted site of the focused subject Yari in (iii)

and a in (v) is an attempt to obviate the violation of EPP as explained above. If this principle is violated, we will have the ungrammatical form in (iii) repeated below as (vi) and (v) repeated as (vii) below:

(127)

vi)* [IP à mbó [CP Yari yólá [IP [e] [VP kò [kpór [NP ndzàp [lá]]]]]]]]

It was Yari that P2 eat meat emph

'It was Yari that ate the meat'

vii) * [IP à mbó [CP tʃòrò yólá [IP [e] [VPkò ġim [NP ñmè lá]]]]]]

It was trap that P2 catch person emph

'It was a trap that caught a person'

Judging from the translated version of the Baba 1 ungrammatical constructions in (vi) and (vii), we realize that they are well formed in English but not in Baba 1.

The English version of the Baba 1 cleft constructions looks like relativized constructions. Consequently, it is important for us to examine relative constructions in Baba 1 so as to find out whether they differ from clefting.

6.3.2.1.4 Relativization

This is a process by which a relative clause is derived from an underlying non- relative clause. A relative clause is one introduced by a relative pronoun and which modifies its NP antecedent. In English, relative pronouns include *who*, *which*, *whom* and *whose* which are usually used to bring together two or more ideas within a single sentence as in the sentences below:

(128)

- i) The child who wrote this letter is a liar. (subject relative clause)
- ii) She ate a plaintain which was raw. (direct object relative clause)
- iii) I delivered the message to the man whom I met. (indirect object relative clause)
- iv) The dog whose tail was cut is ill. (genitive relative clause)

Considering these sentences, we realise that relative pronouns in English are *wh*-elements. In Baba 1 we have this grammatical item yóla which is a relative marker in relative constructions and an obligatory complementizer in cleft constructions (cf 6.3.2.1&6.3.2.1.2). The crucial difference between these constructions is basically structural in terms of the

elements which precede and follow this grammatical item in such constructions. In cleft construction the highest functional projection is an IP which precedes the CP that hosts the grammatical morpheme yála. Conversely in relative constructions, the highest projection is the CP whose C node dominates our yála as illustrated in this bracketed relative construction in (ii) below:

(129)

- i) yǎngǔí yǎlá yí kǎ tó gǎ lá kú mǎ
 Woman who she P2 come here emph die asp
 ‘The woman who came here has died’.
- ii) [CP yǎngǔí yǎlá [IP yí kǎ tó gǎ lá kú mǎ]]

We have so far shown that movement occurs in Baba 1 and this has successfully been illustrated using the NP constituent. It has been illustrated that this movement is achieved through different types of constructions using the particle yála, and all these can be analysed using our proposed syntactic frame for Baba 1. Accordingly, we have come out with the conclusion that these constructions in which the said particle occurs are closely related but with subtle shades of differences in terms of hierarchical structural configuration within each given type of construction. This ties with Thwala’s (2004) observation that wh-questions, relative clauses and clefts are related in Bantu languages.

Our next target which is the focus of the following section is to look at what constitutes verb morphology in this language

PART III

**VERB
MORPHOLOGY**

CHAPTER SEVEN

7.0. Introduction

This is one of the three chapters that constitute the final part of this dissertation, dealing exclusively with verb morphology. In this part, we will examine the temporal, aspectual, and modal features of Baba I verbs. These elements as enumerated above will cover chapters seven, eight and nine respectively. The temporal features refer to the different tenses that are attested in this language; the aspectual features are those which generally indicate the manner in which a verbal action is experienced; and finally modal features refer to the attitude of the speaker in relation to the action expressed by the verb. The markers of these verb related elements (tense, aspect, and mood) may either be segmentals (consonants and vowels), suprasegmentals (tone in this study) or both of the above as will later be seen in the ongoing analysis.

In order to easily bring out the verb related elements when verbs are used in constructions, it is necessary to determine the basic verb form or what Wiesemann (1985:2) calls the neuter form of the verb. As regards verb bases in Bantu languages, Carrie (1986:53) remarks:

En général, les radicaux du proto-bantou ou bantou commun sont monosyllabiques. Nous avons trouvé ---, comme on en trouve dans bien d'autres langues bantoues, --- des radicaux qui n'apparaissent jamais en forme simple (sans affixes).

In keeping with this observation, Baba I which is evidently a Bantu language, exhibits monosyllabic and bisyllabic verb bases, and some occurring in citation form always with what look like affixes (cf 132 and 133) below:

7.0.1. Verb bases.

a) Monosyllabic verb bases.

This is the least lexical form that a verb in this language can take. Though there are bisyllabic verb bases in this language, the greater majority of verb bases as in Bantu languages have monosyllabic forms as(Carrie 1985:56) observed.

Monosyllabic verb forms in Baba I either bear high or low tones as shown

below:

(130)

(H)H.

i) tó 'come'

iv) gúí 'buy'

ii) tíé 'run'

v) gúáx 'throw away'

iii) píp 'wait'

vi) kám 'squeeze'

(131)

(L)L

i) kùér 'touch'

iv) miáx 'throw'

ii) pè 'hate'

v) ná? 'keep'

iii) tàx 'stop'

vi) fiàx 'work'

b) Bisyllabic verb bases.

These verb bases consistently end with /lǎ/, /tǎ/ and /mǎ/ which are suffixes used in this language to express some aspectual meanings. Such verb bases also bear either high or low tones as the following examples indicate:

(132)

(H) H-H

i) vú?lǎ 'erase'

iv) rú?ǎ 'fill'

ii) píé?lǎ 'ask'

v) kú?mǎ 'gather'

iii) kǎmǎ 'remind'

vi) táxtǎ 'protect'

(133)

(L) L-L

i) xǐ?lǎ 'frighten'

iv) jétǎ 'straighten'

ii) nǐ?lǎ 'press'

v) là?lǎ 'forget'

iii) fǎxtǎ 'greet'

vi) xǐ?xlǎ 'tickle'

Looking at the above bisyllabic verb bases, it is evident that the final syllables are suffixes. They do not only bear the same tone as their preceding syllables, they also have a morphological structure like other forms that are used in the same position in monosyllabic verbs to encode some aspectual information in this language. We will rather think that these bisyllabic bases were formerly monosyllabic, capable of existing independently without these suffixes (that have now become inherent parts of these verbs). At a given point in time, these monosyllables became non-productive (Bauer 1983:48), and were lexicalized with their suffixes to form unanalysable verb forms. This is supported by the fact that some monosyllabic verb bases can take these same forms as suffixes to express additional information about the verb as illustrated by the following examples.

(134)

- i) sòp 'pierce'
- ii) sòptó 'pierce + iterative'
- iii) sòpló 'pierce + reciprocal'
- iv) sòp-mó 'pierce + perfective'

7.1 Tenses.

As earlier mentioned, this chapter focuses on the various tenses attested in Baba I. Tense marker, like aspect and mood, could be either consonants and vowels, tones or both of the above as earlier suggested.

Jack Richards et al (1985) consider tense as the relationship between the form of the verb and the time of the action or state that the verb describes. Comrie (1976) in the same line of thought subsumes tense into present, past and future. He notes that present tense describes a situation which is temporally located as simultaneous with the moment of speaking. The past describes a situation which is located prior to the moment of speaking while the future describes a situation that is located subsequent to the moment of speaking. The above views clearly indicate that, as Anderson (1980:2) confirms, time spectrum is symmetrical with respect to the moment of speaking. Tense therefore has the function of relating the action of a verb in a given time to the moment that time situation is being alluded to or discussed. Tense can thus be

regarded as a grammatical category, usually associated with verbs, and indicates the time of an event in relation to the present moment or other reference point.

Baba I distinguishes three major time divisions namely: past, present and future, each of the divisions may still be subdivided to indicate more specific location in time as will be seen in the ongoing analysis of tenses. For ease of presentation, present, past and future markers will be respectively represented by the symbols Pr. P. F. In order to exhaust the possible tonal variation exhibited by the verb base in collocation with other elements, our constructions will involve subjects and verbs that could be representative of the various lexical tone patterns attested in Baba I. This means that we will use monosyllabic nominals with high and low tones, verbs with low and high tones. Also we will use bisyllabic nominals having high-high, high-low and also verbs with high-high and low-low.

7.1.1. Past tense

In Baba I, past tense is of varying degrees depending on how remote the event is to the present. There is the immediate past (Po), recent past (P1), distant past (P2) and remote past (P3).

7.1.1.1. Immediate past (Po)

This tense is used to describe an action which has taken place and is completed just at the time of speaking. The verb has a suffix (sfx) which can be called a terminative verbal marker morpheme in this language. The morpheme is suffixed to the verb to indicate that the action or event has ended at the time of speaking. However, the verb has no prefixal marker which is usually a nasal prefixed to the verb in most constructions to designate varying verbal features. The verbal suffix could for the mean time be considered as terminative aspect in this language but which could translate the notion of an immediate past action. This is why we have decided to treat it under tense using the variable (Po), the only variable with a zero superscript as far as the analysis of temporal features is concerned. This is because of the double nature of the construction in this language as the constructions below will make the explanation more concrete.

(135)

Po

- a) /wù sù7-má ndzá/
You 2sg wash sfx garment
[wù sù7-má ndzá]
You have washed a garment.
- b) /pú sù-má ndzá/
They wash sfx garment
[pú sù7-má ndzá]
They have washed a garment.
- c) /wù fá-má mbám/
You 2sg give sfx money
[wù fá-má mbám]
You have given money.
- d) /pú fá-má mbám/
They give sfx money
[pú fá-má mbám]
They have given money.
- e) /tətáx ʒámtə- má nó/
Frog help sfx snake
[tətáx ʒámtə- má nó]
Frog has helped a snake.
- f) /ʒáwúm ʒámtə-má nó/
Kite help sfx snake
[ʒáwúm ʒámtə-má nó]
Kite has helped a snake.
- g) /tətáx táptə-má nó/
Frog show sfx snake
[tətáx táptə-má nó]
Frog has shown a snake.
- h) /ʒáwúm táptə-má nó/
Kite show sfx snake
[ʒáwúm táptə-má nó]
Kite has shown the snake.

Looking at the constructions above, the underlying representations are directly identical to the surface forms. This means that there are no rules involved in the derivations. It is clear that the immediate past tense marker in Baba I cannot be a floating tone, because if it were, there would have been tonal modification in at least some of the surface forms of the constructions. This is an example of a case where a lexical verb or what Wiesemann (1985:2) calls a 'naked' verb appears in a conjugated construction. There is usually a floating high tone object marker between the verb and its object. This is not our concern here, but it is worth mentioning because of some tonal alternations that such a tone can provoke in certain constructions. The effect of the tonal object marker is illustrated below in the infinitive verbal constructions in A and B where (Inf) stands for infinitive marker.

(136)

| | A | B | |
|------|----------------|-----------------|---------------------|
| i) | mà lǎp | mà lǎp ɲmè | to beat a person |
| | Inf beat | Inf beat person | |
| ii) | mà tǎm | mà tǎm mǎsɲɲ | to shoot a bird |
| | Inf shoot | Inf shoot bird | |
| iii) | mà ʒè | mà ʒè nté | to go to the market |
| | Inf go | Inf go market | |
| iv) | mà ʒàptǎ ndʒàp | mà ʒàptǎ ndʒàp | to share meat |
| | Inf share meat | Inf share meat | |
| v) | mà tié ndíí | mà tié ndíí | to run a race |
| | Inf run race | Inf run race | |

7.1.1.2. Recent past (P1)

This past tense describes an action that took place on the day of speaking. It is marked by /mé/, followed by a homorganic nasal which is prefixed to the verb base as these examples below illustrate

(137)

| | |
|----------------------------|-------------------------|
| a) /wù mé N-ʒè nté/ | [wù mé ɲgé ↓nté] |
| You 2sg P1 pfx go market | You went to the market. |
| b) /pú mé N-ʒè market/ | [pú mé ɲgé nté] |
| They P1 pfx go market | They went to the market |
| c) /wù mé N-kú ndʒi/ | [wù mé ɲkú ndʒi] |
| You 2sg P1 pfx die hunger | You died of hunger. |
| d) /pú mé N-kú ndʒi/ | [pú mé ɲkú ndʒi] |
| They P1 pfx die hunger | They died of hunger |
| e) /tǎtǎx mé N-kòxtǎ mbùm/ | [tǎtǎx mé ɲkòxtǎ mbùm] |
| Frog P1 pfx add egg | A frog added the egg. |

| | |
|-----------------------------|------------------------|
| f) /ʒàwúm mé N-kòxtá mbùm/ | [ʒàwúm mé ɲkòxtá mbùm] |
| Kite P1 pfx add egg | A kite added the egg. |
| g) /tátàx mé N-sáptá ɲgbár/ | [tátàx mé sáptá ɲgbá] |
| Frog P1 pfx rub oil | A frog rubbed oil. |
| h) /ʒàwúm mé N-sáptá ɲgbár/ | [ʒàwúm mé sáptá ɲgbár] |
| Kite P1 pfx rub oil | A kite rubbed oil. |

These constructions above exhibit some phonological processes that operate in this language. The nasal prefixed to the verb assimilates the point of articulation of the following consonant, and in the case of a voiceless fricative, this nasal simply deletes (cfR₅). The high affinity between the tense marker here and the verb is shown by the fact that the tense marker spreads its tonal domain onto the verb. The proof is that the original tone(s) of the verbs in citation form are finally replaced by the spread tone of the tense marker as shown in (137e and f). These processes manifested here have already been discussed in chapter 2. Examples illustrating the immediate and recent past tenses have revealed that the subject of the verb is usually unaffected by tense markers as far as tone spreading is concerned (cf 137a, c, e and g). So the use of bisyllabic subjects with varying tone patterns might seem unnecessary here since this does not in any way illuminate possible variations noticed in our constructions. We henceforth use only monosyllabic subjects with varying tone patterns (low or high) so as to limit the number of unnecessary examples that may not help to explain anything at all.

7.1.1.3. Distant Past (P2)

The distant past (P2) in Baba I describes an action or event which took place the previous day and beyond. This tense can optionally be expressed in two different ways. Either by the use of a morpheme /kə/ between the subject and its verb or a floating low tone in the same position, which subsequently docks to the syllabic nasal serving as a verb prefix marker as indicated below in 138 (b) and (c):

(138)

- | | |
|---|--------------------------------------|
| a) /wù kò gbàr tíí/ You 2sg P2 cut tree | [wù kò gbàr tíí] You cut a tree. |
| b) /wù ɽ N-gbàr tíí/ You 2sg P2 pfx cut tree | [wù ŋgbàr tíí] You cut a tree. |
| c) /yí ɽ N-gbàr tíí/ He/She P2 pfx cut tree | [yí ŋgbàr tíí] He/She cut a tree. |
| d) /mámví ɽ N-kpàr ndzàp / Dog P2 pfx eat meat | [mámví ŋkpàr ndzàp] Dog ate meat |

We realize that though the construction in (a) above has exactly the same semantic meaning with those in (b) and (c), morphologically this form looks queer among the past constructions in this language. This is because the verb in 138(a) lacks the homorganic nasal prefix which appears in past constructions. For purpose of symmetry we adopt the P2 that is morphologically marked by a nasal homorganic with the initial consonant of the verb, while the other form is considered a variant of the same structure. In the above constructions, there is the usual leftward floating tone docking of the object marker which is a general principle in this language. This is why the verbs in (138a, b, c) above assume contour tone at the surface as a result of the effect of this floating tone verbal object marker. These examples below consisting of subjects bearing both low and high tones further illustrate the use of P2 constructions in Baba I. We are using these sentences below to prove that the low tone on the nasal prefix of the verb does not spread from the last syllable of the verbal subject of the sentence.

(139)

- | | |
|--|---|
| a) /fùè ɽ N-tám ɪ ɲmè/ Fon P2 pfx shoot person | [fùè ntám ɲmè] The fon shot a person. |
| b) /ɲké ɽ N-tám ɲmè/ Monkey P2 pfx shoot person | [ɲké ntám ɲmè] A monkey shot a person. |
| c) /fùè ɽ N-kòxtó mbám/ Dog P2 pfx eat meat | [fùè ŋkòxtó mbám] Dog ate meat |

Fon P2 pfx add money
 d) /mámví ʎ N-kòxtǎ mbám/

The fon added money.
 [mámví ŋkòxtǎ mbám]

Dog P2 pfx add money

A dog added money.

The examples in 139 above clearly show that we have chosen the right and more logical alternative of expressing the distant past in Baba I. The postulation of a floating low tone that docks onto a syllabic nasal as P2 marker is well motivated because it has revealed some tonal modifications that are consistent with tonal behaviour in the language, and the output of the tone processes has given the required forms of these constructions at the surface level. The difference between P1 and P2 is that in the former the tone of the tense marker spreads and replaces the inherent verb tone(s) while in the latter, the nasal prefix becomes syllabic and the floating low tone tense marker docks to this syllabic nasal and affects only the verbal prefix.

7.1.1.4. Remote past (P3)

This past tense describes an action which occurred earlier than that described by P2. It is usually an action whose real time of occurrence is almost out of memory. It could also describe a rare occurrence in the life of somebody or something. This is morphologically marked by the morpheme kə́nám which could approximately be rendered in English as 'once'. The examples that follow illustrate the use of P3 in Baba I.

(140)

a) /wù kə́nám N-tùè ndáp/

[wù kə́nám ntúé ndáp]

You 2sgP3 pfx burn house

You (once) burnt a house.

b) /pú kə́nám N-túé ndáp/

[pú kə́nám ntúé ndáp]

They P3 pfx burn house

They (once) burnt a house.

c) /sú kə́nám N-wúplá ʒáwúm/

[sú kə́nám ŋgúplá H ʒáwúm]

Fish P3 pfx imitate kite

Fish (once) imitated the kite.

d) /ŋgè kə́nám N-púptá nó/

[ŋgè kə́nám mbúptá nó]

Crocodile P3 pfx spoil snake

Crocodile (once) spoilt the snake.

e) /máńdzá kə́nám N-gím sú/

[máńdzá kə́nám ŋgím H sú]

Goat P3 pfx catch fish

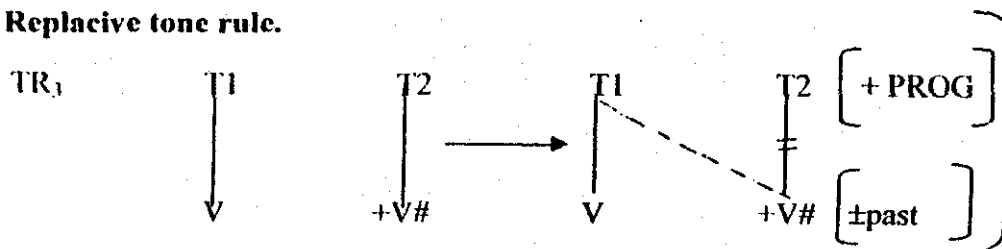
Goat (once) caught a fish.

Apart from segmental alternations already discussed in chapter two, there are tonal variations in these examples. It is a tone docking rule which is consistently recurrent in this language. As in P1, there is as well a tone spreading rule in the above examples whereby the end tone of the P3 marker morpheme spreads to the verb and subsequently replaces the initial tone(s) of the verb root. This explains why verbs with underlying low tones surface as high tones verbs (cf 140 a b and c). This indicates the high affinity that this morpheme has with its contiguous verb. For tone docking and tone replacement rules, see TR1 and TR2 respectively

7.1.2. Present (Pr)

This tense describes an action that is still going on in the present. There is an overlap between the simple present and progressive constructions in this language in that, they both describe actions in progress. But morphologically, the progressive forms are marked by a morpheme /nǎ/ in addition to a nasal prefixed to the verb as usual. The present tense is marked by a replacive tone phenomenon whereby the tone of the subject of the construction spreads and replaces the inherent tone of the verb base. This is through a simultaneous process of tone spreading and deletion. The rule which states that an adjacent tone to a verb, associated or floating, replaces the inherent tone of the following verb is typically a morphologized rule limited to the verb paradigm. This rule is formally represented below as (TR₃) as already treated under our tone rules. Re-stating it here would help refresh our memory and link it directly to the data presented here.

TR 3: Replacive tone rule.



This rule gives a consistent account of tonal variation that occurs in the verbal constructions below.

(141)

a) /ntè Ø kpār sú/

[ntè kpǎ sú]

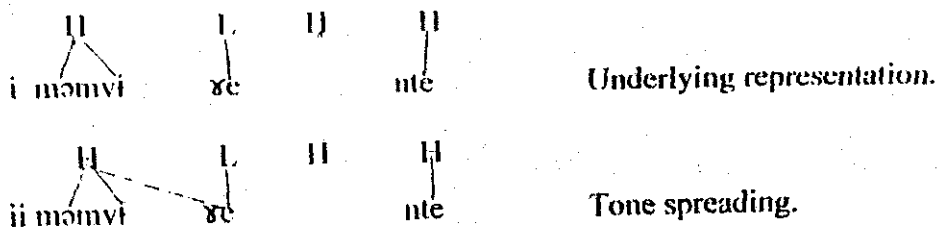
Grasshopper Pr. eat fish

Grasshopper is eating fish.

| | |
|-------------------------|-----------------------------|
| b) /pú ríʔtá wú/ | [pú ríʔtá wú] |
| They Pr end funeral | They are ending a funeral |
| c) /wù Ø tím kɪŋ/ | [wù fīm kɪŋ] |
| You 2sg Pr carry pot | You are carrying a pot. |
| d) /mbùmtá Ø káx tíí/ | [mbùmtá káx tíí] |
| Weevil Pr climb tree | Weevil is climbing tree. |
| e) /mámví Ø xé nté/ | [mámví xé ↓nté] |
| Dog Pr go market | Dog is going to the market. |
| f) /ndzǎplá Ø kpǎr ngí/ | [ndzǎplá kpǎr ngí] |
| Porcupine Pr eat grass | Porcupine is eating grass. |

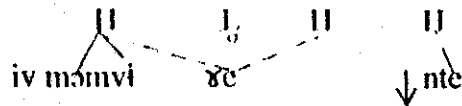
These examples above show that the present tense in this language describes only an ongoing event or action. Apart from the tonal variation noticed at the level of the verb, there is no additional segment that can be said to mark the present tense. In this particular tense, the subject usually shows a greater affinity with the verb. This is surely because there is no intervening element separating the subject from the verb as we have in other verbal constructions. It should however be noted that in the case of Pr, it is only the tone of the final syllable of the subject immediately preceding the verb that spreads its domain to the verb. After this spreading process, the inherent verb tone drops through a delinking process and provokes a downstep process on the following word. This usually happens if the associated tone of the following morpheme is high and the replaced tone is low (cf 141 e). We could use examples (141 e and f) above to better illustrate our explanation through autosegmentalized derivations as shown below:

(142)

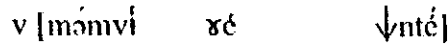




Tone simplification and deletion.

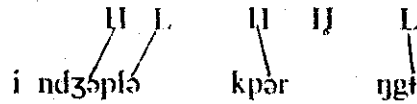


Tone docking and down stepping.

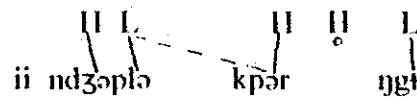


Dog is going to the market.

(143)



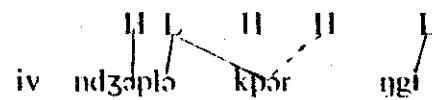
Underlying representation.



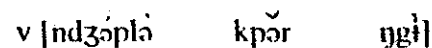
Tone spreading.



Tone simplification and deletion.



Tone docking.



Porcupine is eating grass.

Our examples in 142 and 143 have clearly shown the *raison d'être* for our autosegmental tone rules and the ordered stages through which rules operate. These rules are shown to have accounted in a straightforward manner for the apparent differences noticed between the underlying and surface forms of our utterances that serve as examples. In example 143 above, there is no downstepping because the condition is not met (the following morpheme bears rather a low tone and the floating tone created is high). In the case where all the conditions are met like in 142, the rules are well ordered. Where there is tone simplification and ultimate deletion, this process always precedes tone docking. This is because if tone docking precedes tone simplification, the docked tone will be simplified and deleted, and the wrong output will be obtained. This is why rule ordering which is a cardinal principle of generative phonology and by extension, autosegmental model, is very crucial. This is a clear indication that formulating the right rules is as important as determining the right order in which these rules apply to any given sequence.

7.1.3. Future tense

This major tense division generally describes an action or event yet to take place. In Baba I, there is a morpheme, léʔ which generally marks an unspecified future time. There are four degrees of futurity determined by the addition of some morphemes to the general future tense marker. These morphemes are léʔtó, léʔfiáx léʔmées léʔnám which respectively correspond to F1, F2, F3 and F4 in this language.

7.1.3.1. Recent future (F1)

This tense which describes an event to take place on the day of speaking is morphologically marked by léʔtó, consisting of the generalized future marker and another morpheme specifying the degree of futurity. There is in addition a floating low tone between the tense marker and the verb, which conditions some tonal variations in the constructions. The status of this floating low tone will be determined latter. Its postulation at this level is just to enable us derive the correct surface representation from our underlying forms. In our examples, F1 will represent today's futurity while F2, F3 and F4 will respectively represent the different degrees of futurity from tomorrow upward. The today's future tense also referred to as recent future is illustrated by the examples below:

(144)

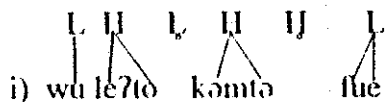
- | | |
|-------------------------------|---------------------------------|
| a) /wù léʔtó L kám̩tò fuè/ | [wù léʔtó kám̩tò fùè] |
| You 2sg F1 pfx remind fon | You will remind the fon. |
| b) /mám̩vɪ léʔtó L xám̩tò sú/ | [mám̩vɪ léʔtó xám̩tò sú] |
| Dog F1 pfx help fish | Dog will help fish. |
| c) /pú léʔtó L kátò mǎyán/ | [pú léʔtó kátò mǎyán] |
| They F1 pfx look ring | They will look at a ring. |
| d) /ɲgè léʔtó L vám sú/ | [ɲgè léʔtó vám sú] |
| Crocodile F1 pfx search fish | Crocodile will search for fish. |
| e) /wù léʔtó L gbàr sú/ | [wù léʔtó gbàr sú] |
| You 2sg F1 pfx cut fish | You will cut a fish. |

Just like in the present tense where the subject tone spreads and replaces the inherent tone of the verb, the same phenomenon occurs in the future. Since the subject and verb in this case are not in immediate sequence because of F1 and low floating tonal morpheme separating them, it is this preceding floating low tone that docks to the verb and finally replaces the inherent verb tone. Nevertheless, the past, present and future constructions in this language exhibit a general verb tone replacement process. In the examples above, the floating low tone preceding the verb totally replaces the inherent tone of the verb, no matter the number of syllables the verb has. (cf 144 a, c and d). In this case, we could formulate a general tone replacement rule which applies to all [\pm past] constructions. This rule as earlier mentioned, states that in a [\pm past] or progressive construction, the preceding tone to a verb whether associated or not, will replace the inherent tone(s) of the following verb, and the replaced tone(s) ultimately delete(s) (cf TR 3).

Although there is a bi-directional tone movement in this language, it is easy to differentiate between them. There is a leftward movement rule or tone docking which is a general principle as far as object marking and other processes are concerned and a rightward movement or tone replacement rule which affects all verb tones or only verbal prefixes in some specific constructions (cf P2). The former affects only the immediate syllable of the preceding word or morpheme while the latter may affect all the tones of the following verb. Nevertheless, care must be taken to order these rules or else they will sometimes give the wrong output.

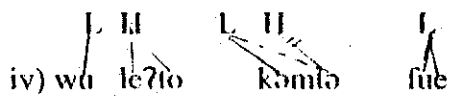
Unlike in the present tense constructions whereby tone docking is the last process, the rules will be ordered in future constructions such that tone docking precedes tone replacement. If this order is not followed, our rules in the future tense will give us the wrong output. The right ordering of the rules is illustrated in these sample derivations below:

(145)

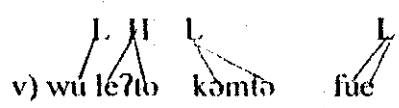
a) i)  Underlying representation.

ii)  OM Tone docking

iii)  Tone replacement 1



Tone replacement 2



Surface representation

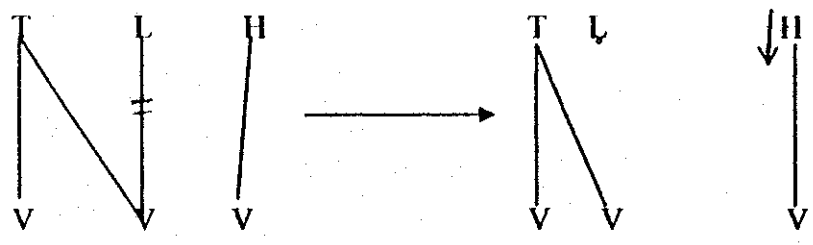
[wù lé?tó kòm?ò fùè]

You will remind the fon.

The postulation of floating tones and subsequent formulation of tone rules are well motivated because we have been able to come out with the required surface forms of our derivations. As said before, it should be noted that tone replacement rule unlike tone docking is a progressive process. Tone replacement rule re-applies until all the inherent tones of the verb are replaced (cf 145 iii and iv) above. The original tones of the verb which are now floating tones are not phonetically realized because they cannot be re-associated. Consequently, they finally drop out causing some tonal perturbation since post lexical tonal re-association is not permissible here.

In addition to tone replacement, there is also a downstep effect provoked by the former. As earlier explained, downstep occurs when a low desociated tone immediately preceding an associated high tone or tones is lost. This rule is formally represented as TR₄ below.

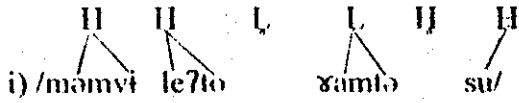
TR₄: Downstepping



This rule applies until its application is stopped by a low tone.

Downstepping can be illustrated by examples (145b and d) above, illustrated below as 146 in this autosegmentalized derivation.

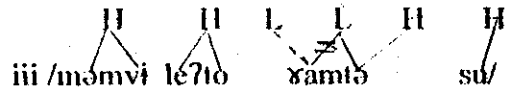
(146)



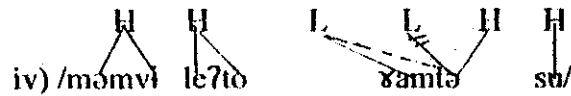
Underlying representation



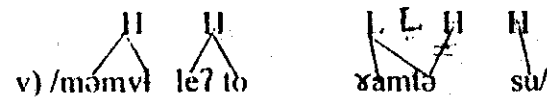
OM Tone docking



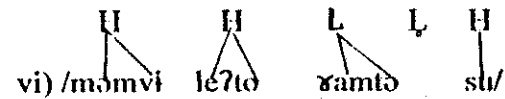
Tone replacement 1



Tone replacement 2



Tone replacement 3

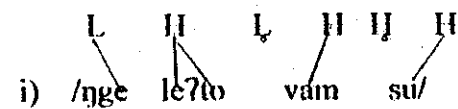


Downstep

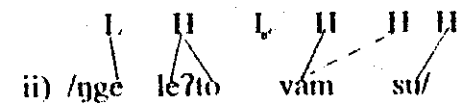
[məm^v leʔt^o ɣamt^ə ↓sú]

Dog will help fish.

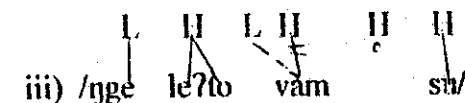
(147)



Underlying representation.



OM Tone docking.



Tone replacement.

iv) [ŋgè léʔtó vàm sú]

Crocodile will search for fish.

In (147), downstepping does not occur because the deleted tone of the verb is high. It should be noted that the tone replacement rules with subscripts 1, 2, 3 actually apply vacuously in the case where the inherent tones are the same as the replacive tone. Our intention of making low tone replace low tone is just for illustrative purposes so as to make clear the various stages undergone by this process. It also makes clear the domain of tone replacement, showing that the progressive nature of the process is checked by the boundary of the verb stem.

7.1.3.2. Tomorrow's future (F2)

In Baba I this tense describes an action or event to take place the following day and beyond. In addition to the general future marker, this tense is morphologically marked by liax which is the marker for the degree of futurity in this particular tense. The various tone processes associated with F1 are also common with F2 as these examples illustrate:

(148)

- | | |
|---------------------------------|---------------------------------|
| a) /wù léʔliáx ɿ kám̩tó fùè/ | [wù léʔliáx kám̩tó fùè] |
| You 2sg F2 pfx remind fon | You will remind the fon. |
| b) /mám̩vɿ léʔliáx ɿ ʒám̩tó sú/ | [mám̩vɿ léʔliáx ʒám̩tó sú] |
| Dog F2 pfx help fish | Dog will help fish. |
| c) /pú léʔliáx ɿ kátá mǎyáŋ/ | [pú léʔliáx kátá mǎyáŋ] |
| They F2 pfx look ring | They will look at the ring. |
| d) /ŋgè léʔliáx ɿ vàm sú/ | [ŋgè léʔliáx vàm sú] |
| Crocodile F2 pfx search fish | Crocodile will search for fish. |
| e) /wù léʔliáx ɿ gbàr sú/ | [wù léʔliáx gbàr sú] |
| You F2 pfx cut fish | You will cut fish. |

Looking at the examples under F1, we realize that the only difference between them and those of F2 is just the replacement of F1 futurity morpheme tó by that of F2 liáx. These two morphemes occupy identical positions in the two constructions. In addition, they all bear high

tones and are identical with the lexical verbs; ló "come" and fiáx "pass the night" in this language. This confirms Anderson's (1980:2) observation that in Ngyembon, a grassfields Bantu language of the Mbam-Nkam group like Baba 1, tense markers just like in many African languages develop from verbs.

7.1.3.3 Distant future (F3)

This tense marked by léʔmée as indicated above is almost like the remote tense with the only difference that the event or action referred to here is less remote in the mind of the speaker. The speaker is certain that the action or event will take place in some unspecified period to come. The sentences below illustrate the use of this tense in the language:

(149)

| | |
|---------------------------------|------------------------------------|
| a) / fùè léʔmée ʔ lúé ɲkpè / | [fùè léʔmée lùè ɲkpè] |
| The chief F3 pfx beg slave | The chief will beg the slave. |
| b) / wù léʔmée ʔ ríí mbíé / | [wù léʔmée ríí mbíé] |
| You 2sg F3 pfx tell lie | You will tell a lie |
| c) / ɲmè léʔmée ʔ wùplá mǎnám / | [ɲmè léʔmée wùplá mǎnám] |
| Person F3 pfx imitate animal | A person will imitate an animal |
| d) / múé léʔmée ʔ ɣámǎ ɲmè / | [Múé léʔmée ɣámǎ ɲmè] |
| Baby F3 pfx help person | A baby will help a person |
| e) / ɲkǎmbàx léʔmée ʔ láá tsú / | [ɲkǎmbàx léʔmée láá tsú] |
| Shouder F3 pfx pass shead | The shouder will be above the head |

These sentences above illustrate a type of future tense which is usually used in proverbial sayings in this language. The speaker is giving a sort of warning by insinuating that things will never be the same. The intention here is to moralize and then make a poorly behaved person to change his ways of doing things. This F3 tense in Baba 1 presents situations that are similar to the English saying 'No condition is permanent'. The speaker is hopeful that a change will be realized in some unspecified period in future unlike in F4 where there is less certainty and more remoteness, and the speaker is making a declaration not caring whether it materialises or not.

7.1.3.4. Remote future (F4)

This tense describes actions which will take place beyond the time described by F3. Here the moment is so uncertain in the speaker's imagination that no precision can be expected. Just like the previous three future tenses described earlier, the same postulation of a floating tone that usually precedes what we may call the main verb, ultimately replaces the inherent tone of the verb. This tone replacement can engender other tonal processes like downstep as already illustrated in the preceding future tense constructions. The remote future as already said is rendered by lé?nám as illustrated by the constructions below:

(150)

- | | |
|---------------------------------|----------------------------------|
| a) /wù lé?nám ɿ tím wó/ | [wù lé?nám tím wó] |
| You F4 pfx carry stone | You will carry a stone. |
| b) /mǎsɿŋ lé?nám ɿ yé sú/ | [mǎsɿŋ lé?nám yé sú] |
| Bird F4 pfx see fish | Bird will see a fish. |
| c) /ɿgè lé?nám ɿ kùptǎ ndáp/ | [ɿgè lé?nám kùptǎ ndáp] |
| Crocodile F4 pfx change house | Crocodile will change the house. |
| d) /mǎngǎp lé?nám ɿ sǎptǎ mbùm/ | [mǎngǎp lé?nám sǎptǎ mbùm] |
| Fowl F4 pfx separate eggs | Fowl will separate the eggs. |

As seen from the constructions involving future tenses, the subject of the construction is usually unaffected by any tonal variation. There is a general future prefix marker as already mentioned, which is recurrent in all the future tenses in addition to the different morphemes marking the various levels of futurity. The floating low tone, which for now may obviously be an aspectual marker in all the future tenses, spreads and replaces the inherent tone(s) of any verb, used in future construction. Generally, Baba I has nine tenses: four past, one present and four future tenses. This partition is not water tight because it has been shown in 7.1.1.3 that there exist two completely separate ways of expressing the 'yesterday' or P2 past and also a tense Po which shows an interpretation of tense and aspect at the same time. We could therefore say that time spectrum in Baba I, just like Anderson (1980:3) observes in Ngyembon, is flexible. The Baba I speaker is free to modify the use of any tense by the addition of some time adverbs like ndíáxà, ntíúáxà and mé, which respectively represent 'now', 'today',

'yesterday/tomorrow'. It has been noticed in Baba I that the term for 'yesterday' and 'tomorrow' is identically mé, the exact meaning being determined by the tense of the construction in which this morpheme is used (past/future). This gives the impression that the real meaning of this morpheme is "the day adjacent to today".

We can make a recapitulation of the use of the various tenses in Baba I, bringing out the tense markers and the generalized shape of the verb in each case as presented below:

Fig. 27 Verb forms in the various tenses.

T.M.-- Tense Marker

Verb form-- Verbs whose inherent tone(s) will be replaced
by a grammatical tone

| a) TENSE | T.M. | Verbal pfix | VERB FORM |
|----------|--------|------------------------|--|
| P3 | kə́nám | N (hormorganic) | High TM tone replaces verb tone |
| P2 | ↳ | N(syllabic homorganic) | Floating low tone docks to syllabic nasal prefixed to verb |
| P1 | mé | N (homorganic) | High tone replaces verb tone |
| P0 | ∅ | ∅ | Aspectual marker /má/ suffixed to verb |

| b) TENSE | T.M. | Verbal prefix | VERB. FORM |
|----------|--------|---------------|--|
| Pr | ∅ | ∅ | Subject tone replaces verb tone. |
| F1 | léʔíó | ↳ | Floating low tone marking aspect replaces verb tone(s) |
| F2 | léʔíáx | ↳ | Floating low tone marking aspect replaces verb tone(s) |
| F3 | léʔmée | ↳ | Floating low tone marking aspect replaces verb tone(s) |
| F4 | léʔnám | ↳ | Floating low tone marking aspect replaces verb tone(s) |

Looking at the tables (a) and (b) above, one notices that apart from Po in fig 27 (a) there is symmetry in the verb form used in the various past constructions in Baba I. There is also symmetry in terms of the aspectual marker, but for Po as usual. This makes us question the validity of P0 as a tense in this language. However, there is variation noticed at the level of tense marker where in one case, there are segmental morphemes while in another there is nothing at all (cf P1, P2, P3, F1, F2, F3 F4 and Po, Pr) as analyzed in preceding pages.

In fig 27 (b) the present construction (Pr) has a peculiar characteristic in that it has no tense marker and no aspectual marker as well. It is because of the way the present action is perceived in this language (ongoing) that makes us classify it under future where the action is supposed to be yet unaccomplished. The final verb form is identical to the verb form used in future construction though the processes by which the forms are derived are different. The verb form in the present tense is derived by tone spreading, delinking and ultimate replacement while the future verb form is got by tone docking and replacement. The tone that spreads in the present tense is the tone of the verbal subject, while in the future tense it is a floating tone posited between the subject and verb. We would have as well posited a floating tone marker in the present, and if we did, it would have made our underlying form more abstract and complex since the tone will be unpredictable such that there has to be a rule that will make this floating tone identical to the final tone of the subject of the construction. Since this does not affect our surface representation in any way, we have preferred a simpler process by which the final tone of the subject spreads and replaces the inherent tone of the verb in the present construction (cf 7.1.2 e, f). This looks more plausible in the sense that it expresses a high degree of affinity between the subject and verb in the present tense in Baba I. This is so because empirical evidence shows that no morpheme exists in between the subject and verb in any present construction in this language.

With respect to the future tenses, there is a greater degree of correlation among the various levels of futurity. They all have a common morpheme lé? which denotes future time in general. The aspectual marker for all the future tenses is seen to be a floating low tone as shown on table (b) of fig 27 above. This low tone docks rightward and replaces the inherent tone of any verb used in the given construction as explained in the final column of the said

table above. We can divide tense in Baba I into two large groups depending on the common characteristics exhibited by verb forms of the different constructions. All verb forms in the past tenses except Po have a tense marker and a nasal prefix marking aspect while all verb forms in the present and future are marked by a suprasegmental low floating tone immediately preceding the verb. This floating low tone can be diachronically associated to a morpheme that was lost in the evolutionary development of Baba I. This can be proven by making allusion to P2 where we have a floating low tone when the morpheme /kə/ is deleted (cf 138 a and b). We can thus talk of [+past] for all the past tenses and [-past] for the present and all future tenses. This can be summarized in the tables below:

Fig. 28 Bi- division of tenses in Baba I

a) [+past] verb forms.

| Tense | Prefix | Verb | Suffix |
|-------|--------|------|--------|
| Po | ∅ | V | má |
| P1 | N | V | ∅ |
| P2 | N | V | ∅ |
| P3 | N | V | ∅ |

b) [-past] verb forms

| Tense | Prefix | Verb | Suffix |
|-------|--------|------|--------|
| Pr | ∅ | V | ∅ |
| F1 | l̥ | V | ∅ |
| F2 | l̥ | V | ∅ |
| F3 | l̥ | V | ∅ |
| F4 | l̥ | V | ∅ |

Since in the treatment of our tenses, some segmental and suprasegmental morphemes were seen and their exact status were not determined, we suggested that they may be aspectual markers. For us to confirm this suggestion we will examine aspect in Baba I in the next chapter.

CHAPTER EIGHT

8.0 Aspects

The notion of aspect has to do with a grammatical category, usually marked in verbs or verb phrases, and represents the way the parts of a situation (an action or state) are related to each other or to the context.

8.1 Introduction

The preceding chapter has dwelt on the different and varying degrees of time reference in Baba I. These temporal categories are inseparable from the verb. In like manner, this chapter focuses on aspect which is another verb related category. These two categories (tense and aspect) are so related in such a way that they can easily be confused especially in languages where the distinction is not so obvious. They are also so related in a way that one cannot be discussed in isolation from the other. This is the reason why any definition of one will make allusion to the other.

The aim of our ongoing analysis here is to determine the various aspectual categories and markers found in Baba I, bringing out those which are morphologically marked while making allusion to those that are not. Comrie (1976:3) considers aspects as the different ways of viewing the internal constituency of a situation. This is always in relation to tense as Comrie (1976:5) further makes the following distinction:

Aspect is not concerned with relating the time of the situation to any time-point, but rather with the internal temporal constituency of one situation; one could state the difference as between situation internal time (aspect) and situation external time (tense).

It is clear from this extract that aspect focuses on the development of an event in relation to its internal temporal structure rather than the moment in which this event is being expressed.

Furthermore Essillie (1988:74) looks at tense and aspect in the following light:

... tense is a deictic notion linking the time of an event to some other point and aspect having nothing at all to do with time but rather referring to the internal constituency of the event.

Unlike tense which links the time of an event to some other point (usually the moment of speaking), aspect is concerned with the internal temporal structure of an action, or event, usually with emphasis on the manner in which this event or action unfolds. Verkuyl (1993) is of the opinion that

aspect is a cover term for those properties of a sentence that constitute the temporal structure of the event denoted by the verb and its arguments. He holds that aspect is in many languages are expressed syntactically and/or morpho-phonologically. This means that there is no unique way of expressing aspect, and as such it varies with language.

In Baba I and related languages, the verb base cannot host or designate aspect and tense at the same time. Consequently in such languages distinct morpheme(s) quite separated from the verb base could serve as tense indicator as illustrated using Baba I in chapter 5. Other morpheme(s), segmental or non-segmental affixed to the verb base will in this case indicate aspect. Our partition of aspectual categories in Baba I will parallel that of Wiesemann et al (1984), while drawing extensively from Beavon (1991:47-103).

8.1.1 Aspectual categories

Marchese (1986) working exclusively on the Kru languages makes mention of four aspectual categories namely; the perfective, imperfective, progressive and perfect. This looks like a simplification of the three major divisions alluded to by Wiesemann et al (1984) who talk of inherent, derived and lexicalized aspects. Since the latter division is wider and could encompass the former as well as other aspectual forms not cited so far, it would be more favourable to adopt the latter.

Inherent aspects, as the name indicates are those aspects that are inseparable from the verbal constituents existing in their simple forms. These are pieces of information contained or encoded in the verb by virtue of the very nature or semantic property of the verb. Since these aspects are rendered in Baba I through semantic interpretation of the verb bearing them or syntactically, we deem it necessary to treat but those aspectual categories that are morphologically marked.

8.1.1.1. Derived aspects

These are aspects found in the different conjugated verbal forms of a process in the various possible verbal constructions in a language. These aspects which are morphologically marked are subdivided into perfective and imperfective, which Comrie (1976:25) considers the common subdivision in languages of the world. In Baba I, we are looking at perfectivity and

imperfection from the same angle as Comrie (1976:16) who makes a distinction between them as follows:

Perfectivity indicates the view of a situation as a single whole without distinction of the various separate phases that make up that situation, while imperfective pays essential attention to the internal structure of the situation.

In effect, any event rendered by the perfective is to be regarded from the view point of its totality while that rendered by the imperfective is considered as having an internal division of beginning, middle and end-rolled into one.

8.1.1.2. Perfective aspect

In Baba I, the perfective presents an action or event as a unified whole without any mention as to the beginning or end. This is usually evident from the segmental, non segmental or both affixes formally exhibited by the verb form in the various past time sequences. We will illustrate the various manifestations of aspect in P1, P2, and P3, then Pr. This will enable us to find out whether the present should be considered a perfective form or not. In the illustrative constructions below (PERF) stands for the perfective maker.

(151)

P3

| | |
|---------------------------|-------------------------------|
| a) /mámví kàhám N-xè nté/ | [mámví kàhám ηgé ↓nté] |
| Dog P3 PERF go market | Dog (once) went to the market |
| b) /pòhà kàhám N-tié ndí/ | [pòhà kàhám ntíé ndí] |
| Dove P3 PERF run race | Dove (once) ran a race |
| c) /kálí? kàhám N-xé nté/ | [kálí? kàhám ηgé ↓nté] |
| Cat P3 PERF go market | Cat (once) went to the market |
| e) /máñi kàhám N-sòhó/ | [máñi kàhám sóhó] |
| God P3 PERF speak | God (once) spoke |

(152)

P2

| | |
|-----------------------|------------------------|
| a) /mámví I N-xè nté/ | [mámví ηgè nté] |
| Dog P2 PERF go market | Dog went to the market |

b) /pòŋlǎ́ I. N- tíé ndíí/

[pòŋlǎ́ n̄tíé ndíí]

Dove P2 PERF run race

Dove ran a race

c) /káǐí? I. N- xè nté/

[káǐí? ŋǣ nté]

Cat P2 PERF go market

Cat went to the market

P1

d) /mǎmví mé N- xè nté/

[mǎmví mé ŋé ↓nté]

Dog P1 PERF go market

Dog went to the market

e) /pòŋlǎ́ mé N- tíé ndíí/

[pòŋlǎ́ mé n̄tíé ndíí]

Dove P1 PERF run race

Dove ran a race.

f) /káǐí? mé N- xè nté/

[káǐí? mé ŋé ↓nté]

Cat PERF go market

Cat went to the market

Pr

g) / mǎmví Ø xè nté/

[mǎmví xé ↓nté]

Dog Pr go market

Dog is going to the market

h) /pòŋlǎ́ Ø tíé ndíí/

[pòŋlǎ́ tíé ndíí]

Dove Pr run race

Dove is running a race.

i) /káǐí? Ø xè nté/

[káǐí? x̄é nté]

Cat Pr go market

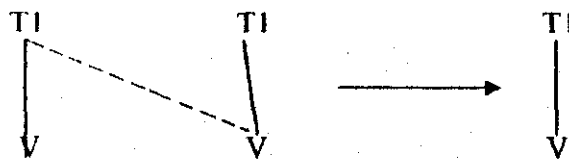
Cat is going to the market.

These examples reveal to us that in Baba I, aspectual markers especially in P1, P2 and P3 consist of segmental morphemes. There is a homorganic nasal prefixed to the verb especially in P1, P2 and P3, with P2 having a syllabic nasal as its verbal prefix. In addition, there is a process whereby the end tone of the tense marker spreads and replaces the inherent tone of the verb in P1 and P3. We realize that in P2 where the tense marker is a floating low tone, the tone simply docks to the syllabic nasal that serves as a verbal prefix and does not spread to the entire verb. The surface forms on the right of our derivation show some tonal and segmental alternations. For segmental modification, changes are within well defined phonological contexts, accounted for by rules explained in Chapter 2. Tonal variations are noticed only at the level of the verb forms. As already explained, the adjacent tone preceding

the verb spreads and replaces the inherent tone of the verb while the next adjacent tone following the verb (object marker) undergoes docking. This explains why underlyingly we have level tone, but on the surface we have contour tones in (152d, f, k and l). These are ordered processes in Baba I which are accounted for by a replacive and docking tone rules as earlier mentioned.

In discussing about tenses, we have tacitly claimed that when verbs are used with verbal objects, there is usually an object marker in between the verb and its object. This object marker is shown to be consistently a floating high tone which docks to the left and affects the tone of the final syllable of the verb in some cases. However, we have also claimed that in P2 constructions, there is a low floating tone that serves as a tense marker of the verb. Accordingly, this homorganic nasal prefix preceded by a floating low tone becomes syllabic so as to receive this stranded tone. In the preceding constructions we have shown that if the replacing tone is identical with that to be replaced, the process operates vacuously, meaning that the two identical tones appearing in this position neutralize themselves through what could be called the principle of identical tones merging. This can be expressed by a tone rule which states that two similar tones undergo neutralization in the course of spreading. This is formally represented as TR6 below.

TR 6 Tone merging rule.



With respect to present construction (Pr), the aspect markers do not conform to a perfective form per se. However, the verbal form shows some characteristics common to verbs in perfective constructions (cf P1, P2 and P3). In Pr, the verb lacks a homorganic nasal prefix but there is high affinity between the subject and its verb where the subject tone spreads to the verb replacing the original tone of the verb. This happens because there is neither tense nor aspect marker to intercede between the verb and its subject in such a construction as it happens

in P1, P2 and P3. We can assume that this construction encodes imperfectivity with a zero aspectual marker. This is plausible since the present construction structurally falls under our [-past] division of tense. Moreover, this construction expresses an action with an internal constituency showing that the action started from a point and continues along the line.

8.1.1.3. Imperfective aspect

This aspect draws attention to the fact that the event in question occurred over a period of time and its internal make-up is relevant. According to Comrie (1976:4),

The imperfective looks at the situation from inside, and as such is crucially concerned with the internal structure of the situation, since it can both look backwards towards the beginning and without any end.

From the above lines it is apparent that imperfectivity portrays the notion of duration and continuity. This categorial subdivision of aspect in Baba I involves actions viewed as taking place over an extended period of time, whether in reference to the present, past or future. This aspect evidently consists of the progressive, habitual, iterative and related verbal forms.

8.1.1.3.1. Progressive

The progressive usually describes an ongoing action or situation. In Baba I, it is marked by a morpheme *ná* placed immediately after the tense marker, and can be employed in all the tenses except P2 and the present (Pr). This is because the present tense in Baba I is already in the progressive while P2 exclusively expresses a habitual action in the past as will be seen later in our analysis.

8.1.1.3.1.1. Progressive in the Past.

This is used in P1 and P3 to express an ongoing situation or action in the past. In our analysis, PROG is used to abbreviate progressive while IMP stands for imperfective aspect.

(153)

P1

- | | |
|-----------------------------|------------------------------|
| a) /tòtàx mé ná N- xè nté/ | [tòtàx mé ná ḡgé ↓nté] |
| Frog P1 PROG IMP go market | Frog was going to the market |
| b) /mómví mé ná N-tié ndíí/ | [mómví mé ná ḡtié ndíí] |
| Dog P1 PROG IMP run race | Dog was running a race. |

- c) /wù mé nǎ N-kòxtǎ ntʃi/ [wù mé nǎ ɲkòxtǎ ntʃi]
- You P1 PROG IMP add water You were adding water.
- d) /pù mé nǎ N-táptǎ ɲmè/ [pù mé nǎ ɲtáptǎ ɲmè]
- They P1 PROG IMP teach person They were teaching a person.

(154)

PROG P3

- a) /mǎpùì kǎɲám nǎ N-tóɲ mvi/ [mǎpùì kǎɲám nǎ ɲtóɲ mvi]
- Squirrel P3 PROG IMP dig hole Squirrel was digging a hole.
- b) /mǎndzǎ kǎɲám nǎ N-kpǎr ɲgi/ [mǎndzǎ kǎɲám nǎ ɲkpǎr ɲgi]
- Goat P3 PROG IMP eat grass Goat was eating grass.
- c) /pù kǎɲám nǎ N-kùèr sú/ [pù kǎɲám nǎ ɲkùèr ↓sú]
- They P3 PROG IMP touch fish They were touching a fish.
- d) /wù kǎɲám nǎ N-ɲámto ɲmè/ [wù kǎɲám nǎ ɲgámto ɲmè]
- You P3 PROG IMP help person You were helping a person.

8.1.1.3.1.2. Progressive in the future

As earlier mentioned, the simple present form in Baba I usually describes an ongoing action (cf 6.1.1.1. j, k, l). This is why we do not want to belabour ourselves illustrating the obvious. We have decided to go straight to the future progressive, which in Daba I exists in F1, F2 F3 and F4. We will illustrate the use of this form only in F1, F2 and F3 because the forms are basically the same but for the change in the degree of futurity morpheme as has been shown in the treatment of tenses. These examples below will lucidly clarify our assertion above.

(155)

PROG F1

- a) /ɲawúm lé?to nǎ N-gim mǎɲgǎp/ [ɲawúm lé? to nǎ ɲgim ↓ mǎɲgǎp]
- Kite F1 PROG IMP catch fowl Kite will be catching a fowl.

b)/máǹdzá léʔtó ná N-kpár ɲǵí/

Goat F1 PROG IMP eat grass

[máǹdzá léʔtó ná ɲkpár ɲǵí]

Goat will be eating grass.

c)/pú léʔtó ná N-kièr ɲmè/

They F1 PROG IMP touch person

[pú léʔtó ná ɲkúér ɲmè]

They will be touching a person.

d)/wù léʔtó ná N-xè nté/

You F1 PROG IMP go market

[wù léʔtó ná ɲgé ↓nté]

You will be going to the market.

(156)

PROG F2

a)/xàwúm léʔliáx ná N-ǵim sí/

Kite F2 PROG IMP catch fish

[xàwúm léʔliáx ná ɲǵim ↓sí]

Kite will be catching fish.

b)/mámví léʔliáx ná N-tím ndzàp/

Dog F2 PROG IMP carry meat

[mámví léʔliáx ná ɲtím ndzàp]

Dog will be carrying meat.

c)/pú léʔliáx ná N-tóɲ mví/

They F2 PROG IMP dig hole

[pú léʔliáx ná ɲtóɲ mví]

They will be digging a hole.

d)/N léʔliáx ná N-yòp ntí/

I 1sg F2 PROG IMP sing song

[ndéʔliáx ná ɲdzóp ntí]

I will be singing a song.

(157)

PROG F3

a)/N léʔmée ná N-xè nté/

I F3 PROG IMP go market

[ndéʔmée ná ɲgé ↓nté]

I will be going to the market.

b)/xàwúm léʔmée ná N-rùtó tí/

Kite F3 PROG IMP shake tree

[xàwúm léʔmée ná ɲdzúto ↓tí]

Kite will be shaking a tree.

c) /pú léʔmécé nǎ N-káx tíí/

[pú léʔmécé nǎ ŋkák tíí]

They F3 PROG IMP climb tree

They will be climbing a tree.

d) /mǎmví léʔmécé nǎ N-yé ŋmè/

[mǎmví léʔmécé nǎ ŋdzé ŋmè]

Dog F3 PROG IMP see person

Dog will be seeing a person.

All the examples illustrating the use of the progressive constructions in the various tenses have clearly shown that the progressive morpheme is nǎ preceding the syllabic verbal prefix. It can be observed that apart from some segmental alternations conditioned by phonological contexts (cf F2 d, F3 a, b, d), there are no tonal variations between the underlying and surface forms that are not well accounted for by the tone rules we have postulated. It should be noted that the progressive, be it in the past or future looks at the action as ongoing, this is the reason why there is the presence of the syllabic nasal prefixed to the verb. We can now represent the various constructions so far in the table below:

fig: 29 Verbal forms in the imperfect progressive

TM = Tense marker

F=Future marker

N= syllabic nasal prefixed to verb marking imperfectivity.

a) Past

| TENSE | T.M. | PROG. | IMP | VERB |
|-------|-------|-------|-----|---|
| P1 | mé | nǎ | N- | Verb base takes the tone of the final syllable of its preceding element |
| P3 | kǎŋám | nǎ | N- | Same as above |

b) Future

| TENSE | TM | PROG | IMP | VB |
|-------|---------|------|-----|----------|
| F1 | léʔtó | nó | N- | -V- + RT |
| F2 | léʔfiáx | nó | N- | -V- + RT |
| F3 | léʔmécé | nó | N- | -V- + RT |

8.1.1.3.13. The Habitual

The habitual aspect of the imperfective describes an action that was or is recurrent over a long period to an extent that it can be considered as a habit of the performer. In Baba I, this aspect semantically overlaps with the progressive but it is morphologically distinct from the latter. The overlapping is evident in the fact that these two forms have some common characteristics as Comrie (1976:12, 27, 33) proposes that they should be well spelt out. He describes progressiveness as "the combination of continuousness with nonstativity", while continuousness is seen as "imperfectivity that is not occasioned by habituality". Habituality in turn is regarded as describing "a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment, but precisely, as a characteristic feature of a whole period." The above distinction shows that both forms express a continuous action or situation, one more extended and the other less so. In view of this discussion, Baba I distinguishes only two habitual forms per se, namely past and present.

8.1.1.3.1.3 1. Habitual in the past

The habitual in the past describes an action or situation that used to occur but is no longer obtained at the present moment of speaking. This action or situation which had an extended period of time could be viewed as constituting a habit of the subject concerned. In Baba I, this aspect is expressed only in the distant past (P2) and neither in the recent past (P1) nor remote past (P3). However, the morphologically (P2) construction in this aspect could refer to a remote time period. It seems as if this morphological dichotomy is meant to avoid the confusion that could arise in distinguishing the progressive from habitual aspect in this language. These constructions below illustrate the use of the habitual in the past. Habitual is designated by HAB, while AUX denotes auxiliary.

(158)

HAB P2

- | | |
|------------------------------------|---------------------------------|
| a) /mámví L N-pá N-líáx ndáp/ | [mámví mbó ndíáx ndáp] |
| Dog P2 IMP AUX HAB sleep house | Dog used to sleep in the house. |
| b) /lètàx L N-pá N-xè nté/ | [lètàx mbó ngé ↓nté] |
| Frog P2 IMP AUX HAB go market | Frog used to go to the market. |
| c) /mójí L N-pá N-sóglá/ | [mójí mbó sóglá] |
| God P2 IMP AUX HAB speak | God used to speak. |
| d) /ngè L N-pá N-póx ñkàr/ | [ngè mbó mbóx ñkàr] |
| Crocodile P2 IMP Aux HAB play drum | Crocodile used to play drum |
| e) /jó L N-pá N-ñáx sú/ | [jó mbó ñáx ↓sú] |
| Snake P2 IMP AUX HAB kill fish | Snake used to kill fish. |

In these constructions above the imperfective marker, a syllabic nasal has moved to pre-auxiliary position while the habitual marker, a non syllabic nasal occupies the immediate pre-verbal position. The reversal of position between the habituality and imperfective markers can be explained using empirical evidence presented by the data. In the construction above, the floating low tone tense marker affects only the prefix of the following morpheme. Since the habitual marker is a nonsyllabic nasal, it exchanges position with the syllabic nasal as to enable the docking of the said tone onto the said nasal which is a tone bearing unit in this context.

It is apparent that though the habitual aspect in the past is rendered by a P2 construction, it could as well refer to a remote past. The habitual marker in Baba I as already indicated is a non syllabic nasal prefixed to the verb, a place usually occupied by the imperfective aspect, a syllabic nasal in such constructions. The low P2 tense marker docks to the syllabic nasal but does not affect the auxiliary tone. It is instead the tone of the auxiliary which spreads and replaces the original tone(s) of the verb, thereby provoking a downstepping effect wherever the condition is met (cf 159b and c). In our constructions as usual, there are segmental alternations conditioned by phonological contexts.

8.1.1.3.1.3 2. Habitual in the present.

This subtype of aspectual category usually expresses a situation or an action that the performer is in the habit of doing. In Baba I this construction is also used to express a universal truth. In the present form, the tense is not marked; also the progressive marker does not feature any longer as well as the habituality marker. It can be observed that the progressive marker here has deleted leaving its high tone which now remains floating. The habituality marker which is not a syllabic nasal cannot bear this floating tone. This nasal is immediately preceded by another nasal, the syllabic nasal for imperfectivity. The non-syllabic nasal readily deletes to enable its syllabic counterpart to carry the floating tone of the deleted progressive marker and transmit it to the entire verb stem. Since it is the only tone bearing unit nearest to the verb, it is

now prefixed to the verb to allow this tone have access to the entire verb. These constructions below will make concrete our explanation.

(159)

HAB Pr.

a) /mǎndzǎ II N Ø-kpǎr ɲgǎ/ [mǎndzǎ ɲkpǎr ɲgǎ]

Goat PROG IMP HAB eat grass Goat eats grass.

b) /ndʒìò II N Ø-gím sú/ [ndʒìò ɲgím↓sú]

Sheep PROG IMP HAB catch fish Sheep catches fish.

c) /tǎtǎx II N Ø-gím sú/ [tǎtǎx ɲgím ↓sú]

Frog PROG IMP HAB catch fish Frog catches fish.

d) /pú II N Ø-kpǎr ndʒǎp/ [pú ɲkpǎr ndʒǎp]

They PROG IMP AUX eat meat They eat meat.

The above examples show that, as earlier indicated, the progressive marker nǎ has actually deleted and only its tone has remained floating. This floating tone has to dock to the following syllabic nasal and subsequently replace the original tone of the following verb. This is impossible because this verb already has a prefix (habitual marker). The only option is for the habitual morpheme to delete and give way to the syllabic nasal which is bearer of the tone. As this happens, the syllabic nasal already bearing the tone of the deleted progressive marker now gets prefixed to the verb and its tone replaces the original tone of the verb causing a downstepping effect as in (160 b and c).

8.1.1.3.2. Iterative

This usually describes an action or situation that is repeated. In Baba I, it is marked by a toneless morpheme /tǎ/ suffixed to the verb, and it acquires the tone of the verb base with

which it occurs. Iterativity in Baba I has the meaning of an action which is repeated more than once, or is carried out or experienced by many people (usually serving as the subject or object of the verb in question). This is illustrated by these constructions below:

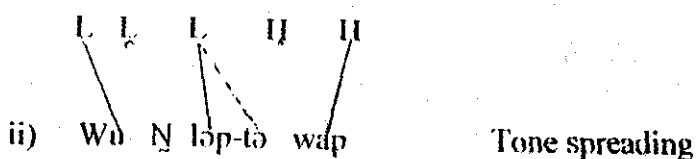
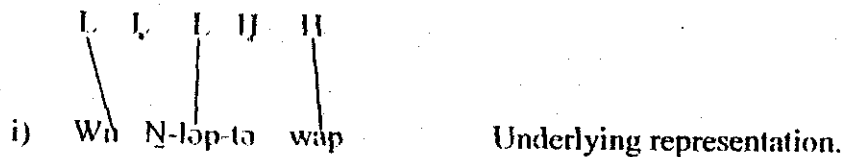
(160)

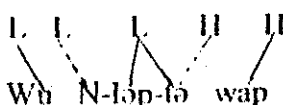
- | | |
|-----------------------------|---|
| a) /wù L. N-ləp-tə wáp/ | [wù ndəp-tə wáp] |
| You P2 IMP beat IT them | You beat them (several times) |
| b) /pú L. N-ləp-tə mómví/ | [pú ndəptə mómví] |
| They P2 IMP beat IT dog | They beat a dog (several times) |
| c) /pómví L. N-tʃiè -tə ʃi/ | [pómví ntʃiè-tə ʃi] |
| Dogs P2 IMP urinate IT down | Dogs urinated on the ground (several times) |
| d) /mómví L. N-núm-tə ɲnè/ | [mómví nún-tə ɲnè] |
| Dog P2 IMP bite IT person | Dog bit (several times) a person |


The contour tone on the last syllable of the verb in (a) and (c) above is caused by the presence of an object tone marker between the verb and the following object (cf 136 A and B).

The surface forms of (a) and (d) derivations are obtained by tone rules that can be autosegmentalized as shown below:

(161)

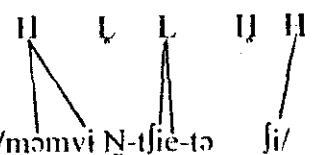



iii)  Wh N-təp-tə wap Tone docking

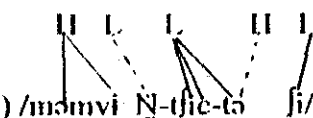
iv)  Wh ndəp-tə wap/ Segmental rules

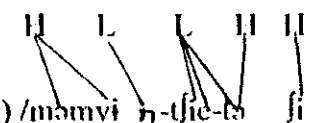
v) [wù ndəp(ə wáp)] You beat them (several times)

(162)

d) i)  /məmvi N-tjie-tə fi/ Underlying representation

ii)  /məmvi N-tjie-tə fi/ Tone spreading

iii)  /məmvi N-tjie-tə fi/ Tone docking

iv)  /məmvi n-tjie-tə fi/ Segmental rules

v) [məmvi n(ə)jè-tə fi] A dog urinated on the ground (several times)

In the above constructions, the rules are not ordered since tone docking or segmental rule can precede tone spreading and the right output will still be arrived at. As already indicated above, tone acquisition is a combined process of docking and spreading and is accounted for by a tone rule which stipulates that a toneless morpheme takes an identical tone to that of the preceding syllable (cf TR2).

It should be noted that the iterative suffix is not a lexical item in this language. It encodes the meaning of iterativity only when suffixed to a verb base. This is a bound

morpheme which, when affixed to verbs indicates a comparable modification of the action indicated by the previously independent verb bases. However, there are some verbal forms in Baba I which have /tə/ as an inherent part of the verb. These verbs include the infinitive forms below; where (Inf) stands for infinitive:

(163)

| | | |
|------------------|-------------|--------------|
| a) /mà + káptə/ | [mà káptə] | 'to cover' |
| Inf cover | | |
| b) /mà + xàm-tə/ | [mà xàm-tə] | 'to help' |
| Inf help | | |
| c) /mà + fítə/ | [mà fítə] | 'to deceive' |
| Inf deceive | | |
| d) /mà + táp-tə/ | [mà táp-tə] | 'to show' |
| Inf show | | |
| e) /mà + wúptə/ | [mà wúptə] | 'to measure' |
| Inf measure | | |

Looking at the infinitive verbal forms above, it is apparent that the final syllables are in effect suffixes. We have earlier noted that the iterative suffix is toneless, and by a spreading tone rule, the tone of the preceding syllable to it extends its domain and assigns a similar tone to the suffix. This explains why these infinitive forms either bear all high tones or low tones. What is peculiar about these forms is that they do not convey any notion of iterativity without the suffixation of /tə/ morpheme. In addition, none of the monosyllabic forms bearing the iterative-like suffix can independently be attested in this language as a lexical verb. We therefore assume that all the monosyllabic forms constituting each of the verb form in this particular case acquired their suffixes through a word formation process which is no longer productive in this language. The forms are now what Guthrie (1970, Vol. IV: 218), cited by Carrie (1986:55) calls restricted bases. The independent meanings of the individual monosyllabic forms are lost in these infinitive verbs and they can now exist only together as lexicalized verbs in the language (cf Bauer 1983:48).

The iterative aspect in this language looks like a perfective aspect in the sense that it

takes all the formal components of perfectivity in addition to the iterative marker as the generalized formula below illustrates:

IC ---- T.M. - IMP - V- IT - (OBJ)

In our formula,

IC --- Iterative construction

TM --- Tense marker

IMP --- IMPERFECTIVITY

V ---- Verb base

IT --- Iterative marker suffix

(OBJ) --- Optional object

This construction is typical of a perfective aspect in the sense that it has a pre-verbal and post verbal marker which is unusual with an imperfective construction in Baba I. The only difference here is the additional post verbal morpheme that marks iterativity which is absent in perfective construction. Closely related to the iterative aspect is the perfect verbal construction.

8.1.1.3.3 The Perfect.

This is another form of aspect which according to Comrie (1976:52) indicates 'the continuing present relevance of a past situation'. It can refer to a situation which occurred any time in the past, but the present result is still of importance to the speaker. In Baba I this is usually marked by the post-verbal morpheme *mə*. We had earlier referred to a similar form as the immediate past (Po) since it conveys a notion of past time, but following Wilkendorf's (1991) reasoning, this is plausibly considered as an aspectual notion because:

Le parfait sert à exprimer un procès qui est envisagé comme accompli mais toutefois, continuant... dans ses conséquences, au moment de l'acte de parole. Ce procès a eu lieu dans le passé et ... ses répercussions continuent dans le présent." (Stanley 1986:116) quoted by Wilkendorf (1991:139).

This indicates that the perfect is a perfective aspect since it can "look backward towards the beginning of the situation, and forward to the end of the situation"(Comrie 1976:4). This subtype of aspectual category in Baba I can occur uniquely in the present and past tenses. There is an overlap between the immediate past tense and the perfect aspect in the present as shown in the constructions below. Here, the perfect is represented by (PFT).

(164)

A) Perfect in the present: (PFT Pr)

i)/yí ɔ ʒè-má nté/

[yí ʒè-má nté]

He/She Pr go PFT market

He/She has gone to the market.

ii)/wù ɔ ʒámá-má ɣmè/

[wù ʒámá-má ɣmè]

You Pr help PFT person

You have helped a person.

iii)/mámví ɔ ʒíé-má sú/

[mámví ʒíé-má sú]

Dog Pr frighten PFV Fish

Dog has frightened fish

iv)/pòʒò ɔ wúpá-má fùè/

[pòʒò wúpá-má fùè]

We Pr imitate PFT fon

We have imitated the fon.

B) Perfect in the past

In the past, perfect can be expressed in the different past time references attested in Baba I namely: P1, P2 and P3 as illustrated below:

(165)

a) PFT P1

i)/wù mé N pà ʒè-má nté/

[wù mé mbò ʒè-má nté]

You P1 PERF AUX go PFT market

You have gone to the market

ii)/pú mé N pà tíé-má ndíí/

[pú mé mbò tíé-má ndíí]

They P1 PERF AUX run PFT race

They have run a race.

iii)/tòtáx mé N pà kpár-má sú/

[tòtáx mé mbò kpár-má sú]

Frog P1 PERF AUX eat PFT fish

Frog has eaten fish

iv)/mándzá mé N pà lèp-má ɣó/

[mándzá mé mbò lèp-má ɣó]

Goat P1 PERF AUX beat PFT snake

Goat has beaten a snake

It is apparent from the examples above that in P1, the perfect is marked by the morpheme m̩ə. This morpheme which is similar to that of (Po) construction places emphasis here on the completed nature of the event or action that is being related as well as its present importance to the time of utterance. This is why in this construction there is the pre-verbal nasal that usually marks perfectivity unlike in Po where this marker is absent. This pre-verbal marker of perfectivity is now prefixed not to the verb as usual, but to the auxiliary which is now one of the constituents of the perfect construction.

(166)

b) **PFT P2**

- | | |
|--------------------------------------|-----------------------------|
| i) /wù L N̩ pə ʒè-mə nté/ | [wù mbə ʒè-mə nté] |
| You P2 PERF AUX go PFT market | You had gone to the market |
| ii) /mámví L N̩ pə gim-mə sú/ | [/mámví mbə gim-mə sú] |
| Dog P2 PERF AUX Catch PFT fish | Dog had caught a fish |
| iii) /pòŋlè L N̩ pə tátə mə ràx/ | [pòŋlè mbə tátə-mə ràx] |
| Dove P2 PERF AUX stir PFT yam | Dove had stirred yam |
| iv) /pú L N̩ pə xíŋlè mə múé/ | [pú mbə xíŋlè-mə múé] |
| They P2 PERF AUX (frighten PFT child | They had frightened a child |

(167)

c) **PFT P3**

- | | |
|-------------------------------|--------------------------|
| i) /wù kəŋám N̩ pə yé-mə fùè/ | [wù kəŋám mbə yé-mə fùè] |
| You P3 PERF AUX see PFT fon | You had seen the fon. |

- ii) /pú kə́nám N pə ʒè-mə́ nté/ [pú kə́nám mbə ʒè-mə́ nté]
 They P3 PERF AUX go PFT market They had gone to the market
- iii) /pəpə́ kə́nám N pə kó-mə́ mbám/ [pəpə́ kə́nám mbə kó-mə́ mbám]
 We P3 PERF AUX take PFT money We had taken money
- iv) /káfi? kə́nám N pə tóŋ-mə́ mvi/ [káfi? kə́nám mbə tóŋ-mə́ mvi]
 Cat P3 PERF AUX dig PFT hole Cat had dug a hole.

In the constructions using the perfect aspect, the present tense as usual is unmarked for tense in Pr. It has no preverbal marker for perfectivity, no auxiliary particle as well (cf165). This seems to be a bare construction from which the perfect form of all tenses is derived. Conversely in the past tense, it has tense and perfective markers as well as an auxiliary. The various constituents of the perfect construction can be recapitulated as illustrated on the table below

Fig 30 Constituents of Perfect construction in Baba I.

| TENSE | T.M | PERF | AUX | V | PFT | |
|-------|--------|------|-----|---|-----|---------------------|
| Pr | ∅ | ∅ | ∅ | v | mə́ | TM = Tense Marker |
| P1 | mé | N | pə | v | mə́ | PERF = perfectivity |
| P2 | l̥ | N̥ | pə | v | mə́ | PFT = Perfect |
| P3 | kə́nám | N | pə | v | mə́ | AUX = Auxiliary |
| | | | | | | V= Bare verb |
| | | | | | | N̥=syllabic nasal |

The table clearly shows that the only regular constituent in all perfect verbal constructions is the post verbal morpheme mə́ supposedly marking the perfect aspect. The perfect present construction as said above is unmarked for tense and perfectivity. The (P1, P2 and P3) are regularly marked for perfectivity by a homorganic nasal consonant placed between the tense marker and auxiliary morpheme, but for P2 whose perfectivity marker is always a syllabic

nasal. The auxiliary morpheme which can be rendered in English by 'to be' takes on the preverbal perfective marker, which in other constructions, are prefixed to the main verb (cf 6.1.1.2.3.). Also the auxiliary morpheme for (P1, P2 and (P3) consistently bears a high tone underlyingly and on the surface. This shows that there is no need for any floating or replacive tone to provoke any tonal variation in all the perfect constructions.

The perfect verbal form in Baba I can have a tense reading in the sense that it relates the time of a past action to a present time. Nevertheless it can be considered as perfective aspect in that Comrie (1976:13) calls attention to the fact that perfective does not denote an action as simply being completed in the sense of focussing on the termination of a situation, but rather as complete by portraying a global view of a situation with a beginning and middle as well as a terminus.

A global view on aspectual constructions in Baba I will reveal that everything clusters around perfectivity and imperfectivity. This is true in terms of the morphological markings assigned to the various constructions. There are often cases where the linear arrangement of elements around the verb is distorted in order to allow for a consistent application of rules in keeping with the verbal paradigm. Semantically one can talk of inherent aspects which are found in the meanings of certain verbs by virtue of the type of processes the said verbs convey. As concerns lexicalized aspect, one cannot clearly make a distinction between it and consecutive constructions in Baba I. This is because, instead of using verbs as auxiliaries in some constructions, it has been clearly shown that auxiliary exists in Baba I (cf perfect). Any construction using verbs in sequence is regarded as a consecutive or serial verb construction since all the verbs in such a sequence function as main verb having a single subject. With all that has been said relating to aspect, the last verbal feature to be examined is mood which is the topic of the next chapter.

CHAPTER NINE

9 0 MOOD

This chapter will solely focus on the last of our verbal feature as we enumerated them at the beginning of this section of our study.

9 Introduction

Closely related to tense and aspect discussed in the two preceding chapters, we also have mood which is another grammatical category having an affinity with the verb.

According to Wiesemann et al (1984:103), mood denotes

"... l'attitude du locuteur au agent vis-à-vis de l'action qui se déroule."

These authors further subdivide mood into two classes namely: "mode réel" and "mode irréel". They explain that "mode réel" expresses certainty and thus consists of the indicative, while "mode irréel" includes the imperative, conditional, wish and permission.

Glidden (1984:24) in the same line of thought considers that:

Mood refers to the grammaticalization of the relationship between the speaker and his message (whether he is affirming, commanding, asking) or of the relationship of the message's content to reality (i.e. true, possible, probable, necessary). Thus, grammaticalized categories that distinguish degrees of actuality or desirability of an action are mood categories.

He also makes mention of a bipartite division of mood, whereby different authors assign different names to such divisions. Such labels include the opposition between factive/nonfactive, real/non-actual, actualized/non-actualized, realis/irrealis.

In keeping with the same bi-division of mood, Beavon (1991:94) points out that in Kɔnzime, there are five moods which could fall under two main classes namely: indicative and non-indicative. He holds that the indicative encodes statements of fact while the non-indicative consists of imperative, consecutive imperative, hortative and interrogative.

The explanations above make it apparent that mood varies from language to language though maintaining a diametrical division. The label given to each division also varies with authors. Drawing inspiration from different authors cited above adopting different approaches to the analysis of mood, we have been able to locate four moods in Baba I namely: indicative, imperative, hortative, and negation.

9.1. The Indicative

In Baba I, this mood usually expresses a high degree of certainty. It presents a realistic situation that has taken place, or is taking place, or has to take place. It means that this mood

which is morphologically unmarked in this language can express an action or situation in the present, past, and future. Since we have lengthily treated the different tenses found in Baba I in chapter five, we just have to give a less detailed illustration of tenses here to serve as examples for indicative mood in the language.

9.1.1. Indicative in the past, present and future

As already noted, this mood makes a statement of fact in the past, present and future, and can be used in P3, P2, P1 Pr and F4, F3, F2 and F1 as shown below: Note that **IND** represents indicative mood.

(168)

IND P3

a) /pòxò kəŋám N-sətó fùè/ [pòxò kəŋám sətó fùè]

We P3 PERF Insult fon We insulted the fon.

b) /ŋké kəŋám N-tié ndíí/ [ŋké kəŋám ntíé ndíí]

Monkey P3 PERF run race Monkey ran a race.

(169)

IND P2

a) /fùè l. ŋ-tír pé/ [fùè ntír pé]

Fon P2 PERF refuse fufu Fon refused fufu.

b) /pú l. ŋ-kátó ndáp/ [pú ŋkátó ndáp]

They P2 PERF look house They looked at the house.

(170)

IND P1

a) /mómví mé N-yé ŋmè/ [mómví mé ndzé ŋmè]

Dog P1 PERF see person Dog saw a man.

b)/káfi? mé N-xè nté/

[káfi mé ngé nté]

Cat P2 PERF go OM market

Cat went to the market.

(171)

IND Pr

a)/wù ø gbé ndzòx/

[wù gbě ndzòx]

You pr sell wine

You are selling wine

b)/yí ø gbé nǵbǵr/

[yí gbé nǵbǵr]

He/She Pr sell oil

He/She is selling oil.

(172)

IND F1

a)/xàwúm lé?tó ʘ gim mǵngǵp/

[xàwúm lé?tó gim mǵngǵp]

Kite F1 pfx catch fowl

Kite will catch fowl.

b)/tǵtǵx lé?tó ʘ xè nté/

[tǵtǵx lé?tó xè nté]

Frog F1 pfx go market

Frog will go to the market.

(173)

IND F2

a)/ntʃi lé?liáx ʘ rù?lǵ mvi/

[ntʃi lé?liáx rù?lǵ mvi]

Water F2 pfx fill hole

Water will fill the hole.

b)/nǵnǵlǵ lé?liáx ʘ fù mǵʃi/

[nǵnǵlǵ lé?liáx fù mǵʃi]

Sugar-cane F2 pfx grow road

Sugar cane will grow on the road.

(174)

IND F3

a) /múé lé?mée l̥ kàx tí/

[múé lé?mée kàx tí]

Child F3 pfx climb tree

A child will climb a tree.

b) /ngè lé?mée l̥ tùm sú/

[ngè lé?mée tùm sú]

Crocodile F3 pfx send fish

Crocodile will send a fish.

These constructions as already stated, represent a global illustration that the indicative mood which is unmarked in Baba I is expressed in all the tenses. For details of the various tenses, (Cf chapter seven).

9.2. The Imperative

In Baba I, this mood is generally used to command or give orders whose execution may be immediate or later. As a result, it is directed to an animate which might be an animal or a person. Usually it is made up just of a basic verbal form without a subject. A tonal morpheme placed immediately after the verb marks this mood. Since it is unmarked for tense, we could readily say that it is in the present, because this is the only tense in this language which is unmarked. However, it can be expressed in the future by using some time adverbials to show that the execution should be carried out later and not immediately. In this case, futurity is marked by semantic and syntactic properties rather than verb based morphological information.

Another characteristic of this mood is that there is a distinction between what Welmers (1973:357) calls singular imperative and another form of imperative that addresses many animates, which we could refer to as plural imperative.

9.2.1. Singular imperative

Here, the command or order is addressed to a single animate. In the imperative, the syllabic shape of the verb usually determines to some extent, the modification that takes place at the level of the verbal structure. For that reason we could further make a distinction between imperatives expressed by closed syllable (CVC) and open syllable (CV) verbal forms.

9.2.1.1 Open syllable imperative (CV) or (CVCV)

The only modification in the structure of the verb on the surface is tonal as illustrated

below: Note that IMPER represents imperative marker.

(175)

a) / xè Ij / [xě] 'Go!'

Go IMPER

b) / tó Ij / [tó] 'Come!'

Come IMPER

c) / sətó Ij / [sətó] 'Insult!'

Insult IMPER

d) / sòŋló Ij / [sòŋló] 'Speak!'

Speak IMPER

9.2.1.2. Closed syllable (CVC) imperative

This is an imperative expressed by a verb that ends in a consonant as illustrated by the following constructions:

(176)

a) / píp Ij / [píbó] 'Wait (for it)!'

Wait IMPER

b) / sùʔ Ij / [sùʔó] 'Wash (it)!'

Wash IMPER

c) / kàŋ Ij / [kàŋó] 'Cry!'

Cry IMPER

d) / káx Ij / [káxó] 'climb!'

Climb IMPER

We notice from our illustrations that there has been some structural modifications at the

level of the verbal forms. These modifications which are either tonal, segmental or both can well be seen when we compare the underlying forms on the left with the surface phonetic realizations on the right. It is noticed here that our tone docking process seems to violate the normal rightward tone movement rule that obtains in the verbal paradigm. If we consider the movement of the floating object tone marker, we will realise that leftward tone docking is also a regular process in the verb paradigm in this language. The data above need some explanation with respect to the facts observed.

First of all, there is a tone docking rule whereby the high floating tone marking the imperative docks to the left and influences the tone of the final syllable of the verb. This influence is only visible when the tone of the final syllable is low. In such a case, the high tonal morpheme docks and creates a contour tone on the final verb syllable (cf 9.2.1.1.a and c). In the situation where the imperative tone marker is identical to the tone of the preceding syllable to the tonal morpheme, there is absorption or neutralization (cf 9.2.1.1.b and d). It is important also to recall that we earlier recognized the presence of a floating high tone object marker in the same position where this other floating tone imperative marker occurs. This does not contradict our claim because these two tones are identical and in the event where they both occur, they merge and neutralize themselves.

Secondly there is a process of vowel epenthesis whereby a predictable vowel, schwa /ə/ is suffixed to the verb if this verb ends in a consonant. This is what happens to all the constructions in (9.2.1.2). In addition, there is a phonological rule that applies to the form in (9.2.1.2 a), whereby a voiceless bilabial stop is voiced because it finds itself in between two vowels as a consequence of the schwa insertion rule (cf chapter 2 for phonological rules).

9.2.2. Plural imperative

As already mentioned, this imperative is addressed to many animates. It resembles the singular imperative in that it is without a subject and the imperative marker is once more a high tonal morpheme that immediately follows the verb. The difference between singular and plural imperative is that, unlike the singular, the plural form has an additional morpheme *li*, which comes immediately after the imperative tone marker. This morpheme is presumably a plural marker, since it has no independent meaning in this language. The plural marker of the imperative can occur with both open (CV (CV)) and closed (CVC) verbal forms as illustrated below: Note that pl denotes plural reference marker.

(177)

9.2.2.1. Plural imperative with CV (CV) form

- a) /fě IJ li/ [fě li] 'Lock!'
Lock IMPER pl
- b) /kú IJ li| [kú li] 'Die!'
Die IMPER pl.
- c) /sətǎ IJ li/ [sətǎ li |] 'Insult!'
Insult IMPER pl
- d) /sónlǎ IJ li| [sónlǎ li] 'Speak!'
Speak IMPER pl

(178)

9.2.2.2. Plural imperative with CVC form

- a) /yóx IJ li / [yóx li |] 'Listen!'
Hear IMPER pl
- b) /gim IJ li / [gim li |] 'Hold!'
Hold IMPER pl
- c) /kǎŋ IJ li / [kǎŋ li |] 'Cry!'
Cry IMPER pl
- d) /kpór IJ li| [kpór li] 'Eat!'
Eat IMPER pl.

As it can be noticed from the constructions so far presented, the tone docking rule also applies to plural imperatives. The difference is situated at the level of schwa epenthesis. Unlike in the singular imperative constructions the closed syllable verbs in the plural imperative do not undergo the schwa insertion process. This can be readily explained by the fact that the epenthesis rule is blocked by any segmental morpheme whatsoever, following the verb. This is made clearer when we look at the singular imperative constructions below occurring with objects:

(179)

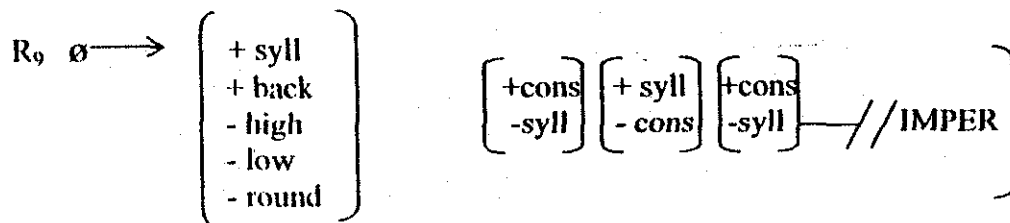
9.2.3. Imperative with verbal objects

- a) /yám I] múé / [yám múé] 'Wake up the child!'
 Wake IMPER child.
- b) /yòp I] ntji / [yǒp ntji] 'Sing a song!'
 Sing IMPER song.
- c) /miáx I] ndzó / [miáx ndzó] 'Wear a garment!'
 Wear IMPER a garment.
- d) /táj I] ndáj / [táj ndáj] 'Blow a horn!'
 Blow IMPER horn.

Our constructions have so far illustrated that in the imperative, closed syllable verbs behave differently from open syllables; the latter do not undergo any vowel epenthesis rule when another morpheme follows them. This indicates that our syntactic rule will be constrained to apply only to constructions that do not have any following morpheme after the verb. Such a rule states that in the imperative, schwa is suffixed to verbs that end in consonants in absolute utterance final position. The rule can be formally represented below where the slashes (//) denote absolute utterance final position.

R 9 Neutral vowel or schwa insertion

/ø/ → [ə]/ CVC - ——//



9.2.4. Imperative in the future

Here we use future as a time reference denoting the moment the order encoded in the imperative is expected to be executed. As earlier indicated, future imperative is marked not by tense but by adverbial particles serving as a sort of complement to the verb. These time adverbials are ntfúáxà and mé, which in this context are respectively rendered by the English 'today' and "tomorrow". These time adverbials placed after the verb and or its plural marker as

the case may be, indicate a specific time reference in the future. Our examples below which focus mainly on closed syllable verbs will further show the inapplicability of our schwa epenthesis rule since the verbs take on complements or adverbial particles.

(180)

- | | | |
|-----------------------|---------------|-------------------|
| a) /kàŋ IJ ntʃúáǎ/ | [kàŋ ntʃúáǎ] | 'Cry today!' |
| Cry IMPER today. | | |
| b) /sǐʔ IJ mé/ | [sǐʔ mé] | 'Bury tomorrow!' |
| Bury IMPER tomorrow. | | |
| c) /kúr IJ ntʃúáǎ / | [kúr ntʃúáǎ] | 'Tie today!' |
| Tie IMPER today | | |
| d) / tím IJ mé / | [tím mé] | 'Carry tomorrow!' |
| Carry IMPER tomorrow. | | |

The inapplicability of the schwa insertion rule is shown by the ungrammaticality of the constructions below:

(181)

- | | | |
|----------------------|-----------------|-------------------|
| a) /kàŋə IJ ntʃúáǎ/ | *[kàŋə ntʃúáǎ] | 'Cry today!' |
| Cry IMPER today. | | |
| b) /sǐʔə IJ mé/ | *[sǐʔə mé] | 'Bury tomorrow!' |
| Bury IMPER tomorrow. | | |
| c) /kúrá IJ ntʃúáǎ / | *[kúrá ntʃúáǎ] | 'Tie today!' |
| Tie IMPER today | | |
| d) / tímə IJ mé / | *[tímə mé] | 'Carry tomorrow!' |
| Carry IMPER | | |

Generally the imperative in Baba I is a direct order addressed to an animate, with the intention of obtaining a result which is usually a reaction to the execution of such an order. Closely related to the imperative is the hortative mood.

9.3. The Hortative

Beavon (1991:94) with reference to the Konzime language states that this mood is used to express an intention, permission, wish or prohibition.

In Baba I, this mood can easily be confused with the imperative. The only clear distinction between them is formal in the sense that unlike the imperative which does not take any subject, the hortative is usually expressed using a verbal subject. This mood which expresses wish, suggestion or permission in this language is much more like what Welmers (1973:357) in Jukun considers a more courteous or gentle way of telling someone to do something.

The verbal subject here is either a noun or a pronoun. In the case of a subject pronoun, the hortative can use only the first and second person plural on the one hand, and the third person singular uniquely and then plural on the other. In the second person singular, the imperative form is rather used, giving the impression that these two moods are to an extent complementary in this language.

Unlike the imperative which is marked by a floating high tone placed immediately following the verb, the hortative is marked by a replacive high tone preceding the verb. The reason for postulating a high tone that precedes the verb is because, up to this point, we have consistently shown that replacive tones in verbal paradigm in this language are unidirectional. They are always seen to precede the morpheme whose tones are to be replaced. Consequently this serves as an additional formal difference between the imperative and the hortative in Baba I.

With respect to temporal marking, this mood, just like in the imperative is unmarked for tense, giving the impression that it is used in the present tense. Nevertheless, it can also be used to express an action or event to take place in future. In such a situation it uses the time adverbial to make reference to specific time period in the future (cf 9.2.4.). In the following constructions serving as illustration for the use of the hortative mood, HORT denotes hortative:

9.3.1. Hortative with pronoun subjects

In this language, the same phenomenon noticed by Welmers (1973:356) in most Niger-Congo languages prevails. He notes that in most languages, the first person singular of the hortative is used primarily or exclusively in questions. This is what happens in Baba I as these questions below illustrate. Question marker is represented by INTER in all hortative constructions.

(182)

- a) /N̄ IJ yè ɿ/ [ŋgê] Should I go?
I HORT go INTER
- b) /N̄ IJ tíé ɿ/ [ntíé] Should I run?
I HORT run INTER
- c) / N̄ IJ sǎtǎ ɿ/ ['sǎtǎ] Should I insult?
I HORT insult INTER

These constructions demonstrate that the first person singular hortative in Baba I is used exclusively in questions. Since the second person singular pronoun is rather used in the imperative as earlier indicated, we only have the first and second person plural and the third person singular and plural hortative respectively as shown in the examples that follow:

(183)

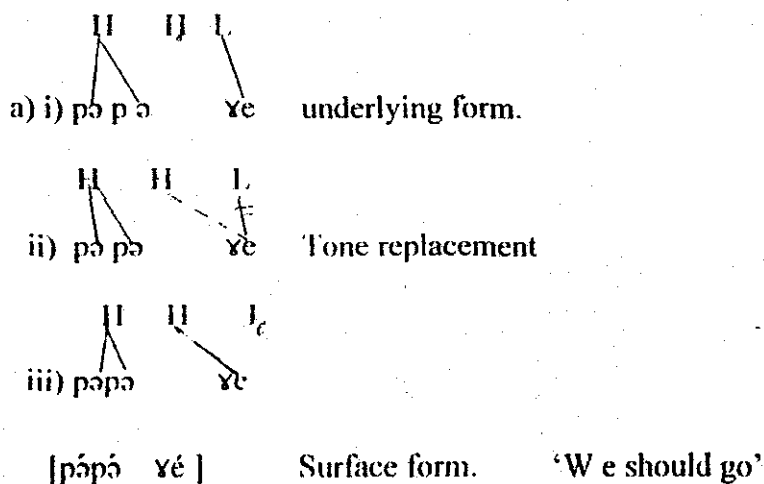
- a) / pǎpǎ IJ yé / [pǎpǎ yé] We should go.
We HORT go.
- b) / pè IJ yòp / [pè yóp] You should sing.
You 2pl HORT sing.
- c) / yì IJ sǎptǎ / [yì sǎptǎ] He/she should separate.
He/She HORT separate.
- d) / pú IJ yámtǎ / [pú yámtǎ] They should help.
They HORT help
- e) / pǎ pǎ IJ yóx / [pǎpǎ yóx] We should hear.
We HORT hear
- f) / yì IJ kúptǎ / [yì kúptǎ] He/She should change.
He/She HORT Change
- g). pè IJ fíŋ / [pè fíŋ] You should call.
You HORT call.

These constructions structurally resemble the present tense constructions (cf chapter 5).

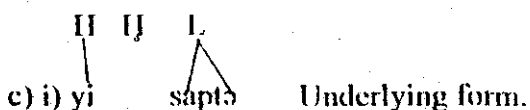
The difference here is that while the present tense has a spreading tone rule whereby the subject tone spreads and replaces the inherent verb tone, the hortative has a consistent floating high replacive tone placed between the subject and the verb thereby blocking the spread of the subject tone onto the verb. Consequently it is the hortative marker, a floating high tone which docks and finally replaces the original tone of the verb. In addition, the present tense has a floating high tone marking imperfectivity which is placed immediately following the verb base. What stands out as a common characteristic shared by both present tense and the hortative mood in Baba I is that tone replacement applies progressively across the verb base until it is blocked by a morpheme boundary. Another crucial feature about the hortative is that the subject apparently bears a low tone. This is an attempt to lower the voice so as to sound polite since hortative implies courtesy. We can claim that the hortative in this language provokes a downstepping process in utterance initial position. That is a plausible argument that helps to explain the correct form of our sample utterances because one consistently hears a low tone subject each time such a construction is uttered.

The derivation of the hortative constructions in (183a, c and f) can be autosegmentalized as shown below:

(184)



(185)



- ii) $\begin{array}{c} H \quad H \quad L \\ | \quad / \quad \backslash \\ yi \quad sápt\grave{a} \end{array}$ Tone replacement (1).
- iii) $\begin{array}{c} H \quad L \\ | \quad / \\ yi \quad sápt\grave{a} \end{array}$ Tone replacement (2).
- iv) [yĩ sápt\grave{a}] Surface form. Let him/her separate

(186)

- f) i) $\begin{array}{c} H \quad H \quad H \\ | \quad / \quad \backslash \\ yi \quad kupt\grave{a} \end{array}$ Underlying form.
- ii) $\begin{array}{c} H \quad H \quad H \\ | \quad / \quad \backslash \\ yi \quad kúpt\grave{a} \end{array}$ Tone replacement (1).
- iii) $\begin{array}{c} H \quad H \\ | \quad / \\ yi \quad kúpt\grave{a} \end{array}$ Tone replacement (2)
- iv) [yĩ kúpt\grave{a}] Surface form. Let him/her change

From our derivation, it is apparent that the tone replacive rule applies on the entire verbal morpheme and replaces the inherent tone(s), no matter the number of syllables the verb contains (cf 183a, c d e and f). Also this rule applies vacuously on forms whose tones are identical to the replacive tone. This is why there is no difference between the underlying and surface verb tone in (183f) unlike in (183a and c) where the surface verb tones are different from the underlying ones.

Having examined hortative constructions with the various permissible subject pronouns, we now turn to nominal subject hortative constructions.

9.3.2. Hortative with nominal subject

Apart from pronominal subject, hortative can also be expressed using nominal subject that is either animate or inanimate. It can be noticed from the pronominal subject hortative constructions above that the subject just like the verb is usually affected in the resultant surface output. This will further be confirmed by the following illustrations where the subjects are both inanimate and animate:

(187)

- a) / ɲmbɔŋ ɪ ɪ ló/ [ɲmbɔŋ ɪ ló] Rain should fall.
Rain HORT fall.
- b) / fũè ɪ ɪ lɔp múé/ [fũè ɪ ɪ p ↓múé] The fon should beat a child.
Fon HORT beat child.
- c) / mɔmɔvɪ ɪ ɪ nó ntɪ / [mɔmɔvɪ nó ntɪ] A dog should drink water.
Dog HORT drink water.
- d) / pásɪŋ ɪ ɪ ɟáxtá sú / [pásɪŋ ɟáxtá ↓sú] Birds should greet a fish.
Birds HORT greet fish.
- e) / pɔŋàm ɪ ɪ kú?má / [pɔŋàm kú?má] Animals should gather.
Animals HORT gather.
- f) / pákpi ɪ ɪ yé nté/ [pákpi yé ↓nté] Donkeys should go to the market.
Donkeys HORT go market.
- g) / pà ŋké ɪ ɪ káx tíí/ [pà ŋké káx tíí] Monkeys should climb trees.
pl monkey HORTclimb tree
- h) / pà kákú? ɪ ɪ yé ŋbí/ [pà kákú? yé ŋbí] Millipedes should go to the farm.
pl millipede HORT go farm

We notice from these constructions that plurality is not marked by a separate morpheme, but it is marked on the subject by a nominal prefix, but if the noun does not have an overt prefix marker, a particle *pà*, supposedly a plurality marker in this case precedes it as in (187g and h) above. Also there is a downstepping process provoked by the replacement of a low tone of the verb by the high tone hortative marker (cf b and f). This happens for verbs that take a following morpheme, and it does only if this morpheme bears a high tone.

Just like in the imperative, the hortative can be expressed in the future. This is done when the expected permission, wish or intention is to be accomplished in the future. This future reference is usually marked by time adverbials discussed in (9.2.4) with respect to imperative.

We have consistently shown that imperative and hortative in Baba I have certain common characteristics especially in their semantic properties. There are certain situations where they could function interchangeably. A hortative expression uttered with a lot of force

could be the imperative. The imperative marker in Baba I could serve as hortative. Hence the difference in these two moods in Baba I is highly formal as can be seen in these generalized formulas below:

IMPERATIVE → Verb + IJ + (OBJ)

HORTATIVE → Subject + Verb + IJ + (OBJ).

Both constructions as seen from the formulas can take optional objects as represented by (OBJ). Since replacive tones occur only in verbal paradigm in this language, a positional distinction can easily be made between tones that replace original verb tones and those that simply docks and affects only a single syllable of the verb. Replacive tone: as earlier mentioned always precedes the morpheme whose tone it replaces. Non replacive tones mostly follow verbs in verb paradigm while they can follow or precede nouns in noun paradigm (cf Chapter 4).

9.4. Negation

In Baba I, a speaker can use negation to express his relationship with an event or action that has passed, unfolding or is still to take place. Consequently, this mood can be used in all the three temporal categories namely: past, present and future, which are all attested in this language. Evidently this mood is as widely used as the indicative in terms of the various time references it makes. Negation marker in this language is generally the morpheme lá which could undergo tonal and segmental modifications conditioned by the tense as well as the phonological context in which it finds itself.

9.4.1. Negation in the past

Here it occurs only in the recent (P1) and distant (P2) past tenses, but (P2) can have a remote past tense reading because it can refer to an event or action quite remote in time. Negation here takes the aspect marker, a homorganic nasal which, though usually prefixed to the verb base in indicative constructions is in this case prefixed to the negation marker. Our illustration of negation in the past begins with the recent past where the various structural variations will be explained.

(188)

a) **Negation in P1**

i) /mámví mé N-lá tó nté/

Dog P1 PERF NEG come market

ii) /tátàx mé N-lá gím sú/

Frog P1 PERF NEG catch fish

iii) /wù mé N-lá sòtò ñmè/

You P1 PERF NEG insult person

iv) /pú mé N-lá wúptò ñgbár/

They P1 PERF NEG measure oil

[mámví mé ndá tó nté]

A dog didn't come to the market.

[tátàx mé ndá gím ↓sú]

Frog didn't catch fish.

[wù mé ndá sòtò ñmè]

You didn't insult a person.

[pú mé ndá wúptò ñgbár]

They didn't measure the oil.

(189)

a) **Negation in P2**

i) /sú ɿ N-lá kpár ñgí/

Fish P2 PERF NEG eat grass

ii) /wù ɿ N-lá yé nté/

You P2 PERF NEG go market

iii) /máñgáp ɿ N-lá yòytò sú/

Fowl P2 PERF NEG follow fish

iv) /tátàx ɿ N-lá kátò H sú/

Frog P2 PERF NEG look fish

[sú ndá kpár ñgí]

Fish didn't eat grass.

[wù ndá yé ↓nté]

You didn't go to the market.

[máñgáp ndá yòytò ↓sú]

Fowl didn't follow fish.

[tátàx ndá kátò sú]

Frog didn't look at fish.

These constructions reveal the same tonal processes that operate in the past tense constructions in this language. The floating high tone representing the object marker docks to the adjacent preceding morpheme as earlier claimed, thereby affecting the tone of the final syllable of the verb. This is illustrated by the differences manifested by the underlying and surface verb forms in (189a ii, iii), (189b ii, and iii). In the underlying forms, the verbal forms all bear level tones while on the surface they bear contour tones in these cases cited above. The only difference between past negation and the indicative in this language is that, in the former there is an explicit negation morpheme, while the latter lacks an explicit indicative marker. Aspect in negation is marked by a homorganic nasal prefixed to this negation marker instead of to the verb as is usually the case with positive constructions. In the past indicative, aspect is

usually marked by a homorganic nasal prefixed to the verb and a high floating tone suffixed to the verb which is not obvious because there is a similar floating tone marking object. The constituents of negation in the past can be recapitulated as on the table below.

Fig: 31 The linear order within constituents of Negation in the Past.

TM = Tense marker
 PERF = Perfective
 NEG = Negation
 V = Verb

| TENSE | TM | PERF | NEG | V |
|-------|----------------|------|-----|---|
| P1 | mé | N | lá | V |
| P2 | l _v | N | lá | V |

9.4.2. Negation in the present

Just like in the present tense, negation here expresses an action or event which is supposedly not continuing as shown by these constructions below:

(190)

- | | |
|---------------------------------|----------------------------------|
| i) / mómví ɔ lá N kátó fùè / | [mómví lá ɣkátó fùè] |
| Dog Pr NEG IMP look fon. | A dog is not looking at the fon. |
| ii) / tótàx ɔ lá N ɣámto H sú / | [tótàx lá ɣgámto ↓sú] |
| Frog Pr NEG IMP help OM fish | Frog is not helping fish. |
| iii) / pú ɔ lá N tíé H ndíí / | [pú lá níé ndíí] |
| They Pr NEG IMP run OM race | They are not running a race. |
| iv) / wù ɔ lá N ɣè H mé / | [wù lá ɣgé ↓nté] |
| You Pr NEG IMP go OM market | You are not going to the market. |

Following the constructions above, we realize that negation in the present tense has a peculiar characteristic. This is because it has the syllabic nasal preceding the verb, something that does not happen in a present tense construction in this language. What is more striking is that this aspect marker which is a syllabic low toned homorganic nasal is usually used to mark distant past tense (P2.) and imperfectivity in general. This means that negation in this language obligatorily takes an aspectual marker even in the present unlike the other present constructions. A plausible explanation for the peculiarity of this form may be that since the present tense marks the end of the past and the beginning of the future in this language, this is why it exceptionally acquires the aspectual marker. This reasoning is further strengthened by the symmetrical relationship at least with respect to aspectual markers, noticed between the future tense construction and negation in the future.

7.4.3. Negation in the future.

Negation here can be expressed in all the four different degrees of future time references namely: recent future (F1), tomorrow's future (F2) distant future (F3) and remote future (F4). In place of the unspecified future marker prefix lé?, the negation marker lá prefixes itself to the degree of futurity morpheme marker in each future construction. We now have only a floating high tone representing lé?, and it then docks to the left and may influence the tone of the subject in such a construction. This leftward tone docking in this particular construction seems to be motivated by the fact that if it the tone docks to the right, its influence can never be felt. This is because the negation marker that has taken its place always bears a high tone in all contexts.

We have empirical evidence to support the fact that the tone which affects the verbal subject in the constructions below comes from the deleted generalised future prefix marker. This is supported by the fact that if this tone were to spread from a neighbouring associated tone of a tone bearing morpheme, it would rather maintain its unidirectional rightward movement towards the verbal base. This is true for the low floating tone that usually marks tense in P2 constructions. This low tone as we said earlier is the tone of the deleted tense marker /kɔ̃ / in the said construction which actually is a variant expression of P2 (cf 138 a). These constructions below will serve as illustration to our negation in the future.

(191)

a) Negation in F1

| | | | | | | | | | | | | | |
|-----------|----|------|----|------|------|--------|-----|------|-----|------|----|-----|---------|
| i) /mámví | IJ | látó | l̥ | ɣè | nté/ | [mámví | lá | tó | ɣè | nté] | | | |
| Dog | px | NEG | F1 | PERF | go | market | Dog | will | not | go | to | the | market. |

ii) /tǎ̀tǎ̀x Ij láto ɓ̣ tùm sú/

Frog pfx NEG F1 PERF send fish

[tǎ̀tǎ̀x lá to tùm sú]

Frog will not send fish.

iii) /wù Ij láto ɓ̣ sǎ̀tǎ̀ fùè/

You pfx NEG F1 PERF insult fon

[wù lá to sǎ̀tǎ̀ fùè]

You will not insult the fon.

iv) /pú Ij láto ɓ̣ kùptǎ̀ ndzǎ̀/

They pfx NEG F1 PERF change garment

[pú lá to kùptǎ̀ ndzǎ̀]

They will not change the garment.

(192)

b) Negation in F2

i) /mǎ̀mví Ij láliáx ɓ̣ yè nté/

Dog pfx NEG F2 PERF go market

[mǎ̀mví lá liáx yè nté]

Dog will not go to the market.

ii) /tǎ̀tǎ̀x Ij láliáx ɓ̣ tùm sú/

Frog pfx NEG F2 PERF send fish

[tǎ̀tǎ̀x lá liáx tùm sú]

Frog will not send fish.

iii) /wù Ij láliáx ɓ̣ sǎ̀tǎ̀ fùè/

You pfx NEG F2 PERF insult fon

[wù lá liáx sǎ̀tǎ̀ fùè]

You will not insult the fon.

iv) /pú Ij láliáx ɓ̣ kùptǎ̀ ndzǎ̀/

They pfx NEG F2 PERF change garment

[pú lá liáx kùptǎ̀ ndzǎ̀]

They will not change the garment.

(193)

F3

/mǎ̀mví Ij lámécé ɓ̣ yè nté/

Dog pfx NEG F1 PERF go market

[mǎ̀mví lá mée yè nté]

Dog will not go to the market.

ii) /tǎ̀tǎ̀x Ij lámécé ɓ̣ tùm sú/

Frog pfx NEG F1 PERF send fish

[tǎ̀tǎ̀x lá mée tùm sú]

Frog will not send fish.

iii) /wù Ij lámécé ɓ̣ sǎ̀tǎ̀ fùè/

You pfx NEG F1 PERF insult fon

[wù lá mée sǎ̀tǎ̀ fùè]

You will not insult the fon.

iv) /pú Ij lámécé ɓ̣ kùptǎ̀ ndzǎ̀/

They pfx NEG F1 PERF change garment

[pú lá mée kùptǎ̀ ndzǎ̀]

They will not change the garment.

(194)

e) Negation in F4

| | |
|-------------------------------------|-----------------------------------|
| i) /mómví H lápám ɓ xè nté/ | mómví lá pám xè nté] |
| Dog pfx NEG F3 PERF go market | Dog will not go to the market. |
| ii) /t àtáx H lápám ɓ túm sú/ | [tátáx lá pám túm sú] |
| Frog pfx NEG F3 PERF send fish | Frog will not send fish. |
| iii) /wù H lápám ɓ sàtò fùè/ | [w ù lá pám sàtò fùè] |
| You pfx NEG F3 PERF insult fon | You will not insult fon. |
| iv) /pú H lápám ɓ kùptò ndzá/ | [pú lá pám kùptò ndzá] |
| They pfx NEG F3 PERF change garment | They will not change the garment. |

These constructions above repeated in the various future tenses in Baba I make some revelations worth commenting upon. The unspecified future prefix marker that usually occurs in the future indicative has been deleted in the negation future construction. In its place as indicated earlier, there is a negation marker and a floating high tone marking unspecified future tense. This floating tone which precedes the negation marker docks to the left and creates a contour tone on the final syllable of the subject if this syllable bears a low tone (cf 191, 192, 193, 194 ii, iii)

There is the normal floating low tone that marks perfectivity in future tenses. This tone docks as usual and subsequently spreads to replace the inherent tones of verbs. There is no downstepping effect on the high tone morpheme immediately following the verbal base because the replaced and replacing tones are all low (cf 191i, 192i, 193i). Since the replaced tone is similar to the replacing tone in this case, there is neutralization and the original verb tones still visibly remain on the surface. The negation marker in all the cases is unaffected by any tonal or segmental process. A recapitulation of the constituents of negation in the future can be represented on the table below:

fig 32: The linear order of constituents of negation in the future

T.M= Tense marker

PERF= Perfective

| Tense | General future marker | Negation | T.M | P E R F | V e r b |
|-------|-----------------------|----------|------|------------------|------------------|
| F1 | l̩ | lá | tó | ↳ | V |
| F2 | l̩ | lá | l̩áx | ↳ | V |
| F3 | l̩ | lá | mécé | ↳ | V |
| F4 | l̩ | lá | ɲám | ↳ | V |

It should be noted that in any construction where there are both tone docking and tone spreading rules applying, the former is always given priority. This is the reason why in all [-past] constructions, the effect of the object marker, usually a high floating tone following the verb base is not visible at the surface. This is because tone docking rule allows this tone to dock to the verb, but subsequent tone spreading rule replaces the docked object tone of the object marker. Our table does not indicate verbal object marker which, as mentioned above, is a floating high tone because we do not think that this is necessary at this level since it has been elaborately treated in preceding sections. For proof of the existence of a verbal object marker in this language (cf chapter 7 data 136). A global view of the analysis so far shows that Baba 1 makes profuse use of tonal morphemes especially in the verb paradigm. The abundant existence of these floating tonal morphemes in this language is enough proof that it has undergone an exhaustive internal restructuring of its lexical load.

We have finally come to the end of our analysis with respect to verb related elements. The next focus is to review the whole work bringing out the results obtained as well as problems encountered such that recommendations could be made concerning future studies on the language. This is going to constitute a brief chapter so that we can make our results more systematic and coherent.

CHAPTER TEN

10. GENERAL CONCLUSION

As we have come to the end of our research, it is but normal to bring out some salient observations and the results we have been able to come out with in the study as well as make recommendations for further research. However, due to the wide range of topics discussed we deem it necessary to make an overview of each of the sections treated so as to refresh our minds and adequately situate the various results and the importance of each area within the overall study.

10.1 Part I

This part contains the initial data on which our analysis is based as well as information on the phonological and tonal processes that operate in this language. Accordingly, the sound system of the language is established based on the behaviour of various segments in well defined phonological contexts. The permissible linear arrangement of segments within the morpheme has enabled us to propose the canonical shape for the syllable structure within the word in this language. The data presented have evidently shown that there are no initial consonant clusters but there are prenasalised initial sequences in the language. Based on the information presented by the phonological phenomena observed in this language, we have been able to propose an orthography for Baba I. This is undoubtedly an important tool for the speakers who can now use it for writing their language which before now was basically oral. It is also a modest contribution to the ongoing government's effort to introduce the teaching of national languages into the school curriculum in Cameroon. The existence of an orthography can facilitate the conception of didactic materials in the language if it were to be taught in schools.

10.2 Part two.

The focus here is on noun morphology, and we have consistently shown that just like other languages of the Grassfields Bantu, Baba I has a noun class system, though highly reduced, which can effectively match with the Bantu number system. To do this we have not resorted to the use of noun class prefixes alone as is usually the case with languages with a rich nominal class system. Baba I has a less developed nominal prefix system and it does not exhibit any coherent noun prefixes. Our study has thus gone a long way to show that not only noun prefixes are important in assigning to a language its characteristic class system, but possessive forms, concord consonants and tones as well are crucial in efficiently doing the job. Consequently this has clearly and unequivocally situated Baba I within the Grassfields Bantu group which is dominated by languages with noun class prefixes. Through our analysis, we

have noticed that there is a degree of correlation between morphological and semantic noun groupings, though in Baba I it varies from one class to the other. Also nouns and their related elements are shown to always co-occur in a principled manner, though this may vary from language to language. We have presented data which substantiates the fact that in Baba I, but for some few noun related forms that premodify their head nouns, nominal post modification is predominant in this language. Just like in African languages in general, notions which are usually rendered by adjectives in English and other European languages are generally rendered in Baba I by forms considered as verbs or verbal cognates. Though there are some few forms that could be considered adjectives per se in that they have a unique form used only in nominal attribution, they are statistically few to constitute a reasonable class of their own as our data illucidate, although quite a reasonable number has been attested. Related to this class of adjectives we have only three forms in Baba I that express numerical or positional attribution and they solely premodify their head nouns. All the same, we have been able to show that adjectives really exist in in Baba I contrary to what some authors belief that adjectives per se are hardly decernable in African languages in general and Bantu languages in particular. To crown this section we have examined the positional occurrence of the noun phrase constituent within a larger syntactic structure (the sentence) in our language. This constituent is shown to occupy varying positions dependening on the syntactic information such a position conveys in relation to the entire structure. The ability for this constituent to optionally occupy different syntactic positions within a sentence in this language has been interpreted in terms of movement and this has made us arrive at the conclusion that Baba I is a [+movement] language.

10.3 Part three.

This section is solely consecrated to verb morphology with the intention of analysing the various affixes that function concertedly to give an appropriate and acceptable verbal form in any given conjugation. We have consistently shown that all the verbal phenomena like tense, aspect, and mood are well represented in this language though they may be implied in certain cases. Hence, this gives the impression that not all elements may be explicitly expressed in languages. In cases where they are overtly present in Baba I, these elements are usually marked by verbal affixes that may be either segmental or tonal morphemes, with a common characteristic being that they systematically show a high degree of affinity with the verb and they also follow a strict linear ordering in each given situation. All the verbs in this language can readily take an object, and in such a case, there is always a predictable high floating tone functioning as an object marker between the verb and its supposed object. This tone ultimately

docks to the preceding final verb syllable when the said verb and its object co-occur in a construction; this is also a general principle in nominal constructions in this language.

On theoretical grounds we have chosen the imperative verb form as basic in this language because it has a predictable tone (the final syllable always bears a high one) and all other verb forms are derived from it. Tone movement is bi-directional in verbs just like in nouns and other related categories. The phenomenon of tone replacement is widely applicable to the verbal paradigm whereby the initial tones of a verbal form in one construction become completely different in another. This has been well explained through the formulation of some morphologized tone rules that that apply often vacuously throughout our analysis.

If we have been able to successfully and consistently account for the various mutations occurring in the different morphemes, in isolation and in concatenation with other morphemes in this language, it is thanks to the postulation of floating tones and the formulation of rules that adequately spell out their functioning. The rules which are phonological, tonal, morphological and even syntactic in some cases always apply in an ordered manner to give us the required surface forms of our utterances just like they operate in any natural language. This in a sense justifies our emphasis on the generative approach that dominates the whole work, for it considers rule formalism as a cardinal principle in the analysis of any linguistic data.

10.4 Problems, achievement and recommendations.

We cannot pretend that the whole analysis has been all roses. First of all working on a language that has no existing literature on any of its aspects is not an easy endeavour. All the postulations and explanations made are based on the observation of the data coupled with our ingenuity and references to cross-linguistic facts from related languages. Some readers may find some of the explanations given in the course of the analysis to be a bit complex probably because of the theoretical frameworks employed. We are therefore assuming that some of the interpretations given to the behaviour of our data may not be definitive. It may be possible that a parallel analysis using alternate frameworks applied to the same data from a different view point might give more justifiable and better explanations to some of the phenomena that have not been given sound explanations here. A case in point is the deletion of bilabial stops in collocational environment. This is a common but yet unexplained phenomenon that is observed in related languages of the nun group such as, Bali nyonga, Bati, and Bapi. It will be another great contribution to research if more recent theories will be applied to attempt giving a better explanation to this phenomenon that looks like a linguistic puzzle. It will also be interesting to look at the data furnished by this study from a different perspective so as to raise issues that might go a long way to ameliorate our analysis. It is true that having been the first descriptive

analysis made on this language, some of the assertions made might have been an oversight.

The proposed orthography that we have come up with at the end of our phonological analysis is supposed to be a practical one for the users of the language. Consequently, it needs to be tested by applied linguists on the field so as to confirm its usability. This is because we might have been so theoretical in our proposal especially with respect to tone markings. We have impressionistically opted for surface tone marking in Babal though this method has weaknesses in some languages. This may not be the case with our language since Bernard et al quoted in Bird (1999d: 10) have drawn attention to the fact that languages use tone in different ways. Consequently they have suggested 'a program of research to test systematically and comparatively the need for and the effects of marking tone in the languages of the world'. To buttress this fact Bird (1999d) has emphasized that such a program should be complemented by a research on different methods of marking tone for the same language, given the wide variety of tone marking methods that exist.

Notwithstanding the problems encountered, and may be the possible weaknesses of some of our postulations and assertions in the course of the analysis, we are nevertheless convinced to have achieved some concrete results. The study has succeeded in producing a representative sample of the Baba 1 language thereby rendering explicit the implicit knowledge of the native speaker of the language, and this is a fundamental objective of linguistic research on a language having only an oral tradition. Future studies on any aspect of the language can now have a reference from which it can freely quote, thanks to this realization.

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