A Comparative Study of Tone and Intonation in Seven Kongo Dialects

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Submitted for the degree of Doctor of Philosophy

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Abstract

This thesis proposes a pitch-accent description of the pitch features of several dialects of the kikongo language (Western Central Africa), hitherto considered tonal. Evidence is given that contour variation for the purposes of focus and emphasis exists in kikongo, i.e. that there is an intonational overlay to the basic pitch-accent system. The common pitch feature of 'bridging' (assimilation of low pitches to surrounding high pitches) is shown to be comparable to phenomena in three other Bantu languages, and like them has connotations of focus or emphasis. Previous systematisations of kikongo pitch features are discussed and shown to be broadly comparable, especially in one area: comparison of the various tone-classes established in these works suggests that there are in fact two main accentual classes in kikongo—rising (low initial) and falling (high initial). These classes are distinguished on words in isolation, but not on words in context. There is thus a three-tier system: accentual classes, pitch-accent system, and intonational overlay. Examination of pitch placement in the different dialects allows us to delimit four main dialect areas. Creole kikongo (kileta) is shown to differ from kikongo proper in that high pitch usually occurs on the penultimate syllable of the word rather than on the first syllable of the stem, and the development from one system of placement to the other is discussed.
Table of Contents

Title page 1
Abstract 2
Table of Contents 3
Acknowledgements 17

PART I: PRELIMINARIES 18

Chapter One: Introductory Remarks 19
1.1: dialects referred to in the thesis 20
1.2: domain of kikongo 21
1.3: dialects
   1: number of dialects 22
   2: dialect areas
1.4: previous study of kikongo 23
1.5: tonal studies of kikongo 24
1.6: terms
   1: preliminary definition of terms 25
   2: early ideas
   3: intonational systems
   4: tonal systems
   5: pitch-accent systems
   6: the pitch continuum
   7: aim of thesis
1.7: the texts
   1: dangers using read texts 26
   2: treatment of the texts
1.8: the informants
   1: the Rev. A. Komy Banzadio 27
   2: Mr. Y.K. Katesi
   3: the Rev. D. Ntoni-Nzinga
   4: Mr. A. Ndolo Menayame

Chapter Two: Textual Conventions 29
2.1: orthography
   1: previous orthographies
2: orthography of this thesis

2.2: phrases and marking
   1: phrases
   2: the delimitation of phonological phrases
   3: high pitch
   4: several high pitches - downdrift
   5: upturns
      1: pausal upturn
      2: high upturn
   6: bridges
   7: long vowels, rises and falls
   8: rising bridge
   9: bridges with extra-high final
  10: extra-high pitch
  11: extra-high bridge
  12: extra-high fall
  13: higher key
  14: lower key
  15: ultra-high pitch
  16: lower high pitch
     1: final
     2: preceding normal high pitch
  17: lengthening of final syllable
  18: uncertain high pitch
  19: stress
  20: nasal length
  21: creaky voice
  22: vowel quality
  23: other features

2.3: summary

PART II: TONOLOGY: TEXTS AND SYSTEMS

Chapter Three: A Preliminary Investigation - kisiNgombe

3.1: introduction
3.2: the original analysis
   1: marking
2: variant pitch contours 4.7
3: general pitch patterns (original marking) 4.9
   1: frequency of high pitch
   2: position of high pitch
   3: ratio of high pitch to word
   4: conclusions - the 'root-syllable'
4: syntactic notation 5.0
5: sample unit descriptions 5.2
   1: subject unit 5.4
   2: locative unit 5.7
   3: direct object unit 5.8
6: conclusions 5.9
3.3: further material 6.0
3.4: general pitch patterns (later marking) 6.2
   1: frequency of high pitch
   2: position of high pitch
   3: ratio of high pitch to word
   4: conclusions
3.5: pitchmeter tracings 6.5
   1: sample passages
   2: questions to be answered
   3: pitch and marking
      1: higher key 6.3
      2: bridges
      3: extra-high pitch
      4: lower pitch on the root-syllable
      5: differing pitch/intensity contours
      6: exceptions
      7: conclusions
4: intensity and pitch
   1: intensity on the root-syllable
   2: co-occurrence of intensity and high pitch
3.6: summary 6.6

Chapter Four: Towards a Pitch-Accent Description - kîmbanz' aKongo 7.0
4.1: introduction
4.2: the text
4.3: sample passage

4.4: patterns in the text

1: first or only high pitch on the root-syllable
2: nouns with prefixed element
3: nouns with prefixed element and shift of high pitch
4: words without high pitch
5: conclusions
6: bridges on individual words
7: bridges between words
8: conclusions

4.5: comments on variant contours

4.6: other research: Carter

1: pitch features
2: tono-morphological variants
3: Carter 1973
   1: realisation
   2: phrase-initial sequences
   3: sequence and cohesion
4: Carter 1980
   1: phrase-initial realisations
   2: variant and sequence
   3: remaining problems
   4: Carter's summary
5: conclusions
   1: words without high pitch
   2: typology
6: Carter's tone-classes
7: conclusions

4.7: comparison of passages

1: same contours
2: similar contours
3: different contours
4: conclusions

4.8: summary

Chapter Five: Further Material - kivaka/kintandu

5.1: introduction
5.2: the text
5.3: sample passage
5.4: patterns in the text
  1: nominal patterns
     1: mpe
     2: -ko
     3: long locatives
     4: short locatives
     5: genitives
     6: vowel-commencing stems
  2: verbal patterns
     1: bridges on verbals
     2: preceding element + shift
     3: shift
     3: words without high pitch
     4: high pitch on the last syllable
  5: conclusions
  6: bridges between words
  7: patterns on names
5.5: comments on variant contours
5.6: other research: van den Eynde
  1: pitch features
     1: tonemes
     2: 'slight rise'
     3: 'slight fall'
     4: 'tonal break'
     5: tone-bridge
  2: cases and moods
     1: tone-classes
     2: tone-types
     3: the three cases
     4: the three moods
     5: relationship
  3: interaction of cases and moods
     1: definite case
     2: neutral case
     3: qualified case
     4: contextual variation
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Introduction</td>
<td>114</td>
</tr>
<tr>
<td>4.2</td>
<td>The text</td>
<td>115</td>
</tr>
<tr>
<td>4.3</td>
<td>Sample passage</td>
<td>116</td>
</tr>
<tr>
<td>4.4</td>
<td>Patterns in the text</td>
<td>117</td>
</tr>
<tr>
<td>4.5</td>
<td>Variation in the three versions</td>
<td>118</td>
</tr>
<tr>
<td>4.6</td>
<td>Comments on variant contours</td>
<td>119</td>
</tr>
<tr>
<td>4.7</td>
<td>Comparison of passages</td>
<td>120</td>
</tr>
<tr>
<td>4.8</td>
<td>Summary</td>
<td>121</td>
</tr>
</tbody>
</table>

Chapter Six: Three Versions - kiZombo

6.1: Introduction
6.2: The text
6.3: Sample passage
6.4: Patterns in the text
   1: Long locatives
   2: Connectives
   3: Genitives
   4: Stabilised items
   5: Initial vowel
   6: High pitch on the last syllable
   7: -ko
   8: Anomalous verbal patterns
   9: Tone-classes
   10: Words without high pitch
   11: Bridges between words
      1: Formation of bridges
      2: Conclusions
   12: Variation in the three versions
      1: Variance in versions of the same text, from the same speaker
      2: Variance in versions of the same text, from different speakers
      3: Variation and focus
      4: Conclusions
   13: Comments on variant contours
   14: Comparison of passages
      1: Same contours
      2: Similar contours
      3: Different contours
      4: Conclusions
   15: Summary
Chapter Seven: Other Systematisations - kĩNdandu

7.1: introduction
7.2: the text
7.3: sample passage
7.4: patterns in the text
   1: locatives
   2: other pre-prefixed nominals
   3: pronouns
   4: verbs
   5: high pitch on the last syllable
   6: words without high pitch
   7: conclusions
   8: bridges between words
   9: conclusions
7.5: comments on variant contours
7.6: other research: Daeleman
   1: nominal patterns
      1: tone-cases
      2: reduction of the tone-cases
      3: dichotomy among the tone-classes
   2: verbal patterns
   3: focus and bridging
      1: cases
      2: range of patterns
      3: conclusions
7.7: comparison of passages
   1: same contours
   2: similar contours
   3: different contours
   4: conclusions
   5: variation in Nsuka's text
7.8: Maya pitch
   1: patterns and preliminary rules
   2: phrase-boundary and revised rules
   3: focus on object, verb and adjunct
   4: process
   5: conclusions
7.9: summary
Chapter Eight: Two Speakers - kifilanyanga, part one

8.1: introduction
8.2: the text and sample passage
8.3: patterns in the text
   1: locatives
   2: genitives
   3: connectives
   4: anomalous patterns on verbs
   5: words without high pitch
   6: high pitch on the last syllable
   7: high pitch on the penultimate syllable
   8: bridges on words
   9: other anomalous patterns
  10: bridges between words
8.4: discussion of the patterns
   1: pitch patterns in each version
   2: words without high pitch
   3: bridges between words
   4: other features
   5: prefix to root-syllable bridges
8.5: variation in the three versions
8.6: comments on variant contours
   1: the Rev. D. Ntoni-Nzinga
   2: Mr. A. Ndolo Menayame
   3: conclusions
8.7: summary

Chapter Nine: The Earliest Research - kifilanyanga, part two

9.1: introduction
9.2: the text and sample passages
9.3: patterns in the text
   1: nominals with syllabic prefixes
   2: locatives
   3: genitives
   4: connectives
   5: anomalous patterns on verbs
   6: conclusions
   7: high pitch on the last syllable
Chapter Ten: Chapter Three Revisited - kisìNgombe

10.1: introduction

10.2: the text and sample passage
10.3: patterns in the text
  1: shift
  2: high pitch on the first syllable
  3: retention on the root-syllable
  4: conclusions
  5: words without high pitch
  6: other anomalous patterns
  7: bridges on words
  8: bridges between words
  9: conclusions

10.4: comments on variant contours

10.5: summary

Chapter Eleven: Creole kikongo - kileta

11.1: introduction
11.2: kileta grammar
11.3: variation in kileta
11.4: other research: Fehderau
  1: Fehderau 1969
    1: class frequency
    2: French loans
    3: stress
    4: conclusions
  2: Fehderau 1962
    1: stress
    2: sentence contours

11.5: the texts: general features
11.6: patterns in the texts
  1: high pitch on the last syllable
  2: words without high pitch
  3: bridges on words
  4: bridges between words
  5: falling pitch
  6: verbal patterns
  7: conclusions

11.7: comments on variant contours
11.8: summary
Chapter Twelve: The Mechanisms of Contour Variation

12.1: introduction
12.2: difficulties
12.3: emphasis
12.4: intonational overlay
12.5: continuity
12.6: other examples
12.7: summary

Chapter Thirteen: Coda - Bantu Parallels

13.1: introduction
13.2: pitch-accent
   1: developing ideas
   2: PB stress-accent
   3: variation in tonal systems
   4: intonational overlay
   5: conclusions
13.3: bridging
   1: Kikuyu
   2: Southern Sotho
   3: Zambian Tonga
   4: conclusions
13.4: summary

PART III: DIALECTOLOGY: PATTERNS AND SIMILARITIES

Chapter Fourteen: Lexical Pitch Correlations

14.1: introduction
14.2: sources
   1: Laman 1936
   2: Carter 1980b
   3: Daeleman 1963,1966
   4: Guthrie 1967-71
14.3: defining the two classes
   1: syllable v. mora
   2: 'level' patterns
   3: acute pitch
   4: stem v. word
Chapter Fourteen: Dialect Similarities

14.4: vowel length in C
14.5: correlation of tone-classes
14.6: method
   1: assignment of items
   2: reckoning the correlations
14.7: which base-list?
   1: D as base-list
   2: everyday frequency of items
14.8: correlation figures
   1: correlation figures for the full count
   2: correlation figures for the reduced count
   3: conclusions
14.9: preponderance of the falling class
   1: B sample
   2: L sample
   3: C sample
   4: D sample
   5: conclusions
14.10: measure of opposedness
   1: full count
   2: reduced count
   3: prisms
   4: conclusions
14.11: shift of high pitch
14.12: CB lh patterns
   1: reflexes in L
   2: *lh → hl
14.13: realisation of the classes in connected speech
   1: reinterpretation of patterns
   2: predominance of the falling class
   3: PB accent
   4: conclusions
14.14: summary

Chapter Fifteen: Dialect Similarities
15.1: introduction
15.2: full pitch-count
### Appendices:

1. Map of KiKongo area
2. Pitch-meter graphs
3. Texts, translations and comparison passages
4. Summarised examples of variant contours
5. Comparative list of cognates
6. Reflexes of CB lh
7. Dialect similarity: data and displays

<table>
<thead>
<tr>
<th>Appendices</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: map of KiKongo area</td>
<td>360</td>
</tr>
<tr>
<td>2: pitch-meter graphs</td>
<td>361</td>
</tr>
<tr>
<td>3: texts, translations and comparison passages</td>
<td>362</td>
</tr>
<tr>
<td>4: summarised examples of variant contours</td>
<td>384</td>
</tr>
<tr>
<td>5: comparative list of cognates</td>
<td>478</td>
</tr>
<tr>
<td>6: reflexes of CB lh</td>
<td>483</td>
</tr>
<tr>
<td>7: dialect similarity: data and displays</td>
<td>496</td>
</tr>
<tr>
<td></td>
<td>499</td>
</tr>
</tbody>
</table>
Acknowledgements

A work of this nature is never due to just one person, though arrangement of the material of course implies that he has final responsibility for the finished product. My debts to others in terms of influence, time, help and encouragement are too numerous to detail in full, but here I would like to express my deep gratitude to some of those who were most instrumental in helping me to bring this thesis to a successful conclusion.

Thanks

to the Department of Education for Northern Ireland, for the award of a Major State Studentship, which enabled me to write this thesis;
to the Whiteley Memorial Fund, for a grant to pay the cost of travel to and remuneration of informants;
to my supervisors, Hazel Carter and Patrick Bennett, for advice, encouragement, fortitude, and, in the case of the latter, much ink;
to my informants, and especially to Ntoni, whose patience and kindness I will never forget;
to Karl Laman, R.I.P., for posthumous inspiration;
to my teachers, whoever and wherever they were, especially Sr. Barbara McCaulay, C.P., Jan Knappert and Sheikh Yahya Omar;
to my family, for love and encouragement;
to Dad, for keeping the home fires burning;
to Mam, for indefatigably typing out messy manuscripts at short notice;
to the Management Up Above, for everything;
and to Rhian, for listening.
PART I

Preliminaries
CHAPTER ONE
Introductory Remarks

1.1: dialects referred to in the thesis.

This thesis deals with material from several dialects of the Kongo language cluster (kiKongo). The cluster is listed as H10 in Guthrie 1967-71. The dialects in question, classified as H16 by Guthrie, are as follows (with equivalents in Guthrie's listing when they can be distinguished):

- kiaMbanza'akongo
- kiYaka/kiNtandu
- kiZombo
- kiNtandu
- kiManyanga
- kisiNgombe

The thesis also examines creole kiKongo, referred to here as kiLeta.

1.2: domain of kiKongo.

An exact idea of the geographical domain of kiKongo is difficult to obtain. The language (or, to be more exact, the cluster of dialects comprising the language) is spoken over a wide area in northern Angola, western Zaire, and southern portions of the République Populaire du Congo, as shown on the map in Appendix 1. The number of speakers of kiKongo is estimated by the Encyclopaedia of Africa at around four million.

1.3: dialects.

1.3.1: number of dialects.

Estimates of the number of dialects comprising the cluster vary. Laman 1936 (pp. xl-xci) lists 13 main dialect areas, and Guthrie 1967-71 (vol. 2, pp. 51-52) also has 13 members in his Kikongo Group, though there is only partial resemblance to those described by Laman. Van Bulck 1948 (pp. 359-392) lists 58 dialects; Bryan 1959 (pp. 56-62) repeats these, and adds about 10 more mentioned by Guy Atkins.

1.3.2: dialect areas.

My informants gave dialect listings differing somewhat from those
in the works cited in 1.3.1; their names and distributions for the central and southern dialects have been given on the map in Appendix 1, and will be used throughout the thesis. For the northern and eastern dialects the names used by Laman 1936 have been retained.

1.4: previous study of kiKongo.

Ever since the Portuguese explorers came into contact with the Kingdom of the Kongo in the 16th century (see Balandier 1968, and for an early account see Pigafetta 1591), the kiKongo language has been the subject of study (van Bulck 1948 pp. 334-59 gives an annotated list of early materials and authors). At first this study was mainly to aid proselytising among the baKongo - a catechism was published in 1624 by Cardoso (see Bontinck and Ndembe Nsasi 1978), and another priest, Brusciotto, followed this with the first grammar of the language (see Brusciotto 1659, Grattan Guinness 1882), which was also the first devoted to any Bantu language (so far as we know).

Thereafter there were many grammatical studies of various dialects (for a good listing to 1948 see van Bulck 1948). The methods of description first developed for Latin and Greek were used in most of these studies, except for the more recent ones (eg. Carter and Makoondekwa 1975, 1979; Daeleman 1966; Jacquot 1967; Lumwamu 1973; Söderberg and Widman 1966, etc.). The study of syntax has, however, been barely touched on, except for some preliminary observations in Guthrie 1961 and Carter 1973.

The first dictionary of kiKongo was compiled by Fr. Georges 2 (see van Wing and Penders 1928), and thereafter several other dictionaries were published. The two most notable are Bentley 1887 (with appendix 1895), dealing with the southern dialects, and the monumental Laman 1936, dealing primarily with the central and northern dialects. Laman's dictionary is one of the largest for any African language, and is carefully tone-marked throughout (see also chapter 14).
Other scholars have collected and discussed kiKongo literature, both written and oral. To take a few at random, we may mention Struyf 1908, 1935; deClerq 1939; Dennett 1898; Nsuka 1968; van Roy 1963; Mbelolo ya Mpiku 1972; Jacquot 1978. There have also been ethnographical studies such as Laman 1907, 1953-68; Bittremieux 1923, 1934.

1.5: tonal studies of kiKongo.

There have been a few studies of the tonal aspects of kiKongo: Laman 1922 (one of the earliest extended studies for any Bantu language) and 1936 (introduction); Daeleman 1966; Carter 1973, 1974, 1980; Meeussen and Ndeme 1964. There is also some information on the tonal aspects of kiYaka, a very closely related language, in van den Eynde 1968.

Each investigator systematises the kiKongo pitch phenomena in a different way, though there does seem to be a consensus that these phenomena are related in some way to syntax. Some differences in these analyses may be due to dialectal or chronological variations, while others may be assumed to relate to differences in personal approach.

All the above studies, with the exception of Meeussen and Ndeme 1964, will be referred to and discussed in this thesis; we may thereby be able to abstract some elements common to these systematisations.

1.6: terms.

1.6.1: preliminary definition of terms.

One important question that will be asked is whether kiKongo can actually be said to have a tonal system. Both the practical and the theoretical implications of this question are important, and cannot be fully discussed here. However, it may elucidate subsequent comments if we give here an extremely brief notion of the reference of certain terms as they are understood in the rest of this thesis. Documentation and fuller discussion will be postponed until later.

1.6.2: early ideas.

Most studies of pitch phenomena in African languages take as their
basis Pike's classic definition of a tone language as one in which there is relative, significant and contrastive pitch on each syllable (Pike 1948). It has been generally considered that there are two main types of pitch phenomena - 'tonal' and 'intonational'.

It was, however, recognised that in some languages such as Norwegian, the boundary between tone and intonation was not clearly defined. Subsequent, more detailed research has allowed us to expand the notion of two types, first to give an intermediate grouping for languages like Norwegian, Serbo-Croatian and Japanese, and then to recognise that it may in fact be more fruitful to see the pitch phenomena of individual languages as being spread along a typological continuum, as McCawley 1978 has suggested.

While recognising this continuum, we have found it useful, for the purposes of our discussion, to distinguish three main areas along the tone-intonation spectrum.

1.6.3: intonational systems.

At one end of the spectrum are languages using pitch solely or primarily to identify different connotations (shades of meaning) of the speech token. We will refer to this type of system as 'intonational'.

1.6.4: tonal systems.

At the other end of the spectrum are languages in which a primary function of pitch is to identify different denotations (semantic references) of an otherwise homophonous speech token, i.e. to distinguish morphemes. We will refer to this type of system as 'tonal'. It is quite probable that there is an intonational element in every language, even in a tonal one, since the use of pitch in marking emphasis, emotional intensity, and so on, seems to be universal. In a tonal language, however, intonational pitch contours will modulate, but usually not replace, the morphemic feature of tone.

1.6.5: pitch-accent systems.

Somewhere between these points, towards the middle of the spectrum,
are languages in which pitch plays some role in distinguishing morphemes or grammatical categories, but this is secondary to its affective and syntactic roles. We will refer to this type of system as 'pitch-accent'.

1.6.6: the pitch continuum.

The situation may be sketched as a graph. On the y axis is placed what we will call 'domain', where four main points may be distinguished: (i) pitch is bound to the syllable or morpheme; (ii) pitch is bound to the morpheme or word; (iii) pitch is bound to the word or phrase; (iv) pitch is bound to the phrase or longer stretch.

On the x axis is placed what we will call 'variability', where two extremes may be distinguished: (i) pitch is primarily fixed by the identity of the segmentals, eg. where the sequence cannot be modified except by making the intervals larger, etc.; (ii) pitch is wholly aesthetic - meaning in effect that the speaker can select from a range of possible pitch patterns in the individual language.

Plotting on a graph with these axes, the following curve would result:
The three main types of system distinguished above have been marked off on the curve. Although an over-simplification, we can roughly characterise the three areas by saying that the domain of tone covers the area syllable-morpheme, that of pitch-accent covers the area morpheme-word (in the Dokean sense), and that of intonation covers the area word-phrase and longer. This has the interesting corollary that the shorter the utterance we are dealing with, the more difficult it is, working on the basis of that utterance alone, to decide which type of pitch system is being used in the language of the utterance.

1.6.7: aim of thesis.

This thesis will attempt, using data both from informants and from previous studies, to specify the position of various kiKongo dialects on the suprasegmental continuum, and to give some account of possible tonal-intonational interactions in the kiKongo system.

1.7. : the texts.

Texts from four informants were used as the basis of the work. Most of the texts were read from written sources, which in some cases were published works, in others self-composed pieces. Two texts, however, were spontaneous monologues. The texts were fully pitch-marked (see chapter 2), and are given, with translations, in Appendix 3. In one or two cases, the same written text was read twice, for purposes of comparison. In most cases, the informant was asked to comment on and explain specific pitch-features of the text. These comments were recorded, and constitute an important body of supplementary data.

1.7.1: dangers of using read texts.

There are of course dangers in taking a read text as the basis for a study, as there may well be special pitch contours associated with reading, or, indeed, with any material rehearsed in advance of the speech act. But at the least, use of read material permits the analysis of a valid subset of the language's pitch phenomena. Though the limitations of such texts are recognised, it is important to note that the system abstracted from the read texts correlated
very closely with that abstracted from the two spontaneous texts.

1.7.2: treatment of the texts.

After the texts were recorded their pitch contours were transcribed and examined. Any variant or otherwise interesting pitch patterns were then noted for discussion with the informant a few days later. His comments on these patterns were recorded, and if necessary, further questions were asked.

This approach has the great advantage that the informant can describe in his own words what he sees as meaningful areas of the language. This led to several interesting comments which might not have come to light otherwise. It is a useful and sometimes illuminating exercise to seek the informant's opinion in this way, as he most probably has insights into his language system which the investigator does not have.

However, this advantage may be offset by dangers: the most obvious one is that the informant may manufacture 'explanations' for differences I thought I perceived. I tried to guard against this by returning to the same point in several different sessions, so that any spur-of-the-moment explanations would be shown up as such.

1.8.: the informants.

The four informants were Rev. André Komy Banzadio (chapters 3, 10), Mr. Y.K. Katesi (chapter 11), Rev. Daniel Ntoni-Nzinga (chapters 4, 5, 6, 7, 8, 10), and Mr. Albert Ndolo Menayame (chapters 8, 9).

1.8.1: A. Komy Banzadio.

Rev. Komy Banzadio recorded a text in 1966 for Hazel Carter of SOAS, and it was this I used. I therefore had no opportunity to ask him for comments on his text. He was born in Kinshasa, but lived most of his life in Kimpese, some distance away. At school he spoke kiNtandu (see chapter 7), but as of 1966 spoke kisiNgombe. His father came from Ntumba and used to speak kiNdibu, but now speaks kisiNgombe. His wife Marthe, also from Ntumba, speaks kiNdibu.
CORRECTIONS


page 17, line 22: McCaulay → McCauley
28/16: there → [there]
31/17: and → [and]
32/7: 3.15 → 3.5
35/15: insert pause mark (') after bu-katombula
36/14: ye-nsusu makumoole → ye-nsusu makumoole
38/7: 3.15 → 3.5
38/13: their → [their]

44/3: delete se
44/8: 4.7.2 → 4.6.1
53/26: 4.7.2 → 4.6.1
56/27: and LOC → and LOC
70/12: kiZombo → kiZombo
72/21: evlīmbu → evlīmbu
83/12: engādi → ēngādi
87/31: delete be
113/26: my → [my]
114/Last: sheep! → sheep'
117 18: -- → →
124/17: last word in the line is 'time'
135/12: -- → →
137/13: text → text
152/1: follows: → follows:
153/29: 12 → 14
155/3: neutralisation → neutralisation
164/27: a → as
166/28: obugolo → obugolo
166/29: Kakulu → Kakulu
166/29: Kakulu → Kakulu
180/6: ah → has
209/19: of the phrase → of the phrase
210/28: a → a
216/22: -awamna → -amwāna
219/9: practise → practice
222/10: his work → [his work]
241/24: ke le → ke[le]
246/14: phrases in → phrases in
252/13: -pitches → -pitched
256/33: nani ke kun → nani ke kun
258/27: sambu → sāmbu (gap mark missing)
260/4: yài. → yài.
264/19: delete th
265/33: consistent → consistent
270/30: 33 → 32
270/32: 33 → 32
270/33: course → course
289/1: delete 'define'
307/31: x (under 'citation form', 2nd instance) → y

316/27: unity (2nd instance) → correlation
339/3: insert 'may' at beginning of line
becomes → become
339/5: 4 → 22
0.6% → 3.4%
339/7: occurring → co-occurring
340/17: forms). → forms)

This suggested derivation may in fact help to account for one feature that Carter has noted in her dialect, namely, the barring of a further high pitch on a word with high pitch on the second syllable (see chapter 4, endnote 13, p.9). When the 'high pitch on the last syllable pattern (cvccv)' for the rising class was dominant, it was presumably impossible to have more than one high pitch on the word - the last syllable already had high pitch, and to put high pitch on a preceding syllable would have caused confusion with the falling class. For example, in a word cvccv, to put a high pitch on the first syllable would give it a fall there, the mark of the falling class. By the same token, though a falling class word could take another high pitch because its defining feature, the fall on the first syllable, would already have marked it as belonging to the falling class. Even when the rising class high pitch migrated leftwards, the same behaviour continued; we might say that a further high pitch on a rising class item in Carter's dialect is barred by the ghost on the last syllable.

362: insert at end: /R/ = uvular r.
384/6: insert after 'texts': /x/ = uvular r.
384/14: delete ve
384/19: O ibooisi → O ibooisi
385/24: N ibooisi → N ibooisi
399/6: 'So the elders ... in.' → 'They remained there.'
399/18: 'they did that.' → 'they remained there.'


Additional corrections:
29/14: insert after 'gemination': 'and affrication'
40/14: → →
45/2: NC → NC
65/10: shortage → shortness
121/20: visible → apparent
ADDITIONAL CORRECTIONS


page 53, line 2: CONN → ^CONN
53/30: STAB → STAB
53/32: CONJ → CONJ
55/6: gen → gen^+
74/15: yo-yuvuzyaan → yo-yuvuzyaan
89/28: ens-sadisi → ens-sadisi
110/7: yakala → yakala
insert after mändi: 'he broke his teeth'
baantu → baatu
insert after baandi: 'he called his men'
151/9: any → [any]
153/8: VI → IV
151/21] rightward(s) → leftward(s)
281/18: 13.2.2 → 13.2.3
305/32: kumdongo → kumdongo
kufula → kufula
28: insert facing p. 28:
endnote 8: The same corollary applies to the rhythm or timing system of a language (J. Kelly, p.c.).
35/22: insert after ' acute': ' or grave*
41/5: tuna bee → tuna bee
342/17: can → can
28: insert facing p. 28:
endnote 8: The same corollary applies to the rhythm or timing system of a language (J. Kelly, p.c.).
35/22: insert after ' acute': ' or grave*
41/5: tuna bee → tuna bee

the place in question' (continuity)
papo hapo 'right here, at this very spot' (emphasis).
353: insert facing p. 353:
Abbreviations:
(B)SOAS: (Bulletin of the) School of Oriental and African Studies
ALS: African Language Studies
AS: African Studies
BFBS: British and Foreign Bible Society
HMSO: Her Majesty's Stationery Office
IAI: International African Institute
IRCB: Institut Royale Coloniale Belge
JAL: Journal of African Languages
JALL: Journal of African Languages and Linguistics
MRAC: Musée Royale de l'Afrique Centrale
OUP: Oxford University Press
SAL: Studies in African Linguistics
SCOPIL: Southern California Occasional Papers in Linguistics
SLS: Studies in the Linguistic Sciences

356/23: insert on next line:
1981. 'Tonal accent in Somali'. SAL 12/2.
360/15: ykeento → y-akeento
130/11: bases → based
416/26: ye-mbundzyaanu → ye-mbundzyaanu
207/17: strongly → strongly
261/29: the work → it
278/25: strong
298/6: average individual correlation → (A)verage (I)ndividual (C)orrelation
308/3: likely numerically → probable statistically
321/18: none are → none is
350/18: not → not
273: insert after endnote 9:
It has been pointed out to me (J.H. Carter, J. Kelly, p.c.) that continuity and emphasis are in fact complementary in that the former mainly acts 'horizontally', while the latter mainly acts 'vertically' (compare the distinction 'syntagmatic/paradigmatic'). Continuity has an element of 'locking backwards', while emphasis has this same element, but also one of 'presentness'. There is a good example in Swahili of a word occurring in both subsets of markedness: hapo 'here, there, in the place already referred to, in

247/30: 'cardigan(?)' → 'sweater'
261/17: interpretation → interpretation
279/30: and → and/or
1.8.2: W.K. Katesi.

Mr. Katesi comes from Mateko in the zone of Idyofa in the Bandundu region of Zaire. His mother-tongue is eNgwii (see Bwantsa-Kafungu 1966, Donnelly and Katesi 1981), but since Mateko is an important commercial centre in which kiLeta is commonly spoken, he started using this language from an early age, perhaps 3 or 4. Teaching in the first year of primary school was in kiLeta, and French was then introduced progressively, to be used exclusively in secondary school. Mr. Katesi had a passive knowledge of Lingala at primary school, and at secondary school he began to use it as a contact language; it was also the language of his military service. English was taught from the second year of secondary school, and used for certain university courses (eg. English philology), though French was the language of general use. He had taught for three years, paying visits to Zambia and the USA, before coming to Britain to attend courses at the universities of Leeds and Reading. He was a lively informant, knowledgeable about linguistics, and easily able to produce spontaneous monologues in kiLeta.

1.8.3: D. Ntoni-Nzinga.

Rev. Ntoni-Nzinga, my main informant, is widely-travelled. He used to speak kiNdamba, a sub-dialect of kiZombo, but owing to his travels his idiolect has become rather mixed - when speaking spontaneously, for example, he would use several dialectal variants for 'people': waantu, waatu, aatu. He spent about 10 years in Zaire, mostly in the kiNtandu dialect area, but also in the kiNdibu area. When he has been in other dialect areas he has consciously tried to imitate the speech habits of the people there, so that he has a good command of different dialectal usages, and knows what the different regional accents sound like. Of course, his reproduction of these was not always perfect; for example, while reading a passage he would occasionally use forms from another dialect. However, when the discrepancies were pointed out to him he would state what he should have said, attributing the mistake to the fact that he was not a first-language speaker of the dialect concerned. For this reason he was unwilling to read passages straight off, but preferred to have some time to 'practise' the passage, so that he could read it with as
little interference as possible from the other dialects he knows. Rev. Ntoni-Nzinga is greatly interested in language in general and kiKongo dialects in particular, which is why he took the trouble of trying to learn the regional accents; he could often give examples of different dialectal pronunciations of the same word, eg. kiNdbu váta [vˈɛ], 'village' but kiZombo váta [vˈɛ], and he was very willing to discuss his language and answer questions on it. He speaks fluent French and Portuguese, and fairly fluent English. His wife is a kiZombo speaker, but, ironically, has learnt to speak kiNdamba more correctly than her husband now does.

1.8.4: A. Ndolo Menayame.

Mr. Ndolo Menayame originally spoke the kiManyanga dialect of Msundi-Lutete, but now tends to speak French more than his first language. He had hoped to do an M.A. on kiManyanga tone at Essex University, but lack of library facilities forced him to write on sociolinguistics instead. He returned to Zaire sooner than I had anticipated, before I was able to obtain more information about his linguistic background.
Endnotes to chapter one.

1. KiYaka/kiNtandu (see 5.2) and kiNtandu are distinguished in this thesis; although both dialects could be described as 'kiNtandu', the former shows an admixture of the closely-related kiYaka language. Both dialects, furthermore, show some significant differences from each other where pitch is concerned - see chapters 5, 7, and 15.

2. Van Bulck 1948, p.349, suggests that Georges was in fact only the copyist or translator of the dictionary, and that the real author may have been Roberedo.

3. The most recent work from this author may be found in Carter and Makoondekwa 1981.

4. This is a wider definition of the term than that given by Hyman 1975, p.231: 'Pitch-accent languages are ... tonal to the extent that the feature which is assigned is tone (and that this tone can contrast with another tone in the same position). However there cannot be more than one syllable per word which receives the tonal accent'. In kiKongo it would seem that the contrast is between +high pitch and -high pitch; there does not seem to be a contrast between two or more tones (eg. level v. falling, etc.). Moreover, although there is usually only one high-pitched syllable per word, this is by no means always the case.

5. This section is based on an idea by Patrick R. Bennett.

6. One investigator working on Ndebele music was being sung various pieces of music by his informant, who prefaced one piece with the comment 'this is more difficult'. Further discussion of what he meant by 'more difficult' revealed that he thought it would be more difficult for the investigator to understand, but he himself did not find it any more difficult than the others he had been reciting. This shows that the informant was tailoring his answers to fit what he thought the investigator wanted to hear, but more importantly, it shows that the informant had in his head a developed idea of the musical system, which he was able to vocalise with some success - so developed was it, in fact, that he was able to guess how the investigator might hear the music, and warn him of pieces he might find difficult. (C. Vassie, p.c.)

7. All the informants were in their early middle age (30-40).
CHAPTER TWO
Textual Conventions

2.1: orthography.

2.1.1: previous orthographies.

The present 'official' kikongo orthography, invented by the Protestant missions, is fairly phonetic, but, for example, it writes semi-vowel + long vowel sequences as vowel + vowel (eg. -waa- is written as -ua-), and separates locative prefixes from the noun (eg. mu nsi 'in the country' instead of munsi, which is to be preferred as the sequence has only one stress). Neither does it distinguish gemination, which seems to play a morphological role in the dialect studied by Carter (Carter 1970).

An alternative orthography was developed by Carter. This distinguishes gemination, and joins both locative and connective prefixes to the noun (eg. muntsi instead of mu nsi). But Carter consistently writes long/double vowels as vowel + vowel, even though in some cases (eg. often before a nasal compound) this lengthening may perhaps be a conditioned variant (eg. -soomba 'buy' instead of -somba) - see 4.6.6 and 14.4. Likewise, in cases where there is a variation between semi-vowel + long vowel and vowel + vowel, she writes only the former.

A new official orthography is being discussed and tested by the recently formed kikongo Consultative Committee (of which both the Rev. D. Ntoni-Nzinga and the Rev. João Makoondewa, who was Carter's main informant, are members), but no definite agreement has been reached as yet.

2.1.2: orthography of this thesis.

The orthography of the texts (see Appendix 3) can best be described as non-standardised. It is based on the present official orthography, but with the incorporation of some features of the Carter orthography. It is not a normalising system; for example, long vowels, affrication and gemination are only marked where heard, and not according to any standard idea of which words should have them. Locative prefixes are written conjunctively (ie. muntsi), but the connective prefix is
hyphenated (i.e. ye-ntsi 'and the country'), because the two types of prefix seem to behave slightly differently as far as pitch patterns are concerned. Relative prefixes (e.g. bu- 'when, then'), object suffixes and negative elements are also hyphenated (e.g. ka-bamweene-dyo-ko 'they have not seen it'). KiKongo proper names usually have the first letter of the stem capitalised (e.g. dībuundu 'the Church'), following Doke's convention.

The word, for the purposes of our discussion, includes not only the stem and such bound elements as markers of class, aspect and the like, but also those elements linked by hyphens - the connective prefix ye-, the relative prefix, the 'long locative' prefixes muna-, kuna-, vuna-, the object suffix, and the negative elements ka-, -ko.

2.2: phrases and marking.
2.2.1: phrases.

In studying the composition of longer utterances it is useful to break them down into 'phrases'. Phrases can be defined in a number of different ways, depending on our purpose. For example, if we take the utterance

ibuna (pause) basiidi kilumbu (pause) ki-bakweenda kuna-kizitu (5, 37-38)

'so they set aside a day on which they would go to the in-laws',

we can divide it into syntactic phrases (i.e. clauses):

ibuna basiidi kilumbu (main clause)
ki-bakweenda kuna-kizitu (subordinate clause)

or into pitch phrases (i.e. sequences containing a high pitch - cf. Carter 1973):

/ibuna /basiidi kilumbu /ki-bakweenda /kuna-kizitu/

or into phonological phrases (i.e. segments occurring between two pauses):

• ibuna • basiidi kilumbu • ki-bakweenda kuna-kizitu•.

In this thesis the texts will be discussed in terms of phonological phrases. Although pitch phrases can be discerned, and are useful in describing certain simple stretches, the variety of possible patterns in any given stretch in the text as a whole are more easily described
in terms of patterns occurring on phonological phrases.

The may consider phonological phrases to be conditioned by two factors: (i) semanto-syntactic considerations, and (ii) pulmonary capability; in other words, (i) the semantics and syntactic structure of the stretch being uttered, and (ii) the length of the stretch the speaker can utter before he runs out of breath. It seems as if the speaker picks out a suitable portion to be uttered, and then pauses while scanning ahead to consider what should be the next portion; the process is repeated indefinitely.

2.2.2: delimitation of the phrases.

Where the punctuation of the written text matches the phrasing of the speech, pauses are marked with the marks of punctuation of the text. Where a pause occurred that was not marked in the script, it was marked by a raised dot. Thus

```
Mono ngyele kunzaandu, ntsumbidiningi ntsusu. (7, 79)
\| phrase one \| phrase two
'I went to the market, and I bought a chicken.'

dimonekene wo sama-skul yikitukidi sempil' atadiya ... (10, 59-60)
\| phrase 1 \| phrase 2 \| phrase 3
'it was seen that the summer-school had become now a kind of factory ...'
```

In some cases, the pauses are fairly prolonged, and this is marked by a series of dots:

```
Yantikidi mukut ... buzzaba bwani. (7, 78)
\| phrase 1 \| phrase 2
'He began to tell of his foolishness'.
```

The same convention is used for false starts.

```
Very often a short pause or 'gap' occurs, usually the result of hesitation or misreading. This gap is marked by \( \wedge \) as in
```
Sama-skul yanthete yi-twanyenda ... (10, 79)
\| phrase 1 \| phrase 2
'The first summer-school that we went to ...'
As can be seen, these gaps have been taken to delimit the phrase just as pauses do, since, although a fair number of these gaps are non-significant and could perhaps be disregarded, this is not true in all cases.

The actual phonetic difference between gaps and pauses is, of course, relative to the speaker and the context, but a study of the tracings discussed in 3.15 (Appendix 2) shows that gaps are generally of less than half-second duration, while pauses are usually longer than half a second; pauses longer than three seconds were considered prolonged. In the actual transcription without mechanical aids, of course, there is an element of subjectivity.

2.2.3: high pitch.

Having delimited the phrases, we must next decide how to represent the pitch patterns occurring on them. Let us take two phrases from the texts (from now on, spaces before and after phrases cited out of context will stand for phrase boundaries):

\[ \text{muna-magata (7, 25)} \quad \text{and} \quad \text{luyantiku (10, 100)} \]

\[ - - - \quad - - - \]

'in the villages' \quad 'the beginning'

We can see that the two contours differ only in the number of initial low pitches, allowing us to recognise a generalised contour \( /...\backslash/ \).

Let us mark the highest point (ie. the peak) of this contour with an acute (\( ' \)), thus:

\[ \text{muna-magata} \quad \text{and} \quad \text{luyantiku} \]

Carter (1973) found that for many kikongo phrases it was adequate to mark only the peak, that syllable which was higher than its neighbours on either side. I have found nothing to invalidate this concept, and so it is followed here.

2.2.4: several high pitches - downdrift.

Phrases with only one high pitch are not very common; we usually find a series of high pitches:

\[ \text{buna ngitsid'i kuna-nzo (7, 46)} \]

\[ - - \quad - - \quad - - \]

'then I came home'
Here we have three high points (circled pitches), where the pitch rises after previous falls, i.e. a contour /\ \ /. In any such kikongo phrase with more than one high point, there is a gradual decrease in the height of the points, such as is seen in the example. This indicates that kikongo shows the widely-distributed phenomenon of downdrift, and allows us to mark all three high points with an acute, with the convention that successive high points in the same phrase will be progressively lower in pitch. Thus:

búna ngitsidi kuná-nzo

In some cases, though the second of two peaks was not higher than that preceding it, it was also no lower. Such instances are discussed in 2.2.6 and 2.2.10.

2.2.5: upturns.

2.2.5.1: pausal upturn.

Very frequently, there is a slight upturn before a pause:

ibuna baana bayenda (5, 69)

The contour is /\ \ /, and we will mark the upturn with a raised circle (\), thus:

ibúna baana bayenda

This pausal upturn has also been noted by Carter (1973, p.18) and Nsuka (1968, p. vi). It occurs only when the pause is not utterance-final, and seems to be an intonational indication that the utterance is about to be continued.

2.2.5.2: high upturn.

In one or two cases there is more of a rise:

umosi (8, 3,a) and twazays (6, 13,b)

While there is good reason to treat the usual upturn (\) as a relatively insignificant pausal feature, this high upturn presents
more of a problem, as the data give us no clear insight into its function. It may in fact be a significant high pitch. Therefore, although in the discussions of these patterns it will normally be treated as a variant of \( \hat{v} \), it will be distinguished in transcription, and marked \( \hat{v} \). Thus:

\[
\hat{v}_{\text{mosi}} \quad \text{and} \quad \hat{v}_{\text{twazayá}}
\]

2.2.6: bridges.

There are phrases in which there is a high pitch 'plateau' such that two or more syllables have the same high pitch, i.e. the contour is \( /\text{---}\/. \) Such plateaux have been called 'tone-bridges' by Daeleman 1966, van den Eynde 1968, and Carter 1980, and the term 'bridge' will be retained here.

Bridges can occur

(a) between words, usually at any point in the phrase:

\[
\text{mono ndutidi mubuzoba (7, 41)}
\]

\[
\begin{array}{cc}
\hline
- & - \\
\end{array} \quad \begin{array}{cc}
- & - \\
- & - \\
\end{array}
\hspace{1cm} \text{(brackets mark the bridge)}
\]

'I excel in foolishness'

\[
\text{bu-balwaaka kuna-nkunku gata dyau (5, 69-70)}
\]

\[
\begin{array}{cc}
- & - \\
- & - \\
\end{array}
\hspace{1cm} \begin{array}{cc}
- & - \\
\end{array}
\]

'when they arrived at the outskirts of their village'

In exceptional cases, the bridge may be very long:

\[
\text{kuna-mfwila maalu manzitu andí (5, 58)}
\]

\[
\begin{array}{cc}
- & - \\
- & - \\
- & - \\
- & - \\
\end{array}
\]

'at the feet of his father-in-law's corpse'

(b) on individual words

(i) initially or medially:

\[
\text{ukweelele nkas'aku (5, 75)}
\]

\[
\begin{array}{cc}
\hline
- & - \\
\end{array}
\hspace{1cm} \begin{array}{cc}
- & - \\
\end{array}
\]

'so that you could marry your bride'

(ii) finally:

\[
\text{bu-katoombula : gana-meesa (7, 47-48)}
\]

\[
\begin{array}{ccc}
\text{-(--\)} \\
- & - & -
\end{array}
\hspace{1cm} \begin{array}{cc}
- & - \\
\end{array}
\]

'when she put them on the table'
This type of bridge is always followed by a pause, and would therefore seem to be a pausal/hesitation feature.

We could mark the bridge, as Daeleman and van den Eynde do, by putting an acute on each syllable, thus:

```
bu-balwaaká kuna-nkünkú gáta dyáu
```

However, this tends to look cluttered, and, more important, it tends to obscure the function of the bridge, which seems in most cases to indicate a close syntactic link. For this reason, Carter's marking, putting a grave (v) on the first syllable of the bridge and an acute on the last, will be used. Thus:

```
mônò ndútiddy mubuzóba
bu-balwaaká kuna-nkünkú gáta dyáu
kunà-mfuía maalu manzítu ándí
ukwéelelé nkás' áku
bu-katômmbulá gana-méesa.
```

2.2.7: long vowels, rises and falls.

The marking convention used for bridges is also applied to long/double vowels when the two morae have the same pitch:

```
mumâmbu makimpéeve (10, 74)
```

'These matters spiritual'

Where the two morae of a long/double vowel differ in pitch, an acute is marked on the higher of the two:

(a) fall: ñbûUNS nañungwa etc. (5, 23)

```
- - - - -
'Then Mr. Owl ...'
```

(b) rise: baaboole ye-nkéento ye-yakala etc. (7, 53)

```
- - - - - - - -
'the two of them, wife and husband ...'
```

Rises are rather infrequent, and mostly occur at the beginning of bridges.
A fall in pitch over a short vowel is marked \( \checkmark \) in the few cases where it occurs:

\[ \text{yo mbute wubageene mbote (7, 106)} \]

\[ \text{-- -- -- -- -- --} \]

\[ 'the man greeted them'. \]

This fall, like the rise marked with \( \checkmark \), almost always occurs before pause. With both the fall and the upturn \( \checkmark \), the vowel is sometimes heard as slightly lengthened (see 2.2.18).

A non pre-pausal rise in pitch over a short vowel is rare, and is marked \( \checkmark \). One of the few examples is

\[ \text{kansi (5, 78)} \]

\[ \checkmark \]

\[ 'but'. \]

In a few cases the rise is found at the beginning of a bridge, and is then marked \( \checkmark \):

\[ \text{ye-nsusu makumoole (5, 40)} \]

\[ \text{-- -- -- -- -- --} \]

\[ 'and twenty chickens'. \]

2.2.8: rising bridge.

Sometimes we meet phrases such as

\[ \text{ndzefu zayandi bakala (7, 113)} \]

\[ -- -- -- -- -- -- \]

\[ 'the beard of him the husband' \]

Here we can see that instead of the usual contour /\( /\), we have /\( /\), ie. that instead of downdrift'from a high point preceded by low and approximately level pitches, we have a steady rise towards a high point near the end of the phrase. This contour, referred to as a 'rising bridge', will be marked \( \checkmark \ldots \checkmark \), ie. the regular bridge markings, but with an arrow to indicate rise. Thus:

\[ \text{ndzefu zayandi bakala.} \]

The first pitch-mark is placed on the first syllable of the phrase appreciably higher than the pitch starting the phrase - this is, of course, subjective, and we will take the rise as starting on the first
syllable of the phrase, except where there are a number of clearly low and level initial syllables.

2.2.9: bridge with extra-high final.

In addition to the level high sequence of the bridge and the steadily rising sequence of the rising bridge, we also find high, level sequences followed by a still higher syllable, ie. a contour /\-
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pitch does not show the downdrift usual in such a position. We will refer to these high points as being 'extra-high', and to mark them we will use the double acute (\(\acute{\acute{\prime}}\)) introduced in 2.2.9. Thus:

\[
\text{bakubika}
\]

\[
ye-muking\acute{\acute{\prime}}\text{lazo yib\u0120kwanga vo.}
\]

The perceived difference between high pitch and extra-high pitch is, of course, subjective, but a study of the tracings discussed in 3.15 shows that an extra-high pitch of the type in the first example is higher than 180 Hz; a normal high pitch is usually lower.

2.2.11: extra-high bridge.

Quite frequently we find an extra-high bridge:

\[
\text{maanzi kama\&a s a myetoma syama-ko (6, 66, z)}
\]

\[
\text{myanxi kan\&a s a myetoma syama-ko.}
\]

The extra-high bridge may also occur on a single word:

\[
\text{ka\&a s i ky\&e l\&o kis\&i ti nt\&u tu (7, 86-87)}
\]

\[
\text{ib\u0120una munsung\u0120i yit\u0120uka\&a s a lunswa (5, 83-84)}
\]

Using the convention introduced in 2.2.6, we mark this:

\[
\text{myanzi kaminaanga myetoma syama-ko.}
\]

2.2.12: extra-high fall.

There are a few instances of an extra-high fall, marked \(\acute{\prime}\):

\[
\text{wufms (7, 55)}
\]

\[
\text{you would die!}
\]

2.2.13: higher key.

We have been marking extra-high pitch when only one or two words in the phrase have a pitch higher than usual. But if both high and
low pitches all through the phrase are raised, it is counter-productive
to have special marks for both extra-high and 'raised low'; it is much
easier to use the marks already assigned for normal high pitch, but
with a special mark indicating that the pitch all through the phrase
is raised, i.e. that the phrase has been transposed to a higher 'key'.
The mark we will use to indicate higher key is ^ at the beginning of
the phrase, and it is important to remember that the higher key applies
only to the phrase so designated. Thus:

* ibuna kayenda ssamuna (5, 25-26)

'so he went off to find'.

It should be noted that in a few cases phrases could be marked in
either of two ways:

\[ \text{wantu woole or } \text{wantu woole} (4, 1) \] 'two people'.

In such cases, whenever the entire phrase is raised, I have chosen the
second method, reserving the extra-high marks for phrases in which
only some of the words have extra-high pitch.

2.2.14: lower key.

Just as there may be transposition to a higher key, so also there
may be transposition to a lower key. This is marked by \( \downarrow \) at the
beginning of the phrase:

\[ \text{bawu} \text{ badingalele} (7, 109) \]

'they were silent'.

Note that in this case the lowering applies mainly to the high pitches,
since the speaker usually has less pitch range below his normal low
than he has above his normal initial high. Since the overall effect
of transposition to lower key is to narrow the range between high and
low pitches, in a few phrases in lower key the marking of high pitch
is only tentative, since it was difficult to hear the contrast
between high and low.

2.2.15: ultra-high pitch.

In a few instances the speaker goes so high that his voice breaks,
This phenomenon, which may be called 'ultra-high pitch', has so far been found only in exclamations and ideophones. It will be marked by placing the symbol * before the word concerned (note that in this case the mark does not apply to the rest of the phrase).

*one mbota ylugaansanga! (7, 108-9)

'says he, "Didn't I greet you?!"

bawu *pit! (7, 106)

'they were as silent as the grave!'

2.2.16: lower high pitch.

2.2.16.1: final.

Consider the following phrases:

ekuma kadi (6, 51,a)

'because'

ntambikidi (8, 25,a) and untoondele (5, 36)

'I entrust'

Here, we notice, the final pitch does not return to base pitch. The phrase ends on a high pitch which is, however, lower than the level of the first high pitch in the word. In the last two examples, it is not a single syllable but a sequence which is at the lower high pitch. If we mark the last syllable with a macron (\(\tilde{\text{v}}\)), and understand it to mean 'all syllables from here to the previous high pitch are on this pitch', then we have:

ekuma k\(\tilde{\text{a}}\)d\(\tilde{\text{i}}\)

ntambik\(\tilde{\text{i}}\)di and untoondele.

This final lower high pitch seems to be a non-significant pausal feature. It occurs in free variation with the pausal upturn (2.2.5.1) - indeed, in some cases it is unclear which of the two is occurring - and with the hesitation bridge (2.2.6(b)(ii)).
bātelāmā and bātelāmā (8, 96, a and b) 'they got up'  
ntāmbākīdī and ntāmbākīdī (8, 25, b and a) 'I entrust'.

2.2.16.2: preceding normal high pitch.
There are a few examples such as

... gana tuna beeto batatu (7, 76-77)

Here, the circled pitch shows an appreciable lift above the base pitch, without, however, reaching peak. We will therefore mark

... ganā tūna beeto bātātu.

We could also mark

... ganā tūna beeto bātātu (cf. 2.2.8)
or ... ganā tūna beeto bātātu (cf. 2.2.9).

However, since two adjacent syllables are concerned here, the lower high pitch mark will be used.

2.2.17: lengthening of final syllable.

In some places a word-final syllable is slightly lengthened before going on to the next syllable, with or without a slight accompanying rise. This lengthening is marked y:

njantiku assalu kusama-skul (10, 100-1)

Since this lengthening seems to have an element of hesitation about it, and since the contours before and after it suggest two separate phrases, the lengthening has been taken as the equivalent of a gap, and we would thus mark the rise on that syllable, where it occurs, with the upturn mark ŋ, as elsewhere:

njantiku assalu kusama-skul.

Sometimes the gap following this lengthening is clearly audible:

buna si-twābakā muvūtu (9, 38)

'then we will get answers'.
2.2.18: uncertain high pitch.

In one or two places it is uncertain whether the high pitch is on the syllable marked, or the one before or after. In these cases the mark ~ is placed before or after the high pitch mark, as necessary:

nzalũ zeeto = nzalũ zeeto/ nzalũ zeeto (9, 17) 'our knowledge'.

Occasionally it may be uncertain whether a given syllable has high pitch; this is marked by putting brackets round the high pitch mark:

si-diá kim̪̄n̪̄i (7, 49)

'for me to eat (?), I do not see [it]'.

Even if the marked syllable is not actually high-pitched, it usually has other perceptual markers of prominence, such as slightly greater stress and/or increased loudness.

2.2.19: stress.

Peaks of stress usually co-occur with peaks of pitch (cf. 3.5.4.2), but where this is not the case, or where it is very intense, stress is marked by a subscript dot:

musík̪̄l̪a yau (8, 91z) 'to stay with them'.

2.2.20: nasal length.

In a few instances a nasal preceding a consonant seems to be slightly lengthened. This is marked by underlining:

@bak̪̄ (a name) (7, 22)

2.2.21: creaky voice.

The marking under a word or syllable indicates that it is pronounced with creaky voice. This has so far been found only in exclamations:

tasta (7, 125) '[by my] father!'.

2.2.22: vowel quality.

The mark ~ under a semi-vowel indicates that it was heard as nearly syllabic, eg. myeene (6, 6,b) 'I see' tends towards [mu̥e̥ene].
The mark ⊂ under -u- indicates that it was unusually low and/or open, tending towards [ø], e.g. bu-bayenda (7, 11) 'when they went'.

2.2.23: other features.

Other important features of phrases are marked by putting + at the beginning and end of the stretch concerned, with a note at the bottom of the page explaining what is referred to. Thus:

- whispered articulation: 7,64.
- indistinct articulation: 7,63-64.
- slow, distinct articulation: 8,96-97;z; 9,6; 11,35,b.
- fast rate of articulation: 6,26-27,a; 6,28,a; 6,38-39,a; 6,69-72,a; 6,77-78,a; 7,10; 8,19,z; 8,68-70;z; 9,13-14; 9,20; 9,35.
- forceful, intense articulation: 8,43,a; 11,31-32,b.
- rising, crescendo contour: 8,75-76;z; 8,61,z; 8,84-85;z; 11,36-37,b.
- fast falling contour: 10,41.

2.3: summary.

To recapitulate on the markings adopted:

- phrase boundaries: punctuation marks, pause (•), gap (₃) (2.2.2), hesitant lengthening (y) (2.2.17).
- pausal features: upturn (ऀ) (2.2.5.1), high upturn (ँ) (2.2.5.2), final lower high pitch (ँ) (2.2.16.1).
- high pitch (ऀ) (2.2.3, 2.2.4), fall (ँ) (2.2.7), bridge (ँ....ँ) (2.2.5), bridge with extra-high final (ँ....ँ) (2.2.9), rising bridge (ँ....ँ) (2.2.8), extra-high pitch (ँ) (2.2.10), extra-high bridge (ँ....ँ) (2.2.11), ultra-high pitch (ँ) (2.2.15), high pitch uncertain (ँ), position of high pitch uncertain (ँ) (2.2.18).
- higher key (ँ) (2.2.13), lower key (ँ) (2.2.14).
- others: stress (y) (2.2.19), nasal lengthening (ँ) (2.2.20), vowel quality (ँ, ु) (2.2.22), creaky voice (ँँँ) (2.2.21).

These markings have enabled us to represent adequately the contours of all the texts. Few, if any, contours have been found which cannot be handled under this system.
1. These numbers refer to the texts in Appendix 3. The first number is that of the chapter where the text is discussed, and the second is the line number in that text. Thus 5,37-38 means 'lines 37-38 of the text for chapter five'.

2. The v...v marking, introduced in Carter 1980, is in origin a divided version of her (1973) mark for peak pitch, V (see also 4.7.2). The v...v marking also allows us to reserve the marking \^v in this thesis for those few instances of 'downstep' that occur in the texts, eg. ang\^mb' änzö (4, 22) 'of the temple', ka-mf\^eené m\^neka-ko (6, 21,b) 'they should not be seen'. Where it is necessary (eg. when discussing a word in isolation) to draw attention to the fact that an acute mark signifies the last high pitch in a bridge, the mark V will be used, eg. kant-ko, from the phrase kadi\^enda kant-ko (6, 28,b) 'it is utterly impossible'.

3. This concept was originally used in the description of kiKongo by K.E. Laman (1922, art.13 et al., see also Donnelly 1980), though the sense in which it is used here is slightly different.

4. In the dialect studied by Carter, the phenomenon often occurs with WH-questions - cf. Carter and Makoondekwa 1981, section 4.3.

5. It is beyond the scope of this thesis to fully discuss or define what constitutes stress, particularly since this is still 'a matter of controversy' (Sommerstein 1977:36). I am content to accept general definitions of the phenomenon, such as that of Hartmann and Stork 1972 ('greater force exerted in the articulation of one part of an utterance compared with another, thus accentuating a certain part of the utterance, giving it more prominence'), or that of Pei 1966 ('intensity of utterance; special emphasis on a sound or sound group, the result of greater amplitude of the sound waves, producing relative loudness'). Sommerstein (ibid.) believes that, 'Loudness itself is not the sole auditory component of what phoneticians call stress. Pitch and duration are relative cues as well', and concludes that in any case 'uncertainty about the phonetic nature of stress ... does not necessarily preclude phonological investigation of it', since investigators can usually agree on which syllables are stressed.
6. It is as yet uncertain whether this lengthening can be considered as syllabicity, ie. whether N:C = NC. Daeleman (1966) considers that syllabic nasals exist in kikongo, but Carter (1970) argues against this on tonal grounds. The instances in the texts are insufficient to come to any firm conclusions.

7. This differs from the rising bridge (2.2.8) in that the rise is not steady, but 'jerky', ie. not /\^-\ , but /\^-\/. Thus:

```
k\a\'ansi be\'eto tw\"asti\'di \"o\'uu\'u vo \"y\"e\'ond\"i \"ind\"e\'en\" (8, 75-75, z)
--- --- --- --- --- --- --- ---
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'but we had not left off hoping that he would be the one'.

Although there is an overall rise, high- and low-pitched syllables can still be distinguished. This is in contrast to the rising bridge, where there is a steady rise in pitch from syllable to syllable.

8. This differs from the usual downdrift contour (2.2.4), where high- and low-pitched syllables can be distinguished, in that there is a sudden fall from the highest pitch, during which there are no high/low pitch distinctions, ie. /\^-\/ instead of /\^-\/.
PART II

Tonology: Texts and Systems
CHAPTER THREE
A Preliminary Investigation - kisiNgombe

3.1: introduction.
This chapter consists of two main sections. The first section (3.2) is a summary of my first attempt at marking and analysing the pitch-contours of one of the texts (the kisiNgombe text by the Rev. Komy Banzadio - see also chapter 10). Although this syntactically-based analysis had later to be heavily revised in favour of a pitch-accent approach, the summary will serve as a useful introduction to the main problems of analysis. The second section (3.3 ff.) embodies an expansion and revision of one part of the first analysis (3.2.3, a study of high pitch placement), along with a discussion of additional material such as pitchmeter tracings. At the end of the chapter we should be in a position to suggest a method of description for the other texts, which we will then apply to progressively longer stretches of text through the rest of the thesis, refining and modifying the description on the way.

3.2: the original analysis.
3.2.1: marking.
Many features which it was later found useful to distinguish were not noted in the original marking of the text. For the purposes of this summary, however, the contours marked will be those originally noted, since they were the ones on which the analysis was based. For comparison, the passage (10, 1-58) to be discussed below (3.2.4-6) is given both with contours in original notation, and with later, revised, notation as described in chapter 2.

3.2.2: variant pitch contours.
Study of the text revealed that the pitch contours showed a large degree of variability, in that the same sequence, even when occurring in a superficially similar context, might show differing patterns. Some 38 sets of such sequences were noted in the text, of which the following are a representative selection:

(1) mpil' ants'ungi zina zim'nekene munts' adlphutu 5-6 'the kind of seasons which are experienced in Europe'
The variations consisted in placement of high pitch within the word, and presence or absence of high pitch on the word. The three members of example (5) illustrate these points. In a few cases, the patterns seem to be complementary: thus, in examples (3) and (10) we have a sequence 'high-pitched word + low-pitched word' in one member, and the reverse sequence 'low-pitched word + high-pitched word' in another, eg.
This type of example might possibly be described in terms of a 'moveable peak' in the contour.

Since differing contours are found with identical sequences, the pitch patterns cannot be determined exclusively by lexical tone and tonal sandhi. From the examples above, we can already discern some possible conditioning factors in the environment of the sequence, such as occurrence after the genitive element (examples 7, 10), or in its delivery - note the effect of pause in examples (6, 8).

3.2.3: general pitch patterns (original marking).

As a preliminary step, certain features of the pitch patterns occurring in the text (e.g. number of high pitches in the word, most common place of occurrence of high pitch, variation of pitch occurrence throughout the text, etc.) were examined, in order to have a general framework into which to fit the findings of more detailed analysis.² Lines 39-80 were chosen as a sample passage.

3.2.3.1: frequency of high pitch.

Of a total of 271 words³, 120 (44%) bore no high pitch. Of the remaining 151 words with high pitch, 28 (10% of the total) had more than one high pitch. 27 of these had a bridge on the word, and in only one case⁴ were there two separate high pitches.

3.2.3.2: position of high pitch.

Of the 151 words with high pitch, it was found that the high pitch rarely⁵ occurred later than the second syllable. It never occurred later than the fourth syllable, although there were 25 words long enough for this to happen. High pitch most commonly occurred on the second syllable of the word (80 cases - 53%), and/or the first syllable of the stem (117 cases - 77%).⁶

3.2.3.3: ratio of high pitch to word.

A rough count was made of the number of words and high pitches all through the text. The ratio of high pitch to word was notably
consistent throughout (slightly less than 1:2), suggesting that the occurrence of high pitch was not dependent on factors of narrative structure.

3.2.3.4: conclusions.—the 'root-syllable'.

Since occurrence of high pitch was regular, and most high pitches appeared on the first syllable of the stem, we could therefore set up a 'predicted' (i.e. unmarked or neutral) place of occurrence for the high pitch. We would then concentrate on the marked, non-neutral pitch contours, attempting to identify the environments in which deviations from the predicted patterns were found.

In view of the importance of the first syllable of the stem, it was labelled the 'root-syllable', following Laman (1922), who had also noted its importance. The root-syllable (as defined here) is the first syllable of the stem of a noun or verb, or the first syllable of a demonstrative, possessive, pronoun, adverb, etc. Thus, underlining the first vowel of the root-syllable:

kabakga 'they were'; myambate 'of goodness'; ovo 'or'; maka 'some'; zina 'which'; kota 'enter'; vaava 'now'; zizzo 'these'; yaayi 'this'; kaansi 'but'; ziyikwanga 'they are called'; intswasawani 'there is a difference'.

3.2.4: syntactic notation.

In order to judge whether or not such factors as phrasing, context, syntactic environment and so on played a role in determining the pitch contours, the syntactic parsing system devised by Guthrie (1961) and refined by Carter (1973) was chosen as a framework for classifying the sequences with which pitch contours occurred. This system is a shorthand describing the surface syntax in terms of a number of syntactic 'units' (e.g. subject, indirect object, etc.), each of which consists of a head (the most 'important' word in the unit) which may occur with one or more dependent items. Thus the phrase

muluzingu laaau laawatimba 39 'in their whole lives'

may be described as LOC-poss-gen. It is a locative unit, consisting of a head noun with locative prefix (LOC), a possessive (poss), and
a genitive (gen), both of which agree with the head noun. Other examples are:

\[ \text{munts}§\text{jungi y\text{\textdagger}} \text{ayi!} \ 17 'in this season' \]
\[ \text{TEMP} - \text{dem} \]
(a temporal unit, consisting of a head noun followed by a demonstrative agreeing with it)

\[ \text{m\text{\textacircled{a}}} \text{ maambu} \ldots \ 40 'a few things' \]
\[ \text{dem - OBJ} \]
(a direct object unit, consisting of a head noun preceded by a demonstrative agreeing with it).

The system has not been described in full here\(^8\), since it was later found that its use for the texts was unnecessary, and therefore it is not of prime importance for understanding the later chapters of this thesis. For a full description, the two works cited above should be referred to. For a critical analysis of the system, see Hayward 1976.

A method was then devised for incorporating abstract representations of the pitch patterns with the abstract representations of the syntactic patterns in the parsing system:

1. since high pitch was most likely to occur on the root-syllable (3.2.3.4), we could mark this by underlining the abbreviation, eg. for a locative unit \text{munts}\j 'in the country', we write \text{LOC};
2. if the high pitch occurred on the syllable preceding or following the root-syllable, this was marked by a raised + before or after /, eg. \text{k\text{\textdagger}mbu} 'in the sea' + \text{LOC}; \text{ba\text{\textdagger}n\text{\textdagger} } 'children' \text{ \text{SUB} + } (a \text{ subject unit});
3. if the high pitch occurred more than one syllable before the root-syllable, this was reflected in the number of signs, eg. \text{\textdagger}lukan\text{\textdagger} 'of the aim' ++ \text{gen} (a dependent genitive item);
4. where no high pitch appeared on the word, the unit abbreviation was left unmarked, eg. \text{kumw\text{\textdagger}inti} 'in the sun' \text{LOC}.

In the original analysis, it was the patterns of the unit heads that were focussed on; some attempt was also made to describe the patterns on dependent items, but these were considered subsidiary, with patterns perhaps linked to those on the unit head.
3.2.5: sample unit descriptions.

The three sample unit descriptions (out of the total of 21) which follow have been chosen so as to highlight both the strong and the weak points of the analysis.

3.2.5.1: subject unit.

The first unit is that of subject (SUB)$^{10}$. In most cases we find SUB, sometimes with a further high pitch:

(1) *bɛɛtš* munts ꩆ koongö 8 'we in the country of Congo'
    SUB$^{11}$ LOC - gen

(2) *yáu* A mnts ꩆ amtîni 13 'it is the season of sun'
    SUB STAB$^{+}$ - gen

(3) *nts ꩆ munts ꩆ allphutu ꩆ tnts ꩆ aswant ... 6-7 'the seasons in the land of Europe are different'
    SUB$^{+}$ LOC - gen STAB land of Europe are different

(4) *yáu* yitlutidi zzolakana 12 'it is the season which excels in beauty'
    SUB$^{+}$ PRED INF

(5) *ekumâ* kádi 13, 14 'the reason being that'
    SUB$^{+}$ CONJ

(6) *mbbûtû myakala myamboote* 47 'the results were good'
    SUB PRED COMP

(7) *kádi vo* mutîni umônskene 24 'since the sun has come out'
    CONJ-CONJ SUB PRED

(8) *program* 55 'programme'
    SUB

(9) *bêsî-allphutu bayaŋgalâcosa ... 13-14 'Europeans are happy'
    SUB PRED

(10) *báantû baluta bâkkanga ... 17 'people often go [on holiday]'
    SUB$^{+}$ AUX - PRED

(11) *kîse kîkalânga ... 21 'it is pleasant'
    SUB PRED

(12) *môeëvo* A mutupîtaâlu zivayîktswanga 18-19 'invalids in hospital are taken ... '
    SUB$^{+}$ LOC PRED

(13) *bawöona bo* bândamene ... 23-24 'everyone feels obliged'
    SUB PRED
(14) matóko ye-z'induumba 36 'young men and women'
   SUB CONN
(15) ye baleke 56 'and the young people'
   β CONJ SUB
(16) ntsuungi zózo 10 'these seasons'
   SUB+ - dem
(17) nkóũbu yeayi yasáma-skuul 27 'this name "summer-school"'
   SUB+ - dem - gen
(18) mbúta zabiyemese ... 53 'the directors of the BMS'
   SUB+ - gen
(19) ntóambokólo asáló 48 'the growth of the work'
   SUB - gen
(20) sáma-skuł yantete yabiyemese 46 'the first BMS summer-school'
   SUB - gen - gen
(21) mbút' álukanu luaáme 41-2 'my main aim'
   SUB - gen - poss
(22) báantu bana balàándila ... 49 'the people who continued ...'
   SUB - rel - REL
(23) buna sáma 11 'well, summer'
   CONJ SUB
(24) síkóolu zikaangamaanga 18 'the schools close'
   SUB+ PRED

It is interesting to note that the prevalence of SUB is almost the opposite of what happens in kiMbanz' aKongo as described in Carter 1973; there a subject unit has its first high tone 'neutralised' (see 4.7.2ff), so that very often the first word in that slot has no high pitch at all.

In two cases we have SUB:

(25) 'imusáma - baaná 27 'it is in summer that young people ...'
   ⊲ STAB SUB+  
(26) ne' intst aKongo - baantu/13 ka-bena ... 22 'like the country of
   β CONJ STAB - gen SUB+ neg- PRED Congo, people do not have ...'
Note that in both cases the immediately preceding unit is STAB.

There are two examples of SUB:

(27) mphasi vo 19 'so that'
   SUB - CONJ

(28) yaau yakala ... 46 'it was ...' (cc. nos. 2 and 3 above)
   SUB - PRED

We therefore have 24 examples of SUB, 2 of SUB* (occurring after STAB), and 2 of SUB. As for other words in the unit, we have one each of SUB-dem, SUB-dem-gen, SUB-gen (bridge), SUB-gen, SUB-gen-gen, and SUB-gen-poss. The subject unit is preceded by a pause in all examples except (6).

3.2.5.2: locative unit.

The second sample unit is that of locative (LOC). Most examples are of LOC:

(29) mtsung’i muntsi amphutu 6-7 'the seasons in the land of Europe'
    SUB* - LOC - gen

(30) ziyikuwanga munding' akingselzo 10 'which are called in the English
    PRED - LOC - gen language ...'

(31) mbeevô mutupitaal' zivyikiswanga 18-19 'the patients in the
    SUB* - LOC PRED hospitals are moved out'

(32) mbuza zabiyemese kulondro 53 'the directors of the BMS in London'
    SUB* - LOC

(33) bëto' muntsi akoongô 8 'we in the country of the Congo'
    SUB* - LOC - gen

(34) buuna muntsi amphutu 8 'whereas in the land of Europe'
    CONJ LOC - gen

(35) muntsi ne' interi akoongô 22 'in a country like the country of
    LOC - CONJ STAB - gen the Congo'

(36) këans ô kùmphutu 23 'but in Europe'
    CONJ - LOC
(37) musama-skulu zantete 54 'in the first summer-schools'
   LOC - + gen

(38) ... muntsi 'Angletser 1 'in the country of England'
   LOC - gen

(39) ... kyayamam' kumwitiko 23 'of lying in the sun'
   gen LOC+ -neg

(40) muntsi sau 34 'in their country'
   LOC - poss*

(41) muntsi eto aKoongo 3 'in our country of Congo'
   LOC - poss - gen

(42) ... mumbaanza zamphila mumphila 16 'in various towns'
   LOC - gen - loc

(43) muntsi zankaka zina zikwenda 35 'in other countries which
   LOC - gen - rel - REL [missionaries] go to'

(44) muluzitungu lwaau lwamumbe 39 'in their whole lives'
   LOC - poss - gen

(45) muAfelika 22 'in Africa' (cf. no. 24 above)
   LOC

   But there are several examples of LOC:

(46) ... zina zimonekene muntsi amphutu 5 'which are experienced in
   rel - REL LOC - + gen the country of Europe'

(47) ... zina zimonekene muntsi aKoongo 8-9 'which are experienced in
   rel - REL LOC - + gen the country of the Congo'

(48) ... kota mungudi ansamu 5 'going to the heart of the matter'
   INF LOC + gen

(49) kiyia muntsi zankaka 16-17 'go to other countries'
   INF LOC + gen

(50) ... yakala mumbaanz' Folkstone 46-7 'it was in the town of
   PRED LOC - gen Folkstone'

(51) ... muyangidika nitu kumwitiko 24 'to let their bodies enjoy the
   PURP OBJ LOC sun'
There are a few examples of LOC:

- (52) bakwändanga ulólo kusama-skul 28 'that they go in a crowd to the summer-school'
  - IREL REF LOC

- (53) ye-kóta mudiBuundu 37 'and enter the Church'
  - CONN LOC

- (54) ye-bankáka mubaau 37 'and some of them'
  - CONN LOC

- (55) ... mukwënda kusama-skúl 50 'to go to summer-school'
  - PURP LOC

- (56) mukwënda kusama-skul 52 'to go to summer-school'
  - PURP LOC

There are a few examples of +LOC:

- (57) ... yivúyóokele múwete 12 'which excels in beauty'
  - REL +LOC

- (58) ... yóbtínga kúmbu 15 'swimming in the sea'
  - INF +LOC

- (59) ... zívayikisaanga kúmbazi 19 'are taken outside'
  - PRED +LOC

We therefore have 17 examples of LOC, 11 of LOC, and 3 of +LOC. In the original analysis LOC was called a 'continuous form', while LOC and +LOC were referred to as 'discontinuous forms', ie. they occur where after the unit there is some sort of switch of reference in what is being talked about. All examples of LOC and +LOC occur clause- or sentence-finally, and although there are a few sentence-final examples of LOC (nos. 38, 39, 44), in general the continuous/discontinuous distinction may be useful.

There are other differences between the groups. All instances of LOC and LOC are non-initial, and all but one (no. 54) are post-verbal. Examples of LOC tend to be non-initial (13 cases) and pre-verbal (11 cases), but there are several exceptions in both areas. It seems usual for the locative unit not to be preceded by a pause – there are only six exceptions (nos. 37, 40, 41, 43, 44, 45) in the above examples, all of them LOC.
As for other words in the unit, there seem to be no high pitches on words following LOC, while those following LOC show a high pitch on the prefix: LOC-gen (6 examples), LOC-poss-gen (2), LOC-gen-loc, LOC-*gen (4). The exceptions LOC-*gen (no. 37) and LOC-gen (no. 50) occur with unassimilated foreign words. LOC-poss (no. 40) may be conditioned by hesitation. No modifier appears in any example of +LOC.

3.2.5.3: direct object unit.

The third sample unit is that of direct object (OBJ). Most examples are of OBJ:

(60) máká maambu 1, 40 'a few things'
   mod - OBJ

(61) ... bállutá bákanka vuundu 17-18 'they usually take a holiday'
   AUX + PRED OBJ

(62) bawv'likanga ntímá 37 'they cleanse their hearts'
   IREL OBJ

(63) bazìzùbula stìkála náana 53 'they opened eight schools'
   PRED-os OBJ - num

(64) ... muyángidika ntú kumwúsínti 24 'to let their bodies enjoy the
   PURP OBJ LOC sun'

(65) ... muvovíla dyasambu dyasama 41 'to talk about the word "summer"
   PURP OBJ - gen

(66) ye-táng kimbaangi 38 'and bear witness'
   CONN+ OBJ

(67) mpíl' antsuungi zína zimónékasane ... 5-6 'the type of seasons
   OBJ - gen rel - REL which are experienced'

But there are almost as many of OBJ:

(68) ntsáangu zasáma-skuylíz zína zikúbíkaangá ... 44 'information about
   OBJ - gen rel - REL the summer-schools which are
   ORGANISED'

(69) bákóbkóliká lékwa kíbbókúlwanga ... 26 'that they prepare
    +IREL OBJ - REL things which are called ...'

(70) baýéttíla múntínti 19 'they may sunbathe'
    PRED OBJ
We therefore have 8 examples of OBJ and 6 of OBJ. The reason for the variation is unclear, since there appears to be no correlation with syntactic environment, context, or phrasing. A pause before the object unit seems to be optional, but more frequent before OBJ (nos. 68, 72, 73) than before OBJ (no. 67). As for other words in the unit, we have OBJ-num, OBJ-gen (2 examples), OBJ-gen (2), OBJ*-gen-num.

3.2.6: conclusions.

We can therefore see that an analysis in these terms has mixed results. In some cases (eg. the subject unit) the basic form seems fairly clearcut, though it is difficult to account for exceptions. In other cases (eg. the object unit) it seems impossible to isolate any clear conditioning factors. In a few cases, though (eg. the locative unit), we do seem to find certain correlations between pitch contour and context (see also 10.3.4).

The results obtained from this analysis are therefore disappointing, and this is exacerbated by the fact that no consistent general statement can be made for modifiers (other words in the unit), since the main emphasis of the analysis is on the unit head. We could perhaps treat gen, *gen, gen, for example, as tonally conditioned in some way, but this would have difficulties, and would also have to come to grips with the fact that the same word may have more than one of the patterns.

A subsequent attempt to apply this type of analysis to another portion of the text showed that the results were equally unsatisfactory – very few of the comments made on pitch contour in the pilot study turned out to be applicable, unless so many qualifying clauses were
inserted in the 'rules' that they were well-nigh useless.

Nevertheless, it was decided that an alternative approach might bear some fruit. In this approach high pitch would again be taken as usually occurring on the root-syllable, subject to conditioning factors of some sort, and to possible intonational variation of the same utterance – that is, a type of pitch-accent system.

The textual marking of the original analysis was refined to give that outlined in chapter 2, and subsequent texts were analysed in this way, which did seem to produce more satisfactory results than the one outlined above.\textsuperscript{14}

3.3: further material.

The rest of the material in this chapter was not part of the original analysis. However, it is related to the matters already discussed, and must logically precede the rest of the thesis.

3.4: general pitch patterns (later marking).

Since the text was later re-marked, the calculations described in 3.2.3 are no longer accurate, and are here expanded and revised. The same portion of the text, lines 39–80, was used as the sample.

3.4.1: frequency of high pitch.

Of the 271 words (excluding 8 foreign words), 200 had high pitch. 67 (25\%) had no high pitch, and 4 more occurred inside a bridge between two flanking high pitches. There were 55 bridges between words, and 29 bridges on individual words. There were only two cases of words with two high pitches not in bridge: mo-yángalalé mpe 'enjoy them also' (57) and zá'a mpe 'theirs also' (75) – as can be seen, they are followed in each case by mpe.

3.4.2: position of high pitch.

The 200 words with high pitch were examined to see on which syllable of the word the first high pitch occurred, and, if there was a bridge on the word, to see on which syllable the bridge ended. The results were as follows:
position of syllable in the word

<table>
<thead>
<tr>
<th>type of syllable</th>
<th>1st.</th>
<th>2nd.</th>
<th>3rd.</th>
<th>4th.</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>root-syllable</td>
<td>66</td>
<td>81</td>
<td>13</td>
<td>2</td>
<td>162</td>
</tr>
<tr>
<td>non root-syllable</td>
<td>23</td>
<td>11</td>
<td>-</td>
<td>-</td>
<td>34</td>
</tr>
<tr>
<td>total</td>
<td>89</td>
<td>92</td>
<td>13</td>
<td>2</td>
<td>196(^1)5</td>
</tr>
<tr>
<td>end of bridge</td>
<td>-</td>
<td>18</td>
<td>7</td>
<td>4</td>
<td>29</td>
</tr>
</tbody>
</table>

These figures show that the most common position for high pitch is on the 2nd. (92 cases, 46%) or 1st. (89 cases, 44%) syllables. Later positions occur much less frequently (3rd. 7%; 4th. 1%).

No high pitch was found to occur later than the fourth syllable - this was true even of high pitches which were the last in a bridge. This is interesting, since we might have expected bridges to extend to the next high pitch, regardless of how far away it was, but in fact they seem to be subject to the same conditions of occurrence as first high pitches.

It is significant that all 15 examples of first high pitch on the 3rd. or 4th. syllable occur on the root-syllable of the word concerned.

Most single and bridge-initial high pitches do in fact occur on root-syllables (162 cases, 81%), underlining dramatically that this is the expected place of occurrence of high pitch in this idiolect.

3.4.3: ratio of high pitch to word.

In all, counting first high pitches and high pitches last in a bridge, there are 225 instances\(^1\)6 of high pitch marked. A count of high pitches throughout the text was not attempted this time, but we can extrapolate to gain a rough idea of the ratio of number of high pitches to number of words. We have here 225:271, which works out to 1:1.2, as opposed to 1:1.9 based on the earlier count (3.2.3). The difference can probably be attributed to the fact that in the re-marking we have a third as many again words being marked with high pitch (200 as opposed to the earlier 151).

It would seem from the ratio 1:1.2 that we get a high pitch to almost every word. This high pitch usually occurs on a given syllable.
Further, we hardly ever find two separate high pitches on the same word. These facts suggest a pitch-accent rather than a tonal system. The ratio of one high pitch to one word is also interesting in view of a phenomenon to be discussed later — that when a word occurs without high pitch, there is a tendency for the preceding word to have an extra high pitch (see, for example, 5.4.3).

3.4.4: conclusions.

Comparison of the figures in this section with those in 3.2.3 shows that the general patterns are very similar, the only real differences being in number of words marked with high pitch, and in number of bridges.

3.5: pitchmeter tracings.

Because of a certain degree of acoustic interference on most of the recordings of the texts, it was decided to test the accuracy of the pitch-marking described in chapter 2. Samples from the Rev. Kony Banzadio's kisiNgombe text were used to check my transcriptions against tracings of pitch and intensity on a pitchmeter. We may assume that the degree of accuracy seen in this sample transcription will hold for the other texts, which were all transcribed by the same investigator following the same system.

Four tracings were taken: (a) linear amplitude, showing volume/intensity; (b) logarithmic amplitude, an enhanced linear amplitude which emphasises the range of the linear amplitude tracing; (c) frequency, in Hertz, showing pitch; (d) an oscillographic tracing conflating amplitude and frequency. Using such tracings it is possible to compute for a given vowel or consonant its length, intensity and pitch. For our purposes, the log amplitude and the frequency tracings were most important, though the other two tracings were occasionally helpful.

To facilitate discussion, the log amplitude and frequency tracings have been transcribed in graph form in Appendix 2, and it is to the page numbers of these graphs that the following sections will refer.
3.5.1: Sample passages.

Tracings were made of three stretches of the text: (a) ll. 1-6 (length of tracing 300 cms.); (b) ll. 115-121 (480 cms.); (c) ll. 193-201 (600 cms.). The last two extracts were chosen for transcription, since they seemed to be more representative of natural speech. It is noticeable, for instance, that at the beginning of the text (extract a), the speech is restrained, while the speaker settles in to reading; however, as he becomes more at ease, his speech becomes progressively more intense. This is shown especially in the log amplitude tracings for extracts (a) and (c) - in (a) the peaks rise no more than 2 cms. from the base line, whereas in (c) they regularly reach 3 cms. above the base line. Likewise, comparing the frequency tracings for extracts (b) and (c), we find that in (c) the tracing regularly reaches 200 Hz or higher, whereas in (b) it reaches 200 Hz in only two instances (Appendix 2, pp. 6 and 7).

3.5.2: Questions to be answered.

We may consider the graphs in terms of three questions: (i) how close is the marking to the actual pitch contour? (ii) where there are differences between the two, are there any factors (preferably recurring ones) by which we might account for these differences? (iii) what are the main features of the intensity contour, and can it be related in any consistent way to the pitch contour? The first two questions will be discussed in 3.5.3, and the third in 3.5.4.

3.5.3: Pitch and marking.

Firstly, we note that the contour as marked bears a very close resemblance to the pitch contour as evidenced by the pitchmeter. This is obvious from a simple examination of the graphs, but if we wish to quantify this observation, we may say that in only 32 out of 93 words (34%) does there seem to be any discrepancy between the marking and the contour. As will be shown in the following paragraphs, all but three of these discrepant markings can be accounted for, and only one of all the 93 words seems to be incorrectly marked.

3.5.3.1: Higher key.

At the beginning of paragraphs in the written text there is a
slightly higher key—pp. 1, 10, 15, 17. Only the last two of these are explicitly marked by ↑. The example on p. 17 is not much higher in pitch, but it sounds higher because of the high intensity.

3.5.3.2: bridges.

Certain words are marked with a bridge when the pitch contour actually shows a slight drop: őolé (1), ṣàma (9), ṣàmbù (21), in which the second syllable is 5 Hz lower than the first; mọsọnyeér (19), in which there is a drop of 10 Hz. It would seem that when the interval between the two syllables is small enough, they may be perceived as level. Note also dyamfunu k'kilu (17) and baleké (15), where the syllables marked as being last in the bridge are actually slightly lower in pitch.

Such a phenomenon might also account for ṣa'liu (2), but it may also be that this word the last syllable appears higher than it actually is because there is a long drop of 65 Hz to the next syllable kya-. This may also account for y'amptimpa (6), where ya- is level with the preceding syllable -na, but perhaps appears higher because of the drop of 50 Hz to -mpí-.

It would seem, therefore, that what are marked as bridges may in a few cases not have absolutely level pitch, but may show some downdrift. Nevertheless, the main features of the bridge are supported from the graphs: the end point of the bridge is appreciably higher than what follows, and yet not higher than the starting point (this may be contrasted with the rising bridge (2.2.8), where the end point is higher than the starting point).

3.5.3.3: extra-high pitch.

In several instances the usual contour pattern within a phrase (/\\/) does not occur, and instead we find /\/>. The last peak here should theoretically be marked as extra-high (see 2.2.10), but in fact it is not: ndwọskulu (9), mbókolo (11), ṣọsọnyeér (12), méana (14), býúu (16), baawonso (5) are all marked with the ordinary high pitch mark, though they are higher in pitch than the previous marked syllable; i.e. their marking implies downdrift, but this downdrift does
not in fact occur. It seems likely that in these instances the long vowel masks the impression of extra-high pitch.

3.5.3.4: lower pitch on the root-syllable.

The example of mbboko (11) quoted in the previous paragraph has another interesting feature - the first mora, mbo-, is lower in pitch than the second, -o-. Several other words also show a pitch lower than that marked, the syllable in question always being in bridge to a syllable with higher pitch: mubakamba (2, the syllable concerned is underlined), bantu (5), yoyo (10), leandila (15), mubola yantsambwadi (4-5), dyane (17).

In each case the syllable in question is the root-syllable, and in each case these syllables are the most intense in the phrase (it will be noted below, 3.5.4.1, that the greatest degree of intensity usually attaches to the root-syllable). It would therefore seem that with a pitch pattern £-~], where the first segment has greater intensity than the second, [£~], the overall impression is that the two segments are level in pitch, [£~].

A similar explanation may account for ekuma (18), ye-india (21), where -ma and ye- respectively are lower in pitch but higher in intensity.

3.5.3.5: differing pitch/intensity contours.

There are a few other cases where discrepancies between the marking and the pitch contour may be due to differences between the pitch and intensity contours. A syllable with high intensity may be perceived as higher than it actually is in pitch: antsangu (15), mumphila (16), dyamfunu kikulu (17). Likewise, a syllable with lesser intensity may appear lower than it actually is: ye-kubazodilanga (9). Some similar explanation may account for basoogaga (13).

3.5.3.6: exceptions.

The processes described above appear not to have been consistently perceived, however; thus, in 18, taking the two contours together, we might expect -tuntu- and ulole instead of -tunta-, ulole, and likewise
Afelika (21) instead of Afelika (cf. ye-india above). It would seem that pitch is the dominant factor; intensity may alter the perception of pitch, but does not interfere in all instances.

In wo bulungidö (5), wo should perhaps have been marked as high, to be perfectly consistent, while amatoko (16) seems to be the only clear example of mismarking — we should have, if anything, amatoko.

3.5.3.7: Conclusions.

It will have been noticed that the discrepancies discussed above all have the same general features — the pitch pattern is slightly misheard due to (i) shortage of interval, (ii) length of vowel, (iii) occurrence of high intensity. Since the discrepancies are few, are minor, and can readily be accounted for (ie. they seem to be 'phonologically natural'), it would appear that the marking is essentially valid. We can conclude that the marking is sufficiently accurate to be used for subsequent discussion of pitch features in kiKongo, and forms an adequate basis from which to draw our conclusions.

3.5.4: Intensity and Pitch.

We may now go on to consider the third question asked in 3.5.2, namely, what general features can be discerned in the intensity contour? Whereas the previous sections hinged mainly on the accuracy of the marking, consideration of this question leads us farther afield and gives us some clues to the nature of the kiKongo system.

3.5.4.1: Intensity on the root-syllable.

Firstly, it is noticeable that in all but a few instances (about 15 words out of the total of 93 — 16%) highest intensity, like the point of highest pitch, occurs on the root-syllable. Not all root-syllables have high intensity, and not all syllables with high intensity are root-syllables, but the equation holds in most cases. It is likely that varying the place of intensity from the norm, and its resultant coincidence with or variation from the point of highest pitch may have implications at the intonational level (see also chapter 12).

3.5.4.2: Co-occurrence of Intensity and High Pitch.

It is also noticeable that in a great many cases (about 2%) high
intensity co-occurs with high pitch on the same syllable. This generally close correlation of the log amplitude and the frequency tracings implies that high pitch and stress tend to occur together. Moreover, as noted in the previous paragraph, high pitch and high intensity (≈ stress) generally occur on one syllable, the root-syllable. If we can assume that it would not be likely for high pitch and intensity to be so predictable or to co-occur to such an extent in a tone language (P.R. Bennett, p.c.), then these facts indicate that this idiolect of kiKongo, at least, is not tonal. These features point rather to some sort of accentual system, whether we call this pitch-accent or stress-accent — in view of the seeming dominance of pitch, the former term might be more apt. 21

3.6: summary.

While the original analysis in the terms described in 3.2 seems to give little return, the general features of pitch occurrence (3.2.3, 3.4) and the evidence of the tracings (3.5) show that a recurrent system of pitch use is discernible. Having verified the marking adopted (3.5.3), we are now justified in attempting at least a partial description along the lines suggested in 3.2.6 — that is, a pitch-accent system in which high pitch (and usually intensity as well) is often associated with the root-syllable of the word. The next chapter will explore this proposition a little further.
Endnotes to chapter three.

1. Nevertheless, for the sake of uniformity with other chapters of the thesis, the original pitchmarks themselves have been replaced by those described in chapter 2.

2. What is given in this section is a brief summary of the calculations performed on the original marking of the text. These calculations were later revised and expanded to take account of the re-marked text, and may be found in 3.4 below.

3. Unassimilated borrowings were not included in the count.

4. The compound makumasambanu 'sixty' < makumi 'ten' + sambanu 'six'.

5. There were only 12 instances out of a possible 104 (11%), and in each of these the syllable on which the high pitch occurred was the first syllable of the stem.

6. In 70 (87%) of the cases with high pitch on the second syllable of the word, this syllable was also the first syllable of the stem.

7. In southern dialects such as kiZombo, where demonstratives and possessives may have an initial vowel, the root-syllable would then be the second syllable.

8. For ease of reading, this summarised analysis uses mnemonic labels for the various units, rather than the shorter labels used by Guthrie and Carter. I have also chosen to differentiate word categories within the syntactic categories set up by these authors. For example, the above three units as described in Carter 1973 would be respectively: $\underline{i}ii; V\underline{ii}; iQ\underline{=}.

9. A word with a single high pitch after the root-syllable was rarely found - no examples occurred in the passage taken for the pitch count described in 3.2.3.

10. Abbreviations are as follows: SUB(ject), LOC(ative), gen(itive), STAB(ilised item), PRED(icator), INF(initive), CONJ(unction), COMP(lement), AUX(iliary), CONN(ective),  B CONJ (co-ordinating conjunction), dem(onstrative), poss(essive), REL(ative), rel(ative pronoun), neg(ative element), PURP(osive), IREL (indirect relative), REF(orent), mod(ifier), os (object substitute), num(eral).

11. The original analysis considered a bridge from root-syllable to final syllable as an extension of the high pitch on the root-syllable, and in the parsing marked only the root-syllable as having high pitch. The bridge has been made more explicit in this
12. This example shows a loan-word which is irregular in its placement of high pitch. We must either assume high pitch not occurring on the root-syllable as previously defined (sikoola), or assume that another syllable be taken as the root-syllable (stkgola). Either approach poses difficulties, and the latter option has been chosen - cf. also (45).

13. This word poses problems, since the segmentation into prefix and stem cannot be totally unambiguous. We could segment ba-n’tu, in which case baantu would have high pitch on the root-syllable, or ba-antu, in which case baantu would have high pitch on the syllable following the root-syllable. In general, where ambiguous cases of this nature appear, I prefer, in accordance with the definition of root-syllable given in 3.2.3.4, to consider the first syllable as the root-syllable.

14. For the new description as applied to this text, see chapter 10.

15. The discrepancy between 196 and 200 is accounted for by words like Iwasama-skul (43), where the high pitch is the last in a bridge, and we cannot specify where the first high pitch of the word might be.

16. That is, counting single high pitches and high pitches at the beginning and end of a bridge. The number does not include those syllables inside a bridge, which have unmarked, ie. non-significant, high pitch.

17. This particular text was chosen since it was the only one recorded in a studio - all the other texts were recorded on a portable cassette recorder in the informant's room, and contained a good deal of background noise. Though the ear was able to distinguish the pitch contours from the background noise, the more sensitive but less discriminating pitch-meter could not.

18. Since orthography is not the main concern here, geminate (intense) consonants (cf. Carter 1970) and long vowels have been marked only when particularly audible, and not consistently, as in Carter and Makoondekwa's books. If geminates, for example, have the same function in this idiolect as in Makoondekwa's, then they are
predictable from the works already cited, and if they do not, a statement of their distribution would exceed the scope of this thesis.

19. It should be emphasised here that although these tracings were made after the method of marking had been finalised and applied to all the texts, the marking of the chosen extracts has not been touched up or adjusted in any way whatsoever.

20. This is an interesting point to bear in mind when discussing kileta - see chapters 11 and 16.

21. Further information on the nature of the kiKongo system might be obtained by comparing samples of kiKongo with those of other languages. Such an experiment, albeit on a small scale, was carried out. (I am grateful to P.R. Bennett for his help here.)

To test cross-dialectal systems, a tracing was made of an extract from Carter and Makoondekwa 1981. It was found to show many of the same features found in the Banzadio tracings, in particular the co-occurrence of high pitch and intensity.

Tracings were further made of an extract in Somali (a non-Bantu pitch-accent language) and one in Kikuyu (a Bantu tone language). It was found that both the Banzadio and the Makoondekwa tracings bore a closer resemblance to the Somali tracings, especially as far as the intensity tracings were concerned. Kikuyu tended to have most intensity near the beginning of phrases, while Somali and kiKongo agreed in varying the position of greatest intensity - very often it occurred at the beginning of phrases, but also it frequently came in the middle. Moreover, both Somali and kiKongo could have several intensity peaks of roughly the same height in a given phonological phrase - this was less common in Kikuyu.

Although the results must be considered tentative, the tracings do seem to show that at least two idiolects of kiKongo show features more similar to a pitch-accent language (Somali) than to a tone language (Kikuyu).
4.1: introduction.

Now that we have come to some preliminary conclusions about the placement of high pitch and about a possible basis for describing that placement, the next step will be to test our conclusions by applying them to a short portion of connected text. This will suggest whether the analysis might be refined.

4.2: the text.

The text is a portion (Luke 23:32-24:41) of the San Salvador (Mbanz' aKongo) Bible (Bentley 1926) as read by the Rev. D. Ntoni-Nzinga. The dialect is kiMbanz' aKongo, referred to in Carter 1973 etc. as kiZombo.

4.3: sample passage.

We will take 11. 39-46 as a sample passage. Of the 45 words in the passage, 37 (82%) have high pitch on the root-syllable, 4 have high pitch on some other syllable, and 4 have no high pitch. Of the 37, 8 have one other high pitch in bridge with the first. These sets of words are listed below.

4.4: patterns in the text.

4.4.1: first or only high pitch on the root-syllable.

(a) nouns (with no prefixed element)

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>nk'ala</td>
<td>'the tomb'</td>
</tr>
<tr>
<td>n'dumbu</td>
<td>'spices'</td>
</tr>
<tr>
<td>Mtis'</td>
<td>'Jesus'</td>
</tr>
<tr>
<td>nk'ento</td>
<td>'the women'</td>
</tr>
<tr>
<td>beezi'di</td>
<td>'they had come'</td>
</tr>
<tr>
<td>bavutukidi</td>
<td>'they returned'</td>
</tr>
<tr>
<td>bauuundidi</td>
<td>'they rested'</td>
</tr>
<tr>
<td>dyanengomoka</td>
<td>'it had been rolled away'</td>
</tr>
<tr>
<td>baktivale</td>
<td>'they went in'</td>
</tr>
<tr>
<td>dyanengomoka</td>
<td>'it had been rolled away'</td>
</tr>
</tbody>
</table>

(b) verbs:

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>baktivale</td>
<td>'they went in'</td>
</tr>
<tr>
<td>baktivale</td>
<td>'they went in'</td>
</tr>
<tr>
<td>baleende</td>
<td>'they followed'</td>
</tr>
<tr>
<td>bamweene</td>
<td>'they saw'</td>
</tr>
<tr>
<td>beewen(e)</td>
<td>'they found'</td>
</tr>
</tbody>
</table>
banète 44 'they brought'
bakòtkètìkò 41,44 'they prepared'
uma 43 'it has'.

(c) others:  

gbàndì 39 'with him'
kwàwà 42 'completely'
zìnà 44 'which' (cc. ana 39)
mùn'-òwù 43 'according to'
túùkà 39 'from' (cf. tūkà 30).

It will be seen that in this list are not only words with a single high pitch on the root-syllable (/—/), but also words with a later high pitch in bridge with the first (/_/—/) and words with the high pitch in bridge with that on a following word (/—/—/). These latter two classes will be discussed below in 4.4.6,7.

4.4.2: nouns with prefixed element.

There is a group of nouns with a prefixed element, which have the high pitch on the root-syllable:

kyavuandingu 42 'of rest'
wankàntikùnu 43 'of the commandment'
kylàumìtingu 43 'of the week'
kùna-Ngalili 40 'to Galilee'
kùna-nìma 40 'behind'
kùna-nkàla 44,45 'to the tomb'
ye-nstìwà 40 'and the laying'
y'-òmàazì 42 'and ointments'
evùtìmbù 41 'the body' (cf. evùtìmbù 36, cc. evùtìmbù 46)

evùtìmbù 42,43 'the day'.

4.4.3: nouns with prefixed element and shift of high pitch.

In contrast, there are 4 nouns, also with a prefixed element, which show a shift of the high pitch one syllable to the left of the root-syllable (this phenomenon will henceforth be referred to simply as 'shift'):

mùnsunga 42 'of perfume'
dyàmfumù 46 'of the Lord'
étaá 45 'the boulder'
evùtìmbù 46 'the body' (cc. evùtìmbù 36, evùtìmbù 41).
4.4.4: words without high pitch.

Words with no high pitch marked are as follows:

- ana 39 'which' (cc. zínä 44)
- dyandi 41 'his'
- dyastw(a) 41 'it was laid'
- also: kyantete 43 'first' (inside a bridge).

4.4.5: conclusions.

The large proportion of words with high pitch on the root-syllable suggests that this can reasonably be taken as the 'norm'. Hence we will give most attention to words not showing this feature of high pitch on the root-syllable.

The words in 4.4.2,3 each have a prefixed element, whether it be genitive, long locative, connective, or initial vowel. Yet it seems difficult to account for the fact that a few words show shift of the high pitch, and others do not.

There are three possible explanations:
(a) the variation may somehow be dependent on the prefixed element; yet the same elements (eg. genitive, initial vowel) occur in both groups;
(b) there may be two or more nominal tone-classes showing different contours in this context; yet there are the examples evëltwmbu and evëltwmbu, showing variation on the same word;
(c) the variation could be conditioned by pause or syntactic order; yet there seems to be little clear evidence for any such conditioning, other than the fact that the words in 4.4.3, with the exception of étuki, all occur after a preceding pause.

At this point it is impossible to decide on an explanation to account for the data. All the possibilities cited must be borne in mind until further data enable us to come to some conclusions. In the meantime the variation can only be noted.

4.4.6: bridges on individual words.

- balësù 40 'they followed'
Three of these words (bakubikidé, akéento, ye-nswa) have a following pause. For baweene a likely factor is that the following object substitute affects the verbal contour. However, the other examples do not lend themselves to any one explanation.

4.4.7: bridges between words.

There are five of these:

- baweene nkala 40 'they saw the tomb'
- bakubikidé ndúumbu 41 'they prepared spices'
- baweene étadi 44-45 'they found the stone'
- slúmbu kyantete kyalumlingu 43 'on the first day of the week'
- unása nswe 43 'very early'.

In each case the bridge is between or over words that are syntactically linked: verb + object, noun + qualifiers, verb + complement. This fact may be of importance. The rising bridge in 43 may possibly be an exponent of emphasis - a new part of the story is beginning, and the speaker may wish to emphasise the occurrence (the Resurrection) about to take place. (See also 10.4.x.)

4.4.8: conclusions.

The patterns occurring on this short extract fit fairly well, as we have seen, a description in which the high pitch of a word is normally associated with the root-syllable. Although there are exceptions, some of which cannot as yet be readily accounted for, it does seem that a very simple rule 'high pitch occurs on the root-syllable' will predict a large majority of the pitch contours.

4.5: comments on variant contours.

For some contours which are difficult to account for, it seems that we may have to postulate an intonational system modulating the basic
patterns (cf. 4.6.5.2). The Rev. D. Ntoni-Nzinga referred to this as 'music', and his comments suggest that it plays a fairly important part in the kiKongo system. These comments by the informant on certain phrases will be given in each chapter (chapters 5-11) of this part of the thesis, and a final chapter (12) will summarise and attempt to classify the main comments on all the texts. The following sections deal with comments on this text.

(i) the difference between the verbal patterns ba'Angaleele 67 'they were silent' and ba'Indaleele 68 'they looked sad': the bridge on the first verb was said to be due to the fact that it does not end the sentence - if ba'Indaleele were in this position, it too would have the contour ba'ndatee te. This comment makes explicit the connection between bridging and hesitation/non-finality, denoting 'to be continued'.

(ii) yo-yu'vuzyaan6 65 'and conversing with each other': there was said to be a possible difference between this and yo-yu'vuzyaan6. Both are pre-pausal and imply a continuation of the sentence, but the former may have some element of emphasis about it, or be exclusive of the speaker, while the latter is inclusive of the speaker. That is, the former may imply 'and conversing with each other' with the speaker as spectator, as opposed to the latter's 'and conversing with each other' with the speaker as a member of the group.

(iii) kwandti 27 'indeed' and kwandti 34 'actually': the former implies pity - Jesus was a good man and did not deserve to suffer. This may be related to the fact that lower key expresses gravity or seriousness. The kwandti can imply either scorn or sympathy. It can suggest that Joseph was a bad man, or unimportant, but since this interpretation is ruled out by the context, it implies here that his home town of Arimathea was very small and unimportant. In some cases it could even imply that the town was of low repute. In Ntoni-Nzinga's words, kwandti changes its meaning according to the context - in itself it is the same'.

(iv) the Rev. D. Ntoni-Nzinga found it difficult to explain the precise difference between k'antu wocle 1 'two people' and wocle 47, since they occur in roughly similar contexts, introducing a new phase of the narrative. But he finally decided that the first
would be a special form which the speaker might use when beginning 
his story, or starting a whole new episode of his story contrasting 
with what had gone before (cf. 3.5.3.1).

(v) in connection with wamuntu ambote 'a good man', I asked if 
there would be any difference between imuntu ambote and imuntu 
ambote. The reply was that the first would imply 'he/it is a good 
person', but the second would imply 'I am a good person'. There is 
a superficial similarity here with the Venda ndimuthu 'it is a 
person', ndimuthu 'I am a person' (< muthu, cf. also ndimuthu 'I 
being a person'), as quoted in van Spaandonck 1973. The Venda 
patterns can be described in tonal terms, but the merging of tonal 
distinctions in kiKongo may mean that the patterns there have to 
be described in terms of accentuation by pitch, etc.

(vi) there was also said to be an important difference between kyambote 
as a question, meaning 'are you well?', and kyambote, the answer, 
meaning 'I am well'. A further example was given: yaan pfumu? 
(question), but yaaan pfumu (statement). There are several other 
examples which suggest that final high pitch serves as a marker 
of question intonation (cf. 5.5.ix, 6.6.vii, 8.6.2.iii, and chapter 
12), but the two examples above show clearly that in certain cases 
purely tonal criteria are inadequate for describing the pitch-
contour; we must resort to accentual or intonational criteria.

4.6: other research: Carter.

We will now look at the systematisation proposed by Carter (1973 and 
1980), and see how well it predicts the pitch contours on another 
passage of the text. First we must give a brief review of the system-
atisation, with a view towards judging its efficacy, and comparing 
its features with those of others discussed in later chapters.

Carter's work is primarily based on the speech of the Rev. Joao 
Makoondekwa, and is certainly one of the most extensive and well-
documented studies available, comprising theoretical analysis, and 
(compiled in collaboration with Makoondekwa) a wide selection of texts 
and tone-marked glossaries. The two sources Carter 1973 and 1980 
reflect two discernible phases in the development of the analysis, 
which will be discussed separately.
4.6.1: pitch features.

Carter 1973 defines phonemic low pitch (left unmarked) as '(i) non-final pitches after which there is no immediate marked drop in pitch, and (ii) final pitches which begin at base pitch' (p.14). Base pitch is the lowest pitch of the speaker's range, while peak pitch (marked ⃗) is the highest (p.3). Phonemic high pitch is defined as '(i) pitches after which there is a drop immediately following, (ii) phrase-final pitches which do not begin at base pitch, though in some cases they may end there' (p.13). Peak pitch is effectively the first high pitch in the pitch-phrase (see next paragraph); subsequent high pitches are marked ⃗. In some cases, high pitch may be unrealised; this, termed 'neutralisation' by Carter, is marked ⃗.

Two types of contour are distinguished: (i) peakless, in which 'the whole contour is at base pitch', and (ii) peaked, in which 'the pitch contour is characterised by the presence of one ... peak - never more than one'. (p.5) For these contours she uses the term '(pitch-)phrase'. Pitch-phrases are not necessarily co-terminous with other types of phrase; for example, the pitch-phrase boundary (marked ⁄) may, but need not, coincide with pause. (p.9)

4.6.2: tone-morphological variants.

Most words show two different contours. This variation is 'tono-morphological', which 'implies that tonal variation entails morphological variation, and vice versa' (p.146). Thus

o-má-váta (initial vowel-prefix-stem) / má-váta 'villages'.

Variant 1 is characterised by the initial vowel or other pre-prefix, Variant 2 by absence of pre-prefix. There is a relationship between the tone-patterns of the two variants, such that in most cases the occurrence of the pre-prefix 'moves' (Carter 1980b) the high tone one syllable leftwards. However, there are other cases where morphological variation does not entail tonal variation, eg.

o-s-sevá / s-sevá 'to laugh'.

Such instances are called Variant 1 and Variant 2 by analogy. The totality of pitch patterns occurring on variants is resolved into a system of tone-classes (cf. 4.6.6) and realisation rules (see 4.6.3.1).
Occasionally a variant midway between Variants 1 and 2 is met. Though used by native speakers, this was rejected when Carter tried to use it. It is found only in the subject position. This variant (labelled 1a) has the tone-pattern of variant 1, but the initial vowel proper to that variant is optional, thus:

\( (\acute{-})\)nk-kaaranda 'book'; \((\acute{o-})\)kuluka 'ancestors'.

It will be seen that this may result in a form with no high pitch, contrasting with Variant 2, which has high pitch, eg.

nkkaaranda / nkkaanda 'book'.

There are also some instances of items straddling the two variants: they have the same tone-pattern as Variant 1, but this pattern undergoes the realisation (see 4.6.3.1) proper to Variant 2, eg.

kuna-mazaandu 'to the markets', cf. ozaaandu, cc. mazaandu.


Carter 1973 defines 26 syntactic units (cf. 3.2.4), each of which has its own (pitch-) phrasing characteristics. Some are obligatorily phrase-initial (i.e. must be preceded by a phrase boundary), some obligatorily non-initial (i.e. cannot be preceded by a phrase boundary), and some may be either according to their position in a sequence, thus:

\( /\text{o\text{uaffulu}}\text{ ky\text{a}\text{k}\text{i}}} / / \text{sekoka}/ 'at that place, turn ...'

\( /\text{o\text{uaffulu}}\text{ ky\text{a}\text{k}\text{i}'} / / \text{sekoka}/ 'at that place, turn ...'

Here, the locative unit is phrase-initial in the first example, and non-initial in the second example, the variation depending on whether it precedes the predicate or not.

4.6.3.1: Realisation.

The interaction between syntactic unit, phrasing, and tono-morpho-logical variant specifies the realisation ('modification') of the tones in the word. 'The slot the nominal is to fill dictates the phrasing and the variant; the phrasing dictates whether or not there is to be initial modification, and the variant is modified according to its specific rule' (p.171). We thus have (p.169)

\[
\text{syntactic slot} \xrightarrow{\text{variant}} \xleftarrow{\text{phrasing}} \text{modification (realisation)}
\]
with realisation being dependent on syntax, even though the relation-
ship is indirect. The modification is termed 'initial modification'
because in fact it is only when the item is phrase-initial that there
is a variety of possible realisations (see next section). When the item
is non-initial, all marked tones are realised as high, and unmarked
ones as low. When, however, the item is phrase-initial, there are two
specific rules modifying the variants: (p.173)

Rule 1 (specific to Variants 1 and 1a): first potential high tone is
unrealised;

Rule 2 (specific to Variant 2): second or only potential high tone is
realised, with the first of two potential high tones unrealised.

There would thus be the following realisations when the words concerned
appeared in phrase-initial position:

Variant 1: omavata 'villages' → /omavata
olųsadisů 'help' → /olųsadisů

Variant 2: mavata → mavata
lusadisů → lusadisů.

4.6.3.2: phrase-initial sequences.

'Phrase-initial sequences of nominals are classified as concatenate,
composite, and compound' (p. 203).

(i) concatenate:

'In a concatenate sequence, the pattern of each item conforms to the
description made for individual items, whether initial or non-initial.
The first realised high tone of the phrase has peak pitch' (p.203).
That is, the various items are merely placed side by side to give
the whole sequence. Thus:

/ffu kyántsi (Variant 2) 'it is the custom of the country'
/emabuula mamyänzi myänkhenqakaasa (Variant 1) 'the skin
of the roots of the creeper'.

(ii) composite:

A composite sequence shows an extension in the domain of Rule 2 from
one word to two words, ie. we have two words being treated as one
composite item. Thus:

/ffuasa-muño 'it is a waste of speech' < *ffuasa' muño
(Variant 2), with extended application of Rule 2.
(iii) compound:

'A compound sequence is one in which the initiating item ['subordi-
inate component'] has no realisation of potential high tone, irre-
spective of the number it may contain' (p. 203). Subordinate
components cannot have an initial vowel, and have a reduced
phonology (lack of vowel length, etc.). 'Compounds are invariably
phrase-initial' (p. 204). Thus:

/nllongo-myaytingi 'many remedies' < *nloongo myaytingi
(Variant 2).

Words following the locatives kuna-, muna-, vana- are
compounds, thus:

/kuna-mazaandu 'to the markets'.

'Compounds are of immense frequency' in Makondekwa's idiolect (p. 194).

4.6.3.3: sequence and cohesion.

Composition seems to express 'a closer relationship between the
exponents of the sequence, in contrast to concatenation, which marks a
looser cohesion' (p. 198). This is supported by the fact that certain
morphologically bound items appear only as composite (pp. 195-7).
However, certain sequences may appear as concatenate or composite, eg.

\( \text{ffu kyântsì 'it is the custom of the country'} \) (concatenate
\( \text{ffu-kyântsì 'it is the local custom'} \) (composite) (p. 197).

Carter considers that compounding signals a very high degree of
cohesion between the components, even dependence of the subordinate
component on the other, dominant, component (p. 204). Certain sequences
may appear as composite or compound, eg.

\( \text{nllongo-myayìngi 'many remedies'} \) (compound)
\( \text{nllongo-myayìngi (composite)} \) (p. 189)
\( \text{asadistì-ëmbote 'they are good helpers'} \) (compound)
\( \text{asadistì-ëmbote (composite, or concatenate)} \) (p. 185).

But in some cases the sequences may be analysed in either way\(^5\), eg.

\( \text{vata-dyâmbote (composite) 'it is a fine village'} \)
\( \text{or vata-dyâmbote (compound)} \) (p. 192);

where the distinction marked is purely orthographic, and the sequences
are homophonous.
It is possible to find the same sequence with all three types of modification, which may signal slight differences of meaning. Thus:

\[\text{enkkumbu myay\text{-}t\text{-}ng\text{-}t} \quad \text{'on many occasions' (concatenate)}\]

\[\text{nk\text{-}kumbu-myay\text{-}t\text{-}ng\text{-}t} \quad \text{'many times' (composite)}\]

\[\text{nnk\text{-}kumbu-myay\text{-}t\text{-}ng\text{-}t} \quad \text{'often, frequently' (compound)} \quad \text{(p.201).}\]

However, Carter does not consider that the existence of compounding provides 'grounds for postulating a parallel with different degrees of emphasis in English, in whatever ways signalled' (p.201).

4.6.4: Carter 1980.

The revised version of the analysis embodied in this work incorporates several additions and amendments.

4.6.4.1: phrase-initial realisations.

Phrase-initial modification (Rule 1, Rule 2) and sequence (concatenatic composition and compounding) are conflated to give four realisations in phrase-initial position. Carter notes that these 'may finally be further reduced' (p.4). Non-initial items, as in the 1973 version, have all basic tones fully realised.

(i) initial cancellation plus bridging:

This replaces 1973 Rule 1; the first high tone is unrealised, and the next two high tones in the phrase (if such exist) are realised on a bridge at peak pitch, for which the marking \(\text{v} \cdots \text{v}\) (a divided peak mark \(\text{v}\)) is used. Thus (using previous examples):

\[\text{em\text{-}by\text{-}ula mmy\text{-}\text{an}\text{-}z\text{-}i m\text{-}y\text{\text{-}k\text{-}heng\text{-}\text{k\text{-}s\text{-}y\text{-}a\text{-}s\text{-}a}} (4,6,3,2,1).\]

This realisation is proper to the pre-predicator subject.

(ii) initial bridging:

This replaces 1973 Rule 2, and also composition; the first and second high tones in the phrase are realised at peak pitch. 'Statistically, bridging is the most frequent initial sequence' (p.10), and it is the realisation proper to the predicate. Thus:

\[\text{ffw\text{-}a\text{-}sa m\text{-}v\text{-}\text{u\text{-}v\text{-}o}} \quad \text{(4,6,3,2,ii, formerly composite)}\]

\[\text{nn\text{-}llo\text{-}\text{a\text{-}ng\text{-}o m\text{-}y\text{\text{-}a\text{-}t\text{-}ng\text{-}t}} \quad \text{(4,6,3,3, formerly composite)}\]

\[\text{ff\text{-}\text{u k\text{-}y\text{-}\text{a\text{-}n\text{-}t\text{-}z\text{-}t}} \quad \text{(4,6,3,3, formerly Rule 2 concatenate or composite)}\].}
Carter notes that it is 'difficult to defend the distinction between cancelled plus realised high tone [previous section], and bridged high tones [this section], on pitch grounds alone' (footnote 4). This is because the actual phonetic difference between the two realisations is slight, eg.

\[ \text{edyaambu dyankhuumbu } [\_\rightarrow \_\_\_] \]

'the matter of the name', initial cancellation + bridging

but \[ \text{idyaambu dyammbi } [\_\_\_\rightarrow \_\_] \]

'it is a bad affair', initial bridging.

Even this difference between 'concave' and 'convex' contour is 'no more than a tendency. ... Moreover, in the case of 'convex' contours, there is no consistency as to the point at which the rise occurs; it may be before, on, or after the vowel with which potential high tone is associated. For instance, comparison of five occurrences of the phrase

\[ \text{'ntsi ännene kîkîlu 'it is an extremely large country'} \]

show rise on the first vowel (\(i\)) twice, and on the second vowel (\(-n\text{tsi}\)) three times'. (adapted from Carter 1973, p. 301)

However, adoption of initial bridging makes for a much better system, not only because of comparability with the work of other researchers such as van den Eynde (Carter 1973, p.302), but also because it resolves some difficulties in the original analysis.

Firstly, some sequences which could be taken as either concatenate or composite (4.6.3.3) are no longer a problem, since the same analysis holds for both (see, for instance, the third example in this section). Secondly, we can account for such pairs as

\[ \text{wasala 'he worked'} \text{ versus} \]

\[ \text{wasala-ssalu 'he did (lit. worked) some work'} \]

(1973, p.221) by simple bridging from high tone to high tone, giving \[ \text{wasala ssalu} \]. This solution also obviates the need to extend Rule 2 to give a composite sequence.

More important, bridging also neatly accounts for certain other instances where a similar process of composition seems to occur. In these cases, however, the original formulation would have caused difficulties, since Variant 1 occurs instead of the usual Variant 2. For example, we have
baboong' ōnkkele (concatenate) 'they picked up the guns'
but babøong'-ënkkkele (composite) (1973, p.259).
Both instances would now be marked babøong' ōnkkele.

(iii) concatenation:
What is included here is much less extensive than in the 1973
analysis; it is proper only to direct WH- questions. The first
high tone is realised at extra-high pitch, and there is no bridge
with any following high tone, eg. (p.14)

nkhi'-anthaangwa bes nga kwiza? 'what time are they coming?'
In 1973 (p.294) nkhi-änthaangwa was analysed as a compound.

(iv) compounding:
Here the subordinate element has no high tone. Carter 1980 seems
less certain about compounding than Carter 1973, but it is retained
for two reasons.
Firstly, this type of realisation has to be distinguished from
initial cancellation plus bridging, in which there is an optional
initial vowel on the first item: the first item of a compound
never has an initial vowel.
Secondly, 'the maintenance of compounding as a special type of
syntactic unit seems necessary if the hypothesis that phrasing is
determined by syntax - a supposition too well attested to jettison
lightly - is to be preserved' (p.16). Otherwise, there would be the
problem of accounting for the differing realisations in

yayënda kuffwaandu 'they went into recess'
and muna kwënda /kuna ffwaandu 'in order to go into recess'.

(v) remaining difficulties:
(a) such forms as tuuka 'from' (<tükä) look like Variant 2 with
cancellation, but must be analysed as Variant 1 with dropped
initial vowel (ie. tuukä) - 'any alternative involving class-
ification of the forms as Variant 2 results in collapse of the
system as at present formulated' (p.20). In 1973 these forms were
classed as compounds.
(b) the 'unstable' negative kemw-...-ko must be analysed as Variant
1 when it occurs in phrase-initial position, since it shows
cancellation and bridging, eg.
kemusseve-ko 'without laughing'.

(c) in direct WH- questions initial stable nominals (Variant 2) show concatenation, not bridging, eg.

\[
\text{muvwatu} \text{ myanant emyoomyo? 'whose are those clothes?'}
\]

(lit. they are clothes of whom, those?).

Carter notes: 'If the association between variant and initial sequence is to be preserved, it is necessary [here] to establish a special category, ... although [the words concerned] are undoubtedly in Variant 2 form' (p.21).

These difficulties are probably less important than Carter fears; for (c), for instance, we can simply specify that extra-high pitch occurs on the first word of the WH- question (cf. (iii) above), even if this is not itself the question word, and that this over-rides the requirements of the variant. Moreover, if concatenation is analysed as a subset of bridging (cf. endnote 6), the problem is minor.\(^8\)

4.6.4.2: variant and sequence.

Carter concludes: 'In sum, the correlation of variant and sequence (ie. type of realisation) is considerably weakened, but still substantially holds good. As with so many other facets of the Koongo tone-phrasing system as described here, there seem to be more difficulties involved in rejecting the present approach than in retaining it' (p.21).

4.6.4.3: remaining problems.

In Carter's opinion, two problems still remain. The first is the relationship between tone and stress. Carter notes that stress is associated with realised high tone, but not always directly - 'in general, for a nominal, the stressed vowels are those which have high tone in Variant 2, thus not only ngud\(\) [\'mother\], with underlining denoting stress] but also engud\(\)\(t\)' (p.28). We also have, for '(the) help':

\[
\begin{array}{ll}
\text{Variant 1} & \text{Variant 2} \\
\text{phrase-initial} & olusadis\(\)\(v\) & lusadis\(\)\(l\) \\
\text{non-initial} & olusadis\(\)\(s\) & lusadis\(\)\(d\)\(s\)\(l\)\(i\)\(0\).
\end{array}
\]

Carter notes: 'Stress indeed seems to be a \underline{substitute} for high pitch as an exponent of high tone realisation in some cases' (p.29), eg.
tuyaantkə 'let us begin'.

Since this always occurs finally, Carter suggests that it may possibly be a sentence-final feature. 11

The second problem is the behaviour of vo 'that'. Carter notes that there is often 'a pitch-rise associated with it' (p.29) but there are the variants

\( \text{\textsc{ssya vo}} \quad [\ldots], \text{but } \text{\textsc{ssya vo}} \quad [\ldots] \) 'that is'.

Carter suggests that perhaps vo is so often rising or high in pitch that it has attained the status of a high-toned element, and can therefore be bridged in some cases. 12

4.6.4: Carter's summary.

Carter notes that in relation to her earlier work 'the analysis and description of the tonal system shows advance on some fronts and retreat on others'. Some details, such as the behaviour of object suffixes, have been added. But 'the correlation of syntax and phrasing is not as clear-cut as it once seemed to be, and formidable problems of data interpretation still remain' (p.30).

4.6.5: conclusions.

Carter's systematisation is probably the most extensive and detailed to date, and is certainly adequate for the areas it sets out to describe (cf. endnote 1, chapter 16), as is witnessed by its ability to predict contours with a high degree of accuracy: see 4.7 and 6.7, where we compare actual contours with those predicted by Carter's analysis.

However, it is a little 'complicated' (Carter 1973, p.154), and there are minor difficulties such as those in 4.6.4.1.v. Moreover, there are still a few cases where the analysis does not account for all the possible pitch patterns heard, eg.

\[ \ldots \text{\textsc{vo /\textsc{amona nkkeento}}} 'that you saw a woman'\]

\[ \text{\textsc{av vo /\textsc{amona nkkeento}}} 'if you should see a woman'\]

(adapted from Carter 1973, p.156), where \textsc{nkkeento} has two different realised patterns in virtually the same context. This example might be accounted for in terms of the very slight difference between bridged
and cancelled high tones (4.6.4.1.ii), i.e. we could tonemically mark nkæünte in both cases, with a slightly different tonetic realisation in both cases. But this does raise the question of why we should interpret the data in two different ways (initial bridging, and cancellation plus bridging) when there is so little phonetic difference between them, and when indeed marking of the first high pitch in the bridge seems to be somewhat arbitrary (4.6.4.1.ii).

4.6.5.1: words without high pitch.

The phenomenon of compounding is of some interest. In Carter 1973 we have such instances as

\[ nllongo-myayîngi \approx nllongo + myayîngi \ 'many remedies' \] (p.134)

Carter quite reasonably analyses this as showing cancellation of high pitch on the first element, and realisation of that from the second. Other examples, such as

\[ yandî-ngudî \approx (e)ngudî \ 'she the mother' \] (p.187)
\[ ngudî-zaau \approx (e)ngudi + zaau \ 'their mothers' \] (cc. ... ngudî zaau the non-compound) (p.187)

can be similarly analysed. Though the high pitch is realised on the final vowel of the first element, this is clearly due to the deletion of the pitch-bearing initial vowel of the second.

But there are compounds which this analysis does not fit so well, eg.

\[ mpftînda-zaandî \approx mpftînda + zaandî \ 'his forest' \] (J.H. Carte)
\[ mōyo-muuntu \approx mōyo + muuntu \ 'living person' \] (p.130)

where it is the second element, not the first, on which the high tone is cancelled.13

There is also the interesting case of Variant 1a (4.6.2), where in some instances the net result is to produce a contrast of high pitch versus no high pitch, eg.

\[ nkkaanda (Variant 1a without initial vowel)/nkkaanda (Variant 2) \ 'book'. \]

Moreover, if, for the enkkûmbu myayîngi triplet in 4.6.3.3, we can assume that Variant 1a may occur in the concatenate (= 1980 initial cancellation plus bridging) version, we would have
which differs only in vowel length from the compound version
nkumbu-myay'ingi.

There is a similar small difference between the concatenate and the composite (= 1980 initial bridging) version - the slightly different realisation of the first high tone of a bridge (cf. 4.6.4.1.ii):
nkumbu myay'ingi (1980 marking).

The difference between the three may therefore be questioned.¹⁴

If we see the contours of compounds purely in terms of the tonal system, with a selection of tone-classes and typical variants within those tone-classes, then it makes sense to analyse compounding, in which one word has high pitch and another does not, using those concepts. We might sketch this as follows:

<table>
<thead>
<tr>
<th>Primary Importance</th>
<th>Moved Pattern</th>
<th>Basic Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Variant 1)</td>
<td></td>
<td>(Variant 2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Importance</th>
<th>Cancelled Pattern</th>
<th>Cancelled Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>(No high pitch)</td>
<td>(No high pitch)</td>
<td></td>
</tr>
</tbody>
</table>

However, there is a slightly different way of looking at the same phenomena:

<table>
<thead>
<tr>
<th>Primary Importance</th>
<th>Basic Pattern</th>
<th>Cancelled Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>(High pitch on root-syllable)</td>
<td>(No high pitch)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Importance</th>
<th>Moved Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shift of high pitch leftwards, 2. Movement of high pitch rightwards</td>
<td></td>
</tr>
</tbody>
</table>

Such a system is less specific as to the type of shift involved, but may provide a better general framework. In this case, underlying high pitch would be the basic element, but this might be conditioned by certain factors into changing its position, or into being cancelled. Sometimes the two, move and cancellation, may occur together in one phrase, eg. yand' ngudi, where both words show anomalous patterns in that neither has high pitch on the root-syllable (cf. 3.4.2); yand' shows movement of high pitch rightwards, while ngudi shows cancellation.

It should be emphasised that I am not suggesting that either way of
looking at things is 'better' than the other, but merely that each approach has its advantages, and both might profitably be examined. It is the second view, though, which will be explored in greater depth in the rest of this thesis. It shows some promise of providing a unifying feature for all previous systematisations of kikongo pitch, as well as accounting for a large proportion of the pitch contours in new data.

Both views, however, must suggest some reason for the non-occurrence of high pitch on certain items — merely naming this 'compounding' or 'no high pitch' is not fully satisfactory. While Carter 1973 considers compounding merely as an exponent of dependence of relationships within the group (4.6.3.3), I would go slightly farther and say that no high pitch on a word signals the placement of emphasis or focus within the phrase. This is in fact inherent in what Carter says: a greater dependence of one component on the other automatically implies a lessening of the 'individuality' of the one component, and therefore some degree of focus on the other. At present, however, it is unclear what factors govern this focus, i.e. when and why the speaker uses it, how he uses it, how it is signalled, and what it means; there must, presumably, be some slight differences of connotation between
(a) no high pitch on the first element, eg. llumbu-nilmos 'one day',
(b) no high pitch on the second element, eg. mpfintnda-zaand 'his forest',
(c) no high pitch on the second element, plus rightward movement of high pitch on the first, eg. yandngud 'she the mother' (though Carter would class this with the first group).
The question of focus and emphasis will be considered more fully in chapter 12.

4.6.5.2: typology.

Finally, we must consider the typological classification to which the kikongo pitch system may belong, since this may well influence the way the raw data are segmented and systematised. When Carter 1973 was being written, there seemed to be two main groupings in the typology: tonal languages and intonational languages (cf. 1.6.3 ff., 13.2). The question to be asked at that time, therefore, was simply: 'Is it feasible, or even better, to describe Zombo as intonational rather than tonal?' (Carter 1973, p.255)
Carter discusses both sides of the question: on the one hand, 'the tones of Kongo, viewed as a classic tonal system, do not make sense' (p. vi). Yet although it is 'true that over large areas of the language tonal distinctions are neutralised, ... this need not be regarded as a bar to describing it as tonal. There are other cases of tone-languages in which the distinctions are masked under certain conditions, while the homophonous items can still be described as having different basic tonal structure' (p. 255).

On the other hand, 'on the level of phonetic pitch, there is undoubtedly a very strong superficial resemblance to languages such as English' (p. 256). Yet intonation seems to be ruled out by the fact that 'the Zombo speaker has in my opinion no choice at all' in the pitch-patterning of the sequence - this is 'pre-determined by the lexical and syntactic choices already made' (p. 256).

She concludes that 'it is not possible to describe Zombo in terms of an intonational system; the superficial resemblances are accidental, and description in tonal terms is the most satisfactory approach' (p. 257). Because there are only two terms, and description in one is ruled out, the other must be used, even though it is not totally adequate either.

The concept of a continuum (1.6.3) allows us to use an intermediate classification, that of pitch-accent, which may fit kiKongo better. This is not a simple trading of one label for another - as mentioned above, awareness of different possibilities may well have a bearing on the analysis. If we view tone/intonation as discrete categories, the subject in question is dealt with on a yes/no basis; eventually it must be assigned, even if only tentatively, to one or other of the classes. However, if we recognise the existence of a continuum, we can afford to take whatever features from each extreme seem suitable, while yet preserving a distinct identity for the subject.

For example, kiKongo can probably not be described in the same way as a 'classically' intonational language such as French or English; there must, nevertheless, be (as in all (?) languages)-certain intonational features, conveying emphasis, surprise, questions, etc. In fact, it
would seem, from the Rev. D. Ntoni-Nzinga's comments (see 4.5 and following chapters, especially 12) that kiKongo has quite a wide range of these features, though their precise outlines cannot as yet be completely clarified. As for possibility of choice, the possibility of having alternative contours for virtually the same sequence surely amounts to some degree of conscious control.  

Again, purely tonal analysis is not ruled out by wide neutralisation of tonal distinctions, though if these are very widespread, we might begin to think of revising the classification: there is no point in setting up distinctions if these are going to be neutralised in many cases. It may even be that a tonal interpretation hampers development of an adequate analysis of pitch contours, since phenomena will tend to be considered in terms of tones only - this may be the case with the issya vo phrase (4.6.4.3).

It therefore seems best to keep an open mind on the type of system to be adopted. Previous analyses have been tonal in one way or another, while this thesis will see how useful a pitch-accent approach might be.

4.6.6: Carter's tone-classes.

Carter 1973, pp.113-140 discusses the 'tone-classes proposed to deal with the totality of pitch-patterns, but at the end of this section the author admits that 'the attempt to sort nominals into tone-classes breaks down. ... In a few cases ... it is to some extent helpful, but in very many it is not. The exercise has not been without benefit, however, in showing general groupings of items and relationships of patterns' (p.139).

The preliminary classification in Carter 1973 crystallises in Carter and Makoondekwa 1975,1977 into the following schema:

I  b-vasta/vata 'village'; bns-sadati/ns-sadati 'worker'
II b-vu-vaanga/vu-vaanga 'to do'
III (e)-l-ludi 'truth'
IV (e)-bay'a 'plank'; (e)v-vaava 'to need, seek'
V end-zambo/nd-zambo 'God'
V ent-soompe/nt-soompo 'marriage'.
Tone-classes I and III are the most numerous, while II is 'an extremely small class' (p.116).

Apart from some uncertainties of classification (cf. Carter 1973, pp. 124, 131), there are three main difficulties with this systematisation. The first is the surprising point that paradigmatically related items are not necessarily in the same tone-class. Thus:

(e-)yakála 'husband', III, but (o)ma-áskála 'husbands', II;
(e)s-soómpa 'to marry', III, but ent-soómpelo/nt-soómpelo V;
ó1-la/l-la 'to be long', I, but (e)nn-da 'length', II.

This type of 'unstable assignment' occurs most often in classes II-V, and is difficult to account for.

The second difficulty is that the differences between the classes are very slight - they tend to overlap with one another. Thus a III word without initial vowel has the same pattern as a II word (e.g. vvuľvinga, lludi), while a IV word without initial vowel has the same pattern as a III word (e.g. ndza ámbi, vvašva), etc. Carter 1978 makes use of this fact to support an interesting, but not entirely convincing, derivation of these pitch patterns from those established for Proto-Bantu.17

The third difficulty is the question of vowel length. Is the contrast between a long and a short syllable significant? If it is, should such long syllables be interpreted as a single long vowel, or as a double vowel? This point is discussed in Carter 1973, pp.121-131. It turns out that 'there is no phonetic difference whatsoever' (p.124) between 'long' and 'double' vowels, but both analyses must be considered. Analysing all vowel length as double vowels gives the six tone-classes above. However, if we allow some vowel length to be analysed as long vowels, it is to some extent possible to subsume IV under II, and V under III. It is, though, impossible to analyse all vowel length as long vowels, since this would interfere with the formulation of I, Iž, and III. Thus, Carter concludes, we either use one analysis and have more, yet minimally differentiated, tone-classes, or two analyses, with their domain defined in an ad hoc fashion.

Before a nasal combination, vowel length occurs 'in the overwhelming
majority of cases' (p.126). Yet Carter refrains from saying that such vowel length is a conditioned variant because (i) not all vowel length occurs in this position, (ii) some vowel length in this position is more amenable to analysis in terms of double vowels, and (iii) not all vowels in this position are long. She concludes that 'while examples disconfirming the V:NC hypothesis are not as numerous as those which tend to support it, they are nonetheless sufficient to make its adoption difficult' (p.127).

This is an interesting point, and I will return to it in 14.4. For the moment we may note (cf. Carter 1973, p.136) that Iz seems to be a conditioned variant of I:

\[ u^\prime \text{imba 'to swell up'}, \text{Iz}, \text{shows a pattern different from} \]
\[ u^\prime \text{isâ 'to authenticate'}, \text{I}, \text{yet similar to} \]
\[ u^\prime \text{ma 'to throw'}, \text{I}, \text{which suggests that the base form'} \]
\[ *u^\prime \text{imba, with vowel length conditioned by the nasal combination}. \]

Moreover, many instance of vowel length occur on the penultimate syllable, or where NC has been reduced to C, eg.

\[ \text{emm-bëele 'knife'} \]
\[ \text{ent-soöpele 'marriage' } (p<mp \text{, cf. the variant ent-soöpelo } \]

While not all vowel length is conditioned, and therefore non-significant, there does seem to be a case for suggesting that it is not of primary importance in setting up the tone-classes. We find such non-significant variation as

\[ \text{ent-sangåla ~ ent-saangåla 'basket'} \text{ (cf. endnote 13, and 14.4).} \]

If we arrange the example words for the 1973 tone-classes without initial vowel and ignoring vowel length, we find two main classes. The first has high tone on the first stem syllable, with another high tone if the stem is long enough:

\[ \text{vöta (I), uuönge (Iz), nssådåst (I), löt (II).} \]

The second has high tone on the second stem syllable:

\[ \text{bayå (III), uuavå (III), ndzamå (IV), ntsömålo (V).} \]

Each of these classes can be subdivided according as to whether the high
tone 'moves' (see 4.6.2) when a pre-prefix occurs (I, Iz, IV, V), or not (II, III). For further discussion see chapter 14. It is significant that in verbal stems only two classes (I/Iz and III) are represented (Carter 1973, p.136 ff.), as is the case with nominal stems longer than five moras (p.131).

Carter 1980 adopts the idea of moving versus fixed tone as the main basis for sorting the tone-patterns, and says: 'It is possible, but not very useful, to set up more refined tone-classes' (p.18). We therefore have the divisions: first syllable high tone, first syllable high tone (moving), second syllable high tone, second syllable high tone (moving), plus a few anomalous and some uncertain patterns (cf. also chapter 14). This classification is the one used in Carter 1980b, and is perhaps more useful than the earlier version - for further comments see chapter 14.

4.6.7: conclusions.

It is possible to see the development of Carter's ideas between 1973 and 1980. The earlier work was an interesting and original way of segmenting the data, but there were some shortcomings due to complexity and lack of flexibility in dealing with alternative patterns. The later work, although the theoretical background is less clear-cut, is simpler in many ways, more intuitively satisfying, and can probably deal with a larger variety of patterns than the earlier work.

4.7: comparison of passages.

It is interesting to compare the patterns of a piece of the text as spoken by the Rev. D. Ntoni-Nzinga with those predicted by Carter's systematisation. There are of course good reasons for divergence, since two different idiolects are concerned, but such an exercise will be useful in that it will enable us to see how well the systematisation captures the features of the text.

4.7.1: same contours.

Of the 83 words (excluding proper names) in the comparison passage (see Appendix 3), about 46 (55%) show a coincidence of high pitch, eg. ovóvele vo 24 'he said (that)', okwàmbèl Nzaambè 26 'he praised God', baawútukidt 29 'they returned', etc. In some cases, C (Carter's version)
has a bridge while N (Ntoni-Nzinga's version) does not, eg. muna-muske
masku 24 'into your hands', yalungalkan' omona 28 'which had gathered
together to see', y'-evangu dysu 33 'and their deeds', etc. Occasionally
the occurrence of vowel length causes slight differences in the place-
ment of high pitch, eg.

C tmuũtu ansōngi / N tmuũtu ansōngi 27 'he was a righteous man'
eTsāta / eTsāta 24 'Father'
wasõngā / wasõngā 32 'of justice'.

4.7.2: similar contours.

In 14 words (17%) the contours are very similar:

(i) C āndyooyu / N āndiyu 27,33,35 'he'
    owu / ēwu 26 'how'
    ēbwu / ēbwu 28 'how'.

The last two pairs seem comparable, especially since the Rev. D.
Ntoni-Nzinga said that ēbwu 28 was a mispronunciation of ēbwu.

(ii) there are two instances of a word occurring inside a bridge in N,
    but not in C:
    C wēswu / N wawsu 25 'this'
    nkumuũb / nkumbu 31 'name'.

The Rev. D. Ntoni-Nzinga commented that the contour on omuntu
nkumbu andi Vosefe 31-32 'a man called Joseph' was due to fast
reading - the contour in slow speech would be omuntu nkumbu andi
Vosefe, which is more directly comparable to Carter's version
(cf. also 4.7.3.1).

(iii) there are two cases where the N version has a rising bridge, and
    the C version cancellation plus bridging:
    C endōngga yswonso / N endōngga yswonso 27 'all the crowd'
    ʾakunḍi ʾandt ʾswonso / ʾakunḍi ʾandt ʾswonso 29 'all his
    friends'.

This is merely a case of two different markings for the same contour
\(/\) (cf. 4.6.4.1.ii).

(iv) there are two cases in N where a word has high pitch in one instance
    but no high pitch in another; the word has high pitch in both
    instances in C:
    vswāvā C23, CN25 / vswāvā N23 'when'
    kwāndt C27,34, kwāndt N34 / kwāndt N27 'indeed'.
4.7.3: different contours.

There are 22 words where the contours in the two versions differ more than in the previous two sections, though even here some recurrent patterns can be discerned:

(i) N has high pitch, C does not:

C ana / N ñaná 30 'who'
on(a) / on(a) 34 'who'
omuntu / omuntu 31 'a person'
tuuka / tuka 30 'from'.

The patterns of the latter two pairs are probably related to the rising bridge phenomenon noted in 4.7.2.ii; the Carter unrealised mark does not rule out a slight pitch rise, non-significant in her systematisation, thus omuntu /——/

(ii) C has high pitch, N does not:

C dyaadí / N dyaadí 28 'this'
tulu / tulu 29 'cheeks'
mama / mama 31 'these (things)'
kuuna / kuna 35 'there'
åme / âme 25 'my'
ambote / ambote 32 'good'
also: oku vo / oku vo 26 'saying'
-kó / -ko 33 'not'.

(iii) N has high pitch on the root-syllable, C has it elsewhere:

C kyeleka / N kyeleka 26 'truly'
muna-ulala / muna-ulala 31 'at a distance'
eviiimbu / eviiimbu 36 'the body'
evata / evata 34 'town'
angolo / ñangolo 24 'loud'
ingyekwele moyo / ingyekwele moyo 24-25 'I commend (my)
also: ekintii / ekintii 35 'the kingdom'. spirit'

(iv) other different contours:

C ombut' ankama / N ombut' ankama 25 'the centurion'
y'-akeento / y'-akeento 30 'and the women'.

4.7.4: conclusions.

Taking words in 4.7.1,2 it therefore seems that in 70% of cases
(60/86) the fit between the two versions is close, if not exact. The differences suggest a greater importance of the root-syllable in Ntoni-Nzinga's dialect, and a tendency for different types of word in the two versions to appear without high pitch.

4.8: summary.

This chapter has examined one text in terms of an approach which takes the root-syllable as the norm for occurrence of high pitch. This provides a useful general basis for predicting the pitch-patterns (4.4.8), though there are certain aspects of pitch placement which present some problems (4.4.5). Other anomalous patterns such as words without high pitch, and variant contours for the same word or phrase, may be ascribed to intonation modifying the basic pitch-accent system. The Rev. D. Ntoni-Nzinga's comments (4.5) may be helpful in coming to a preliminary understanding of this overlay.

A synopsis of Carter's systematisation shows that many of the features of the text are also present in her dialect, though described in different terms (cf. 4.6.5.1). A comparison of her 1973 and 1980 formulations shows an evolution towards greater flexibility (4.6.7) and some simplification (eg. in tone-classes). It may therefore be possible to reconcile both approaches in a general description of the kiKongo system; many stretches fit both descriptions equally well (4.7, and cf. endnote 13).

Successive chapters will follow the same outline as this one, covering three basic areas: (i) testing the usefulness of the 'high pitch on the root-syllable' rule, with comments on apparent exceptions; (ii) examination of other analyses of kiKongo pitch to see whether similar features are noted or discussed there; and (iii) comparison of passages, to test the extent to which these analyses are compatible.
Endnotes to chapter four.

1. The Rev. D. Ntoni-Nzinga preferred to reserve this term for dialects spoken farther east - see Appendix 1.

2. The Rev. D. Ntoni-Nzinga said in comments (cf. 4.5) that the form evimbu in 41 was emphatic, but that evimbu in 102 put the emphasis on the preceding verb ka-ba-seen-dye-ko 'they did not find it'. Note also that evimbu and evimbu occur after elision, while evimbu does not.

3. From various comments by the Rev. D. Ntoni-Nzinga, it appears that lower key denotes seriousness, gravity, a private matter of some importance, sadness, or a parenthetic comment. Higher key denotes anger, an exclamation, or the introduction of a new episode in a story or a new topic in a discussion.

4. Carter notes that Rule 1 could also be extended to operate over two words, but that this has the same net result as if it were taken to apply only to the first word - that is, in the case of Rule 1 there is 'a masking or neutralization of the concatenate/composite distinction' (p.203).

5. Compare the neutralisation of the concatenate/composite distinction (endnote 4). 'It will be appreciated that initial modification ... results in the neutralisation of tonal distinctions over a large area of the language'. (Carter 1973, p.194, cf. also p.255)

6. It is probable, though this is not explicitly stated by Carter, that concatenation could be analysed as a subset of initial bridging, since in an indirect WH- question the realisation takes this latter form: kizeyewo kana /nkhi antheangsaw besinga kwiza 'I don't know what time they will come' (Carter 1980, p.14).

7. Note that in terms of the description put forward in this thesis, two separate high pitches (as in the second example) would be considered 'basic', while a bridge between them (as in the first example) would be ascribed to the speaker's wishing to mark a close relationship between the words concerned (cf. 6.4.11.1.2). The applicability of such a description to the two examples here would depend primarily on whether the first example was ever found to occur without bridge, and, to a lesser extent, on whether the second was ever found to occur with bridge.

8. It may be that an ordered rule approach would find fewer difficulties here.
9. 'Cancellation of high tone seems to equal cancellation of stress too' (J.H. Carter, p.c.).

10. It is significant to our analysis to note that in three of these four cases the root-syllable is stressed, and in three out of four cases high pitch and stress coincide - compare 3.5.4. Also, there was some evidence in our tracings that the next but one syllable following a root-syllable might receive stress, e.g. (Appendix 2) yakubazdgilanga 9, basonganga 10, mukituka 12, 19, muyindula 20, though this was not common and occurred only with verbs.

11. This pitch/stress relationship is very noticeable in kiLeta - see chapter 11.

12. For another explanation of these variants, see 10.4.v.

13. Recent revisions in the analysis (J.H. Carter, p.c.) mean that these examples are now considered as 'complexes', where the two items behave as if they formed one word - to some extent a return to the 1973 idea of composites. In Carter's dialect there seems to be a rule such that, if high pitch occurs on the second syllable of a word, a further high pitch on the word is barred - this applies, for example, when the negative affix -ko is suffixed to a noun, and also in certain verbal inflections (see Carter 1980 for examples). If, however, the high pitch occurs on the first syllable of the word, a further high pitch can occur later in the word.

   This rule applies in the case of complexes of the form 'noun + possessive pronoun', though not, apparently, in those of the form 'noun + genitive'. There is also a tendency for the first item of a complex to undergo vowel contraction, i.e. VWNC → VNC. Thus the examples would now be marked:

   nlonga-myauting (the 'no further high pitch' rule does not apply to the genitive)

   yandt-ndot (?)

   ngudt-zau (the 1973 pattern is now regarded as a mishearing; Carter 1980b also gives corrected patterns for the possessive pronoun: ezau/zaau)

   mpfinda-zand (or mpfinda-zaand)

   moyo-muntu (or moyo-muntu ?).

   If this analysis can be more comprehensively formulated, it will provide a more effective explanation, in terms of Carter's systematisation, for the occurrence/non-occurrence of high pitch on certain words, and would certainly be an advance on the 1973
analysis discussed below (4.6.5.1). (The same sequence of, in terms of my systematisation, two anomalous contours (usually word with high pitch on the last syllable + word without high pitch) also occurs in the texts in this thesis, and has been noted several times (eg. 7.4.7, 8.4.2, 9.3.8). The pattern does, however, seem to occur on a wider range of items than Carter's complexes, including verb + object.)

14. A similar problem arises when we consider

\[ \text{o}\text{mu}\text{ntu /w} \text{akala ... 'the person was ...'} \]

but \[ \text{mo} \text{oyo-} \text{mu} \text{ntu 'living person'}. \]

Here the same pattern on \( \text{o} \text{mu} \text{ntu} \) is accounted for in two different ways: initial cancellation in the first example, and occurrence as part of a complex (see endnote 13) in the second (in Carter 1973, p.130, fn. the pattern on \text{mu} \text{ntu} was held to be a 'fossilised' form without high pitch).

15. Rightward movement of high pitch does not occur in Carter's system.

16. This applies also to the \text{enku} \text{um} \text{bu} \text{my} \text{ay} \text{ing} \text{i} \text{tripl} \text{e} \text{t} \text{i} \text{m} \text{e} \text{t} \text{t} \text{e} in 4.6.3.3.

Carter (1973, p.201) suggests that there may be slight differences of meaning between the three, signalled by the different realisations. If this is the case, it implies some choice on the part of the speaker.

17. Very briefly, Carter 1978 tries to explain the 'erratic correspondences' between CB and kikongo nominal tone-patterns by a sort of chain reaction:

\[ \text{CB 11 (-jada 'hunger')} \rightarrow \text{K lh (e-ndzal\text{'}) / lh (ndzal\text{'})} \]
\[ \text{CB lh (-gud\text{'} 'pig')} \rightarrow \text{K hl (e-ngulu) / lh (ngulu)} \]
\[ \text{CB hl (-sadu 'work')} \rightarrow \text{K (h)ll (e-ssalu) / hl (ssalu)} \]
\[ \text{CB hh (-sus\text{'} 'chicken')} \rightarrow \text{K (h)ll (e-ntsusu) / hl (ntsusu)} \]

The sequence begins with \text{CB 11} \rightarrow \text{K lh}, which in Carter's opinion is due to the fact that to maintain the distinction between the three realisations of high tone (full, cancelled and bridged), the item must have at least one high tone. This, however, gives rise to a series of clashes (marked above by dotted lines), with corresponding changes (solid lines) to preserve distinctions.

I find this derivation unconvincing for a number of reasons:

(1) patterns with pre-prefix clash with patterns without pre-prefix
(K lh ≠ CB lh, K hl ≠ CB hl, K hl ≠ K hl); since these items are already morphologically differentiated, it seems unlikely that the situation for a phonological clash could arise.

(2) patterns with pre-prefix are taken as the base forms, whereas it makes better sense to take patterns without pre-prefix as basic (which, in fact, is what Carter does in 1980b). The above derivation means that, for example, CB -gudu must develop to K e-nguló via K e-nguulu; this is possible, but it is surely more likely that e-ngulu is a secondary development from CB -gudu → K e-nguló, particularly since the pattern without pre-prefix is in each case ngulu.

(3) taking patterns without pre-prefix as basic, we would then have CB 11, lh → K lh; CB hl, hh → K hl.

This bipartite division may be compared with chapter 14, where, on other grounds, two main pitch-pattern groups ('rising' and 'falling') are postulated for KilKongo.

(4) patterns with pre-prefix would then be considered secondary, and indeed there seems to be some reason to suppose that leftward shift of the high pitch here depends on what pitch-group the item belongs to. In a sample from Carter 1980b (14.11), 7% of items in the rising group were found to show shift with the addition of a pre-prefix, whereas the percentage in the falling group was 79.5%. Exceptions such as e-ngulu might be due to a certain overlapping of the two groups.

To sum up: the postulation of two main groups, each with specific pattern behaviour where pre-prefixes are concerned, seems to me simpler and more adequate than Carter 1978's system of clashes.

Such comparative experiments will form an integral part of chapters 6, 7 and 9, where the contours of a text as given or predicted by Carter, Daeleman and Laman will be compared with those of the text as read by an informant.
CHAPTER FIVE
Further Material - kiYaka/kiNtandu

5.1: introduction.
This chapter will examine a slightly longer passage in more detail, and discuss another researcher’s systematisation of the pitch system of the neighbouring, closely-related language kiYaka (see van den Eynde 1968).

5.2: the text.
The text, from Struyf 1936, pp. 104-111, is a folktale on the theme of gratitude. It was said by the Rev. D. Ntoni-Nzinga to be in the kiNtandu dialect, but with a certain admixture of kiYaka.

5.3: sample passage.
The passage chosen for discussion is ll. 52-83. Omitting patterns on the names NaNgundu-Nkunga 'Mr. Nightingale' and NaFungwa 'Mr. Owl' (see 5.4.7), there are roughly 159 high pitches in the passage, and of these, 97 (61%) occur on the root-syllable.

5.4: patterns in the text.
This section examines instances where the high pitch does not occur on the root-syllable; it will be seen that there are certain recurrent patterns here.

5.4.1: nominal patterns.
5.4.1.1: mpe ‘also’.
Mpe ~ mpi ‘also’, as in Carter’s dialect (1973), seems to entail a high pitch on the preceding syllable:

\[
\begin{align*}
\text{mono} & \; \text{mpi} \; 75 \; 'and I' \\
\text{mpi}^\prime & \text{mpe} \; 52 \; 'evening also'
\end{align*}
\]

In one case mpi seems to ‘spread the high pitch’:

\[
\text{NaFuungwa} \; \text{mpi} \; 57 \; 'Mr. Owl too' \; (< \text{NaFuungwa} \; \text{mpi} \; ?; \; \text{cf.} \\
\text{NaFuungwa} \; \text{mpi} \; \text{ubakidi} \; 53-4)
\]

5.4.1.2: -ko ‘not’.
The same processes occur with the negative affix -ko:
5.4.1.3: long locatives.¹

'Long' locatives (ie. with muna-, kuna-) seem to shift² the high pitch one syllable leftwards in most instances:

- muna-yeemba 53 'in the funeral chamber'
- muna-nkutu 64 'under the cloak' (cc. muna-nkutu 59)
- kuna-kizitu 74 'at the in-laws'
- kuna-gata 77,83 'to the village'
- kuna-mfwila 58 'at the feet'
- kuNaFunguia 55,80 'to Mr. Owl'

All but two of the above locatives are in bridge with following items, while muna-yeemba and kuNaFunguia are followed by a pause. Bridging (see 5.4.6.ii) would therefore seem to be a feature of locatives in this dialect.

In a few cases the high pitch remains on the root-syllable:

- muna-nzilâ 83 'on the way'
- muna-nkutu 59 'in the cloak'
- kuna-nkunku 70 'at the perimeter' (cc. muna-nkunku 87)

The length of the following stretch may have something to do with variation in high pitch placement. Compare, for example,

- muna-nkutu kansweka 64 'under the cloak where he had hidden him'
  with muna-nkutu mukala NaNgunda-Nkungu 59-60 'under the cloak where Mr. Nightingale was'

and muna-nkunku 87 (pre-pausal) 'at the perimeter'
  with kuna-nkunku gata djiâu 70 'at the perimeter of his village'

However, this would still not account for phrases like

- kuna-mfwila maalu manzitu ďandî 58 'at the feet of his father-in-law's corpse'

where, despite a long following stretch, there is a shift of high pitch.
5.4.1.4: short locatives.

'Short' locatives (i.e. with mu-, ku-) usually retain high pitch on the root-syllable:

- munsí 54, 56 'under'
- mukkuma 73 'for the reason'
- mubbaka 80 'to get'.

But there is one case of no high pitch:

mubitum 65 'after the days'

and one of penultimate high pitch:

muyändika 66 'to give a send-off to'.

5.4.1.5: genitives.

The genitive element also seems to condition a shift:

- kídya 74 'of food'
- zìmfundi 68 'of manioc'
- kíseenda 82 'of paying'.

(see also 5.4.6)

The example manzitu 58 'of the father-in-law' occurs inside a bridge,

5.4.1.6: vowel-commencing stems.

The patterns on vowel-commencing stems are ambiguous:

- baakulu 57 'the elders'
- biima 66 'things'
- but kímsa 74, 81 'thing'
- bes^-gata 52 'villagers'.

Occurrence as the last element in a bridge may tend to move the high pitch leftwards – see also 7.4.8.

5.4.2: verbal patterns.

In verbals, the high pitch is most commonly on the root-syllable, and is often the first high pitch of a bridge with following items.

5.4.2.1: bridges on verbals.

In a few cases the bridge is only on the verb itself:

yibbonga 58³ 'I will sing'
Kayungäsä 81 'he shook'
Mwele 79, 83 'he came' (cc. bësle këta 53)
Baymbididi 62 'they sang'
Ukwelele 75 'so that you could marry'
Kagëene 63 'he (didn't) give' (pre-pausal - cc. bagëene 69).

There are also two examples where the first high pitch is on the syllable preceding the root-syllable (cf. 5.4.2.2):

Bu-katuuikiisi 70 'he then took out'
Yakuboongila 75 'I sang for you'.

It will have been noticed that the second high pitch is always on the last syllable of a disyllabic verb or on the penultimate of longer verbs. In two cases there is a high pitch on this syllable, but none on the root-syllable:

Musindoika 66 'to give a send-off to'
Tele 55 '(if) you click (your fingers)' (cf. mëta kindodya 59).

5.4.2.2: preceding element + shift.

A preceding element may shift the high pitch of the verb:

(i) bu- 'when, then': bu-kasa 55 'he had then said'
    bu-bälwaaka 69 'when they arrived'
    Bu-katuuikiisi 70 'he then took out'

In one case the high pitch occurs on the preceding element itself:

Bu-ngwidì tanda kwäme 73 'I am as thin as a rake'.

This may be because the sentence is exclamatory - see 5.4.6.

(ii) 2PS os 'you': Yakuboongila 75 'I sang for you'
    Yikufuta 79 'that I may pay you' (cc. ikufuta 78).

(iii) relative prefix: bi-bayundula 66 'which they gave'.

5.4.2.3: shift.

There are a few examples of shift with no preceding element:

Wakota 58 'he entered'
Mëta 59 'he clicked'
Wëmbonga 60 'he sang'
Wëlembwà 74 'you failed'.
It is unclear why these occur; they may possibly be instances of an emphatic past tense such as occurs in Makoondewa's dialect (Carter 1973, p.311).

5.4.3: words without high pitch.

In some cases no high pitch at all occurs on the word:

(i) objects:  
kindodya 55,59 'clicking of fingers'
mbesmba 57,62,75 'lament'

(ii) subjects:  
bantu 62 'people'
bazitu 65 'in-laws'
NaFungwa 80 'Mr. Owl'
mono 56,72 'I'
ge 73 'you'
yani 77 'he'

(iii). adjuncts:  
bilumbu 62 'days'
mubilumbu 65 'after the days'

(iv) verbs:  
benda 69 'they went'
bayenda 69 'they went' (cc. wayenda 58)
gyenda 76 'so that I can go'
vutuka 80 'returning'
dila 83 'lamenting'.

The sequence noun-possessive seems in five instances to have high pitch on the possessive only:

nkas' andi 66,69 'his wife'
nkas'aku 75 'your wife'
nsendo andi 80 'his fee'
nsendo-ame 76 'my fee'
ntu ânti 81 'his head'.

5.4.4: high pitch on the last syllable.

There are a very few cases where a word has high pitch on the last syllable. Some of these have already been mentioned in other contexts: mono, mptimpé (5.4.1.1), bu-bálwaské (5.4.2.2), teelé (5.4.2.1). But note:
5.4.5: conclusions.

We may sum up by saying that the majority of high pitches occur on the root-syllable of the words concerned. Where this is not the case, the examples mostly form well-defined subsets - for instance, many anomalous nominal patterns can be described in terms of preprefixation conditioning a shift of the high pitch (5.4.1.3,5).

5.4.6: bridges between words.

Most of the bridges on individual words have been indicated in the above discussion (eg. 5.4.1.1,2; 5.4.2.1). However, there are quite a few bridges between words, showing recurring patterns of occurrence:

(i) noun/pronoun + following item:
   ye-báu banzéenza 53 'and they the guests'
   kkóta kuav baákulu 57 'the entrance of they the elders'
   kíímá kí já 74 'something to eat'
   kíyúnga kýándí 54 'his cloak'
   nsúsu makumatánu 67 '30 chickens'
   ye-ntombo makumóóle 67 'and 20 goats'
   yè-ntongo zíngulu kúumi 68 'and 10 fine pigs'
   yè-ntóma ntábé 68 'and 100 roots'
   nìngí wúnu 78 'in a week from now'
   NaFúungwa mpi ubúkití 53-4 'Mr. Owl grabbed'

(ii) locative + following item:
   kúna-gáta dyáme 77 'to my village'
   kúna-gáta dyándí 83 'to his village'
   kúna-kízítu kyáku 74 'to your in-laws' / 'in-law's corpse'
   kúna-afúlla maalu manzítu kýándí 58 'at the feet of his father-
   kúna-nkúnu gáta dyáu 70 'at the perimeter of their village'
   munsí kínkútu ngíína 56 'under the cloak where I am'
   muna-nkútu mukala NaNgundu-Nkúunga 59-60 'under the cloak where
   Mr. Nightingale was'
   muna-nkútu kansuúka 64 'under the cloak where he had hidden him'
   mukkúma nktí 73 'for what reason'
(iii) verb + following item:

batuukidi b'tima 65-6 'they brought out things'
k'iwildi nzimbú-ko 78 'I have no money'
uwildi tanda 65 'he got very thin' (cf. uwildi tanda 71)
bú-nguidi tanda kwáme 73 'I'm as thin as a rake'
yikufuta kwáku 79 'I will indeed pay you'
nzya'udi kwáme 56 'I will fully understand'
bakese kóko 63 'they remained there' / weele dila 83)
bele kkóta 53 'they came and entered' (cf. weele vutuka 79-80,
welembwa kungána 74 'you failed to give me'.

(iv) exclamations:

ee mpàang' 77 'hey, my friend!'
è nkaandi yaya 61 'hey, palm-nut, hooray!'
nkaandi yiğana ngaanu 61 'the palm-nut confers talent!'
kileleleeee 61 'hip hip hooray!'
cf. also: kànt 74 'at all'
kyéléka 73 'indeed'

There are three instances of 'broken' bridges, long bridges which
have a structure similar to one of those above, but are broken by a
pause (see also 6.4.11.1):

kageene • NaNgundu-Nkunga madyá-ko 63-4 'he didn't give Mr.
Nightingale any food' (cf. (iii) above)
yè-nkáma ntabé • zimfundí 68 'and 100 manioc roots' (cf.
(i) above)
kawildi kwánt nkútu kite'mi • kíseenda NaNgundu-Nkungó-ko 81-2
'he had nothing whatsoever to pay Mr.
Nightingale with' (cf. (i) above)

These examples could be considered as two consecutive bridges, and are
so marked. However, with two consecutive bridges we expect the high
pitch to end and begin respectively on the root-syllable. With these
bridges, the high pitch of the first half continues right up to the
last syllable, and the high pitch of the second half starts right from
the first syllable; there therefore seems to be good reason for
considering these sequences as two halves of one bridge rather than
as two bridges. The sequences could then be marked
5.4.7: patterns on names.

(i) *NaNgundu-Nkunga* 55, 60, 64, 71 'Mr. Nightingale'
    NaNgundu-Nkunga 60, 82
    NaNgundu-Nkunga 54, 79
    NaNgundu-Nkunga 71, 72, 82

(ii) *NaFuungiua* 59, 63, 66, 70, 77, 53, 57 'Mr. Owl'
    kuNaFungiua 55, 80
    NaFungiua 73
    NaFungiua 80

Apart from noting that *NaNgundu-Nkunga* and *NaFungiua* are the most common forms, there is little to be said about these.

5.5: comments on variant contours.

(i) *NaFungiua* mp? 7 'Mr. Owl also' and *NaFungiua* mp? 57: there was 'little difference' between these - the latter was said to place more emphasis on *NaFungiua*, while the former was more narrative, continuing the story, with the emphasis, if any, on the preceding *ibuuna* 'then'. It was noted that the difference really depends on the context, and on what the speaker wants to emphasise.

(ii) *gogele nde* [—] 21 'she said' and *kuNaNgundu nde* [—] 28 '(he said) to Mr. Nightingale': the Rev. D. Ntoni-Nzinga said that the extra-high pitch on *nde* in the latter was a 'special kiNtandu accent', which underlined here that the Owl was asking a favour. It would not be right, he said, to use this 'strong' form in the first example, because the speaker was a lady, and also because there was no discussion in what she said, just simple agreement. However, since the pausal upturn is the contour given to *nde* in all but one other example in the text, it seems safer to assume that this is the usual form, and that *nde* with extra-high pitch is a marked form. We may compare the two patterns for issya vo 'that is' noted in the previous chapter (4.6.4.2).

(iii) *kuna yakundimina* 16 'there where I am buried' and *kuuna* ...
the Rev. D. Ntoni-Nzinga suspected that the final position of the latter might condition the contour; for example, we could say *wakundima* if the word were not in final position. On the other hand, the fact that the two words refer respectively to 1st and 3rd person may, he said, affect the contours.

(iv) *nkutú-ko* 25 'at all' and *nkútu-ko* 34: after some hesitation and difficulty, the Rev. D. Ntoni-Nzinga finally decided that the former was more emphatic.

(v) *kadyaambu-ko* 19,76 'no matter!' and *kadyaambu-ko* 43: these were characterised as 'different types of reply'. The latter is a reply to someone from whom you have received something, and the former a reply to someone who wants to do something for you. It is clear that these explanations do not entirely fit the contexts, but it seems likely that there is some sort of difference. This may, as suggested by P.R. Bennett (p.c.), have something to do with the relative value of the components and the degree of their lexicalisation. We may compare the English 'how-do-you-do?' as opposed to 'how do you do that?'. We might suppose that the 43 example is a polite (and therefore marked) form, while the other example is the more usual one; the high pitch on the syllable preceding *-ko* is certainly more usual (cf. 5.4.1.2).

(vi) *kitumbu kimosi* 2 'one day' and *bitumbu bitánu* 62 'five days': the Rev. D. Ntoni-Nzinga said that the first example would be used when setting the scene at the beginning of a story (rather like 'once upon a time'), while the second emphasised the time lapse by means of the high pitches on the numeral. Again, lexicalisation may be a factor. We might compare *waantu wóólé*/*waantu wóólé* in 4.5.iv.

(vii) *kuná-gata dyámádi* 23 'to his village' and *kuná-ga dyámádi* 83: the extra length and falling pitch on *dyámádi* in the first example were said to convey an impression of sadness, or an attitude of aggressiveness, as when giving an order; the second example is the usual form. Compare the comments on *kwáandi* in 4.5.iii.

(viii) *yituukaanga lunswá* 84 'when the termites come out' and
mumbaambisa lunswa "to use the termites as bait for him"; the contour differences were ascribed to position in the sentence; we could have yituu kaenga lunswa and mumbaambisa lunswa .... The Rev. D. Ntoni-Nzinga drew attention to the way the contours of both words, not just of lunswa, changed: 'if you change one word, you must change another'. This variation is difficult to account for; no other examples of this kind have been found.

(ix) kuntu nam 105 'on whose head is it?' and kuntu Vafungwa 105 'on Mr. Owl's head': the first example was identified as a question form: the higher the pitch, the more forceful the question.

(x) asked about the differing contours on kaansi (passim), the Rev. D. Ntoni-Nzinga said that basically this depends on its function in the sentence, a form like kaansi being used to 'reply', for example, but one like k\^{e}nsi being used to 'explain'. He seemed to mean here that k\^{e}nsi 'but' was neutral, in its ordinary function of introducing information contrary to that previously presented, while k\^{e}nsi introduced what might be considered a cautionary note: 'but, however, ...'. Compare also 10.4.v.

5.6: other research: van den Eynde.

We have seen that there are certain recurrent patterns both in the contours of individual words and also in the structures associated with pitch bridges. We will now compare the systematisation proposed by another scholar to see whether similar tendencies can be discerned there. Either Daeleman 1966 or van den Eynde 1968 would be appropriate for this dialect, but I will deal here with the latter, since I propose to discuss Daeleman 1966 in chapter 7.

5.6.1: pitch features.

5.6.1.1: tonemes.

Van den Eynde distinguishes two tonemes, high (marked \(\ddagger\)) and low (unmarked). Thus:

\[\begin{align*}
m\ddagger\text{ \emph{mutu} 'it is a man'}
\end{align*}\]

\[\begin{align*}
\text{\emph{wusidi} 'it has arrived'}
\end{align*}\]

\[\begin{align*}
\text{\emph{kh\^{e}ombo} 'goat'}.
\end{align*}\]

But 'in fact tonal realisation is more complicated', since there are
also 'slightly rising' and 'slightly falling' pitches, and a 'tonal break'.

5.6.1.2: 'slight rise'.

The slight rise seems to be a variant of the level contour (class C, see 5.6.2.1), and words may have either pattern. Thus:

\[
\text{ngóömbe 'cow'} [---] \text{ or } [-_.-] \\
\text{yakala 'man, husband'} [---] \text{ or } [-_.-].
\]

The items are marked with high tones because this is 'the simplest from the tonal point of view', and also, it appears, to keep two of the nominal tone-groups (B and C, see 5.6.2.1) clearly distinct. There is 'a certain risk of confusion' with these two groups when the words occur in self-standing or phrase-final position, because it is then that the falling realisation for class C usually occurs. But the choice of the two realisations, level or falling, may even depend, 'for the same syntactic position, [on whether] the informant speaks in a more, or less, emphatic manner, slower or faster'.

5.6.1.3: 'slight fall'.

As for the slight fall, we have

\[
\text{kúlúndzi 'cross'} [---] \\
\text{kuúlu 'leg'} [---].
\]

That is, although we would expect from the marking that the contour is [---], it is actually [---]. Here we are given no reason for the marking adopted, and the exact phonetic difference between -\(\text{ýv}\)- and -\(\text{ýv}\)- with slight fall is not explained. It is noticeable that just as the slight rise tends to blur the distinction between groups B and C, this slight fall would tend to merge groups B and A (cf. 4.6.6).

5.6.1.4: 'tonal break'.

The tonal break involves an extra-high tone, thus:

\[
^\dagger\text{tútála 'we will work'}}[---].
\]

However, 'this phenomenon has been systematically omitted, although it seems to play a distinctive role in the language'.
5.6.1.5: tone-bridge.

Van den Eynde notes that in connected speech a 'tone-bridge' is sometimes formed between the high tones of two words, e.g.

\[ \text{batu} \text{đi} \text{ bako} \text{mbu} \text{ bapfumu} \ 'they saw the chief's goats' \]

with \[ \text{batu} \text{đi} \text{ bako} \text{mbu} \text{ bapfumu} \ 'they saw the chief's goats' \] it is interesting that in his examples bridging mostly seems to occur with nouns in his 'definite' case (see 5.6.2.3). Van den Eynde gives few details on where and when bridging is used. If it occurs at all frequently, it surely obscures many of his tonal distinctions, and it would therefore be interesting to know how he arrived at his underlying forms.

5.6.2: cases and moods.


5.6.2.1: tone-classes.

'At first sight, one has the impression that substantives behave according to a very irregular tonal scheme, even when occurring in the same case.' Nouns are therefore divided into three 'groups' or tone-classes, each with specific tone-patterns for the various cases (see 5.6.2.3). Thus:

<table>
<thead>
<tr>
<th>Case</th>
<th>Definite</th>
<th>Neutral</th>
<th>Qualified</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>yî-sèngèl</td>
<td>yî-sèngèl'</td>
<td>yî-sèngèl</td>
<td>'axe' / marks'</td>
</tr>
<tr>
<td>B</td>
<td>ma-kuluńdzi</td>
<td>ma-kuluńdzi</td>
<td>ma-kuluńdzi</td>
<td>'cruciform tattoo'</td>
</tr>
<tr>
<td>C</td>
<td>ba-yăkala</td>
<td>ba-yăkala</td>
<td>ba-yăkala</td>
<td>'husbands'</td>
</tr>
</tbody>
</table>

It will be seen that in the qualified case there is no tonal differentiation of the words. The comments in 5.6.1.2,3 above about the distinctiveness of the tone-classes should also be borne in mind when considering the definite case.

5.6.2.2: tone-types.

Verbal behaviour also necessitates a division into two 'types', each with specific tone-patterns for the different moods. The types are not tonal classes of the radical, as we might expect from other Bantu tonal systems. Rather, they seem to be determined by the tense. We might say that there are not two, but three types, since the tenses...
of type I have very different patterns according to whether the
subject prefix is 1st/2nd person or 3rd person. Thus:

<table>
<thead>
<tr>
<th></th>
<th>absolute</th>
<th>selective</th>
<th>relative</th>
<th>meaning</th>
<th>tense</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (i)</td>
<td>tutadidi</td>
<td>tutadidi</td>
<td>tutadidi</td>
<td>'we have looked'</td>
<td>perfect</td>
</tr>
<tr>
<td>(ii)</td>
<td>batadidi</td>
<td>batadidi</td>
<td>batadidi</td>
<td>'they have looked'</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>twatadidi</td>
<td>twatadidi</td>
<td>twatadidi</td>
<td>'we had looked'</td>
<td>pluperfect</td>
</tr>
</tbody>
</table>

See also 5.6.2.4 and 5.6.5.

5.6.2.3: the three cases.
Van den Eynde says of the cases: (pp. 16-7)
(i) with the neutral case, 'the substantive ... expresses only its
own lexical content' - ie. this is the unmarked form.
(ii) with the definite case, 'the accent is placed on the substantive,
in its own right, or in comparison with another'. This form is
therefore marked and emphatic.
(iii) the qualified case 'signifies that ... the attention ... is
deflected from this substantive to the profit of its determining
[i.e. qualifying] form'. We might call this a 'de-emphasised' form,
and it is mostly found in first position in a nominal group.

5.6.2.4: the three moods.
Of the moods, van den Eynde says: (p.19)
(i) the absolute mood 'is neutral'.
(ii) the selective mood 'focusses attention on the complement. The
presence of the latter is obligatory ... When the selective
mood is used, it is desired to clearly indicate that the
complement is the main area of attention, not something else.
An exclusive choice is being made among various possibilities,
the chosen complement is being opposed to others'.
(iii) the relative mood 'can be translated most adequately in French
by a relative construction, although the frequency of its use
far surpasses that of the relative in French'.

5.6.2.5: relationship.
The moods and cases therefore seem to correspond as follows:
(a) marked: definite case, selective mood; (b) unmarked: neutral
case, absolute mood; (c) 'de-marked': qualified case, relative mood.
5.6.3: interaction of cases and moods.

The sense of syntactic groups and of the phrase in Yaka is determined by tonal characteristics, which express the different possible links between one or more nominal forms and between one or more verbal forms. (p.11) Van den Eynde examines this interplay between mood and case in the phrase from the point of view of where each case may occur.

5.6.3.1: definite case.

The definite case occurs when the noun
(a) stands alone as a predicative or vocative, eg.
   mahéembo 'they are shoulders'
   a nge mwaëna! 'hey, you, child!'
(b) is preceded by the genitive element, eg.
   kîmî kyaphwëenya 'it is a thing of beauty'
(c) is preceded by kwa-/kuna-, ye-/ya-, eg.
   tweelë kuna-ntsîtu 'we went to the forest'
   tuusîdi ya-maama 'I/we have come with mother'
(d) appears as object of a verb in the selective mood, eg.
   tuntîmbîni kathâëngi 'we slept on a bed (not on the ground)'.

5.6.3.2: neutral case.

The neutral case occurs when the noun
(a) occurs before numerals, -bësa 'all', or -têngi 'many'
(b) appears as subject of a verb in (i) absolute, or (ii) selective mood, eg.
   (i) yisengelë kyalâla 'the axe was lost'
   (ii) mahaëmbô mawwëëne phâst 'my shoulders are really sore'
(c) appears as object of a verb in (i) absolute, or (ii) relative mood, eg.
   (i) tumwëëne kabulukü 'we saw an antelope' / is dead'
   (ii) mutu wâstîdi makhondo, fûûdi 'the person who ate the bananas
(d) appears as complement of an indirect relative, eg.
   mwaëna kâwvâssëtîsi maama 'the child whom dresses the mother'.

5.6.3.3: qualified case.

The qualified case occurs when the noun
(a) is first item in a nominal group (ie. when it occurs before a
genitive, possessive or demonstrative), eg.

\[ \text{lust'imb} \text{a maheembo maama} \text{a 'hold mummy's shoulders!'} \]
\[ \text{mitoombo my}^{4} \text{m yam}^{4} \text{m 'these manic roots are bad'} \]

(b) is qualified by a relative, whether (i) direct, or (ii) indirect, eg.

(i) ngaandu wazyonders mumaamba, luuki: 'the crocodile which
dived into the water was evil'
(ii) ndaanda yithë:tele ndzyoko, yitoombokele 'the path which
the elephant was looking for sloped upwards'.

5.6.3.4: contextual variation.

Van den Eynde points out that 'in certain contexts either the
qualified or the definite case may occur' (pp. 22-4), eg.

\[ \text{hathaangi tun}^{1} \text{imb}^{1} \text{ni (def + rel) 'it was on a bed that we slept'} \]
\[ \text{cf. tun}^{1} \text{imb}^{1} \text{ni hathaangi (sel + def) 'we slept on a bed'} \]
\[ \text{but hathaangi tun}^{1} \text{imb}^{1} \text{ni (qual + rel) 'the bed on which we slept ...'} \]
\[ \text{maheembo maama (def) 'these are my shoulders'} \]
\[ \text{but maheembo maama (qual) 'my shoulders ...'}. \]

5.6.4: range of patterns.

The range of patterns for a simple sentence with three slots then
seems to be something like this:

<table>
<thead>
<tr>
<th>subject</th>
<th>predicate</th>
<th>object</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>def</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>def-rel-neut</td>
<td>-</td>
</tr>
<tr>
<td>neut</td>
<td>abs</td>
<td>qual-def</td>
</tr>
<tr>
<td>qual-def</td>
<td>qual-rel-neut</td>
<td>def</td>
</tr>
<tr>
<td>qual-rel-neut</td>
<td>sel</td>
<td>def-def</td>
</tr>
<tr>
<td></td>
<td></td>
<td>def-rel-neut (?)</td>
</tr>
</tbody>
</table>

Thus we have (p.12):

(i) baphaangi (def) 'they are brothers'
(ii) baphaangi bahoondélé bakhoombo (neut + abs + neut) 'the brothers
killed the goats'
(iii) baphaangi bahoondélé bakhoombo (neut + sel + def) 'the brothers
killed the goats (and not the sheep)'
(iv) bahoonamba bahoondele baphaangt (def-rel-neut) 'it is the goats that the brothers killed'

(v) bahoonabo bahoondele baphaangt, bafuudi (qual-rel-neut + abs) 'the goats which the brothers killed have died'.

5.6.5: verbal patterns.

Not all of van den Eynde's verb forms show the patterns predicted by his formulations (5.6.2.2). For example, in 5.6.3.2 the form kawaseetstt, said to be a relative, has a pattern which is supposed to appear on relatives of type II only, whereas this verb form appears to be a perfect tense, not a pluperfect, and therefore type I.

Again, in 5.6.3.4 we have two different patterns for the relative tunitimbint: tunitimbint and tunitimbinit. The form here is definitely type I, so the second pattern does fit van den Eynde's formulations. The first pattern, however, is not included in those given for either type. We might postulate tunitimbint, with lowered pitch on the last syllable because of pre-pausal occurrence (as happens to nouns - cf. 5.6.1.2), but this pattern only occurs on type II relatives.

There are two more contradictory patterns for a relative in 5.6.4: bahoondele (iv) and bahoondele (v). All other patterns for bahoondele in these sentences except that in (v) seem to mark it as a type II verb (ie. pluperfect). But bahoondele seems closer to the pattern for a relative of type I (ie. perfect). Either the glosses for these sentences are misleading (since none of them reflects the pluperfect meaning), or the patterns displayed on verbals are not fully described in van den Eynde's formulations.

5.6.6: further problematic examples.

(i) katóluta meenu maandit but.télele baantu baandit (both abs + qual-def): -aandi is in tone-group A, so the first example shows a definite case pattern, while the second shows a neutral case pattern. Yet from the information presented, the neutral case does not occur on a word in this context.

(ii) a nge mušana! 'hey, you, child!' but a ngé! 'hey, you!': this implies either that there is a hierarchy in the application of
high pitch (perhaps on the lines of only one substantive in the group being in the definite case, or of only one item in a given slot having high pitch), or some sort of focus or emphasis.

(iii) tumweene bangoomba bapfumu (abs + qual-def) 'we saw the chief's cows' but tumweene bangóomba bapfumu (sel + def-def) 'we saw the chief's cows': such pairs suggest clearly that focus may be a relevant factor in the realisation of the pitch contours.

(iv) lutufuula kheenda (abs + neut) 'have mercy on us (on all occasions, in general)' but lutufuula kheenda (sel + def) 'have mercy on us (on one particular occasion)'; here the pitch patterns provide connotative contrast. We might note that in Carter's kiMbanza akongo (Carter 1973), where the initial vowel acts to some extent as a marker of definiteness, the patterns for the noun would be nkheenda (less definite) and ūnkheenda (more definite).

5.6.7: conclusions.

Despite its internal inconsistencies, van den Eynde's study shows a number of parallels with tendencies noted in the text (5.4). In many cases there is only one high pitch on a word, and in some cases none at all; in addition, words may have a variety of contours in the same context. There are variant realisations for some words (5.6.1.2) depending on position in the utterance, and also on speed of utterance and emphasis. The fact that there are discrepancies between the posited verbal contours and their actual forms in the examples suggests that there may be a certain amount of flexibility here, which would make verbal patterns hard to categorise. Finally, pitch may be used to signal a close relationship between items in a nominal group, or between a verb and its object, and to indicate various degrees of markedness or focus.

5.7: summary.

Analysis of the text (5.4) has yielded more information on the occurrence of bridging (5.4.6) and of anomalous patterns (5.4.5). Comparison with van den Eynde's work (5.6) suggests parallels with the system I am postulating: one of minimal tonal differentiation, but with a certain amount of optional contour variation (5.5) - a fairly flexible system which accounts for the bulk of the data.
Endnotes to chapter five.

1. Terms such as 'locative', 'genitive', 'connective', etc. are used as shorthand for 'noun with prefixed locative element', 'noun with prefixed genitive element', 'noun with prefixed connective element', etc.

2. Such expressions as 'locatives shift the high pitch' are used as shorthand for 'nouns with prefixed locative element are associated with shift of the high pitch'. It is not necessarily intended to suggest a causal relationship between occurrence of the locative element and shift of the high pitch, though such may well be the case.

3. Henceforth, an arrow over a line number will indicate an anomalous pattern on surrounding words.

4. It will be noticed that in all these examples elision has occurred or could occur. The analysis here would be one of non-occurrence of high pitch on the first word, with expected high pitch on the second. Note that Carter (p.c.) would analyse the forms as, for example, *nkhasé¬sandt (a possessive complex) — nkhas'§sandt (with elision causing the high pitch to move one syllable to the right). That is, her analysis would be one of non-occurrence of high pitch on the second word, with expected high pitch on the first, although this high pitch is in fact realised on the second word because of the elision.

5. Other instances of ye- show no shift, eg. ye-bést-gata 52 'and the villagers', ye-bbu 53 'and they'. The shift of high pitch onto the connective element in the three examples in 67-8 may be due to their being in a list: the speaker is enunciating them carefully, emphasising the number of the gifts. Compare also bu-ngwéd̄ ... in (iii), which also has high pitch on the prefixed element and is also emphatic, being an exclamation.

6. ndé 93, but the high pitch may be due to the fact that it is elided with the vocative element e.

7. All extracts from van den Eynde 1968 are translated from the original French.

8. Van den Eynde's names for the cases and moods are related to each other in four instances out of six, and are therefore difficult to remember. In my translations, therefore, I use slightly different terms, as follows:
<table>
<thead>
<tr>
<th>tone-cases</th>
<th>tone-moods</th>
</tr>
</thead>
<tbody>
<tr>
<td>déterminant: definite</td>
<td>absolutif: absolute</td>
</tr>
<tr>
<td>indéterminé: neutral</td>
<td>sélectif: selective</td>
</tr>
<tr>
<td>déterminé: qualified</td>
<td>déterminatif: relative.</td>
</tr>
</tbody>
</table>

9. We might also compare the Tonga

*twakayanda ula mulimo 'we looked for work'*

but *twakayanda ula mulimo 'we looked for work'*

(Carter 1971-2). See also 13.3.3.
CHAPTER SIX
Three Versions - kiZombo

6.1: introduction.
This chapter will examine three versions of the same text in the kiZombo dialect, to ascertain their degree of difference or similarity in terms of pitch features. A portion of the text will then be compared with the patterns predicted by Carter's systematisation (cf. 4.6.7).^2

6.2: the text.
The first text (version A) was a spontaneous one spoken by the Rev. D. Ntoni-Nzinga into a cassette recorder. Version A was then examined in two following sessions; it would be played for a phrase, the Rev. D. Ntoni-Nzinga would repeat the phrase more slowly and clearly perhaps two or three times, and I would check this against version A. This slowed-down, 'exploded' version (B) showed some variations from A in both wording and contour. Finally, one session was devoted to explaining the exact meaning and reference of the text. During this, the Rev. D. Ntoni-Nzinga would frequently repeat phrases or whole sentences from my written version of the text (especially the middle portion) for the purposes of translation and explanation. This explicatory version (C) was also recorded.

6.3: sample passage.
The passage chosen for examination is 11. 33-58. About 60% of high pitches in versions B and C occur on the root-syllable; the proportion is slightly lower in A (about 52%).

For the sake of simplicity, we will describe the patterns with reference to A, only noting patterns in B and C when they diverge from those in A. This approach has been found, after trial and error, to be preferable to describing the patterns in three parallel columns, or to describing each version individually and then comparing them.

6.4: patterns in the text.
The patterns in this text (version A) are strikingly different from those of the texts previously examined. The patterns in those
texts could be categorised in terms of 'basic' (i.e. high pitch on the root-syllable) or 'anomalous' (i.e. (i) high pitch elsewhere, or (ii) no high pitch), with the 'basic' and 'anomalous (i)' categories containing the greatest number of items.

In this text it is the 'basic' and 'anomalous (ii)' categories which contain most items – a very high proportion (about 28%) of words have no high pitch, and words with prefixed elements tend to retain the high pitch on the root-syllable, instead of shifting it as in previous texts.

6.4.1: long locatives.

Long locatives do not shift the high pitch:

- muna-wàntu 42 'for people'
- muna-kuma 52 'for the reason'
- muna-yàayi 57 'in this'
- muna-màa 45 [B muna-màama] 'because of these [things]'
- muna-lumba 39 [absent in B, C muna-lùmù] 'in the days'
- muna-dyaadì 33 [absent in B, C muna-dyaadì] 'for this [reason]'

Note also kwàntu 35 'to someone'

kwaphil(a) 46 'by a type', which might be better classed with the genitives in 6.4.3.

6.4.2: connectives.

Connectives also retain high pitch on the root-syllable. Thus:

- ye-màntu 34 'with someone'
- ye-bùndazyaanu 48 'with a joining together'
- ye-wànga 49 'with fear'
- ye-nàni 50 'with whom'.

But note also ye-kyàwoonzì 51 'and of danger'

and ye-thàangu 55 'with a time'.

6.4.3: genitives.

Some genitives shift the high pitch:

- kyanene 47 'of largeness'
- kyàphasi 50 'of difficulty'
mandza 40 'of the world'
mánkaka 37 [absent in B] 'of otherness'
dyánkaka 56 'of otherness'
kyéthaangu 44 'absent in C 'of time'
'ethangu 36,56 'of time' (cf. ye-thaangu 55, thaangu 33C, 34C)
ye-kyávoonza 51 'and of danger'
'Idyámona 57 'it is of seeing'.

But others do not:
zazíngi 45 'of manyness'
ayíng(i) 51 ditto
awóonsono 42 'of all'
mawóonsono 45 ditto
awóenga 46 'of fear'
kyédýadít 52 'of this'
áuvúu 48 'of hope'
áuvúu-ko 48 [C áuvuvúu-ko] '(not) of hope'
dyámfunu 33 [C dyámfunu] '(it is) of importance' (cf. mfúnu-ko

Note also edyaambu 35,36 'of matter'
kyálumbu 34 [absent in B, C kyálumbu] 'of days'.

There is no visible conditioning factor which would account for shift in some cases but not in others.

6.4.4: stabilised items.

Some stabilised items shift the high pitch:

{íboosi 36 [absent in BC] 'then' (cc. íboosi 43,46)
(e)ísya vó 40 [B ísyè vó] 'that is'
ýi-mákaló 42 'they are [things] which are'.

But others do not:

íkyá' kyesya vó 47 [B ákyákét kyesya vó, C ákyákét ...] 'it is
inkúundi 50 'it is a friend'
intáantu 50 'it is an enemy'
tímadá 53 'it is these [things]'.

Note also íse- (?) in 11.43-4, though the patterns for this differ.
6.4.5: initial vowel.

The initial vowel shifts high pitch in some cases:

ephastī 56,57 'difficulty' (cf. kyephastī 50, cc. ephastī 52)
ēlumbu 57 'day'
ēphīla 57 'the manner'
ēzaya 35 [C əzəya] 'to know'
[ēkhuumbu 45C] [A khūmbu, absent in B] 'names'.

But in other cases there is no high pitch:

eludi 43 'truth'
eluvunu 43 'lies'
emaantu 46 'people'
eyaatu 47 ditto (cc. eyaatu 39C)
ephastī 52 'difficulty' (cc. ēphastī 56,57)
emaamba 55 'things'
esikila 53 [BC sīkila] 'become right'
ekuma 49,51 [B ekūma] 'the reason'.

We might also note here

dimostī 38 [BC dimostī] 'one'.

6.4.6: high pitch on the last syllable.

A few words have high pitch on the last syllable, usually as part of a bridge:

kina 47 'which'
mānā 41,41 (A here actually has mānā),42 'which'
[konsō 33B,34B] [A koso, C kōnsō] 'every'
muuntu muuntu 40,49 [40B muuntu muuntu] 'everyone'.

6.4.7: -ko.

The negative affix -ko seems to cause spreading only on verbs:

kazeyē-ko 49 'he doesn't know'
kazete-ko 52 'we don't know'
kufufu-ko 54 'despite'.

Note also waatū-ko 51 [B wəatū-ko] '(not) people!.

There are three examples with no spreading:
Only anomalous patterns are noted here; other examples in this text have high pitch on the root-syllable. Note particularly the high degree of variation from one version to another in verbal patterns.

6.4.9: tone-classes.

As with previous texts, it seems difficult to account for categories where there is shift in some cases and not in others (eg. 6.4.3). There seem to be no conditioning factors in the surrounding environment. Should we then postulate tone-classes? There is one argument for this view, namely, that the patterns of some groups (eg. 6.4.2) mostly coincide with those assigned to them in Carter 1980b. However, there are several arguments against tone-classes:

(a) some prefixes do not shift the high pitch as Carter predicts, eg.

muna-lumbu 39, Carter predicts muna-lumbu (see also 6.7);
(b) one word may have two different patterns, eg. dyamfunu/dyamfunu 33;
(c) the above variation is due more to simple difference in the placement of high pitch than to a series of different tone-patterns for the word;
(d) the postulation of even minimally-differentiated tone-classes has not proved useful for other texts.
There is therefore a dilemma: a few pieces of evidence for tone-classes, but nothing definite. Perhaps the best approach is merely to note the possibility of lexical conditioning of contours in some cases\(^3\), but to continue with the description in terms of morphological and semantic conditioning, as has been found most useful for the majority of the contours in all the texts. It has already been noted (6.4) that the patterns in this text are somewhat different from those of other texts, and we might add the possibility of residual tone-classes as one of those differences. I will return to this question in 6.7.4.

6.4.10: words without high pitch.

(i) adjunct: 'boost' 43,46 'so'

kana vo 52 'whether'

kikilu 50 [C kikilu] 'real' (cc. kikilu 33)

wau 49 'now'

evo 56 [B yivo, C yivo] 'or'

koso thangu 33 [C konsa thangu, B konsa thangu] 'every i:'

mambu ne 53 [BC mambu ne] 'things like'

(ii) object: khy' 35,36,36,53 'what'

phasit 39 'difficulty'

ephasit 52 ditto (cc. ephasit 56,57)

ngindu 34 [B ngindu] 'ideas'

ndaanu 38 [B ndanu] 'wise'

dyoodyo 54 'this'

yaayi 40 ditto

[kyau 54B] [AC kyau] 'it'

ey-thangu 55 'with a time'

[mbundanu 40C] [A mbundanu, B mbundan] 'joining'

(iii) verbs: kamena 37 [BC kamena] 'which are not' (cc. kaena 47)

tutaditi 39 'we have looked'

[lenda 35BC] [A lenda] 'you can'

malenda 53 [C malenda] 'they can'

afwete 45 [BC afwete] 'they are (as a rule)'

makwenda 55 [C makwenda] 'they will become'

vova-ko 35 [BC vova-ko] '(not) say'
(e) sǐkĩlẽ 53 'be put right' (cc. sǐkĩlẽ 55)
[sǐkĩlẽ 55BC] [A sǐkĩlẽ] 'righted'
kuphaangæng(a) 56 [B kuphaangæng(a)] 'causing me'
kuphaang(a) 57 'cause me'

Note also the relative pronoun dĩna 35,36 [absent in BC] 'which'

(iv) subject: aatu 40 'people'
saatu 47 ditto
swaantu 46 ditto
eludũ 43 'truth'
eluvunu 44 'lies'
smaambu 55 'things'
smaambu 37 [absent in B] ditto
[smaambu 53BC] [A maambu] ditto
dyəambu 55 [C dyəambu] 'matter'
Ekuma 49[B ekuma], 51 'the reason'
muuntu muuntu 40[B muuntu muuntu], 49 'everyone'.

It is noticeable that, as in 6.4.8, these anomalous patterns show a
great deal of variation between versions. It is interesting that
some words appear more than once, eg. waantu 'people' and maambu
'things'. We might compare these to English 'weak' forms, eg. 'people
say that but they don't really mean it' as opposed to the 'strong'
form 'people are important'.

In general, words without high pitch seem to occur in 'de-emphasised'
or de-stressed position: for example, tutadi 39 occurs as a
parenthesis, 'if we care to look'; ndaandu 38 'wise' is a kiNdibu
synonym for mfũnu, so it loses its high pitch in favour of mfũnu - it
is interesting to note that in the B version, ndaandu is said after
mfũnu, and here it is presumably meant to reinforce mfũnu, so it is
given the emphatic pattern ndaandũ. It is likely that other instances
of no high pitch (though perhaps not all) could be accounted for in
this way, by postulating a manipulation of the contours by the speaker
to focus attention on certain parts of his utterance (see also chapter
12). This would be particularly likely to occur in this text, since
the speaker was emotionally involved with his subject.
6.4.11: bridges between words.

(i) noun + following item:

muna-lumbu kyalumbu 39 [C muna-lumbu • kyalumbu, absent in B] 'all the time'

[mæambu mändza 39-40B] [A mæambu • mändza, C mæambu mändza] 'the events of the world'

thaangu kyéthaangu 44 [absent in C] 'the whole time'

kwaph'il awonga 46 'by a great fear'

evuvonza kyánene 46-47 [C evuvonza kyánene] 'the greatest danger'

mbündanu avúvu 48 [B mbündanu avúvu, C mbündanu avúvu] 'a joining of hope'

ye-mbündazyaanu avúvu-ko 48 [unbridged variants in B and C] 'nor a joining together of hope'

teezo kyáphast 50 [B teezo A kyáphast] '(it is) a difficult situation'

muna-kúma kyedýaayt 52 [BC muna-kúma kyedýaayt] 'on account of this'

inkündi Ŏnt 50 'it is his friend'

intántu Ŏnt 50 'it is his enemy'

muna-ýyayt álumbu 57 'in this day and age'

dyámbu dímost 38 [BC dyámbu dímost] 'one thing'

dyamfunu këklú 33 [C dyamfunu këklú] '(it is) of great importance'

muna-dyáadít nàanga 33 [B muna-dyáadít • nàanga, C muna-dyáadít • nàanga] 'on account of this, perhaps'

koso thaangu vóvaanga 33-34 [B konsò thaangu vóvaanga, C konsò thaangu vóvaanga] 'every time you speak'

[konsò thaangu ssóongaanga 34B] [A konsò thaangu • ssóongaanga, C konsò thaangu ssóongaanga] 'every time you explain'

ayling' atwamon(a) 51-52 [BC ayling • atwamon(a)] 'many are experiencing'

[dyamambu dyánkaka ditóma 55-56C] [AB dyamambu dyánkaka ditóma] 'another thing which really ...'

note also katu dyáka 48-49 'no longer at all'

(ii) verb + following item:

afwete vësa khúmbu 45 [B afwete vësa, C bafwete vësa, ékhuunbu] 'they are given names'

lënda vóva 35 [BC lënda vóva] 'you can say'
kaenâ dyâka 47-48 [C kaenâ dyâka] 'they no longer have'  
[kamena kwânt 37BC] [A kamena kwânt] 'which are not entirely'  
note also zina zinaânaa 37 [C zina zinaânaa, absent in B] 'which are'  
kine' kisundidi 47 'surpassing'  
mana kenâanga 41 'what he has'  
mana kauângaanga 42 'what he is doing'  
mana kayti'ndulaanga 41 [BC mana kayti'ndulaanga] 'what he is thinking'  
and yina yaâtu 58 [absent in C] 'in which people'.

Here again there is a good deal of variation among the three versions, which suggests that bridging depends very much on factors such as speed of utterance, sequence of words, occurrence of pauses, and perhaps to some extent on the speaker's intentions (ie. whether he wants to emphasise the close relationship between certain items by bridging them) - see 6.4.11.2.

6.4.11.1: formation of bridges.

The variant contours of some sequences allow us to draw some important conclusions about the formation of bridges.

There are a few instances of 'broken' bridges, i.e. two consecutive bridges which can be regarded as one bridge with a pause in the middle (see 5.4.6), eg.

\[\text{maambu, mandza 39-40A 'the events of the world'.}\]

This could be marked maambu, mandza, and in fact in 39-40B a similar pattern (without pause) does occur:

\[\text{maambu mandza.}^4\]

Compare tæzzo kyâphasi 50B '(it is) a difficult situation' and tæzzo kyâphasi 50C.

The A version here shows a bridge with final extra-high pitch:

\[\text{tæzzo kyâphasi.}\]

It is also possible to find examples where, although there is no pause between the two words, the first word has the bridging pattern (ie. could be taken to constitute the first half of a broken bridge),
but the second word does not continue this bridge. Thus:

mbùndanú avůvu 48B 'a joining of hope'.

This may be taken as an intermediate stage in the formation of a bridge, and in fact the full bridge occurs in

mbùndanu avůvu 48A,

where the first syllable of the second word has been raised to form a bridge proper.

The examples suggest the following steps in the expansion of a bridge:

1. / / \ / \ / \, is. bridge on first word + pause + unbridged pattern on second word \ full bridge;
2. / \ / \ / \, is. bridge on first word + unbridged pattern on second word \ full bridge (with extra-high final).

Considering now the contour on the first word, we can see that syllables following the first high pitch are consecutively raised. The complete sequence is seen in:

(unbridged) masmbu - m¾nda 39-40C
(broken bridge) masmbu m¾nda 39-40A
(full bridge) masmbu m¾nda 39-40B.

Note also (unbridged) evu Dönza kyangene 46-47C 'the greatest danger'
(full bridge) evu Dönza kyangene 46-47AB

and (unbridged) muna-kúma kyedýayɛi 52C 'on account of this'
(full bridge) muna-kúma kyedýayɛi 52A.

6.4.11.2: conclusions.

These examples seem to suggest that in bridging the voice remains high after the first high pitch, in readiness for the second part of the bridge. In fairly slow speech, however, there may be a pause between the two parts, or syllables of the second part before the next high pitch may not be assimilated, ie. the second part has the unbridged pattern. In fast speech, or where there are no pauses, a full bridge is formed – the high pitch is run on from the end of the first part to the beginning of the second. The stages can be shown
We might now ask why bridging occurs. It would seem that certain syntactic sequences (such as noun-qualifier or verb-object) are more likely to occur with bridging. They have a close grammatical relationship, and the speaker may choose to signal this relationship, and/or its importance, by putting the two items in bridge. In fast speech bridging may even be obligatory. There may be an element of conscious focus by deciding to bridge two items (see also 7.6.3 and 12.4), and the rising bridge appears to be a marked form of bridging. This syntactico-semantic phenomenon of bridging seems to have parallels in at least three other Bantu languages, as I will show in 13.3.

6.5: variation in the three versions.

Investigation of inter-version differences is also interesting. As noted above (6.4), in the spontaneous A version there is a large proportion of words with no high pitch. The number is somewhat less in the slower versions B and C, which tend to have high pitch on the root-syllable of many words which in A have no high pitch (cf. 6.4.10). This may be ascribed to a tendency for slower speech to retain a greater number of basic patterns (cf. 6.4.11.2).

Areas of anomalous patterning, especially words or sequences which in A have no high pitch or are in bridge, are especially prone to variation over the three versions (cf. 6.4,8,10,11). Bridges are very slightly more common in A, and are usually slightly longer than those in B or C. Phrases in A are also generally longer than those in B or C, though of course this is to some degree accounted for by the nature of the secondary versions. For example, the sequence dyambu dimosil ditwatem uwaang(a) aatu phasi muna-lumbu kyalumbu 38-39 'one thing which constantly causes people great trouble all the time' is one phrase in A, two phrases in B (where the last two words are also absent), and four phrases in C.

We may quantify the actual divergences of B and C from A as follows:

\[
\begin{align*}
\text{A} & \rightarrow \text{B} & \rightarrow \text{C} \\
\end{align*}
\]
It thus seems that there is a 20% level of variance from A. Expressed individually, B differs from A by 13%, and C from A by the slightly higher 15%, i.e. there is a high degree of similarity between the three versions.

6.5.1: variance in versions of the same text, from the same speaker.

Version A was the primary version, and B and C were secondary versions based on it. If we were counting merely the number of different contours in all three versions, we would add the variance percentages for B (13%) and C (15%) to give 28%. But since we are counting the amount of variance from the A version in other versions, places where B and C both have different contours are counted as one, giving the figure of 20%.

If A is taken as zero, then the amount of variation when A is compared to one other version (A+1) is 15% (taking the figure for C, the version showing greatest divergence), and when A is compared to two other versions (A+2) the figure is 20%. If we can assume that this text is representative, it would seem that there is an exponential decrease in variance, so that eventually we would expect the amount of variation not to exceed a certain figure, no matter how many versions were compared. This assumption seems reasonable, since, as pointed out several times above (e.g. 6.4,8,10), the variation generally occurs in certain areas, i.e. it is non-random. We would at any rate expect a finite amount of variation, since no language has yet been discovered which shows infinite variability. An ultimate figure of around 25% variation seems appropriate.

It appears, then, that we might predict a sequence such as
6.5.2: Variance in versions of the same text, from different speakers.

This hypothesis becomes more attractive when we remember the level of correlation with patterns derived from other systematisations. In 4.7 I compared a text from the Rev. D. Ntoni-Nzinga and the same text marked as predicted by Carter's systematisation. The two showed a correlation of about 70%, i.e. a variability level of about 30%. The same exercise has been carried out for this text (see 6.7), again showing 70% correlation. In later chapters it will be shown that there is a similar level of comparability with other systematisations (chapters 7 and 9), and between two versions of the same text from two different speakers (chapter 8).

6.5.3: Variation and focus.

It therefore seems likely that there are certain possibilities of variation in the kiKongo system: the expected patterns may be varied by the speaker to give anomalous patterns which possibly convey differences of focus or emphasis (see also chapter 12). It is interesting that in one comparability study (see 9.6) it was found that the system I am postulating here, and that proposed by another researcher, both had difficulty in accounting for the same phrases where the speaker had used anomalous contours; this suggests that at a certain level systems based on linguistic features excluding focus and emphasis break down, and we must postulate some system including these.

Although not all variation in contours can be ascribed to focus or emphasis (some variation may be due to misreading, or to a slightly different choice of words or phrasing), nevertheless it seems reasonable to attribute the bulk of the variation to focus. As a working hypothesis, then, we may use the figures in the previous sections as a rough index to the amount of focus, while bearing in mind that the actual amount may be slightly less than that given.
6.5.4: conclusions.

To sum up, therefore, we might say that there is a very high degree of similarity between versions A, B and C, which suggests that the basic system is similar in all three. On the other hand, there is also a fairly high level of variation, which suggests that the basic system is being conditioned in some way. This variation tends to occur in the same phrases, suggesting that such variation is the exponent of emphasis or focus. The fact that the figures for the degree of variation are comparable to those obtained for a text from two different sources suggests that the possibility of variation may be an integral part of the system itself.

I would suggest that variation between two versions of the same text by the same speaker would typically be about 15%, and that this would increase the more versions were compared until we found a general level of about 25% variation. If we were to compare two versions of the same text by different speakers we would find a further increase to about 30% variation. It is uncertain what would be found if several versions of the same text by different speakers were compared. However, if we assume that there are structural limits as to how much variability is possible, and that certain structures are more likely to permit variation (as seems probable), the level should not be too high: we might estimate 40%. Thus:

<table>
<thead>
<tr>
<th></th>
<th>same speaker</th>
<th>different speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>two versions</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>more than two versions</td>
<td>25%</td>
<td>40% (?)</td>
</tr>
</tbody>
</table>

6.6: comments on variant contours.

(i) discussing 52-53, the Rev. D. Ntoni-Nzinga gave the pair katuzeyé-kâ, kana vó ekhy'éthaangu ... 'we do not know whether some time ...' and katuzeyé-kâ, kana vó ekhy'éthaangu ... ; katuzeyé-ko was said to be the neutral form, suggesting that what follows is not very important, but katuzeyé-kâ is much more emphatic, implying that something very important, eg. an opinion dearly held by the speaker, is about to follow.

(ii) in 58, B has a neutral éphîla yîna yâstu, but A has a more
emphatic emphila ya'ma yaatu ('the way in which people ...'), with the high key emphasising yaatu. The speaker feels strongly about the subject, and this is also signalled by the three pauses in this part of the sentence, which help to emphasise each phrase.

(iii) discussing 75, the Rev. D. Ntoni-Nzinga drew attention to two possible patterns for a noun in final position. When the same syntactic pattern is repeated, as here, it tends to have its high pitch suppressed, with no pausal upturn: aatu eluvuvamu, aatu eluvuvamu, ye-zolë ... 'people often talk about peace, people often talk about love'. However, as a paratactic addition, the noun has high pitch and upturn: aatu eluvuvamu, ye-zolë ... 'people often talk about peace, and love'. The first form was compared to one before a comma, and the second to one before a semi-colon.

(iv) in 95-96, kaleendele vuluza ye-maambu maandi-ko 'he cannot be saved with all his problems' would be a neutral form with no emphasis, but the actual kaleendele vuluza ye-maambu maandi-ko emphasises maambu, implying that the Church has a responsibility to save not only a person's soul, but his whole being, problems and all.

(v) discussing 55, emaambu was said to be a neutral form, but a form such as maambu would be emphatic.

(vi) discussing 32, the Rev. D. Ntoni-Nzinga gave the pair muna-kati kwändi 'inside him' (cf. the actual muna-kati kwändi) and muna-kati kwändi; the first is neutral, but the latter would be used when the speaker was angry, or wanted to emphasise that he was talking about one thing in particular.

(vii) in 2, tuindst idi 'you were thinking' is a statement, but the question form would be tuindstidi?

(viii) discussing 7, the Rev. D. Ntoni-Nzinga said that inngindu zaame would be a non-final form, while inngindu zaame is a final form. Inngindu zaame implies a feeling of sadness, while inngindu zaame is impossible, or at any rate would be used only by missionaries. (It seems, though, that inngindu zaame is possible in Makoondekwa's idiolect, as a possessive complex - J.H. Carter, p.c.). Discussing
ngindu zaaku 34, the Rev. D. Ntoni-Nzinga said that extra-high pitch on zaaku and fast rate of delivery would imply that an opposite idea was to follow, as in ngindu zaaku zaambil(e), keeet ... 'your ideas are good, but ...'.

(ix) in 90, the low key of muné-phsa yaphiшла yeyi 'in a situation of this kind' was attributed in part to its occurrence at the end of a sentence, but it is also the result of a conscious attempt to give the impression of an open question - the speaker is pondering. This is not an ordinary question (cf. (vii) above), but, in the speaker's own words, a 'thinking' question, so the speaker must 'go low', ie. use a low key. Moreover, the low key will emphasise what is being said, because everyone will listen attentively to hear better what the speaker is saying.

6.7: comparison of passages.

The patterns on a portion of the text (ll. 33-50) will now be compared to those predicted by Carter's systematisation.

6.7.1: same contours.

Of 123 words in the passage, 66 have identical contours, sometimes over fairly long stretches: muuntu muuntu una ye-wonge, skuma kádi kazeyé-ko ... 49 'everyone is afraid, because he doesn't know ...' is a case in point, as is afwe te vëwa khómbu zazéngi 45 'they are given many names'. There is sometimes slight variation due to vowel length:

Cr (Carter) zaaku N (Ntoni-Nzinga) zaaku 34 'your'

dyáka
dyáka 48 '(no) longer'

avúvu-ko
avúvu-ko 48 '(not) of hope'

kwamuuntu
kwamuuntu 35 'to someone'

and so on.

6.7.2: similar contours.

Other words have similar, though not identical, contours, which are relatable in many cases:

(i) N has high pitch on the root-syllable, while Cr has it elsewhere:

Cr satú / N aštu 39 'people'

masambu / masambu 39 'things'
Cr dyamfunu / N dyamfunu '[it is] of importance'
muna-dyaădi / muna-dyaădi '[therefore]
muna-lumbu / muna-lumbu '[in the days'
muna-măma / muna-măma '[because of these [things]
'ckya' / 'ckya' 'it is this'
'inkkundo / 'inkkundo 'it is a friend'
'inttaantu / inttaantu /[it is an enemy'
-lussengomunaanga / -lusengomunaanga 'what is becoming common'
bakotelo / bakotelo 46 'they are entered'

note also ye-mbundayyaanu / ye-mbundayyaanu 'with a joining together'

(ii) there are two cases where the N patterns can be derived from the
Cr patterns by processes of assimilation (peak pitch ▼ — high
pitch in bridge ▼) and elision:

Cr nkhл adyaămbu —> nkhл adyaămbu —> (n)khy' adyaămbu —>  
N khy' adyaămbu 35,36 'what thing'
Cr nkhл ñthaangu —> nkhл ñthaangu —> (n)khy' ñthaangu —>  
N khy' ñthaangu 36 'what time'

(iii) Cr has no marked high pitch, N has:

Cr (kons) ñthaangu / N (koso) (ñthaangu) [(kons) (ñthaangu)]  
33,34 'every time'
waleenda / waleenda '[you should be able'
vo / vo '[that'
(isya) vo / (isya) vo '[that is'
dyaămbu / dyămbu 38 'thing'
euwoonza / euwoonza 46 'danger'
kisuundidi / kisuundidi 47 'surpassing'
zina / zina 37 'which'
mana / mana, mana 41,41,42 'which'

(iv) N has no marked high pitch, Cr has:

Cr kons (ñthaangu) / N koso (ñthaangu) [(kons) (ñthaangu)]  
33,34 'every time'
ngiindu / ngiindu '[ideas'
ndaanu / ndaanu '[wise'
phasi / phasi 39 'difficulty'
yasya / yaasya 40 'this'
kyesya / kyesya '[of saying'
wau / wau 49 'now'
Cr kîkîlû / N kîkîlû [kîkîlû] 50 'really'
vo / evô 39 'if'
kamena / kamena [kamena] 37 'which are not'
note also vvôva-ko / vova-ko [vvôva-ko] 36 '(not) to speak'
(v) N shows no high pitch on -ko, while Cr does:
Cr mffûnu-ko / mffûnu-ko 38 '(not) useful'
vôva-ko / vova-ko [vvôva-ko] 36 '(not) to speak'
kazeeye-ko [kazègeyê-ko (?)] / kazège-ko 50 'he does not know'.

6.7.3: different contours.
The rest of the words in the passage show more divergent contours in
the two versions:
(i) Cr has two high pitches on the word, N only one:
Cr vvôvaanga / N vvôvaanga 34 'you are speaking'
soongaanga / ssoongaanga 34 'you are explaining'
kav/uaangaanga / kavaangaanga 42 'that he is doing'
yê-mbundâzyânû / ye-mbundâzyânû 48 'with a joining together'
but note the opposite in
Cr yi-mâkala / N yi-mâkala 42 'they are things which are'
(ii) other different contours:
Cr zmâya / N zmâya [zmâya] 35 'know'
kûlêndi / kûlêndî [kûlêndî] 36 'you cannot'
-dimônekaanga / -dimônekaanga 43 'it is being seen'
tbooist / tbooist, tbooist 36,43,46 'so'
dimôst / dimôst 38 'one'
kyallumbû / kyllumbû [kyllumbû] 39 'of days'
and note also the differing contours on ise- in 43-44.

6.7.4: conclusions.
If we take words with the same or similar contours in Cr and N, those
due to elision (6.7.2.ii), and those which have variants in N similar to
the Cr contours, there is a 70% (88/123) correlation of the two versions.
This figure matches well with other data (cf. 6.5.2). It is interesting
that Cr seems closer to B or C than to A. This is natural, since
Carter's systematisation is based on slow speech, and may be less
applicable to faster, spontaneous speech. To deal with the latter, we
may need additions to Carter's systematisation.
Though recognising tone-classes (see 6.4.9) would help to account for contours in certain cases, it would be counter-productive to introduce them as a basic part of the description. In this text they would create more problems than they solve, and they seem unnecessary when dealing with other texts. Carter's 1973 systematisation, based on tone-classes, does not achieve a full fit with the contours and finds it difficult to account for cases where the same sequence has two different contours. On the other hand, Carter's systematisation does predict many of the basic contours, and chapter 14 will show that there is good evidence for postulating underlying tone-classes, though these may be merged in actual speech. On balance, however, the concept of tone-classes seems of little practical use in the prediction of contours in running text. The description proposed in this thesis will therefore not assign an important role to tone-classes, preferring to approach the texts from the point of view of establishing the possible range of contour choice for a given sequence.

6.8: summary.

This text shows considerable differences from those previously discussed, which might be attributed to its spontaneous nature (6.4). Comparison with other versions of the same text provides information on variant contours: these are especially common where the A version has what I have called an anomalous contour, suggesting that spontaneous speech departs further from the 'basic' patterns than slow speech (6.4.8, 10, 11). Comparison of the versions also throws some light on bridging (6.4.11) and on general level of variability (6.5). The conclusions about the latter agree to a large extent with data from other texts (6.5.2), and with comparison with Carter's systematisation (6.7). This final comparison indicates certain basic differences between Carter's description and the one suggested here (6.7.4).
Endnotes to chapter six.

1. This should not be confused with Carter's kizombo - see 4.2.

2. The passage in chapter 4 was a rather short one on which to base final conclusions, hence the repetition here. Moreover, although the two dialects in question (KiMbanza akongo and kizombo) are both southern, Carter's systematisation may apply slightly differently to each of them, and this requires testing.

3. The question of whether traces of tone-classes exist will be taken up in chapter 14.

4. The reason for the occurrence of the extra-high pitch is unclear: it may just be that in some cases, perhaps articulated more slowly, the ear perceives the lack of downdrift between the two marked syllables as extra-high pitch on the second, i.e. a phrase may usually show downdrift, /\----/, but in a bridge /\----/ (as here) the lack of downdrift may be perceived as /\----/- cf. 3.5.3.2. The bridge with extra-high final will be considered as a variant of the ordinary bridge.

5. The differing implications of the two figures (20% v. 28%) may be more readily seen in the following diagram, where a straight line stands for 'same contours', and a toothed line for 'variant contours':

\[ A \quad B \quad C \]

Here, using the first approach, we would count four variant contours, but using the second, we would count only three, since two of the variants occur in the same place relative to A. This latter approach is chosen, since, as already pointed out, a large proportion of the variance from A occurs in certain areas where the patterns in A have been classed as anomalous, i.e. the variation occurs in the same phrase in B and C. To count such variation in both versions as two instances rather than one would mean that we are not measuring variation from A in subsequent versions, but merely number of variant contours.

6. Carter's 1980 systematisation does in fact recognise that tone-classes are inadequate, and discards them for the most part, retaining them only for verbal inflections.

7. The southern dialects may be a possible exception, since there may here be slightly less neutralisation of tonal distinctions in certain contexts.
CHAPTER SEVEN

Other Systematisations - kiNtandu

7.1: introduction.

This chapter discusses the pitch features of a kiNtandu text (Nsuka 1968, pp. 70-78) as read by the Rev. D. Ntoni-Nzinga, and compares them with Nsuka's marking of the text. Since this seems to owe a good deal to Daeleman, his description of kiNtandu tonal features (Daeleman 1966) will be examined and compared to the system proposed here. Finally, I will look briefly at an interesting treatment (Byarushengo et al. 1976) of apparently comparable phenomena in Haya.

7.2: the text.

The text is an amusing story about three fools who each tried to prove themselves more foolish than the others. The Rev. D. Ntoni-Nzinga enjoyed the story and became greatly involved in it; towards the end he was frequently convulsed by laughter. This may account for the many bridges in the text (7.4.8), which I have suggested elsewhere (6.4.11.2) are associated with animated speech.

7.3: sample passage.

High pitch occurs on the root-syllable in 112 out of 196 instances (57%) in the sample passage, 11. 79-109. It would seem as if a major tendency noted for previous texts, that is, to shift the high pitch of the word one syllable leftwards when certain pre-prefixes are added, hardly applies here. On the other hand, there is a marked tendency to have high pitch on the last or penultimate syllables of the word.

7.4: patterns in the text.

7.4.1: locatives.

Most instances show retention of high pitch on the root-syllable:

- gana-lbônga 84 'on the plate'
- gana-méesa 84,103 'on the table'
- gana-mwēelo 108 'to the door'
- goméesa 98 'at the table'
But several examples show shift:

\[\begin{align*}
\text{gan'zno} & \text{ 100 'to the house'} \\
\text{kóndzo} & \text{ 101 'to the house'} \\
\text{mun'taangu} & \text{ 85 'at the time'}.
\end{align*}\]

The word mombaombo 103 'in the vicinity (?)' shows a bridge from prefix to root-syllable, while m'una-nsuunga 83 'in the herbs' shows high pitch on the first syllable, perhaps as a mark of emphasis.

Three examples have no high pitch:

\[\begin{align*}
\text{kuna-zaandu} & \text{ 79 'to the market' (cc. kuna-zaandu 44)} \\
\text{kunkeento} & \text{ 80 'to the wife' (cc. kunkeento 47)} \\
\text{momwaamba} & \text{ 82 'in the sauce' (cf. mwaamba 90, cc. mwaamba 81)}.
\end{align*}\]

7.4.2: other pre-prefixed nominals.

(i) stabilised items: ebuuna 104 'so'

\[\begin{align*}
\text{y'i-buuna} & \text{ 85 'so'}
\end{align*}\]

(ii) genitive: dinusu 104 'of the chicken'.

Note also kisalu 92 'work'.

7.4.3: pronouns.

A few pronouns have high pitch on the root-syllable:

\[\begin{align*}
y'au & \text{ 80 'it'} \\
ngè & \text{ 94 'you' (cc. nga inside a bridge in 88)} \\
ngè [mp] & \text{ 97 'you also'} \\
ka-ngè & \text{ 97 '(not) you'} \\
ngéye & \text{ 90 'you' (cc. 92,93,88)} \\
báno & \text{ 108 'they'} \\
ay'una & \text{ 101 'he' (cf. yoona 99)} \\
mónô & \text{ 95 'I'} \\
ka-mónô & \text{ 96 '(not) I'}.
\end{align*}\]

Others have high pitch on the last syllable:

\[\begin{align*}
mónô & \text{ 79,87,88,89,90,93 'I'} \\
mónô [mp] & \text{ 96 'I too'} \\
mónô & \text{ 92 'I'} \\
ngéye & \text{ 92,93 'you'.}
\end{align*}\]
There is one example without high pitch:

\[\text{beeno 106 } \text{'(to) you}'.\]

It is unclear whether high pitch on the last syllable is due to a specific tendency in this dialect to have high pitch there (see 7.3), or to such factors as focus or emphasis 'disturbing' (see chapter 12) the basic contour of high pitch on the root-syllable. In view of the patterns on other words (eg. verbs – see 7.4.4), the first view is perhaps more likely. However, such patterns as \(\text{yba}n\)\(\text{á 99}, \text{monó 95}, \text{monó 92}\) and \(\text{ngeye 88}\) may well be emphatic.

7.4.4: verbs.

Most verbs have high pitch on the root-syllable, although this is very often in bridge with another high pitch later in the word, usually on the penultimate syllable.

- \(\text{ntsùumbid'íngi 79 } \text{'I bought'}\)
- \(\text{tufwongèle 86 } \text{'we sat down'}\)
- \(\text{z\'ibíka 87, 89 } \text{'shut'}\)
- \(\text{z\'ibíkó 93 } \text{'shut'}\)
- \(\text{bay\'indelel'ènga 101 } \text{'they sat on'}\)
- \(\text{kaw\'dikíla 103 } \text{'he smelt'}\)
- \(\text{ffumban\'aha 105 } \text{'watching'}\)
- \(\text{y\'inde\'ele 107 } \text{'he thought'}\)
- \(\text{k\'enge\'ele 108 } \text{'it was silent'}\)
- \(\text{badingat\'ele 109 } \text{'they were silent'}\)

Note also \(\text{yilugaan\'aha 109 } \text{'I am giving you'}\)
\(\text{zz\'ibíka-ko 94 } \text{'(not) to close'}\).

It may be significant that four of these verbs have flanking words with anomalous patterns, and that four more (those in 86, 109 (2) and perhaps 107) are clause-final. Moreover, all are three syllables or more in length.

Several verbs show high pitch on the last or penultimate syllable:
(i) last:  
ngyeelé 79 'I went'  
ngene 80 'I gave'  
ndeembe 91 'I cooked'  
dikoitó 90 'I made'  
nntekele 91 'I fetched'  
widí 100 'he came' (an auxiliary verb)  
bauidí 105 'they were' (cc. widí 82)

(ii) penultimate:  
bbotúla 82 'bake'  
tomêné 84 'she did well' (cc. bu-katömene 82)  
zibíka 88 'shut' (cc. zibíka 87, 89)  
nsuktueele 91 'I washed'.

It is noticeable that all these verbs are of three syllables or less in length. Note that the first five are followed by an item without high pitch: the resulting sequence 'anomalous pattern + anomalous pattern' suggests that the two items are bound together to form a complex in these cases. The alternation between final and penultimate high pitch recalls that of Carter's kiMbanza kA Kongó (Carter 1973, pp. 117-8).

In some cases there is shift of the high pitch; this often happens with a preceding verbal element (cf. 5.4.2.2), and in this case a bridge may occur as well:

kúdyá 85 'to eat' (cc. kúdyá 86)  
kúmbhakha 102 'to seize him'  
múgošó 99 'to speak'  
báyándalala 99, 99 'they sat'  
bu-katóombula 83 'she then took out'  
kó-katóuka 102 'where he came from'  
bu-kàkaniktàntà 81 'she then cooked'  
sít'iyàntíka 86 'we will begin'.

Not all instances of preceding verbal elements show shift, however:

bu-nnts'úumbóódi 80 'when I had bought'  
bu-katómene-yó 82 'she then did it very well'  
bu-bamwêéne 101 'they then saw him'  
kízíbíkà-kò 88 'I won't shut it'  
kániktàntà-kà 98 'he should not move'
ka-kyazlbika-ko 95 'I won't close it'
kuzzlbika-kyó-ko 96 'you won't close it'.

There are a few instances of verbs where no high pitch is marked:

widi 82 'she had' (cc. baawíd 105)
nteel 87 'I said'
sadidi 92 'I've done work'
lutil 100 'passing'
wuyita 99 'he should speak' occurs inside a rising bridge.

The verbal patterns in general suggest that in this dialect there is a tendency to have high pitch on the later syllables of the word.

7.4.5: high pitch on the last syllable.

Apart from instances noted above, we also find:

muamba 81 'sausage' (cc. muamba 90)
kyelo 86 'door' (cc. kyelo 93, 99)
mbote 106 'good wishes' (cc. mbote 108, mbote 106)
mbote' 106 'gentleman'
mbote [mp'] 102 'the gentleman also'
mesa [mp'] 85 'the table also'
ufu [mp'] 85 'kitchen also'
anzala [mp'] 102 'hunger also'
nkento [nde] 88, 94-95 'said the wife' (cc. nkento nde 90)
gakala [nde] 69, 93, 96 'said the husband' (cc. gakala 100)
banta-e 108 'people, are they?'
kimá-ko 93 '(not) a thing'
kikíngi 92 'a great deal'
kati 105 'but' (cc. káti 97, káti 97)
yi 80 'that'
yoonso 98 'whoever'.

It will be noticed that in all but four of these words there is a following element (mpe, nde, -e, -ko) which seems to attract the high pitch rightwards, or an anomalous pattern on a following word. These considerations, plus the fact that in some cases there is an alternative example without high pitch (eg. muamba, kyeelo, mbote, káti) suggest that final high pitch is not a basic pattern, but a morphology- or
focus-conditioned variant of the basic 'high pitch on root-syllable' pattern.

7.4.6: words without high pitch.

Not counting the examples noted in 7.4.1,4, the following words occur without high pitch. Since they cannot be grouped by pre-prefix, etc., they are grouped by function. Also included here (in brackets) are words occurring inside a bridge.

(i) object: ntsusu 79, 80, 91 'chicken'
mwaamba 90 'sausage' (cf. momwaamba 82, cc. mwaamba 81)
masa 91 'water'
kyeelo 93, 99 'door' (cc. kyeelo 86)
ntsuunga 103 'herbs'
mwisi 104 'steam'
(ki'ingi) 89 'much'

(ii) adjunct: kani 97 'moreover' (cc. k'ani 97, k'ani 105)
nkatu 87, 105 (post-verbal) 'completely' (cc. nkhatu 107, (ya) 81 'then (?)')
(kaka) 83, 104 'just'

(iii) subject, complement: [ande] mbote 106 'sez he, "greetings ..."' (cc. ene mbote 108)
(mbota) 100 'gentleman'
(nge) 88 'you'
(taata) 95 'father'.

7.4.7: conclusions.

The patterns suggest that it is more common in this dialect than in others previously examined to have high pitch on the last or penultimate syllable. However, there are also suggestions (for nouns, 7.4.5, and some verbs, 7.4.4) that this final high pitch pattern is due either to morphological features or to focus on the words concerned, i.e. that it is a perturbation of the basic pattern. We might therefore conclude that there is no need, for most words, to postulate an underlying final high pattern, but that if there is going to be an anomalous pattern it is most likely in this dialect to be one with final high pitch — other anomalous patterns, such as shift, or zero high pitch, do not occur with such frequency.
There is one interesting case in this text of a sequence showing the basic pattern in one occurrence, and an anomalous pattern in another. The phrase ṅgẹ́e le kuna-zaandu 'I went to the market' occurs in 1.44, and has the expected patterns of high pitch on the root-syllable of the first item, and shift of high pitch (due to prefixation of kuna-) in the second. But later in the text (presumably once the speaker has settled in to his reading and is involved in the story), the pattern is ṅgẹ́e le kuna-zaandu 79, with zero high pitch on the second item and final high pitch on the first. This latter sequence seems to reflect the speaker's increased involvement in the story by using the anomalous patterns on both items to signal the close relationship between them, thus drawing attention to the beginning of the new story about Makengo and his wife. If this interpretation is correct, it also suggests that the domain of pitch has expanded from word to phrase – when patterns are modulated they tend to be altered over the whole phrase rather than on one particular word (cf. 5.5.viii). Compare also ṅgee ne kunkeento 46-47 'I gave it to the wife', but ṅgee ne kunkeento in 1.80.

7.4.8: bridges between words.

(i) verb + following item:

bu-katomene-yo bbotula 82 'she then baked it very nicely'  
yitomene kumbhakha 102 'it had really seized him'  
tomene yala 84 'she laid (the table) very nicely'  
dyelele gaana 85 'it went there'  
kilendi zizibka-ko 94 'I can't close it'  
toka maka ditoka 104 '(the steam) kept coming out'  
bu-ntsambidi yina ntsusu 80 'when I had bought that chicken'  
nglisidi yau 80 'I came with it'  
kusididi kima-ko 92-93 'you haven't done anything'  
wuzibika kyamwu 94 'you close it'  
sidi dyaka 84 'she placed (it) again'  
kiffwa taata Mandyanguru 95 'may I die, by my father M.'

(ii) noun + following item:

nkento yaa kagoondele 81 'the wife then killed it'  
yoonso wuyita mugoza 98-99 'whoever speaks first'
It may be that for such cases as bu-ntsuzumbi yina ntsusu 80 and 
kisisalu kikiingi nsaadi 92 we could propose intermediate sub-surface 
forms *... yina ntsusu and *... kikiingi nsaadi respectively. The 
surface forms would then be due to a contraction of the bridge such as 
has been noted by Carter (p.c.) for certain forms in kiMbanz’ aKongo. 
Such a formulation would answer several questions, such as the absence 
of high pitch on ntsusu and nsaadi, and the final high pitch on yina 
and kikiingi, as well as leaving kisisalu kikiingi nsaadi more compar-
ible with the almost identical salu kikiingi nsaadi (though see also 
7.5.v).

7.4.9: conclusions.

All in all, this passage may be characterised as showing a greater 
number of anomalous patterns than previous texts, but yet displaying 
a certain regularity in these patterns in that 'final high pitch' is 
the most common anomalous pattern, and is more likely to recur in a 
given environment. Nevertheless, the 'high pitch on the root-syllable' 
rule still provides a useful basis in terms of which to describe the 
contours.

7.5: comments on variant contours.

(i) yakala dimọno 10 'my husband' and yakala dimọno 13: the latter 
is in a slightly lower key. The former also occurred as yakala 
dimọno ntootila wungeen mbot 'it was my husband the king greeted'. 
The difference between them can therefore be represented as /\_\_\_\_\_\_\_\_/ 
for 10 and /\_\_\_\_\_\_/ for 13. This is reinforced by the Rev. D.
Ntoni-Nzinga's comment that 13 was 'an answer – we stop there; that's why we don't go up, we go down', i.e. the slightly lower key is because of occurrence at the end of an unmarked declarative sentence. However, the pattern of 10 was said to be due to the fact that it is a preposed object, and that this made it 'stand out more'. If it were in normal postposed position, we would have nootila ngene mbote yakala dimo 'the king greeted my husband', i.e. the same pattern as 13. The Rev. D. Ntoni-Nzinga noted that this was 'the same dimono as in 13. It would seem therefore as if the rising contour is a marked one, as noted previously.

(ii) bu-katoombula 47 'when she dished (it) out' and bu-katoombula 83: the former is apparently a pre-pausal form. When no pause occurred in 47 we had bu-katoombula gane-meesa, and when a pause occurred in 83, we had bu-katoombula yau. 

(iii) a pre-pausal pattern on ngeye occurs in zibika ngeye 88 'close you' when compared with zibika ngeye nkento 89-90 'close you (it) wife'. When in a repetition a pause occurred in the latter phrase after ngeye it had the same pattern (ngeye) as in the former.

(iv) nkento nde 88 'says the wife' and nkento nde 90: the latter was classed as a mistake, and the form in 88 was said to be correct. The fact that 90 is anomalous was pointed out above (7.4.5, cf. also 7.7.5).

(v) mono saku kiningi nsadidi 89 'I did a lot of work' appeared in repetitions as mono kisalu kiningi ntsadidi, kisalu kiningi ntsadidi, mono kisalu kiningi ntsadidi, kisalu kiningi ntsadidi, kisalu kiningi ntsadidi, kisalu kiningi ntsadidi, kisalu kiningi ntsadidi. This was compared with kisalu kikingi ntsadidi mono 92 'I did a great deal of work', which also appeared as kisalu kikingi ntsadidi mono, kisalu kikingi ntsadidi mono, kikingi ntsadidi, kikingi ntsadidi mono. In the repetitions of 89, nsadidi had no high pitch, whereas it had in the text, and the opposite applied to 92. Likewise, in the repetitions 89 was uttered in a slightly lower key than 92, but the opposite occurred in the text. This variation is difficult to account for. However, judging from the majority of examples, we could associate post-posed mono
with a high pitch on nsadidi, as the Rev. D. Ntoni-Nzinga suggested. He noted that if mono in 89 were right-shifted, we would have mudyāmbu kisalu k'ingi nts'adidi monu, or mudyāmbu kisalu k'ingi nts'adidi monu. The latter shows aspiration of nts, which may mark emphasis, and the extra prefix ki- in k'ingi, which certainly marks emphasis: 'a lot of work - she wants to emphasise'.

(vi) mweene ntoo tilš 38 'you see, king', mweene ntoo tilš 72 (also said as 38 in repetition), and mweene ntoo tilš 130: the Rev. D. Ntoni-Nzinga said that the pattern in 130 could not occur in the other two contexts. Whether this should be ascribed to a syntactic feature (the examples in 38 and 72 are followed by stabilised nominals) or to some such factor as emphasis is uncertain.

(vii) yaandī si-wuzibia kyeelo 121-2 'he would have to shut the door' and nge si-wuzibia kyeelo 126 'you have to shut the door': the latter was pronounced in repetition as nge si-wuzibia kyeelo. Since the former was also given the same pattern, yaandī si-wuzibia kyeelo, it may be that 121-2 shows emphasis, while 126 shows the basic pattern before bridging. This is, however, tentative.

(viii) bataša 6 'they saw' and katala 103 'he saw': the Rev. D. Ntoni-Nzinga said that the latter could also be pronounced katala. This seems to be correlated with a feature of 'continuity': 'kaudikila ntsuunga mombombi comma katala gana-meša laonga d'ntsusu .... katala gana-meša, you can say that. But you can also say kauudikila ntsuunga mombombi colon katala gana-meša laonga d'ntsusu .... Now the sentence becomes two.' That is, katala seems to imply connection or continuity with the previous clause (which the Rev. D. Ntoni-Nzinga symbolised by 'comma'), whereas katala or katala seems to imply forward rather than backward reference (which he symbolised by 'colon'). 'Katala gana-meša because you put comma, only ... [it] is not [a] full stop ... but if you put [a] colon here, you must stop, and go on, and you can separate ... the two sentences.' He also noted that 'this is the grammar, but in kikongo [it]self, it doesn't matter', i.e. these are fine distinctions which do not alter the basic meanings of the words. When asked if katala was possible, he was at first uncertain whether this was kintandu, but then said it could be used, but
not in the context of 103 above; it would be used rather in a
sentence like 'Nkaambi kakoté munú-ndzo kataló - Nkaambi to
enter [in] the house and to see, and to look', ie. Nkaambi
entered the house and looked. Kataló therefore seems to imply
subsequent action which is expected and need not therefore be
marked by high pitch - compare kavumbu'la meeso kataló 'he
raised his eyes and looked' in 118-9.

(ix) the Rev. D. Ntoni-Nzinga gave examples of mpti altering the pitch
pattern: (a) mfúíidí, mfúíidí mpti 'I [also] died'; (b) eyáau
ayóle, eyáau mpe ayóle 'the two of them [also]'; (c) eyáau
avóvele, eyáau mpe avóvele 'they [also] spoke'; (d) bau batatu
ba'fukamene, bau'batatu mpti hafukamene 'the three of them [also]
knelt down'.

(x) other comments on patterns produced conflicting information.
Insufficient examples mean that no conclusions can be drawn, and
they are simply listed here: (a) mónwa 31 'in his mouth', but
monwá 123 - in repetition the latter was also given as mónwa;
(b) bétó boole 129 'the two of us' was repeated as bétó boole -
cf. 127; (c) tusúíídí múnzala 129 'we remained hungry' was said to
be a mistake - 'this is mixed, my dialect with another thing' -
and the correct form was given as tusúíídí múnzala, comparable to
stúíídí múnzala in 36; (d) ndáa mómono ta'tá mfúíídí 124-5 'aiee, by
my father, I'm dying' was also given as ndáa mómono ta'tá mfúíídí,
where the bridge and final fall seem to denote emphasis: 'an
eclamation - he's crying'.

(xi) as on previous occasions, the Rev. D. Ntoni-Nzinga noted that it
was difficult for him sometimes to explain what differences in
pattern meant: 'You can see the difference there, but I can't
explain any other thing ... I can't explain [it to] you, because,
I can think, but I am not sure that I can explain [to] you why
they are different'. He was also aware that he might be influenced
by his own dialect: 'It is possible, my friend, it is not my
dialect, it is possible for me to ... go wrong'.

The above comments suggest that rising bridges are associated with
emphasis, but that there may be pausal patterns and 'continuous' patterns
as well as those associated with focus or marking. This would mean that
the suprasegmental system might well be more complex than previously thought.

7.6: other research.

It may be interesting to compare Nsuka's (1968) marking of the same passage discussed in 7.4 above. However, this seems to be very similar to the marking used by Daeleman 1966; in fact, 14 tales in Nsuka's total corpus were lent to him by Daeleman (Nsuka 1968, p.ii), and this text is one of them (ibid., last page). It will first be necessary, therefore, to give a brief description and discussion of Daeleman's systematisation of the pitch features of the kiNtandu dialect of kiKongo.

7.6.1: nominal patterns.

Nominal tone-patterns are described in Daeleman 1966, pp. 73-90 (English summary pp. 383-5). Nominals are classified in five tone-classes, each with a series of six tone-cases (ie. variations of the basic pattern used in particular semanto-syntactic environments - cf. 7.6.1.1). Thus, where \( \downarrow \) = high tone, and low tone is left unmarked:

<table>
<thead>
<tr>
<th>tone-class</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
</tr>
</thead>
<tbody>
<tr>
<td>tone-case I</td>
<td>kisakala</td>
<td>makyeléka</td>
<td>dilalansa</td>
<td>makaasú</td>
<td>makekese</td>
</tr>
<tr>
<td>tone-case II</td>
<td>kisakala</td>
<td>makyeléka</td>
<td>dilalansa</td>
<td>makaasú</td>
<td>makekese</td>
</tr>
<tr>
<td>tone-case III</td>
<td>kisakala</td>
<td>makyeléka</td>
<td>dilalansa</td>
<td>makaasú</td>
<td>makekese</td>
</tr>
<tr>
<td>tone-case IV</td>
<td>kisakala</td>
<td>makyeléka</td>
<td>dilalansa</td>
<td>makaasú</td>
<td>makekese</td>
</tr>
<tr>
<td>tone-case V</td>
<td>kisakala</td>
<td>makyeléka</td>
<td>dilalansa</td>
<td>makaasú</td>
<td>makekese</td>
</tr>
<tr>
<td>tone-case VI</td>
<td>kisakala</td>
<td>makyeléka</td>
<td>dilalansa</td>
<td>makaasú</td>
<td>makekese</td>
</tr>
</tbody>
</table>

meaning: 'thicket' 'truth' 'orange' 'kola nuts' 'termites'

underlying pattern: L...L H...L L....H L..H H...H

It should be noted that more recent work (J. Daeleman, p.c.) has shown that two of the tone-classes (c and d) are in complementary distribution and can therefore be conflated, and also that the tone-cases have been revised to make them simpler. Comments below, however, will refer predominantly to the published work.

7.6.1.1: tone-cases.

The six tone-cases are:
I: absolutive, occurring with a verbal in what Daeleman calls the absolutive mood;

II: predicative, ie. stable, 'it is a ...', 'the most easily obtainable as an isolated form';

III: determinative, occurring before a qualifying genitive or relative;

IV: selective, occurring on a genitive or relative after a determinative noun, and on a noun after a selective verb;

V: negative predicative, 'it is not a ...';

VI: negative selective, 'none, without any'.

It is interesting to compare these tone-cases with those of van den Eynde 1968 (see 5.6), where their reference is described in somewhat more detail.

7.6.1.2: reduction of the tone-cases.

There are a number of points about these tone-cases:

(1) III and IV are secondary formations from II: their only differentiating features are a bridge from the first high pitch to the end of the word (III), and a bridge from the beginning of the word to the first high pitch (IV), eg.

\[ \text{makaasu II, makaasu III, makaasu IV.} \]

However, eIV does show a difference from eII - the high pitch is moved one syllable rightwards, eg.

\[ \text{makekese II, makekese III, makekese IV.} \]

(2) V and VI are also secondary formations from II:

(i) in V classes (a,b) have the same patterns as II, and (c,d,e) have a bridge to the end of the word from the first high pitch, eg.

\[ \text{makyeléka II, makyeléka V, makyeléka II, makyeléka V.} \]

(ii) in VI there is a bridge from the beginning of the word to the last high pitch of case V, eg.

\[ \text{makyeléka V, makyeléka VI, makyeléka V, makyeléka VI.} \]

(3) in deriving I from II, tone-class (c) poses some problems. However, if we postulate two rules deletion (ie. 'delete the last or only high tone') and shift (ie. 'move the tone-pattern rightwards so that the last or only high tone is on the last syllable'), all the patterns
can be derived as follows:

- kisakála II → (deletion) → kisakala I
- makyeleka II → (shift) → makyeleka I
- dilalansa II → (shift) → *dilalansa → (deletion) → dilalansa I
- makaasu II → (shift) → makaasu I
- makekese II → (shift) → makekesi I.

The six cases can therefore be reduced to one basic pattern: that of case II. The simplified tone-cases referred to by Daeleman (see 7.6.1) may well be along these lines.

7.6.1.3: dichotomy among the tone-classes.

There is also a dichotomy in the five classes. In case I, (a) deletes the high tone of II, but (b,d,e) shift the high tone - the remaining class (c) is ambivalent, since it does both. In cases V and VI, (a,b) have a final low tone, and (c,d,e) have a final high tone. It therefore seems that there are two main groups of nouns as far as tone is concerned.

What does the dichotomy among the classes imply? To examine each class more individually, we may note that one of the reasons which may have prompted Daeleman's conflation of (c) and (d) is that in his lists of minimal pairs (pp.81-90) class (c) does not contrast with any other. (cf. also its ambivalence, noted above).

The number of minimal contrasts is as follows: a/e 132, a/d 60, a/b 3; e/d 45, e/b 3; d/b 2. It is notable that in seven cases out of the eight where (b) is concerned, the contrast is between stems, i.e. the word is already differentiated by some morphological marker. The total number of items concerned is as follows: a 195, b 8, d 107, e 180. Not only does this distribution imply that class (c) is not a separate entity, it also suggests that class (b) is becoming obsolete (or is newly emerging). The fact that this class shows only 8 contrasts, with all but one of these already morphologically differentiated, suggests that, even though it may still exist in the language, it will eventually be absorbed into one of the other classes. This may in fact account for its ambivalence in the dichotomies pointed out above: (a) v. (b,d,e) and (a,b) v. (c,d,e).

Secondly, we may note the preponderance of items in classes (a),
low on first syllable, and (e), high on first syllable, showing contrasts: 132 - 54% of the total number (245) of minimal contrasts. These two classes also show more contrast with each other than with any other class, suggesting that kiNtandu nouns are polarising (or have been polarised in the past) into two main groups, low initial and high initial. There is a sizeable proportion of words in class (d), but it will be remembered that this class is differentiated from class (e) in only one of the six cases: case VI, where (e) shows a rightward shift of the high pitch. Class (b) seems to be approaching (a) or (d), as I have suggested above. Class (c) may now be conflated with (d), but it is interesting to speculate on its past history - conflation with (d) means it is more difficult to establish underlying forms for the new (c/d) (cf. endnote 5), and it does show many resemblances to (b). It may well be that it was once an independent class, but is now defunct and has been absorbed by (d), much as I have suggested might happen to class (b).

The situation therefore seems to be comparable to that in Carter's 1973 systematisation of the kiMbanz' aKongo noun classes - a number of classes, each differing only minimally (and which might possibly be classified in a number of ways), with two classes at the 'extremes', and the other classes arranged in a spectrum between these two extremes (Carter's I and III, Daeleman's a and e). Moreover, these classes at the extremes seem to comprise the bulk of the vocabulary items. It is also interesting to compare here Laman's (1922, 1936) division of his vocabulary items into two main groups, rising and falling (ie. low initial and high initial), with some other groups, such as 'acute', between these extremes. For a full discussion of vocabulary correlations between Laman, Carter and Daeleman, and the implications of this, see chapter 12.

7.6.2: verbal patterns.

Daeleman has two main verb-classes (high and low), though some tenses may have no tonal distinctiveness in the verb stem (1966, p.256, 6.2, 6.3). He also distinguishes four tone-moods (pp. 256, 396):
I: absolutive, 'the common structural form';
II: determinative, referring to a preceding determinative, the
pattern being a bridge from the beginning of the verbal inflection to the last high of the absolutive pattern;

III: indirect relative, which seems (?) to have the same tone-pattern as the absolutive;

IV: selective, which 'selects something excluding all else', for which the pattern is a bridge from the first high pitch to the end of the verbal inflection.

For the various verbal tenses Daeleman gives tonal formulae (p. 329 and preceding sections) - note that some tense formatives are purely tonal, with no segmental carrier. There are two formal divisions: 'tabular' forms, ie, those exhibiting the four categories of polarity, mood, tense, and aspect; and 'non-tabular' forms like the subjunctive, imperative, infinitive, etc., which operate only the categories of polarity, mood and aspect (pp. 396-8). Each division has associated preferences for the moods they may occur in: tabular forms usually show all four moods, non-tabular forms are usually in the absolutive, less often in the selective, seldom in the determinative, and rarely in the indirect relative.

The tense formulae are related to the surface patterns by nine realisation rules, though it must be said that these are more in the nature of collections of descriptions of occurrence than rules predicting realisation (pp. 330-40). These are finally conflated into four rules (pp. 341,400), but unfortunately these do not seem to give all the correct realisations from the formulae (eg. the personal forms of tense 9 for high verbs).

7.6.3: focus and bridging.

7.6.3.1: tone-cases.

I have shown in 7.6.1.2 that cases III-VI can be derived directly from II, the predicative. It is interesting that in this case, in which we might expect a certain affirmation of the existence of the object in question, all five classes have at least one high pitch, in four instances on the root-syllable. In I, the absolutive, however, the neutral form used in most contexts, the high pitch moves towards the end of the word, and class (a) has no high pitch
at all. Again, we might expect this: pitch prominence is reserved for the verb, the core of the neutral sentence (cf. Bennett nd.). It is worth comparing here the Kimbanz' aKongo neutralisation of the first high pitch of the word when it occurs as a subject (Carter 1973), and it will be remembered that in this and previous texts there were several instances in which a subject showed no high pitch.

Case III, the determinative, emphasises the connection of the item with the following qualifier and is therefore in bridge with it. Case IV, the selective, emphasises the connection of the item with the preceding word, and again is in bridge with it. Case V, the negative predicative, might be expected to affirm the non-existence of the item, and so we have a form very similar to II, but with spreading of the high pitch in classes (c,d,e) - again, this is comparable to the spreading before -ko noted many times in this and previous texts. Case VI, the negative selective, is a more emphatic version of V, so again we have bridging, this time with the preceding verb (cf. case IV). This correlation of bridging with close connection of the items concerned (so that they form a type of complex), or with emphasis, is another feature which has been commented on in previous texts.

This correlation may be made clearer if we consider the part the verb plays in the sentence.

7.6.3.2: range of patterns.

The following chart, as for van den Eyné's systematisation (see 5.6.4), shows permitted cases and moods for items in a simple sentence with three slots: (+ = bridge between the two items)

<table>
<thead>
<tr>
<th>subject</th>
<th>predicator</th>
<th>object</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>pred</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>neg. pred</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>det + sel</td>
<td>-</td>
</tr>
<tr>
<td>abs</td>
<td>abs</td>
<td>abs</td>
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<tr>
<td>abs</td>
<td>ind. rel</td>
<td>abs</td>
</tr>
<tr>
<td>det</td>
<td>+</td>
<td>det</td>
</tr>
<tr>
<td>abs</td>
<td>sel</td>
<td>+</td>
</tr>
<tr>
<td>abs</td>
<td>sel</td>
<td>+</td>
</tr>
</tbody>
</table>
We can see that there is indeed a complementary distribution of the cases and moods. The determinative case + selective case (called the 'connective' by Daeleman) in the predicative slot needs little comment: the bridge links the two items together in a complex. But in other cases of bridging, we note that the bridge occurs on the items on which the speaker is focussing: if he is emphasising the subject, there is a bridge between subject and verb (determinative + determinative); if he is emphasising the object, there is a bridge between verb and object (selective + selective). In other words, the bridging would seem to be a direct consequence of the prominence given to a certain item, and Daeleman's characterisation of it as 'tonal concentration' (p.396) is most apt.

7.6.3.3: conclusions.

It is conceivable, therefore, that the concept of tone-cases and tone-moods is unnecessary, and could perhaps be replaced by a simple statement to the effect that the greater the prominence given to a particular item, or the greater the degree of cohesion the speaker wants to assign to two items, the more likelihood there will be of a bridge.

It may, of course, be that a bridge is more likely to occur with certain collocations than not, e.g. in the determinative + selective case complex above; moreover, it might be difficult to argue that every single instance of bridging carries added emphasis - in some cases the bridging may merely be a characteristic of fast or animated speech. But it is probably fair to say that bridges, at least originally, carry some connotation of prominence - they are, after all, anomalous patterns. If Kikongo is, as seems probable, incorporating them into the basic system of suprasegmental contours and regularly associating them with certain syntactic/semantic functions, it is in any case developing away from having a tonal system.

7.7: comparison of passages.

7.7.1: same contours.

Comparing the passage as read by the Rev. D. Ntoni-Nzinga with the marking given in Nsuka 1968, we find that of the 219 words,
about 130 (59%) have identical patterns, sometimes over fairly long stretches, eg. ... yala meesə mpi; fufu mpe dyeele gəana 84-85 'laid the table as well; there was also fufu on it'.

Included in this figure of 130 are words which have different patterns in each version due to the occurrence of bridging. These instances are as follows: (D = Nsuka's text, N = Ntoni-Nzinga)

D nkeento yə kagəndele / N nkeento yaa kagəndele 81 'the wife then killed it'
monə kizibikə-ko / monə kizibikə-ko 88 'I won't shut it'
gə kuzibika-kyʊ-ko / gə kuzzibika-kyʊ-ko 96 'if you don't close it'
bayəndele gomeesa / bayəndele gomeesa 98 'they sat at the table'
toka kakə ditokə / toka kaka ditokə 9 104 'it kept coming out'
monə kifə taata Mandyaangyu / monə kifə taata Mandyaangyu 95 'I swear by my father Mandyaangyu'
yuəba kyəaw / yuəba kyəaw 87 'it was open'
kugəi dyəaka / kugəi dyəaka 97 'you're not to speak again'
ngenə məə wuzibika kyəawu / ngenə məə wuzibika kyəawu 10 94 'you alone will close it'

7.7.2: similar contours.
(i) N has a falling pitch where D has a high level pitch:
D wə / N wə 79 'listen' (cc. wə/wə 90)
monə / monə 92 'I' (cc. monə/monə 90, monə/monə 95)
mbote / mbote 106 'good wishes' (cc. mbote/mbote 106).

In each of these three cases the word is sentence-final.

(ii) a bridge between words in one version is confined to one word in the other:
D kima-ko / N kima-ko 93 '(not) a thing'
fumbanaangə / fumbanaangə 105 'watching'.

(iii) D has pre-pausal final high pitch, N has no high pitch:
D nsusu / N ntsusu 79,80,91 'chicken'
kudya / kudya 86 'to eat'
na / na 87 'said'
nde / nde 88,89,93,95,96,107 'said'
mwaamba / mwaamba 90 'sauce' (cc. mwaamba/mwaamba 81)
masá / masa 91 'water'
kyeelo / kyeelo 93,99 'door' (cc. kyeelo/kyeelo 87)
mwisi / mwisi 104 'steam'

note also nswunga / nswunga 83 'peanut' (cc. nswunga/ntsungu 103)
bawu / bawu 106 'they' (cc. baawu/bawu 101, baawu/bawu 109).
(iv) D has pre-pausal final high pitch, N has high pitch on the root-syllable:

D yaaw / N yau 80 'it'
ntuutu / ntutu 87 'open'
piti / piti 106 'silent'
yugoga / yugoga 107 'nary a one spoke'

note also kigorti / kigori 97 'I won't speak'
gana-mesa / gana-mesa 84 'on the table' (cc. gana-mesa 103)
and mugoó / mugogo 99 'to speak' (this might be better classed under (i) above).

7.7.3: different contours.

(i) D has final high pitch, N has high pitch on the root-syllable:

D ngiisidi / N ngisidi 80 'I came'
kyeelo / kyeelo 87 'door' (cc. kyeelo/kyeelo 93,99)
katala / katala 103 'he saw'
ngaatu / ngaatu 107 'surely'.

(ii) D has high pitch on the root-syllable, N has high pitch elsewhere:

D nkeento / N nkeento 88,94 'wife' (cc. nkeento/nkeento 90)
kikíngi / kikíngi 92 'very much'
kant / kani 105 'yet' (cc. kant/kant 97)
wisi- / wisi- 100 'he came'
bawudi / bawoi 105 'they were'
ngye / ngye 88,93 'you'
tomene / tomoêe 84 'she did very well'
bukatomba / bukatomba 83 'she then dished (it) out'.

Note the reverse in
mínsuunga / mínsuunga 83 'of herbs'.

(iii) D has high pitch, N has no high pitch:

D kunazaandu / N kunazaandu 79 'to the market'
mowaaamba / momwaamba 82 'in the sauce'
D kunkeento / N kunkeento 80 'to the wife'  
widti / widi 82 'she had (put)'  
nsuunga / ntsuunga 103 'herbs' (cc. nsuunga/nsuunga 83)  
nsadidi / nsadidi 92 'I worked'  
kani / kani 97 'nor' (cc. kani/kani 105)  
nkatu / nkatu 105 'at all' (cc. nkatu/nkhatu 107)  
mbote / mbote 106 'greetings' (cc. mbote/mbote 106)  
beeno / beeno 106 '(to) you'  
muuntu / muuntu 105 'nobody'  
lutila / lutila 100 'passing'  
nteele / nntele 87 'I said'.

(iv) N has high pitch, D has no high pitch:  
D muntaangu / N muntaangu 85 'at the time'  
nti / nti 82 'a sprig'  
loonga / loonga 104 'dish'  
maloonga / maloonga 91 'dishes'  
nkeento / nkeento 90 'wife' (cc. nkeento/nkeento 88,94)  
kisididi / kisididi 86 'it remained'  
kusadidi / kusadidi 92 'you didn't do'  
wa / wa 90 'listen' (cc. wa/wa 79)  
zita / zita 83 'it emitted'  
zibika / zibika 89 'close' (cf. 87,88,93)  
yakala / yakalá 89,93 'husband' (cc. yakala/yakala 96)  
mono / mono 90 'I' (cc. mono/mono 92, mono/mono 95)  
ndikini / ndikini 90 'I cooked'  
bauwu / Bauwu 101 'they' (cc. bauwu/bauwu 106, Bauwu/bauwu 109)  
zalal / zalá 102 'hunger'  
mwaamba / mwaamba 81 'sauce' (cc. mwaamba/mwaamba 90).

(v) D has one high pitch, N has two:  
D bukankini / N bu-kankini 81 'she then cooked'  
yuna / yoona 99 'he'  
nsukule / nsukule 91 'I washed'  
tufuongo / tufuongo 86 'we sat down'  
mono / mono 95 'I'  
zibika / zibika 93 'close'  
zibika / zibika 87 'close' (cf. zibika/zibika 88).
(vi) N has one high pitch, D has two:

\[
\begin{align*}
D \text{ ko-kátuuka} / N \text{ ko-kátuuka} & 102 \ 'where he came from' \\
\text{gána-mušelo} / \text{gána-mušelo} & 108 \ 'to the door' \\
\text{yu-wuzbíká} / \text{uzbíká} & 99 \ '(it is he who) will shut' \\
\text{bu-báyindalála} / \text{báyindalála} & 99 \ 'they sat on' \\
\text{báyindalála} / \text{báyindalála} & 99 \ ditto.
\end{align*}
\]

(vii) other patterns:

\[
\begin{align*}
D \text{ zibíká} / N \text{ zibíká} & 88 \ 'close' \ (cf. \text{zlbíká/zúbíká} 87) \\
\text{kísalú} / \text{kísalú} & 92 \ 'work'.
\end{align*}
\]

7.7.4: conclusions.

It is clear that the contours of the two passages are broadly similar, in spite of certain individual differences (e.g., Nsuka's version has more final high pitches, has fewer words without high pitch, and tends to have slightly longer bridges). Counting the words in 7.7.1 and 7.7.2, there is a 73% (160/219) level of similarity between the two versions. This figure is very slightly higher than the figure of 70% given by other comparisons (4.7.4, 6.7.4, 9.6.4), and this may perhaps be due to the fact that the Rev. D. Ntoni-Nzinga lived for ten years in the kiNtandu dialect area (1.8.3), and was therefore familiar with this dialect.

7.7.5: variation in Nsuka's text.

Although some contour variation, due to the effects of different tone-classes, tone-cases or tone-moods, is allowed for in Daeleman's systematisation, there are a few cases where the same item appearing in the same general context has a different contour in each instance. This is not allowed for in the systematisation, and, if there are no misprints in Nsuka's marking, we must assume that a type of contour variation exists which has not been described by Daeleman. The examples are as follows: (giving least common pattern, when this can be determined, first)

\[
\begin{align*}
\text{ngítstíl} \text{ yaw} & 80 \ 'I came back with it', \text{ but bu-katóombula} \\
\text{gáwa} & 83 \ 'she then dished it out' \\
\text{zibíká ngíye} & 88 \ 'open (it) you', \text{ but zíbíká ngíye} \ldots 88 \\
kínto ndé & 90 \ 'sez the wife', \text{ but nkeńto ndé} 88 \\
\text{mono ndítíni} & \ldots 90 \ 'I cooked', \text{ but mono ngyeélé} \ldots 79 \\
\text{'I went'}
\end{align*}
\]
baawu bay'indelel'enge 101 'they sat on', but baawu
badilingale 109 'they remained silent'
yakala nde 96 'say the husband', but yakala nde 89
wa 90 'listen', but wa 79
gana-meesa 84 'at the table', but gana-meesa 103
nsuunga to ... 83 'the herbs emitting', but kaswidiik'ila
nsuunga ... 103 'he smelt the herbs'.

There is also the example (not in the sample passage):
si-wuzib'ika kyeelo 121-2 'he will have to shut the door',
but nzibikidi kyelo 128-9 'I had to close the door'.

7.8: Haya pitch.

Daeleman's systematisation as it stands, although it provides a
good description of the patterns in the text, is rather clumsy. However,
it does have one very important feature built into it which Carter's
systematisation lacks - that is, the concept that patterns may be
conditioned by prominence or focus as well as by purely syntactic or
lexical factors (the selective case and mood are an especial example
of this). His systematisation may therefore be characterised as one
having a tonal basis, in which pitch patterns are originally conditioned
by lexical/morphological considerations (eg. tone-class of verb, tones
on verbal elements co-occurring with it), but which leaves room for
accentual variation (eg. tone-mood of verb, tone-case of noun).

A similar attempt to include non-tonal features within the frame­
work of a tonal analysis is that by Byarushengo et al. 1976. This
analysis seems to be midway between Carter and Daeleman: the authors
conclude that 'tonologists may have to spend a lot more time and
effort examining ... syntax', but the phenomenon of assertion seems
to have many similarities with that which Daeleman tries to describe
in terms of tone-cases and tone-moods.

7.8.1: patterns and preliminary rules.

Haya, the authors say, has two tones: high (h, marked \( \uparrow \)) and low
(l, unmarked). A consideration of possible tone-sequences in the Haya
noun in isolation reveals that:
(i) h never occurs on a final syllable, occurs initially only in
disyllabic nouns, and on the third syllable from the end in only a few words (often loans);

(ii) falling pitch occurs only penultimately;

(iii) there is only one mark of prominence (i.e. h or f) per word.

However, in context the pattern of the word can vary considerably:

- omúti (lhl) 'tree'
- okubón' omúti (hhl) 'to see a tree'
- omútí gwange (llh) 'my tree'
- okubón' omútí gwange (hll) 'to see my tree'
- omúti gwa Káto (lll) 'Kato's tree'
- okubón' omúti gwa Káto (hll) 'to see Kato's tree'
- abón' omútí Káto (hhh) 'he sees the tree, Kato'.

The lll and hll patterns are not dealt with in the article.

The authors go on to establish preliminary rules:

(a) hl# → fl# (where # denotes pause);

(b) lh# → hl# (in footnote 6 it is said that non pre-pausal hl (and also fl) may surface as ll, depending on the underlying tone of the following syllable);

(c) hh → lh (instances of hh# → hl# can be accounted for by a sequence hh → lh → hl#);

(d) the pre-prefix has high tone except after pause (this exception does not apply to disyllabic nouns).

7.8.2: phrase-boundary and revised rules.

Haya does not seem to have the phrase-penultimate accent the authors consider typical of many Bantu languages, yet the widespread fl and hl finals give penultimate prominence. The alternations hl → fl and lh → hl are 'unnatural from a tonetic point of view [i.e. tonal assimilation is unlikely to give these patterns], but natural from an accentual one'. Since examples occur of words having a 'pausal' pattern even when there is no following pause, the authors postulate a phrase-boundary (denoted by %) which assigns or conditions a penultimate accent, the one they claim is reconstructable for Proto-Bantu. This phrase-boundary may or may not coincide with pause. The earlier rules (a-c) are revised to give (1) hl% → fl%; (2) lh% → hh%; (3) h# → l#;
The authors then go on to propose rules for the insertion of this accent-conditioning phrase-boundary.

7.8.3: focus on object, verb and adjunct.

The authors note that tonal alternations in sentences with a right-dislocated noun recapitulating old information can be accounted for by postulating a phrase-boundary preceding this noun, e.g.

\[
\text{abakazi babon' omwaana 'the women see the child'} \\
\text{but babon' omwaana 'they see the child, the women'}. 12
\]

Compare the pattern on omwaana in

\[
\text{ah' omuana' obugolo 'he gives the child snuff'},
\]

where there is no following boundary. Sentences with right-dislocation they characterise as having an element of assertion, contrast, surprise or contradiction on the item preceding the right-dislocated noun, and a certain 'de-focussing' of the right-shifted noun itself. We could, in fact, describe the above sentences as showing focus on the object, and represent them, after the authors, as SVO → VOs, S.

When focus occurs on the verb, there are two markers: tonal alternation, and an object substitute (os) agreeing with the object, e.g.

\[
\text{bamubon' abakazi omwaana 'they see him, the women, the child'} \\
\text{bamubon' omwaana' abakazi 'they see him, the child, the women'} \\
\text{abubona Kakulu' obugolo 'he sees it, Kakulu, the snuff'} \\
\text{abubona' obugolo Kakulu 'he sees it, the snuff, Kakulu'}.
\]

We can represent these as SVO → VOs, S, 0 / Vos, 0, S. Verbal focus can also occur where there is no subject noun, e.g.

\[
\text{bamubon' omwaana 'they see him, the child'} \\
\text{(cf. babon' omwaana 'they see the/a child')} \\
\text{bamujuné nyina 'they help her, his mother'} \\
\text{(cf. bajuné nyina 'they help his mother')}.
\]

These can be represented as VO → Vos, 0. 13

Focus may also occur with two post-verbal items, e.g.

\[
\text{nibajuné Kakulu mbwaánu 'they are helping Kakulu today'}
\]
These can be represented as VOA → V₀,A / V₀s, O, A / V₀s, A, O.

7.8.4: process.

The authors note that left-dislocation is not characterised by a phrase-boundary and the resulting tonal alternations. They propose boundary insertion, therefore, (i) after the assertion of an utterance, and (ii) after each recapitulation. In sum, then, we might suggest that the process is as follows: the speaker's decision to assert or focus on a particular item in the sentence means that a phrase-boundary will be inserted in the appropriate place, and this boundary then conditions certain tonal alternations.  

7.8.5: conclusions.

This study is therefore interesting for showing that 'syntactic variations not only affect the tones of Haya, but that the tones may in turn reveal the nature of these variations.' Tone is linked to the syntax, as in Carter's analysis of kiKongo, yet these tomo-syntactic alternations reflect focus or 'assertion' in the mind of the speaker, as occurs in Daeleman's analysis discussed above. There would therefore seem to be several similarities between the suprasegmental systems of Haya and kiKongo.

7.9: summary.

Patterns in this text are similar to those of texts previously discussed, but there are many more instances of high pitch on the final or penultimate syllable (7.4.9). However, it seems adequate in most cases to treat these instances a perturbations of the basic pattern, particularly since the same word or phrase can sometimes show two patterns (7.4.7,5). A consideration of Daeleman's systematisation (7.6) shows that although his analysis is based on lexical tone, it leaves a good deal of room for conditioning of the pitch-patterns by focus or emphasis (7.6.3.3). A similar situation of tonal base and subsequent conditioning by 'assertion' seems to exist in Haya (7.8). A comparison of Ntoni-Nzinga's and Daeleman's patterns in a portion of the text shows a large degree of correlation between them (7.7.4).
Endnotes to chapter seven.

1. As usual, the arrow $\uparrow$ marks anomalous patterns on neighbouring words.

2. I postulate a base form *mu-goga, with shift (mʊgʊgʊ) and final fall to mark emphasis - note that the item occurs in a rising bridge, which seems to be associated with emphasis.

3. It is interesting to compare this situation with that in kizombo, where zero high pitch seems to be the single most common anomalous pattern (6.4).

4. It is sometimes difficult to hear the final fall on the last item in the sentence, and it may even be deleted in some cases: cf. mbote 20, but mbote 10.

5. In the revised version, we require three rules: shift as above, deletion, revised to read 'delete the only high tone', and lowering (ie. 'lower the second of two high tones'). For the conflated (c/d) we must specify a basic pattern (h)h on the penultimate syllable, ie. a high tone on the first mora of the penultimate, with another high tone preceding this if there is another stem syllable to bear it, thus ma-kasu, di-l'ale. I is then derived from II by deletion for (a), shift for (b,e), and shift followed by lowering for (c/d).

6. This does not imply complete absence of differences between Daeleman's (a) and (b), or between his (c),(d) and (e) - nevertheless, these differences do seem to be subsidiary to the main bipartite grouping. We might symbolise the situation in diagrams as follows:

```
          a b c d e
 Daeleman's system

          a b c d e
 system proposed here
```

Here, although we end up with five classes in each diagram, the picture of their relationship to each other is markedly different.

7. This tendency, which occurs also with the nominal underlying forms, is probably due to the fact that Daeleman's thesis was a fairly early attempt at morphotonemic analysis.

8. This chart may not of course be entirely correct, because there is no detailed statement in the thesis on co-occurrence of tone-
cases and tone-moods, but it is broadly correct, and it greatly clarifies what was said above.

9. Compare D *t*ā kākā zīta / N *t*ā kākā zīta 83 'it kept emitting'.

10. There are in addition instances of bridging in one version but not in the other where most of the word-contour differences cannot be attributed solely to the occurrence of bridging, and the individual words have therefore been listed separately in subsequent sections. These instances are as follows:

- D bu-ntsūmbidī yīnə nsusu / N bu-ntsūmbidī yīnə ntsusu 80
- ngīṣidī yaa / ngīṣidī yaa 80
- ngeenē kunkeento / ngeenē kunkeento 80
- kīsali kikīngi nsadīdī / kīsali kikīngi nsadīdī 92
- kusadīdī kīmē-ko / kusadīdī kīmē-ko 92-93
- yoonsō wuyita mugoga / yoonsō wuyita mugoga 99.

11. It is possible that the sequence bu-bayiindalala, bayiindalala in D should be interpreted, not as two distinct verbal patterns, but as a bridge from root-syllable to root-syllable, ie. bu-bayiindalala bayiindalala.

12. An acute indicates the accentual locus in the English translation, while a comma indicates the phrase-boundary.

13. The authors do not say whether there is any difference between these two marked ('asserted') patterns.

14. The authors do not discuss the possibility of there being special tone-patterns for a verb containing an object substitute.

15. It could be argued that we could have direct accent assignment without reference to the intermediate phrase-boundary by having the rules (1) 1 +accent → h, eg. obugglo → obugol (underlining marks the accented syllable), and (2) h +accent → f, eg. Kakul → Kakulu.
CHAPTER EIGHT
Two Speakers - kiManyanga, part one

8.1: introduction.

This chapter deals with material from two informants - the Rev. D. Ntoni-Nzinga and Mr. A. Ndolo Menayame. A portion from a text read by the former will be compared with two versions of the same portion read by the latter, in order to ascertain the degree of pitch-pattern similarity or difference between the three. The results will then be used to test the conclusions drawn in chapter 6 (6.5).

8.2: the text and sample passage.

The text consists of Luke 23:32-24:39 in Laman's kiManyanga translation, which is also used by some of the baNdibu. The passage chosen for examination is 11. 43-77. In the following discussion Mr. Ndolo Menayame's first version will be referred to as A, his second version being labelled B, while the Rev. D. Ntoni-Nzinga's version will be called Z. Following the convention of chapter 6, all three versions will be discussed together, giving patterns occurring in all three versions first (unlabelled), and then going on to patterns occurring in only one or two versions (labelled with the above letters A, B or Z). 1

8.3: patterns in the text 2 (omitting those on names).

8.3.1: locatives.

Most locatives show shift of the high pitch:

kundyamu 44 'to the
mundyamu 45 'from
mulumbu 54 'on the day'
kuvata 61 'to a town'
mulumiingu 43 'in the week'
AB valuse 59 [Z valusę] 'in the opinion' (cf. 72)
AB mubafwa 50 [Z mubafwą] 'among the dead'
B vantoto 49 [A vantotó, Z vantóto] 'on earth'
B mubaau 61 [AZ mubaau] 'among them'
B munzeengolo 74 [A munzeēngolo, Z munzeēngolo] 'to a verd'
B vakulunsi 75 [AZ vakulunsi] 'on the cross' (cf. 54)
BZ kündamu 55 [A kündamu] 'to the tomb'
Z münkyaama 49 [AB münkama] 'why?'
Z múmàvaanga 72 [A múmàvaanga, B múmavàanga] 'in deeds'
Z múmaambu 55 [AB múmaambu] 'in matters'.

Some locatives show shift, plus another high pitch:

múbyasaal 72 'in these'
B vákulunsi 54 [A vákulunsi, Z vákulunsi] 'on the cross'
Z múbaftua 50 [AB múbaftu] 'among the dead'.

However, other locatives show a bridge between prefix and root-syllable:

valuieeka 48 'to the side'
A vantoto 49 [B vántoto, Z vántoto] 'on earth'
A kündamu 55 [BZ kündamu] 'to the tomb'
A vákulunsi 54 [B vákulunsi, Z vákulunsi] 'on the cross'
AB münkama 49 [Z münkyaama] 'why?'
AB múmoka 53 [Z múmoka] 'into the hands'
AB múmaambu 55 [Z múmaambu] 'in matters'
A(B) ye, ye-mumaambu 72 [Z ye-mumaambu] 'and in matters'
Z múnزةëngolo 74 [A múnزةëngolo, Z múnزةëngolo] 'to a verdict'
also: A kwayaandi 68 [B kwayaandi, Z kwayaandi] 'to him'.

Other locatives show a retention of the high pitch on the root-syllable:

A múnزةëngolo 74 [B múnزةëngolo, Z múnزةëngolo] 'to a verdict'
AZ vákulunsi 75 [B vákulunsi] 'on the cross'
Z vákulunsi 54 [A vákulunsi, B vákulunsi] 'on the cross'
AZ múbáau 61 [B múbáau] 'among them'
Z vántoto 49 [A vántoto, B vántoto] 'on earth'
Z ye-mumaambu 72 [A(B) ye-mumaambu] 'and in matters'
kuwábáau 49,66,70 'to them'
kuwábáeno 51 'to us'
kwaýaandi 71,68B [A kwaýaandi, Z kwaýaandi] 'to him'
kwaýumí 56 'to ten'.

A number of locatives where the word has a syllabic prefix show shift of the high pitch over two syllables (to the first syllable of the word) instead of over one. These examples can probably be considered a subset of the usual one-syllable shift, conditioned by the syllabic prefix.
There are also examples of words with bridge between the first syllable and second syllable; again, this would probably best be considered a subset of words showing bridge between prefix and root-syllable.

Z múlumíngu 43 [A múlumíngu, B múlumíngu] 'in the week'
Z váluse 59 [AB váluse] 'in the opinion'
B múlumíngu 43 [A múlumíngu, Z múlumíngu] 'in the week'
A múmávaanga 72 [B múmávaanga, Z múmávaanga] 'in deeds'
Z kwažíntumwa 59 [AB kwažíntumwa] 'to the disciples'.

Some words show two separate high pitches:

AB kwažíntumwa 59 [Z kwažíntumwa] 'to the disciples'
B múmávaanga 72 [A múmávaanga, Z múmávaanga] 'in deeds'
Z yé-kwábóonsono 56 [A yé-kwábóonsono, B yé-kwábóonsono] 'and to all'.

Only one locative shows no high pitch:
Z kwaýándi 68 [A kwaýándi, B kwaýándi] 'to him'.

8.3.2: genitives.

Most genitives show shift of the high pitch:

kyántatu 43 'first'
myánsuunga 44 'of the herbs'
ámmumu 46 'of the Lord'
bánkaka 59, 56a 'other'
A amántu 52 [B amántu, Z amántu] 'of a person'
A mámáoonsono 77 [B mámáoonsono, Z mámáoonsono] 'all'
AB mámáoonsono 63 [Z mámáoonsono] 'all'
B mámáoonsono 56 [AZ mámáoonsono] 'all'
A bábóonsono 73 [B bábóonsono, Z bábóonsono] 'all'
A kyántatu 77 [B kyántatu, Z kyántatu] 'third' (cf. 54)
A wáluleendo 72 [BZ wáluleendo] 'of power'
AZ áváta 61 [B áváta] 'of the town'
B myámásumu 53 [A myámásumu, Z myámásumu] 'of sins'
Z yánkátu 60 [AB yánkátu] 'of nonsense'
Z álékwa 70 [AB álékwa] 'of things'.

Some words show shift plus another high pitch:

A ámáambó 66 [B ámáambó, Z ámáambó] 'of things'
A z'angang'a 74 [B zangaenga, Z zangāanga] 'of priests'
Z alufu'a 74 [A alufu'a, B alufu'a] 'of death'.

Some genitives show a prefix to root-syllable bridge:
kyantatu 54,77B 'third'
AB yankatu 60 'of nonsense'
AB lwandozambi 73 [Z lwandozamb] 'of God'
A mastadiya 62 [B mastadiya, Z m'astadiya] 'of stadia'
B avata 61 'of the town'
B mombonono 77 'all'.

Other genitives show retention of high pitch on the root-syllable:
AZ mambonono 56 'all'
Z mambonono 63 'all'
Z mambonono 77 'all'
B babbonono 73 'all'
AB al'ekwa 70 'of things'
AZ byanayembele 67 [B byanayembele] 'of sadness'
Z amuntu 52 'of a person'
Z lwandozamb 73 'of God'
Z zanganga 74 'of priests'.

As with locatives, there are a few words with high pitch on the first syllable:
A m'bankwa 53 [BZ m'bankwa] 'of possessors'
AZ maluse 72 [B maluse] 'before'
Z myamasumu 53 'of sins'
B maluse 72 'before'
A alufu'a 74 'of death'
B byanayembele 67 'of sadness'
BZ maluleendo 72 'of power'.

There are several genitives with no high pitch:
B amuntu 52 'of a person'
A myamasumi 53 'of sins'
B amambu 66 'of things'
B zangaanga 74 'of priests'
B alufu'a 74 'of death'.
Z baboonsomo 73 'all'
Z kyantatu 77 'third'.

8.3.3: connectives.

Some connectives show shift:

AB ye-mosi 56 ['and one']
AB ye-bakeento 58 ['and the women']
A ye-ndtingi 61 [B ye_A-ndtingi, Z ye-ndtingi] 'with sadness(?)'
Z ye-komwa 53 [AB ye-A-komwa] 'and be crucified'
Z ye-fuluka 54 [A ye-fuluka, B ye-fuluka] 'and rise'
also: B ye-ziz 67 [AZ ye-ziz] 'with (their) faces'
AZ ye-bkuluntu 74 [B ye-bkuluntu] 'and the leaders'.

There is one example of a bridge from prefix to root-syllable:
B ye-fuluka 54 'and rise'.

Others retain the high pitch on the root-syllable:
AB ye-komwa 53 'and be crucified'
A ye-fuluka 54 'and rise'
A(Z) ye-yuv(ul)asana 64 [B ye-yuvul asana] 'and talking to each other'
AZ ye-ziz 67 'with (their) faces'
BZ ye-bantu 73 [A ye-bantu] 'and the people'
B ye-ndtingi 61 'with sadness(?)'
Z ye-bakeento 58 'and the women'
AZ yeeno 52 [B yeeno] 'with you'
AB yasu 65 [Z yasu] 'with them'.

A few connectives show no high pitch:
A ye-bantu 73 'and the people'
Z ye-mosi 56 'and one'
Z ye-ndtingi 61 'with sadness(?)'
B yeeno 52 'with you'
Z yasu 65 'with them'.

8.3.4: anomalous patterns on verbs.

Most verbs show a shift of high pitch (here and below, a hyphen preceding the word indicates a preceding verbal element):

mabwa 63 'which had happened'
mábwité 70 'which have happened'
AB túbambuka 51 [Z túbambuka] 'remember'
AB túbístidž 75 [Z túbístidž] 'we had left'
A wákana 76 [B wákana, Z wákana] 'who would ransom'
B wávúva 68 [A wávúva, Z wávúva] 'he said'
BZ bávúva 71 [A bávúva] 'they said'
Z -kávúva 51 [A -kávúva, B -kávúva] 'he said'
BZ -bákala 48 [A -bákala] 'they were'
Z bákala 59 [A bákala, B bákala] 'they were'
Z bákala 59 [A bákala, B bákala] 'they were'
Z bávúva 48 [AB bávúva] 'they were wearing'
Z mákákwa 65 [A mákákwa, B mákákwa] 'they were deceived'
Z bwándýekole 73 [AB bwándýekole] 'how (they) handed him over'
Z bámkomisa 75 [AB bámkomisa] 'they nailed him'
Z yávúangwa 77 [A yávúangwa, B yávúangwa] 'it was done'
Z -kákedi 52 [A -kákedi, B -kákedi] 'he was'
Z -bámkásana 46 [AB -bámkásana] 'they found'
Z kúzeyt 69 [AB kúzeyt] 'you do not know'
Z kúnzáaya 65 [A kúnzáaya, B kúnzáaya] 'to recognise him'.

A similar number of examples show a bridge from prefix to root-syllable:
AZ myás'fema 48 [B myás'fema] 'which were shining'
A -kávúva 51 [B -kávúva, Z -kávúva] 'he said'
A wávúva 52 [BZ wávúva] 'he said'
A wávúva 68 [B wávúva, Z wávúva] 'he said'
B wávúva 49 [AZ wávúva] 'they said'
B wávúva 66 [A wávúva, Z wávúva] 'he said'
A mákákwa 65 'they were deceived'
A -kákedi 52 'he was'
A -bámkásana 63 [BZ -bámkásana] 'they were talking'
A kúnzáaya 65 'to recognise him'
AB bwándýekole 73 'how (they) handed him over'
B wákana 76 'who would ransom'
B yávúangwa 77 'it was done'
B wávútula 68 [AZ wávútula] 'he answered'
B (má-)lwát 66 [AZ (má-)lwát] 'which you are ...'
Z bákásamba 58 [AB bákásamba] 'they told'
Z túbístidž 75 'we had left'
Z -bákátila 47 [A -bákátila, B -bákátila] 'they were'.

One or two verbs retain the high pitch on the root-syllable, even though we might expect a shift due to the occurrence of a preceding element:

- bidi (?) 65 'they came'
A - bakadila 47 'they were'
BZ - basakasana 63 'they were talking'
BZ - kayekuluwa 53 [A - kayekuluwa] 'he (would) be delivered'.

A few verbs show no high pitch:
AB wakedi 72 [Z wakedi] 'he was'
AB dyasta 67 [Z dyasta] 'walk'
B bwakala 46 'it was when'
B bakala 58 'they were'
Z wena 50 (inside a bridge) [AB wena], 69 [AB wena] 'he who has'
Z bakubtka 45 [AB -bakubtka] 'they had prepared'
Z basata 44 [AB basata] 'they carried'
Z babwaana 46 'they found'.

There is a bridge on some verbs:
fulukidjungi 51 'he has risen'
AB (bu-)lweti 67 [Z (bu-)lweti] 'as you are'
A w'avovo 66 'he said'
B kuzey 69 'you do not know'
Z babambuka 54 [AB babambuka] 'they remembered'

cf. also: B -kakedi 52 'he was'.

8,3,5: words without high pitch.

(i) adjuncts:

lumbu-ko 70 '(not) days'
AB lumbu 43 [Z lumbu] 'day'
Z lumbu 60 [A lumbu, B lumbu] 'day'
AB nabu 44 [Z nabu] 'very'
AB kansi 46 [Z kansi] 'but'
B kansi 65 [A kansi, Z kansi] 'but'
AZ ntaangu 76 [B ntaangu] 'time'
BZkaa 69 [A kaaka] 'only'
A myamasumi 53 'of sins'
A ye-baantu 73 'and the people'
(ii) objects:  
AZ tadi 45 ['boulder']  
AZ moomo 59 ['these']  
Z moomo 56 ['these']  
B moomo 69 ['these']  
A nlele 48 ['clothes']  
B mooyo 50 ['life']  
Z mooyo 54 ['mind']  
Z ndzeenza 44 ['perfume']  
Z zizi 49 ['faces']  
Z nitu 46 ['the body'].

(iii) subjects:  
boole 47 ['two']  
B boole 61 ['two']  
yandit 64 ['he']  
kumbu 68 ['name']  
BZ mwaan(a) 52 ['the child']  
AZ beeto 74 ['our']  
AB beeto 75 ['we']  
BZ andi 68 ['his']  
B amuntu 52 ['of a person']  
B meeso 65 ['eyes']  
B yaandi 75 ['he']  
B zangaanga 74 ['of the priests']  
Z moo 59 ['these']  
Z kibent 64 ['himself']  
Z kyakt 77 ['this']  
Z kyantatu 77 ['third'].

(iv) predicates:  
moomo 71 ['these']  
B moomo 66 ['these']  
B amaambu 66 ['of things']  
Z nki 70 ['what kind of?']
8.3.6: high pitch on the last syllable.

B -kakedi 'he was' 52
A moomó 'these'
AB mɪnʊ-ko 60 [Z mɪnʊ-ko] '(not) trust'
B lumbú 60 'day'
Z kɪnə 60 [AB kɪnə] 'that'
A kansị 65 'but'
A ɛmaamú 66 'of things'
AB mosí 68 [Z mósí] 'one'
A moomó 66 'these'
AB kədị 68 [Z kədị] 'because'
ngeyé 69 'you'
B ndzeenzé 69 [AZ ndzeenzé] 'visitor'
múbyaabú 70 'in these'
AZ ye-bákuluntú 74 'and the leaders'
A zanganga 74 'of the priests'
A kaansi 75 [BZ káansi] 'but'
AZ tuuká 76 [B tuuka] 'from'
A kansị 76 [BZ káansi] 'but'.

8.3.7: high pitch on the penultimate syllable.

BZ mastadía 62 'of stadia'
B ye-bákuluntú 74 'and the leaders'
B vákulúnsi 54 'on the cross'.

8.3.8: bridges on words.

Z bónso 59 [AB bónso] 'like'
Z káká 53 [AB káká] 'only'
kwakuntú 56 'to ten'.

See also 8.3.4 for bridges on verbs.

8.3.9: other anomalous patterns.

BZ kɗunga 47 [A kɗunga] 'hesitation(?)'  
BZ babɓkala 47 [A babɓkala] 'men'
AZ b'angudi 74 [B b'angudi] 'the elders'
\{lumbu 77 'it was the day'
B b'angudi 74 'the elders'
\{indyana 76 'it was he'
AB makumusaambanu 62 [Z makumusaambanu] 'sixty'
A babakala 47 'men'
\{vo 75,522 [AB vo] 'that'.

8.3.10: bridges between words.

(i) noun + following item:

Z Malia muisi-nda ... [A Malia muisti ... , B Malia muisti ... ]
\{57 'it was Mary, an inhabitant of ...'
Z indudi avakobi 57 [A indudi avakobi, B indudi avakobi] 'she was the mother of Jacob'
Z m'ambu moomo mamutika 59 [AB m'ambu m'omo m'amutika] 'these things seemed'
Z nkumbu avata 61 [A nkumbu avata, B nkumbu avata] 'the name of the village'
Z mosi nkumbu andi Kleopa 68 [A mosi nkumbu andi Kleopa, B mosi nkumbu andi Kleopa] 'one, whose name (was) Cleopas'
Z kula Isayeli 76 [A kula Isayeli, B kula Isayeli] 'the tribe of Israel'

note also: (A)B bo k'funga 47 [Z ...bo k'funga] 'in hesitation(?)

(ii) adjunct + following item:

Z n'suka nabu 44 [AB ntsuka nabu] 'very early'

AB kwakumti ye-mosi 56 [Z kwakumti ye-mosi] 'to the eleven'

(A)B k'kina lumbu ... 60 [cf. A k'kina lumbu ..., Z k'kina lumbu ...] 'that day'
A boole mubaau 61 [B ...boole mubaau, Z ...boole mubaau]
'two of them'
B ye-'ndingi kuvata 61 [A ye-'ndingi kuvata, Z ye-'ndingi kuvata] 'with sadness to the town'
B(Z) kadi nguye kaka ... 68-9 [cf. Z kadi nguye kaka, A kadi nguye kaka ...] 'surely you are just'

Z boonso twanyakole 73 [AB boonso twanyakole] 'how he was handed over'
A(Z) ... vo yaandt 75 [cf. Z ... vo yaandt, B ... vo yaandt] 'that he'

(iii) verb + following item:

Z bu-bakala woonga 48 [A bu-bakala woonga, B bu-bakala woonga]
'they were afraid'
B lut'ombale wena mooyo 50 [A lut'ombale wena mooyo] 'are you looking for the living?'
Z lut'ombale wena mooyo 50 ditto
Z bu-kakedi yeeno 52 [A bu-kakedi yeeno, B bu-kakedi yeeno]
'when he was with you'
Z wavova vo 52 [A wavova vo, B wavova vo] 'he said that'
Z bamokasana mumoomo 63 [AB bamokasana mumoomo] 'they were talking about this'
B ka-bididi kunzayya 65 [A ka-bididi kunzayya, Z ka-bididi kunzayya]
'so that they did not recognise him'
B ... wena ndzeenza ... 69 [A ... wena ndzeenza, Z ... wena
ndzeenza ...] 'you are a stranger'
Z wakedi mbikudi 72 [AB wakedi mbikudi] 'he was a prophet'.

8.4: discussion of the patterns.

The above layout, while exhaustive, makes it difficult to draw conclusions. The material will therefore be re-arranged in subsequent sections in order to discuss several main points.

8.4.1: pitch patterns in each version.

It will be helpful to list together the number of various patterns for each version:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>shift</td>
<td>34</td>
<td>37</td>
<td>42</td>
</tr>
<tr>
<td>prefix to root-syllable bridge</td>
<td>23</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>retention on root-syllable</td>
<td>18</td>
<td>17</td>
<td>27</td>
</tr>
<tr>
<td>on first syllable</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>first syllable to prefix bridge</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>two separate high pitches</td>
<td>5</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>on last (penultimate) syllable</td>
<td>14(0)</td>
<td>8(3)</td>
<td>5(1)</td>
</tr>
<tr>
<td>no high pitch</td>
<td>18</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>total anomalous patterns</td>
<td>117</td>
<td>122</td>
<td>125</td>
</tr>
</tbody>
</table>

A has 3 bridges on individual words, B 4, and Z 7.

The most noticeable feature of this table is that Z has very few bridges from prefix to root-syllable, and shows mostly a two-way distinction between shift or no shift. With versions A and B, on the other hand, the 'half-way house' of prefix to root-syllable bridge is
very common. The tendency in Z to have some words with this bridge may be an attempt to imitate the features of kiManyanga, since such a bridge does not occur frequently in the texts previously examined (see also 8.4.5, 9.3.6).

Version A shows the greatest number of high pitches occurring on the last syllable of the word. Eight of these words occur in contexts where surrounding words also have anomalous patterns, and in 3 other cases the equivalent word in version B shows no high pitch (i.e. also has an anomalous pattern). This suggests that the rising pattern in words with high pitch on the last syllable is not a basic pattern, but merely an anomalous pattern used in certain phrases where there is general perturbation, perhaps for focus or emphasis, of the expected contours on a particular portion of the utterance. That these patterns are in fact variants of the basic pattern can be seen from the fact that they need not occur in both versions A and B, e.g.

\[
\text{kan}^q\text{tuuk}^q\text{ntaangu 76A 'but from the time'}
\]
\[
\text{but kan}^q\text{tuuka ntaangu 76B.}
\]

This suggests that the rising pattern is a manipulation of the expected pattern, for general effect. Moreover, different perturbations can occur in each version, e.g.

\[
\text{nk}^q^q\text{amaambu momo 66A 'what are these things?'}
\]
\[
\text{but nk}^q^q\text{amaambu momo 66B,}
\]

which reinforces the idea that these anomalous patterns are not an underlying pattern of the word concerned. A special rising pattern therefore does not seem to be required to account for these cases, though of course this does not rule out the possibility that such patterns may exist (see chapter 14).

Version B shows the greatest number of words with two unbridged high pitches. The second high pitch in most cases is on the root-syllable, which suggests a tendency for the root-syllable to retain its prominence in this idiolect. The frequent occurrence of prefix to root-syllable bridges may support this (see 8.4.5).

It is notable that all three versions have roughly the same number
of anomalous contours. The number is smallest in A, and this may be because A was read hesitantly, so that words tended to retain their basic pattern rather than show the anomalous patterns associated with faster, more spontaneous reading. Mr. Ndolo Menayame tended to read in a more restrained fashion than the Rev. D. Ntoni-Nzinga, so the same comment also holds true of B to a certain extent. The difference in reading is reflected in the number of pauses or gaps in the passage (excluding full stops):

A 113  B 96  Z 77.

8.4.2: words without high pitch (see 8.3.5).

As in previously examined texts, many words without high pitch occur in contexts where the preceding or following word also has an anomalous contour, eg.

bu-kakedi yeeno 52B 'when he was with you'.

In many cases the preceding word shows a bridge, as if the word without high pitch had transferred this to the preceding word, eg.

babambuka mooyo 54Z 'they called to mind'.

As pointed out previously, therefore, (eg. 6.4.10) it seems best to consider non-appearance of high pitch to be a means of focussing attention on something else in the phrase:

We might then postulate the following interpretation of such phrases as mosi nkumbu andi Kleopa

(a) mosi with rising pattern intimates that more information is about to follow; this comes in the appositive phrase nkumbu andi Kleopa, which gives the name of the mosi, the individual;

(b) nkumbu andi is devoid of high pitch to convey that the name Kleopa is the most important part of this appositive phrase;

(c) the sentence then continues, with the verb telling what this person did.

Note that pause can affect the realisation of the pattern:

mosi nkumbu andi Kleopa 68A.

Bridging seems to achieve a similar focus on the name:
However, focus need not occur in all instances, eg.

nkùmbu ñándi ụbọsefì 33B(A) 'his name (was) Joseph'.

8.4.3: bridges between words (see 8.3,10).

Version Z has 16 bridges (4 of them rising bridges), while A has 4, and B abs 8. The less frequent occurrence of bridging in versions A and B may represent a fundamental difference between the two idiolects, but it is more likely to be due to Mr. Ndolo Menayame's restrained reading of the passage - as I have previously suggested, bridging seems to be frequent only when the speaker is reading fairly quickly, and with a certain degree of animation. The manner of reading may also account for the fact that neither A nor B has any examples of a rising bridge, the marked form of bridging.

8.4.4: other features.

In version Z, involvement or excitement may be conveyed by several means, including change of pattern, key and rate of delivery:

(a) ñugáñnt kìbẹnì ñịsù 64Z 'he himself Jesus' has no high pitch, but the syllables where we would expect high pitch are given extra stress; this, and the fact that the phrase is in lower key, may be intended to express gravity or seriousness;

(b) kàdù ngeyé kàka wẹnà ndẹnẹnà ... 68-9Z 'surely you are indeed a stranger' shows anomalous patterns on the middle three words; the phrase is also spoken in a higher key and faster than usual, presumably to indicate the surprise of the speaker. Note that the fast rate and anomalous contours (on 4 out of 5 words) also apply to the second half of the sentence (69-70Z);

(c) kànsì .... ñọtëna 75-76Z 'but we had not left off hoping that he was the one' shows lower key and a 'crescendo' pitch-pattern (cf. 2.2.24), i.e. each high pitch is successively louder and higher than the previous one: /~/~~/ (cc. the rising bridge /--L/);

(d) lùmbù k'yàntete 43Z 'on the first day' is pronounced in a higher key to indicate that a new section of the story is beginning; this phrase also has a more forceful delivery than normal in versions A and B.
Versions A and B show no special manipulation of the contour for effect (except for the example in 43); again, this may be attributed to Mr. Ndolo Menayame's restrained reading of the passage.

There are several examples of final falling pitch, which seems to be emphatic:

Z alufwa 74 'of death'
A alufwa 74 ditto
Z mubafusa 50 'among the dead'
B yé-zizê 67 'with faces'.

There seem to be two instances in version Z of a shift of high pitch conveying emphasis:

munkyaama 49Z 'why?' (note extra stress and extra-high pitch)
kúzeyi 69Z 'you do not know' (note that this occurs in a phrase with a fast rate of delivery).

8.4.5: prefix to root-syllable bridges.

This pattern poses some problems of interpretation. If an item *v-cvcv (prefix separated by hyphen, root-syllable underlined) shows a pattern _v-cvcv, should this be taken as the realisation of an underlying form *v-cvcv (with anticipation of the high pitch on the prefix), or of one *v-cvcv (with continuation of the high pitch to the root-syllable)? Is there a shift here or not? Moreover, if *v-cvcv and *v-cvcv can both appear as _v-cvcv, the distinctiveness between shift and non-shift would be cancelled.

There are two possible explanations for the 'half-way house' of _v-cvcv: either it is a stage in the development of shift, or it is a stage in a development away from shift. The former implies a derivation v-cvcv → _v-cvcv → _v-cvcv, thus accomplishing a shift of the high pitch. The latter of the two views implies a derivation _v-cvcv → _v-cvcv → v-cvcv (cf. base form cvcv). That is, the root-syllable has come to be the most prominent syllable of the word, and resists the shift of high pitch to the affix.

We will label the two derivations respectively (s) and (r), and we
will now see whether the figures for occurrence of prefix to root-
syllable bridges in the three versions of this text support one or
other of the two derivations.  

The arguments for (s) and (r) may be set out in parallel columns,
as follows:

<table>
<thead>
<tr>
<th>in favour of (s)</th>
<th>in favour of (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) such a sequence is a phonologically natural explanation for shift.</td>
<td>(2) such a sequence would be systematically consistent; the importance of the root-syllable has been pointed out all through this thesis.</td>
</tr>
<tr>
<td>(3) (r) cannot be true, as it implies that the dialect with the greatest number of (v-cvcv) patterns is moving towards having most high pitches on the root-syllable. But this is not the case: (Z), with fewer (v-cvcv) patterns, has more root-syllable high pitches than (AB), and in general the southern dialects have more of these than (ki)Manyanga (cf. chapter 15).</td>
<td>(4) (s) cannot be true, as it implies that the dialect with the greatest number of (v-cvcv) patterns is moving towards having most examples of shift. But this is not the case: (Z), with fewer (v-cvcv) patterns, has more examples of shift than (AB), and in general shift is the most common anomalous pattern even where (v-cvcv) is rare (cf. chapter 15).</td>
</tr>
<tr>
<td>(5) if we take the patterns (v-cvcv) and (v-cvcv), the figures from each speaker ((AB) average 39, (Z) 36) are closer together than the figures for (v-cvcv) and (v-cvcv) ((AB) 57, (Z) 51). This suggests that the patterns (v-cvcv) and (v-cvcv) may be variant realisations of one underlying pattern. Taking the first two steps of (s) and (r), this argues in favour of (s), since if (v-cvcv) and (v-cvcv) are related in this way, the connection between them is closer than that between (v-cvcv) and (v-cvcv).</td>
<td>(6) (AB) show fewer examples of shift than (Z), yet more examples of (v-cvcv); i.e. there is a tilt of the high pitch towards the root-syllable.</td>
</tr>
<tr>
<td>(7) if we take the patterns (v-cvcv) and (v-cvcv), the figures from each speaker ((AB) average 39, (Z) 36) are closer together than the figures for (v-cvcv) and (v-cvcv) ((AB) 57, (Z) 51). This suggests that the patterns (v-cvcv) and (v-cvcv) may be variant realisations of one underlying pattern. Taking the first two steps of (s) and (r), this argues in favour of (s), since if (v-cvcv) and (v-cvcv) are related in this way, the connection between them is closer than that between (v-cvcv) and (v-cvcv).</td>
<td>(8) the same reasoning holds, but …</td>
</tr>
<tr>
<td>(9) in chapter 14 it will be shown that about 60% of (CB) (lh) patterns are realised as (hl) in Laman 1936, compared to 30% in Carter 1980b. This suggests that the shift (lh \rightarrow hl) has progressed farthest in (ki)Manyanga. If this is true, we … taking the last two steps of (s) and (r), this argues in favour of (r).</td>
<td>(10) the same reasoning holds, but …</td>
</tr>
</tbody>
</table>
might expect that the same could be said for the shift l-hl → h-ll (i.e. v-cvcv → V-cycv). This is the case: taking high pitches occurring before the root-syllable, kiManyanga shows the greatest number of these (see chapter 15, and cf. 5 above), while the V-cvcv pattern is most common there, yet least common in the southern dialects.

... this is not the case: if it were, we would expect the V-cvcv pattern to be found most commonly in kiManyanga (with V-cycv, the earlier stage, of infrequent occurrence) and that v-cvcv would be more common in the southern dialects (with V-cycv, the later form, infrequent, since the shift has not advanced so far there). But instead we find that V-cvcv is most common in kiManyanga, and least common in the southern dialects, while V-cycv is the more common of the two in all dialects (see chapter 15, and cf. 4 above).

(12) there are quite a few examples in this text of words showing two separate high pitches which are not in bridge - one on the affix and one on the root-syllable. This may suggest a greater prominence of the root-syllable in kiManyanga.

As can be seen, we can argue equally well for either derivation. (5) is a good argument for (s), but (10) is a good argument for (r), and otherwise there seems little to choose between either point of view - (12) would perhaps clinch the argument for (r), if there were a few more examples of this kind. However, we can only deduce that the place of the prefix to root-syllable bridge is unclear. 7

It may in fact be best to consider V-cvcv as a variant of v-cvcv (cf. 7 above), one which is more likely to occur in kiManyanga than in other dialects. This would in effect be midway between (r) and (s): V-cvcv would be closest to V-cycv (as in r), but the net effect of having such a variant would be to have a greater number of high pitches occurring before the root-syllable (as in s). We must also note the fact that instances of V-cvcv occur in Laman's work of the twenties and thirties (Laman 1922, 1936); if we consider V-cvcv to be a variant, then this is evidence that it is widespread in kiManyanga; if we consider it to be a stage in one of the above derivations, then we must conclude that the pitch-shift (in whatever direction) has been in progress for at least 50 years.
8.5: variation in the three versions.

The amount of pitch variation between all three versions is shown below. Numbers indicate number of words in each pair of versions which show different contours.

<table>
<thead>
<tr>
<th>section</th>
<th>A (\neq) B</th>
<th>A (\neq) Z</th>
<th>B (\neq) Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.3.1</td>
<td>9 (5)</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>8.3.2</td>
<td>15 (11)</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>8.3.3</td>
<td>7 (5)</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>8.3.4</td>
<td>20 (7)</td>
<td>33</td>
<td>32</td>
</tr>
<tr>
<td>8.3.5</td>
<td>17 (17)</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>8.3.6</td>
<td>4 (4)</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>8.3.9</td>
<td>3 (3)</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>total</td>
<td>75 (52)</td>
<td>101</td>
<td>110</td>
</tr>
</tbody>
</table>

(out of 208 words)

Leaving aside for the moment the bracketed figures under A \(\neq\) B, the percentage variation is as follows:

- A \(\neq\) B: 36%
- A \(\neq\) Z: 49%
- B \(\neq\) Z: 53%.

These figures can be laid out as a table:

<table>
<thead>
<tr>
<th></th>
<th>same speaker</th>
<th>different speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>two versions</td>
<td>36%</td>
<td>49-53%</td>
</tr>
</tbody>
</table>

Compare this to the table suggested in 6.5.4:

<table>
<thead>
<tr>
<th></th>
<th>same speaker</th>
<th>different speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>two versions</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>more than two versions</td>
<td>25%</td>
<td>40% (?)</td>
</tr>
</tbody>
</table>

The differences are clearly significant: what could account for the much larger percentages from this text?

The ambivalent status of the prefix to root-syllable bridge, which is very common in versions A and B, may be affecting the figures. The figures in brackets under A \(\neq\) B above do not count instances of prefix to root-syllable bridge: that is, where this pattern occurs in one version, and the other version has shift, or retention on the root-syllable, the two versions are considered as having the same pattern. This seems reasonable, since (as pointed out above) the prefix to root-syllable bridge seems to be a 'half-way house', and could be
counted in either category. The adjusted percentage $A \neq B$ is then 25% (previously 36%). There are difficulties with applying the same method to $A \neq Z$ and $B \neq Z^8$, but if we can assume a comparable decrease, their percentage variations would be $A \neq Z 34%$ (previously 49%), $B \neq Z 37%$ (previously 53%).

These adjustments bring the figures within the range of the table constructed in chapter 6, but they are still slightly higher than their equivalents in that table. This might be accounted for in two ways: (a) the figures in the table in chapter 6 could be revised upwards, particularly for the 'same speaker' column. This implies that the text of chapter 6 may not have been fully representative. On the other hand, the table as suggested makes a fairly good system - if the figures are raised too much, the level of possible variability might go over 50%, and we would surely then have to consider an intonational system; moreover, the table must be drawn in such a way as to take in lower levels of variability as well as higher ones; (b) the figures for this text could be revised downwards. In my opinion, this would be the best solution; versions A and B, as noted several times above, were read hesitantly, and some obvious differences of pitch patterning were pointed out in 8.4. It is not unlikely that this hesitancy also had an effect on the contours of individual words, and if the number of words affected were even as few as 10, this would bring the figures down 5% and place them within the range of variability predicted from the table.

The second suggestion gives the following revised table (figures for this text first, general figures in brackets):

<table>
<thead>
<tr>
<th></th>
<th>same speaker</th>
<th>different speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>two versions</td>
<td>20% (10-20%)</td>
<td>30% (25-35%)</td>
</tr>
<tr>
<td>more than two versions</td>
<td>(20-30%)</td>
<td>(35-45%)</td>
</tr>
</tbody>
</table>

8.6: comments on variant contours.

(i) The concept of relative importance of the items in a sentence or
phrase influencing the pattern came up several times, but only seemed to be verifiable when discussing bankaka mubau 81 'some of them': '... we are talking about some people, and one part of this people; now the most important word is bōau ... we want to accentuate one part, and ... one part is bankaka. But can we know what are ... these bankaka? There can be another group different from the group which we are talking [about] here, and we say bōau, and there is a reference to the same group which I [am] talking about '. Bankaka mubau is the pattern given in discussion, but in view of the mention of accentuation it is interesting to note that in the text the pattern is bankaka mubau, a rising bridge (which I have suggested is associated with emphasis), and that the words appear in a 'crescendo' phrase.

(ii) Comparing batelamā 6 'they stood' and batēlama (which occurred when discussing batēlamanene in 32), the Rev. D. Ntoni-Nzinga said that in 6 'I can't say bāntu batēlama batēla ... ['the people stood and watched'] because we have a comma: bāntu batēlamā, batēla'. Since the form in 32 occurs without a following pause (batēlama ntāme 'they stood at a distance'), we might conclude that batēlama is a pre-pausal form. Yet batēlama ntāme also occurred in the discussions. From other comments it seemed that a difference in emphasis was also involved.

It was said of 6: 'batēlamā is the most important word here. The writer wants to give us the impression that the people were there standing - the standing is very important for us, no? - and because there were two actions, standing and seeing. ... This is the beginning of a sentence, ... and we want to make emphasis about the people, and the two actions'. The fact that batēlama was said when speaking about batēlama (see the first word in this quotation) might suggest that the former is unmarked, the latter marked.

Of the other form, batēlama, the Rev. D. Ntoni-Nzinga said: 'here we are talking about people who see the [saddest thing] about Christ, and ... they are sad; ... batēlama is important, but we talked about [it] (earlier?) ... and now it is not very important - [what] is very important [is what precedes]. ... I can't say [batēlama] strongly, [because it] is a sad ... story - my voice needs to be sad also'. The reference to not being able to say the word 'strongly' because
the story is sad is perhaps significant.

It is notable that in a repetition of the sentence containing batelama all the verbs were given a high pitch on the prefix syllable, although in the text the high pitch was on the root-syllable. Since this repetition was the last of the section of comments dealing with this question, it might be that by this time the Rev. D. Ntoni-Nzinga was unintentionally emphasising the words to bring out the point he was making. Conversely, discussing batelama, the verbs in the text have high pitch on the prefix syllable, but in the repetition have high pitch on the root-syllable, perhaps because this instance was among the first repetitions, and was therefore neutral in pattern. However, the evidence is conflicting, and it is uncertain whether we should attribute the difference between batelama/batelama to pause, emphasis, or even dialect interference (see (xi) below).

(iii) Discussion of malunuungu 28 'of righteousness' and malunuungu 33 brought more comments on relative emphasis, and its relation with downdrift.

Comments on 28 were as follows: 'kédíka, ndyeú •-÷ ímúntu waluñungu ... Kédíka, ndyeú •-÷ ímúntu waluñungu [truly, this was a righteous man] ... here ndyeú • ímúntu waluñungu is [an] exclamation, ... he said [what] he had in his heart, and I want to give the impression to people who can't read, how was the situation: kédíka • ndyeú • ímúntu waluñungu. Emphasis [is on] waluñungu, waluñungu, ... I talk very slowly, but all the emphasis is there, not with kédíka, not with ndyeú. ... Because we have two kinds of emphasis: I can put the emphasis if ... talking strongly, or talking very slowly - [it] is the music. For example, [talking] very slowly is very good emphasis, because all the people will [become] quiet, you see? ... And I am calling [them to] ... reflection'.

This seems to suggest that a word may be emphasised by putting the high pitch in an unexpected place: eg. in (ii) above, batelama might be the expected form, so this was emphasised by shifting the high pitch: batelama. Here, the shift is expected because of the genitive prefix, but instead of waluñungu (cf. 33), we find waluñungu, with no shift (cf. chapter 12 for a development of this point). Moreover, it seems that having no high pitch on a word (eg.
malunungu) may also emphasise it. This seems to be comparable to the fact that both speaking in a higher key and speaking in a lower key are devices to emphasise what is being said, as the Rev. D. Ntoni-Nzinga noted several times. To get the full meaning of what is being implied (emphasis or reduction of emphasis), he repeatedly affirmed, we must take the whole context into consideration.

Of the second instance (ye-walunungu 33), he said: 'the emphasis is with kyambote. Yes, [there] is [a] difference when I want to put the emphasis with wambote - imuntu wambote • ye-walunungu ['he was a good and righteous man']. [The anomalous pattern here may serve to focus on the words concerned.] Every time when [I am] talking, if ... I said the first word strongly, the second I need to [gesture for 'lower'] ... and you see the music: Imuntu wambote [gesture for 'high'] • ye-walunungu [gesture for 'low']. I can't say \imuntu wambote ye-walunungu - if I say \imuntu wambote ye-walunungu I need to say something again [ie. continue with another modifier] ... to go down. ... Every time when I am speaking, when I speak strongly I need to go down, I can't go up and finish'. This suggests that height is associated with phrasal 'unfinished-ness', ie. denotes continuity.

Other phrases came up in discussion: \imuntu wambote kwsanti; bo, \imuntu wambote k'kili. The latter seems to be a marked contour, but its exact significance is unclear.

(iv) kyantatu 54 'third' and kyantatu 77: both examples were at first pronounced kyantatu. But some thought produced the comment that in 77 the 'people are sad, are talking ... about the man; ... they believed him, ... that he would be a saviour, but he didn't, and now they are very sad - kyantatu; ... I can say that ... c'est une action désespérée'.

(v) Discussing ka-bammtueenining'-ko 83 'they did not see him', it was said that such a pattern in this context was a mistake, and that the correct pattern here should be ka-bammtueenining'-ko. Further questions revealed that this was because of the pre-posed yaandi: 'the emphasis is with yaandi ... When I say ka-bammtueenining'-ko, I haven't the yaandi, you see? ... I suppose yaandi in the verb [ie. as an object substitute] ... yaandi•ka-bammtueenining'-ko; I can't
say yaandi·ka-bamweentingi-ko, it is impossible in this context'.

This is reminiscent of some phrases in kiNtandu where marked word-order was accompanied by pitch-pattern differences (7.5.i,v).

Asked about the pattern in 83, the Rev. D. Ntoni-Nzinga said: 'I can say that, I can say it, but not in this context. ... For example, you ask me, ... "did ... the travellers come back?" I say, "Yes". "Did they see their mother?" I say, "ka-bamweentingi-ko", you see?' This may suggest different patterns for verbs with and without the object substitute, but it may also have something to do with focus.

Asked about the difference between -ko in ka-bamweentingi-ko 83 and -ko in ye-mavanga mau-ko 34 'and their actions', the Rev. D. Ntoni-Nzinga replied, "-ko? Yes, it is a music; I want to ... emphasise the negative -ko'.

(vi) ma-lweti mokin, bu-lweti dyetsa 66-67 'that you are talking about, as you are walking along': it appears that mokin can also occur without high pitch 'to make a distinction between the two actions', but the comments were not very clear.

(vii) kakivulusa 8 'let him save himself' and ukuvalusa 11,13 'save yourself': the Rev. D. Ntoni-Nzinga said that ukuvalusa could also be pronounced ukuvalusa in order 'to oblige him', i.e. to emphasise the imperative to the person being spoken to.

For 8, kakivulusa occurred once in repetitions, and kakivulusa six times. When it was pointed out that kakivulusa occurs in the text, he thought for a while and came to the conclusion that kakivulusa was not a kiManyanga form, but a form from his own dialect. The two forms quoted at the beginning, therefore, might suggest that kiManyanga has different pitch-patterns for 2nd and 3rd person imperatives, though no evidence of such variation was found in other dialects.

However, it is also possible that we have in 8 another case of relative emphasis: the Rev. D. Ntoni-Nzinga noted that both commands were mocking Jesus ('joking'), but that in 8 the speaker 'was not talking directly to Jesus, he was talking to the people'. In a rhetorical command of this nature the speaker might choose to place the emphasis on -ki-: 'he has saved others, now let him save himself'.
(viii) mɓ-bavę̄ngi 5 'what they have done' and mumu-tw̄̄sengi 17 'for what we have done': the latter occurred consistently in repetitions as mumu-tw̄̄sengi, which is similar to 5. 17 is possibly emphatic.

(ix) Of pitch patterns in general, he said: 'All lecture [ie. reading] ... is accompanying the story - I need to change the ... voice in the different place, ... to apply my voice to the story, to express well the opinion with the accent'.

(x) Of kiManyanga pitch patterns he said: 'If somebody from Manyanga is reading this, you will [get] more [of an] impression, 'cos it is a good music, a very nice music that one, yes. ... They have a good music ... when they are reading. ... I like it myself ... I like reading the music with somebody from Manyanga who is reading himself'.

(xi) As always, he was well aware of the possibility of dialect interference: 'The problem is, sometimes I can't be very ... faithful to the ... situation - I get some [influence] from my dialect, you know?' His advice was, 'If you hear some slight nuance [ie. some small variation], it is because it's not my dialect, ... but if I repeat the same, that one is right'.

8.6.2: Mr. A. Ndolo Menayame.

(i) muntu o wāwonōsono 22 'over all the earth': when asked if muntu wāwonōsono was ever possible, the reply was, 'That would be due to idiosyncracy, ... not really characteristic to a whole region, maybe to one individual. ... People who use that sort of language are just pastors - they try to make their language a bit different from ordinary people'.

(ii) Discussing Ṣeese-ko 46 'not Jesus', Mr. Ndolo Menayame said that Ṣeese-ko was not likely for two reasons: (a) Ṣeese was a name (which seems to imply that proper names may have different realisations from ordinary nouns), and (b) 'if you use a rising intonation, you have this tendency to ask a question instead of having a negation - negation is falling'. Asked if Ṣeese-ko were possible, he said this 'would be a sort of exclamation of astonishment' (cf. the Rev. D. Ntoni-Nzimba's comment in (v) above that -ko denotes emphasis).
(iii) **b름**-**luwet** **dyata** 67 'as you are going along': **b름**-**luwet** **dyata**" was said to be also possible, with 'a rising intonation at the end of *dyata* because there is a question there'. However, the precise difference in significance between the two forms is unclear.

8.6.3: conclusions.

It would therefore seem that at least some of the variation in the texts must be ascribed to differences in focus or emphasis, though individual speakers may vary greatly in how coherently they are able to verbalise these differences, and most likely also in the extent and type of these differences.

8.7: summary.

The versions discussed in this chapter show slightly more examples of anomalous patterns than texts previously considered (8.3). Even among themselves, each version shows several differences from the other two (8.4), and the level of variation among them is higher than that encountered in other texts (8.5). There is also the problem of how to interpret the pattern of prefix to root-syllable bridge, which occurs here much more frequently than in other texts (8.4.5). Nevertheless, discussion of all these points shows that the text does not diverge so widely as might be thought at first sight from the system established for other texts: the root-syllable is of prime importance, and the problematic *v-cvc* pattern may even be a variant of the pattern with high pitch on the root-syllable (8.4.5); differences between the versions may be ascribed to idiolectal features or to hesitant reading (8.4.1,3); and the high level of variation may be due to the ambivalent nature of the *v-cvc* pattern and perhaps to the effects of hesitation (8.5).

Comparison of the three versions allows us to draw further conclusions about the function of anomalous contours as markers of focus (8.4.2), and in version Z we can distinguish several phrases where a variety of means is used to draw attention to what is being said (8.4.4). The same point is taken up in several of the Rev. D. Ntoni-Nzinga's comments on the text (8.6.1).
Endnotes to chapter 8.

1. As noted in 6.3, this method has been found the most useful of several tried. On the other hand, it involves the presentation of an excessive amount of data at one time, especially in this text, where there is a large variety of pitch-patterns. Nevertheless, it is essential to give a complete listing of the data on which conclusions are to be based; the reader who wishes to omit section 8.3 may therefore proceed to section 8.4, where the data is discussed.

2. There seem to be no syntactic or phrasal factors conditioning, e.g. shift v. non-shift, etc.

3. In this and following sections patterns from other versions will only be given when they have not already been previously noted.

4. Words without high pitch are listed here by function of the phrase they occur in merely as a convenient method of sorting words which have no pre-prefix; there does not seem to be any syntactic factor conditioning the contours (cf. endnote 2).

5. This is supported by the fact that the word without high pitch often appears in a phrase that has been given extra prominence by means of adjustment in key or fast rate of delivery - see 8.4.4.

6. In examining these figures it will be useful to remember that version A and B are from a kiManyanga speaker, while version Z is from a speaker of the southern dialect, kizombo. Version Z therefore provides a useful midway point between kiManyanga proper and the southern dialects kimbanz' akongo and kizombo; while not showing exactly the same features as Versions A and B, it is nevertheless closer to them than it is to the southern dialects (see also 9.3.6 and chapter 15).

7. The only alternative to the two derivations above is to consider $\sqrt[3]{\text{cvcv}}$ to be a falling together of $\sqrt[3]{\text{cyov}}$ and $\sqrt[3]{\text{cyvcv}}$; however, there seem to be no good arguments for this solution.

8. For example, given Z munze'engolo, A munze'engolo, B munze'engolo 'to a verdict', do we count the Z pattern with the A pattern, or with the B pattern?

9. For example, similar studies of variability (J.H. Carter, p.c.) in different versions of the same text as read by the Rev. Joao Makoondekwa showed very little contour variation, perhaps lower than 5%. Most of that variation consisted of occurrence/non-occurrence
of bridging, and realisation/non-realisation of high pitch on the subject, eg. (using Carter's notation)

\[ /nts\, an\, /yiv\, mphe \ldots 'the country of Angola \]

but \[ /nts\, an\, /yiv\, mphe \ldots . \] also has \ldots ')

There were also examples of such a type as

\[ /evu\, /iky\, vo 'the hope is that \ldots ' \]

but \[ /evu\, /iky\, vo. \]

The realisation \[ evu\] tended to occur when there was a following pause.

10. Exactly the same thing may happen in English. Consider the following sentences (marked using the conventions of chapter 2):

(1) I \, t\,d him to do \, it, \,\, and he didn't do \, it!

(2) I \, t\,d him to do \, it, \,\, and he didn't do \, it!

(In my idiolect, this sentence requires a longer pause at the comma than sentence 1.)

The second clause of both sentences conveys emphasis, although in (1) it is in what I have called 'higher' key, while in (2) it is in 'lower' key. Just as in kikongo, however, (see \textit{endnote 3 to chapter 4}) the emphasis has a slightly different connotation in each case. In (1) there is a sense of indignation and frustration that the person has not done what was asked of him. In (2) it is implied that the speaker did not really expect the request to be obeyed; there is a sense of 'well, that's typical! ...'.

11. The sequence might also be stable noun + relative verb, rather than subject + indicative verb, as assumed here. (J.H. Carter, p.c.)

12. The Rev. João Makondekwa, Carter's informant, also referred to a 'parsonical voice'. (J.H. Carter, p.c.)
CHAPTER NINE

The Earliest Research - kiManyanga, part two

9.1: introduction.

This chapter continues the discussion of kiManyanga pitch features by considering two texts recorded by Mr. A. Ndolo Menayame, along with a series of minimal pairs given by him. The earliest research on kiKongo pitch, that of K.E. Laman, will then be discussed, followed by a comparison of pitch patterns on a portion of the text with those predicted by Laman's systematisation.

9.2: the text and sample passage.

The first text (ll. 1-38) seems to have been composed first and then read into the recorder, while the second (ll. 39-46) is a portion of a letter, also read. As with all Mr. Ndolo's texts, these were read much more haltingly, in a lower key, and with much less animation than those contributed by the Rev. D. Ntoni-Nzinga. Stress in some cases would seem to be as important an exponent of prominence as high pitch, and in general the pitch range (ie. the distance between high and low) is smaller than in other texts.

Since a certain amount of intensity seems to occur automatically on the root-syllable, it is sometimes hard to decide on the marking to be used. For example, the marking \^cvcv suggests the contour / −/. but in the texts it often had to be used to mark a / −/ contour, eg.

\^ton\cvcv 10 'try' [−]
\^yaanc\cvcv 29 'she'
\^\mu\wav\cvn\cvcv 29 'the child'
and note \^\my\d\cvn\cvcv 19 'are'.

Another instance of uncertainty as to whether the prominence involves high pitch occurs with the marking \cvc\cvcv, suggesting the contour / −/. In the texts the second syllable often seems to drift down to give the contour / −\cvcv/, which might instead be marked \cvc\cvcv, eg.

\^\b\cvcv 20 'very much'.

In some cases it is difficult to know whether the first syllable is indeed high, eg.
loonga or loonga 23 'dish'.

It is noticeable that in all these cases the syllable in question has a long vowel; it may be that the second mora of a long vowel tends to be slightly lower in pitch than the first.

These features are again reminiscent of kileta, but there is also one last similarity – the distinctly rare occurrence of bridging. In the 24 lines of text sampled, only three examples of a bridge between words was found (11. 16, 31, 42) – see 9.3.11. This lack of bridging may be due to the manner in which the texts were read, but the resemblance to kileta is interesting.

The sample passages are 11. 11-23, 30-38, and 42-46.

9.3: patterns in the text.

9.3.1: nominals with syllabic prefixes.

In most instances these show a shift of the high pitch:

\[\begin{align*}
\text{bankaka} & \ 12 \ 'some' \\
\text{muniingu} & \ 20,22 \ 'tone' (cc. \ muniingu 11,19; muniingu 13; muniingu 22,34 'tones' (cc. muniingu 11,19; muniingu 13; mtiatu 12 'three' mtiya 12 'four' m†waani 19 'examples' m†waadi 16 'examples' m†zi 43 'pictures'.
\end{align*}\]

There are some examples of a prefix to root-syllable bridge:

\[\begin{align*}
\text{muniingu} & \ 11,19 \ 'tones' (cc. 22,34; 13; 30) \\
\text{b†waani} & \ 23 \ 'they are the examples'
\end{align*}\]

note also k†nyaanga 11 'kiManyanga'.

There are two instances of high pitch on the root-syllable:

\[\begin{align*}
\text{bab†tingi} & \ 35 \ 'many' (cf. 8) \\
\text{muniingu} & \ 13 \ 'tones'.
\end{align*}\]

9.3.2: locatives.

(i) shift: vao'mosi 38 'together'
9.3.3: genitives.

(i) shift: 
- byanda 19 'longer'
- myanda 32,33 'longer'

(ii) bridge: 
- zankaka [mpě] 14 'some (also)' (cf. bänkska 12)

(iii) retention: 
- andzila 33 'of a way'
- aftla 44 'of sending'
- ñambôte 45 'alright'.

9.3.4: connectives:

(i) shift: 
- ye-tuku 34 'and the origin'
- ye-kudikîla 15 'and nourish' (cf. ye-kudikîla 9)

(ii) bridge: 
- ye-muuntu 13 'to person'
- ye-zuunga 14 'to area'
- ye-mpöva 18 'with words'

(iii) retention: 
- ye-toonta 33 'and try'
- ye-sönîka 35 'and write up'
- ye-bwâabu 43 'to now'
- ye-ntângu 13 'and times'
- ye-minîngu 12 'with tones'.

Note also mumloonga 32,33 'in sentences'
münkî 33 'in what' (cf. künki 28)

Note also mu'songe 16 'to show'

(ii) bridge: 
mumuntu 13 'from person' (cf. ye-muuntu 13)
muzuunga 14 'from area' (cf. ye-zuunga 14)
mubînuvu 37 'to the questions'
mupoolystje-ko 44 '(not) in the post'

Note also mu'lwëska 45 'on arriving'.
9.3.5: anomalous patterns on verbs.

(i) shift:
- 'tusobele 20,20 'should we change''
- 'tubeki 31 'should we take''
- 'si-twabaka 38 'we will get''
- 'milenda 15,30 'they can''
- 'belenda 21 'they can''
- 'tuleenda 36 'we can''

(ii) bridge(?): 'zasikila 38 'which are correct''

9.3.6: conclusions.

As in previous texts it must be admitted that it seems hard to find any recurrent system in the data. There seems to be no common factor among words showing different pitch-patterns: placement in the sentence, position of pauses, function, and even tone-marking in Laman's dictionary (Laman 1936) all vary. Setting up tone-classes would in any case be open to the same criticisms as were discussed in 6.4.9.

General frequency of each pattern is, however, comparable to figures from the previous chapter (8.4.1). In the table below, the number of words with a certain pattern is given, and then expressed as a percentage of the total number of words in the passage:

<table>
<thead>
<tr>
<th>Pattern</th>
<th>This text</th>
<th>AB (average)</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>shift</td>
<td>30/169 18%</td>
<td>34+37/416 17%</td>
<td>42/208 20%</td>
</tr>
<tr>
<td>prefix to root-syllable bridge</td>
<td>20/169 12%</td>
<td>23+20/416 10%</td>
<td>9/208  4%</td>
</tr>
<tr>
<td>retention on root-syllable</td>
<td>9/169  5%</td>
<td>18+17/416  8%</td>
<td>27/208 13%</td>
</tr>
<tr>
<td>on last syllable (see 9.3.7)</td>
<td>15/169  9%</td>
<td>14+8/416   5%</td>
<td>5/208  2%</td>
</tr>
<tr>
<td>no high pitch (see 9.3.8)</td>
<td>22/169 13%</td>
<td>18+28/416 11%</td>
<td>32/208 15%</td>
</tr>
</tbody>
</table>

The most obvious conclusion to be drawn from the above table is that in four of the five categories this text most resembles versions A and B of the chapter 8 text. This is hardly surprising, since the same speaker is responsible for all three. The resemblance of this text to the Z version of the chapter 8 text, from a speaker of a southern dialect (cf. chapter 8, endnote 5), is not so close, but as will be seen in chapter 15 the two are closer to each other than
to any other text discussed in this thesis.¹

It will be noticed that in this text there are 30 instances of shift, 20 of prefix to root-syllable bridge, and only 9 of retention of high pitch on the root-syllable. This last figure is lower than the equivalent figure for versions A and B, but in general the patterns in this text shed no light on the problem of the \( V-cVcV \) pattern, and do not affect the arguments put forward in 8.4.5. The conclusion reached there, that \( V-cVcV \) may possibly be a variant of the high pitch on root-syllable pattern, may apply here as well. If they are variants, it seems clear that in this text the prefix to root-syllable bridge is by far the commoner of the two. In fact, retention of high pitch on the root-syllable of an inflected word only occurs to any great extent with the connective prefix (9.3.4).

9.3.7: high pitch on the last syllable.

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>nzai'lú 17</td>
<td>'knowledge'</td>
</tr>
<tr>
<td>ntaangú 44,45</td>
<td>'time'</td>
</tr>
<tr>
<td>mosí 18,31</td>
<td>'one'</td>
</tr>
<tr>
<td>mboki 19</td>
<td>'afterwards'</td>
</tr>
<tr>
<td>buná 38,36(?)</td>
<td>'then'</td>
</tr>
<tr>
<td>nate 43</td>
<td>'until'</td>
</tr>
<tr>
<td>kaansi 44,45</td>
<td>'but' (cc. kaansi 12,21)</td>
</tr>
<tr>
<td>kyená 11</td>
<td>'it has'</td>
</tr>
<tr>
<td>bana 38</td>
<td>'they will' (cc. bana 9,35)</td>
</tr>
<tr>
<td>lendá 17</td>
<td>'it can'</td>
</tr>
<tr>
<td>tulendá 30,32</td>
<td>'we can'</td>
</tr>
<tr>
<td>note also</td>
<td>bá lendá 21</td>
</tr>
<tr>
<td></td>
<td>m'ilendá 15,30</td>
</tr>
<tr>
<td></td>
<td>t'uleendá 36</td>
</tr>
</tbody>
</table>

9.3.8: words without high pitch.

subject: ming'ingu 30 (cc. 11,19; 22,34; 13)

object: mosí 18,31 'one'

adjunct: kaansi 12,21 'but' (cc. kaansi 44,45)
It is noticeable that most of these words are components of a verbal complex (auxiliary verb + main verb); the anomalous patterns may therefore signal the close syntactic relationship of the items (cf. 7.4.7).

9.3.9: auxiliary verbs.

(i) -eti 'am, are, is':

An examination of all instances in the text shows that -eti occurs 10 times, and can thus be taken as the base form. -eti occurs twice, in ngyeti badika 18 'I am beginning' (which may have an element of assertion) and in zeti vovwa 18 'which are being spoken'. -eti occurs once in tweti kumulumbila 7 'we are praying for him'; this may be contrasted with tweti loombila 'we are praying' in 5.

(ii) -(t)na 'have' + nominal, 'will' + verbal:

Whereas -eti is always followed by an infinitive, -(t)na may be followed by a nominal or a verbal. It is followed here by a nominal in 7 cases, and in 6 of these the pattern is -(t)na. The exception is kyena yē-11 'it has', which seems to be due to unusual pause placement - we would expect kyena ye-mint'ingu. When -(t)na is followed by a verbal (5 cases), the pattern is -(t)na in four cases (with exception banā 38 'they will'), i.e. where -(t)na is an auxiliary verb, it seems to have no prominence.

(iii) -lenda 'can':

The patterns on this auxiliary pose some problems. On the basis of lenda soba 17 'it can change', tulenda mona 30 'we can see', and
tulenda mpe 32 'we can also', we might postulate a base form *-lenda, with subsequent shift of high pitch rightwards and deletion of high pitch on the following main verb to form a complex. But bélenda zaaya 21 'they can know' and milenda soba 30 'they can change' seem to imply two shifts of high pitch leftwards, eg. a base form *milenda soba. Yet while tulenda mpe 32 suggests that we have *-lenda with shift rightwards because of mpe, milenda mpe 15 'they can also' suggests a high pitch appearing from nowhere; if we have base form -lenda with shift rightwards, where does the high pitch on mi- come from?; and if the shift is leftwards, where does the high pitch on -nda come from? We might assume mpe to have underlying high pitch, but why does it not show up in other cases, for example in 32? (See also 9.3.10.) Postulating -lenda with rightward shift for persons and leftward shift for classes is also impossible: we have tulenda mona 30 but tuleenda baka 36 'we can take'. It appears that the only way of reconciling these examples is to postulate a base form *-lenda, with a high pitch on the prefix when this refers to one of the classes, and often with no high pitch on the following main verb. Tuleenda remains anomalous, but may be emphatic. Here then is a further similarity to kileta (and perhaps kintantu) - we may have to postulate a few words (perhaps residual items in the lexicon) with final high pitch.

9.3.10: other items.

We may note that vo in this idiolect seems always to have high pitch (16,20,31,38,44) - in other dialects, including Carter's kiMbanza aKongo, it varies. Note, however, évo 'if' in 17 and 22.

Instances of mpe as follows:

zánkaka mpe 14 'some also'
milenda mpe 15 'they can also'
tusobele mpe 20 'should we change also'
tulenda mpe 32 'we can also'
dyaska mpe 7 'also again'
baau mpe 9 'they also'
mboki mpe 10 'and afterwards'.

The first three examples suggest that mpe has a high pitch of its own,
but it is probably better to think of it as shifting the high pitch rightwards on most occasions, though, as with -lends, it is difficult to come to firm conclusions because of the conflicting examples.

Examples of relative prefixes are as follows:

- ma-tuzblele 21 'what we want'
- bu-ýïkòondolo 45 'which suits [you]'  
- bi-tuvéent 37 'which we have given'
- bu-tubbakaaga 31 'when we take'.

It would seem that in these constructions there are two high pitches, one on the relative prefix and one on the root-syllable of the verb, though this basic pattern may be altered slightly by occurrence before pause, by emphasis, etc. Compare also

- kà-byalweeki-ko 43 'they have not arrived',

with the same pattern of high pitch on negative element and root-syllable.

There is one example of a final falling pitch, possibly for emphasis: bèen 20 'very much'.

9.3.11: bridges.

Most bridges on words are associated with occurrence before pause, eg. tsèbolò 14, munìngu 17, mpoùè 31, 31, ttòomba 33, zàeù 36, sòlo 42, gànbdò 45, yikòondolo 45. Sàkà in 44 occurs before ntaangù - the fact that both words have 'anomalous' patterns may be significant.

Taking 'bridge' in its usual sense here of 'an assimilation of a low pitch to surrounding high pitches', there are only three real bridges between words in the sample passages:

- ñàna bìfwaàdi 16 'give examples'
- mpoùà mosì mosì 31 'individual words'
- bèttì ttòoma 42 'they are doing very much'.

There is one instance of a 'broken' bridge (see 6.4.11.1):

- tsèbolò Àmpìntìngu 14 'the variation of the tones'.

There are three instances of 'bridges' between vo and an initial
high pitch on the following word, though these are better described as juxtapositions than as true bridges:

\[ \text{vù ntsòbolo 'that the variation'} \]
\[ \text{vù túbeki 31 'if we take'} \]
\[ \text{vù kútubáka 44 'if you don't get'.} \]

The low frequency of real bridges is reminiscent of kiLeta (cf. chapter 11).

One rising bridge occurs in

\[ \text{bu-tubbákaangs 31 'when we take'.} \]

In a few other instances we find an 'up-step', i.e. a lower high pitch and then a high pitch, which may be related to the phenomenon of rising bridge. Thus:

\[ \text{bunā t'ulseendā bāka ... 36 'then we can obtain'} \]
\[ \text{... ntsangū mu₃ 44-45 'time on ...'} \]
\[ \text{... ntsangū bu₃ 45 'a time that ...'.} \]

9.3.12: conclusions.

All in all, the text can be described in the terms used for previous texts, though the occurrence of prefix to root-syllable bridge is much more frequent than elsewhere. If it is considered a variant of the pattern high pitch on root-syllable, as suggested in 8.4.5, we have the usual variation between shift and retention of high pitch common from other texts. It would seem that retention of high pitch on the root-syllable and/or bridge from prefix to root-syllable are the most common patterns where affixes are concerned (9.3.2-4), while shift of high pitch is most common with syllabic prefixes (9.3.1) and verbs (9.3.5). However, as in other texts, exceptions are difficult to account for. The anomalous patterns of high pitch on the last syllable (9.3.7) and no high pitch (9.3.8) correspond to those seen in previous texts, though they are proportionally rather fewer. The language of this text shows few bridges or emphatic patterns, and shows some interesting similarities to that of the specimen of kiLeta (chapter 11).

9.4: minimal pairs.

There is one interesting part of this text (11. 23 ff.,) where the speaker gives examples of minimal pairs. In the text as written by the
speaker, the words of each pair were written in black ink, while
their meanings were entered in red ink; further, length was not
distinguished. The speaker was also asked on a later occasion to
repeat these examples, reading from his text. In the table below,
the above are given in columns 2, 1 and 3 respectively. Column 4
contains the corresponding items from Laman 1936 (marked according
to my notation, except that his 'acute high' mark (') has been
retained). Column 5 gives equivalent items from Carter 1980b.

<table>
<thead>
<tr>
<th></th>
<th>1 meaning</th>
<th>2 text</th>
<th>3 rep'n</th>
<th>4 Laman</th>
<th>5 Carter</th>
</tr>
</thead>
<tbody>
<tr>
<td>la</td>
<td>under</td>
<td>kūnsi</td>
<td>künsi</td>
<td>künsi</td>
<td>küntsi</td>
</tr>
<tr>
<td></td>
<td>pillar</td>
<td>kūnsi</td>
<td>kūnsi</td>
<td>kūnsi</td>
<td></td>
</tr>
<tr>
<td></td>
<td>plough, cultivate</td>
<td>vāta</td>
<td>vāta</td>
<td>vāta</td>
<td>-vāta</td>
</tr>
<tr>
<td></td>
<td>village</td>
<td>vātsa</td>
<td>vātsa</td>
<td>vātsa</td>
<td>vātsa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2a</td>
<td>dish</td>
<td>loongs</td>
<td>loonga</td>
<td>longa</td>
<td>loonga</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>educate, teach</td>
<td>longa</td>
<td>longa</td>
<td>longa</td>
<td>-longa</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3a</td>
<td>village</td>
<td>buta</td>
<td>buta</td>
<td>bulá/bula</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>distance, length</td>
<td>bulá</td>
<td>bulá</td>
<td>la/bulá</td>
<td>nnda’</td>
</tr>
<tr>
<td></td>
<td>give birth to</td>
<td>butá</td>
<td>butá</td>
<td>butá/butá</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4a</td>
<td>weapon</td>
<td>buta</td>
<td>buta</td>
<td>butá/butá</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

To facilitate discussion, it is best to simplify the marking of
Ndolo’s items, and we will do this by adopting the convention that
( will be re-written as v, and ( as ( (i.e. ( is taken as a conditioned
variant of final high pitch). Thus (la) kūnsi will be re-written as
kuンsi, and (4b) bulá as bulá.

Having done this, we notice one interesting point: pairs 1, 2 and 5
in columns 2 and 3 have opposite patterns, thus:

5a  butá
5b  butá

The patterns are the same, but seem to have been switched. It is also
noticeable that column 3 items 1a, 1b and 5b show more resemblance to
the equivalent patterns in columns 4 and 5 than the same items in
column 2 do.

We might therefore suggest that there is a discrepancy between
the items of the text and the meaning assigned to them. When putting these items into longer sentences, Mr. Ndolo may have forgotten which item of the pair came first; he then went back to the pairs and added the meanings of the words (as mentioned above, these are entered in ink of a different colour) following the order of the longer sentences (11. 25-30). When he was asked to repeat the minimal pairs, he followed the order of the meanings, and this accounts for the switched patterns of pairs 1, 2 and 5.

The table can therefore be revised as follows:

<table>
<thead>
<tr>
<th></th>
<th>under</th>
<th>kunsi</th>
<th>kunsi</th>
<th>kunsi</th>
<th>kuntsi</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>pillar</td>
<td>kuuni</td>
<td>kuuni</td>
<td>kunsi</td>
<td>--</td>
</tr>
<tr>
<td>2A</td>
<td>plough, cultivate</td>
<td>vata</td>
<td>vata</td>
<td>vata</td>
<td>-vata</td>
</tr>
<tr>
<td>B</td>
<td>village</td>
<td>vata</td>
<td>vata</td>
<td>vata</td>
<td>vata</td>
</tr>
<tr>
<td>3A</td>
<td>dish</td>
<td>loonga</td>
<td>loonga</td>
<td>longa</td>
<td>loonga</td>
</tr>
<tr>
<td>B</td>
<td>educate, teach</td>
<td>longa</td>
<td>longa</td>
<td>longa</td>
<td>-longa</td>
</tr>
<tr>
<td>4A</td>
<td>village</td>
<td>bula</td>
<td>bula</td>
<td>bula (bulu)</td>
<td>--</td>
</tr>
<tr>
<td>B</td>
<td>distance, length</td>
<td>bulu</td>
<td>bulu</td>
<td>bulu (lu)</td>
<td>nda</td>
</tr>
<tr>
<td>5A</td>
<td>weapon</td>
<td>buta</td>
<td>buta</td>
<td>buta (buta)</td>
<td>--</td>
</tr>
<tr>
<td>B</td>
<td>give birth to</td>
<td>buta</td>
<td>buta</td>
<td>buta</td>
<td>-wota</td>
</tr>
</tbody>
</table>

We can now see the obvious correlation with Laman's and Carter's patterns. Only two contours appear on the words: rising (low pitch on the first syllable) and falling (high pitch on the first syllable) - see chapter 14. Strong stress coincides with high pitch except in two instances: 2B vata (but note vata in column 3), and 5B buta (but note buta in column 3). There would thus seem to be a good case for suggesting that these pairs show, not tonal contrast, but pitch-accent contrast² (cf. 3.5.4.2).

The fact that vata 'village' and vata 'cultivate' both have the pattern vata in Laman's and Carter's versions suggests that there the two patterns may have fallen together, or that there is a certain amount of variation in the particular class to which a word may be assigned (this is already apparent from other comparative data - see chapter 14)³.
Perhaps most intriguing of all is the question of why these two patterns should not appear consistently in the text. This is especially obvious when the words cited occur in longer utterances (11. 25-30) — here they all have high pitch on the root-syllable, with the exception of 3B longa. As it seems otherwise unnecessary (and even impossible) to distinguish between falling and rising word-classes (cf. 6.4.9), we must conclude that words in isolation may be distinguished as to falling or rising class, but that this distinction may disappear when the words are placed in context in connected speech: their contours are then conditioned by external factors such as occurrence with certain prefixes, occurrence in a certain syntactic environment, focus, emphasis, and so on. These points will be more fully discussed in chapters 12 and 14.

9.5: other research: Laman.

Since kiManyanga is the dialect in which Laman did most work, it will be of interest to see if there are any correlations between his work and the text as discussed above. Laman 1922 has been discussed in depth in an unpublished paper, of which Donnelly 1980 is an abbreviated version. Brief references only will therefore be made to Laman 1922, and the main emphasis here will be on discussing Laman's view of kiKongo pitch as set out in the 'Musical Tones' section (pp. xii-xxxvii) of the introduction to Laman 1936. What he says here is a summary of his earlier work, but there is some revision and advance, mainly in the area of general formulations. All quotations are translated from the original French.

9.5.1: pitch features.

Laman first describes what he sees as the role musical tones play in a language. In European languages, he says, we can speak of 'an emotive tone or a syntactic tone serving to modify the sense of a word in a certain position, to accentuate the expression of one thought at the expense of another'. (para.9) In most African languages, however, the tones 'serve also to distinguish different fundamental ideas expressed by the words of the language ... We can therefore speak of a tone of signification (a semantic or etymological tone), and also of a grammatical or syntactic tone'. (para.10) Laman seems here to be trying to express the difference between what we now call intonation and tone.
He notes that pitch is relative - a great advance on Laman 1922, when he held that it was absolute. (para.13) He also recognises downdrift, though he does not use this term - a hl pattern usually extends over 5 or 6 semitones, while a lh pattern extends only over 3 (para.14) - cf. also 9.5.4.3. He contends that tone is an integral part of the syllable (para.17) and concludes that 'the semantic tone of a word seems to be the same in all dialects, even the ḭ [acute] tone, in spite of the variations which it undergoes according to the various spoken forms' (para.18) - cf. chapter 14.

9.5.2: intensity.

There is 'an intimate correlation between the tone of a syllable on the one hand and its intensity and duration on the other ... A final syllable with a tone higher than the preceding syllable always has great intensity ... A syllable, even a prefix, with a tone higher than the following syllable is often the most intense [in the word]' (para.19) Laman seems to be saying that intensity is usually associated with high pitch, but he also cautions us that 'this melodic intensity should not be confused with what is called in general the accent of intensity, or even, quite simply, the accent'. (para.19) 'In Kongo, words have, as a rule, the principal (etymological) accent [primary stress, called root-stress in Laman 1922] on the root-syllable, and a secondary (rhythmic) accent, fairly strong, on the penultimate [perhaps penultimate length]. The melodic intensity can more or less weaken the etymological accent on the root-syllable, but this latter can never become atonal [ie. totally without accent]'. (para.20)

It is unclear what exactly Laman means here. Perhaps he is saying that there is an expected pattern of intensity in the word, but that where this 'clashes' with the pitch pattern the place of intensity is moved to coincide with the high pitch. This seems apparent from para.21, where he gives the examples kɪba [- -] 'walk' and kɪba [ - ] 'wound'. Here the intensity is on the root-syllable in the second example (where it happens to coincide with the high pitch), but in the first example the root-syllable intensity has been 'weakened' by the 'melodic intensity' of the rising 'melody', so that it is the final syllable (which also bears the high pitch) which is the most intense. This interpretation would also account for Laman's comment
in para. 21 that 'the melodic intensity has a semantic and grammatical function', for the rising and falling contours do of course have these functions. The three paragraphs 19-21 are an example of Laman's tendency (frequently apparent in Laman 1922) to establish various categories, related by 'rules', for particular parts of the data, rather than trying to formulate general principles that would hold good over several parts of the data. However, it does seem clear that his comments agree with the findings of 3.5.4.

9.5.3: tonal classes.

In para. 22 Laman distinguishes 'four very characteristic tones which serve to form the four principal tonal classes, which are the origin of the semantic tones and the grammatical tones. They also constitute the principle for the melodic notation in the dictionary'. These four tones are:

1. \( \hat{a} \), 'low tone', 'indicating the grave class with rising melody'; \( [-] \);
2. \( \hat{A} \), 'strongly accentuated high tone', 'indicating the double acute class with falling melody'; \( [-] \);
3. \( \hat{a} \), 'high tone', 'indicating the acute class with falling melody'; \( [-] \);
4. \( \tilde{a} \), 'mid tone', 'indicating the mid (mid-acute) class with uniform [ie. level] melody'; \( [-] \).

9.5.3.1: the acute pitch.

Laman discusses the 'double acute tone' (called the 'acute pitch' in Laman 1922) in paras. 23 and 24. This pattern is interesting in that it straddles the boundary between rising and falling classes. Laman had had occasion to refer to it many times in the earlier work, but now he seems to have a better idea of how it might fit into his classification of the patterns. 'The double acute tone (\( \hat{a} \)) is a constant tone. The ordinary acute tone (\( \hat{a} \)) is on the contrary a variable tone. The difference between the two tones is often very difficult to grasp. But in inflection and in derivation this difference is apparent in the variations of the acute tone'. (para. 23) In other words, Laman sets up the two different classes on the basis of the different behaviour of the words in context, even if in isolation there is little difference in the contour.
He attempts to account for the double acute tone by reference to
dialectal variation. 'The double acute tone is a grammatical tone as
well as a semantic tone. It should be understood that it constitutes
a variation of the grave tone [ie. the rising pattern, (1) above].
This noteworthy double acute tone is produced - for grammatical
reasons as often as semantic ones - by a replacement of the original
rising melodic intensity [-] ... by a falling one [−−], for
example, nlongi [−] 'schoolmaster', longi [“] 'lesson'. 'In Bembe,
verbs and substantives have retained the same strongly accentuated
and falling acute tone, [eg. landa [\−] 'follow']. But in other
dialects: landa [\−]. It seems that, in some dialects of the North
and South, the fall of the tone has disappeared and the grave tone
only remains', eg. landa [−]. (para.24)

The number of possible patterns here for words in the same tone-
class is striking, especially when we consider that this same tone-
class shows most variation in the vocabulary lists of other researchers
such as Daeleman and Carter (see chapter 14, and Appendix 5/3). In this
paragraph Laman has referred to the following patterns:
(i)[−], (ii)[−], (iii)[−], (iv)[−], (v)[“].

His comments on Bembe and the Northern and Southern dialects suggest
that Laman thought of the acute falling contour as 'original', and
that this developed into the rising contour. However, a number of
factors in his own work (eg. the lesser frequency of the acute falling
contour as opposed to the rising contour, the fact that the rising
contour is subject to further variation while the acute falling contour
is not -cf. 9.5.6.1,2) actually suggest the opposite, and the rare
occurrence of the rising contour in the texts I have analysed would
tend to support this. We might therefore picture the arrangement of
patterns above as a development, resulting in a transference of the
high pitch from the final to the first syllable (though the place of
(iii) in this derivation is arguable, and may in fact represent a
divergent line of development). This derivation would also account
for the lack of further variation with the acute falling contour,
since it is already a derived contour.

The fact that Laman considers the complex of patterns related to
the acute pitch as dialectal variants is some advance on his earlier
work. It shows, not only that he now has some idea of underlying
forms (cf. my comments on Laman 1927 in Donnelly 1980), but that
kiKongo words may have a variety of surface patterns (cf. the example
vembo 'shoulder' $\left[\overline{-\_}\right]$ or $\left[\\_\_\_\_\right]$ in para.17). If there is this variety
of realisations for the rising class, it would mean that it would be
more open to influence from the falling class, which has only two
realisations, falling and level (see 14.3). The shift of high pitch
resulting from the (i-v) development above would also mean that there
was some precedent for the convergence of the rising and falling
classes. I have argued for both these points in 14.13.

9.5.4: function of pitch.

Laman considers 'tones' (i.e. pitch) to have four main functions:
'According to their use and their signification, we have the following
tones: (i) semantic or etymological tones indicating a determinate
meaning for the isolated word; (ii) grammatical or syntactic tones
indicating a grammatical relationship for the word in the phrase;
(iii) emotive tones indicating various sentiments; (iv) tones of the
phrase, indicating at the end of the phrase the desired effect,
either greatly rising or greatly falling'. 7 (para.30) Again, the
paragraph shows that Laman had a clear idea of the different possible
uses of pitch in the language, and it is a pity that he did most of
his work on (i) and (ii) only, and wrote little about (iii) and (iv).
The four functions Laman distinguishes will be discussed in turn,
drawing on his comments.

9.5.4.1: semantic and syntactic pitch.

Laman has assigned each word to one of four tone-classes (see 9.5.3),
and since minimal pairs occur (e.g. kibé 'walk', kíba 'wound'), pitch
can be said to play a semantic role in differentiating meaning. Table
I (Laman 1936, pp. xix-xxiv) 'Comparative Tables of the Semantic Tonal
Classes and their Tonal Forms' gives a more detailed description of
the four tonal classes than was possible in para.22. 8 The various
contours occurring in each class over words of different length are
exemplified and marked using the basic system of four diacritics.

However, the 'semantic tonal classes ... are subject to numerous
modifications, because there also exist grammatical and syntactic tonal classes in the inflections as well as according to the position of words in the phrase'. (para.31) That is, in Laman's opinion, 'The tone of a syllable and the tones (melody) of a word or group of words depend, leaving accent [ie. intensity] and duration out of consideration, on the following four facts:

(a) the tonal class in question;
(b) the position in the word or in the phrase;
(c) the initial phoneme and the internal one [ie. elision];
(d) the neighbouring tones.' (para.26)

He believes that 'one can indicate fixed rules for the musical tones of Kongo'. (para.25)

In the context of Laman's systematisation (and to some extent outside that context) these comments seem to be true, and Laman discusses them in succeeding paragraphs. The tonal class (a) is obviously of importance in determining the final pattern of the word, and elision (c) may condition this pattern, as indeed it does in Carter's dialect (Carter 1973, pp. 150-1). Para.28 shows the effects of elision on the contours.

The reference to 'position' (b) may be a reminder that significant pitch is relative and not absolute (cf. para.13), but it is also possible that Laman may be using the word to mean 'sequence' or even 'function'. In simple terms, a noun occurring before a verb is a subject, while a noun occurring after a verb is an object; likewise, a syllable occurring after, for example, the genitive element, may well have a pitch other than it would normally have, as Laman endeavours to demonstrate in para.27. Here he gives some examples of the 'tonal laws' referred to in para.25 as they apply to the genitive, their function being to 'harmonise and assimilate'. Dealing first with the a tone-class, Laman gives four rules: assigning a high pitch to the genitive element, lowering a high pitch after a high pitch, raising a low pitch after a high pitch, and lowering all syllables after a raised pitch. The four together can be simply rephrased as 'the genitive element moves the high pitch of the word one syllable leftwards', eg. kála 'coal', makála 'coals', -ákala 'of the coal', -ámákala 'of the coals'. This may not be exactly the reference we would give to 'position/sequence/function' nowadays, but the general idea does seem to be
valid: Carter (1973) made syntactic sequence a cornerstone of her systematisation, and position relative to certain items such as predicant is of some importance in describing bridging in Daeleman's (1966) and van den Eynde's (1968) systematisations.

By his reference to 'neighbouring tones' (d) Laman may again be referring to relative pitch, but it is more likely that he means the general 'texture' of the language, or the dialectal accent, in view of his comments in para.29. Here he discusses 'intonation', by which we should understand, not intonation in the modern sense, but the more original meaning of 'melody'. 'As for intonation, it is not the same in all the dialects. In the speech of Kingoyi, for example, one 'sings' - in other words, the voice rests for a longer time on certain tones in the melody of the words, such that the intonation becomes more marked and approaches a chant. In the Mazinga dialects, on the other hand, the usual melody of the words becomes a richer modulation, which renders the tones of this dialect hard to grasp. [cf. Laman 1922, articles 19,20,126,128.] ... In the Northern dialects the tone of the prefix has a greater influence than in the other dialects. (para.29) Laman is therefore trying to say that the realised pitch pattern of a word depends to some extent on the general pitch system in the dialect in question, which is unarguable. Unfortunately, his tantalising comments give only a glimpse of the possibilities - for example, how far are the variant patterns discussed here a case of intonational perturbation in the dialect concerned, and how far a case merely of variant realisation for the same underlying tones?

In the context of the systematisation proposed in this thesis, the four facts listed in para.26 are of some relevance. Tonal class (a) has not been a major part of this analysis (see 6.4.9, 14.13), and there has been no cause to propose special realisation rules for (c) elision. However, tonal classes for words in isolation are quite likely (see 9.4), and (b) position in the word or phrase and (d) influence of neighbouring tones have both been taken as integral conditioning factors for the realised contours. It has been suggested many times (in 8.4.2 to take just one example) that to account for the patterns fully we must take into consideration the phrase as a whole, and not just the individual words.
9.5.4.2: emotive pitch.

Para.33 repeats what was said in para.18 about the 'onomatopoeic nature' of the tones; Laman considers that this has an effect on the intonation or melody: 'Concerning the emotive tone in Kongo, where affection [i.e. emotion] does not play the same role at all as in European languages, we consider that the intonation has entirely different causes'. Laman seems to imply that the intonation of the sentence does not depend on the emotional state of the speaker at the time of the utterance, as in European languages, but on the semantic reference of the words. It is difficult to see how this interpretation differs from the previous descriptions of lexical and grammatical tones - indeed, examples of the latter are included in this paragraph: genitive, locative, imperfect, future, and even the imperative, eg. tala 'to look', tala! 'look!'. It may be that Laman was hampered by the difficulties of conceptualising tonal phenomena at the time he was writing, for it is plain that he means something more, otherwise he would not discuss it in a separate section.

The clue may be that he talks of a 'raised melodic intensity [i.e. pitch contour] ... serving to express, for example, a rapid movement, ... great intensity, ... a shout', etc., eg. maalu 'quickly', but maalu-maalu 'very quickly'. Likewise, 'the weakening of the melodic intensity [i.e. a lowering of the pitch contour] expresses, for example, a slow movement, ... an order', etc., eg. kunu 'nearby', but kunu-kunu 'very close by'. It will be obvious that these comments are reminiscent of phenomena already discussed in previous chapters: bridging, use of different keys, and relevance of these to emphasis.

Laman may here be struggling to express the fact that there is a type of 'emotive tone' in kikongo, used in limited contexts, even if there is not the full range of emotionally-based intonation found in some European languages. The texts I have previously discussed are certainly amenable to this interpretation. The only way he can express this is to say that the 'emotive tone' is due to a certain 'melodic intensity' or pitch contour associated with qualities possessed by the words in the phrase. But of course he then has the problems of trying to explain (i) why a similar 'melodic intensity' (eg. on verb forms or the genitive) should not have a similar effect, and (ii) how
the 'melodic intensity' associated with qualities the words express is different from the semantic tones of the words (cf. also 12.4). These difficulties perhaps explain why his comments are hard to understand. His ideas here are a slight advance on those in Laman 1922, since here he refers to whole contours, not just specific pitches such as high, low or acute, having the 'emotive' effect, but all in all his statements are still not clear enough.

9.5.4.3: phrase pitch.

Laman next discusses the 'phrase tone' (para.34): 'This tone is modified according to the contents of the phrase as well as according to the different tonal classes. We have already said that one can make certain words in the phrase stand out by giving them raised or lowered tones, a richer modulation. [Italics mine.] These emotional tonal groups are however influenced and modified by the neighbouring tonal groups in the same way that the tone of one syllable influences that of another. Thus the tones of the phrase progressively approach each other\(^{10}\) (lit. become equal), except at the end [of the phrase], where, rising very high or descending very low, [the tones] arrive at a culminating point, which consequently indicates the desired effect'.

Laman seems to be describing here something like the pausal phenomena mentioned by the Rev. D. Ntoni-Nzinga (see 8.6.1.iii). According to the latter, high pitch at the end of the phrase (of which pausal upturn is the most common example) denoted continuity or 'unfinishedness', whereas low pitch denoted finality or completeness. Such an interpretation would fit Laman's comments, though of course it should not be ruled out that he has in mind some other type of contour, denoting emphasis.

He refers to a transcription in Laman 1922, pp. 135-40 of a quarrel between two women: 'The study of these examples shows us (i) that one tonal group is easily distinguished from others; (ii) that, in accented words, the interval [ie. the pitch range] is greater; (iii) that the tones of the phrase have a levelling influence on the tonal groups to render the tonal effect at the end [of the phrase] so much the greater'. He gives the sample sentence
eh, mama nge Mas'umbu kamba makutu maku "tele"?
'hey you, Mrs. Masumbai, tell me, are you listening properly? (?).'

The paragraph again raises echoes of phonological phrases, Carter's tone-phrases, pausal phenomena, emphasis, and neutralisation of tonal differences (perturbation). The last part of the paragraph definitely suggests that the contours of words in context may be significantly different from those of the same words in isolation.

9.5.5: conclusions.

Laman's essay might have been better if it had been a new work, instead of simply a re-working of Laman 1922. It follows the plan of the earlier work fairly closely, and this means that little space is given to aspects such as emotive tone or phrase tone. Laman's theories are a little muddled by modern standards, but are still serviceable, and with a little interpretation can tell us a lot about the kiKongo pitch system as he has abstracted it. His comments in para.24 on pitch variation according to different dialects is interesting, since it shows the variety of contours possible in one tone-class. This may have relevance in discussing vocabulary comparison, though his terminology is not so precise as we might perhaps wish. His references to intonation, emotive tone and phrase tone all bring to mind comments by other researchers, as I have pointed out above. The existence of these similarities in the descriptions implies that there is indeed a certain core of features in the kiKongo use of pitch which has been apparent to those who have worked at different times with different dialects, even though they have chosen to put this core in the context of different systematisations.

9.5.6: Table III.

Further evidence that kiKongo, even in Laman's systematisation, may have unexplained contour variation becomes apparent when we study closely Table III, 'Comparative Tables of the Tonal Declensions of Substantives' (Laman 1936, pp. xxxiv-xxxv). This table gives examples of words from the three tone-classes a, a, and a (which includes a) - cf. para.22. Examples are then given of the contours of these words in the genitive, with a possessive pronoun or demonstrative, and in the
locative. Some interesting variations in the contours of individual words are noticeable, about which there are no explicit rules in either Laman 1922 or 1936.

9.5.6.1: the ‘a class.

Taking the rising (‘a) class first, we notice tokó 'young man', but -atoko 'of the young man' and -amátoko 'of the young men'; also ngondá 'moon', -ángonda 'of the moon'. It will be recalled that Laman refrains from proposing rules for the rising class genitive in para.27, but the impression he gave in Laman 1922, article 82 was that the contour was almost level. With the tokó examples, this can be seen to be a partial description, but for the ngondá example it is plainly not even that.

In my examination of Laman 1922 (Donnelly 1980), I came to the conclusion that the genitive element tended to shift the high pitch one syllable to the left - again, this partially explains -atoko but not -amátoko or -ángonda. The question is not a simple one, but it is revealing to note the general similarities to various contour patterns in the text by Mr. Ndolo discussed above. There is a further similarity in that many locative examples in Laman’s table have high pitch on both locative prefix and root-syllable, eg. in this class, mängó 'mountain', kümôngo 'to the mountain', vámôngo 'on the mountain', nósango 'leopard', mùngó 'about the leopard'; dyambú 'matter', mûdyambù 'about the matter'.

Other examples of unexplained variation are muntú 'person, man', but kwâmuntu 'to the person', mûntú ámá 'my husband (?)', mûntú wau 'this man', wau muntú 'the man (?)', mûntú ə 'that man (?)'. Note again the apparently varying length of the root-syllable. Also kandá 'family', but dyàdi kândá 'the family (?)'. This is comparable to wau muntú in that the preceding demonstrative attracts the high pitch one syllable leftwards, but note the bridge in the second example. Note also the differing contours of kandá dyámi 'my family' and mûntú ámá, showing that the pitch behaviour before possessives cannot be predicted with the rules Laman has given us.

9.5.6.2: the ‘á class.

Going on to the acute class (‘á), it is clear that what Laman says about it being more 'stable' is very true. Nevertheless, there is the interesting point that he cites kandá dyámi 'my palm-tree' when
talking about the ā class in para.27, but that this appears here as kānda dyāmti < kānda 'palm-tree'. It may be that kānda dyāmti in para.27 is a misprint (cf. kānda dyāmti < kānda 'family'), but if it is not, it suggests that the acute falling and the rising contour are not only variations, but interchangeable. This in turn raises the question of how important the rising contour is. It will have been noticed that in most of the inflected examples cited in 9.5.6.1 the rising contour is replaced by a falling one; as I have suggested elsewhere (eg. 14.13, cf. 16.3.2.2, 9.5.3.1), this may have been the original reason for the convergence of the falling and rising classes. The place of the acute class in such a development is intriguing - is it a distinct class, or an intermediate stage? Arguments for the second view are easy to find, but in favour of the first view we must note that the rising and acute falling classes show different behaviour with locative and genitive prefixes, in that these prefixes do not have high pitch in the latter class.

9.5.6.3: the ā class.

Anomalous variation is also manifest in the falling class (ā). It will be remembered that we concluded from Laman's para.27 that the genitive contour for this class could be accounted for by postulating a shift of the basic high pitch one syllable leftwards (9.5.4.1). But this does not happen in muiana 'child', -āmuiana 'of the child'. There are also the examples -akooko 'of the arm' and -ādrītīsu 'of the eye'. Note that these nouns all have vowel-commencing stems; Laman may also have been uncertain about their classification - ātīsu, for example, is marked with the acute pitch in Laman 1922. There are further examples of high pitch on both prefix and root-syllable, as often occurred in Mr. Ndolo's texts: kufola 'to the path', kunkenge 'to the market', vamwana 'on the child', munkumbu 'in the name', mulanda 'in order to follow'.

An interesting set of examples is mfumu 'king', mumfumu 'about the king', dyamfumu 'of the king', mfumu yi 'that king (?)', mfumu yaayi 'this king', yaayi mfumu 'the king (?). The pairs yaayi mfumu/wau muntu and mfumu yaayi/muntu wau suggest that succeeding demonstratives are less prominent and therefore have no high pitch of their own, while preceding demonstratives (= definite articles?) are more
prominent and do have a high pitch.

9.5.6.4: other examples.

Two miscellaneous examples are babons'q 'all', and adakento 'of the women'. Note that the latter has two high pitches, as happened once or twice in Mr. Ndolo's text in chapter 8. This suggests (along with other similarities pointed out above) that Laman's data and Mr. Ndolo's speech are broadly comparable (see also 9.6).

9.5.6.5: conclusions.

It can therefore be seen that the examples in this table provide some good evidence for a large degree of overlap for the tone-classes in context. In the face of this evidence, it would seem that there are only two choices to be made: either (1) we must postulate more tone-classes (in fact, Daeleman and Carter could be said to have taken this approach), or (2) the factors conditioning pitch contour changes have not been fully described. In turn, when we consider the correlations of vocabulary items (see chapter 14), and see that there is a recurrent two-fold grouping, it would seem that the second choice is the most likely one. It is this that I would argue for, suggesting that factors of emphasis or focus ('emotive tone' and 'phrase tone', as Laman calls them) may have played a part in the realisation of the contours in Laman's examples, though he never described these phenomena systematically.

9.5.7: other tables.

9.5.7.1: Table II.

Table II, 'Comparative Tables of the Tonal Conjugations of Verbs' (Laman 1936, pp. xxv-xxxiii) sets out the tonal behaviour of various tenses and verbal forms in 8 sections, the first six of which deal with 'primitive verbs', and the last two with 'derived verbs'. These tables are a great advance on the way the data were dealt with in Laman 1922, though it is only the first three sections, dealing with the most common tenses, that contain enough examples from which to draw firm conclusions about verbal contours. There is a major difference between rising and falling/level classes in that the former has a high pitch on the prefix only very rarely, whereas in
the latter class this or the root-syllable is the most common place for the high pitch.

Examination of these first three sections of the table show that where verbal inflections of disyllabic radicals are concerned, there is no real difference between falling and level classes, so that there is really only a two-way distinction between rising and falling classes (later researchers such as Carter and Daeleman have come to similar conclusions in their systematisations). Laman may have realised this, because in the next four sections of his table he makes no reference to the level class. Section 4 deals with interrogative forms, while Section 5 gives examples of various negative forms. Section 6 exemplifies the infixed object substitute, and the last two sections deal with what Laman calls 'derived verbs': relatives in Section 7, and passives in Section 8.

Laman concludes with some examples which he quoted in Laman 1922, and which, I argued in Donnelly 1980, imply contour variation due to focus:

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\text{mskaya m\-nk\'ombele} 'the leaves that I swept away'
\text{mak\'ya m\-nk\'ombele} 'the leaves with which I swept'
\text{mbek\'i nganga} 'I caught the doctor'
\text{nganga mbek\'i} 'I caught the doctor'
\text{mbend\'i nganga} 'I hit the doctor (?)'.
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9.5.7.2: Table IV.

Table IV, 'Comparative Tables of the Tonal Formations of Words' (Laman 1936, pp. xxxvi-xxxvii) gives examples of extended verbs (Section 1), deverbative nouns (Section 2), and derived nouns (Section 3). The secondary formations seem to follow fixed patterns: thus, falling verbs longer than two syllables have a level contour in the infinitive (which again shows that falling and level classes are merely two parts of one larger grouping); in derived nouns, the prefix has low tone, unless it precedes a nasal (augment), in which case it has high tone. More information and examples are given in Laman 1922, chapter 5.
9.5.7.3: conclusions.

Much more could be said on the data in these two tables, but this much is included to show that Laman's systematisation takes account of most of the grammatical areas of the language. The main shortcoming of these sections of the analysis is that Laman makes little attempt to formulate general rules for the patterns, and does no more than list the examples.

9.6: comparison of passages.

Following the practise of other chapters, a portion of Ndolo's text (N) will be compared to the same text marked according to the principles outlined in Laman 1936 (L).

9.6.1: same contours.

Leaving aside conditioning of contours by pausal features, etc. (eg. L m pope / N m pope 31 'words'), we notice that there is a high degree of correlation between the two sets of contours. Of the 142 words in the passage (ll. 11-23,30-38), almost half (70) show a coincidence of high pitch, eg. ndwenga zëto 15 'our knowledge', nk' tuzôlele 21-22 'what we want', évo (passim) 'whether', vó banâ sálâ vakimosi 38 'if they will work together', etc.

In several cases one of two high pitches in L matches one in N, eg.

L zámpova / N zámpova 18 'of the words'
mubyuuuu / mubyuuuu 37 'to the questions'
múzuunga / múzuunga 14 'from area'
ye-bândweenga bandzéndza / ye-bândweenga bandzéndza 37 'and foreign scholars'.

It would seem that these could easily be accounted for by postulating a difference in tonological rule between the two dialects (where L's dialect says 'shift the high pitch leftwards', N's says 'spread the high pitch leftwards'), and so examples like these have been counted in this section.

9.6.2: similar contours.

There are also about another 50 words where the contours are very similar, and where recognition of certain simple principles produces more coincidence:
(i) although L's dialect regularly has final high pitches, these are much less common in N - we must postulate a tendency in the latter for the high pitch to 'gravitate' towards the root-syllable, eg.

L bazonsaanga / N bazónsaanga 12 'they speak'
maambú / m'àmbu 20 'things'
baantu / bántu 21,35 'people'
longukà / l'ònguka 32 'study'
vuuvû / vuûvu 35 'hope'
ndongokolò / ndóngokólo 36 'researches'.

(ii) this tendency in N to avoid final high pitch leads to monosyllabic stems having their high pitch shifted to the penultimate (this may also apply in L, but since this is uncertain the words have been marked as if it does not apply), eg.

L miyà / N miyà 12 'four'
byanda / byànda 19 'longer'
munki / mûnti 33 'in what'
(?) ngyetì / ngûti 16 'I am'.

(iii) in N such verbal contours as misobaanga L13,34 'they change' are realised as misobaanga N13,34; again, the high pitch seems to gravitate to the root-syllable. There is also a parallel in the fact that verbs with level basic contour appear to be a subset of the falling class - cf. 9.5.7.1.

(iv) also in this section are:
(a) L amìntìngu / N amìntìngu 32 'of the tones', which appears to be a variant of the spreading rule mentioned in 9.6.1;
(b) L mumìloonga / N mumìloonga 33 'in sentences', which implies stating that the acute pitch does not exist in N, or at any rate is not so stable as it is in L (this is already implied in the spreading rule (9.6.1) above, cf. L bandzëndza / N bandzëndza 37 'foreign');
(c) L bìfwaanì / N bìfwaanì 19 'examples'; L mûntìngu / N mûntìngu 22 'tone'; these imply that in certain cases a syllabic prefix can trigger a high pitch shift.

(v) there are a few examples which seem to be related, even though it is not entirely clear how we might account for them, eg.
9.6.3: different contours.

In the third section are 22 words whose contours in L cannot really be related in any consistent way to their contours in N. It is intriguing to note that these are almost the same sequences which were difficult to describe in my discussion of the text (9.3), and which necessitated the postulation of some non-tonological factor such as emphasis to account for them. It would appear that Laman's systematisation too would find these sequences difficult to deal with.

Eg.  
L zet' vówua / N zeti vówua 18 'which are being spoken'
ngyet' bádiká / ngyet' bádiká 18 'I am going to begin'
kaamba / kaamba 21,22 'to say'
vówua / vówua 21 'now'
boonso tulenda mona míningu / boonso tulenda mona míningu 30 'as we can see, the tones ...' (note that this sequence occurs when the speaker is launching into a new part of his text, after giving the examples).

9.6.4: conclusions.

The degree of close correlation between the two texts is therefore in the order of 70%: 70 examples from 9.6.1 + at least 30 from 9.6.2 = 100/142. This is no small proportion when we consider the time difference (about 50-60 years), the fact that Laman's systematisation was not based on Ndolo's idiolect, and the fact that Ndolo's contours may have been influenced somewhat by emphasis. The differences between the two texts are also illuminating since they suggest that slightly different tonological rules apply in each text: spread of high pitch instead of shift, rarity of final high pitch, greater tendency for high pitch to occur on the root-syllable, apparent lack of acute pitch, etc. all mark off Ndolo's idiolect as opposed to Laman's systematisation.

9.7: comments on variant contours.

In general, Mr. Ndolo said, he tends to use French more now than his native language. He speaks the Nsundi-Lutete dialect of kiManyanga, but there are other dialects in Luozi, Kibuunzi and Mongolwala. The last seems to be furthest away from his dialect - 'that is the worst; they
speak like a kind of Cockney, you can't really understand [it]. But still they say they are speaking Manyanga. They have a tendency to drop consonants.' When told of Laman's northern dialects, he said, 'I know Kingoyi, but I don't know what he means by Mazinga.'

(i) When some of Laman's phrases were repeated to him, Mr. Ndolo in most cases did not show the same contours or distinctions. For example, Laman differentiates between kimfumu 'authority' and kimfumu 'kingdom', but Mr. Ndolo knew only kimfumu for both meanings. He noted, 'The problem is, it is a long way since he did his work ... it may be just one word now'.

(ii) Laman also gives ku-yizolele 'where it wants' and ku-bazolele 'where they want' - these should theoretically have the same pattern, since they are both third person forms. It appears that the difference is correlated with tense. Mr. Ndolo immediately recognised ku-bazolele, and when asked if ku-bazolele was possible, said that it implied past time. Thus: beele ku-kubazolele, beele ku-bazolele, beele ku-bazolele: 'that's saying just today, the present ... they are going where they want'. But: bayele ku-bazolele, bayele ku-bazolele, mbeele ku-bazolele, bayele ku-bazolele: 'that's in the past ... they went where they wanted to go'. It is probable that the two forms have different morphological structure: *ku-be-zol-ele for the present, and *ku-b(a)-zol-ele for the past. Note that the relative prefix in the examples has high pitch in most instances (cf. 9.3.10), and that a high pitch often occurs on the penultimate syllable, especially when the preceding syllable is low-pitched.

(iii) There do seem to be similar emphatic processes in Mr. Ndolo's dialect as in that of the Rev. D. Ntoni-Nzinga. Asked about the phrase 'since that time', Mr. Ndolo produced tuuka ntaangu yiina, tuuka ntaangu yooyo. Asked if tuuka ntaangu yooyo was possible, Mr. Ndolo said, 'tuuka ntaangu yooyo means you are a bit surprised ... tuuka ntaangu yooyo - since I left you, you haven't done that'. Note that the first instance shows a bridge between the two high pitches of the second instance. It will be remembered that for the Rev. D. Ntoni-Nzinga the phrase with contour /\ also had an element of emphasis associated with it. Asked if tuuka ntaangu yooyo was possible, Mr. Ndolo said, 'I don't think so, but you
could use it in joking, just changing your way of speaking', again showing that pitch contours can be varied for effect.

(iv) Mr. Ndolo gave one further example of a possible minimal pair. He said that makabu meaning 'groups' and meaning 'shares, gifts' differed by 'a slight variation in the tone'. But the examples are hard to interpret: makabu (3 instances) 'groups'; makabu, makabu 'shares'. However, in the phrase makabu mamonsono 'all the groups' the pattern was makabu.

9.8: summary.

The text is amenable to description in the terms used for previous texts (9.3.13), though it does have the noticeable individual feature of prefix to root-syllable bridging (9.3.6), also seen in the chapter 8 text. The patterning shows some general similarities to that of kileta (9.2). The five minimal pairs in the text suggest that words in isolation may be distinguished by pitch, but that these distinctions are obscured when the words are placed in context (9.4). The systematisation proposed by Laman (1936) is discussed (9.5), and found to be internally consistent and remarkably advanced in scope for a work of that period. His examples show some interesting parallels with other work on the kiKongo pitch system, especially in the area of variability of contour on the same utterance (9.5.4.2,3; 9.5.6). The patterns predicted by his systematisation correlate to a large extent with those found in the text (9.6).
Endnotes to chapter nine.

1. A rough method of measuring similarity would be to compare the ratio for each dialect of words showing shift of high pitch to words showing prefix to root-syllable bridges. The figures in the table above may be used for kiManyanga, but for the other dialects the figures in Appendix 7/1 will be used.

<table>
<thead>
<tr>
<th>Dialect</th>
<th>(a) shift</th>
<th>(b) bridge</th>
<th>ratio (a/b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>kiManyanga 2 (ch.9):</td>
<td>30</td>
<td>20</td>
<td>1.5</td>
</tr>
<tr>
<td>kiManyanga 1, A:</td>
<td>34</td>
<td>23</td>
<td>1.5</td>
</tr>
<tr>
<td>(ch.8) B:</td>
<td>37</td>
<td>20</td>
<td>1.8</td>
</tr>
<tr>
<td>Z:</td>
<td>42</td>
<td>9</td>
<td>4.7</td>
</tr>
<tr>
<td>kiMbanz' aKongo (ch.4):</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>kiZombo (ch.6):</td>
<td>24</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>kiNtandu (ch.7):</td>
<td>14</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>kisiNgombe (ch.10):</td>
<td>29</td>
<td>1</td>
<td>29</td>
</tr>
</tbody>
</table>

kiYaka/kiNtandu (ch.5) has no instances at all of a prefix to root-syllable bridge, but 27 instances of shift of high pitch.

As can be seen, version Z is midway between the other specimens of kiManyanga and those of the remaining dialects. This suggests that although it may show some features of the speaker's own dialect, kiZombo, it is sufficiently close to kiManyanga as evidenced by the other speaker to be classed along with it.

2. In the case of pair 3, the contrast actually seems to be between long vowel and short vowel.

3. Compare such CB items as 'path', with two tone-patterns: *-zida (CS940) and *-zidé (941). Guthrie refers to such items, 'where the divergence between starred forms or meanings is slight, or in other words where most of the features of two or more [comparative series] are coincident', as showing 'osculance'. (Guthrie 1967-71, vol.2, p.111)

4. He admits that this 'seemed to lack coherence a little and to be difficult of comprehension' (para.11). There is also a difference in the system of notation used in the two books: that in Laman 1922 was based on musical scales and had syllable-by-syllable marking of 6 different pitch-levels, whereas in Laman 1936 examples in the introduction are marked with Meinhof's system of raised dots, and the words in the body of the dictionary use a marking 'illustrating all the tones or the whole melody that a word can have' (para.12). See also 9.5.3.
5. This is actually given in Laman 1922 as a variant of (i) (cf. Donnelly 1980, p. 6), so I have listed it here.

6. To facilitate discussion, Laman's classes will henceforth be referred to by more mnemonic titles. Thus:
   (1) á (Laman's grave class): rising class;
   (2) à (Laman's double acute class): acute falling class, or simply, acute class;
   (3) á (Laman's acute class): falling class;
   (4) à (Laman's mid class): level class.

   Moreover, all subsequent examples from Laman 1936 will be marked in my notation, with the exception that Laman's mark à will be retained for the acute falling class.

7. It is interesting to compare this section with Laman 1922, article 79, which is an earlier version of it.

8. In Laman 1936, the author prefers to present his examples in tabular form (pp. xix-xxxvii), reserving discussion for his more general findings on pitch. In part this was no doubt due to lack of space, and also to the fact that a large selection of data is more clearly presented in tabular form. On the other hand, this type of presentation may be due to the fact that Laman had not succeeded in progressing beyond a partial formulation of rules, and therefore in many cases could do no more than list the data.

9. As for the à class, the high pitch is fixed, eg. kanda 'palm-tree', -akanda 'of the palm-tree'. Laman gives no rules for the à class, perhaps because the rules that would be required are rather more complex than those previously given - see 9.5.6.1.

10. This seems to be the phenomenon nowadays referred to as 'downdrift' - I am grateful to P.R. Bennett for pointing this out to me.

11. Van Spaandonck 1973 has noted that many early tonal studies are virtually unintelligible nowadays because of obscurity of explanation, advances in tonal concepts, and changes in technical vocabulary. This seems to me a rather extreme view to take, and it is my opinion that early studies can be valuable if we take the trouble to try to understand the data from the author's point of view, and to interpret his writings on this basis.

12. Note that the different pitches on the root-syllables in these two examples seem to show free variation in vowel length before -NC-, as I have suggested elsewhere (4.6.6, 14.4).
13. In fact, it would have been interesting to have had more information on how the examples were collected—whether they came from a text or were elicited, and so on; -\text{amatokó} is remarkably reminiscent of a pausal form, for example.

14. Interestingly, the patterns abstracted from these tables for the imperfect, future, perfect and pluperfect bear a very close resemblance to the patterns I tentatively abstracted from the more scattered examples in Laman 1922 (see Donnelly 1980).
10.1: introduction.

This chapter returns to the text discussed in the preliminary investigation of chapter three. It will be remembered that that text showed a high frequency of variant contours occurring on otherwise similar sequences (3.2.2), and it was attempted to account for the patterns in terms of the syntactic environment of the item concerned. For this the syntactic parsing system developed by Guthrie and Carter (3.2.4) was used, and applied to ll. 1-58 of the text. While this gave fairly good results for some categories (eg. locatives, 3.2.5.2), as a whole it was of little help in describing the contours, and this became obvious when it was attempted to apply it to a further portion of the text (3.2.6).

In this chapter, the original marking of the text has been revised to accord with the conventions of chapter 2 (3.2.1), and the terms of description used in chapters 4-9 will be applied. It should be noted, however, that although possible conditioning factors for the contours can be adduced (10.3), these can be no more than statements of general tendencies, because it would seem that in this text there is a great deal of individual intonational contour variation (10.4).

10.2: the text and sample passage.

Although most of the high pitches in this text occur on root-syllables, as usual, there is sometimes extreme variation about which syllable the other high pitches occur on, to the extent that very frequently we find the same phrase (eg. matoko ye-zindumba 'boys and girls') with two or even three different contours. The sample passage is ll. 128-167.

10.3: patterns in the text.

10.3.1: shift.

In this passage there are remarkably few instances of a high pitch shift leftwards. They are as follows:

(a) genitive:  
  \[\text{zánkaka 138 'other'}\]  
  \[\text{dyánkaka 145 ditto}\]
byánkkaka 151 'other'
óšambu 141 'of prayer'
zándzeenza 142 'foreign'
kyásambała 149 '(the day of) Saturday'
mánkočila 161 'of the evening'
yámpímipa 161 'of the evening'
akíse 162 'of happiness' (cc. dyákíse 160)
šítibíla 167 'of the Bible' (cc. ašítibíla 140)
ándza 153 'of the world'

note also: ósalu 136 'of work'
žámbote-mbote 162 'beautiful'.

There is also múlučákju lwásika múvángí 163 'with the object of praising our Maker', which contrasts with múlučákju lwásika Ndzéambí mpé 'with the object of praising God also' in 165.

(b) locative, etc.: múmpíla 146 'in kinds'
kúsambu 160 'to the church' (cc. kúsambu 158, kũmbu 148 'in the sea', cf. óšambu 141)
múwusa 162 'to hear' (cc. múttá 148 'to do').

(c) connective: yé-zhánhés 130 'and youth'
yé-ndzo 143 'with a house'.

(d) verbs: mútadítí 136 'which are concerned with'
wásala 153 'he worked'.

(e) others: múfu 133 'it is a place'
kalumbu 149 'it is not a day(?)' mússya 133,135,143 'it is to say'.

10.3.2: high pitch on the first syllable.

In a few cases the high pitch is moved onto the first syllable of a word with two syllabic prefixes, suggesting that in the case of shift the high pitch tends to associate with the preposed element conditioning the shift. Thus:

(a) genitive: múmkúnguŋa 142 'of hymns'
kušántokó 163 'by the young men'.

(b) locative: múlučákju 132,165 'with the aim of' (see also 10.3.1.a)
mudítbúndu 136 'in the Church'
vúškímoští 134,135 'together'.

múlučákju lwásika múvángí 163 'with the object of praising our Maker'.

mulukkanu lwásika Ndzéambí mpé 'with the object of praising God also' in 165.
(c) verb: kūkūvaana 137 'to give themselves'.

10.3.3: retention on the root-syllable.

In most instances, the high pitch does not move as predicted:

(a) genitive: lwasakana 132 'of relaxing'
kyalumbu 149 'of a day'
šibibili 140 'of the Bible' (cc. šibibili 167)
abyuusu 141 'of questions'
byalumbu 151 'of days'
waantsémono 153 'of the creation'
kyawooono 154 'all'
kyalumúngu 157 '(the day of) Sunday'
dyakiese 160 'of happiness' (cc. akiese 162)
anaana 161 'of eight'
lwastka 165 'of praising' (cc. lwastka 163)
kyantšangulu 166 'of a reading'
lwamvlimba 137 'entire'
mákimpéeeve 145 'of the spirit'
yabattústá 158 'Baptist'.

(b) locative: muluzíngu 137 'in life'
musáñlkili 138 'to work for'
muntsí 138,138,141 'in countries'
musálú 141 'about the work'
muzúna 164 'in the area'
mulukkanú 163 'with the aim of' (cc. mulukkanú 132,165)
mun'sówu 153 'concerning'
musúmbó-myo 144 'to read them'
mutungá 144 'in strengthening'
mumáambu 145 'in matters'
mutsí 148 'to do' (cc. múmwa 162 'to hear')
mulumbú 150 'on the day'
mumánísa 154 'to finish'
munsyuku 157 'in the morning'
mukyantšémbwadi 154 'on the seventh (day)'
munkokílía 159 'in the evening'
mušúul(a) 161 'at the hour'
vakati 129 'among'
The above data suggest that phonological phrasing may be a factor conditioning the placement of high pitch. In the first group, with shifted high pitch (10.3.1.2), nearly all the examples in sections (a), (b) and (c) occur with following pause, but with no preceding pause, i.e., in an environment /...x#. On the other hand, in the group with high pitch retained on the root-syllable (10.3.3), only 5 examples from those sections occurred in this environment: the rest occurred in environments /...x.../, / ≠x..., / ≠x≠/. That is, the shift occurs prepausally, but not when the word is preceded by pause as well. It will be remembered that this type of variation occurred with at least one unit (the locative) in the first analysis of this text (3.2.5.2). Moreover, Carter's (1973) analysis of pitch-patterns in kîMbanz' aKongo is based on syntactic phrasing. There would thus seem to be a general pattern here which suggests that the composition of the phrase conditions the pitch contour; this pattern in turn suggests a pitch-accent system.

10.3.5: words without high pitch.

These will be listed in terms of the function of the phrase in which they occur. Arrows, as usual, indicate that the pattern on surrounding words is also anomalous.

(i) subject: dyəaədi 129 'this'
kusəkə 156 'this'
mambu 133 'things'
As has been suggested for other texts, the absence of high pitch on a word may be correlated with focus on another word in the phrase: some of the Rev. D. Ntoni-Nzinga's comments (10.4) will make this point.
10.3.6: other anomalous patterns.

There are two instances of high pitch on the last syllable:

\[ \text{kaa}ns\text{f} (\text{mpe}) 132 '\text{but (also)}' \]
\[ \text{mphasf} 155 'so that' (\text{cf. mphasf} 137). \]

In seven cases there is a bridge on the first two syllables of a word:

\[ \text{ka}7 \text{—fulu} 131 '\text{it is not a place' (cf. } \text{fulu} 133) \]
\[ \text{kulusoonga} 139 '\text{to tell you'} \]
\[ \text{aminkaanda} 142,143 '\text{of books'} \]
\[ \text{lusadisu} 144 '\text{it is a help'} \]
\[ \text{dyaklifsto} 136 '\text{of Christ'} \]
\[ \text{kumosti} 165 '\text{in one place'}. \]

10.3.7: bridges on words.

There are many instances of bridges on an individual word:

\[ \text{dyambu} 128, 160 'a thing' \]
\[ \text{mfund} 131 'the purpose' \]
\[ \text{mau} 134 'they' \]
\[ \text{bambuta} 134 'the adults' \]
\[ \text{mphasf vo} 137 'so that' (\text{cf. mphasf} 155) \]
\[ \text{balennda} 137 'they can' (\text{cf. balenda} 145) \]
\[ \text{vaav} 139 'now' \]
\[ \text{maka} 139 'some' \]
\[ \text{man} 139 'which' \]
\[ \text{nthangulu} 140,142 'the reading' \]
\[ \text{mpfildlo} 140 'the leading' \]
\[ \text{ndilu} 141 'the asking (lit. eating for)’ \]
\[ \text{musa} 141 'about the work’ \]
\[ \text{vena (mpe)} 143 'there is (also)’ \]
\[ \text{musuumba-myo} 144 'to read them’ \]
\[ \text{mutungag} 144 'in strengthening’ \]
\[ \text{balongukaangag (mpe)} 148 'they (also) learn’ \]
\[ \text{salo} 149,151 'the work’ \]
\[ \text{mulumbu} 150 'on the day’ \]
\[ \text{bika} 151 'let's’ \]
\[ \text{beto} 151 'us’ \]
\[ \text{tuttanganga} 152 'we read’ \]
In most cases these bridges occur as the result of hesitation, but in several instances there is a neighbouring word with anomalous pattern, suggesting that the two words are in a complex. In other cases, the bridge is due to the spreading of high pitch associated with following items such as mpe.

10.3.8: bridges between words.

The number of bridges between words is smaller than might have been expected: again this shows some similarity to kiManyanga.

(i) noun + following item:

dil'Bundu ye-zhan's 130 'the Church and youth'
kyalumbu k'alumbu 149 'from day to day'
kyawonso mutumba 154 'completely entire'
nssamu mitaditi 135-6 'subjects concerned with'
Ndzamb' w'sala 153 'God made'
mun's z'ankaka 138 'in other countries'
mumamba makimp' Venue 145 'in matters spiritual'
mulukk'amu lw'shika 163 'with the object of praising'
muz'anga kyasam'sk'wul 164 'in the neighbourhood of the summer-
ansana yamp'imp' 161 'of eight in the evening'. / school'

Most of these are locative + genitive sequences.

(ii) verb + following item:

z'itisa lumbu 155 'honour the day'
ye-sosile nd'zila 136 'and examine ways'
musadila Ndzamb' 138 'to work for God'.
10.3.9: conclusions.

This passage shows features broadly comparable to those discussed in previous texts, especially instances of words without high pitch, and of bridging. However, it has some individual features, notably the tendency to retain high pitch on the root-syllable, and the phenomenon of phonological phrasing as a factor conditioning the pitch contours.

10.4: comments on variant contours.

Since the original text was spoken by someone else, the Rev. D. Ntoni-Nzinga found it hard at times to explain exactly what the differences in pitch contour signified. Sometimes he attributed the differences to the fact that his friend the Rev. A. Komy Banzadio was a 'very fantasy man', by which he seemed to mean that Mr. Banzadio sometimes varied the pitch contours simply for effect, rather than to alter the meaning of the phrase in any substantial way. Nevertheless, the Rev. D. Ntoni-Nzinga had no difficulty in accepting that pitch contours could be varied in this way, even if the variation was at times slightly different in type or extent from what he himself might have used. The fact that two speakers use such a system, and that it can be explained to a foreigner, suggests that the system is fairly widespread, and also standardised to some extent, even if the exact mechanisms cannot be fully described at this early stage (see also chapter 12).

(i) kulenda monika 122 'there can be seen' and tulenda mona 124 'we can see': the Rev. D. Ntoni-Nzinga said at first that the former pattern emphasised monika, but then he became uncertain and said that since monika ends in -ka and not -na (ie. because it is one syllable longer than mona) this affects the pattern on -lenda.

(ii) ntete 2 'first' and twafflipa ntete 5 'let us examine first': the high pitch on the former was ascribed to the fact that it occurred sentence finally, whereas the example in 5 did not. But if the latter had occurred in final position, it would have been possible to say twafflipa ntete.

(iii) kumbazì 19 'outside' and kumbàzi' aluzì'ingu 69 'outside life': the
Rev. D. Ntoni-Nzinga said 'this is Banzadio kiKongo: he says it, I remember, but it is not very good - it is the accent in kiNgombe or something. As I say, he is a very fantastic man - he talks very well. When he speaks any language he is very sensitive, he has ... good expression, more fantasy'. The informant therefore seems to attribute this difference in contour to idiolectal accentuation, and it may well be that we have here an instance of phonological phrasing conditioning the pitch contour (cf. 10.3.4).

(iv) ndzolele kulusoonga 1 'I would like to tell you' and ndzolele kulusoonga 89: the pattern on the latter was said to signify that the speaker was moving on to a new topic, while the pattern in 1 signified that the speaker was actually starting the new topic, in this case introducing the talk. We might also compare ndzolele kulusoonga 139 with the pattern in 1; again, the speaker is launching into a new topic.

(v) discussing issya vo (passim) 'that is', the Rev. D. Ntoni-Ozinga said that the exact pattern varies and depends on who is speaking. Sometimes, he said, there is a slightly different connotation according to the pattern, but it is impossible to describe this outside the context. In general, isysa vo is the usual pattern, while issya vo is not normal, and might be used to signal contrast.

(vi) mulukkanu lwesika Muvaangi 163 'with the object of praising our Maker' and mulukanu lwesika Ndzaambi mpe 165 'with the object of praising God also': the fact that no high pitch occurred on Ndzaambi was said to be due to the following mpe. This probably means that the speaker was here emphasising mpe at the expense of Ndzaambi. In general the phrase in 165 is a repetition of the one in 163, but the speaker wishes to emphasise in 165 that the praising of God took place here also - this may account for the general difference in pattern between the two phrases. See also 12.3.

(vii) discussing musama-skulz zantete 54 'in the first summer-schools', the Rev. D. Ntoni-Nzinga said that this pattern emphasised the word zantete. It is possible, he said, to have musama-skulz zantete, but in that case the sentence structure must be different: 'I can't begin ... that time with musama-skulz; I will begin with another [word]'. Thus, dyamóniká, musama-skulz zantete, vo program ...
instead of (as in the text) musama-skulz zántete, dyamónika vo- prógrámm ... . In the latter, 'dyamónika is lower down; if it starts the sentence [as in the former], it is higher. I told you before: our music conditions the meaning'. These comments suggest that bridging, as I have suggested in previous chapters, is associated with emphasis - we would expect a certain amount of emphasis at the beginning of a new topic.

(viii) madya mánkóókíla 117-8 'the evening meal' and laandíla madya mánkóókíla 160-1 'following the evening meal': the pattern in 117-8 was characterised as placing emphasis on mánkóókíla. In 160-1, on the contrary, there was said to be no emphasis on the phrase: 'every time in kiKongo when we use laandíla, the emphasis is not there - it's at the end of the sentence, or in the middle; laandíla introduces, it is not very important - we could even leave [the phrase containing] it out, or put it at the end'.

(ix) vakáti kwábalóngi ye-díBuundú, bíseelo ye-bapastóó, diBuundú yé-zhanéEs 129-30 'between the teachers and the Church, the domestics and the pastors, the Church and youth': when the Rev. D. Ntoní-Nzinga read this sequence, he said vakáti kwábalóngi ye-díBuundú, bíseelo ye-bapastóó, diBuundú yé-zhanéEs. When it was pointed out to him that the Rev. A. Komy Banzadio had said yé-zhanéEs and not ye-zhanéEs, he said, 'Aa, ... it is the music... . In the first two places, he put the emphasis on the first word, but in the third citation he put the emphasis on the last word: diBuundú· yé-zhanéEs ... . Also, we can understand something: he [is making] some accusation ... [with this way of talking] he [is pointing out that] the balóngi are the people who sometimes have problems with the Church, not Church with balóngi; ... he wants to [say that] sometimes the bíseelo have problems with the pastors, not the pastors with the bíseelo. Also, [using] the accent we can make many interpretations ... [thus we can say in the third case that] now it is the Church [which has] problems with the Youth'. ... The Kongo music is sometimes very complicated - without the background we can't understand'. These comments indicate very clearly that the pitch patterns can be modulated to convey differences of focus, according to the intentions of the speaker. Moreover, this focus may involve a whole complex of associations which are not immediately obvious, but are implicit in the pitch contours.
The first pattern was identified as the usual form. The Rev. D. Ntoni-Nzinga said, 'It is not a very important difference, but ... depends on the idea. ... You need to have the background to understand why he said that, and this is very usual in kikongo: sometimes you can't understand it, but kikongo people understand why he said that. The second pattern would be used when the speaker was talking about something, and he wanted to give [some] idea about the difference between the first time and the time following. ... [Or] maybe he was ... accusing someone, maybe he was talking about changing the situation, and he wanted to help the people to understand ... the serious matter. [As if he were saying] "Since that time the matter [has] become very serious". And he didn't say [directly] "Now the matter [is] becoming serious" - no, he only said tuukà ntangu yòyò ... and [his listeners] say, "Oh, what is this?" ... [and they] will listen about the explanation, to understand why he said tuukà ntangu yòyò with a different intonation'.

Again, these comments bring out the fact that pitch patterns may be modulated according to the 'background' (ie. context), and that this pattern variation conveys a great deal of unspoken information about the relative importance of items, the speaker's opinion on the subject, and so on.

We may sum up with another of the Rev. D. Ntoni-Nzinga's comments: he said that kikongo music is very common - a person may not say something directly, but the music he uses will show you exactly what he is thinking. BaKongo elders especially do not like to say something straight out - they use proverbs. But the music they use helps the listener to understand: he still has to figure it out himself, but the music and the proverb taken together should leave him in no doubt as to what is meant.

10.5: summary.

In the texts discussed in this and previous chapters, I hope to have shown that there is one general principle which is widespread, namely, that high pitch occurs on the root-syllable of the word. Deviations from this may be due to morphological and perhaps syntactic or phonological
factors, or to features of emphasis or intensity affecting the contours. I have also tried to show how this analysis would dovetail with previous studies. The main point I have been arguing for is that we must, in discussing kiKongo pitch contours, give much more weight to the part played by emphasis, etc., and consider the phrase rather than the word as the domain of pitch. That is, kiKongo has more of a pitch-accent system than a tonal one.
Endnotes to chapter ten.

1. Compare a similar phenomenon in one of the kiManyanga texts (8.3.1,2).
2. Note also kaensi mpe 132 'but also' and Ndzaambi mpe 165 'God also'.
3. It is interesting to note that if we postulate for several of the above examples an underlying form with high pitch on the root-syllable, followed by bridging with a preceding high pitch, followed by a contraction of the bridge (cf. 7.4.8), we have an explanation for some anomalous patterns, eg. *Ndzaambi wasâla -> *Ndzaambi wasâla -> Ndzaambi wasâla. It will be remembered that wasâla is one of only two verbs in this passage showing shift of high pitch (10.3.1.d) - the other is mitadidi, which also occurs here. Whether the contraction should be considered automatic or conditioned by focus is unclear. Note, for example, *mulukkanu lwastika -> *mulukkanu lwastika -> mulukkanu lwastika, but (165) *mulukkanu lwastika -> mulukkanu lwastika, where the first high pitch is shifted to give an anomalous pattern, and no bridging occurs. It therefore seems likely that if the phenomenon of contraction does exist, it is conditioned by focus, since it is secondary to bridging, which may itself act as a marker of focus (cf. chapter 12). More information, though, is required before firm conclusions can be drawn.
4. I suspect that the Rev. D. Ntoni-Nzinga really meant to say that 'youth has problems with the Church', as his other comments imply that this is the meaning intended. He may by this time have been unintentionally emphasising the words to bring out his point (cf. 8.6.1.ii) - his repetition of the phrase at this juncture (d'Buundu, ye-zhanxes) shows what may be an emphatic contour on d'Buundu (earlier dîBuundu).

While on this subject we may note other variant contours which occurred on repetitions of the phrases. Most of these show a high pitch on the prefix syllable, and since the pattern in question (ye-zhanxes) is similar, these repetitions may also show a certain degree of emphasis:

(a) d'Buundu (*ye-zhanxes)
(b) (vak'ut kwabałôongî) ye-o'd'Buundu
(c) (bîseeî) ye-bapastôor
(d) bîseeî (*ye-bapastôor).

The last two examples suggest differential emphasis: on the second item in (c), and on the first item in (d).
CHAPTER ELEVEN
Creole kiKongo - kiLeta

11.1: introduction.
This chapter discusses pitch features in creole kiKongo, a language with, in Fehderau’s (1962) words 'a kiKongo-like vocabulary, with an essentially Lingala-like grammar, lined with French borrowings'. This language has many names: Kikongo, Kikongo vériculaire, Kikongo simplifié, Kikongo commercial, Kituba, Kikwango, Kingala, Ikeleve, Monokutuba, Kibulamatadi, etc., but the name most often used now seems to be Kikongo ya leta (< Kikongo ya l’État), and I will refer to it by the abbreviated version of this title, kiLeta. For some comments on the possible development of the language, see chapter 16.

11.2: kiLeta grammar.
KiLeta differs in some important respects from kiKongo, and it may be well to give here a short list of the more obvious differences to prevent confusion in the subsequent discussion. The following notes are based on the sketch of the language in Fehderau 1967, pp. 46-57.

(1) There are 5 main genders: (a) ō~ā~mu~ / ba~; (b) mu~ / mi~; (c) o~di~ / ma~; (d) ki~ / bi~; (e) ku~. These are obviously relatable in form to the general Bantu prefixes, but the system has been considerably simplified. Moreover, ba~ is widening its application, often reducing other prefixes to augments, eg. bamambu 'things', bandzo 'houses'.

(2) Personal pronouns are much more widely used than in kiKongo: mono, nge, yandi, beto, beno, bau 'I, you, he/she, we, you, they'. There is also the impersonal yau 'it'. These pronouns are often abbreviated, eg. mono → mu or even m, bau → bo, yau → yo; nge seems to be a short form of the older (now emphatic) ngeye.

(3) na + pronoun = possessive, eg. tata na yandi 'his father';
na + noun = locative, eg. na mesa 'on the table';
ya + noun = genitive, eg. munkanda ya muntu yat 'this person's book'.

(4) Demonstratives: ya 'this', yīna 'that', yango 'this/that already referred to'. Yīna is also the relative pronoun, apparently often shortened to ya – cf. 11. 35, 74, 75 of the text.
(5) \( 'with, that, or, and' \) (though ye also occurs for 'and');
\( \text{sambu (na)} \) 'because (of)'.

(6) Verbal inflections have been greatly streamlined, though with
apparently no diminution in the range of time reference of which
they are capable. The basic pattern is (pronoun +) \( + \) formative +
base \( + \) suffix. The formatives are \( \text{ke-} \) (probably from \( \text{ke}^{\text{le}} \) 'is, are'), \( \text{me-} \) and \( \text{ta-} \) (cf. Swahili \( \text{me-} \) and \( \text{ta-} \), with similar meanings).
Fehderau refers to these as auxiliaries. The habitual suffix is
\(-\text{ka} \). One-word tenses are as follows:

- Present indefinite: (nge) sala 'you must work'
- Past indefinite: (nge) salaka '(you) worked'
- Present progressive: (nge) kesala 'you are working'
- Past habitual: (nge) kesalaka '(you) work'
- Present perfect: (nge) mesala 'you have worked'
- Past perfect: (nge) mesalaka '(you) had worked'
- Future indefinite: (nge) tasala 'you will work'
- Future habitual: (nge) tasalaka '(you) will work'

Fehderau notes that an alternative form of the past indefinite, nge kusalaka, which occurs several times in the texts, seems to be an
older form, but is still much used in the eastern (Kwilu-Kwango)
region.

For the verb 'to be' the eight tenses above are:

- Present: (nge) vanda '(you) are'
- Past: (nge) vandaka '(you) were'
- Present: (nge) ke le '(you) am'
- Past: (nge) kevandaka '(you) were'
- Present: (nge) mevanda '(you) have'
- Past: (nge) mevandaka '(you) had'
- Present: (nge) tavanda '(you) will'
- Past: (nge) tavanda kusala 'you will be working',

These forms may be combined with the verbal noun to give
periphrastic tenses, eg. (nge) tavanda kusala 'you will be working',
(nge) vandaka kusala 'you were working (continuous)'.

The negative marker ve is placed at the end of the phrase or
sentence to be negated, eg. (nge) salaka ve 'you did not work'.

11.3: variation in kiLeta.

It should be emphasised that a great deal of variation occurs even
in idiolects; no doubt the fact that kiLeta speakers come from widely
different linguistic backgrounds contributes to this situation. Some
examples of phonological variation in the texts are:
(a) y, l and sometimes k seem to be unstable and are often elided, eg. milele pronounced [milen] 6 'clothes'; bantu ya [bantu a] 30a 'the people of'; kelongukaka [kelongwaka] 71 '(they) learn'; kubulukaka [kubulwaka] 76 '(they) have congregated';
(b) nu is often simplified to n, eg. takwenda [takwena] 32a '(you) will go';
(c) mb is sometimes simplified to m, eg. kuyambaka [kuyamaka] 14a '(they) received', and sometimes to b, eg. mbala [bala] 75 'times';
(d) o often approaches [u], eg. kusonga mono [kusunga munu] 20a 'teaching me';
(e) nasal + s,z is usually pronounced as a prenasalised affricate, but not always, eg. mbandza 13b / mbanza 13a 'town'; yontso 54 / yonso 83 'all';
(f) voicing sometimes occurs, eg. matonsi [matonz] 18 'marks'; ntswa [ndzwa] 23a 'permission';
(g) a nasal is sometimes inserted, eg. mosi [monsi] 18a 'some'; mukanda [munkanda] 21b 'paper';
(h) miscellaneous: kezaba [kaizaba] 70 '(he) knows'; makambu yina [makambo yenä] 72 'these difficulties';
(i) a final vowel is sometimes elided and replaced by aspiration, eg. 3, 18, 38, 45.

The language system is therefore fairly fluid.

11.4: Other research: Fehderau.
11.4.1: Fehderau 1969.

The author describes 'word tone and stress' on pp. xxix-xxx. He describes five 'word tone-classes', marked using \( \text{\textdagger} \) to mean 'high pitch' and \( \text{\textdagger} \) to mean 'low pitch/stress'. These are variously called 'tone-marks' and 'accent-marks', as if Fehderau is uncertain how to classify the suprasegmental features; it may be that his marking owes something to Laman, whose dictionary he cites on p. xxxv as being 'most helpful'. The five classes are as follows:

I: high pitch on the penultimate syllable, marked \( \text{\textdagger} \), eg. bamagazîi 'shops'. If the stressed syllable is not the penultimate, it is marked \( \text{\textdagger} \), eg. kupɛsîla 'to give for'.

\[ \text{\textdagger} \]
II: high on the last syllable, marked \( \checkmark \), eg. yangé 'yours'. If the stressed syllable is not the last, it is marked \( \checkmark \), eg. bibênde 'metal'.

III: all low, marked \( \checkmark \) on all syllables of the root, eg. kupola 'to rot'.

IV: all low, except that the prefix immediately preceding the root is high; marked \( \checkmark \) on all syllables of the root, eg. bamingânga 'doctors'. Fehderau warns that this marking is therefore the same as for III, because the distinction between the two classes was discovered too late for the dictionary marking to be revised. A revised marking for IV would be \( \checkmark \) on the root-syllable', eg. bamingânga.

V: all high, marked \( \checkmark \) on all syllables of the root, eg. mpëmbé 'white'.

Fehderau's examples of IV are items including what we might call an 'augment' (though bamingéle 'Europeans' occurs in I) - cf. 9.5.7.2. The examples cited for II, III, IV and V seem to have no more than two syllables in the stem, and to some extent this is borne out in the sample analysed below, though its significance is unclear.

11.4.1.1: class frequency.

To test the distribution of these classes, it was decided to count through a random sample from the dictionary - words beginning with k (pp. 69-117). There were 33 items in II (high on last syllable), including 25 French loanwords. There were 53 items (including one Portuguese loan), 16 of which were monosyllabic roots, in III (all low). There were roughly 555 items in I (high on the penultimate syllable), including 3 loans from English (kaméla, kóma, kisikìti), 4 from Portuguese (kaualu, kisabala, kólùa, kwértu), and 16 from French (kaláka, kalásì, kamaládi, kanífu, kanténì, kapitëni, katólìka, kifwalónsa, kiloméla, kásto, kómíséle, kitánst, and the less certain kárite, kintínti, kípi, kánsénsa). There were no items in the sample from V, and if we are correct in assuming IV to occur only where there is an augment, there were no items from this class either. We note therefore that in this sample at any rate class I overwhelmingly outnumbers all the other classes put together by more than 6 to 1.

11.4.1.2: French loans.

For French loans, it would seem that the high pitch goes on the last
syllable of the word as pronounced in French; if this last syllable ends in a vowel sound (which will therefore be the last syllable of the kiluta version, since no epenthetic vowels will be added), there will moreover be stress on the root-syllable, eg. cadeau → kăd'ơ, commencer → kămans'ę. If however the last syllable ends in a consonant sound (which will therefore be the penultimate syllable of the kiluta version, since an epenthetic vowel will be added), the stress will co-occur with the high pitch, eg. camarade → kamaľ'd'ë, catholique → katoľ'ka. That is, -cv' → ɭcv', while -vc' → -vč(v)'.

11.4.1.3: stress.

Fehderau says that stress 'usually' occurs on the root-syllable, but in actual fact in this sample it was found to occur there in all but the following cases: kafkūs (from Portuguese?), kan'ki (from Swahili?), kapťta (from French?), k(a)m'ë(n)ku-lu. However, (i) in compounds it seems that the first element is devoid of stress and high pitch, eg. kalak'ala, kati-kati, kifwe-makūtu, kosa-koso, kifwani-fwani, kitala-tala, etc.;
(ii) monosyllabic roots tend to have high pitch and stress on the prefix syllable (Laman noted the same phenomenon), eg. k'iz-nzu, k'i-ti; where they have low pitch, however, the stress remains on the root-syllable, eg. k'i-nwë;
(iii) loanwords with high pitch on the penultimate syllable have the stress on that syllable (cf. previous section), the only two exceptions being komis'ële and kisab'ala.

11.4.1.4: conclusions.

This sample seems to show that since stress is largely predictable, and since so much of the lexical stock belongs to just one of the five classes, it might perhaps have been more concise for Fehderau to have set up one 'canonical form' for lexical items in general, only marking in detail exceptions or deviations from this. This is reinforced by the fact that two of the classes (IV and V) seem to have so few items that there were no examples of them in this sample. Moreover, the comments made above about high pitch on French loanwords suggest that high-pitch assignment follows a fixed pattern in all loanwords, and that we can consider those in class II (high on the last syllable) as a subset of those in class I (high on the penultimate syllable).
11.4.2: Fehderau 1962.

11.4.2.1: stress.

On p.6 Fehderau notes that stress can have a connotative function, eg.

\[ \text{mwa}nə nə \text{m}ə\text{no} 'the child and I' \]
\[ \text{mwa}nə nə \text{m}ə\text{no} 'my child', \]
\[ \text{beto} \text{lenda} \text{kusala} 'we can work' \]
\[ \text{beto} \text{lenda} \text{kusala} 'we were able to work'. \]

He draws attention (this is developed at greater length in the dictionary) to the fact that high pitch and stress are independent of each other - we could express this by saying that stress is morphologically determined (occurring on the root-syllable), while high pitch is phonologically determined (occurring on the penultimate syllable), though of course these syllables may coincide. It is interesting to note that Fehderau has some difficulty distinguishing stress and high pitch: on p.91 komansi (< commencer) is marked \[ \text{komanse} \], with stress on the last syllable, while in the dictionary it is marked \[ \text{komanse} \], with stress on the first and high pitch on the last syllable (cf. also 11.5).

11.4.2.2: sentence contours.

One or two references are made to pitch patterns on sentence-length stretches. On p.6 we are given

\[ \text{yand}i \text{k}ə\text{le} \text{kusə}dəsə 'he is helping', \]

which suggests that the last item of this particular sentence is the only one to have high pitch - the other two, if they ever had it, seem to have it suppressed here. On p.200 Fehderau discusses interrogative intonation, giving the following examples:

\[ \text{yand}i \text{k}ə\text{le} \text{sa}ləkə? \quad \text{'is he working?'} \]
\[ \text{yand}i \text{sa}ləkə? \quad \text{'did he work?'} \]
\[ \text{(cc. yand}i \text{sa}ləkə) \quad \text{'he worked'} \]
\[ \text{yand}i \text{sa}ləkə \text{ve} \quad \text{'did he not work?'}. \]

Again, these show a distinctive pitch pattern for the sentence being realised on the last word in that sentence. See also 11.6.7.

11.5: the texts: general features.

The texts obtained from Mr. Katesi were (i) a letter read on two
different occasions (referred to as a and b), (ii) a spontaneous
description of the language situation in Zaire, and (iii) a translation
of a very short English text.

The marking conventions used for kiKongo (chapter 2) seem to be
applicable to kiLeta as well. There is, however, one exception. The
place of the pausal upturn (\(\upsilon\)) is uncertain, and the mark has been
used here only when the word already has a high pitch, ie. in 5 cases:
\(\acute{s}\) 16a, \(\acute{m}\)obut\(\acute{u}\) 89, \(\acute{m}\)ing\(\acute{a}\) 101, \(\acute{S}\)ando\(\acute{u}\) 58,63. Where the word has no
other high pitch, high pitch on the final syllable (even when occurring
pre-pausally) is marked with an acute.

Although \(\upsilon\) has been used, as in other chapters, to denote 'pitch
higher than that on surrounding syllables', it must be said that high
pitch in these texts is not so clearly perceptible as in previous ones.
The canonical form for phonological phrases in other texts was \(/\ldots\ldots/\)
but in these the general key is much lower, and downdrift within the
phrase is less apparent, giving a canonical form more like \(/\ldots\ldots/\) cf. 9.2. Most of the high pitches seem to be at the same height, and
indeed it is sometimes uncertain whether we have two high pitches, or
merely one accompanied by a 'lead-up' or 'lead-off' rise in pitch, eg.
\(\acute{v}\)and\(\acute{k}\)a\(\acute{a}\)/\(\acute{v}\)and\(\acute{k}\)a\(\acute{a}\) 7, kubik\(\acute{a}\)la/kub\(\acute{i}\)\(\acute{k}\)a\(\acute{l}\)a 24, where each of the versions has
a different marking.

The position is complicated somewhat by the phenomenon of stress.
By far the most common thing in these texts is for high pitch to occur
on the penultimate syllable of each word (except for certain formatives
such as ya or na - cf. 11.2.iii). This high pitch is usually accom-
panied by stress. However, in a few cases it is difficult to decide
which of the two (high pitch or stress) is most prominent, eg.
p\(\acute{e}\)nep\(\acute{e}\)n\(\acute{e}\) 99/p\(\acute{e}\)nep\(\acute{e}\)n\(\acute{e}\) 104 'up, over'.

As mentioned above, not only is the general key much lower than in
previous texts, but the overall range of key is much smaller as well,
so that lower and higher key occur much less frequently than in other
texts. High key appears in 20,25,35,40,46 in the b version (which seems
on the whole to have a greater variety of pitch features than the a
version - cf. endnote 8), and appears to have the function of emphasis or the introduction of another aspect of the subject under discussion. Low key occurs in 53, in a parenthetic comment.

There are instances (all in the b version) of a stretch with extra emphasis (ie, more intensity and greater pitch height) in 31-32, a stretch with slow rate (35), and a stretch with rising contour (36-37). These all seem to be for the purposes of emphasis. There are two instances of a contour /—/ in 32b and 72, both of them what we might call parenthetic comments.

Extra-high pitch occurs in several instances and seems to have two main functions:
(i) as an optional pause marker when the syllable preceding the pause has high pitch (in the kiLeta system this is not very frequent), eg. with ve 'not' in 7a, 23a, 25a, 30a, 64, and with za'ir in 51;
(ii) for emphasis, eg. 19a, 32b, 35b (note that these last two appear in stretches which have additional special pitch features), 53. It also occurs in Kiswa\hili k\etu\bam\aka 60 'Kiswahili is spoken', sa\ambu 65 'because', and nt\angu 102 'time'.

11.6: patterns in the text.
Since the formulation 'high pitch on the penultimate' is of such wide application, no 'sample passage' will be taken as in previous chapters; instead, reference will be made to exceptions throughout the text.

11.6.1: high pitch on the last syllable.
This occurs with:
(i) French loanwords:

\a\v\i\d\ 5 'aeroplane'
yu\niv\er\s\i\t\ 17, 78 'university'
bap\anta\l\o\ 38 'trousers'
\t\l\\i\k\o\ 39 'cardigan (?)'
k\a\m\i\n\g\o\ 43 'vehicle'
\ek\w\a\r\t\ 57 'equator'
g\u\v\e\r\n\h\a\m\ 70, 94 'government'
\p\r\e\z\i\d\ 89 'president'
bamusiyé 91 'musicians'
basolo 92 'soloists'
Zaïr (passim) 'Zaire';

(ii) miscellaneous:
Kivú 88 'Kivu'
(m)pénsé 8 'really'
mtinkanda 19 'books'  (there may be some influence from
mu(n)kanda 21 'paper'  Lingala with this word - cf. 
endnote 1)
mucídé 103 'bank' (cc. mucídé 101, mucídé 100);

(iii) there are two words which seem to be treated as both monosyllables
and disyllables. The word for 'also' was presumably originally
*mpi, a monosyllable. However, syllabification of the nasal seems
to have produced two competing forms: n-mpi (eg. 2a,6b,30a,61,71,
etc., cf. also 58 nmpi), where the pitch has been assigned as
usual to the penultimate syllable, and m-mpi (eg. 30b,33b,63, etc.,
cf. mpi 91), where the pitch has been retained on what is now
the last syllable. Note also the forms mpi 56,60,61 and mpi 33a,
76. The same variation occurs to a lesser extent with n-tswe 23b
'permission' versus n-dzwa 23a (with voicing). Compare also n-dzo-
44,45 'house', where the form with penultimate high seems to be
usual - note what seems to be a transference of this high pitch
in ná ndzwa-nkánda 48 'to my studies (lit. to the library)'.

11.6.2: words without high pitch.
These may be grouped as follows:

(i) showing no high pitch in most of the recorded instances:
kantsi 6,29a,40b,58,63,81,86 'but'
bantu 21a,30,52,56,57,58,62,64,70,73,82,86,87,91 'people'
(but note bantu in 21b and 74)
mbala 25,31,66,75,78,93,94 'occasion'
kana 2b,33,59,70 'if'  
nde 11a,29b,52,59,61,72,73,85,89,93 'that' (cc. ndé 11b,
makulu 43 'feet'
kundímá 89 'agree'
ndeke 5 'bird, plane' (this was pronounced ndéke during
the discussions of 11.7; the use of this
word rather than the now archaic n(y)uni
was said to be due to the influence of
Lingala);
(ii) occurring both with and without high pitch:

awa 3, 24, 27, 35, 48 (cc. 1, 31) 'here'
go 33 (cc. 31, 43) 'or'
(na) yandi 68, 90 (cc. 60) 'his'
(na) mono 104 (cc. 1) 'my'
Lingala 88 (cc. 85) 'Lingala'
takuma 93 (cc. 85) '(it) will become'
penepene 99 (cc. 104) 'over, up'
mucidî 101 (cc. 100, 103) 'bank'
yee 17b 'and'
ti 28b, 34a, 37b 'and'
yo 36b 'it is'
bo 31b, 33b (cc. 30) 'they'
nge 38b 'you'
beto 50a 'us'
pîpi 45a 'close'
mbote(-mbote) 19b 'very good' (cf. 45a, 59, 87 with this basic pattern, but mbote- mbote in 45b)
ata fyotî 45a 'the slightest'
tkele 2b, 45b 'is, are'
kevandaka 37b '(it) is'
kekumaka 42a '(they) become'
kupesaka 47a 'which you) gave'.

Note also the interesting kisìwo yè 49a 'this dry season' versus kisìwo yèt 49b, where in each case only one word in the group has high pitch.

These examples suggest either (i) that certain words usually have no high pitch, or (ii) that words may lose their high pitch in certain contexts. However, a combination of these ideas of no high pitch basically, and suppression of high pitch, may best account for the above examples, the former applying perhaps to the words in section (i)\textsuperscript{12}, and the latter to the words in section (ii).

11.6.3: bridges on words.

There are a number of cases where words have high pitch on both syllables of a disyllabic root, although very often another instance has the usual high pitch on the penultimate syllable. The phenomenon seems
to be more common in the passages that were read from a prepared text.
The resultant contour is very similar to the hesitation bridge, and
indeed with nyaka 15 'afterwards', mbsi 27 (cf. 65) 'a', mple 13 41
'white', ya nkaka 42 (cf. 35) 'some' and mlingi 50 (cf. 77) 'greatest'
version b has a following pause, though version a does not. In other
cases there is no following pause, but one might be expected to occur:

bamindile 3 'Europeans' occurs at the end of a parenthesis;
fyoti 34a 'youth' occurs before ti 'and, or';
imp 56 (cf. 60,61) 'also'
bando-nkanda 77 (cf. 45) 'schools' both show final hesitation;
mlingi 77 (cf. 50) 'a lot' occurs before er, um'.

However, not all instances of the pattern can be accounted for in
terms of hesitation, and the remainder (all but 3 of which occur in the
read passages) seem to fall into two main groups:

(i) the word in question is the subject of the clause or sentence:

mbulala 5b 'rain'
yontso 7b 'either'
yandla 32b 'he'
ntulu 35a 'the price'
kama 35a 'a thing'
yankaka 35 (cf. 42) 'another'
mone 14,35a,46a,92 'I'
madutla 37b 'the cold'
ndzo-nkanda 44b '(my) studies'
beto 46 'we'.

The fact that for most of these examples the other version has the
more common form with high pitch on the penultimate syllable
suggests that the form with two highs is a free variant.

(ii) the word occurs in close proximity with the connective na:

after: nma 15a 'afterwards'
zulu 39b 'top'
ntangula 47b 'time'
bando-nkanda 77 (cf. 45) 'schools'

before: bamindile 3 'Europeans'
kuna 9 'there'
mone 14 'me'
As can be seen, this group crosscuts the previous two groupings to a large extent.

(iii) other examples:

- **bàlóŋyì 19a** 'the lecturers'
- **ikèlè 27** (cf. 67) '(they) are'
- **mọ́ 65** (cf. 27a) 'one'.

Although this pattern sometimes occurs several times on the same word (e.g., *mọ̀, mìngì*), there does not seem to be enough evidence here to postulate a class of words with high-pitched roots, especially since many examples have variants with only one high pitch. Of course, this is not to say that such a class does not exist, but merely that the evidence here, when taken in conjunction with the very common pause-marking function of the plateau pattern, seems to point more towards hesitation with the words concerned, even if no actual pause follows. It may be that there is a tendency for the pattern to occur in certain syntactic (e.g., subject) or morphological (e.g., with *na*) contexts, but the evidence even for this is not conclusive. The fact that most examples occur in the read passages, where we would expect a certain amount of hesitation, is another factor in favour of a description in terms of hesitation-conditioned variants.

11.6.4: bridging between words.

Bridging as hitherto defined (i.e., where the high pitches of two contiguous words are pronounced on the same pitch, sometimes with raising of intervening low pitches) occurs only in 9 of the 22 cases noted below, since many of the words concerned are monosyllabic. Bridging in general seems to be much less common than in previous texts (cf. 9.3.11), and in fact seems to take a slightly different form, since there are variants in which the high pitch seems to fall before rising again to complete the bridge, e.g. *bọ̀ kẹ́nwa [\quad \] 31a 'they drink', but *bọ̀ kẹ́nwa [\quad \] 33a. Compare also *yòò yì́nà 24a 'that is why' (cc. *yòò yì́nà 24b), *bápántálò ʒòlè 38 'two pairs of trousers'.

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It is uncertain how these instances should be treated; we might suggest that two contiguous high pitches, when occurring on different words, have two possible realisations: h-h → h-h (bridge) or f-h. But this variance seems to suggest that the high pitch entity possesses some component such as a fall, i.e. that the drop in pitch after a high pitch is just as important as the high pitch itself (cf. Carter 1973, p.13, and also 4.6.1 of this thesis), though at times this drop may be so short as to give the impression of two successive high pitches. If this view is correct, it would mean that bridging in kileta is rather different from that found in kikongo. This might be supported by the two facts mentioned above: that bridging is much less common, and that it mostly applies only to two successive high pitches, with the raising of intervening low-pitches syllables comparatively rare.

Instances of bridging are as follows:

(i) subject + verb:
- bɔ kɛnɔa 30,31a 'they drink'
- bɔ kɛtubɔka 76 'they speak'
- bɔ kukuotɔka 77 'they have entered'
- bɔ kezɔla 85 'they want'
- ngɛ tɛlæ 87 'you look'
- ngɛ kezɔla 33 'you want'
- mɔ kemɔna 85 'I see'
- ntuлу ya makɔya mɛluta 35 'the price of tobacco exceeds'
- Kiswahili kɛtumamɔka 60 'Kiswahili is spoken'.

(ii) verb + object:
- tayula ngɛ 32b '(he) will ask you'.

(iii) adjunct + following item:
- gɔ kɛfɛ 31b 'or coffee' (cc. gɔ kɛfɛ 31a, go kɛfɛ 33)
- yɔ yina 24b 'that is why'
- yo yai 36a (cf. 81) 'it (is) this'
- yo mʌngy 34 '... it a lot'
- tɛ bayakaalɛ 34b 'and men'
- tɛ bɔ-zaɪɛ 58 'or Bas-Zaire'
- ve asa 40b 'not here'.

(iv) noun + qualifier:
- ndzo-nkɔnda na mɔnɔ 45b 'my place of study'
note also nt'angu \mwa\ mingi 101 'a long time'.

To sum up: the concept of bridging does not seem so helpful here
as in kikongo, since in many cases the bridges might be described as
the mere juxtaposition of two high pitches. Further, they do not seem
to occur in positions where we might expect emphasis, or in one type
of passage more than another. It might therefore be best to consider
bridges in kileta as variants with no special significance, though
reserving full judgement on bridges over several syllables until more
examples present themselves.

11.6.5: falling pitch.

Apart from those examples noted under 11.6.4, falling pitch also
occurs in mb 28a 'badness', b 76 'they', t 33a 'or', v 31 'not'.
Note that these are all monosyllabic, and all except b occur pre-
pausally.

There is an interesting set of words which have two high pitches,
the last of which is pronounced with a fall: munka 21b 'paper',
\bantu\ 21b,74 'people', \ming\ 37b 'great', k\ants\ 53 'but', cf. also
\ank\ 66 'some'. Note that these all occur pre-pausally, except
the last. Moreover, they all occur in the b version (which I have
already suggested (11.5) may be more 'vivid' than the a version) and
the spoken passage, which seems to characterise them as typical of
more lively monologue. When we note that they all occur in contexts
where the speaker might be expected to use a certain amount of emphasis,
it seems reasonable to suppose that we have here a marked form (hf
instead of the usual pausal hh), used to highlight what the speaker
is saying. This gains credibility from the fact that in the great
majority of other instances of \bantu\ (11.6.2.i), it has no high pitch,
so that the difference between marked and unmarked forms for this item
is more obvious.

11.6.6: verbal patterns.

Verbal forms show a variety of patterns. In most cases there seems
to be a majority form, but there also seem to be fairly numerous
exceptions to these. Moreover, it may be that in some of the patterns
stress has been confused with high pitch, so the following listing is
not final.
(1) past indefinite (base + -ka, sometimes ku- + base + -ka): the
majority form is penultimate high, eg. lombáka 21 'I asked',
kupelisáka 10 'they lit'. But note:
(i) high on antepenultimate and penultimate, eg. kukulumúkaka 5b
'(I) disembarked', kupélaka 6b '(they) got wet', kubuyáka
23b '(they) refused', múnáka 24b '(you) have seen'. Note
that these all occur in the b version. It is possible that
the first high is actually stress, especially since in 3 of
the cases it occurs on the root-syllable.
(ii) high on penultimate and final, eg. vándáka 7b,9b,10,99 '(it)
was', kuláláká 8b '(it) set', zóláka 36a '(I) want',
kubulúkáká 74 'who have congregated', kwiísáka 103 '(he) came'.
(iii) kúkótáka 77 '(they) have entered'.

(2) present habitual (ke- + base + -ka): the majority form has high
pitch on ke- and on the penultimate, eg. kétubáka 64,73 '(they)
speak'. But note:
(i) kéebingáká 21b '(they) call'.
(ii) kéebingáká 21a, kélongukáká 71 '(they) learn'.

(3) present progressive (ke- + base): the majority form seems to be
high on the penultimate, eg. kebánsá 93 '(I) think', though this may
occur pausally (38b,70) or in bridge (33,74,85). But note:
(i) high on ke-, eg. kézola 29a '(they) like', kénya 30,31 '(they)
drink', kégwáka 41 '(it) falls', kétula 48 '(I) am devoting',
kéndíma 86 '(they) agree', kétuáb yó 58 '(they) speak it'.
(ii) high on ke- and penultimate, eg. kézóla 26a '(I) want',
kétuáb 65,66 '(they) speak'.

(4) present perfect (me- + base): there are not enough examples to say
which is the majority form. There are three patterns:
(i) high pitch on me- and the penultimate syllable, eg. mékatúka
74 'who have come', méktutáná 75 '(they) meet' (pre-pausal);
the two highs may be in bridge, eg. méluťa 4b 'which has
preceded', méluþa 11 'it has set', mékuwendo 70 '(he) has
gone'.
(ii) high on the penultimate, eg. méluťa 4a,25 'which has preceded',
memóna 28 '(I) have seen', mésálá 28b '(they) have done',
mélúta 35b 'it has exceeded'.
(iii) high on me-, eg. mésaálá 28a, méluťa 35a.
future indefinite (ta- + base): the majority form has high pitch on the penultimate syllable, eg. tatuba 78 '(they) will speak'.
But note takuma '(it) will become'.

11.6.7: conclusions.
It appears, therefore, that in the great majority of cases in these texts, high pitch occurs on the penultimate syllable, though a few words seem to have high pitch on the last syllable, or no high pitch at all. Hesitation or pause may raise the final syllable of the word. It seems possible to discern some differences between each text: the b version is slightly more vivid than the a version (having extra-high pitches and fewer hesitation bridges), and the read passages have distinctive features when compared with the spoken passages (loss of high pitch, high pitch on both syllables, hesitation-conditioned bridges). Moreover, the emphatic hf contour occurs only in the b version and the spoken passage.

It can be seen that there is a very large degree of correlation between Fehderau's description and the contours of the texts discussed above. There are three main similarities:
(a) the frequent occurrence of high pitch on the penultimate syllable in the texts is similar to Fehderau's most common class (I), with penultimate high pitch;
(b) stress is commonly associated with high pitch in the texts - indeed, as noted in 11.5, it is sometimes difficult to say which is which. In Fehderau's description stress usually occurs on the root-syllable, but this very often coincides with the high-pitched penultimate syllable anyway. Moreover, he notes that in class II, with final high pitch, the root-syllable stress tends to move to the final syllable to coincide with the high pitch. We might also note Fehderau's uncertainty in the case of komansa/komansé (cf. 11.4.2.1); this may have to do with the development of his ideas, but it does show that high pitch and stress in Kileta are easily confused;
(c) the lenda/lenda variance noted in Fehderau 1962 (11.4.2.1) may bear some relationship to a possible neutral-marked pair lenda/lenda (cf. 11.6.5). (But note the alternative explanation in endnote 7.)

Nevertheless, there is one important difference: there seems no
reason to posit special tone-classes for the words in these texts (though it may be that a small minority depart from the general pattern). I have suggested above (11.4.1.4) that Fehderau's description does not make it plain enough that one class far outnumbers all the rest, and that there seems to be a simple rule governing stress-placement in his data. His methods of description could therefore be misleading when applied to the texts here.

11.7: comments on variant contours.

Detailed discussion of a few key sentences revealed several possibilities for contour variance.

(i) With regard to the general idea of intonation, Mr. Katesi said that the contours depended on 'the emotions, and the attitudes towards a person I am talking to, and then I think that the voice or the intonation depends on that. I might be angry and raise my voice when I use one word or a phrase or sentence. ... In some sentences, for instance, you would notice that you don't have a word like nani ['who'] which might introduce a question, or inki kima ['what'] there, but you will notice just by the intonation that there is a question'. On the difference in contours when reading and when speaking spontaneously, he commented, 'When I am reading I think that I am a little bit conscious that I'm reading, and I have to read in such a way because the sentences are [already] there of course. When I speak, you see, at the same time the sentences come, and the attitudes - there are a lot of factors; but here I've just got the text there I have to read'. Of emphasis he said, 'When the emphasis is on one word, it means that the information provided by the word has not been given - maybe the person got some cue, but he didn't get the exact information'. He added, 'This question of intonation - sometimes it is not conscious'.

(ii) 'Who is there?' This was given in a series from slow and unelided to fast and elided: nani itele kuna?, nani kela kuna?, nani ke kuna?, nani ke kuna?, nani ke kuna?, nani ke kuna? Nani ke kuna? and nani ... kele kuna? also occurred. For emphasis, 'who is over there?', nani ke kuna? was given.

Since -kuna also means 'sow', the sentence could also theoretically mean 'who is sowing?', as Mr. Katesi pointed out: nani ke kuna?, nani
ke kuna? Since there is no difference in the contour, 'it depends now also on the context, the situation, and so on'. However, he noted that this sequence would almost always be used as a minor sentence, if the speaker 'told you for instance that somebody is sowing': nání ke kuná? or nání ke kuna? In most other cases 'I think that we need a complement': nání ke kuná matiti? 'Who is sowing the grain?'.

(iii) 'Who saw you?' Nání monáka ngé?, nání monáka ngé?, nání monaka ngé?, nání monaka ngé?, nání monaka ngé? The exact difference between these four is unclear. The first may be slow, distinct speech, and the third may be a variant of this, suppressing the high pitch on monaka to give more prominence to that on ngé.

The second tends to emphasise monaka. The fourth would tend to emphasise nání ('you want to know chiefly "who?" '), and this may be reinforced by pronouncing nání slowly and with emphasis.

However, nání monáka ngé? or nání monaka ngé? can also emphasise ngé, while nání monaka ngé or nání monáka ngé? again emphasise ngé, but convey an element of surprise (though Mr. Katesi was not entirely sure about this).

When replying 'X saw me' the high pitch was usually on the X item, eg. ndzendza monaka mono 'the visitor ...', mbuta-muntu monaka mono 'the gentleman ...', tata na ngé monaka mono 'your father ...', etc.

(iv) 'Do you want me to eat rice?' Nge kezola munu kudya lóso?

The statement form would be ngé kezola munu kudya lóso (the same contour, but in a normal key) or ngé kezola munu kudya lóso.

Nge kezola munu kudya lóso? sounds 'a bit awkward', though some people (eg. missionaries) might use it, or it might occur if the speaker was angry - 'the tune is not common'.

Nge kezola munu kudya lóso? go nyama? 'do you want me to eat rice ... or meat?'

Nge kezola munu kudya lóso? would have somewhat the same connotation, emphasising lóso.

Nge kezola munu kudya lóso? could mean the same, but might also imply 'I see that you want me to eat rice, you are forcing me to eat rice'.

Nge kezola munu kudya lóso seems not to be possible, though nge
kezola yândi kudya loso, kansi m'v ve 'you want him to eat meat, but not me' did occur (with a few variants), 'emphasising - not in the sense of "him, not me" ... yes, it might mean so, but I think it can also mean in the sense of "must" - it might introduce a sense of obligation'.

(v) 'I came to London'. Mono kwisaka na Londra.

Ngyeele kulo Londra was what Mr. Katesi learnt in school - 'when these people speak kiNtandu or the other dialects you notice that there is a lot of intonation or tones'.

Mono kwisaka na Londra sounds like a question, but is not normal: 'maybe someone asking a question where he is surprised ... in answer to a statement made by somebody else'.

Mono kwisaka na Londra might mean something similar, as if you queried somebody's statement that you had been in London, or that he had seen you in London.

Mono kwisaka na Londra is possible, presumably to emphasise kwisaka.

Mono kwisaka na Londra 'might be a question of hesitation, or you don't know what you're going to say afterwards. Or a pause to make this kind of thing important, so people would expect to know where you came [to] ... maybe the person wants people to ... guess what is coming next'.

Mono kwisaka na Londra is possible, 'but not very usual, unless there is a hesitation'.

Mono kwisaka na Londra sambu na kuta nga 'I came to London in order to see you' is a neutral form.

Mono kwisaka na Londra sambu na kuta nga is possible, emphasising London, 'not somewhere else. But it means that we are not in London, maybe'.

Mono kwisaka na Londra sambu na kuta nga (kuta pronounces slowly and emphatically) 'won't sound quite normal unless somebody wants to insist, or he is a little bit angry, or he has got a special attitude. Unless you are maybe angry, or someone asks you to repeat again and again and you say mono kwisaka na Londra sambu na kuta nga ... he is insisting that he came to see him. Chiefly when people have arguments they try to insist like this'.

(vi) 'Did I come to Kinshasa?' Asked if there was any difference between
mono kwisaka na Kintshasa? and mono kwisaka na Kintshasa? Mr. Katesi said that the second would be the more natural of the two, though the speaker would be surprised in both cases - in the second that his interlocutor was referring to him, in the first that his interlocutor was referring to Kinshasa. 'There is a very slight difference in meaning ... In the second one I think that is maybe "you saw somebody else, but not me": [the speaker] is surprised that you are saying that you saw him or that he went to Kinshasa, but it is definitely not him. But in the first one maybe [the speaker] went somewhere, but not in Kinshasa. Maybe you saw him somewhere [else], but according to [the speaker] it seems unlikely to be Kinshasa'.

(vii) 'Your brother will not be coming to Kinshasa'. Mbota na ng'e takwisa ve na Kintshasa. A pause is possible after ve, but in such a case the word seems to have no high pitch. A pause after the first three words gives them the contour mbota na ng'e.

Mbota na ng'e takwisa dyaka ve na Kintshasa 'your brother will no longer be coming to Kinshasa [as expected]' . Asked whether it were possible to pronounce the ve here as ve, Mr. Katesi said that this emphasised the negative: 'I haven't said it myself many times, but I have often heard people insisting like this [in arguments]'.

(viii) 'My father [works hard]'. Tata na mono kesala kisalu ngolo (note the cognate object, again showing a dislike of ellipsis).

As a minor sentence in answer to the question nani kesala kisalu ngolo? 'who works hard?' we might have tata na mono.

Tata na mono? would imply that 'I want to make sure I got what you said'.

Tata na mono? implies that 'you are maybe surprised, you didn't know what he was saying, or maybe you just want to check'.

When mono was given the 'hesitation' contour noted earlier (v), tata na mono ke'sala kisalu ngolo, Mr. Katesi said, 'I don't actually see a great difference'.

Tata na mono ke'sala kisalu ngolo (mono pronounced slowly and emphatically): 'maybe you want to correct what somebody said before; maybe he implied that it is his father, and now you want to say it is your father who is doing it - in this case the person might be a bit excited anyway': tata na mono ke'sala kisalu ngolo, tata na ng'e ve, tata na mono 'my father works hard, not your father, my father'.
(ix) 'Is this the book belonging to this person?' Inkiya munkanda ya muntu ya{x}, Inkiya munkanda ya muntu ya'{17}

Munkanda ya muntu ya{x} is possible, but 'I think [then] there is definitely an emphasis on ya'.

Munkanda ya muntu ya{'} may possibly emphasise muntu: 'not other people's, or not ours, but it belongs to this person'.

Munkanda ya muntu ya{x} also occurred (giving prominence to munkanda?).

(x) 'My father's chair'. Kiti ya tata na mono, Kiti ya tata na mono.

Kiti ya tata na mono or Kiti ya tata na mono would imply that the speaker was pointing out the chair and saying not to touch it.

Kiti ya tata na mono (spoken fast) would imply that the speaker 'is a bit angry maybe.' It might be said as a minor sentence answering the question yat' Kiti ya nani? 'whose chair is this?' ('maybe the person is inquiring where people are going to sit down'), 'but it sounds a little bit that the person who is answering is less polite, anyway, to insist like this: "not of your father, not of somebody else, but of my father", because I would say that the idea is, even if the father is yours he belongs to the society, he is the father of everybody, anybody will call him tata, so why should you emphasise on that?'

Kiti ya tata na mono seems to be impossible.

Kiti ya tata na mono would indicate surprise.

(xi) 'My older brother'. Mbuta na mono, Mbuta na mono – the latter implies that the speaker is 'a little bit happy'.

Mbuta na mono 'doesn't seem to be quite regular, but if somebody says it maybe he is very very happy ... chiefly between children'.

Mbuta na nge would denote surprise, and emphasise nge - 'I mean the person is maybe surprised to hear that [the other person's] brother is coming, and he wants to know even more'.

Mbuta na mono (spoken slowly and emphatically) would denote that '[the speaker] is very happy - "you must know that it is my brother who is coming"'.

Mbuta na mono sounds 'very awkward - perhaps na mono could be a kind of humour, but not a normal pattern'.

(xii) During discussion of the translated passage (11. 96-104), a seeming tonal minimal pair appeared: mutambi 'fishing-net', but mutambi 'fisherman [with net]'. However, on further investigation
it turned out that Mr. Katesi used only mutambi with any frequency, preferring pesher (<pescheur) for the personal noun, and that this applied to most people - in fact, he sometimes had great difficulty in remembering to say mutambi for the person. It is therefore a moot point whether we actually do have a pair mutambi/mutambi - it seems rather to be mutambi/pesher.

Enough recurring principles can be discerned (eg. extra-high final bridge denoting a surprised question, high pitch on every word denoting insistence and even impoliteness) to suggest that we do indeed have here a fairly well-developed system of intonation. The main method of altering the connotation of various stretches seems to be the suppression or raising of the high pitches on various items in that stretch. Very often, this amounts to what we might call a 'moveable peak', though there does not seem to be enough information at present to say much about the relationship between place of peak and connotation. Moreover, the difference between, or factor governing, right-hand suppression in a nominal group (which seems to be the most usual), eg. mbuta-muntu 'gentleman', as against left-hand suppression, eg. tata na me 'my father', is as yet unclear.

When comparing the notes above with what Fehderau 1962 says about intonation (11.4.2.2), it must be admitted that the two sets of comments show few points of contact. We might suggest that Fehderau's informant merely used stress (instead of high pitch) for non-final words, reserving high pitch for the final word of the sentence so as to give specific sentence finals.

11.8: summary.

This chapter has examined earlier work on kileta (11.4), and suggests improvements in the systematisation that work proposes (11.4.1.4), though recognising that the work forms a very useful basis for future research. Analysis of the texts (11.6) shows that it is most common for kileta to have high pitch on the penultimate syllable, and that there are some differences between spoken and read versions of the language. Finally, the comments on variant contours (11.7) show that kileta seems to be well on the way to systematising several intonation features.
Endnotes to chapter eleven.

1. Fehderau 1967 pp. 46-47 notes that there seems to be tonal contrast, eg. mukongo 'back', mukôngo 'Kongo person', mukanda 'skin', mukândà 'book'. In 1969 he marks these examples

mukôngó, mukôngo
mukāndà, mukāndà

Fehderau does however note that this contrast seems to carry little functional load. Are the examples given real minimal pairs, or are they accidental? (Cf. 11.7.xii.) Mukongo 'back' looks like a loan-word from Lingala (cf. mokôngo in Dzokanga 1979), and no kiKongo cognate is given in Laman 1936. In the case of the second pair, the cognate nkānda in Laman 1936 is given for both meanings. The Lingala mokandá (Dzokanga 1979) means 'letter', but the pattern seems to be closer to the pattern given by Fehderau 1969 for 'skin'. Compare the CB -kanda 'letter', -kānda 'skin', where the patterns and meanings are also switched. All in all, it would seem that we require many more examples before we can suggest that there is tonal contrast in kilêta.

2. The layout of the dictionary leaves something to be desired, as prefix and stem are not segmented, eg. -kumxsa 'finish' is followed by ku-móna 'to see'.

3. Kafumbá, káká, kibendé, kibúkilo, kinđumbá, kitemwé, Kóngó, kuná, and loans kabiné, kado, kafé, kajo, käsé, kamintó, kère, kertó, kawsú, kaye, kilesó, kíló, kímásó, kíma, kündá, kúmásé, kómi, kúmpántó, kúntíné, kontró, konzé, kreyón, kúrtýé, kúpé, kúse, kúkér.

4. Kana, kansí, kasíndí, kata, kibuka, kídíkídí, kidíba, kidínga, kifu, kikodi, kilanga, kilungi, kílungí, kímbua, kímta, kímpa, kímuntu, kimununu, kindókí, kinduku, kinganga, kinsúntó, kinunu, kinwe, kínzana, kípesí, kíputí, kipák, kiriší, kisungí, kísí, kísoní, kita, kitemba, kitende, kívumu, kíya, kízíba, kízítu, kubwa, kudía, kufwa, kuka, kukiá, kukiá, kunkusa, kumaná, kunda, kundíma, kunwa, kusa, kwa, kwanga, and loan kopa.

5. There are three items which belong to none of the classes described by Fehderau: the indigenous kekete, the English loan klém, and the French loan katekísima. These pose some problems of classification, ie, what status do we assign to epenthetic vowels? To a certain
extent these problems also occur with kwátru, Kísto and kárte in class I. We might rewrite these words k(i)lím(u), katekíts(i)ma, kuárt(u)tu, K(i)líts(i)to, kár(e)te, and we then note that the high pitch occurs on the penultimate or only syllable which has a 'full' vowel. It therefore seems reasonable to put these words in class I. Kékete, however, is still problematic.

6. Fehderau notes, though, that this stress tends to move to the last syllable (i.e. the high-pitched syllable) in speech.

7. It is possible that we do not have here a distinction lenda (present)/ lendá (past), but in fact one lenda/lendá. The regular past formation from lenda 'can, is able' would be lendáka 'could, was able' (11.2.6); however, as noted in 11.3.a [k] is often elided. This would mean that we do not have here a minimal pair distinguished by stress placement, but a regular present/past alternation, with lendá(k)a being heard by Fehderau as having final stress when it has in fact final length. But see also 11.6.7.

8. The hesitation bridge (2.2.6.b.ii) is by far the most common pausal marker, though it should be noted that it does not occur before all pauses. There are several instances of one of the versions of the letter (11. 1-50) having the bridge, and the other one not, eg. kuLála 9a 'going down', ya mbvúló 17a 'of the year', ya mbíté 27b 'good', ya madúdú 40a 'of coldness'. The fact that the a version seems to have more examples of the bridge may be an indication that it is less spontaneous than the b version. In quite a few cases the pause has no special pitch indication, eg. na bêto 26b 'our', kuvùla 36b 'to note', yái 64,82 'these', na kumôna 82 'on seeing'.

9. The reason is that most of the handful of words with final high pitch are French loan-words; since some of these do not occur pre-pausally and yet have this final high pitch, it seems best from the point of view of systematisation to mark it in all cases with an acute.

10. This may be due to the influence of Lingala, whose pitch system shows virtually no downdrift (J.H. Carter, p.c.).

11. This is in contrast to kiKongo, where it is most common for high pitch to occur on the root-syllable. It should be noted though that in many cases root-syllable and penultimate syllable coincide (see also 16.3.2).

12. It will be remembered that there is a sizeable number of words in Fehderau 1969 which have no high pitch (class III) - see 11.4.1.1.
13. Note that Fehderau lists this as being an all-high stem (class II).
14. The example ṭkèlé 57 may be a variant of ṭkèlé.
15. [ŋ] nkì seems to act as a question marker (cf. je in Swahili), eg. ñkì tò kekwìsa na Londò? 'do they come to London?'
16. It is to be noted that Mr. Katesì did not seem to like ellipsis or indefiniteness in the sentences he discussed. Nouns were almost always made specific, eg. nkénto na ngé 'your wife', mpèrumu ya bawála 'the chief of the village', muntu múst 'a man', etc.
17. Note the variant patterns on munkanda; the latter pattern may owe something to Lingala influence (cf. endnote 1). Note also the use of nkì as a question marker (cf. endnote 15).
18. It might be said that, apart from a rising contour in 36-37, and a low contour in 32b and 72, the texts themselves do not show much of what we would term intonation, ie. pitch differences applying over sentences to give varying connotations. However, we must remember that these texts were mostly neutral as regards contour.
19. This method of altering connotation could be said to stand midway between word-pitch (tone) and sentence-pitch (intonation). The units used to alter the contour are words (by suppression or raising of their high pitch), the domain of this contour is the phrase, but since the effect of suppressing or raising certain high pitches is to give a different contour over the phrase, this contributes to the contour being associated with the phrase rather than with the words, thus making it easier for the phrasal contour to be used as a unit when the idea of sentence-contours develops.
20. Historically mbut' amuntu (noun + genitive), but now best treated as a compound.
CHAPTER TWELVE
The Mechanisms of Contour Variation

12.1: introduction.

In chapter 11 it was noted (11.7) that kileta seems to be developing an intonation system, though no more than the outlines can be discerned at present. Can anything similar be said about kikongo? Chapters 4-10 included informants' comments on variant contours, and it is the aim of this chapter to assemble and summarise these comments so as to give a preliminary systematisation of variant contour types and their function. The summarised comments, all from my main informant the Rev. D. Ntoni-Nzinga, are collected in Appendix 4, to which the numbers in the rest of this chapter refer.

12.2: difficulties.

There are several difficulties inherent in any such attempt to investigate contour variation:

(a) the informant may be unable to vocalise his ideas of nuances of meaning;
(b) he may misunderstand what he is being asked to comment on;
(c) there is some difficulty in separating the effects of suprasegmental markers from those of other markers such as variant word order;
(d) there is a dearth of examples in exactly comparable environments;
(e) the investigator may misunderstand what the informant considered significant;
(f) he may tend to see things from his own point of view rather than from that of the informant;
(g) there is a great amount of wastage in examples presented for comment, the comments on perhaps only a quarter overcoming the above difficulties and seeming relevant to the inquiry.

Nevertheless, it is imperative that some account be given of these phenomena of contour variation if we are to begin to approach a full description of the kikongo pitch system. It will become apparent in the rest of this chapter that, contrary to what might be expected, we are in fact presented with a remarkably consistent picture of the form and function of variant contours.
12.3: emphasis.

Most of the examples show a neutral/marked or normal/emphasised distinction. It would seem that such examples could be summed up as follows: 'emphasis may be achieved by the use of the non-expected'. That is, a sequence may be emphasised by one or more of the high pitches in that sequence being in a position or having an attribute that would not occur in the normal, neutral sequence.

Exponents of emphasis seem to be as follows:\(^4\)

(i) high pitch when none is expected, eg. 20b, 21b, 50a, 36c (cc. 5a), 42a(?), 49a, and perhaps 36a (cc. b). Thus: imuntu ĉambote 'he is a good man' 5a neutral, imuntu ĉambote 36c emphatic.

(ii) suppression of expected high pitch (cf. (vii) below), eg. 3a, 24c, 33b, 37b. Thus: kyantatu 'third' 37a neutral, kyantatu 37b emphatic.

(iii) unexpected shift of high pitch, eg. 35a, 40a, 38b(?), 33b(?), and note rightward move in 10a, 29a. Thus: batelama 'they stood' 35b neutral, batelama 35a emphatic.

(iv) non-shift of normally shifted high pitch, eg. 49a, 36a (cc. c)(?), and note no rightward move in 11b. Thus: ... madya mankokiia 'the evening meal' 49b neutral, madya mankokiia 49a emphatic (for the pattern on madya cf. (i) above).

(v) falling pitch instead of low pitch, eg. 17b, 39b, 41b, 21b, 33b. The first three could also be classified under (i) above. Thus: yeesu-kə 'not Jesus' 41a neutral, yeesu-kə 41b emphatic.

(vi) higher key, or extra-high pitch, eg. 18a, 22b, 25b, 36c (cc. 5a). Thus: muna-kətidi 'inside him' 22a neutral, muna-kətidi 22b emphatic.

(vii) lower key, eg. 26, 36a. Thus: munā-phuwa yaphilia 'in a situation of this kind' 26 emphatic.

(viii) bridging, eg. 7b; 16b, 46b, 9b; 45a, 48a, 4a, 12a (these four are all at the beginning of a new topic); 51b, 27b, 34b, 31a, 33b. Thus: bānkaka mubaau 'some of them' 34a neutral, bānkaka mubaau 34b emphatic.

It is noticeable that one example may occur in several of the above categories, eg. 21b in (i) and (v); 36c in (i) and (vi); 49a in (i) and (iv); 36a in (i), (iv) and (vii); 33b in (ii), (iii), (v) and (viii). This suggests that several parameters of emphasis may intersect in a given case to convey the desired effect. Thus in the last example mentioned,
33b, we have:

<table>
<thead>
<tr>
<th></th>
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<th>in a (above)</th>
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<tbody>
<tr>
<td>mono</td>
<td>for mono</td>
<td></td>
</tr>
<tr>
<td>təta</td>
<td>for təta</td>
<td></td>
</tr>
<tr>
<td>mfutid</td>
<td>for mfutid</td>
<td></td>
</tr>
<tr>
<td>təta mfutid</td>
<td>for təta mfutid</td>
<td>in a (above)</td>
</tr>
</tbody>
</table>

This concept of the simultaneous occurrence of several markers of emphasis may help to account for sequences where the patterns pose problems of description. Such a sequence is 47b (cf. 10.3.1.i). Looking at this in terms of emphatic parameters, we can say we have:

- mülukanu for mulukanu in a (iii above)
- lwastika for lwastika in a (iv above)
- Ndzambu (no high pitch) for Muvungu (high pitch on the root-syllable) in a (ii above)
- mpɔ̃ with falling pitch (v above).

The extra vowel-length in lwastika may also have an emphatic function (cf. 3b and 13a).

However, in putting forward this interpretation we are faced with one problem: namely, why is the reverse not possible? That is, since the above categories mostly fall into opposing pairs (i↔ii; iii↔iv; vi ↔vii), we could just as well work the other way, and say we have:

- mulukanu for mülukanu in b (iv above)
- lwastika for lwastika in b (iii above), etc.

We would then be arguing that 47a is the marked phrase, and this view would be reinforced by the fact that 47a has a bridge (viii above), while 47b does not. Yet are the parameters of emphasis outlined above of any benefit if we can use them to argue both ways?

The point is that these parameters are purely descriptive; they are not prescriptive. We cannot use them by themselves to decide whether a given sequence is emphatic; however, once we conclude that this sequence is in fact emphatic, they can be used to describe how this emphasis is conveyed. In example 47, we conclude that 47b is the marked version on the basis of three considerations:

1. 47b was said by the informant to be marked;
(2) 47b fits less easily into the description proposed here than does 47a, i.e. from the point of view of systematisation 47b is the odd one out;

(3) 47b shows the distinctive falling pitch, which in other occurrences in the texts indicates emphasis.

On these grounds, 47b is considered the marked version, and it is only then that the above parameters may be applied.

12.4: Intonational overlay.

The previous paragraph raises the question of how to fit the idea of exponents of emphasis such as those listed above into the systematisation put forward in previous chapters. How, for example, do we differentiate between high pitch shift with, say, a genitive element, and high pitch shift for emphasis (12.3.iii)? On what basis do we say that one conveys no connotation of markedness, and yet hold that the other does?⁵

The only answer seems to lie in suggesting that this system of emphasis is an overlay to the pitch-accent system. We might visualise the above parameters of emphasis as a disturbance of the expected contours, and this would unite the opposing pairs in one whole. Thus we would have the parameters

A ——— B

high pitch

no high pitch

A ——— B

shift no shift

If the word was 'normally' at point A, there would be the option of emphasising it by moving it to point B, and vice versa.

We therefore envisage a three-tier system, as follows:

level one: word-contour (tone)⁶ — tone-classes of the isolated word

(for a full discussion of this see chapter 14)

(tone-class differences merge in connected speech — 14.13)

level two: phrase-contour (pitch-accent) — the system discussed in chapters 3-10; this is where the primary (main) conditioning of 'normal' contours takes place, by means of such factors as: (i) upturn, etc., due to pause (phonological),

(ii) shift of high pitch due to occurrence of pre-pre-
fixes such as the genitive element (morphological),
(iii) bridging due to close association of items (syntactic), etc.

level three: connotation (intonation) - this is where the secondary conditioning of the contours established at level two may take place; the same mechanisms are used for the most part as at level two, but in this case to disturb, not to fix, the 'normal' contours.

We can now see why the parameters of emphasis cannot of themselves be used to decide whether or not a given sequence is marked - they are dependent on the contours conditioned at the lower level, two. That is, emphasis can be signalled only by modulating the 'normal' level two contour, and not by creating an entirely new emphatic contour based on, say, level one. In other words, a level three contour does not exist as an independent entity, but implies a pre-existing level two contour on which it is based. Since level three is strictly secondary to level two (the word 'overlay' is therefore apt), and yet uses much the same mechanisms, it cannot be used alone as a deciding factor for markedness.

This brings us to the question raised at the beginning of this section - on what basis do we distinguish, say, shift at level two and shift at level three? The result in each case is exactly the same - high pitch is moved one syllable leftwards. However, the significance in each case is different. At level two shift is, we might say, automatic; indeed, if the mechanisms at level two were not automatic, if they could not be taken for granted as the normal, neutral, expected pattern, then they could not be manipulated at level three for the purposes of emphasis. At level three, shift seems to be much more a conscious modulation of the expected contour by the speaker. In other words, therefore, we distinguish shift at levels two and three on the basis of the part it plays in the system as a whole: if a speaker attributes no special emphasis to a word with shift, then it is at level two; if, on the other hand, he does say it is emphatic, then the shift is at level three. The fact that the same mechanisms can occur at two different levels is significant; it is inherently likely that when a system develops it would do so by the extension of existing mechanisms, rather than by the creation of totally new ones.
It would therefore seem that to describe KiKongo contours fully we must look not only at the word, but also at the phrase and the whole context: all of these factors are crucial in conditioning the pitch contours.

12.5: Continuity.\footnote{12.5: Continuity.}

There seems to be one other main level three grouping in the examples besides that of emphasis - final versus non-final. It is more difficult to organise these examples, partly because there are fewer of them, but also because the final/non-final distinction cuts across the level two feature of pausality, eg. it is quite possible to have a non-final form occurring pre-pausally. Accordingly, the examples will merely be listed here.

Exponents of finality\footnote{Exponents of finality} seem to be:

(i) move of high pitch towards the beginning of the word, eg. 44a, 8b (but see also 12.6.b) \[cf. 12.3.iii],
(ii) move of high pitch towards the end of the word, eg. 29a (though this may be more a matter of emphasis than finality) \[cf. 12.3.iv],
(iii) suppression of high pitch, eg. 24b (though the absence of high pitch on ingindu may be a variant, and the real marker of finality the absence of pausal upturn on zaame) \[cf. 12.3.ii],
(iv) high pitch when none is expected, eg. 43b, 14b \[cf. 12.3.i].

These categories are less clear-cut than those for emphasis, but it is notable that again we have a system of oppositions (i) \(\Rightarrow\) (ii), (iii) \(\Rightarrow\) (iv). Moreover, the categories are directly comparable to those suggested for emphasis. The possible significance of this appears when we examine one example in greater depth.

In example 32 we have ___katala, katála___, and ___(katala). The third instance (32c) shows no high pitch, in this case de-emphasising the word, since the action expressed is expected and therefore needs no attention drawn to it. 33a and b are interesting since they are very similar to 35a and b, and yet were explained differently by the Rev. D. Ntoni-Nzinga. He explained 33a/b in terms of continuity, but 35a/b in terms of emphasis. The syntactic context is of course different in each case, but even so, the examples pose a problem: why should the same
features be explained in different ways? The answer may be that continuity and emphasis are in fact related; the final/non-final 33a/b is comparable to the emphatic/neutral 35a/b, and, as noted above, continuity and emphasis seem to be similarly expressed. We might therefore suggest that these two phenomena are subsets of a single category 'marked' on level three (cf. also 7.6.3).

12.6: other examples.

A few other examples are worthy of comment:

(a) examples 6a, 15a, and 23b are questions, from which it would seem that question intonation includes high pitch on the final syllable.

(b) examples 5 and 8 show third person forms with high pitch nearer the beginning of the phrase than first person forms; since these are the only examples in the whole corpus (other than, possibly, 40 - cf. 8.6.1.vii) where there seems to be a distinction of this nature, it seems somewhat suspect. The different contours may be due to some other feature, eg. in 8 the distinction final/non-final is also adduced as a conditioning factor.

(c) examples 19b and 36c show a paratactic connective - note the high pitch on the connective element ye- in each case (cf. 50a).

(d) examples 30b and 38b show marked word-order, which interacts with pitch features to give an emphatic connotation.

12.7: summary.

I have suggested in previous chapters that the occurrence of sequences with variant contours implies a certain degree of variability in the kikongo pitch system (cf. 4.5). In spite of the difficulties involved in investigating variant contours (12.2), certain recurrent features can be discerned, and a consistent picture emerges of a relationship to emphasis (12.3) or continuity (12.5). Further examination suggests that there is an intonational overlay to the pitch-accent system, where varying connotations can be signalled by perturbation of the normal contours of a sequence (12.4). Although this formulation is tentative, the outlines are sufficient to suggest that this overlay plays an important part in the kikongo pitch system.
Endnotes to chapter twelve.

1. KiLeta will not be dealt with in this chapter, as it has already been discussed at some length (11.7), and in any case seems to differ fairly markedly from kiKongo in terms of its pitch system.

2. These are as follows: 1-6 (chapter 4.5), 7-16 (chapter 5.5), 17-27 (chapter 6.6), 28-33 (chapter 7.5), 34-41 (chapter 8.6.1), 42-51 (chapter 10.4). For full information on the examples reference should of course be made to the relevant portions of the chapters concerned.

3. There are very few comments by Mr. A. Ndolo Menayame (chapters 8 and 9), since he was not so forthcoming about these variant contour features as my main informant. It was therefore considered best to exclude Ndolo Menayame's comments altogether in order to concentrate on those from Ntoni-Nzinga. It is not impossible that Ndolo Menayame may have a different or less extensive system of contour variation in his idiolect, though on the one occasion when both he and Ntoni-Nzinga commented on the same phrase (example 51), their comments were almost identical.

4. Simplified examples are given to illustrate each exponent; the syllable in question is underlined.

5. The problem is remarkably similar to that faced by Laman in the same context — see 9.5.4.2.

6. The use of the word 'tone' here is not strictly accurate, because I have argued in chapter 14 that since only two main patterns can be discerned, the contrast is really one of pitch-accent rather than of tone. However, the term is retained since Carter 1973 and Daeleman 1966 distinguish several patterns which seem subsidiary to the bipartite division of chapter 14, and also because the term draws attention to the fact that the domain of pitch in this case is the word.

7. It should be noted that this term does not refer to an action taking place uninterrupted over a period of time, as when we speak of a certain tense as being 'continuous', but rather refers to the presence or absence of a subsequent entity related to the one in question, as when we speak of 'continuity' between successive regimes.

8. In two instances (1b, 28a), the variant contours seem to be due merely to the occurrence of hesitation bridges before pause.

9. It seems reasonable to consider politeness as a form of markedness
also, and if this is accepted we can then refer to another Bantu language where continuity is related to another subset of 'marked'. Recent work by Mateus Katupha on Makua (P.R. Bennett, p.c.) shows that there exist two indicative verbal suffixes -a and -aka; -a implies that the verbal item is final or independent, while -aka implies that it is conjunct or related to some other clause. In the subjunctive we can distinguish cognate suffixes -e and -eke, but there, -e is a neutral form, while -eke has an implication of politeness, eg.

kîlîme attentâ 'I ought to hoe the field'

kîlîmeke attentâ 'may I hoe the field?'.

kiHnlmeke ettima 'may I hoe the field?'.

kiHnlmeke ettima 'I ought to hoe the field'
CHAPTER THIRTEEN
Coda - Bantu Parallels

13.1: introduction.
This chapter is devoted to general discussion of two main areas: (i) is there any precedent for a pitch-accent description of Bantu pitch systems, i.e. is the description proposed for kiKongo in this thesis paralleled by other work in the Bantu field? (ii) does the most distinctive feature of the kiKongo pitch system, bridging, have any parallels in other Bantu languages, whether in form or function?

13.2: pitch-accent.
I have defined what I mean by 'pitch-accent' in 1.6.5 (see also Carter 1980c for a general discussion of 'tone', 'pitch-accent' and 'intonation'). In my opinion, the features present in the texts I have discussed are quite capable of being interpreted in terms of a pitch-accent system, and therefore the only point that needs to be established is whether it is reasonable to expect that such a system could occur in a Bantu language.

13.2.1: developing ideas.
With the great increase in suprasegmental studies over the past few years (90% of all work on tone, etc. has been done in the past 10 years), our ideas on pitch features and their function in language has been crystallising, so that it is now possible to publish general introductory works on, for example, tonal theory (see Fromkin 1979). The suprasegmental systems of a great many languages have been studied, leading to useful advances in description and analysis. The descriptions of a few languages (e.g. Tonga - see Goldsmith 1980) have been revised and recast in terms rather different from those of the original description. Most of this new work will contribute to the development of pitch typology, though no doubt a certain amount of it may just be due to the 're-writing mania' which strikes linguistics every now and again (such that all previous descriptions must be re-written to accord with the latest revealed truth).

At one period Bantu languages were being described in terms of a
fair number of discrete tone-levels (e.g., Doke's 9 for Zulu, Laman's (1922) 6 for kiKongo). From the 1940s onward, however, it began to be realised that most Bantu languages could be described in terms of two tonemes, and many descriptions were published in the fifties and early sixties which took advantage of this (see especially the works of the Belgian Bantuists such as Meeussen). It was recognised that some languages, such as Swahili, could not be described as tone-languages, and they were classed separately as intonation languages. Further research in the late sixties and the seventies has led to a further extension in our understanding of pitch phenomena, and this time American scholars have taken the lead, arguing that the pitch typology should not be limited to two divisions, but is much more flexible, and that there is a variety of gradations of pitch system. Arguments have been given for regarding certain languages as having unorthodox tonal systems in one way or another, e.g., Johnson 1976, Byarushengendo et al. 1976, Cheng and Kisseberth 1979-80, Goldsmith 1980, Voorhoeve 1973, Schadeberg 1973, Stucky 1979, while Kisseberth and Wood 1980-81 argue for Digo having residual tone, and Bennett 1974 suggests that there are elements of intonational overlay in Kikuyu.

Thus, due to growing awareness of and interest in pitch systems, the suggestion that kiKongo might have a pitch-accent system would by no means be a unique one. Apart from the evidence put forward by the analysis of texts earlier in the thesis, however, are there any general considerations which might support the suggestion of a pitch-accent system?

13.2.2: PB stress-accent.

Bennett nd. puts forward several arguments in favour of there having been some sort of stress-accent system as well as a tonal system in Proto-Bantu. Although the evidence is circumstantial, he makes a strong case. The variety of existing pitch systems in Bantu languages would then be due to the interaction of those two systems and the progression towards dominance of one of them. This would lead to various types of tonal system, and perhaps in certain cases to a pitch-accent or even intonational system.
13.2.3: Variation in tonal systems.

Tonal systems do certainly vary. In some languages (e.g. Yao) there is a loss of tonal distinctiveness on verbal stems, and in other languages (e.g. Kikuyu) the tones of the verbal stem are not associated with individual syllables, but rather are patterns which may expand or contract to cover verbs of varying length. Moreover, in most languages nouns do not have the full complement of possible patterns: there are usually several 'holes', and the tendency is to enlarge these holes, especially since most nouns of three syllables or more are verbally derived and therefore have often only a two-way tonal contrast on syllables up to the final suffix. Even disyllabic nouns have often only three, or sometimes even two, of the four possible patterns, hl often merging with hh, and, less commonly, lh with ll. There is also a general tendency to lose tonal distinctiveness at the edges of the subject-predicate complex: for example, noun class prefixes and verbal extensions are usually not tonally contrastive.

In general it may be said that Bantu tonal patterns are more loosely associated with the segmental level than are those of, say, Chinese. Such things as pattern expansion or contraction, tonal shift and tonal displacement are widely documented throughout the Bantu area. In many languages a certain syllable of the word is prominent, sometimes by extra length (as with the penultimate syllable of many south-eastern Bantu languages), sometimes by stress, and we may find high tones becoming associated with this prominent syllable by, for example, being moved from a syllable of less prominence (e.g. Zulu \_\_\# -> \_\_\#). The situation may therefore develop into one amenable to an interpretation in terms of pitch-accent or phrase intonation.

13.2.4: Intonational overlay.

It may even be questionable whether anything recognisable as a Bantu language ever had a fully tonal system in which each syllable was tonally distinct (see Bennett nd.). A type of phrase-intonation may be present in many languages and yet go unnoticed. For example, in unpublished work Bennett and others found that in spontaneous Kikuyu narrative, volume/intensity tracings showed recurrent patterns of 'humps', eg.
Closer study showed that these were bursts of speech separated by pauses of variable length. There were three types of pause - short, medium and long (cf. kikongo gap, pause and long pause, 2.2.2) - and three types of hump - level or 'molar' and falling or 'canine' were the most common, occurring with about equal frequency, while the third, rising, was very rare. The tracing also showed downdrift over several humps (indicated by lines in the invented example above), with periodic 'hoists' back to higher level - these hoists served as markers for what would in written text be called paragraph-beginnings. Inside the humps themselves, it was found that the peak usually occurred at the beginning of a word or phrase (not necessarily initially, but usually no more than three words from the beginning), and usually on a predicator such as a verb. The length of the humps varied from around 3 to 30 syllables, though each hump occupied roughly the same amount of time. It should be remembered that these phrasal features were in addition to the tonal features of the text.

13.2.5: conclusions.

There would thus seem to be a fairly strong independent theoretical and observational basis for the suggestion that kikongo may have a pitch-accent system, and that this type of system may be much more widespread than generally realised, perhaps even going back to a feature of Proto-Bantu itself.

13.3: bridging.

The usefulness of the analysis in this thesis for comparison purposes comes when we are able, using also data from other languages, to point out one aspect of the system which may go back to the parent language. The general features of bridging, to which I have drawn attention several times, are reminiscent of intonational overlay features in other languages, especially where the sequences noun-qualifier (n-q) and verb-object (v-o) are concerned.

13.3.1: Kikuyu.

In Kikuyu, for example, (Bennett 1974) there is the phenomenon of
'tone reversal': underlying LLLHH may be realised in certain contexts as lllll, but when occurring in the above environments is realised as hhhhl (ie. all syllables up to and including the first underlying high are raised). This raising may extend over several words (as in kiKongo bridging). Sequences of v-o where the raising does not occur are in most cases cognate objects, where o has reduced prominence and where we would therefore not expect a great deal of emphasis anyway.

13.3.2: Southern Sotho.

In Southern Sotho, Kunene (1972) finds that 'downstep' (by which he means 'a downward tonal transition ... bringing the total set of contrasting syllable pitches to a lower key') does not occur between a noun and its first qualifier or a verb and its first modifier, but does occur between these sequences and additional qualifiers/modifiers. Thus we have \( n_{-1}q_{-1}q_{-2}q_{-3} \text{ etc.,} \) \( v_{-1}m_{-1}m_{-2}m_{-3} \text{ etc.}, \) where the n-q and v-m sequences are marked off by lack of downstep. It should be noted, though, that these sequences have a potential downstep, and this is converted to a realised downstep in emphatic constructions. Thus:

\[
gwës' wâ kâ n-q \rightarrow wâ kâ' gwës' q-n
\]

'my child' (unmarked) 'as regards my child' (marked)

Downstep, therefore, like bridging in kiKongo, is connected with the phenomenon of emphasis.

13.3.3: Zambian Tonga.

In Zambian Tonga (Carter 1962) certain items have two tone-patterns. Carter calls these 'strong' and 'weak' patterns, based on their capabilities of occurrence: a strong pattern 'require[s] no support and may stand at the end of an utterance', while a weak pattern 'require[s] the support of a following item'. We might say that the sequence 'weak pattern + following item' is a complex, and indeed the function of this weak pattern seems to be to increase the focus or emphasis on the following item; the strong pattern, on the other hand, retains emphasis on itself. Thus:

\[
\begin{align*}
kujâyâ & \text{ 'to kill', but kûjâyâ mbâba 'to kill a mouse'} \\
ndakâ'olâ'nyâma & \text{ 'I took meat', but ndakâ'olâ'nyâma 'I took meat' .}
\end{align*}
\]

The second example in each case shows the weak pattern on the first word.
The weak pattern can usually be inferred from the strong one - 'the typical relationship is that syllables bearing low tone in the strong pattern have high tone in the weak, with tone-slip between the 'raised' tones and preceding high tone, if any'. The domain over which the weak pattern operates is again n-q and v-o.

In later work (Carter 1971-2), the same phenomena are dealt with in terms of complexes (part 2, pp. 69-82). The 'weak' variant is now described as a 'verb in D-link with the following item'. 'D-link [marked by +] implies emphasis of O(bject) as against V(erbal); absence of D-link, with or without transference [marked by ←], implies emphasis of V(erb)'. (pp. 82-3) Thus:

D-link:  
\[\text{wakayandauli + } ^{1}\text{musune 'he looked for the ox (not something else)'}\]

transference:  
\[\text{wakayandauli ← } ^{1}\text{musune 'he looked for the ox (but didn't find it)'}\].

Carter notes (p.83) that 'complexes abound in Tonga', and concludes (p.87): 'One is left with the growing conviction of a prevailing principle: the signalling of syntactic relationships by means of the tonal system, even at the expense of its functions in lexis'.

13.3.4: conclusions.

The similarities between the above three intonational overlay phenomena and bridging in KiKongo are very marked, not only in the domain where each phenomenon applies, but also to some extent in the mechanisms by which the phenomenon is realised. In Tonga, and to a lesser extent in Sotho, there seems to be some connection with emphasis, while in Kikuyu the phenomenon seems to be more automatic. KiKongo bridging seems to be somewhere between these two states - in some cases it may be automatic, in others emphatic. It would appear, therefore, that the existence of a special pattern for n-q and v-o sequences can perhaps be reconstructed as a Proto-Bantu intonational feature.

13.4: summary.

Consideration of other research in the field of Bantu suprasegmentals
shows that the pitch-accent description proposed in this thesis is by no means unique. Recent advances in suprasegmental study, and evidence from other areas, suggest that pitch-accent descriptions may be more widely-applicable than previously realised (13.2). Moreover, one particular part of the kikongo pitch system, bridging, seems to be directly comparable to phenomena in three other widely-separated Bantu languages, thus suggesting that similar features may have been present in the parent language (13.3).
Endnotes to chapter thirteen.

1. I am grateful to P.R. Bennett for drawing my attention to relevant material on this subject.

2. Despite similarities in domain and mechanism, there does however, as P.R. Bennett has pointed out in a letter to me, seem to be one main difference between 'the Kongo type (pitch-accent with bridging) and the Kikuyu/Tonga type (tone-spreading or hopping), for which see Bennett 1970. Given a sequence \([-\ldots\ldots-]\), the Kongo style tends to fill in the gap under the right conditions, thus \([-\ldots\ldots-] \rightarrow [-\ldots\ldots-];\) the Kikuyu style preserves the contrast in levels with downstep, thus \([-\ldots\ldots-] \rightarrow [-\ldots\ldots-]\) or (in Kikuyu) \([-\ldots\ldots-].\) The next question is why? Downdrift is at least as important in the Kongo type, and is supposed to be the mechanism facilitating downstep. The result, of course, is to work toward tone-class merger in Kongo and maintenance in Kikuyu [see 14.13.4], but I can't think of a source. That it is linked with an increase in the relative role of clause intonation at the expense of lexical suprasegmentals is, however, clear.' See also 13.2.2.
PART III

Dialectology: Patterns and Similarities
CHAPTER FOURTEEN  
Lexical Pitch Correlations

This chapter discusses several aspects of the correlations between the various tone-classes to which researchers have assigned kikongo lexical items, and attempts to draw some conclusions from this.

14.2: Sources.
The chapter is based on a list (Appendix 5) of 236 cognates from four sources: Laman 1936 (abbreviated henceforth as L), Carter 1960b (C), Daeleman 1963 and 1966 (D), and Guthrie 1967-71 (B). Some comment on each of these sources is necessary.

14.2.1: Laman 1936.
L was chosen as the base-list since this dictionary is by far the largest corpus of tone-marked items in kikongo. Items given by Carter or Daeleman are not necessarily to be found in the other, but always have a cognate in L. The items have therefore been arranged according to L's tone-class system, so that there are two main groups: falling (which includes L's \( \acute{a} \) and \( \tilde{a} \) tone-classes), and rising (which includes L's \( \acute{\grave{a}} \) tone-class).

L's remaining tone-class, \( \acute{\grave{a}} \) (acute), posed some problems, since it is not distinguished in the other sources. Eventually the following procedure was adopted. Where cognates from C and D showed a falling pattern, or where only one cognate (from either C or D, the other not being represented) showed a falling pattern, the item in L was counted as belonging to the falling class. In all other cases (i.e. C and D rising, C or D - the other not being represented - rising, C rising D falling, C falling D rising) the item in L was counted as belonging to the rising class, since Laman does say several times that the acute class is a variation of an underlying rising contour. Nevertheless, the fact that he does seem to have changed his mind over a period about the class assignment of certain words (e.g. \( \ddot{a} \dot{u} \) 'eye' 1922, but \( \ddot{a} \dot{i} \dot{u} \) 1936) provides justification for assigning some of his acute words to the falling class. Where it is of some
interest to compare these varying assignments, the tone-pattern in Laman 1922 is given in square brackets after the entry for L. Thus the above example would read: d'isu [d'isu]'eye'.

14.2.2: Carter 1980b.

C is a conflation and revision of previous vocabulary lists (Carter and Makondekwa 1975, 1977, 1981) and uses 'direct' marking of the pitch patterns instead of the assignment to tone-classes used in the earlier works, eg. zzeenga 'to cut off' instead of zzeenga III. A capital M following the entry indicates that with the addition of a pre-prefix the high pitch moves one syllable leftwards (cf. 14.11), eg. ḵiinzó 'pot', but eḵiinzó. If only the form with initial vowel is known, that is the only one given, eg. endzoonzi ? 'type of fish'. A question-mark following the entry indicates that it is unclear whether the high pitch moves or not, ie. whether we have here a base form ndzoonzi or ndzoonzì. A double question mark indicates that the tone of the entry is uncertain, eg. ḵkweela ?? 'to marry'. For the sake of completeness, in this list the tentative marking when given in the earlier works is put in brackets on the word, thus ḵkweela. Occasionally cognates were not to be found in Carter 1980b; in this case they were taken from the earlier works and given in square brackets, eg. [ng̱alu] 'pig'.


D is a collection of cognates from two sources. It is difficult to locate cognates easily in Daeleman 1966, since they are not listed alphabetically. The main source here was a list of minimal pairs (Daeleman 1966 pp. 81-83), and cognates from C were noted when these could be found. When seeking cognates for those words taken from C, however, Daeleman 1963 was used, since this is an alphabetical list of nouns.

The two Daeleman sources hardly vary, if at all, in the tone-class to which they assign a word, but their marking of the tone-classes differs, and it is the marking of Daeleman 1963 that I have used here, since it is the easiest to read. In this 1963 presentation, Daeleman distinguishes three tone-classes: first
mora high, eg. mfumu 'chief'; first two moras high, eg. munsanga 'type of tree'; all low, eg. nzau 'elephant'. The first two will be considered as belonging to the 'falling' class, and the last to the 'rising' class. It is interesting to note the resemblance of the second class to Laman's 'level' (ɔ) tone-class; this second class is much less common than the other two.

In his 1966 presentation, Daeleman distinguishes five tone-classes; some of these (eg. D and E) are distinguished only by differing contours in certain tone-cases (see chapter 7). In the two most common tone-cases, absolute / predicative, we have: E last mora high / first mora high; D likewise; C, B last two moras high / first two moras high; A all low / penultimate mora high.\(^2\) The relationship to the 1963 classes is clear, but it does raise some difficulties about marking. A later personal communication from Daeleman (1979) brings the number of classes down to four: A, B, C/D (now called C), E (now called D).

In view of all this, I decided to mark the 1966 data using the 1963 conventions, but giving the 1966 tone-class letter after the item, eg. mfumu B 'manner of dying'. The 1966 A is therefore marked all low, B is marked with the first two moras high, and D and E with the first mora high (C does not occur). Again, A is counted as belonging to the rising class, and the others to the falling class.

14.2.4: Guthrie 1967-71.

B is a list of cognates from CB, for which the English-CB index in Mann 1976 was found useful. A few tentative cognates are included as well as the obvious ones - the former are marked by a question-mark, eg. kyozi 'coldness', -didi ?. There is some evidence (P.R. Bennett, p.c.) of ambivalence between Guthrie's CB hh and hl patterns for nouns, so that in this discussion words having these patterns will all be counted as being in the 'falling' class - note the resemblance here with Laman's ɔ (falling) and ɔ (level) tone-classes. However, only words with 11 pattern will be counted as belonging to the 'rising' class. This seemingly counter-intuitive
omission of lh patterns from the rising class is due to the fact that the kikongo reflex of CB pattern lh seems to be hl (ie. falling) in most cases - this will be discussed more fully in 14.12.

14.3. : defining the two classes.

More should be said about the general concept of the two classes. The terms 'falling' and 'rising' are merely mnemonic, and should not be taken as a totally accurate description. Basically, 'falling' may be defined for kikongo as 'high on the first syllable or mora (with succeeding syllables or moras low)', while 'rising' may be defined as 'low on the first syllable or mora (with succeeding syllables or moras high)'. There are several intentional ambiguities here - 'syllable/mora', 'first', 'succeeding' - which are necessary to leave the definition flexible enough. These ambiguities require some discussion.

14.3.1. : syllable v. mora.

First of all, it seems that for L the pitch-bearing unit is the syllable, while for C and D it is the mora. Thus, for example, in the rising class L has the second syllable high, while C and D have only the second mora high, eg. nsangó 'news', ntsaángu, nsaangú A (as noted above, this tone-class in Daeleman 1966 has the pattern nsaangú in the predicative case). This is not because L ignores vowel length (cf. eg. túúlú 'to put', díínu 'eye', etc.), but because he considers vowel lengthening before a nasal compound to be non-significant, while C and D do consider it significant. The difference is also evident in examples such as mbúngú 'beaker', mbúungú M, mbúungu E, where L marks the first syllable high, but C and D mark only the first mora high. Therefore, the terms 'falling' and 'rising' when applied to L refer to the contour over the whole word ([^_^] and [^-^]), but when applied to C and D refer only to the contour over the first two moras ([\-\-] and [\-\-]).

14.3.2. : 'level' patterns.

This view still presents difficulties, the most notable of which is the place of items such as léékó 'to sleep', lléékó M, which either show no fall as defined above, or show a subsequent rise.
However, since the researchers themselves have said that these patterns are a subset of those discussed in the previous paragraph, it seems reasonable to put them in the falling class, even if they do not exactly fulfill the criteria for that class.

14.3. 3 : acute pitch.

A similar difficulty arises with the acute pitch. As described above, in some cases items in L with the acute pitch are put in the falling class, and this is reasonable, since they have an overall fall. But in most cases, where the items with acute pitch are retained in the rising class, the overall falling contour contradicts the basic criteria for that class. We can do no more than say with Laman that they are 'variations' of an underlying rising contour. This too seems reasonable in view of such examples as bundu/bündu 'fruit'.

14.3.4: stem v. word.

As for the word 'first' qualifying 'syllable or mora', we must specify that for C it is the first mora of the stem, whereas with L and D it is the first syllable or mora of the whole word, prefix included. Thus L and D ditnu (di-tnu) 'tooth', but C ditnu (di-tnu); L and D mëszë/mëst 'fat', but C mëszë. With vowel-commencing stems in the falling class, therefore, C has a pattern superficially similar to that of an item in the rising class.

14.4: vowel length in C.

While on the subject of syllables and moras, it should be noted that C fairly often shows variance in this regard, such that if a syllable is shortened so as to contain only one mora instead of two, this has a corresponding effect on the pitch contour of the word, eg. më-níti 'minute(s)' ~ më-níti, -mënta 'climb' ~ -matá, ma-kuulu 'dysentery' ~ ma-kuulu. Such examples provide solid evidence for relating Laman's rising contour to Carter's 'second mora high' contour, but they also raise questions about the significance of vowel length in kiKongo.

Other variations are also interesting. For example, Carter's
pattern hlh M on verbs is a variant or subset of hl M, occurring when the verb is three moras or more long\textsuperscript{5}, eg. -s\textael\textael 'work for' -s\textael\textael 'work'. But, again relating to the significance of vowel lengthening before a nasal compound, if the second mora of the verb is followed by a nasal compound, the pattern is not hlh M, but hll M (= hl M ?), eg. -k\textael\textael M 'extract', but -k\textael\textael\textael\textael M 'hunt'. It is also possible sometimes to find the hlh M and hl M patterns on the same verb, dictated by the length of the first syllable, eg. -s\textael\textael M 'choose' -s\textael\textael M. Again, such variations provide good evidence for the relationship of 'level' contours to 'falling' contours. They also suggest, however, that vowel length in certain contexts (before an NC compound, and perhaps even in penultimate position) may be conditioned, and therefore non-significant.

14.5: correlation of tone-classes.

The computations that follow were undertaken to test the theory that there is a large degree of correlation between the tone-classes occurring in L, C, D, and even B, provided that we take defining criteria for the classes general enough to apply to all the sources. Hence the reason for the broad rising/falling dichotomy, the basis of, and justification for, which I have outlined above. If a correlation does exist, it will raise certain important questions, but consideration of these will be deferred until after the figures have been evaluated.

14.6: method.

The method used is as follows. Each of the four sources L, C, D, and B will have three relationships, one with each of the other sources. This gives six relationships in total: L/C, L/D, L/B, C/D, C/B, D/B. To judge the degree of each relationship equally, we can express it as a percentage figure, using the formula $\frac{n}{t} \times 100\%$. Here t stands for 'total number of cognates in the two sources being investigated', while n stands for 'number of those cognates displaying the same falling (rising) contour, as defined below'.

14.6.1: assignment of items.

We must now define, bearing in mind the earlier discussion,
define, not what constitutes the falling and rising classes, but what criteria are to be used in assigning items from each source to those classes. We will therefore propose that

(i) in the falling class be counted items from L having a high pitch on the first or only syllable; items from C having a high pitch on the first or only mora; items from D having a high pitch on the first or only mora; items from B having a high pitch on the first or only syllable. Note that such a definition allows us to include not only the items with 'obvious' falling contour, but also such items as tůůlǎ (L) / tůūlǔ (C) 'to put, place', munsângâ B (D) 'type of tree', -důŋú (B) 'pepper', and sē (all sources) 'father'.

(ii) in the rising class be counted items from L having a low pitch on the first or only syllable (and those having the variant realisation of acute pitch there, provided this is reinforced by the item appearing in the rising class in either C or D or both); items from C having a low pitch on the first or only mora; items from D having a low pitch on the first or only mora; items from B having a low pitch on all syllables. In effect, it would seem that all monosyllables in C and D have a high pitch (and would therefore be in the falling class), so the qualification 'or only' may be unnecessary.6

14.6.2: reckoning the correlations.

Where an item line like mfũmu 'chief', mpũmu [M], mfũmu, -kũmy is concerned, the situation is simple - the n number of each of the six relationships will have a unit added to it. But what about item lines like mbũndu 'heart', mbũndu, mbũndu A, ṑ? The situation here is rather more complicated. L obviously has an item in the falling class, but both C and D have it in the rising class, and there is no cognate in B. This immediately means that this item line cannot contribute anything to finding the degree of correlation in the three relationships L/B, C/B, and D/B.

Where L/C and L/D are concerned, the item line will count in the t number for the falling class (since the cognate occurs in both sources), but not in the n number (since both cognates do not belong
to the same class) - the net result would be to lower the percentage degree of correlation for L/C and L/D in the falling class.

But what about the relationship C/D? In neither of these sources does the item occur in the falling class, so we must transfer this particular pair of cognates to the rising class. This means that for the falling class this pair will not exist and cannot be counted there. However, they will be counted in the t number of the rising class, and also in the n number (since they both have the same pattern) - the net result would be to raise the percentage degree of correlation for C/D in the rising class.

This 'transfer necessity' occurs only a few times: mbundu 'heart' (D/C), mbamba 'type of snake' (D/B), ntantu 'bridge' (D/B), taata 'father' (D/B) must all be transferred from the falling class where they are listed, and counted in the rising class for the relationships shown; ngo 'leopard' (C/D), ziku 'certainty' (C/D), nkasa 'bean' (C/D), bundu 'group' (C/D), yukuta 'to be sated' (C/B) must all be transferred from the rising class where they are listed, and counted in the falling class for the relationships shown.

14.7. : which base-list?

Obviously, the layout here is not faultless - it takes L as the base-list (since L has most cognates with all other sources, and also has the simplest system of tone-classes), but the picture thus gained would presumably be slightly different if, say, Daeleman's five tone-classes were to be chosen as the base-list, or Carter's (earlier) five tone-classes. The cognates from other sources would then be mapped onto these, such that, say, Daeleman's tone-class A had x% cognates in Laman's falling class, and y% cognates in Laman's rising class. In spite of small differences, however, I am convinced that the general picture would remain the same no matter which source we took as the base-list, and for the reasons above L seems to be the most useful in this preliminary investigation. The ideal, of course, would be to do the calculations using each source in turn as the base-list, but then it would also be ideal to use a much larger corpus of cognates than is given here.
14.7.1: D as base-list.

Nevertheless, to give a very rough idea of a small area of the problem, let us see what order of difference might be expected as a result of taking different base-lists. We will use cognates from L and from D 1966. The calculations are rough, and only the most common classes A, D and E are used in referring to the data from Daeleman 1966.

(i) taking L as the base-list:

rise → 87% → A (33 out of 38 in the rising class)
fall → 24% → D (16 out of 67 in the falling class)

(ii) taking D as the base-list:

A → 73% → rise (33 out of 45 in the A class)
D → 84% → fall (16 out of 19 in the D class)
E → 95% (39 out of 41 in the E class)

Taking 'fall→D,E' first, it can be seen that fall → D,E = 82%, while D,E → fall = 89.5% (84+95, ÷ 2), so that the difference is small. With 'rise→A', the difference is almost twice as much, and may be accounted for only because a fairly large group of words in Daeleman's A class (12 here) have cognates in Laman's falling class. On the whole, though, it can be seen that taking different base-lists would still give the same general results.

14.7.2: everyday frequency of items.

One further factor that might have a bearing on the results of the calculations is the question of how far the items listed here would be heard in daily speech, i.e. how typical they, and the patterns associated with them, are. (P.R. Bennett, p.c.) It is of course true that the items were taken from linguistic studies and pedagogical material, and therefore might not be entirely representative of everyday speech. But on the other hand all the authors have based their analyses on many texts and/or a great deal of experience in the field. Furthermore, the fact that consistent correlations exist at all tends to point to a basic system in the language. The question of frequency, therefore, does not seem at this stage to be an important one, though the related question of
how far the differences between falling and rising classes are realised in connected speech will be taken up again in 14.13.

14.8: correlation figures.

14.8.1: correlation figures for the full count.

The correlation figures for the two classes are as follows:

<table>
<thead>
<tr>
<th></th>
<th>L/C</th>
<th>L/D</th>
<th>L/B</th>
<th>C/D</th>
<th>C/B</th>
<th>D/B</th>
<th>(L total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>falling</td>
<td>79/83</td>
<td>88/99</td>
<td>54/63</td>
<td>47/50</td>
<td>51/55</td>
<td>28/35</td>
<td>(136)</td>
</tr>
<tr>
<td>rising</td>
<td>70/79</td>
<td>55/66</td>
<td>35/40</td>
<td>34/41</td>
<td>31/39</td>
<td>18/24</td>
<td>(100)</td>
</tr>
<tr>
<td></td>
<td>95%</td>
<td>89%</td>
<td>86%</td>
<td>94%</td>
<td>93%</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>89%</td>
<td>83%</td>
<td>87%</td>
<td>83%</td>
<td>79%</td>
<td>75%</td>
<td></td>
</tr>
</tbody>
</table>

The figures can be put into 'webs' to display them more effectively:

falling

rising

It is immediately noticeable how uniform the various figures are; for example in both classes L, C, and D vary by no more than 6% for any one relationship against the other two. The figures where B is concerned are more variable. For C/B and D/B in the rising class the total number of items was rather small, and moreover, items with pattern lh in B were not included in the count: This may explain the low percentages for these two relationships. The total for D/B in the falling class was also small.

The average web correlation is 89% for the falling class, and 83% for the rising class. If we take only L, C, and D the figures are 93% and 85% respectively. This level of correlation is very interesting, since it suggests that a basic falling/rising dichotomy in the pitch contours of kiKongo lexical items is very widespread. It is also noteworthy that in each case the percentage for the falling class is higher, which might suggest that it has a slightly
greater 'cohesion' and 'identity' than the rising class. This also applies to the basic percentages given in the webs above, except in the case of L/B.

The average of the correlation figures for each source ('the average individual correlation') is as follows:

(i) all sources:

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>C</th>
<th>D</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>falling</td>
<td>90%</td>
<td>94%</td>
<td>88%</td>
<td>86%</td>
</tr>
<tr>
<td>rising</td>
<td>86%</td>
<td>84%</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>

(ii) kikongo sources only:

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>falling</td>
<td>92%</td>
<td>94.5%</td>
<td>91.5%</td>
</tr>
<tr>
<td>rising</td>
<td>86%</td>
<td>86%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Again, the level of correlation is exceptionally close, particularly when B is not taken into account. The higher level of correlation in the falling class is again noticeable, being in the 90s in table (ii), while the level for the rising class there is in the 80s.

14.8.2: correlation figures for the reduced count.

It will be noticed that in the computations above the number of items occurring in each relationship varies, from the lowest of 24 (D/B rising) to the highest of 99 (L/D falling). It is conceivable that this could distort the correlation figures somewhat, so as a check on this we will now give the correlation figures (reduced count) for the 90 items occurring in all three kikongo sources (B will not be counted for these figures):

<table>
<thead>
<tr>
<th></th>
<th>falling</th>
<th>rising</th>
</tr>
</thead>
<tbody>
<tr>
<td>L/C</td>
<td>43/47</td>
<td>37/43</td>
</tr>
<tr>
<td>L/D</td>
<td>45/47</td>
<td>34/43</td>
</tr>
<tr>
<td>C/D</td>
<td>46/50</td>
<td>33/40</td>
</tr>
<tr>
<td>91%</td>
<td>96%</td>
<td>86%</td>
</tr>
<tr>
<td>(95%)</td>
<td>(89%)</td>
<td>(89%)</td>
</tr>
</tbody>
</table>
| (94%) | (full count) | (83%) | (83%)

Here and subsequently the reduced count figures will be followed by the full count figures in brackets.

If the reduced count figures are put into webs, we have:
It can be seen that while the L/C and C/D correlations are very similar in both counts, the L/D correlation in the reduced count goes up 7% for the falling class, to make it the closest correlation of the three (whereas previously it was the least close), and down 4% for the rising class, to make it the least close correlation (whereas previously it had the same correlation as C/D). These movements may be balanced in some way.

This becomes more likely when we consider the average web correlation for each class: falling 93% (93%), rising 82.5% (85%). The correlations for the two counts are almost the exact same.

The average individual correlations are as follows:

<table>
<thead>
<tr>
<th></th>
<th>falling</th>
<th>rising</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>93.5%</td>
<td>91.5%</td>
</tr>
<tr>
<td></td>
<td>(92%)</td>
<td>(94.5%)</td>
</tr>
</tbody>
</table>

Although the ranking of the three sources differs slightly in the two counts, it is significant that there is no more than 3.5% variation between them for each source.

14.8.3: conclusions.

The figures for the reduced count therefore support the conclusions drawn from those for the full count: (1) there is an extremely high degree of correlation between the pitch-patterns given for the same items from different sources, suggesting that there is a basic dichotomy in the lexicon between items with a falling contour and items with a rising contour, and that this dichotomy is widespread throughout the kiKongo area; (2) the correlation figures for the falling class are consistently and significantly higher than those for the rising class.
for the rising class, which may suggest greater 'cohesion' in the falling class.

14.9. : preponderance of the falling class.

What are we to make of this cohesion? It is conceivable that it could represent a situation where the falling class is expanding its influence at the expense of the rising class, but this seems unlikely in view of the facts that (1) the degree of correlation for items from L is close to the mean even though his work was done 50 or 60 years before that of C and D, and (2) there is a large, though more variable, degree of correlation with the patterns proposed for Guthrie's CB constructs.

We might therefore ask whether the slightly greater number of items in the falling class is reflected in B, and whether we might be able to say that this in turn is reflected in Kikongo itself. To answer this question, samples were taken from the four sources L, C, D, and B, and the number of words with the patterns concerned were counted. Naturally, this is only a tentative exercise, and for L, C, and D the samples could be expanded. For L and C the samples were taken from glossaries, which has the disadvantage that derived forms must be included in the count, which may slightly distort the result. On the other hand, the lexicographer presumably included only those derived forms which were most common, or which diverged from the base meaning of the root, so that this provides some sort of balance. The situation also raises the interesting theoretical question, which will not be discussed here, of whether the contours counted (in samples of speech, for instance) should be based on the total number of items (even if some of these are repetitions), or only on the number of distinct items.

14.9.1: B sample.

The first sample consists of the contours on items from B. The index in Mann 1976 giving the tonal contours of all CB items was used here. The results were as follows:
Column 1 gives items in what I have termed here the 'rising' class, while column 3 gives items in the falling class. The place of column 2 is uncertain - as mentioned above, I will later discuss reflexes of this group as they occur in L - and it seems best not to assign the group to either class yet. It is noteworthy that this group is fairly small numerically.

The total number of items is 2,608, and the percentage of the rising class (column 1) is 37.5%.

14.9.2: L sample.

The second sample consists of words from Laman 1936 beginning with sa- (pp. 861-882). In this sample the contours were as follows:

rising 279    acute 29    level 298    falling 178    total 784

The percentage of the rising class (rising + acute) is 39%.

14.9.3: C sample.

The third sample consists of words from Carter 1980b beginning with s- (pp. 29-36). The figures were as follows: (1 = high on first mora of stem, 1+ = 1 plus another high later in the stem, 2 = high on second mora of stem, M = moving, ? = movement uncertain, ?? = exact contour uncertain, pre = high on prefix)

(i) falling:

1 15; 1M 58; 1? 11; 1+ 7; 1+M 70; total 161

(ii) rising:

2 98; 2? 12; 2M 8; total 118
These groups may seem more formidable than Carter's previous 5 tone-classes, but in fact they show much more clearly than the tone-classes the basic dichotomy between rising and falling in the lexicon.

The total number of items is 309, so the percentage of the rising class is 38%.

14.9.4: D sample.

The fourth sample consists of all words from Daeleman 1963 except those beginning with m- and n-. The contours for the first two moras are as follows:

11 105; 1h 1; hl 153; hh 22

The total number of items is 281, so the percentage of the 'rising' class (11 + 1h) is 38%.

14.9.5: conclusions.

The percentage of items in the rising class is therefore as follows: B 37.5%, L 39%, C 38%, D 38%. The correlation between the four figures is extremely close, and suggests that an imbalance in the numbers of items belonging to the two main classes is indeed a basic feature of kiKongo, and may in fact reflect a similar situation in CB. Voorhoeve 1973 (fn. 4, p. 4) suggested a similar result for CB, based on work by Schadeberg on a much smaller database, and this is confirmed here. However, the reasons why this situation should be are not clear - Voorhoeve's suggestion that in CB the low pattern (the rising class here) was the marked pattern is debatable in view of the fairly high ratio of rising class to non-rising class words (3 : 5).

Of course, if further and longer samples were taken from L, C, and D it is quite possible that the figures would be slightly different, but I firmly suspect that the general picture would remain the same: the rising class items are slightly less numerous than those in the falling class.
While we would expect the figures to be roughly similar because of the large degree of correlation for each class, this cannot be the whole story: because of the different lengths and fields of the samples the smaller number of rising class items must be attributed to a basic feature in the language.

14.10. : measure of opposedness.

The figures given above in the correlation webs (14.8) suggest another interesting point. The average individual correlation for L, C, and D was obtained by taking each source in turn and finding the average of its correlation with the other two sources. Thus, for the average individual correlation (reduced count) of L in the falling class: L/C (92%) + L/D (96%), / 2, = AIC 94%. It is interesting that of the four AIC figures (2 counts x 2 classes) for D, three (the exception being the reduced count, falling class figure) are the lowest in their series. Granted that for the full count this result may perhaps be due to the fewer items from D in the list, yet its recurrence in at least some of the reduced count figures suggests that there may be some special feature associated with D.

Suppose that each AIC is compared to the web correlation 'opposite' to it, i.e. the AIC of D, for example, would be compared with the correlation L/C. This should give some indication of the relative 'distance' or 'opposedness' between the source whose AIC is under consideration and the other two sources considered as a unit.

14. 10.1: full count.

The figures for the full count (omitting B) are as follows:

<table>
<thead>
<tr>
<th></th>
<th>L v. C/D</th>
<th>C v. L/D</th>
<th>D v. L/C</th>
</tr>
</thead>
<tbody>
<tr>
<td>falling</td>
<td>92% ↔ 94%</td>
<td>94.5% ↔ 89%</td>
<td>91.5% ↔ 95%</td>
</tr>
<tr>
<td>rising</td>
<td>86% ↔ 83%</td>
<td>86% ↔ 83%</td>
<td>83% ↔ 89%</td>
</tr>
<tr>
<td>combined</td>
<td>89% ↔ 88.5%</td>
<td>90% ↔ 86%</td>
<td>87% ↔ 92%</td>
</tr>
</tbody>
</table>

The arrow ↔ indicates 'is opposed to the following unitary figure'. It can be seen that the AIC figure for D is lower than the corresponding opposite correlation figure - this is most noticeable when the mean of the rising and falling class figures (shown above
as 'combined') is considered. The only other instance in the nine series where this happens is with L v. C/D, falling.

14.10.2: reduced count.

The figures for the reduced count say much the same thing:

<table>
<thead>
<tr>
<th></th>
<th>L v. C/D</th>
<th>C v. L/D</th>
<th>D v. L/C</th>
</tr>
</thead>
<tbody>
<tr>
<td>falling</td>
<td>93.5% ⇔ 92%</td>
<td>91.5% ⇔ 96%</td>
<td>94% ⇔ 91%</td>
</tr>
<tr>
<td>rising</td>
<td>82.5% ⇔ 82.5%</td>
<td>84% ⇔ 79%</td>
<td>81% ⇔ 86%</td>
</tr>
<tr>
<td>combined</td>
<td>88% ⇔ 87%</td>
<td>88% ⇔ 87.5%</td>
<td>87.5% ⇔ 88.5%</td>
</tr>
</tbody>
</table>

Although the figures are not so clearcut in the falling/rising series, the combined figure gives the same result, though less striking, as before - the AIC for L and C is higher than the opposed correlations, while that for D is lower.

14.10.3: prisms.

The correlations may be taken as a measure of 'connectedness', while the AIC opposed to any particular correlation may be taken as a measure of the 'opposedness' of the source in question to the other two sources considered as a unit. Both the connectedness and the opposedness may be displayed more effectively for the combined figures above by putting them in 'prisms' in which the inner triangle shows the connectedness of the three sources, and the outer one shows their opposedness.

The degree of relationship in the correlation figures may be shown by taking the lowest percentage as 1, giving the relationship showing it one line, and then giving an additional line for each unit or half-unit above the base percentage. To show the degree of relation­ship in the AIC figures, the same principle of 1% = 1 line is used, but, the AIC figures are compared to the corresponding correlation figures, not to any base percentage. Therefore, when the AIC figure is lower than the correlation figure, the result is negative, and this is shown by broken lines. This difference in counting had to be used to show opposedness rather than connectedness for the outer triangle. We thus have:
14.10.4: conclusions.

It can be seen that connectedness in terms of the full count is L/C first, then C/D, then L/D, and in terms of the reduced count is L/C first, then L/D, then C/D. On the other hand, opposedness (taking both counts) is D first, then L, then C. It would therefore seem that the correlation L/C is closest, while D is farthest removed from this correlation.

This suggests that the kiNtandu dialect diverges more from the other samples of kiKongo discussed. Since this dialect is spoken nearest Kinshasa, the capital of Zaire, it has probably been slightly more under the influence of various other languages than C or L, and has therefore been more prone to change. It is especially interesting that it is spoken near the area where we might presume kiLetka to have come into existence.

Since by these counts C and L are closer to each other than either is to D, it is possible that we can see here a hint of conservatism at the edges of the kiKongo-speaking area. Of course, taken against the background of similarities between L, C, and D, the differences between L/C and D are minimal, and have in fact been emphasised in the discussion above. But it does seem clear that a slight difference exists, and should be noted.

14.11. : shift of high pitch.

In connection with relationships between L and C, the most immediately obvious morphological difference is the presence in C of an initial vowel (IV), which the northern dialects (L and D) do not
possess. Carter (p.c.) has pointed out that the pattern with IV (e.g. empumu 'chief') would be most directly comparable to Laman's pattern with the genitive element prefixed (i.e. -amfumu), since in the dialect she has studied the pattern with IV and the pattern with the genitive element (or indeed with any pre-prefixed element) are the same. This raises another interesting area of comparability between C and L.

It would seem that the locative element, the genitive element and, in southern dialects, the IV (to take the most common pre-prefixed elements) have similar effects on the pattern of the word, so that we have a set \{loc, gen, IV\}. For L, these effects (see chapter 9) can be summarised as 'the set usually moves the high pitch of the falling class one syllable leftwards, but the set's effects on the rising class are less predictable'.

In the sample vocabulary count from C (14.9.3), it was found that there were eight groups of patterns which could be divided into two main classes. Three of these groups had the property M, i.e. the high pitch moves one syllable left when the IV, genitive element, etc. is prefixed to the word. It is revealing to consider the distribution pattern of this property: out of 161 items in the falling class, 128 (79.5%) were marked M, while out of 118 items in the rising class, 8 (7%) were marked M. This obvious imbalance (ratio 16:1 that an item marked M will be in the falling class) suggests that the property M belongs primarily to the falling class.

In other words, we have for L \{loc, gen\} usually shifting the high pitch in the falling class, with variable effects in the rising class, while for C we have \{loc, gen, IV, etc.\} usually shifting the high pitch in the falling class, with (in most cases) no such shift in the rising class. The comparability is unmistakeable.

Again, the result seems to show that the falling class has more cohesion over the whole area in that it behaves similarly in different dialects, while the rising class does not—indeed, we could say that
the only area of similarity it has over different dialects is that it behaves differently from the falling class. The greater variability in the rising class patterns in L is possibly indicative of a certain state of 'flux', where inflected patterns are not so 'settled' as in C. The 8 M items in the rising class in C might be similarly accounted for by influence from the more numerous falling class, or they might be grouped on their own as a borderline class. This is in fact what Carter did in earlier research, referring to them as TC IV - the same applies to those 33 items in the falling class which are not marked M; these were called TC II. Finally, the result may have implications for the earlier morphological status of the initial vowel.


It has been said several times before that CB lh was not counted in the rising class, and some discussion of the reasons for this is required. Since Carter and Daeleman have both contributed their own studies of CB reflexes in kiKongo (Carter 1973, 1978, Daeleman in press), it was felt reasonable to base decisions in this area on the patterns of CB reflexes in Laman 1936. This may have led to some very slight distortions where the other two sources were concerned, but these would be minimal; in any case, there are complications no matter what system of correspondence is used. It seems likely in any case that it was Laman's patterns that Guthrie took into account when considering the tone-marking of his CB items.

14.12.1: reflexes in L.

To test the kiKongo reflex of CB lh, 35 items were taken at random (see Appendix 6). Of the 35 items, 23 (66%) occur in L in the falling class, 3 (8%) in the acute class, and 9 (26%) in the rising class. It seems therefore that in two out of every three cases CB lh is realised in L as hl (the proportion is more if we take the acute tone-class as also counted in the falling class). On this basis, it would be unwise to count CB lh among rising class items, since we could expect only 1 out of 3 accuracy in this assignment.

However, that is not the only piece of information to emerge from Appendix 6. Granted that what follows must be tentative because of the small number of items involved, an interesting pattern emerges when we compare the reflexes in C and D with those in L. For C, there are 18 reflexes in all, 12 of which (67%) are in the rising class, with 6 (33%) in the falling. Out of a total of 13 reflexes in D, 4 (31%) are in the rising class, and 9 (69%) in the falling class. We therefore have:

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>D</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>falling</td>
<td>66%</td>
<td>69%</td>
<td>33%</td>
</tr>
<tr>
<td>rising</td>
<td>26%</td>
<td>31%</td>
<td>67%</td>
</tr>
</tbody>
</table>

If we compare the patterns occurring on reflexes common to L and D, we find that they are the same in 12 out of 13 cases (92%). However, patterns on reflexes common to L and C are the same only in 9 out of 18 cases (50%).

There may therefore be some reason to postulate a shift *th → hl, which, however, does not occur in all cases. It would seem to be at least twice as common, though, in the northern dialects. It is noteworthy that this seems to be an example of the falling class extending its domain at the expense of the rising class; it is most interesting that the shift appears to have progressed farthest in the northern dialects, which were the most influential in the formation of kileta, and where we know (from Daeleman), or assume (from Laman), that we must postulate contour variation due to focus or emphasis.

14.13.: Realisation of the classes in connected speech.

This brings us to the last point, which I have avoided raising until now. If this bipartite grouping of lexical items is so all-pervading, why has there been no evidence of it in the texts discussed in the previous chapters of this thesis? At first sight, since the class correlations are so obvious, and yet absent from my discussions, the question would appear to be a very serious one. But on reflection, several items of circumstantial evidence, most of which have also been outlined above, add up to give, in my view, a fairly convincing answer.

First of all, let us consider patterns on the individual item. It will have been noticed that for C and D there is in many cases only a difference of one mora between the classes, eg. falling mboongo 'cloth', but rising mboongo 'harvest' (this latter would be the pattern in C, and in D's predicative case). C and D mboongo may be compared with L mbongo. It is already significant that for C and D the pattern seems tied to moras rather than syllables, since we find, not *mboongó, with the high pitch on the second syllable, but mboongo, with it on the second mora. Since in this (and perhaps many other items) the vowel length may not be significant (see 14.4), there exists the possibility that such structures could be reinterpreted as showing a high pitch belonging to the first syllable, giving *mboongó. In L this in fact seems to occur, since he gives variant pairs such as bundú/bündu 'fruit'; the above process seems the most likely explanation for the variation between his acute and rising tone-classes. That it is possible for the high pitch to change moras like this is shown by C dīsu 'eye' versus L, D dīsu; note that Laman 1922 marks this dīsu, and that in C the pattern is prone to move the high pitch in any case.

In fact, several examples can be found in Appendix 5 of a word in L and C having two contours, one rising and one falling. In L there is bundú/bündu 'fruit'; zikú/ziku 'certainty'; and kosi/makosi 'headache'; note also [nkokila]/nkokila 'evening'. There are also instances of the item occurring in both the falling and the acute class, showing that this variation is also possible: kùulu 'leg', dīsu 'eye', dīnu 'tooth', kyolo 'door', mwindi 'sunshine', māzi 'fat', and tēata 'father'. In C there is mbanza/mbanza 'city'; nthalú/nthalu 'price'; nosi/-mósí 'one'; and kyozi/kyozi 'coldness' - note that in the last two there is again the additional factor that the rising pattern may move the high pitch.

There is also the fact that reflexes of CB lh have the pattern hl in ¾ (C) or ¾ (L, D) of the instances. This points to a general tendency to reanalyse rising patterns.
It is interesting to note that in C and D the high pitch does seem to be moving, or to have moved, leftwards in the rising class. In L the high pitch occurs on the last syllable, even in a word of, say, four syllables; in other words, the first syllable defines the falling class, while the last syllable defines the rising class. In C and D there is a distinct difference in that the high pitch in the rising class occurs on the second mora, ie. whereas in L we counted from the end, in C and D we must count from the beginning. This means that the first mora is the critical one in deciding the class affiliation - if the first mora is low, the class is rising, but if it is high, the class is falling. In such a situation it is possible that the class affiliation, and in certain contexts the classes themselves, could become blurred. This is already clear from the verbal system, where the tone-classes are differentiated only in a minority of tenses in all three sources, even those differences being slight.

It would seem that in monosyllables in C and D the two classes have already fallen together - each monosyllabic noun must have a high pitch; thus ngô 'leopard' in C and D, but ngo in L - note however that even L has the variant ngô'. Again, there is a reflection of this in the verbal system - in L and D all verbal inflections must have at least one high pitch.

14.13.2: predominance of the falling class.

Going on to the classes as wholes, the greater 'cohesion' of the falling class has already been pointed out several times. This is apparent in the consistently higher correlation figures for that class, and also in the more predictable contour behaviour after a pre-prefixed element. The variability of the rising class in this context is especially noticeable in L, as also is the overlap between the two classes in this context; for example, unless we were told elsewhere in Laman 1936, we could not tell from looking at the examples kumôngo 'to the mountain' and kúfūla 'to the path' that the first noun was in the rising class, and the second in the falling. Of course, I am not arguing that such a difference does not exist, but merely that in some contexts it is obscured. This phenomenon
probably occurs to a certain extent in all tone-systems, but if it happens at all widely or regularly, then it becomes of special importance, since it could lead to the classes themselves falling together.

It is noteworthy that, just as the leftward move of the high pitch in the C and D rising class citation form has led to a fall over the word as a whole, i.e. [\(\swarrow\)], so the net result of the prefixation of a genitive or locative element to a rising class item in L is to change the rise to a fall. On what syllable the fall will occur is rather unpredictable, and here it is noticeable that Laman 1936, para. 27 refrains from giving rules about this, though he has already given several for the behaviour of falling and acute tone-class words in the same context (see chapter 9).

This net result is interesting when we consider the general preponderance of items in the falling class. This, as noted above, is probably not a feature just of kikongo, but may reflect a situation in CB (see 14.9). While there may therefore be no compelling reason to postulate here an expansion of the falling class, it is certainly the case that this is the most common class numerically. The rising contour would thus be more likely to assimilate to the falling contour, rather than vice versa.

We may note that in one of the dialects discussed in Laman 1922 this state of affairs does seem to have resulted in the coalescence of the two classes. In discussing his selection of pitch-marked items from the Bembe dialect (art. 132), one of the northernmost dialects, Laman notes that 'all the words in this table have the grave pitch [i.e. a short falling contour] except a few nouns, numerals and pronouns ..., and that there are no primitive words [i.e. roots] with a ... rising intonation.'


Finally, there is Bennett's well-argued suggestion (Bennett nd.) that it is possible to discern certain features in various present-day languages which may have to be ascribed to an accentual or
intonational system in Proto-Bantu. He finds that there is a general
tendency in Bantu languages for tonal distinctiveness to shrink from
the edges of the utterance (cf. such common tonal alternations as
Zulu llh# → llf#), and to gravitate towards the predicator in the
sentence. This is probably reflected in the fact that in kiKongo
(as in many other languages) a rise over a pre-pausal word implies
a continuation of the utterance, whereas a fall in the same context
implies the end of the utterance.

14.13.4: conclusions.

I would therefore argue that although tonal (or perhaps we should
say, accentual) contrasts can be found in words in isolation, the
differentiation between the two classes is often meagre; given the
greater cohesion and frequency of the falling class, those differences
may merge (as in monosyllabic nouns and in Bembe). When the isolated
words are placed in context there may be a certain amount of overlap
in the contours of inflected forms, which is most noticeable in
Laman's examples. Added to this, there is the phenomenon of bridging,
which would tend to obliterate distinctions even if they had been
previously maintained, and whatever intonational overlay there may
be — I have suggested that for kiKongo this is fairly extensive.

The differences between the kiKongo system and that of kiKuyu are
interesting in this regard. In the latter language, words in
isolation show minimal contrast, and the full range of tonal contrast
only appears in connected speech. In kiKongo, on the other hand, it
would seem that citation forms show most contrast, while with words
in context many of the contrasts seem to be merged. The situation
may be tabulated as follows:

(a) kiKuyu

<table>
<thead>
<tr>
<th>form in contexts</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
<td>x</td>
<td>y</td>
<td>x</td>
</tr>
<tr>
<td>x</td>
<td>x</td>
<td>y</td>
<td>y</td>
<td>y</td>
</tr>
</tbody>
</table>

(b) kiKongo

<table>
<thead>
<tr>
<th>form in contexts</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>y</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>y</td>
</tr>
</tbody>
</table>
Once a language has reached the stage shown by kiKongo here, there is a tendency to reduce the tonal contrasts even further; a word is more likely numerically to occur in context than in isolation, and since most contextual forms show no contrast, the tendency is to assimilate those remaining forms which do. Through time this could well lead to the complete collapse of tonal contrast in the language. The opposite situation holds in kiKuyu, where the occurrence of most contrasts in contextual forms tends to maintain the tonal system.

All in all, therefore, it is not inconceivable that some speakers, but not all, may maintain accentual differences at word level, but that these become largely obscured in connected speech, though again this need not apply to all speakers. Thus Mr Ndolo gave some minimal pairs, but in spite of extensive testing Rev. Ntoni-Nzinga showed no consistent tonal differentiations, while Mr. Nakoondekwa (Carter's informant) seems to maintain tonal distinctions even in connected speech. There is doubtless a good deal of dialectal and idiolectal variation in kiKongo, and it is for these reasons that I think it important to concentrate on areas of general similarity rather than on idiolectal details; in this way, paradoxically, we may be able to proceed to more detailed work for each idiolect from our clearer understanding of how the system works as a whole.


I have tried to show that for all of the kiKongo sources considered there are two main word-classes, falling and rising, the first of which is more common, even in CB. Consideration of the individual sources may give some clues to development in different dialect areas. For example, taking the vocabulary list as a whole, L and C seem closer together than either are to D; taking reflexes of CB lh, L and D have most in common since they have more instances of *lh → h1 than C has; taking contours of words in context, C and D seem closer together than they are to L, since the latter shows more contour variability and overlap of the two classes. However, although two classes can be distinguished in citation forms, it is likely that in connected speech the contrasts between them merge to a greater or lesser extent, depending on the dialect and on the speaker.
Endnotes to chapter fourteen.

1. 'Cognate' is used here in the sense of 'descended from common ancestor ... representing same word or root'. (Concise Oxford Dictionary, 6th. ed. 1976)

2. Describing the all low pattern as 'rising' (previous paragraph), therefore, does not seem so arbitrary, since in some contexts this pattern does show a rise.

3. It must be born in mind, of course, that this matter is not entirely beyond doubt; Laman's work is not as sophisticated as that of later researchers, and he may not have consistently differentiated syllable and mora.

4. It is interesting to speculate on the relationship of the tonal patterns lëeké and lëékó (ie. lëekó).

5. There thus seems to be a shift to a word contour, as has happened in Luganda and other languages in that area. (P.R. Bennett, p.c.)

6. All nouns in citation form in C and D must have at least one high pitch - see also 14.13.1, last paragraph.

7. While the reason for the class imbalance in either kiKongo or CB cannot as yet be known, the situation provides telling evidence that if tone-classes (or indeed, any classes) are to be set up for a language, some indication should always be given of the general size of each tone-class, ie. how many items (roughly) it contains. Knowledge of the relative size of each class may suggest something about their relatedness, but even if the information cannot immediately be put to use, it may fall into place at a later date.

8. For example, Carter 1973, p. 41: 'No very regular correspondence of Common Bantu patterns with those of Zoombo is discernible.'

9. This is doubly likely since in other Bantu tonal systems, and indeed in Classical Greek, there is a tendency for rising syllables to be reanalysed with level high pitch. (P.R. Bennett, p.c.)

10. This paragraph is based on an idea by P.R. Bennett.
CHAPTER FIFTEEN
Dialect Similarities

15.1: introduction.

This chapter tries to quantify the differences noted between the texts of chapters 4-10. In those chapters, general comments on the individual features of the texts were given, such as, 'kiNtandu shows many penultimate or final high pitches'. In this chapter, we attempt to define this judgement in numerical terms, such as, 'kiNtandu shows 68 out of 196 high pitches (i.e. 35%) in this position'. It then becomes possible to compare this figure with those for other dialects, eg. kiManyanga with 7 or 8% of high pitches in this position.

The figures for each dialect are first discussed in general terms, and then used as the basis for various mathematical computations designed to bring out their significance as fully as possible. A wide variety of graphic display is also used towards the same end. Since much of this display takes up a good deal of space, it has been grouped together in Appendix 7.

15.2: full pitch-count.

The sample passages of chapters 4-10 were examined to determine (i) place of high pitch, and (ii) type of word on which the high pitch occurred. The results are given in 7/1. It should be noted that the numbers in the tables are those of high pitch as marked - other syllables, eg. those inside a bridge, may be high in pitch, but are not marked as such and are therefore not counted.

There are 80 possible combinations in the tables in 7/1, but in practice less than half of these are ever filled. Some dialects show a greater spread of possibilities in that they fill more positions than other dialects, thus:

M1 39,  S 37,  N 33,  Z 32,  B 29,  Y 29,  M2 26.

Y, N and S show a sizeable number of penultimate high pitches (9, 25 and 7 respectively), while other dialects show only 1 (M1, Z) or none (M2, B). We might therefore say that the north-eastern dialects have a tendency to penultimate high pitch.
High pitch on the first syllable of the word is very common in M1, M2 and S, and this may be a dialectal characteristic, since it occurs with three different speakers. Again, a prefix to root-syllable bridge is most common in M1 and M2, and indeed seems to mark kiManyanga off from the other dialects.

Some dialects show very few (Z, S) or no (M2) words inside a bridge. The reason in this case may be that longer bridges are more likely to occur when reading from a book - these three texts were all speaker-composed.

15.3: collapsed pitch-count.

To use the tables in 7/1 for the later calculations of this chapter would mean that categories would be distinguished which would have too low an incidence for significance within the texts used. To avoid this, the tables in 7/1 have been collapsed to give the grosser, but more manageable, figures of 7/2.

To make each set of figures comparable, they were expressed as percentages. That is, the figures in the first three columns of each table in 7/2 were calculated as a percentage of the total given in the fourth column. The resulting percentages are given in 7/3\(^5\) (with graphic display in 7/4), and it is these figures which will be used in the rest of the chapter.

In each dialect a high proportion of pre-prefixed items show high pitch before the root-syllable. This is especially pronounced in kiManyanga, where the proportion of items with shift is actually greater than that of items with high pitch on the root-syllable: M1 49% v. 44%; M2 55% v. 43%.

The proportion of nominals with high pitch after the root-syllable is exceptionally high in N, while Y also has a high figure here (49% and 28% respectively). On the other hand, M shows a high proportion of nominals with high pitch before the root-syllable (M2 33%, M1 14%).

The same pattern holds for verbals: N has a larger proportion with
high pitch after the root-syllable (32%), while M has a higher proportion with high pitch before the root-syllable (M1 30%, M2 29%).

For other items, B shows an exceptionally high proportion with high pitch not on the root-syllable (43%), in opposition to Y, with only 4%. S and Z also show high proportions - 35% and 23% respectively.

15.4: measures of correlation.
A simple consideration of 7/3, therefore, shows that certain dialects have well-defined features which mark them off from other dialects. This section will try to reprocess the information given in 7/3 in order to produce a measure of the correlation of each dialect with every other, that is, a 'similarity coefficient'. The object of finding these coefficients is to produce a classification of the dialects in terms of similarity (cf. Henrici 1973, p.92). The methods used are derived from the field of numerical taxonomy (see Henrici 1973 for an excellent introduction to this subject, and Sneath and Sokal 1973 for a full and lucid discussion), though with some individual adaptation.

15.4.1: first method.
The first method is a measure of dispersion, taking the mean absolute difference between the 11 pairs of basic figures in 7/3 for each pair of dialects, i.e., the formula is

\[ C = \frac{\left[ p(rs) - p(rs') \right] + \left[ n(rs) - n(rs') \right] + \cdots + \left[ o(b) - o(b') \right]}{11} \]

Note: * indicates that the number in square brackets was always given positive polarity.

For each of the 11 positions a list was made ranking the dialects in descending order. The difference in percentage points between each pair of dialects was then displayed in a matrix. Ranking and matrices are shown in 7/5. The matrices were then conflated and averaged to give the following matrix:

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>Z</th>
<th>N</th>
<th>M1</th>
<th>M2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>19.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>13.3</td>
<td>7.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>21.1</td>
<td>9.9</td>
<td>12.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>18.5</td>
<td>12.1</td>
<td>9.0</td>
<td>16.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td>24.4</td>
<td>11.8</td>
<td>12.6</td>
<td>15.0</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>9.7</td>
<td>11.0</td>
<td>5.4</td>
<td>13.0</td>
<td>12.1</td>
<td>16.9</td>
</tr>
</tbody>
</table>
Each of the above figures is a dissimilarity coefficient for that pair of dialects, i.e., the higher the figure, the more dissimilar are the two dialects.

Using group average classification (Henrici 1973, p.96, Sneath and Sokal 1973, pp.230ff.) this matrix can be converted into a phenogram (for matrix sequence see 7/6):

The numbers on the crossbars indicate the relative levels at which the clusters join. We can see that Z and S are most similar. M1 and M2 cluster at a slightly higher level of similarity. ZS then clusters successively with Y and N, and the resultant complex then clusters with kiManyanga. B is last to cluster with all the other dialects.

However, it is well known that phenograms are liable to oversimplify the picture. In Henrici's words (1973, p.100):

'Once a tree structure has been imposed on a set of languages then any grouping of them based on this tree is necessarily into non-overlapping clusters. ... It may be a useful corrective to consideration of these uncompromising pictures to compare them with a similar diagram generated by a method which allows clusters to overlap.'

One possible way of achieving this is to recast the matrix in terms of a series of 'linkage diagrams', showing the situation:

'as the criterion for [dialects] linking up is gradually relaxed. A difficulty of this approach is that in order to get an understanding of the relationships of an entire taxonomic group one needs to have in front of one the various layers or cross-sections of the taxonomic hierarchy, which requires a fairly large number of successive graphs [in the graph theoretical sense] showing the increasing interrelationship of the set of [dialects]... Ideally the clustering process should be shown as a continuous series of images as in a moving picture.' (Sneath and Sokal 1973, p.264)
The dissimilarity matrix above has been converted into a series of linkage diagrams in 7/7. Here heavy lines indicate links that changed the previous diagram to the present one (ie. connect previously unconnected groups), and light lines represent internal structure that existed in the previous diagram (after Sneath and Sokal 1973, p.267).

A consideration of these diagrams shows clearly that much of the information in the matrix does not come out in the phenogram, although of course the general outlines are similar. The central cluster SZY has appeared by level 2, and M1 and M2 cluster at the next level. But M joins the central cluster SZY much sooner than the phenogram suggests (M1 level 4, M2 level 8). The same applies to B, which clusters with S at level 5. It is interesting that B and Z do not cluster until level 14 - we might have expected this to happen earlier, since they are both southern dialects. The phenogram gives the impression that N is a fairly central dialect, but in fact it is last to cluster, joining the closely-related Y at level 6, and not clustering with another dialect until level 11, when it joins Z. Moreover, the phenogram does not bring out the fact that although M1 and M2 cluster at level 3, M1 bears more resemblance generally to SZY, and M2 to YN. Although N is the last to join the cluster (level 6), it integrates more rapidly (by level 20) than M2, which clustered first at level 3 but only integrates at level 21. Again, although B joins at level 5, it is last to integrate (from level 18 on). These facts are reflected in the phenogram.

If we take the average of the figures in the above matrix for each dialect, we can obtain a rough idea of how far each dialect is from a centre containing the 6 remaining dialects, ie. its average distance.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>Z</th>
<th>N</th>
<th>M1</th>
<th>M2</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg</td>
<td>17.7</td>
<td>11.9</td>
<td>10.0</td>
<td>14.6</td>
<td>12.6</td>
<td>14.7</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Drawing these on a spectrum gives:

As might be expected, this spectrum shows the central dialects as being less distant from the Centre than the peripheral dialects.
15.4.2: second method.

The second method is a measure of dispersion, taking the root mean square difference between the 11 pairs of basic figures in 7/3 for each pair of dialects. That is, the dissimilarity coefficient $C$ for each pair is found by the formula

$$C = \sqrt{\frac{[p(rs) - p(rs)'^2] + [n(rs) - n(rs)']^2 + ... + [o(b) - o(b)']^2}{11}}$$

We obtain the following matrix:

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>Z</th>
<th>N</th>
<th>M1</th>
<th>M2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>22.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>15.0</td>
<td>9.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>24.6</td>
<td>11.1</td>
<td>15.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>21.2</td>
<td>13.6</td>
<td>9.4</td>
<td>20.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td>27.0</td>
<td>14.4</td>
<td>14.5</td>
<td>19.7</td>
<td>10.3</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>11.5</td>
<td>14.8</td>
<td>6.6</td>
<td>16.8</td>
<td>13.2</td>
<td>18.2</td>
</tr>
</tbody>
</table>

This matrix converts by group average into the following phenogram (for matrix sequence see 7/8):

This phenogram shows one main difference from that in 15.4.1: the placement of $Y$ and $N$. It shows $Z/S$ and $M1/M2$ clustering early (as in the previous phenogram). However, instead of $ZS$ clustering progressively with $Y$ and then with $N$, $Y$ and $N$ themselves cluster. Moreover, they then cluster with $M$. Again, instead of $B$ clustering last with all the other dialects, it clusters first with $ZS$. Then the two main groups ($BZS$ and $YNM$) join.

The previous phenogram suggested the sequence $ZS + Y + N + M + B$. However, this phenogram suggests four main groups clustering into two complexes, which in turn join each other.
This phenogram seems to reflect the series of linkage diagrams (7/9) more faithfully than the one in 15.4.1. The main discrepancy is that the close relationship of Z/M1 (level 2) and Z/Y (level 3) is not made clear in the phenogram.

The average distance for each dialect is as follows:

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>Z</th>
<th>N</th>
<th>M1</th>
<th>M2</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20.3</td>
<td>14.3</td>
<td>11.7</td>
<td>18.1</td>
<td>14.8</td>
<td>17.4</td>
<td>13.5</td>
</tr>
</tbody>
</table>

Drawing these on a spectrum gives:

```
Centre X Y Z M1 M2 S
0 1 2 3 4 5 6
```

The main difference between this spectrum and the one in 15.4.1 is that N has here moved farther away from the Centre, and is now positioned between M2 and B. Otherwise, the relative positions of the dialects are exactly the same.

15.4.3: third method.

The third method is a measure of correlation using Pearson's coefficient of correlation (r) between the 11 pairs of basic figures in 7/3. The formula for r is:

\[
    r = \frac{\frac{1}{n} \sum \sum (x - \bar{x})(y - \bar{y})}{\sqrt{\left(\frac{1}{n} \sum x^2 - (\bar{x})^2\right) \left(\frac{1}{n} \sum y^2 - (\bar{y})^2\right)}}
\]

where \( n \) = total number of items in the sample (11 in this case), \( \Sigma = \) sum of \( \ldots \), \( x = \) figure in dialect a, \( y = \) corresponding figure in dialect a'.

Pearson's coefficient gives 'a numerical value to the correlation present between two sets of data' (Gregory and Ward 1978, p.109). 'The value of r varies between +1 and -1. Perfect correlation is represented by unity. (The sign indicates whether it is positive correlation or negative.) A value of 0 indicates no correlation'. (ibid., p.119) That is, a value for r approaching unity shows a high degree of unity. However, 'the value of r is very much affected by the size of the sample (i.e. the number of items) and for small samples it should be treated with great reserve' (ibid.). Since the sample here consists
only of 11 variables, it is plain that a high value for $r$ will be required if we wish to say there is a correlation. We will therefore increase the area of no correlation from 0 to $(-0.5)-(+0.5)$, and say that if we obtain a value below $+0.5$ it is not significant, i.e. it could have arisen by chance, and there is consequently no correlation. The calculations yield the following matrix:

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>Z</th>
<th>N</th>
<th>M1</th>
<th>M2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>0.751</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>0.889</td>
<td>0.946</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>0.663</td>
<td>0.932</td>
<td>0.838</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>0.769</td>
<td>0.891</td>
<td>0.945</td>
<td>0.699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td>0.592</td>
<td>0.874</td>
<td>0.854</td>
<td>0.683</td>
<td>0.935</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>0.950</td>
<td>0.865</td>
<td>0.972</td>
<td>0.778</td>
<td>0.888</td>
<td>0.745</td>
</tr>
</tbody>
</table>

It will be noticed that each pair of dialects shows a positive correlation, each of which is above the limit of 0.5. The higher the figure, the closer the correlation between the dialects concerned; that is, B/M2 (0.592) show least correlation, and Z/S (0.972) show most.

The matrix converts by group average into the following phenogram (for matrix sequence see 7/10):

Interestingly, this shows exactly the same cluster pattern as the phenogram in 15.4.2. Z/S and M1/M2 cluster first, then Y/N and B/ZS, to give three major groups. It is noticeable that all these clusterings take place above a level of correlation of 0.900. The next clustering only occurs below a level of correlation of 0.800: the two northern groups cluster first (YN/M), and then the northern and southern groups (BZS/YNM). There is thus a clear division between what we might call narrow clustering and extended clustering.
However, on comparing the series of linkage diagrams (7/11) drawn from the same matrix, we see that the phenogram presents an oversimplified picture. S/Z cluster at level 1, as suggested by the phenogram, but B/S cluster at level 2, much sooner than suggested. The dual division into northern and southern dialects is not reflected to the same extent in the diagrams, where Z/Y and Z/M1 cluster early (levels 3 and 4). N is the last to join the cluster (N/Y, level 6), and only clusters with dialects other than Y from level 13 on (cf. 7/7). Even then it joins Z (level 13) and S (level 14) first, not M1 or M2 as implied by the phenogram. In fact it is noticeable that the northern dialects N and M2 cluster with the central dialects Z (levels 13, 12) and S (levels 14, 17) before they cluster with each other (level 19), and then with B (levels 20, 21).

The average distance for each dialect is as follows:

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>Z</th>
<th>N</th>
<th>M1</th>
<th>M2</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dist</td>
<td>0.769</td>
<td>0.877</td>
<td>0.907</td>
<td>0.766</td>
<td>0.855</td>
<td>0.781</td>
<td>0.866</td>
</tr>
</tbody>
</table>

Drawing these on a spectrum gives:

```
Centre 2- Y  S  Ml M l  B N
```

Compared to previous spectra (15.4.1, 2), S and Y have transferred positions, and N has moved to become the farthest dialect from the Centre.

We will also use a slight variation on this theme by taking the standard deviation of each set of dialect figures, i.e., how far the set deviates from its average. The formula for the sample standard deviation ($\sigma_{n-1}$) is:

$$\sigma_{n-1} = \sqrt{\frac{\sum x^2 - (\sum x)^2}{n}}$$

where abbreviations are the same as those used in the formula for Pearson's coefficient. The resultant figures are as follows:

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>Z</th>
<th>N</th>
<th>M1</th>
<th>M2</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>0.134</td>
<td>0.069</td>
<td>0.055</td>
<td>0.105</td>
<td>0.099</td>
<td>0.130</td>
<td>0.091</td>
</tr>
</tbody>
</table>

Drawing these on a spectrum gives:
This spectrum resembles that in 15.4.1 in that N occurs between M1 and M2, not at the end as in the average distance spectrum above. However, it does resemble the latter in that Y and S have transferred positions in comparison to the other spectra. The fact that Y and N, related dialects, vary in their placement with regard to the other dialects may be significant.

15.4.4: linkage diagram correlation.

There are several minor differences between each of the three series of linkage diagrams 7/7, 7/9 and 7/11, but all three give the same general picture of the central dialects clustering earlier and the peripheral dialects later. In each series stages can be discerned where the dialect clustering is similar, thus:

\[
\begin{align*}
7/7 & : 1 \quad 4 \quad 6 \quad - \quad - \quad 14 \quad 17 \quad 18 \quad 19 \quad 20 \quad 21 \\
7/9 & : 1 \quad 4 \quad 6 \quad 12 \quad 13 \quad 14 \quad 17 \quad 18 \quad 19 \quad 20 \quad 21 \\
7/11 & : 1 \quad - \quad 6 \quad 12 \quad 13 \quad 14 \quad - \quad - \quad 19 \quad 20 \quad 21
\end{align*}
\]

The first method (7/7) has 9 stages in common with the second method (7/9), and 6 with the third (7/11); the second method has 8 stages in common with the third method. This seems to suggest that the results given by the first and second methods are most similar, then those given by the second and third methods, and least similar are the results given by the first and third methods.

This is borne out when we examine the linkage diagram sequences in greater depth. Ranking the dialect pairs in terms of the level at which they cluster, we have:

<table>
<thead>
<tr>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z/S</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>N/Y</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Z/Y</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>S/Y</td>
<td>7</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>M1/M2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>M2/Y</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>M1/Z</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>M1/Y</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>B/S</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>M1/S</td>
<td>9</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>
The previous table showed stages in each sequence where the overall dialect situation was the same; this table shows the level in each sequence where a specific pair of dialects cluster. If we calculate Pearson's coefficient $r$ for each pair of rankings above, we have:

\[
\begin{align*}
1\text{st}/2\text{nd} & : 0.968 \\
1\text{st}/3\text{rd} & : 0.924 \\
2\text{nd}/3\text{rd} & : 0.948 \\
\end{align*}
\]

This suggests that there is a high degree of correlation between all three rankings, though those given by the first and second methods are most similar. This is somewhat surprising, since judging from the phenograms we might have said that the second and third methods gave most similar results.

15.5: scattergrams.

The calculations of 15.4 give a detailed picture of dialect similarities, but there is one further representation of the data in 7/3 which gives a less detailed, though more graphic, display of the correlation between two dialects. A pair of dialects is selected, and the figures for dialect a are then mapped along the x axis of a graph, while those for dialect a' are mapped along the y axis. The result is a diagram showing a scatter of points — this is called a 'scattergram'. If the points tend to lie along a line, this shows a strong correlation between the two dialects. Normally, at least a hundred points are required for a scattergram to have statistical validity, but even though the ones given here (7/12) show only 14 points, they are effective illustrations of the conclusions reached in 15.4.

Rather than give a scattergram for each of the 21 pairs of dialects, which would take up too much space, 4 pairs have been selected on the basis of the third method ranking (cf. 15.4.4) so as to give a picture of the changing configurations as we progress from least correlation to most correlation: M2/B (21st in the ranking), N/S (14th), M1/Y (7th) and
Z/S (1st). A 'central area of greatest correlation' has been assigned on an ad hoc basis, taking in the region between $x = y + 10$ and $y = x + 10$. On either side of this (as far as $x = y + 20$ and $y = x + 20$) has been marked an 'extended area of greatest correlation'.

The scatter of the points in the scattergrams may be tabulated as follows:

<table>
<thead>
<tr>
<th></th>
<th>central</th>
<th>extended</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) M2/B</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>(b) N/S</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>(c) M1/Y</td>
<td>5</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>(d) Z/S</td>
<td>12</td>
<td>2</td>
<td>14</td>
</tr>
</tbody>
</table>

The first scattergram shows a wide scatter of points, only 4 being in the central area, and none in the extended area. The second shows the points coming closer to the central area and beginning to form themselves into a line, only 4 being outside the central or extended areas. In the third scattergram the process continues, all but one point being inside the boundaries of the extended area. In the last scattergram the process is complete - all but 2 points are in the central area, and none are outside the extended area.

15.6: multi-dimensional scaling.

In addition to taxonomic methods such as those used in 15.4, modern numerical taxonomy also has access to several more complex classification methods, usually requiring the use of a computer for their application. Such a method is that of local order non-metric multi-dimensional scaling, run by a program known as MDSCAL (Version 5M). The data on the entities to be compared (in this case, the 7 dialects) is prepared in the form of matrices such as those in 15.4, and fed into the computer. In Henrici's words (1973, p.89):

'Consider any three languages A, B and C. If A [shows greater correlation] with B than with C then the program will attempt to position A nearer to B than to C. The data is likely to be such that this cannot be done completely consistently for all the languages. The end result produced is a configuration in which as many as possible of such relations are reflected correctly in the final positions [of the languages on the printout]. The method is called multi-dimensional since it can be used to arrange objects along one dimension, or in a two-dimensional map as here, or in three or more dimensions. The
term 'non-metric' signifies that no use is made of how much
larger the AB overlap is than the AC one, merely the fact that
it is larger. And finally 'local order' specifies that only
comparisons containing one item in common are made. Thus AB
versus AC is considered, but not AB versus CD.'

The three matrices in 15.4.1,2,3 were used as input.
'The MDSCAL program first arranges the points randomly in 2
dimensions, then compares the distance-rankings between each
pair of dialects on this map with the distance-rankings
extracted from the input data. It then calculates by a trig-
onometric algorithm how to improve this correlation by moving
the points around. It then compares the new map distance-rankings
with the input distance-rankings and so on cyclically. During
each cycle it prints one line of 'iteration figures', representing
a 'history of the calculation'. The program gives up after some
value has reached a satisfactorily low/high level, or after 50
cycles. The map represents the state after the last iteration.'
(M. Mann, p.c.)

The program also measures how much distortion is involved in trans-
ferring the correlations shown in the input matrix onto a two-
dimensional map. This is known as the 'stress' of the map. The satis-
factory stress level for MDSCAL Version 5M is <0.010, calculated using
Formula 2, the most recent stress formula for the program.

15.6.1: first method.
Using the first method matrix (15.4.1) there were 50 iterations (the
maximum possible in the program), and the stress was 0.023 (above the
'acceptable' level of 0.010, but still low). The final configuration,


<table>
<thead>
<tr>
<th></th>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>0.102</td>
<td>-1.596</td>
</tr>
<tr>
<td>Y</td>
<td>0.109</td>
<td>0.404</td>
</tr>
<tr>
<td>Z</td>
<td>0.015</td>
<td>-0.117</td>
</tr>
<tr>
<td>N</td>
<td>1.040</td>
<td>0.657</td>
</tr>
<tr>
<td>M1</td>
<td>-0.837</td>
<td>0.178</td>
</tr>
<tr>
<td>M2</td>
<td>-0.644</td>
<td>1.084</td>
</tr>
<tr>
<td>S</td>
<td>0.215</td>
<td>-0.610</td>
</tr>
</tbody>
</table>

The resultant map is shown in 7/13.

15.6.2: second method.
Using the second method matrix (15.4.2) only 12 iterations were
required to reach a stress of 0.006. The final configuration was:

<table>
<thead>
<tr>
<th></th>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>-0.020</td>
<td>-1.619</td>
</tr>
<tr>
<td>Y</td>
<td>0.298</td>
<td>0.541</td>
</tr>
<tr>
<td>Z</td>
<td>-0.112</td>
<td>-0.126</td>
</tr>
<tr>
<td>N</td>
<td>1.099</td>
<td>0.754</td>
</tr>
<tr>
<td>M1</td>
<td>-0.605</td>
<td>0.131</td>
</tr>
<tr>
<td>M2</td>
<td>-0.673</td>
<td>0.968</td>
</tr>
<tr>
<td>S</td>
<td>0.012</td>
<td>-0.648</td>
</tr>
</tbody>
</table>

The resultant map is shown in 7/14.

15.6.3: third method.

The third method (15.4.3) gave 9 iterations leading to a stress of 0.007. The final configuration was:

<table>
<thead>
<tr>
<th></th>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>-0.454</td>
<td>-1.351</td>
</tr>
<tr>
<td>Y</td>
<td>0.379</td>
<td>0.352</td>
</tr>
<tr>
<td>Z</td>
<td>-0.182</td>
<td>-0.364</td>
</tr>
<tr>
<td>N</td>
<td>1.336</td>
<td>0.258</td>
</tr>
<tr>
<td>M1</td>
<td>-0.584</td>
<td>0.442</td>
</tr>
<tr>
<td>M2</td>
<td>-0.276</td>
<td>1.281</td>
</tr>
<tr>
<td>S</td>
<td>-0.218</td>
<td>-0.619</td>
</tr>
</tbody>
</table>

The resultant map is shown in 7/15.

15.6.4: conclusions.

A simple examination of the three maps reveals that they are very similar. Calculating Pearson's coefficient for each pair of final configurations gives:

<table>
<thead>
<tr>
<th></th>
<th>1st/2nd</th>
<th>1st/3rd</th>
<th>2nd/3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>lst/2nd</td>
<td>0.985</td>
<td>0.908</td>
<td>0.923</td>
</tr>
</tbody>
</table>

(cf. 15.4.4 and endnote 9). All three maps show Y and N in the north-eastern quadrant, M1 and M2 in the north-western quadrant, while Z, S and B occur in the southern half, close to the y axis. To some extent this reflects the phenograms of 15.4.2, 3. However, the maps avoid the phenograms' tendency to oversimplify in that they show the proximity of Z and S to Y and M1 (cf. the phenogram in 15.4.1). It is in fact noticeable that, contrary to the phenograms and linkage diagrams, the maps do not necessarily show Z and S as the two most similar dialects:
in 7/13 Z is closest to Y, and in 7/14 to Ml. However, they do reflect the linkage diagrams in that B is shown, paradoxically, as closer to S than to Z, and conversely Ml is shown as closer to Z than to S.

The three maps therefore give a consistent picture which supplements those obtained from the measures of correlation in 15.4. But there are two important points to be noted.

The first is the relationship of these maps based on pitch features to the actual geographical situation.

'It is not surprising that some sort of recognisable map should appear - one would not have expected closely-related languages to have dispersed to opposite sides of the continent. But the accuracy of this one is a trifle disconcerting. Does it show that all the purported measures of linguistic relationship are merely reflections of geography, so that the figures ... only reflect distances between language communities and can tell us nothing about their evolution? This would be an unduly defeatist view since [7/3] contains much more information than can be displayed in any single map. But the map should serve as a warning that the table is by no means purely linguistic.' (Henrici 1973, p. 89)

As Henrici says, to consider pitch-pattern differences merely as a function of geographical distance is an oversimplification. The linkage diagrams in 7/7, 7/9 and 7/11 show clearly that a multiplicity of relationships is involved. Nevertheless, it is probable that whatever differences exist between dialects may be accentuated by distance, and this factor should be taken into account in any study of the evolutionary relationship of dialects.

The second point is that one obvious departure from the geographical position of the dialects does occur: namely, Z has moved much closer to the centre than we would expect in terms of its location. (This fact was also apparent from the spectra in 15.4.) There are two possible explanations for this, which are not necessarily mutually exclusive:

(i) the Rev. D. Ntoni-Nzinga had lived for some time in other areas, so that what he called Z was in reality rather mixed (as he himself averred on a few occasions);

(ii) the fact that he spoke Z as his mother-tongue means that this would tend to be the central point for the other dialects Y, N, Ml, B, rather than an abstract 'origin'.
There are some remaining data in 7/3 which have not yet been utilised. These, involving the ratio of high pitch to word, are fully set out below.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>t</td>
<td>z</td>
<td>z/t%</td>
<td>w</td>
<td>h</td>
<td>h:w</td>
<td>r</td>
<td>%/w%</td>
</tr>
<tr>
<td>B</td>
<td>135</td>
<td>27</td>
<td>108</td>
<td>123</td>
<td>1.14</td>
<td>95</td>
<td>88%</td>
</tr>
<tr>
<td>Y</td>
<td>218</td>
<td>44</td>
<td>174</td>
<td>165</td>
<td>0.99</td>
<td>112</td>
<td>64%</td>
</tr>
<tr>
<td>Z</td>
<td>177</td>
<td>49</td>
<td>126</td>
<td>139</td>
<td>1.08</td>
<td>94</td>
<td>73%</td>
</tr>
<tr>
<td>N</td>
<td>219</td>
<td>48</td>
<td>171</td>
<td>196</td>
<td>1.15</td>
<td>112</td>
<td>65%</td>
</tr>
<tr>
<td>M1</td>
<td>208</td>
<td>33</td>
<td>175</td>
<td>201</td>
<td>1.15</td>
<td>125</td>
<td>71%</td>
</tr>
<tr>
<td>M2</td>
<td>142</td>
<td>27</td>
<td>115</td>
<td>141</td>
<td>1.23</td>
<td>78</td>
<td>68%</td>
</tr>
<tr>
<td>S</td>
<td>237</td>
<td>54</td>
<td>183</td>
<td>221</td>
<td>1.21</td>
<td>142</td>
<td>78%</td>
</tr>
</tbody>
</table>

Column 1 gives the total number of words in the passage (abbreviated t). Column 2 shows the number of words without high pitch in that passage (abbreviated z for 'zero'). Column 3 shows the number of words without high pitch as a percentage of all the words in the passage (z/t%). In column 4 is listed the number of words with high pitch (abbreviated w), i.e. t - z. Column 5 gives the total number of high pitches occurring in the passage (abbreviated h). Column 6 shows the ratio of high pitch to word (h:w), where the figure for w is set at unity; this should be read, 'for every word on which high pitch will occur, there are likely to be x number of high pitches on that word'. Figures above unity imply that there will be more than one high pitch per word, i.e. in a sequence of words with high pitch, one may have two high pitches; figures below unity imply that there will be less than one high pitch per word, i.e. in a sequence of words with high pitch, one may have no high pitch. Column 7 shows the number of words with high pitch on the root-syllable (abbreviated r). Column 8 shows the number of words with root-syllable high pitch as a percentage of words with high pitch (r/w%); this should be read, 'when a word has high pitch, in x% of cases the high pitch will occur on the root-syllable'.

If we rank the figures in Column 3 in descending order, we have Z, S, N, Y + B, M2, M1. Z and S show the highest frequency of words without high pitch. It may be significant that these texts were composed by the informant; on the other hand, the same applies to M2, which occurs at
the opposite end of the list. Different reading styles may therefore also have played a part (cf. 9.2).

Ranking the figures in Column 6 in descending order gives M2, S, M1 + N, B, Z, Y. The highest ratios are shown by M2 and S, and since we know from the previous studies that these two dialects do not show an especially close affinity, perhaps their separation from the other dialects here may be accounted for by the fact that both these texts were from informants other than the Rev. D. Ntoni-Nzinga. The figures in this column support the suggestions in 6.5 and 8.5 that there may be a fair amount of variation in the frequency of the high pitches of individual speakers; the variation level here, 14.5% \(^{12}\), correlates well with the estimates of 8.5, though it is slightly lower than predicted there.

Ranking the Column 8 figures in descending order gives B, S, Z, M1, M2, N, Y. B is set off from the other dialects by its very high figure. The lowest figures are in the north-eastern dialects Y and N; this correlates with the fact that they have a large proportion of high pitches after the root-syllable (cf. 15.2,3).

These data\(^ {13}\) fill out the picture given earlier, but are less reliable since they are perhaps more prone to show variation with the content of the text: for example, if words without high pitch signal emphasis, focus or complexes (as I have argued), their frequency of occurrence depends on the type of text and the level of the speaker's involvement with it.

15.8: summary.

This chapter has discussed the implications of the differing pitch-pattern distribution in samples of the kiKongo dialects discussed in chapters 4-10. A pitch-count was first made to determine the placement of high pitch in each of the 7 samples (15.2), and this brought out preliminary differences and similarities among the dialects. A collapsed version of the pitch-count was then drawn up (15.3) and used as a basis for more detailed analysis of the correlation between the dialects. Three measures of correlation were used (15.4), giving matrices from which phenograms, linkage diagrams, spectra and 2-D maps
could be derived. All these methods give a consistent picture of dialect similarity, though they may differ in some minor details. This picture is filled out with scattergrams (15.5) and other data from the original pitch-count (15.7).

The evidence suggests four main dialect areas:
(a) NE: comprising kiNtandu and kiYaka/kiNtandu, characterised by a tendency for high pitch to move towards the end of the word;
(b) NW: comprising kiManyanga, characterised by a tendency for high pitch to move towards the beginning of the word;
(c) SW: comprising kiMbanza' aKongo, characterised by a tendency for high pitch to remain on the root-syllable (?);
(d) SE: comprising kisiNgombe and kiZombo, characterised by no discernible tendencies.

The first three areas' distinctiveness is reinforced by the differing lexical pitch-pattern behaviour, discussed in chapter 14. The fourth area might well be called SE/Central, since it is less homogeneous than the other three areas, and indeed seems closely-related to kiYaka/kiNtandu in the NE area - it might even be best to consider this dialect as belonging to both the NE and SE areas.
Endnotes to chapter fifteen.

1. I am grateful to Michael Mann for his helpful advice on this chapter, and for running the MDSCAL program of 15.6.

2. In this chapter the dialects will be referred to by abbreviations:

   - B: kiMbanz' aKongo (chapter 4)
   - Y: kiYaka/kiNtandu (5)
   - Z: kiZombo (6)
   - N: kiNtandu (7)
   - M1: kiManyanga 1 (8, Ntoni-Nzinga)
   - M2: kiManyanga 2 (9, Ndolo Menayame)
   - S: kisiNgombe (10).

   Compass directions will refer to the following diagram of the geographical distribution of the dialects:

```
    M2   N   ↑ north
    M1   S   Y
      B   Z
```

3. All references of the form '7/n' should be read as 'the nth section of Appendix 7'.

4. Three of the unfilled positions (oth/prs; oth/sh; oth/lst) are ruled out by definition: the first syllable of conjunctions, etc., is taken to be the root-syllable (3.2.3.4), and since they cannot take pre-prefixes (note, however, va/evo 'if', buna/tuna 'then, so'), there cannot be any syllable of the word before the root-syllable.

5. In a few cases, because of rounding off to the nearest whole number, the rows add up to 99% instead of to 100%.

***

7. 'The terms phenogram and cladogram ... have come into general use to define dendrograms [ie. tree-diagrams] representing phenetic and cladistic relationships, respectively.' (Sneath and Sokal 1973, p.58)

The terms 'phenetic' and 'cladistic' are roughly equivalent to the linguistic terms 'synchronic' and 'diachronic' respectively; that is, a cladogram displays ancestor-descendant relationships, while a phenogram displays similarity based on the characteristics of the objects under study. Sneath and Sokal (1973, p.29) note that, 'While phenetic similarity may be an indicator of cladistic relationship it is not necessarily congruent with the latter.' It should be noted that this whole chapter is concerned with phenetic (ie. present-day) resemblances only; it is not necessarily the case that these resemblances reflect evolutionary development, though of course we would

*** For endnote 6 see p.
like to assume that they do (cf. Henrici 1973, p.88).

8. It should be noted that this spectrum does not show relative closeness of each dialect. Thus the proximity of N and M2 on the spectrum does not mean that they are closely-related, nor does the fact that Z and M1 are separated by S and Y mean that they are not closely-related. The position of each band on the spectrum shows the distance of each dialect from all the other six dialects considered as a unitary Centre.

The concept may be illustrated by referring to a standard deviation curve, a symmetrical curve about the average, showing deviation from that average:

![Standard Deviation Curve](image)

Points A and B are equidistant from the average, yet they are actually farther from each other than are points C and D, which are at different distances from the average.

Likewise, in the spectrum N and M2 are at almost the same average distance from the Centre, yet are not necessarily of close affinity, while M1 and Z are farther away from each other on the spectrum, but are yet of closer affinity.

9. Likewise, Pearson's coefficient for the basic matrices of each pair of methods gives similar results:

<table>
<thead>
<tr>
<th>Method Pair</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st/2nd</td>
<td>0.979</td>
</tr>
<tr>
<td>1st/3rd</td>
<td>-0.922</td>
</tr>
<tr>
<td>2nd/3rd</td>
<td>-0.960</td>
</tr>
</tbody>
</table>

The negative values are due to the fact that the first and second methods are measures of dissimilarity, while the third is a measure of similarity - any correlation between them would therefore have to be negative (see 15.4.3).

10. In this and subsequent configurations the figures have been adjusted so as to make the computer-produced map comparable to the actual geographical positions of the dialects (cf. endnote 2). All that was involved was changing the polarity of the x figures so as to produce a reflection along the y axis and bring east and west the
right way round. On the actual maps (7/13, 14, 15) the positions of the dialects have been shown to only 2 decimal places, instead of 3 as here.

11. It should be noted that in 7/3 the total percentage in the root-syllable column is that of number of high pitches on the root-syllable expressed as a percentage of the total number of high pitches in the passage, i.e. r/h%. The figures therefore differ from those given here, which show r/w%.

12. This figure was calculated as follows. We have two groups of dialects: B, Y, Z, N, M1 from the Rev. D. Ntoni-Nzinga, and M2, S from other informants. The outer limits for the possible variation in the first group are Y 0.99 and N, M1 1.15, giving a difference of 0.16. Expressing this difference as a percentage of the figures for the first group of dialects (average 1.10) will give an idea of the amount of possible variation in that speaker's high pitch occurrence: the answer is 14.5%.

13. The data could of course be used as additional variables when calculating Pearson's coefficient r (15.4.3). Taking the dialect pairs in 15.4.3 showing the highest (Z/S) and lowest (B/M2) values for r, the figures were re-calculated to include the three sets of variables just presented. The results were:

\[
\begin{array}{l}
Z/S & 0.977 \text{ (formerly 0.972)} \\
B/M2 & 0.693 \text{ (formerly 0.592)}
\end{array}
\]

that is, the higher limit shows little change, but the lower limit is significantly raised. The net result would probably be to raise the values for the bottom half of the ranking of the 21 pairs (cf. 15.4.4), while yet retaining the major features of the ranking as already established.

6. It must be emphasised that although three methods are used, this is only in order to examine the figures from all sides; minor differences in the results for each method do occur, but it should be remembered that the main object of the exercise is to group the dialects, not to weigh the advantages and disadvantages of each method.
CHAPTER SIXTEEN
Coda: Historical Development

16.1: introduction.

This chapter has two purposes. Firstly, it will give a few suggestions on the evolution of the kiKongo pitch system, and what this might imply for the systematisation of pitch features. Secondly, it will examine the kiKongo and kileta pitch systems to see whether any relationships between them can be discerned, and what these might imply.

16.2: kiKongo pitch.

Chapter 14 discussed lexical correlations among three kiKongo sources (Laman 1936, Daeleman 1963 and 1966, and Carter 1980b). It was concluded that, despite a number of features peculiar to each dialect, the three agreed in differentiating two main tonal classes (rising and falling).

Chapter 15 discussed relative similarities between the six kiKongo dialects of this thesis, based on pitch features, and distinguished four main dialect areas: NW (kiManyanga), NE (kiNtandu, kiYaka/kiNtandu), SW (kiMbanza' aKongo), and SE/Central (kiZombo, kisiNgombe). It was noted that there was a tendency for the central dialects kiZombo, kisiNgombe and kiYaka/kiNtandu to show most similarity.

The picture is therefore an expected one of individual dialectal differences, which must, however, be seen against a background of wider general similarity. It remains now to try to integrate this information with the picture given in part II of the thesis concerning the various systematisations of kiKongo pitch features.

16.2.1: development of research.

Guthrie 1967-71 has abstracted four tone-classes for Proto-Bantu, and although some of the tone-class distinctions (eg. *hl v. *hh, see 14.2.4) may need revision, it is clear that PB showed tonal features. However, Bennett nd. has argued that we may need to posit accentual features as well for PB (see 14.13.3).
Carter, Laman, Daeleman and van den Eynde describe kikongo, with varying degrees of success, in terms of a tonal system. However, all four authors admit that this tonal system shows some additional non-tonal features, and, to account for these, bring special features into their descriptions: Laman refers to 'phrase-tone' and 'emotive tone', gives a few intriguing examples, and leaves it at that; Carter develops the idea of tone-phrases and syntactic conditioning of the tonal contours; Daeleman and van den Eynde resort to 'cases' and 'moods'. The last two also refer to pitch patterns being conditioned by focus (eg. Daeleman characterises bridging as 'tonal concentration'). This implies a clause-level (ie. intonational) accent supplementary to the word-level (ie. tonal) system (see also 12.4).

In this thesis I have taken the view that tone-classes figure very little in connected speech (for arguments in favour of this, see 14.13), and have given them a subordinate position in the description. I have described pitch-patterns in terms of high pitch normally occurring on the root-syllable of the word. Certain affixes such as genitive, locative or connective elements condition other patterns, such as 'shift'. Other anomalous patterns such as high pitch on the last syllable of the word, bridge on the word, or no high pitch on the word have been considered as exponents of a system of focus or emphasis, which has been taken to be the main system governing realisation of pitch patterns in kikongo. It has been suggested that bridging between words is another marker of focus (or at least close relationship between the words concerned), and similar structures from three other Bantu languages have been discussed (13.3). A preliminary attempt has been made to classify mechanisms by which contours may be varied for effect (chapter 12), and general arguments for a pitch-accent system have been put forward (13.2).

The preceding paragraphs might be summarised as follows:

(1) PB: tone-classes + accent (?)
(2) C, D, L, E: tone-classes + something else (accentual?)
(3) here: pitch-accent + residual tone-classes

(2) and (3) reflect merely a difference of emphasis, though it may be that a similar increasing importance of accentual features over tonal
features was an actual historical fact in the language. It will be remembered that in 14.13 I gave reasons for why the tone-classes might have merged in connected speech, and how this would have led to pitch becoming increasingly linked to the phrase, with the possibility of modulating phrase contours for effect.

16.2.2: implications.

Consideration of the system proposed in this thesis, and of previous systematisations, leads to several conclusions.

If non-tonal factors are subsidiary to tonal ones in a language, it is probably better to deal with the suprasegmentals in terms of a tonal analysis — it may even be easier to describe the non-tonal features in the same set of rules as the tonal ones (cf. Bennett 1974 for Kikuyu).

As non-tonal factors assume increasing importance, however, it may become more difficult to deal with them in this way, especially if the tonal factors are simultaneously altering their domain from morpheme/syllable to word/phrase. It may then be necessary to link tonal realisations to their surrounding syntactic environment (cf. Carter 1973). In McCawley's (1968) terms, we still have to ask to some extent, 'What type of high pitch is this? What sort of matrix does it occur in?' rather than just 'Where is the high pitch?'.

If the sequence continues, though, we may have to admit specifically non-tonal factors to the analysis; their occurrence may be fairly predictable, but to describe them we may need to introduce special concepts such as tone-cases or moods (cf. Daeleman 1966) or assertion (cf. Byarushengo et al. 1976).

The next step may be for high pitch to become associated with one particular syllable in the word, usually with accompanying stress (cf. the system postulated in this thesis, cf. also 4.6.4.2; compare Johnson 1976 on Low Runyankore). The model here is an accentual system, with possible further development of structures for determining prominence or cohesion within a group (eg. bridging). Such a system would eventually lead, via modulation of contour for special effect, to an intonational system.2
Tonal systematisations for a language in the early accentual stage may be descriptively and predictively adequate, as are Daeleman's and Carter's, but if the language passes beyond a certain point, such systematisations will end up describing only a minor portion of the system. It is, unfortunately, difficult to conduct investigations into marking of prominence, particularly if the language is in a transitional stage, but in part II of the thesis I have tried to present evidence that the development of kikongo has proceeded to a stage where this sort of work must be undertaken, and have made a few suggestions as to the type of system which might be in operation.

16.3: relationship between kikongo and kileta.

Previous chapters have dealt mostly with kikongo, though kileta has been described in chapter 11. Before discussing the relationship between the two entities, it is necessary to summarise the main conclusions reached in the most important work on the subject - Fehderau 1967.

16.3.1: Fehderau 1967.

Fehderau bases his suggestions about kileta on geographical, historical and linguistic data. Chapter 2 of his book gives a brief history of the area in which kileta is spoken, while chapter 3 gives a sketch of the language.

16.3.1.1: linguistic evidence.

In chapter 5 Fehderau discusses borrowing in kileta, and concludes that Portuguese has only affected kileta to the extent that there were some Portuguese loanwords in kikongo, a major component of kileta. (Fehderau 1967, pp. 77-78) Lingala, about 40% related to kileta by cognition (in Fehderau's words), is also about 10% related by borrowing of some of its lexical items and grammatical features into kileta (ibid. pp. 78-80). French is playing an increasing role in the development of kileta, again donating lexical items and a few sporadic grammatical features (ibid. pp. 82-87).

Chapter 4 gives Fehderau's evidence for the relatedness of kileta with other kikongo dialects and other Bantu languages in the area.
Comparing the phonological inventory of kiLeta with that of five other languages, Fehderau arrives at the following tree diagram:

```
kiLeta  kiManyanga  giMbala  kiNgwana  kiTeke  liNgala
              (kiKongo)             (kiSwahili)  (upper)
```

He then examines the lexicon of the 17 languages/dialects of his study. He takes 60 cognates occurring in all the languages, and, using a measure of similarity developed by Gleason, ends up with a numerical indication of how similar each language is to kiLeta:

(M) kiLManyanga  513
(YN) N. kiYombe   508
(L) Ladi          489
The 10 kikongo dialects obviously show greatest proximity to kileta. Fehderau groups them (M-K)(N-S)(Ka,V), giving picture (i) below. However, it is also possible to group them (M,YN)(L-N)(YS-Ka)(V), giving picture (ii) below.

Both groupings are based on an arbitrary selection of cutoff points, but have slightly different implications. Fehderau's segmentation of his table (picture i) implies a fairly wide central area, then a wider area taking in all the other dialects except kikabinda and kivili. My segmentation (picture ii) implies a small central area, then a wider area taking in up-river dialects, then a wider area still, taking in the down-river dialects, with kivili last. Fehderau concludes from picture (i) that the central dialects of kikongo are more similar to kileta than the peripheral dialects (p.76).

16.3.1.2: historical evidence.

He then proceeds (chapters 6 and 7) to trace the development of
kiLeta as he sees it. He refutes suggestions that Portuguese, English or French provided the impetus for the growth of kiLeta: (i) most Africans learnt Portuguese proper, rather than pidgin, to communicate with the Portuguese merchants; (ii) English trading companies tended to hire workers from the West African coast, so that there was no contact situation with the local people; (iii) missionaries usually learnt the local language properly rather than try to communicate in pidgin; (iv) French was not widely introduced until after WWII, when kiLeta was already in existence (pp. 89-92). Fehderau therefore concludes that since none of the above groups could have been responsible for the formation of kiLeta, it must have arisen independently. He also postulates a unitary origin for kiLeta because it possesses almost the same features regardless of region (pp. 93-98).

In Fehderau's opinion, therefore, kiLeta started as 'a koine based only on African dialects and languages' (p.99), which first came into existence 'as a contact language of the native traders in the Lower Congo region west of Kinshasa' (p.vii). He quotes Eliet (1953) as reporting that two old men had told him that kiLeta was already in use in the Kinshasa area by 1881, having come from the SW via Manyanga. However, he contends that Eliet's suggestion of Boma as the contact centre where kiLeta arose is not convincing, since it involves contradictory dates (p.100). He suggests rather that the contact centre was in fact Manyanga, a convenient switchover point for the local trading caravans, whether going upriver or coastwards (cf. pp. 24-8).

Apart from agreeing well with his linguistic data, such a centre is attractive from a historical point of view. The whole Lower Congo region was a trading area as early as 1600 (p.99), monopolised by the baKongo, baZombo and baTeke, so that such centres as Manyanga had become focal points by, perhaps, 17507, bringing together speakers of various dialects of kiKongo and of other related languages. A pidginised version of kiKongo presumably took shape8, and was perhaps established in that area around 1800(?)7. Thereafter, as the trade routes pushed farther up the R. Kongo, the pidgin language expanded its sphere of use.

After European exploration of the R. Kongo and the establishment
of direct trading with the peoples of the interior, the old 'ivory road' system was phased out. Nevertheless, the infrastructure of the Congo Free State ensured the continued use of kileta (1870-90) (p.108). Probably by the turn of the century, increased contact with Lingala speakers led to that language influencing kileta (p.109). Then came an eastward expansion of use to the Kwango-Kwilu region (1910-20) (p.110). In the thirties and forties the language began to be creolised (i.e. people began to speak it as a first language), with borrowing from French to fill gaps in the lexicon (p.110). Finally, Fehderau notes the beginnings of dialect differentiation into a western and an eastern form (pp. 111-3).

16.3.2: indications from pitch features.

It now remains to be seen whether evidence from the pitch features of kikongo and kileta can be fitted into Fehderau's fairly detailed scheme. The main difference between the two pitch systems is that kikongo tends to have high pitch on the root-syllable, whereas kileta usually shows penultimate high pitch. How might these two be reconciled? There are three ways in which this might be done:

(i) suggest that the kileta pitch system is not derived by inheritance from that of the kikongo source dialects;
(ii) postulate a development of the kileta system from the kikongo one;
(iii) postulate divergent development of both systems from a common source.

In view of the many other relationships between kikongo and kileta, it is difficult to believe that the kileta pitch system is completely innovative and independent of the kikongo one. The first position, therefore, will not be considered here unless the other two positions are found not to provide a reasonably coherent explanation of the data.

16.3.2.1: evolutionary development.

The second position would suggest a sequence along the following lines: (1) in kikongo, high pitch became increasingly linked to the root-syllable around the time a stable pidgin kileta was developing (c. 1900?); (2) in kileta this high pitch was reinterpreted as stress.
(3) owing to influence from another source, high pitch was reintroduced on the penultimate syllable; (4) the stress on the root-syllable then becomes associated with this new high pitch.

The second step in this sequence would account for the fact that out of 644 items in a sample from Fehderau 1969, only 4 (0.6%) did not have stress on the root-syllable (see 11.4.1.3). Step 4 accounts for stress and high pitch usually occurring on the penultimate in Mr. Katesi’s speech, and in any case Fehderau (1969) notes that stress tends to move to the high-pitched syllable in one of his tone-classes (II) - cf. 11.6.7.

However, we have still to find the 'other source' specified in step 3. A perfect example of the same type of language as kiLeta, with penultimate stress/high pitch, is Swahili. However, it is unlikely that Swahili would have had enough influence this far west at an early enough period (cf. Fehderau’s (1967) conclusions about kiNgwana, 16.3.1.1 above), though it has no doubt exerted some such influence in more recent years (Mr. Katesi, for example, knew a few Swahili words). There is, however, one other source closer to kiLeta which might possibly fit the bill - kiNtandu. If we can assume that the pitch features of modern kiNtandu are comparable to those of a century ago, it is possible that the common tendency in kiNtandu to have high pitch towards the end of the word (see chapters 7 and 15) may have influenced the developing kiLeta. KiManyanga also may have played a part - it will be remembered that the early work of Laman, done in the 1920s, showed a final high pitch for the rising class, no matter what the length of the word, thus cvcv, cvccv, etc. (9.5). This feature does not appear in modern kiKongo (cf. chapters 9 and 15), where the high pitch seems to have been moved leftwards, but its presence in kiKongo at one stage may have influenced kiLeta.

16.3.2.2: divergent development.

The third position mentioned above, that of divergent development from a common source, suggests the following sequence: (1) at a certain stage in its development, pidgin kiLeta interpreted kiKongo pitch patterns in a fundamentally different, though superficially similar, way; (2) the two languages continued an individual, but parallel,
development.

The most obvious way in which the differing interpretations referred to in step 1 could arise is based on disyllabic patterns. Take the kikongo patterns

(a) \( *cv^c_{cv} \) (falling) and \( *cv^c_{cvv} \) (rising).

As long as the interpretation is 'high on first syllable' and 'high on last syllable' respectively, there will be trisyllabic forms

(b) \( *cv^c_{cv}cv \) and \( *cv^c_{cvv}v \) (cf. Laman).

But if the domain of pitch increases from syllable to word, ie. if the patterns in (a) are seen as unitary wholes, trisyllabic forms may be seen as 'falling pattern + syllable' and 'rising pattern + syllable' respectively, giving

(c) \( *cv^c_{cv}cvv \) and \( *cv^c_{cvv}v \).

This starts the leftward movement of the high pitch in the kikongo rising class, and further development, as outlined in chapter 14, may leave only one mora distinguishing falling and rising classes (cf. Daeleman's and Carter's forms). Eventually even this distinction may disappear, leading to a complete merger of the classes (cf. 14.13).

If we assume, as we did for the first step of the previous position (16.3.2.1), that stable pidgin kileta was developing at a time when kikongo high pitch was becoming increasingly linked to the root-syllable, a similar reinterpretation could account for the different contours in both languages:

\[
\text{kikongo: } *cv^c_{cv} \rightarrow *cv^c_{cv}cv \text{ and kileta: } *cv^c_{cv} \rightarrow *cv^c_{cvv}. \]

Kikongo here counts from the beginning of the word, and kileta from the end. That this became the usual pattern in kileta was probably due to the kiManyanga and kiNtandu patterns mentioned above (16.3.2.1), the rising pattern in (c) above, and the greater frequency in kikongo of the falling pattern which begins the sequence.

16.3.2.3: conclusions.

The third sequence (16.3.2.2) might account for penultimate high
pitch more easily than the second one (16.3.2.1) - the high pitch arises from different placement of the same basic feature in each language, and does not have to materialise from somewhere else. On the other hand, the third sequence does not account so well for Fehderau's stress patterns. Both sequences must be considered tentative, and perhaps further research will throw more light on the matter.

We may summarise as follows:

second sequence:

kiKongo (high pitch/stress on the root-syllable) --- → kiNtandu --- → kiManyanga

<table>
<thead>
<tr>
<th>high pitch reinterpreted as stress</th>
<th>penultimate high pitch introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>kiLeta (stress on root-syllable, penultimate high pitch)</td>
<td></td>
</tr>
<tr>
<td>(penultimate high pitch/stress)</td>
<td></td>
</tr>
</tbody>
</table>

third sequence:

kiKongo

\[ cv \rightarrow cv \rightarrow cv \]

\[ -- \rightarrow kiNtandu \rightarrow kiLeta \rightarrow kiManyanga \]

\[ cv \rightarrow cv \rightarrow cv \]

16.3.3: kiNtandu influence.

The pitch system of kiLeta does therefore seem to be relatable to that of kiKongo, either by derivation or by independent development. The northern dialects of kiKongo seem closest to kiLeta: kiNtandu shows a tendency to have high pitch towards the end of the word, and kiManyanga shows a somewhat similar, though not at all so marked, tendency in some cases (Laman's patterns, and possibly a few words with underlying rising contours - cf. 9.3.9). KiManyanga also showed, in one idiolect, patterns of bridging similar to those of kiLeta: bridges were not so common nor so long as in other dialects studied (9.2, 9.3.11).
In chapter 11 it was suggested that kileta was on the way to developing an intonational system. It may not be coincidence that the dialect between kimanyanga and kintandu, kisingombe, shows development towards phrase-pitch (ie. pitch patterns may be determined by length of phrase and placement of pause - 10.3.4), and also shows most contour variation.

Fehderau did not take pitch features into account in his study (1967, pp. 46-47), but it will be noticed that the above observations agree substantially with his conclusions. However, on one point there is an important difference. On pp. 92-93 Fehderau says, 'Those who point to kintandu as the kiKongo dialect which has most influenced kileta must contend with linguistic evidence that does not give a special place to it. It is rather a cluster of central dialects that proves to be most closely related ...' - see picture (i) under 16.3.1.1. However, as picture (ii) illustrates, the segmentation of the data may be done in several ways, and in this latter picture kintandu could be said to have a special place, since it can then be considered as one of the 'cluster of central dialects'.

Fehderau seems to want to discount kintandu because that might suggest Kinshasa as the contact centre rather than Manyanga. However, the two views can be reconciled easily enough by agreeing with Fehderau that Manyanga was the contact centre that gave rise to kileta, but suggesting that once kileta came into existence it was influenced to some degree by kintandu. It is in any case surely counter-intuitive to rule out the neighbouring kintandu as an influence when kiZombo influence, from much farther away, is implied in at least one passage (p.100). Moreover, kintandu is the main dialect near the Stanley Pool area, and Leopoldville had been established as an important inland depot by 1885 (p.31), so kintandu influence is chronologically possible in Fehderau's scheme (16.3.1.2). Further, since he accepts that in this period liNgala could have influenced kileta (p.109), it is difficult to see how kintandu influence can be ruled out. Finally, this sequence of an original centre in Manyanga, influenced by kimanyanga, and then a spread upriver to Kinshasa, influenced by kintandu, fits well with Fehderau's linguistic evidence as segmented in my picture (ii) under 16.3.1.1.
Evidence from pitch features thus seems to support Fehderau's conclusions, though I would prefer to give greater weight to the northern dialects (kiManyanga, kiNtandu, and perhaps kisiNgombe) in the formation of kiLeta. However kiLeta develops in the future, it does seem to show a clear relationship to kiKongo. We may characterise both languages as following different, though parallel, paths: both show the development of word-contours modified by focus and emphasis. There is an echo here of the 'notion that creolisation is merely accelerated natural change', as Hancock nd. paraphrases van Name 1870, and he also notes that some modern scholars also see this process as 'not very different except in intensity' (Goodman 1964) from ordinary linguistic change. It may indeed be that the kiLeta pitch system has merely accelerated certain tendencies inherent in the kiKongo pitch system.
Endnotes to chapter sixteen.

1. A very crude characterisation of the different levels described by different researchers might be as follows:

   contour variation -
   patterns on phrases - | | | | | |
   lexical patterns - E C D L H

   where E = van den Eynde, C = Carter, D = Daeleman, L = Laman, and H = this thesis.

2. This sequence suggests an increasing importance of pitch. Pitch starts out as a segmental feature differentiating lexical items; as an expansion of this, it starts to delineate function, which puts it on the suprasegmental level (cf. Knappert, nd.). Pitch may then extend its domain from syllable to word to phrase to sentence, and has by this time only vestigial remains of its earlier segmental nature. Both high pitch and stress indicate prominence, so at some stage in the preceding sequence they may begin to regularly co-occur. If this 'prominence complex' becomes the main suprasegmental feature of the language (e.g. in a stress-timed language), it may lead to certain segments having reduced phonetic features in some environments. In this view, therefore, pitch would begin as a segmental feature and evolve into a conditioning factor for other segmental features.

3. Malcolm Guthrie once said of kiKongo, 'It's got too complicated and has broken down as a tonal system.' (J.H. Carter, p.c.)

4. Compared to Carter's and Daeleman's systematisations, the system I have used to describe the patterns of the various passages can be considered only vaguely predictive (prescriptive?) - rather in the nature of 'contour x is more probable in this context than contour y'. On the other hand, for a language in the state I postulate, we can no longer predict how a passage will be read - we can only predict the parameters within which it will be possible to read it; we can only regress from the spoken contours to determine which rules the speaker followed, though not necessarily why. In any case, the rule for determining the basic patterns of a stretch ('high pitch occurs on the root-syllable') is very simple, and there is more scope for dealing with patterns that are anomalous in some way.
5. Some of the features attributed to liNgala influence (eg. the habituative suffix -aka, p.80) are however also found in such kikongo dialects as Ladi (eg. p.104).

6. The method is as follows: each set of cognates is given a weight of 100 points; each language which shows a cognate with kiLeta is given an equal share of the points. For example, if 10 of the 16 test languages show a cognate with kiLeta, these 10 are given 10 points each, and the other 6 are given none. Finally, all the points are added up for each language.

   The main drawback to this method is that it is weighted so heavily in favour of (perhaps chance) similarities. For example, if kiLeta, Ladi, and kiNtandu had all happened to borrow the same loan-word, which did not occur in any of the other languages, Ladi and kiNtandu would receive 50 points each, yet actually the fact that they both showed the same 'cognate' (in this case a loan-word) would not necessarily imply that they were genetically related. Such non-genetic interpretations are inherent in all forms of lexicostatistics, and the example given is extreme, but nevertheless Fehderau's figures may well be skewed in some such way.

7. These two dates are my own suggestions, not Fehderau's.

8. Several dialects of kiKongo (eg. some kiManyanga dialects and kiZombo) are mutually intelligible only with difficulty (Rev. D. Ntoni-Nzinga, p.c.) - cf. also 9.7.

9. It may be that Fehderau is rather premature in doing this; as noted in chapter 11 (11.3), there seems to be a good deal of variation in one idiolect. For example, Fehderau considers a syllabic nasal in words such as mpi 'also' to be characteristic of the eastern region, and forms with prefixed vowel (impi) as characteristic of the western region, but Mr. Katesi used both.

10. Similar problems are encountered when discussing languages such as Lozi. P.R. Bennett (p.c.) says: 'Material being used in Mukumbuta Lisimba's PhD dissertation here [in Wisconsin] indicates that the system of Lozi (already shown by me as it could have been derived by evolution from the Sotho system - see Bennett 1970) is matched reasonably well by some dialects of the Luyana group, which form the substrate for Lozi. Question: did Lozi borrow from Luyana?, did Luyana borrow from Lozi?, did both evolve from the earlier systems?, and in the last case, was the evolution independent or did
interaction precipitate it?'

11. A similar thing happened in Ancient Greek: 'In Hellenistic times the Greek pitch accent changed to a stress incident upon the same syllable as that on which the pitch had previously been.' (Atkinson 1933, p.62) The change was complete as early as the third century BC.

12. The leftward movement seems to have already happened in connected speech in Laman's time (cf. for example, 9.5.6.1), but citation forms may not have shown this.

13. It is unfortunate that Fehderau gives no source for the suggestion that kiNtandu may have influenced kiLeta.

14. Fehderau here gives a rather opaque example 'to illustrate the above point'. He seems to be suggesting that if we can find in kiLeta certain words which are common there, but are different from the cognate items common in the neighbouring kiKongo dialect, this proves that kiLeta cannot have been influenced by that neighbouring dialect. Given the nature of kiLeta, this is a rather dubious line of reasoning, especially since only four words are given, from Brazzaville kiLeta and the neighbouring Ladi:

<table>
<thead>
<tr>
<th>kiLeta</th>
<th>Ladi</th>
</tr>
</thead>
<tbody>
<tr>
<td>tuba</td>
<td>'talk'</td>
</tr>
<tr>
<td>zaba</td>
<td>'know'</td>
</tr>
<tr>
<td>basala</td>
<td>'village'</td>
</tr>
<tr>
<td>we</td>
<td>'no, not'</td>
</tr>
</tbody>
</table>

The kiLeta words, he says, 'are all characteristic of the more western kiKongo dialects'. However, this is not entirely true: we is of common occurrence all over the kiKongo area, including such distant dialects as kiMbanz' aKongo; zonza occurs in the kiManyanga text of chapter 9 (as zonsa), and Fehderau would presumably count kiManyanga as a 'western' dialect. At least two of the words given cannot therefore be reliably marked off as to district or dialect, and Fehderau's examples do not disprove Ladi influence on kiLeta. In any case, some common kiLeta words may have been borrowed from sources other than kiKongo.

15. It is worth noting that the influx of French loan-words may possibly change the suprasegmental pattern of kiLeta (penultimate → final high pitch/stress? - cf. 11.4.1.2). The development of a more elaborate intonation system also seems a distinct possibility.
PART IV

Retrospective
CHAPTER SEVENTEEN
Summary and Conclusions

Now that we have come to the end of this thesis, it will be helpful to summarise its main ideas and recapitulate the conclusions reached.

The thesis has several equally important aims:
(a) to make a suprasegmental comparison of several dialects, or at least idiolects, such as has not been attempted since K.E. Laman's work of the 1920s/30s;
(b) to demonstrate that in certain cases the pitch features of kiKongo are difficult to analyse in terms of tone, and may therefore warrant a pitch-accent description;
(c) to show that there may be an intonational overlay in kiKongo;
(d) to consider the relevance of the conclusions reached in the previous two sections to the development of kiKongo;
(e) to critically summarise previous work on kiKongo suprasegmentals, attempting to abstract common elements in a range of different systematisations.

The important point of the meaning of the terms to be used is taken up in chapter 1. It should be noted that 'pitch-accent' is not used here in precisely the same sense as what seems to be the typical one in current American publications: it refers to a system 'in which pitch plays some role in distinguishing morphemes or grammatical categories, but this is secondary to its affective and syntactic roles' (1.6.5). This loose definition means that the pitch-accent systematisation proposed in this thesis does not predict, by means of formal rules, what pitch-contour will appear in what context; rather, it describes the range of possible pitch-contour choice. (This point is extremely important when considering chapters 4-11.) It is my belief that the nature of the kiKongo system precludes the establishment of predictive rules (or in any case that formulating them would not be worth the trouble), and that it seems to be more a question of establishing descriptive guidelines such as 'contour x is more probable in this context than contour y'.

There is usually (but not always) only one high pitch per word (15.7). 64% (on average) of all high pitches occurred on the 'root-syllable', the
first syllable of the root or stem, while 72% (on average) of all words had high pitch on the root-syllable (see Appendix 7/3 and 15.7). Pitchmeter tracings, apart from validating the pitch-marking used, showed that in 84% of all words in a sample passage highest intensity occurred on the root-syllable. Moreover, highest intensity and highest pitch coincided in about 65% of cases (3.5.4).

These facts suggest that we can postulate a simple, yet comprehensive, rule for high pitch occurrence, namely, 'high pitch usually occurs on the root-syllable'. This is taken as the basic pattern. However, other patterns also occur, of which by far the most numerous are:
(a) high pitch occurs on the syllable before the root-syllable (this pattern is referred to as 'shift');
(b) high pitch occurs on the last syllable of the word;
(c) no high pitch occurs on the word.
These are considered 'anomalous' variants of the basic pattern, derived from it by, respectively:
(a) shift of the basic high pitch leftwards;
(b) move of the basic high pitch rightwards;
(c) suppression or deletion of the basic high pitch.
Shift is usually morphologically conditioned in that the affixation of certain elements (eg. locative, genitive, connective) to the noun conditions a shift of the high pitch one syllable leftwards. In some cases where these elements appear, however, the expected shift does not actually occur. This may be connected with focus or emphasis, especially since the other two anomalous patterns seem to signal close relationship with neighbouring words, ie. a complex, and therefore act as mechanisms for focus or emphasis. It is also significant that items with anomalous patterns usually occur in groups (ie. *basic + basic → anomalous + anomalous), suggesting that pitch variation operates over the phrase rather than over the word. Tonal distinctions as a major conditioning factor for the pitch patterns seem to be ruled out by the fact that the same word may have different pitch patterns in essentially the same environment.

One particularly important feature of kikongo pitch is 'bridging', ie. where lower pitches between two high pitches are raised so that a high pitch 'plateau' is formed. This occurs especially with the sequences
noun-qualifier and verb-object, and seems to indicate the close rela-
tionship of the items concerned. It may even signify focus or
emphasis, since similar phenomena, over the same sequences, can be
discerned in Kikuyu, Zambian Tonga and Southern Sotho, and these all
have some connection with focus. The fact that these sequences have
special patterns in four widely-separated languages suggests that we
may be dealing here with a PB intonational feature.

In an effort to clarify the points raised in the previous two
paragraphs, the main informant was asked to comment on certain phrases
in the texts where the same words showed different pitch contours. His
answers indicate that it is possible for the Kikongo speaker to modulate
or condition the pitch contours in certain ways so as to emphasise or
focus on certain aspects of his utterance. An examination of these 51
comments leads to a preliminary description of the mechanisms of this
contour variation. It seems that 'emphasis may be achieved by the use
of the non-expected' (12.3); that is, if, for example, a word might
normally be expected to have its high pitch shifted, it can be emphasised
by not shifting this high pitch, and so on. Continuity/inality and
emphasis seem to be related in that they both use these same mechanisms
of 'markedness'.

Comparison of several versions of the same text show certain differences
in pitch patterning. If we can assume that these differences may be due
to differing patterns of emphasis and focus in each version, we then have
a crude means of measuring roughly how much emphasis and focus is
'permissible' in the language. For one speaker reading several versions,
the answer seems to be about 15% (6.5); for two speakers reading one
version each the figure seems to be around 30% (8.5). Comparison of
textual patterns with those predicted by the systematisations of previous
researchers (4.7, 6.7, 7.7, 9.6) again shows a variability level of
about 30%.

A consideration of previous studies of Kikongo (4.6, 7.6, 9.5, and
cf. 5.6) reveals that although each systematisation deals with the pitch
features in terms of tone, they all agree that certain of these pitch
features require additional non-tonal elements in the description (eg.
Carter's tone-phrases, Laman's emotive tone, Daeleman's tone-cases/-moods) - see 16.2.1. The idea of focus-based conditioning of contours provides a unifying factor for all the systematisations, and, as I have tried to argue, such an interpretation can be read into each one without undue difficulty.

Comparison of the lexical tone-classes established by Laman, Daeleman and Carter reveals a large degree of correlation between the three sources, and suggests that we can abstract a further unifying feature: in each source two main tone-classes can be distinguished - rising (ie. low initial) and falling (ie. high initial), though of course there may be a few patterns on the boundaries of these two main ones. The same outlines can even be discerned in CB, though to a lesser degree. Moreover, the falling class is the predominant one, even in CB - the rising class accounts for only 38% of items in samples from the four sources. There is also some evidence of a shift *lh —> hl, which has progressed farther in the north than in the south.

As to why these two tone-classes (or, to be perfectly consistent, accentual classes) do not appear in the texts, evidence is adduced to argue that although they may exist for words in isolation, once these words are placed in context the distinctions disappear (cf. also 9.4). This may be due to the fact that: (cf. 14.13)
(a) the falling class is most numerous, and would therefore tend to assimilate the rising class;
(b) there is in some cases very little difference between the classes, thus leading to possible merger;
(c) PB, as Bennett persuasively argues, may have had some sort of stress-accent, so that the kiKongo system may be a development of that.

The conclusions of the preceding paragraphs lead to the postulation of a three-tier system for kiKongo (12.4):
(a) accentual classes on words in isolation;
(b) pitch-accent on words in context, conditioning 'normal' contours;
(c) possible intonational variation, conditioning emphatic contours.

An examination of the pitch patterning in sample passages from the
individual dialects allows us, by using a variety of numerical taxonomic methods, to distinguish four main dialect areas:
(a) NW: kiManyanga;
(b) NE: kiNtandu, kiYaka/kiNtandu;
(c) SW: kiMbanza' aKongo;
(d) SE/Central: kiZombo, kisiNgombe.

KiLeta (creole kiKongo) tends to have high pitch on the penultimate syllable of the word rather than on the root-syllable as in kiKongo proper – of course, in many cases (eg, disyllabic stems) these two syllables would coincide. It also has a fairly well-developed range of intonational variation, similar in some respects to that of Swahili. After consideration of Fehderau 1967, the most detailed work on the subject, we conclude that kiLeta probably developed around Manyanga and Kinshasa from 1800 onwards, and that its pitch features have been based on/influenced by kiManyanga, kiNtandu, Lingala (?), Swahili (?) and lately French.
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Appendices

The following section contains seven appendices:
1: map of kiKongo area (chapter 1)
2: pitch-meter graphs (chapter 3)
3: texts, translations and comparison passages (chapters 3-11)
4: summarised examples of variant contours (chapter 12)
5: comparative list of cognates (chapter 14)
6: reflexes of CB lh (chapter 14)
7: dialect similarity: data and displays (chapter 15).
Appendix 1

Map of kikongo Area

The map below shows the relative positions of the kikongo dialects discussed in this thesis, as given by the Rev. D. Ntoni-Nzinga. It also shows a few other dialects and languages mentioned in the course of the thesis.
Appendix 2

Pitch-meter graphs

The following pages represent pitch-meter tracings of two extracts from a passage read by the Rev. A. Komy Banzadio.

2/1-2/9: 11. 115-121 of the text for chapter 10 (Appendix 3)
2/10-2/21: 11. 193-201 of the same text.

The results are arranged as follows:
(a) frequency (measured in Hertz), with my marking;
(b) logarithmic amplitude (measured in number of 5mm units from the base line);
(c) text and marking;
(d) duration of utterance and [duration of pause] (measured in seconds);
(e) translation.

Stretches where the results are uncertain (e.g. 2/5) are placed in brackets.
Translation: From the hour of two, or two o'clock, the young people begin
text luákaanga · isálu kyasekretőR · mukubakaàmbá.

translation: to arrive, [and] it is the job of the secretary to welcome them.
The evening meal is at the hour 1:00. This is the meal of makalanga...
text: buna m'oola yan'ana yampiimpå.

time: 2.42

translation: it is about eight o'clock in the evening.
Translation: And they gather in the assembly hall.

Text: bakutakananga, mundzo 'alukitakanu.'
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text: yekubazódi langa ndwâákulu ámbote. kusâmá-skuul.

time: 2:18 [0.81] 0:14

translation: and hopes they had a good journey to the summer school.
text

It is at this time too that they tell the young people

translation

Inuit language: yóoyo ṷe thu bragongo kwhabaekir

ss: kej
Appendix 2/11

text: kusama-skul: bo'onso bu-bawila: mboko

0.85 [0.96] 1.07 [0.88]

translation: at the summer-school how they heard the call
...kimbangi kyau. Basbooyay mpe mphasi.

transliteration: their witness. They tell also of the hardships.
Following the presentation of their talks, the young people…
Appendix 2/16
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Appendix 2/17

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4 - bu m ki
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Translation: This matter is of great importance,
text: ye dikubavàanangá ntháangû muyindula...

translation: and it gives them the opportunity to think of
Appendix 2/21

2.30 - 220 - 200 - 190 - 180 - 170 - 160 - 150 - 140 - 130 - 120 - be(?) - li↑// di mµ a u//

6 - R e-I a ya
5 - fe n s
4 - be n s
3 - s di mbu
2 - lika// y a// mµ
1 -
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Text: ...besi?-Afélikå, yè-Índiå, musàambú yaau.

Time: 1.97 [0.62] 0.92 [0.32] 1.03

Translation: the inhabitants of Africa and India in their prayers.
Appendix 3

Texts, translations and comparison passages

This section contains the texts (with interlinear translation) which form the basis for the discussions in chapters 3-11. Comparison passages, where they occur, are given after the texts concerned. Slashes (/) indicate paragraph beginnings in the original texts.

chapter 3: the text is the same as that for chapter 10. The original marking for the sample passage (ll. 1-58) is given on the lower line of the chapter 10 text, ll. 1-58.

chapter 4: in the comparison passage, C stands for Carter's version, and N for Ntoni-Nzinga's.

chapter 6: version C does not occur for all of the text - where it is not written down, this means that there is no version C for that portion of the text, eg. 1-32, 58-67, etc. Likewise, version B does not occur for some stretches, eg. 37, 39. In the comparison passage, C stands for Carter's version, N for Ntoni-Nzinga's. For ease of comparison, pausal upturn marks have been omitted in N except where they seem to be reflected in the patterns of C, eg. C ìboosi / N ìboosi 36.

chapter 7: in the comparison passage, D stands for Daeleman's version from Nsuka 1968, and N for Ntoni-Nzinga's. D is re-marked for easier comparison with N, such that bridging is more obvious, eg. sìdi dyàska is re-marked sìdi dyàska 57.

chapter 8: Z stands for Ntoni-Nzinga's version, A for NdoloMenayame's first version, and B for his second version.

chapter 9: in the comparison passage, the first line gives Laman's base forms as listed in Laman 1936. The second line, labelled L, gives his realised forms, insofar as these can be determined. The third line, labelled N, gives Ndolo Menayame's version, in which pause marks have been omitted for ease of comparison.

chapter 11: in ll. 1-50, version A is the upper line, and version B the lower.
Text for chapter 4.
Dialect: kiMbanz’ aKongo.
Source: Bentley 1926, pp. 83-84.

1. Two other wrong-doing people were brought out with him and went

2. to be executed. When they arrived at the place of the Skull, there they nailed

3. him on the cross, and the malefactors, one on the right

4. hand, one on the left. Jesus said, ‘Father,

5. forgive them, for they do not know at all what they are doing.’

6. And they shared out his clothes, and cast lots.

7. The people stood in that place, watching. And the rulers

8. derided him, saying, ‘He has saved others, let him save himself,

9. if he is the Christ of God, the Chosen One. The soldiers also

10. mocked him, coming and offering him vinegar, saying, ‘If you

11. There was a notice above

12. One of the wrong-doers
13. wamānana untyângwëni oku vô: Nqâ kē-ŋeŋe y tKlitstu-ko e? hanging there railed at him, saying, 'Are you not the Christ?

14. Wiyûluzâ. Ye-yëto mpe. Dona wakâk avútâiti, untumbidi. Save yourself, and us too.' But that other one answered and rebuked him,

15. oku vô: Kuvumina Nzaâmbî-ko e? Wô vo ntumbwa mosti tutumbwa. saying, 'Do you not fear God', seeing as we have received the same sentence.

16. Waâtu eyeëto yansâongi; kadî yëtö, tubâkidi nsândo ansâongi. And we indeed justly, for we, we have received a just punishment

17. mun'-âwu tuvangidi; ... kaâ instantly, kuvangidi kwandî for what we have done; but he, he has done nothing

18. dyâmbû dyâmbî-ko. Ovovèle mpe vô. Evtûsu, ungtûndula vav' wrong whatsoever.' And he said, 'Jesus, remember me when

19. olââka muna-kinçînu kyaâku. Umuovësë vô. Kyëeleka isâmunwînî you arrive in your kingdom.' He replied, 'Truly I say,

20. vô. Omuwûnu. Okay saâme. Muna-palâdisu. Setîeza kyaâla that today you will be with me in paradise. It was now the

21. ina ye-sâmbanû, stômbë kibûkamëne ensi yawânsâ yamuna sixth hour, and darkness covered the whole earth until

22. òala ina ye-uwâ, omumini ukintâdâne; onâlî angub'ânzö. the ninth hour, for the sun was dark. The veil of the temple

23. ñuaukâ ulûzukûni vana-kâtî. Evtûsu vââa kaboekoelle mbûkwas torn in the middle. When Jesus had called out in a loud

24. ângâlû, ovovèle vo Elââa, muna-mëko mâyku ingyâkoelle voice, he said, 'Father, into your hands I commend

25. moyo 'ame; vââa kavoèle wasa oytûmbëdi omôyoy. Ombût' ankâmwa my spirit'; and when he had said this, he gave up his spirit. The centurion

26. omwëen' âwu uvangamenë, okëembeele Nzaâmbî oku vô: Kyëeleka, saw what had happened, and he praised God, saying, 'Truly,
27. "andioyu omuntu ansongi kwandi. Endonga yandonsa, ina
this was indeed a righteous man. All the people who had
28. yalungalakan' omona daadikamusengi, bowu usangamene,
gathered together to see this, when they saw what had happened,
29. ba bundidi. tulu yawu, ba bvmnukiyo. Akundi andi awondo
beat their breasts and went back home. All his friends,
30. y'akento mpF, ban' balenendeenge yawo tuke kana-Ngalili,
and also the women who had followed him from Galilee,
31. batelamene muna-vala, ba bndidi mama. Omuntu nkumbu andi
stood at a distance, and watched these things. One man called
32. Vosefe, wambanda-ambanda wamuntu ambotw, wasonge mphi -
Joseph, a member of the Council, a good man, and also just -
33. andioyu kakulikila muna-lukanu lwau, y'evangu dyau-ko -
he had not consented to their intention or deed -
34. mhwitsi Alimataya kwaandik, evate dyayuda, gon' otelaang'
a native of Arimathea actually, a town of the Jews, who awaited
35. ekintinu kyanzambu; andioyu weele kana kwaPilatu, olombel'
the kingdom of God; he went to Pilate, and asked for
the body of Jesus. He took it down, wrapped it in a cloth
37. altim, ostedi-dyo muna-nkkala watozwelo. mun-Nsenzelo,
of linen, and placed it in a tomb hewn in the rock,
38. muna ke-meastwa nkutu muntu-ko. Selumbu kyankubambo, elumbu
in which no-one else at all had been laid. It was now the
day of the Preparation, and the day
39. kyavundu sekikya. Akento, ... ana beziyo yawandi tukwa
of rest was beginning. The women who had come with him from
40. kana-Ngalili, baleende kuna-ntem, ... baweweene nkala, ye-ntswe
Galilee followed along behind, and saw the tomb, and the way
41. dyasit' evitimbu dyandi. Bawutukidi, bakubikidi nduumbu. His body was laid. They returned home, and prepared spices.

42. y'omasi' munsunga. ... Elumbu kyavundii. bawundidi kwai, and perfumed ointments. On the day of rest they rested completely.

43. mun'owo wankantikinu. Elumbu kyantete kyalumtingu, una nse, according to the commandment. On the first day of the week, very early in the morning,

44. bessiti kuna-nkala, banete nduumbu. zina bakubikid'i. Bawen, they came to the tomb, bringing the spices they had prepared. They saw

45. etasi. dyanengomoka. kuna-nkala. Bakoteli, ke-bawen-e-dya-ko. the stone rolled away from the tomb. They went in, but could not see

46. evitimbu. ... dyamfumu Vitsu. Entima myau. una mtyangamene. the body of the Lord Jesus. As their hearts puzzled

47. dyambu dyaqi, waantu wooli babatlamene. emuvatu myau. over this matter, two men stood by them, their garments

48. myelozi-lezi; wan'bamwene wonge, ... y'obbokeka tuse. shining; they were afraid, and bowed their faces.

49. mun'ensii, babwovesi vo: Adyeyi, ... muvaveil' bona una moyo. towards the ground, but they said to them, 'Why are you looking for a living person

50. vana-mafwa? Ken'no-ko, ofulikidi kwandi. Nubbakula mpovese. among the dead? He is not here, but has actually risen. Remember the words

51. kanwovesi vo: vaava kaka' kuna-Ngaliti oku vo: Omwam' amantu. that he spoke to you when he was in Galilee, saying, "The Son of Man

52. ofwete yekolwa muna-moko masumuki, k'komos' van'ekoluzu, must be delivered into the hands of sinners, and be nailed to a cross.

53. kafutuka kwandi, elumbu. kina kyetatu. Babakwid'i maambu but rise again on the third day." They remembered his words,

54. maandi, bawutukid'i kuna-nkala, basamunwini maambu mana mawonse. and returned from the tomb, and recounted all these things
55. kūna kwayā'u akuumį ye-mosi, yo-kūná-kwaakaka yawōnso. Mariá, to the Eleven, and to all the others. It was Mary

56. mawāsi Mandalá, yo-yebo, yo-yeano, yo-Mariá: wangu'andidi aYakobo, of Magdala, and Joanna, and Mary the mother of James,

57. y'-ákak' ākento bakëdî yâu · basämumunëni maambu maamā · and other women who were with them, who told these things

58. kwantumwa. Oyał · babēnëvé · maambu maamā · maam̱wëntë kaka, to the apostles. They thought that these things were just nonsense,

59. bavuntisi. Vo iPetelo otelamene weel' entinu kuna-nkala; and did not believe them. As for Peter, he got up and went at a run to the tomb;

60. ovëtamanë, odyōngelë, omwënenë nlele myaltinò · vakikaka, and went in, and bent down, and saw the linen cloths by themselves,

61. ovutukidì kūna-nzo āndi, ostuikidì edë divangamene. Ekyakin' and he returned home, amazed at what had happened. That same

62. elūmbu, owoole vànë benò, wayeelleenge kun'-ëvata dyēmāu, day, two of them were going to the village of Emaus,

63. dikala vô · kilomētë kvuñi ye-zoolë · tuuka Velusaleene. which is twelve kilometres from Jerusalem.

64. Bambokënë · maambu mawōnso · mëna matwîndi. Wau bëmokenanga They were talking about all the things which had happened. As they were talking

65. yo-yuuyanò · cëlyisë yændi kibent ofanimene · wele yau. and conversing with each other, Jesus himself came up and walked along with them.

66. Këns' mesô mau nautelakessë, kē-bakuntonëna. Ubavovesë vo: But their eyes were deceived, so that they did not recognise him. He said to them,

67. Nki amambu mama bëmokenengë · wau nukwënda? Badingaleele, 'What matters are you discussing as you go along?' They were silent,

68. bayindaleele. Omōsi nkumbù andi Keleopa · umatwîndi vo: looking sad. One, whose name was Cleopas, answered him,
69. Nga nganye kaka umaamba, kuna-velusaleme, walembi zhy' a.
'Surely you are the only one in Jerusalem who does not know the things'

70. mabwadi zay' a 1. Ubavovese vo: 'Ameyi? Bamuonese vo: that have happened [there] these [last few] days?' He said to them, 'What things?' They said to him,

71. Omdama mawitsa akwanazalele, andicona wangunza 1. umama.
'These things about Jesus of Nazareth, he [who was] a prophet of might

72. muna-mavangu, ooku kwazambiti, yo-nkangu amaumso mpe; in deeds and words, before God and also before all the people;

73. ye-ngyekola byenyekwele ambata zangang 1. y'akulunti eto.
and the way he was handed over by our chief priests and leaders

74. kazaengwa nzeengo afwa, bamuooondele vanekuluza. Vo tiyeti, and was sentenced to a verdict of death, and they executed him on the cross. As for us,

75. Ubavovese vo: 'Wuxxwlwa, wo yandii yun'akulwa 1. Isiwale. Vana-ntandu amaa we had not left off hoping that he would be the one who would ransom Israel. On top of all

76. mawonsi, owunu ilumbu kyetatu, tukakena kyabwili, maambu amama. this, this is the third day since the doing of these things.

77. Kaansi kadi, akak' ekeento eto 1. batuzengenekene, baketi But also, some of our womenfolk astonished us, who were

78. emene-mene kuna-kaalaa; obva balembel' wesen' eviumbu dyandhi, at the tomb very early; when they were unable to find his body

79. beezidi uvoi yo mano-maeso kyambasi 1. bameene, benu bavouvele vo. they came saying that they had seen a vision of angels, who said that

80. unaa kwaandii uuna. Akaka mpe 1. bena yeytii 1. beele kuna-kaalaa, he was in fact now alive. And some who were with us went to the tomb,

81. bameene wana uvoole kyento, kaansi yaandii ke-bamuni.
and found it as the women had said, but him they did not see,

82. Ubavovese vo: Vee no amazowa, nu akw' ntima 1. mya kkombok. He said to them, 'You fools, you possessors of hearts slow
to believe in all that the prophets have spoken! Should Christ indeed not have suffered these agonies, and enter into his glory?'

Starting from Moses and all the prophets, he began to explain to them in all the scriptures the things which were about himself.

They approached the perimeter of the town to which they were going, and he was about to go on ahead.

They pressed him, saying, 'Stay with us, for it is now evening, and the daylight is now fading.' And he went in to where they were staying. When he was sitting with them at the table, he took bread, and blessed it, and broke it, and shared it out to them.

And their eyes were opened and they recognised him, and he disappeared from their sight.

They said to each other, 'Did not our hearts burn within us when he was speaking to us on the road, and opening to us the scriptures?'

It was that instant that they got up and returned to Jerusalem, and went and found the Eleven, and those who were with them, gathered together; and they said, 'The Lord has indeed risen, and has been seen
97. {kwa}Simon. {Bakumbulwidi} ooma {manzi}a, ye-{ndz}{e}y{e} banzey{e} by Simon. They related what [had happened] on the road, and how they had recognised him.

98. {va}va kabukwinti embolo. Una bavoueleeng{e} maamb{u} ... maama, when he broke the bread. While they were talking about these things,

99. oyaand{e} ktb{e}nt otelamene van{a}-b{e}n{e}, ubav{e}v{e}se vo: Luuvamu He himself stood among them, and said to them, 'Peace

100. oko nu{t}ina. Bakumbulwidi, bawen{e} m{e}onga, tedi bawenze vo: be with you.' They were alarmed, and felt afraid, because they thought that

101. mwanda bawen{e}. Uba{v}{e}v{e}se vo: Adj{e}ey{e}y{e} nutelamene 'amyboyo? it was a ghost they had seen. He said to them, 'Why are your hearts troubled?

102. Adj{e}ey{e}y{e} zikwiz{e}l' embal{u} m{n}a-{nt}ina mu{e}n{e}no? Nual{a} Why do doubts arise in your hearts? Look

103. mooko mawem{e} ye-t{a}m{b}i y{e}am{e}, tmo nu mwaam{e} y{u}yu; nungunza-wunza, at my hands and my feet, it is really me; touch me,

104. nwatala; kad{e} mwanda-k{e}n{e} ye-nitu ye-visi-ko, ndz{e} y{e}ay{e} and see for yourselves; for a ghost does not have flesh and bones, in the way that

105. numbewene. Wau. Una kavouele wau, ubasangale mooko ye-tamb{i}. you see me now.' When he had spoken thus, he showed them his hands and feet.

106. Wau baleembele kwikitid{e}. kuna-kites, bastuwka, uba{v}{e}v{e}se vo: While they were unable to believe for joy, and were astonished, he said to them,

107. Nuna ye-map{a}kyey{e}ya vaav{e}? 'Have you anything to eat here?'
Comparison passage for chapter 4: Carter.

23c. ..... Oytisu vaavà kabokeele mbook’

24c. angolo, ov'ole veo: Etàata, muna-moko maaku ingyekeele

25c. moyo ame; vaavà kavovole waau oyaambwidi omboyo. Ombut’ ankama

26c. omwéen’ owu uvaangamene, okëembeele Nzaambí oku vo: Kyèlekà,

27c. andyoyu imuntu anso'ngi kuandí. Endongga yawsonso, òna

28c. yałungalakan’ omona dyàadd’ bama'sen’ owu uvaangamene,

29c. babundidë tu'lu yáau, bavutukidë. Akwundi andi awdonso

30c. y'akeento mphë, ana balaendeenge yaandí tuku' kuna-Ngalilì,

31c. batelamene muna-valë, batadidi maama. Omuntu nkumbu andi
32c. Yosefe, ... wamununtu 'ambote, wasoonga mphe -

n. Yosefe, ... wamununtu ambote, wasoonga mphe -

33c. andyobyu kakwetikila muna-lukanu lw'au, y'evangu dyau-ko -

n. andyobyu kakwetikila muna-lukanu lw'au, y'evangu dyau-ko -

34c. meti' Alimataya kwa'andi, evata dyAyuda, on' otalaang'

n. meti' Alimataya kwa'andi, evata dyAyuda, on' otalaang'

35c. ekintu kyanzaamb; andyobyu weele kuna kwaPilatu, oloombel'

n. ekintu kyanzaamb; andyobyu weele kuna kwaPilatu, oloombel'

36c. evitimbu dyayitsu.

n. evitimbu dyayitsu.
1. Kimpa knlMaFuungiua. NaFuungwa ... wakale kwáñì mpuumpa-yákala.
The adventure of Mr. Owl. Mr. Owl was indeed an eligible bachelor.

2. Kilumbu kimósti, wa’le kaangela kwáñì muna-mákaanga, wa’le waané
One day he went travelling, indeed, in the bush, and came upon

3. muusa-nómbé mpwañë, * zína dyéndi Mýéése. NaFúnguwa, dé
a pretty young maiden whose name was Moonray. Mr. Owl

4. muusa ndéë: E mbadi muusa-nkeento, ýngaanëte massa, * inwa
spoke to her thus: 'Hey, my dear young lady, would you kindly
give me some water, so that I may

5. kwáñì, kikuma kádi mboní leemë yikundaëmë - ye-kwúña ktmóssa.
take a drink, because my inside is really burning me with a thirst
for water.'

6. Ibúna yaná ndómbé mpá dé múnsí ndéë: Nwa kuaku táata muusa-
So the maiden also spoke to him thus: 'Drink away, my dear young

7. yákala, nkalë amo - yíyóblë móoko. Ibúna NaFúnguwa mpá,
man - [here is] my calabash, in which I wash my hands. So Mr.
Owl in his turn

8. tby-kábakó-yo mpá, yíby-káññó-mó. Ngá Náfúnguwa ... kabqóngë
then took it, and drank from it. Then Mr. Owl took up

9. go dyämbó, katulá dé múnsí ndéë: É mbadi muusa-nkeento yu,
the conversation, and carried on saying, 'Hey, my dear young lady
there,

10. ngá naní ukúzitikila kwáku? Ndómbé mpá dé múnsí ndéë: *Kañí
who might it be that you are engaged to?' And the young lady said,
'In fact,

11. kikweelétti-ko - káñní taat! amo nófu. kwáñì. *Káñní
I am under no compulsion to marry, except that my father has in
fact died. But

12. bu-káyaya ndéë: Memó bëbbó yíífüh! *amo; káññí koñso muunt'
when he was in his death agony, he said, 'I am now dying; but whoever
13. ukwéla mwaan' ámo Myéése, kandyé nzimbu-ko, kánsi· mpási
wants to marry my daughter Moonray, do not ask for a brideprice
from him, but rather

14. go wéést bongo ... mbeembo· yikwenda kumbwa gaga· ntati
that he should come and sing a lament which should be well-thought
of here all through

15. ntangó· yiyi yakulu, tyändi yuna ukwéla mwaan' ámo. Kánsi
this whole area, and it is he who should marry my child! But

16. mbeembo· kese bboongila ... kuné yako'undimina· ididitl'anga,
the lament must be sung there where I am buried, where [they] weep

17. monó, taat' andi. Ibúna taat' amó· káaya kyungud' amó
for me, her father." That was what my father groaned to my mother

18. ye· kubambuta zámo. Ibúna NaFuungwa bu-káwo-bó, de· munwa
and my relatives." So when Mr. Owl heard this he said,

19. ndé: Ka-dyaambu-ko! ... So yéboongá-yo· kuünó· ku-bakundikila
'That's no problem! I will indeed sing it where they have buried

20. taat' aku. Mbadí nduumba mpé· kana'ana muffina mpaká-ko,
your father." The charming young lady for her part did not
prolong the conversation;

21. gósela ndé: Ka-dina kwandi dysembu-ko, yikuzblele kwáku,
she said, 'It is indeed no problem, for I am in love with you;

22. wisa bongo mbeembo· kuné kuko'undimina taat' amó, ibúna·
so come and sing the lament where my father is buried, so that

23. yikiltuka nke' aku! Ibúna NaFuungwa wele· kuné-gata dyéndi.
I may become your wife!' So Mr. Owl went back to his village.

24. / múla yikundul'anga mbeembo, yikako'ongó· kuné-kiséitu
He kept on thinking about the lament which he was to sing there
before his in-laws,

25. kyändi, kánsi kasuli-ya'ko nkutú-ko. Ibúna kayanda
but he couldn't think of one at all. So he went

26. ssamuna· NaNgundu-Nkúunga, kyenda kuboongila mbeembo·
to ask Mr. Nightingale to go and sing the lament [for him]
27. kuuna kuna-nzitu, kanda wa-handimina. Ibuna NaFungwa ... una there before his buried father-in-law. So Mr. Owl took along

28. malafu kuNaNgundu-Nkungwa, yi-bu-keza kuNaNgundu nde: ... some palm-wine to Mr. Nightingale, and when he got there he said to Mr. Nightingale,

29. Embadu NaNgundu-Nkungwa, dodokolo dyaku, twendaete 'My dear Master Nightingale, I beg you, come along with me

30. umboongile mbeembo kuna-kizitu kyamo, ku-ikwelelele nkeentō and sing a lament for me to my in-laws, so that I can marry a woman

31. mumbembo kuāni, ke-muntuambu-ko, bu-bantštita nde: ... Gō because of this lament, not because of brideprice, as they have promised me, saying,""If

32. wišidi boonga mbeembo nkeentō una zina dinyaase, ngā you come and sing a lament, the woman whose name is Moonray

33. kaktukanakasi aku. Kaansi tuuka bantštamba tembwa yindula will indeed become your wife." But since they told me this, I haven’t stopped thinking

34. mbeembo, ... kani kisowlwele-ya nkutu-ko, Dyānu ngisīdū about a lament, and yet I can’t think of one at all. That’s why I’ve come

35. kusamuna kaansi kisit nkutu-kō; yānsī kindongo kykyō to talk to you, but I haven’t come empty-handed, because I have brought you this

36. kusūnātī. / Ibuna NaNgundu-Nkungā utoundelā ... calebash.' So Mr. Nightingale accepted

37. malafu māndi yi-bu-bantštini-ni mpe. Ibuna bastidi kilumbō his palm-wine, and drank it as well. Then they set aside a day

38. ki-bakiueenda kuna-kizitu. Kilumbu bu-ktiwe,ë, bakūtidi on which they would go to the in-laws. On the appointed day, they gathered up

39. malafu kuuny ye-nkoombō ye-tsänū ye-ntoongo zoole zingūlū 10 [calebashes] of palm-wine, and 5 goats, and 2 fine specimens of pigs,

40. ye-nnsusu makumôlele. Bakūtidi mpe kibuka kībaleka bau. Ibuna and 20 chickens. They also assembled a group of their friends. Then
they went to the in-laws'. When they finally arrived at the in-laws', they
said, 'We cannot sing laments during the day, it is only at night that we sing.'
The in-laws said, 'That's no problem!' And then they showed them to their room.
The in-laws said, 'That's no problem!' And then they showed them to their room.
Then they also presented the things that they had brought their in-laws.
Then Mr. Nightingale went to tell Mr. Owl what to do,
behind the house, and said, 'Now you, Mr. Owl, once we have gone into
the funeral chamber where your father-in-law is buried, to mourn, then
you are to grab hold of me Mr. Nightingale, and put me below your cloak, so that they will not realise it is I
Mr. Nightingale who is singing the lament. What they will just think is,
"Mr. Owl himself, it is he himself who sang his lament."
So night then fell. So all the villagers
and they the guests went and entered the funeral chamber. And Mr. Owl
took hold of Mr. Nightingale and placed him under his cloak.
Mr. Nightingale had said to Mr. Owl, "When you click your fingers under the mantle where I am, then I will fully understand, and I will sing the lament." So the elders kept going in. Mr. Owl too entered and went and sat down at the feet of his father-in-law's corpse.

So Mr. Owl clicked his fingers in the mantle where Mr. Nightingale was, and then Mr. Nightingale sung the lament, saying, 'Hey, palm-nut, hooray! The palm-nut confers talent! Kileleleeee!' Then everyone joined in in singing the lament, so for five days they did that. But Mr. Owl didn't give Mr. Nightingale any food under the cloak where he had hidden him. So Mr. Nightingale got very thin. So after those days the in-laws brought out things which they gave to Mr. Owl, as a send-off for his wife; so they slaughtered 30 chickens, and 20 goats, and 10 fine pigs, and 100 manioc roots (†). Then
69. bagiêne nkas’ andi benda yândi. Ibúna baaná bayendo, bu-balâsâna they handed over his wife, and they went off with her. So they went off, and when they arrived
70. kuna-nkâkkù gata dyâu, NaFungâa bu-kàtuuktìsi ... at the perimeter fence of their village, Mr. Owl took out
71. NaNgundu-Nkùungâ, GNànà NaNgundu-Nkùungâ, Gwùlùdù tânda. / Mr. Nightingale, but Mr. Nightingale was very thin.
72. Tba naNaNgundu-Nkùungâ dé munâ ndò: Téla mono Ngundu-Nkùungâ So Mr. Nightingale said, 'Look at me Nightingale',
73. kyéléka Tba-n-nytòdù tânda kwâme! Mùkkùmâ nkt nge, NaFungâ, truly I am as thin as a rake! For what reason, Mr. Owl,
74. wâlemâna kungâna kànt kîtìmì kîdyà Gwùlùdù kitzitu kyâku? did you fail to give me anything whatsoever to eat at your in-laws?
75. Monó Npi yâkùbùnghâla mbeambâ, kuwelelele nkas’ akû. Gwànst After all, I sang the lament for you, so that you could marry your wife. But
76. ka-dyâambù ko! Gnàst gàana nsanda’mé, nyënda kwâme no matter! But give me my fee, so that I can go back on home
77. kuna-gata dyâme! Ibúna yandi NaFungâa ndò: Èg mpaângi, tó my village.' So he Mr. Owl said, 'Hey, my friend,
78. Tðúnu kivùlìtì nziímù-ko, ykufûta. Gnàst nlungi wùnu at the minute I have no money on me to pay you with. But in a week from now
79. umvûkûla, nge yikuftu kuakû! NaNgundu-Nkùungâ wele come back to me, and I will indeed pay you!' Mr. Nightingale came
80. vutuka kuNaFungâa mubbâka nsanda ènti. Gnàst NaFungâa back to Mr. Owl to get his fee. But Mr. Owl
81. ‘ntu àndi, kàuyûngàsa, ... këuwûtìdù kwaní nkutu kîtìmì shook his head, because he had nothing whatsoever
82. kîseenda NaNgundu-Nkùungâ-ko. Ibúna NaNgundu-Nkùungâ to pay Mr. Nightingale with. So Mr. Nightingale
83. went sadly on his way back to his village. So it was in the season
84. when the winged termites come out, and Mr. Nightingale went to tell
85. Mr. Trapper to go and catch Mr. Owl by using as bait for him
86. the termites. So the Trapper went and set up bait for Mr. Owl
87. at his perimeter fence. So Mr. Owl felt like
88. a walk that evening around the edge of his village, and he came upon
89. termites shaking their wings, and he said, 'I'm going to gorge myself
90. on those termites which are in that tree!' So as he was going
91. to collect them, didn't the trap spring, and then Mr. Owl
92. was caught in the rope; and the Trapper came and found him
93. in his trap, and said, 'Hey, Owl, today you will find your way
94. into my sauce!' So Mr. Owl begged
95. the Trapper, saying, 'Let me go, and I will then give you a fat
96.reward.' But the Trapper said, 'If you lied to Mr. Nightingale
97. "Munsendu g’yu’mono ... ngá yu-ku’uná-ko? Yandí nde:
about a fee, will you not indeed lie to me as well?" He said,

'I will not lie as I lied to Mr. Nightingale!' But the Trapper

99. kawá nkutu ... ngogo myandí-ko, unzzubidí kaká ... ye-nyíni
didn’t listen at all to his words, he just hit Owl with the

100. mbéele gane-mbata ntu. Fuungwa, ibúna unéte ...
of his knife on the crown of his head, and then carried him

101. kuNaNgundu-Nk’ungu. Ibúna NaNgundu-Nk’ungu umwéné yangí ñtingí,
to Mr. Nightingale. So Mr. Nightingale was overjoyed;

102. welé bonga nkeentí ’ntí Myása, ukítu’oí • sínkeentw’ánt.
he went and took his wife Moonray and she now became the wife of

Mr. Nightingale in [place of] his fee, which he had not received
from Mr. Owl.

104. Yitá ngána, fulá ngána, B’oranguníí afwtidí • ye-ntete
Tell a tale, ask for a tale (?), Banguningi died with a basketful

105. ngána! Kimpá ztki-ztki • kuntú nantí? Kuntu YaFungwa!
of tales! This tale of miserliness, on whose head is it? (?) On
Master Owl’s head!
1a. Wə̀ n təzələ məkənə fytə̀ tə məndə̀ ngə akikoongo. Kizə́ yə̀ -ko
Now we would like to speak a little in the kiKongo language. I don't know
2a. kana vò khyàməmbu yìndwìdì, ekuma kàdə̀, unə̀ ngəphovaangə̀.
b.  \"Unə̀ ngə́ phovaangə̀.\"
what kind of thing you were thinking, because when I was speaking
3a. kikèlə̀ ye-kənnə̀ ko nawaitu nkutə̀ zànuvə̀ kàso. dyaάmbu
b. kikèlə̀ yề-koànsò ngiiìndə̀ nkutù zànuvò koònsò dyaάmbu
I had no idea at all of saying anything
4a. dyaphìla yìnə̀. Kàsə̀ nà nə̀ ngiiìndwiidì vò kutaòmene
b. dyaphìla tìnə̀-ko. Nànə̀ ngiiìndwiidì vò kutaòmenè of that nature. But it is possible, I think, that you didn't really
5a. kushìsà̀-ko. Mudyàmbu kələ̀ və̀ uphìtsìdìngə̀-ephtìptìta
b. kushìsà̀-ko. Mù̀gyàmbu kələ̀ və̀ uphìtsìdìngə̀-ephtìptìta understand me. Because, if you had understood me, the difficulty
6a. yìnə̀ məwə̀nə̀ ngə̀ kàntə̀ kumwò̀ne-yə̀-ko. Yè-nànə̀ ngə̀ wà̀də̀
b. yìnə̀ myə̀nə̀ ngə̀ kàntə̀ kumwò̀ne-yə̀-ko. Yè-nànə̀ ngə̀ wà̀də̀ which you have experienced, you would certainly not have experienced it. And perhaps you didn't
7a. llə̀ended' ezə̀yə̀ kana və̀ nkhìtì ngəntu ə̀zə̀mə̀ ye-khìtì
b. llə̀ended' zə̀yə̀ kana və̀ nkhìtì ngəntu ə̀zə̀mə̀ ye- actually realise what my idea and what
8a. llukanu lə̀zə̀mə̀. Tə̀sedə̀mo st kənə̀ ndə̀zə̀le toma ə̀zə̀ yə̀-ekkuma.
b. llukanu lə̀zə̀mə̀. Tə̀sedə̀mo st kənə̀ ndə̀zə̀le toma ə̀zə̀ ekkumà my intention was. I really want to know just one thing now: the reason
9a. lə̀makidì mune-teezò kyə̀phìtì ə̀yə̀yə̀t. Ekkuma kàdə̀
b. lə̀makidì mune-teezò kyə̀phìtì ə̀yə̀yə̀t. Ekkuma kàdə̀ you have come to a conclusion of this sort. Because
I never thought that you would come to a position of this kind. Now what I am thinking is that perhaps we ought to examine this matter in detail once more, so that we may know whether there is any other reason which might cause such anxiety. In my own opinion, the reason is no other than — that is, the reason is to do with things which can be witnessed, and with things which are happening.

I don't know whether you have already noticed something of this nature, but according to what I have already seen, and according to what I have already heard, I understand very well that there are times
20a. z‘nkaka z‘na z‘n‘anga vō maambu mana men‘anga vō n’gā
b. z‘nkaka z‘na z‘n‘anga vō maambu mana men‘anga vō n’gā
occasionally when things [happen] which are not indeed

b. ka-safwenē mōnekā-ko ka‘ansi mumōnekā men‘anga. Muna-dyaadā.

22a. th‘angu z‘ngi ‘mmu‘eenanga phasi. Uweyi muntu kalenda
b. th‘angu z‘ngi ‘mmu‘eenang‘ eph‘si. Uweyi omuntu kalenda
I often experience some difficulty. How can a person

23a. kadila waazzikuka muna-z‘ngu kyandi ye-mun‘-ng‘indu
b. kadila waazzikuka muna-z‘ngu kyandi muna-ng‘indu
be truly honest in his life and in his thoughts,

24a. z‘ngi ye-‘v‘isakan‘a kwa‘atū. Iboost kaka‘langō dy‘aka
b. z‘ngi ye-‘v‘isakan‘a kwa‘atū. Iboost kaka‘langō dy‘aka
and be correctly understood by people? Then again he has

25a. ye-māmbu mana mavw‘ k‘nkakakanakalē muna-m‘n‘ ma-
b. ye-māmbu mana mavw‘ k‘nkakakanakalē y‘’υō'
problems in which he is entangled, [or] by which

26a. k‘mm‘ngalakyan‘ muna-k‘tī k‘n‘tī k‘n‘tī é‘ne. Kwitkīdī-lyo
b. k‘mm‘ngalakyan‘ muna-k‘tī k‘n‘tī é‘ne. Kwitkīdī-lyo
he is assailed in his innermost heart. Do you believe

that someone can have peace of mind in a situation of this

I think it is utterly impossible. The reason is that it is a little difficult

29a. fy‘t‘ kw‘m‘ntu vō un‘ ye-māmbu m‘n‘ matw‘kun‘v‘ang
b. fy‘t‘ kw‘m‘ntu vō un‘ ye-māmbu m‘n‘ matw‘kun‘v‘ang
for a person, if he has problems causing him

NB: 26–27a: ++ fast. 28a: ++ fast.
30a. T'phasü muna-kátí kwántmá • iboosí • kaleenda ékala • wazzíkuka •
30b. T'phasü • muna-kátí kwántmá • iboosí • kaleenda ékala • wazzíkuka •

anxiety in the depths of his heart, for him then to be able to be honest

31a. thaangu kyéthaangu • vena-tète • awáantu. Ise-d'mónëkaanga
31b. thaangu kyéthaangu • vena-thádísí • awáantu. Ise-d'mónëkaanga

all the time with regard to people. It will be quite obvious

32a. nkútú vó • elúvunó • ise-lukótaga • muna-kátí kwándí.
32b. nkútú vó • elúvunó • ise-lukótaga • muna-kátí kwándí.

that lying will enter into his very core.

33a. Muna-dyaàdít • náágø • dyámfunu kíkílu vó • koso • thaangu
33b. Muna-dyaàdít • náágø • dyámfunu kíkílu vó • koso • thaangu
33c. Muna-dyaàdít • náágø • dyámfunu kíkílu vó • koso • thaangu

It is therefore perhaps of great importance, every time

34a. vóvaanga ye-múüntu • koso • thaangu • ssóongaanga ngíndu zæåku
34b. vóvaanga ye-múüntu • koso • thaangu • ssóongaanga ngíndu zæåku
34c. vóvaanga ye-múüntu • koso • thaangu • ssóongaanga ngíndu zæåku

you are speaking to someone, every time you are explaining your ideas

35a. kwamúüntu • waleend • ézaya • khy'ëdyaàmbu • díñu • lenda vóva
35b. kwamúüntu • waleend • ézaya • khy'ëdyaàmbu • lenda vóva
35c. kwamúüntu • waleend • ézaya • khy'ëdyaàmbu • lenda vóva

to someone, to be able to know what sort of thing you can say,

36a. 'ë-khy'ëdyaàmbu díñu kúlendí vóva-ko • iboosí • khy'ëthaangu
36b. 'ë-khy'ëdyaàmbu • kúlendí vóva-ko • ye-khy'ëthaangu
36c. 'ë-khy'ëdyaàmbu • kúlendí vóva-ko • ye-khy'ëthaangu

and what sort of thing you cannot say, and also on what occasions,

37a. zína zínaanga vó • náanga maambu mënka • kamena kwándí
37b. zína zína • náanga maambu mënka • kamena kwándí

since there are perhaps some things which it is not entirely

38a. ndaanu • mffunu-ko • dyámbru dimosi • ditótomu vúéang!
38b. mffunu-ko • ndaanu • dyámbru dimosi • ditótomu vúéang!
38c. ndaanu • mffunu-ko • dyámbru dimosi • ditótomu vúéang!

wise or useful [to say]. One thing which constantly causes

NB: 36-39a: ++ fast.
39a. *aatu phasi* muna-lumbu kyālumbu, evō tutadidi. māmbu
b. *aatu phasi*
     vō tutadidi. māmbu

c. *eya-atu phasi* muna-lumbu kyālumbu, vō tutadidi. māmbu
   people great trouble all the time, if we examine the events

40a. *mändza yaayt* tutawzingišila. tīsya vō aatō. muuntu mutu
b. *mändza yaayt* tutawzingišila. tīsya vō aatō. muuntu mutu

c. *mändza yaayt* tutawzingišila. tīsya vō aatō. muuntu mutu
   of this world we are living in, is that people – everyone

41a. *zölele vō* manē kenaanga maau. manē kayyiindulaanga
b. *zölele vō* manē kenaanga maau. manē kayyiindulaanga

c. *zölele vō* manē kenaanga maēu. manē kayyiindulaanga
   wants [to believe] that what he is involved in, what he is
   thinking,

42a. manē kaväangaanga yi-makalë muna-aaantu awoonsono.
     ..... 
    b. manē kaväangaanga yi-makalë muna-aaantu awoonsono.
     ..... 
   c. manē kaväangaanga yi-makalë muna-aaantu awoonsono.
what he is doing, has to hold good for everyone else.

43a. *iboos* ise-dimmonekaanga vō. ellu. ise-kiswéekwaanga
b. *iboos* ise-dimmonkaanga vō. ellu. ise-kiswéekwaanga

c. *iboos* ise-dimmonekaanga vō. ellu. ise-kiswéekwaanga
   Then what is happening is that the truth is being covered up,

    ..... 
   b. *eluunu* ise-lusengomonwaanga. káthaangu kyéthaangu.
   ..... 
   c. *eluunu* ise-lusengomonwaanga.
and lies are becoming common the whole time.

45a. *Afuete veusu khúumbu zazínti.* muna-maâ. mawóonsono
b. *Afuete veusu* zazínti. muna-máama mawóono

c. *Bafuete veusu* ekhuumbu zazínti. muna-maâ. mawóonsono
   They are given many names, and because of all these things

46a. *ewantu* bakotelo kwaphili. awong. *iboos* evuonoza
b. *ewantu* bakotelo kwaphili. awong. *iboos* evuonoza

c. *ewantu* bakotelo kwaphili. awong. *iboos* evuonoza
   the people are seized by terror. So the most dangerous
thing is that people now have a mutual lack of trust – there is no longer any confidence at all now. Each person is afraid because he doesn’t know who is his real friend and who is his enemy. It is a very distressing and dangerous situation, because people can have no peace of mind. Many are suffering because of this. We do not know whether at some time things like this can be righted.

But despite this we still hope that
55a. vené ye-thaangu· emaambú · sítíla makwenda síkidi. Dyaambu
b. vené ye-thaangu · emaambú · sítíla makwenda síkidi. Dyaambu
c. vené ye-thaangu· emaambú · sítíla makwenda síkidi. Dyaambu
there will be a time when things will in fact be put right.

56a. dyánkaka ditóma kuphaangaana' éphasi yevo ... dllútidi!
b. dyánkaka ditóma kuphaangaang' éphasi · yóó · dllútidi!
c. dyánkaka ditóma kuphaangaang' éphasi · yóó · dllútidi!
Another thing which causes me great difficulty, or which often

57a. kuphaang' éphasi muna-yaayi élumbu · idyámonó · éphila
b. kuphaang' éphasi muna-yaayi élumbu idyámonó · éphila
c. kuphaang' éphasi muna-yaayi élumbu · idyámonó · éphila .....
causes me difficulty in this day and age, is seeing how

58a. yina yaatu · atúazxngila. I boost waô · aayíngó · azolele zínga
b. yina yaatu · atúazxngila. I boost waô · aayíngó · azolele zínga
people are living. I mean now, many want to live

59a. muna-lukwilík’lu lwau ye-Ndzaambi. Kási vathadisi!
b. muna-lukwilík’lu lwau · ye-Ndzaambi. Kántsí · vena-thadisi
in their faith in God, but on account

60a. emaambu maama maudonsonô · lukwilík’lu lwau · ye-tukwilík’lu
b. emaambu maama maudonsonô · lukwilík’lu lwau · yóó tukwilík’lu
of all these things their faith or their beliefs

61a. lwau · lumène wwa · báka phiíl’ aphuta · isya wó · kaalendi!
b. lwau · lumène wwa báka phiíl’ aphuta · kaalendi!
have in a manner of speaking been seriously wounded, that is, they cannot

62a. lleénda · kátsa aúúvama-ko · ekundaambu-ngá wóongó · ekundaambu-ngá
b. lleénda · kátsa aúúvama-ko · ekundaambu-ngá wóongó · ekundaambu-ngá
really be at peace — on one side fear, on another

63a. lukáltikísu · ekundaambu-ngá nddúmbu lwá vuúvuú · isya wó
b. lukáltikísu · ekundaambu-ngá luvúmbu lwá vuúvuú · isya wó.
doubt, on another lack of hope — that is,
64a. kayenaanga syama-kə aytingi kayena syama-kə muna-kuma
b. kayenaanga asyama-kə aytingi kayena syama-kə muna-kuma
they cannot be confident; many are not confident on account

65a. kyesya və etteembo esakiti emavuku masakidi waay poos;

b. kyesya və etteembo esakiti emavuku masakidi waay poos.
of the constant outside pressure (lit. winds), and then the

66a. ene enaanga və muayanzi kamínaanga myetoma syama-ko isya və.
b. ene enaanga və muayanzi kamínaanga myetoma syama-ko isya və.
are in the state of having no really firm roots, that is,

67a. atwazíngíla kaka muna-phwe yoyo. enaanga muna-lukenéikiku
b. atwazíngíla kaka muna-phwe yoyo. enaanga muna-lukenéikiku
they just exist any old way - they have faith,

68a. kaansí se-kena zatóma zya kana wun enena
b. kaansí se-kena atoma zya-ko kana və wun enena.
c. kaansí se-kena atoma zya-ko kana və wun enena.
but they don't really know whether they

69a. waafwete kádila ye-kaná və vená ye-dyáambu dyánkaka
b. waafwete kádila ye-kaná və vená ye-dyáambu dyánkaka

6a. waafwete kádila ye-kaná və vená ye-dyáambu dyánkaka.
ought to stay as they are (?) or whether there is something

70a. diná afwete vaanga ye-kaná və vená ye-dyáambu dıkondele
diná afwete vaanga ye-kaná və vená ye-dyáambu dıkondele
c. diná afwete vaanga ye-kaná və vená ye-dyáambu dıkondele.
which they ought to do, or whether there is something lacking

71a. muna-yaau-e mamtingi maytingi afwete kiyuvula.
b. muna-yaau-e mamtingi maytingi afwete kiyuvula.
c. muna-yaau-e maytingi afwete kiyuvula.
in them - they have to ask themselves many things.

72a. Vena venanga esaa maawoonsono vaituamweena v edibuundu
b. Vena venanga esaa maawoonsono vaituamweena v edibuundu.
c. Vena venanga esaa maawoonsono vaituamweena v edibuundu.
It is because of all these things that I have come to see that
the Church

NB: 69-72a: ++ fast.
73a. 'Salu kyam'weena dy'ka kenaanga kyau. Ephasi zantatu zina
b. 'Salu kyam'weena dy'ka kenaanga kyau. Ephasi zantatu zina

c. 'Salu kyamphweena dy'ka kenaanga kyau. Ephasi zantatu zina

has got an immense task before it. The three difficulties that

74a. mbween' izaa zasya vo' mundza yamwonsone eyaatu
b. mbweene dy'ka izaaiz zasya vo' mundza yamwonsone eyaatu

I perceive now are these: that in the whole world people

75a. alutidi' vouel' eluvuvamu aatu alutidi' vouel' ezola
b. alutidi' vouel' eluvuvamu eyaatu alutidi' vouel' ezola

often talk about peace, people often talk about love,

76a. aatu alutidi' vouel' eludi kaansi maau maambu mama matatu
b. aatu alutidi' vouel' eludi kaansi maau maambu mama matatu

people often talk about truth, yet these three things

77a. v'ikosya vo ka-matwamokaka eluvuvamu kaluna'ko yamuna'nts'i
b. v'ikosya vo ka-matwamokaka-ko eluvuvamu kaluna'ko yamuna'nts'i

are in fact not in evidence; there is no peace, even in the

78a. nkutw'i na ziy'tindwil'isya vo n'aanga kiphwaanza zinaanga
b. nkutw' zina ziy'tindwil' v'o kiphwaanza zinaanga

usually considered as being independent,

79a. eaatu avuuvaana yen'aanga isya vo luvuvamu kaluna'ko
b. eaatu avuuvaana yen'aanga isya vo luvuvamu kaluna'ko

with their inhabitants at peace – that is, there is no peace there,

80a. muna-vouel' eludi. Aatu ena kaka abaangama vena kaka
b. muna-vouel' eludi. Aatu ena kaka abaangama vena kaka

if the truth be told. People are just being victimised; they still

81a. ye-dyaambu ditwakwaabaangika ditwakwaavang' ephasi.....
b. ye-dyaambu ditwakwaabaangika ditwakwaavang' ephasi.....

have something persecuting them, causing them distress.

82a. Kani tutatamane kweeto yambuleeti owatete nk'ungaa wau...
b. Kani tutatamane kweeto yambuleeti wowo tete nk'ungaa wau...

Before we continue with our discussion, let us first hear this

hymn now:.....

NB: 77-79a: ++ fast.
Now, to continue with our discussion: I said earlier that
there are difficulties nowadays because people

there are difficulties nowadays because people

have no peace. ..... Because of all these things,

their life, their existence, their hope, all of these things

are in doubt, that is, they are not confident,

they are not optimistic, they have no firm hope.

I don't know whether, being a Christian - what is the Church's

responsibility in a situation of this kind. If we are speaking
about salvation in Christ, I think that this salvation is in no other sense than that it ought to save people with regard to all the things which are causing them distress, that is, I consider that the salvation of Jesus cannot take place in someone if this man cannot be saved with all his problems - things which cause him distress, things which give him joy, things which give him riches, things which give him poverty - all these things have to be saved, along
100a. ye-nitu 瑭endi k'beeni. Wau  unve a mung-yaye elumbe ak'ondele
b. ye-nitu 瑭endi.
Wau  unve a mung-yaye elumbe azblele
with his body itself. Now, if people nowadays who lack (b: like)

101a. evuu a kyasikalala - ezingilaanga muna-lukatikisu, kyakhi?
b. evuu kyasikalala - ezingilaanga muna-lukatikisu, khi
a firm hope are living in doubt, what kind

102a. iluvalu a tukuvaanaanga? Ekyakii a k'luvuu kyame,
b. iluvalu a tukuvaanaanga? Ekyakii a k'luvuu kyame,
of salvation are we giving them? This is my question,

103a. k'phasi zame - ingindu zame - ekuma kadi nga dyamdu
b. k'phasi zame - ekuma kadi nga dyamdu
and my difficulty, and my opinion, because something in fact

104a. difwete vo kala. Wau  idibundu aloongaanga lumbu kalumbu.
b. difwete vo kala.  Dibundu aloongaanga lumbu kalumbu.
ought to be [done for them]. Now, the Church is indeed teaching
the whole time,

105a. kaantsi natee ye-wawu - malongi madibuundu - makinuvezela.
b. kaantsi natee ye-wawu - malongi madibuundu - makinuvezela.
but up until now the teaching of the Church has been ignored,

106a. ye-yitindululitwa nk'utu kwaanaantu ankaka a vo n'anga imazu
b. ye-yitindululitwa nk'utu kwaanaantu ankaka vo imazu
and even considered by some people as perhaps being

107a. malutid t'wasa' enkaang.  Kizaye ko kyi ingindu
b. malutid t'wasa' enkaang.  Kizaye ko kyi ingindu
what has often devastated the population.  I don't know
what your opinions are,

108a. zenu a vo kyi ingindu zaako ngaye muna-tteezo kyamaa
b. zenu a yovu kyi ingindu zaako ngaye muna-tteezo kyamaa
or what your own views are as regards all these

109a. mawonsono.
b. mawonsono.
things.
Comparison passage for chapter 6: Carter.

33c. Muna-dyaadí nâanga dyâmfunu kîktu vo konso thaangu /T(c) X /A X G /U(c) n. Muna-dyaadí nâanga dyâmfunu kîktu vo koso thaangu [C dyâmfunu kîktu vo] [B konso thaangu]

34c. vûvaanga ye-mûntu konso thaangu soongaanga ngîndu zâaku K /N /U(c) K Q t i n. vûvaanga ye-mûntu koso thaangu assoongaanga ngîndu zâaku [B konso thaangu soongaanga ngîndu zâaku]

35c. kwamûntu waleenda zëaya nkhi adyaâmbu dîna lenda vuûva /J /A F /A t i /K(c) F n. kwamûntu waleenda zëaya khy'adyaâmbu dîna lenda vuûva [C waleenda zëya khy'adyaâmbu]

36c. ye nkhi adyaâmbu dîna kulendi vuûva-kó iboosî nkhi athaangu /P /A t i /K(c) F /P /A t i n. 'e-khy'adyaâmbu dîna kulendi vuûva-kó iboosî khy'ethaangu [BC Ø kulendi vuûva-kó]

37c. zîna zînâanga vo nâanga mañaambu mânkaka kamenë kwandî /L(c) G X /P t i /A M n. zîna zînâanga vo nâanga mañaambu mânkaka kamenë kwandî [B kamenë kwandî]

38c. ndaändu mffûnu-kô. Dyaâmbu dîmosî ditwâtôma vuûang' /C /P t i /L F n. ndaändu mffûnu-kô. Dyaâmbu dîmosî ditwâtôma vuûang' mffûnu-kô ndaändû]

39c. astu phâsi muna-llumbu kyâllumbu vo tutadidí mâmbu B Q /U(c) t i t i t i G /A Q n. astu phâsi muna-llumbu kyâllumbu evo tutadidí mâmbu [C muna-llumbu kyâllumbu]

40c. mândza yaayî tutwâzîngîla etsya vo astu muuntu muuntu t i t i t i t i t i /iA G /P /P(c) n. mândza yaayî tutwâzîngîla etsya vo astu muuntu muuntu [C etsya vo astu]
Notes:

1. Broken bridges have been marked as full bridge with pause.

2. isya vo also occurs with patterns isya vo, isya vo.

3. kazæye-ko is the form given in revised notes, but since final highs in Makoondekwa's idiolect can also appear on the penultimate (eg. nssadisi-ko or nssadisi-ko), kazæye-ko, more comparable to Ntoni-Nzinga's version, is also possible.

4. Since attaantu is in two classes (1M, as given, or 2), inttaantu is also possible.
Chapter 7

Dialect: kiNtandu.
Source: Nsuka 1968, pp.70-78.

   The three men who were fools. There were once in a village

2. bambu bataatu, mazowa kuwa. Ka-bazaaya kuwa ku kisalu-ko; kisalu
   three men, all of them fools. They didn’t know any trade; their

3. kyau kuyambíla lumbó - muná-lumbó: baú batatu, befwoongeleengý
   trade was to fool about each day, all three having gathered

4. kífulu kimosí. / Víbúnó, kílumbu kimosí befwoongó, gana-mpaambu
   at the same place. So one day they had met at the cross-

5. nzíla: baú batatu mukuyambíla gána. Bu-bayambíla báyambíla,
   roads, all three to fool about there. When they had been playing
   about for some time,

   they looked at the road and saw that the king was coming. All
   three knelt down.

7. Nyótoóla wubágéne mbote; baú mpi batambulwele. Nyótoóla
   The king greeted them, and they also replied. The king

8. lútióo kwáni. / Báu bu-básaali, baú ye-báu, bamaaangéne mpi
   went on his way. They stayed behind, and then they also left,

9. beele kuwa. Bu-bayenda muná-nzo záu, wúuna nkeento #' kisémá
   and went home. When they each went home they told their wives

10. kibakidi. / +Ande: Wakala dmonó nyótoóla ã wúngéene mbote!
    the news (?). [Each wife] said [to herself], 'The king actually
    greeted my husband!' 

11. / Víbúnó by-bayenda munzíla mósá, baú bakeéntó mukwáteseula.
    So when they were on the way [to fetch] water the women went on
    thinking

12. wáneenda wúuna. / Nkeento yuumósí ndé kató, búuna bankaka
    about this favour. When one woman said it, then the others

NB. 10: ++ fast.
13. ndō: / Ka\-yakala dinge-ko yakala dimóni! Yuumōsi ndō: Ka\-yakala
said, 'It wasn't your husband, it was my husband!' And the first
one said, 'It wasn't your
husband, it was my husband!' Then among themselves they started
arguing.
So they took this matter before the husbands themselves. The
husbands also
16. bu-ye-bāu yuumānā mpi sī-bayumana; banweene nkīndū yīngōlo.
began to argue among themselves as well; they had a terrible
quarrel.
17. Yibunā beele dyāka kuntoōtila. / Bu-bayenda kuntoōtila,
So they went back to the king. When they had gone to the king
18. banyuweēle: E nuntoōtila, ganagēna beatō ngēye nānī ugeeneēnge
they asked him, 'Oh king, who among us did you yourself
19. mbote? Nuntoōtila ... ubayuweēle ndō: Êeene baantō ngaātu
greet?' The king answered them, 'You people, indeed
20. lu māzōbā lūns! Ganagēna bēeno yungeeneēnge mbote yoonso
you must be idiots! Among you I greeted whoever
21. yi'llūtī tī mubuzōbā, yiyūnā ngeeneēnge mbote. ... Buunā
has excelled in foolishness, it is him I greeted.' There was
22. gākala zōba dimōsi, ... zīna dyāannī Mbākī. Mbākī ndō: ...
one foolish man, [and] his name was Mbākī. Mbākī said:
23. Vundūtī tī mubuzōbā nuntoōtila, mōno! Būna nuntoōtila ndē:
'I have excelled in foolishness, king, me! So the king said,
24. Šī-šēeti baabuza bušābu, keš-bwe lutūtī! Ndē: Wā nuntoōtila
'Say first all about this foolishness, and how you have excelled!' [Mbākī] said: Listen, king
25. yīta! Kīlumbu kimōsi, ngyeēle mukuleenga muna-māgata, yibūna
and I will tell! One day I went on a visit to the villages, and
26. bampaange zāmē baangleē māakī kūuntō ye-zōole. Būna muna-nzo
my brothers gave me twelve eggs. Now in my house
27. I have ten children, then one wife and myself; one family.

28. So I gave these eggs

29. to the wife. When she had cooked them the wife placed them on the table;

30. when I came in [to eat] they had eaten [all] the big eggs, and left one egg.

31. This one I took, and put it in my mouth, and held it

32. My father-in-law arrived

33. and saw my swollen cheek and said, "Ah, my son-in-law, this

34. decayed tooth,

35. so that the toothache may be cured (?), and your cheek will then get better." The father-in-law

36. then seized him by the throat, put his finger into [Mbaki's] mouth,

37. and the egg fell out. The father-in-law took the egg and ate it. So [Mbaki]

38. he was left hungry. Says he, 'You have seen, king, this

39. is that foolishness of mine.' The king said, 'Ah, indeed it was perhaps

40. you whom I greeted.' Then one [other] man said, 'No, king,
41. "ka-yaandî-ko! Mono ndutîdi mubuzoba. Zîna dyandî Pululu. it is not him! I have excelled in foolishness.' His name was Pululu.

42. Pululu nde: Mono ndutîdi mubuzoba Ntootîla nde: Bunteleethî. Pululu said, 'I have excelled in foolishness.' The king said, 'Tell us then

43. ketî-bwe lututîdi mubuzoba. Ana we ntootîla yikelela-keti-bwe how you have excelled in foolishness.' 'Well, listen, king, and I will tell you how

44. ndutîdi. Kilumbu kimosi A ngyele kunâ-zaandu; banduku zame I have excelled. One day I went to the market; my friends

45. bângsîne fimboongo; ye-mboongo zîna. *nsumbidî zaandu nu tu ngulu gave me a little money; with this money I bought a pig's head

46. ye-makolo mangulu maya. Buna ngiisidi kunâ-nzo, ngene and four pig's trotters. Then I came home, and gave [them]

47. kunkeento. Nkeento mpi tôme-ne-byo làamba. Bu-katóombula to the wife. And the wife cooked them beautifully. When she put

48. gana-mesa, monâ kîma. *si-yîmonâangâ *si-makolo matatu, [them] on the table, I for my part could see but three trotters,

49. kâkâ kolo dîmôi *si-dîa kîmôni. Nguula kunkeento, only the other trotter I could not see (?). I asked the wife,

50. nkeento nde: E! Mono kîma mbweene *makolo matatu. / Kunâ and the wife said, "Well! I myself have seen [only] three trotters." "It was

51. makolo maya nsûmbidîngi *kunâ-zaandu ye-ntu ngulu! / four trotters that I bought at the market along with the pig's head!"

52. Kaansi nkeento nde: E! Makolo matatu ye-ntu kaka mon(o) But the wife says, "Well! Three trotters and the head is all I

53. mbweene. / Bâbâbôle ye-nkeento ye-yàkala mpakâ zîbûidî. have seen." The two of them, wife and husband both, fell to arguing.

54. Yakala nde: Momô *znàna kolo *go kimweene-duó-ko, dyama The husband said, "If I don't see that trotter [at once], then
yifwa. / Nkeentó nd(e): Wufwa. mudyamba diko lo kumweene? Ee
I will die." The wife says, "You'll die because you haven't seen a trotter?" "Yes,
monó fwa yifwa! Nde Kaansi koló ka-dimonekene kwó-ko nga
indeed I will!" Says she, "But the trotter is nowhere to be seen, and indeed
monó kitém. mbweene makólo mafatu Nde: Gó mafatu, monó fwa
I myself have only seen three trotters." Says he, "If [there are
only] three, I am indeed going
to die just as I said! I have died!" And at that [he fell] to
the ground
yanó fwididi. Buna banekeenge muné-kele, si-bakwé-nzíka.
and he died. So they wrapped him in a shroud and went to bury
him
kumazyamí. Bu-bannata, si-bakweenda mukúntikó ku-bakwá-
in the graveyard. They carried him along, and as they went to
bury him they had to
pass along the road [beside the house of] that gentleman who
had sold [Pululu] the pig's head
ye-makólo maya. / Buna yóna mbutá bu-kámona muumbí banéti,
and the four trotters. So that man, when he saw the corpse they
were carrying,
bu-kaywéele: Ná yo báne (na)nt? Bawó ndé: Mpululu a
asked, "Who is it [you] are carrying there?" They said, "It is
Pululu
yoyó báne, wufwindi. Buna yó ndé: Wal Kyéléka Mpululu
that we are carrying - he has died," So he said, "Heavens!
Indeed it was [only]
zoonó kí-kasuumbídi ntu ngulu ye-makólo maya kumóno!
yesterday that Pululu bought a pig's head and four trotters
from me!"
Buuna yaantí Mpululu. Bu-kawa buúna, yi-yaantí vuumbukidi,
So when Pululu heard that, didn't he get up,
ffútumukini! Anda wíidi! wíidi! wíidi! monó luwónu
restored to life! Says he, "You heard! You heard! You heard
that I
ntéeleéngé! Beenó kulu go lu bambaangi! Luwíidi-
had told a lie! You people are all my witnesses! You heard
NB. 63-64: ++ very indistinct. 64: ++ whispered.
4-23

9. *yu-wuntek'ele* • ntu ngulî • ye-m'akolo mâyå! Wiidî mono
[the man] who sold me a pig's head and four trotters! Whereas
you heard[earlier] that I

10. luvunu yite te / Buunå bâskulu ndê: Aása makyâleka teële.
had in fact told a lie." Then everybody said, "Ah, you told
the truth

11. m'mambu mâku! Buunå yâmâ nkeênto *yu-wute'ele* luvunu. Buunå
[about] these things! So it was the wife who told the lie. So

12. *Mpulülu nuungini kwâni!* Bûna m'wene n'tootîle.
Pululu is completely vindicated!" So you have seen, king,

13. *yi-buzoba bûmone buunå! Bûna n'tootîle.* Bu-kâyândalaa
this is that foolishness of mine." So the king thought [for
a while]

14. ndê: Aása *kyâleka* n'gâstu ngê kibëenî *wuzoba d'întete*. ...
and said, 'Ah, indeed it is perhaps you yourself [who is] the
foremost fool.

15. Ngê m'ti ngeënënë mbotû. Abûunô *gàkala* Makeengo ndê:
And it was you whom I greeted!" Then a man [called] Makeengo
said,

16. Ka-yaan-ko zôba d'întete wa; yundûtîdi kibëenî gânë
'It is not him who is the foremost fool, d'ye hear - I myself
have excelled amongst

17. tûna beeto bâtêtu mînô! N'tootîle ndê *Sitë ngê këtt-bwe
the three of us, me!* The king said, 'You tell us how

18. lutûî. *Wântikidî mûkuta ... buzoba bwàni.* Makeengo ndê:
you have excelled.' Makeengo began to relate his foolishness.
He said,

'Listen! I went to the market, and I bought a chicken.

When I had bought that chicken, I came [back home] with it, and

21. Nkeënto yaa kagoëndele, ... bu-kâ *këntikîni mwaambê ngûba,
The wife then killed it, cooked a peanut sauce,

22. bu-katômene-yo bbotûla momwaambê ngûba. Wiidî tuûla ntî
and baked it very nicely in the peanut sauce. She had put
83. minsüunga muna-nsungâ tâ kaka zitâ. Buuna bu-kâtoombula yâ, herbs in it, and it kept giving off [the beautiful odour] of herbs. Then she took it out,

84. sîdi gana-loôngâ, sîdi dyâaka gana-méesa. Tomâne yâla placed it on a dish, and placed [the dish] again on the table. She had very beautifully laid

85. méesa môt; fufu mpe dyâle geâna. Yâ-buuna mûntsângu kûdyâ, the table too; there was also fufu (kitchen) on it. So it was time to eat;

86. toutwoongêle, sî-tûyaant'ka kûdyâ, ... kânsî kyeele kisîîdt we sat down, and were about to begin eating, but the door had been left

87. ntûtu, yûzîbâ-kyâu nkató. Monô nteele nô: zibîka kyeele open, it was wide open. I then said, "Close the door,

88. nge nkeêntô. Nkeêntô ndê: Monô kizibika'-ko, zibîka ngeye you, wife." Says the wife, "I won't shut it, shut it you,

89. mudyaambu monô sâlu kînîgî nsâđîdî! Yâkëla ndê: zibîka because I have [already] done a lot of work!" The husband said, "Shut

90. ngeye nkeêntô! Nkeêntô ndê: ûë! Monô ndîkîdî mwasamba, you it, wife!" The wife said, "Listen! I made the sauce,

91. ndeembe ntsusu, ntekelé masû, nsukweèle malônga; I cooked the chicken, I fetched the water, I washed the plates;

92. kîsâlu kîkînîgî nsâdîdî monô. kânsî ngeye kusâdîdî I've done an awful lot of work, I have. But you haven't done

93. kîmâ-ko; zibîka ngeye ... kyeele. / Yâkëla ndê: Monô a hand's turn; close you the door." The husband said, "I

94. kîlêndî zizibîka'-ko, ngë mmôsî' wuzibika kyâwû! Nkeêntô can't [bring myself] to close it, you're the only one who's going to close it!" The wife

95. ndê: Monô kiffwa tasta Mandyâangu! Ka-kûzizibika'-ko! said, "I swear by my father Mandyâangu, I won't close it!"

96. Buuna yakëla ndê: go kuzibika-kû'-ko, monô môt, ka-mônô So the husband said, "If you don't close it, I [won't] either, and I won't
kigog, ... kani nga mpi, ka-ngi kugogi dyaka; ... kani speak, nor you either, you're not to speak again; and

muntu kankuna-kol Babole bayindele gomesa. Yoona neither of us is to move!" The two of them sat at the table, [the understanding being that] whoever

wuyitá mugo, yoona uzi bika kyeelo! Bayindala bayindala speaks first, he it is who will shut the door!" They sat on and on,

100. gakala mbuta mbosti, wisi-lutila ganana-nzo bau. Yaandi and a certain gentleman came along past their house. He

101. kbesa, bu-bamswene, kondzo baawu bayindeleleeng. Ayuna came [over to the house], and they saw him, but they sat on in the house. And that

102. mbuta mpi ko-ka-tvuuka nzala mpi ito men e kumbakha, man too, where he came from [there was] a famine as well, and

103. Kawidikila ntsunung...ombombo; katale gana-meesa He smelt [the odour of] the herbs wafting about, and saw on the table

104. llonga dinsusu toka kaka ditoka mwisi. Ebuuna baawu the plateful of chicken just steaming. So those [other]

105. babole ... babidi frumbananga, kani muuntu goza nkatu. two were watching, but neither said a word.

106. vo mbuta wubageene mbote. Ande mbote beeno! Bauu A pi! The man greeted them. He said, "Greetings to you!" They were as silent as the grave!

107. Nkhatu yugoga! Buuna yindwela nde: Ngatu, bigyuyu. Not a one spoke! So [the man] thought and said [to himself], "Perhaps they are loonies,

108. baa baantu-e! Weels gana-mwelo, kengeleele; A! Ane Mbote these people!" He went [closer] to the door, and all was [still] silence. Ah! He said, "I am greeting you [- don't you realise that?]" They remained silent.

109. yilugaananga! Bauu badingalele. Yo nde: Ee! Maa

greeting you [- don't you realise that?]" They remained silent. He said, "Hey, these ones

110. mazoba ma! Kotele kunezo. Bu-kakota, ... woongel(e are real idiots!" He went into the house. When he had entered, he sat down
111. g)ana-méesa; dyë kwani si-kadya. Abu-kabonga nsusu, bu-kadya, 
at the table, and tucked in. He took the chicken, and ate,
and ate, [until the hunger in] his belly was satisfied. He 
took a bone
112. kadya, aktuu mu kyani kryuwete. Boongele ... nyist, 
and ate, [until the hunger in] his belly was satisfied. He 
took a bone
113. yi-wa-kakwange m̄-ndzefu zayandi bako, ... . Vuuna mbuta 
and entwined it in the beard of the husband. That man [who had 
eaten the chicken]
114. tuuki kwan; weele. Bakélé bakélé, bata bubú dîmbwa. 
grew out and went away. They sat on and on, and they saw a big 
brute of a dog. 
115. mbú bu-káwa nsuunga, ngi! dyu dyäska - konzo. Bu-kakota 
The dog smelt the herbs, hey!, and this one also [enters] the 
house. When he had entered
116. kunzo, nde kafimbé, kafimbé, kavumbúla mbebo, (g)oméesa, 
the house, he sniffed and sniffed, and smelt the odour from the 
table
117. ntsuunga a kaka zita, ge! ditá goméesa! ... Bu-kadya 
that the herbs were still giving off. Hey!, [and there he was,] 
eating from the table! When he had
118. bina bisiása yuna mbuta, bu-yumbú, nde kavumbúla meeso 
finished whatever that other man had left, he looked up, he 
raised his eyes
119. katala. mokyeefa. nyisi wudyaambilâanga! Abu-kasa na 
and saw in the [husband's] beard the bone hanging! Then he grabbed
120. komonkisi, zekása si-kazekása nyisti. Zekése zekése. yaani 
hold of the bone, and tugged and tugged at the bone. Tug, tug, 
and [the husband]
121. kaangiti mbeuno, mudyambó gö tawele, yaandi si-wuzibika 
held back his yells, because if he complained it would be him 
who [would have] to shut
122. kyéelo. Buuna-mbúá, nánikini, nánikini, nánikini, aá, 
the door. So the dog yanked and tugged and heaved at the bone ; 
123. bu-káman mpasi. zimakuntwa monawa, mudyambu nkaanda. 
and [the husband] felt pains in his jaw (?), because the skin
124. wunnua. nnanuka si-wunanuka, yi-yané lookele. Ndaa 
of his mouth was beginning to tear, and he yelled, "Hiyaa! 
by my father, he's killing me! Aa, the pain!" The wife said, "Aha! You've lost!

It was you who spoke first! You have to close the door!" And that was that!

There we were, the two of us, wife and husband, our best things had been eaten, and I had been the first to speak, so I had to close the door, and what would we eat as well? The two of us went hungry.

You have seen, king, that I have excelled in foolishness! The worst fool I have seen is you! So, among you three, the one I have greeted is you! You have excelled in foolishness!"
Comparison passage for chapter 7: Daeleman (from Nsuka 1968).

79d. "Mo mo ngwele kuna-zaandu, nsuumbidîngî nsusu.

n. "Mo mo ngwele kuna-zaandu, ntsuumbidîngi ntsusu.

80d. Bu-nsuumbiî yi'na nsusu', ngîsîdî yaaw, ngeene' kunkeento.

n. Bu-ntsuumbî yi'na ntsusu', ngîsîdî yaaw, ngeene' kunkeento.

81d. Nkeento ya'a kagôndele, bu-kanîkînti mwaamba nguba,

n. Nkeento ya'a kagôndele, ... bu-kanîkînti mwaamba nguba,

82d. bu-katomene-yo bbotula m'mwaamba nguba. Widî tu'ula nti

n. bu-katomene-yo bbotula m'mwaamba nguba. Widî tu'ula nti

83d. m'msuunga m'muna, nsuunga tô kaka zîta, Buuna bu-katóombo bula yaaw,

n. m'msuunga m'muna-nsuunga tô kaka zîta. Buunâ bu-batóombo bula yaaw,

84d. 'stidî gana-loonga, 'stidî dyaa'ka gana-meesa. Tweme yala

n. 'stidî gana-loonga, 'stidî dyaa'ka gana-meesa. Tweme yala

85d. m'mesâ m'pî; fufî mpe dyeele gaana. Yi'buuna muntaangu kudya,

n. m'mesâ m'pî; fufî mpe dyeele gaana. Yi'buuna muntaangu kudya,

86d. tufwongele, si'tuyaantlyka kudya, kaansi kyeelo kisidî

n. tufwongele, si'tuyaantlyka kudya, ... kaansi kyeelo kisidî

87d. n'tutu', yuzy'ba kyaaw nkátu. Mo no nteele ná: Zibîka kyeelo

n. n'tutu', yuzy'ba kyaaw nkátu. Mo no nteele ná: Zibîka kyeelo

88d. nge nkeento. Nkeento nô: Mo no kizibîka-ko, zibîka ngeye

n. nge nkeento. Nkeento nô: Mo no kizibîka-ko, zibîka ngeye

89d. mudyaambu monó kisalu kînîngi nsâdîdî! Yakala nô: Zibîka

n. mudyaambu monó salu kînîngi nsâdîdî! Yakala nô: Zibîka

90d. ngeye! Nkeento nô: Wa! Mo no ndîkînti mwaamba,

n. ngeye nkeento! Nkeento nô: Wa! Mo no ndîkînti mwaamba,

91d. ndeembë nsusu', ntekêle mûsa, nsukwele malaonga;

n. ndeembë ntsusu, ntekêle mûsa, nsukwele malaonga;

92d. kisalu kîkînîngi nsâdîdî monó. Kaansi ngeye kusâdîdî

n. kisalu kîkînîngi nsâdîdî monó. Kaansi ngeye kusâdîdî
107d. Nkatu yugoga! Búna y'ündwele ndé: Ngeatú bìyìyyu
108d. bó baantu-e! Weeële gana-mweelo, kengelele; Ane Mbote
n. bóó baantu-e! Weeële gana-mweelo, kengelele; A! Ane Mbote
109d. yilugaanaanga! Bawú badingalele.
    n. yilugaanaanga! Bawú badingalele.
Text for chapter 8.
Dialect: kiManyanga.
Informants: Rev. D. Ntoni-Nzinga and Mr. A. Ndolo Menayame.

1z. Thbole ban kale, ibankwa nkani, banatwa yaandit mvoondwa.
   a. Boole ban kale, ibankwa nkani, banatwa yaandit mvoondwa.
   b. Boole ban kale, ibankwa nkani, banatwa yaandit mvoondwa.
   Two other men, both criminals, were taken out with him to be executed.

2z. Bu-balwaaka vaumva kibikwaanga kbasongsolo kyantu,
   a. Bu-balwaaka vaumva kibikwaanga kbasongsolo kyantu,
   b. Balwaaka vaumva kibikwaanga kbasongsolo kyantu,
   When they came to the place called The Skull,

3z. Bankoma vaana vakulunsle ye-bankwa nkani umosi valubakala.
   a. Bankoma vaana kulanse ye-bankwa nkani umosi valubakala.
   b. Bankoma vaana kulanse ye-bankwa nkani umosi valubakala.
   They nailed him to the cross, along with the other criminals, one on his right,

4z. Umosi valumuso. Yisu wawevo, Teta ubayambudila kadi.
   one on his left. Jesus said, 'Father, forgive them, for

5z. Ka-bazeeyi ma-bavengi-kol. Bakabana mwaatui myaandi,
   a. Ka-bazeeyi ma-bavengi-kol. Bakabana mwaatui myaandi,
   b. Ka-bazeeyi ma-bavengi-kol. Bakabana mwaatui myaandi,
   they do not know what they are doing.' They shared out his clothes,

   casting lots for them. The people stood watching, but the rulers

7z. Bannamisa mbombo lauova: Yaandi wawulusi ban kale; bitka.
   a. Bannamisa mbombo lauova: Yaandi wawulusi ban kale; bitka.
   b. Bannamisa mbombo lauova: Yaandi wawulusi ban kale; bitka.
   made fun of him; they said, 'He saved others; let
8z. kakivulusa, vo ndyeu t'Kitisto, soolwa kyanDzaambi.
a. kAkivulusa, vo ndyeu t'Kitisto, soolwa kyanDzaambi.
b. kAkivulusa, vo ndyeu t'Kitisto, soolwa kyanDzaambi.
him save himself, if he is the Christ, the Chosen One of God.'
9z. Binuani mp£ byantsakanana, byayiza kwayaandi, bantaambika
a. Binuani mp£ byantsakanana, byayiza kwayaandi, bantaambika
b. Binuani mp£ byantsakanana, byayiza kwayaandi, bantaambika
The soldiers also mocked him, they came up to him and offered

10z. vinya kyandeke, bayova: vo nguye intinu abayudayo,
a. vinya kyandeke, bayova: vo nguye intinu abayudayo,
b. vinya kyandeke, bayova: vo nguye intinu abayudayo,
wine vinegar, and said, 'If you are the king of the Jews,
a. ukivulusa. Ntsonokono yakala vaantaandu andi: Ndyeu
b. ukivulusa. Ntsonokono yakala vaantaandu andi: Ndyeu
save yourself.' There was a written notice above him: 'This
12z. intinu abayudayo. Muanga most ankanu wamanukwa yaand£a
a. intinu abayudayo. Muanga most ankanu wamanukwa yaand£a
b. intinu abayudayo. Muanga most ankanu wamanukwa yaand£a
is the king of the Jews.' One of the criminals hung there with

13z. wantiaka mp£; Kadi nguye ka-tKitisto-ko-e? Uktivulusa
a. wantiaka mp£; Kadi nguye ka-tKitisto-ko-e? Uktivulusa
b. wantiaka mp£; Kadi nguye ka-tKitisto-ko-e? Uktivulusa
also insulted him: 'Aren't you the Christ? Save yourself

14z. ye-beeto! Kaansi wankaka wovutula, wanseemba wovova:
a. ye-beeto! Kaansi wankaka wovutula, wanseemba wovova:
b. ye-beeto! Kaansi wankaka wovutula, wanseemba wovova:
and us as well!' But the other criminal replied and rebuked

15z. †Kadi kuvumina Ndzaambi nkutu-ko-e, bu-wena
a. †Kadi kuvumina Ndzaambi nkutu-ko-e, bu-wena
b. †Kadi kuvumina Nganga Ndzaambi nkutu-ko-e, bu-wena
'Don't you fear God at all, since you are
16z. mundzeengolo y'most? Beeto boonso busoongele, kadi
a. mundzeengolo y'most? Beeto boonso busoongele, kadi
b. mundzeengolo y'most? Beeto boonso busoongele, kadi...

under the same sentence? We are both justly punished, for

17z. tuttaambulaanga ntséendo ufweni muma-twawee ngi, kaansi
a. tutaambulaanga ntséendo ufweni muma-twawee ngi, kaansi
b. tuttaambulaanga ntséendo ufweni muma-twawee ngi, kaansi

we are getting punishment suitable for what we have done, but

18z. ndyeu kavengi dilembolo fwananga ko. Yandi wavova: Yeusu
a. ndyeu kaveengi dilembolo fwananga ko. Yandi wavova: Yeusu
b. ndyeu kaveengi dilembolo fwananga ko. Yandi wavova: Yeusu

this man has done nothing which is wrong. And he said, 'Jesus,

19z. umbambukila moyo, bu-ulweeki mukimfumu kyaaku. Yandi
a. umbambukila moyo, bu-ulweeki mukimfumu kyaaku. Yandi
b. umbambukila moyo, bu-ulweeki mukimfumu kyaaku. Yandi

keep me in mind when you have arrived in your kingdom.' Jesus

20z. wavova kwayaandi: Ke'dkaka mono tvouele: kyaak't lumbu ngeye
a. wavova kwayaandi: Ke'dkaka mono tvouele: kyaak't lumbu ngeye
b. wavova kwayaandi: Ke'dkaka mono tvouele: kyaak't lumbu ngeye

gave to him, 'Truly I have said, this day you

21z. stuka la yam'i mupaladitsa. Buakala kani mulokula
a. stuka la yam'i mupaladitsa. Buakala kani mulokula
b. stuka la yam'i mupaladitsa. Buakala kani mulokula

will be with me in paradise. It was now about the

22z. kyantsaamban'u t'ombe kyakala muntoto wawonsono nat'e
a. kyantsaamban'u t'ombe kyakala muntoto wawonsono nat'e
b. kyantsaamban'u t'ombe kyakala muntoto wawonsono nat'e

sixth hour, and darkness was over the whole land until

23z. ye-lukula ky'awwa, ntangu bu-yalembwa teen'ika;
 a. ye-lukula ky'awwa, ntangu bu-yalembwa teen'ika;
 b. ye-lukula ky'awwa, ntangu bu-yalembwa teen'ika;

the ninth hour, [since] the sun had stopped shining.

N6. 19z: ++ fast.
And the veil in the temple was torn down the middle. Jesus called out

... in a loud voice and said, 'Father, into your hands I commit my spirit.' When he had said this, he breathed his last. The centurion, when he saw what had happened, praised God... and said, 'Truly, this was a righteous man.' All the... and the... who had come with him from Galilee, who had gathered to see these things, when they saw what had happened, they beat their breasts and went back home. All those who knew...
stood at a distance, watching these things. And behold, there was a man
and his name was Joseph, a member of the Council, a good and upright man -

he had not consented to their decision and actions - he was a native of

Arimathea, a Judean town, and he was waiting for the kingdom of God.

This man went to Pilate and asked for the body of Jesus. He took it down,
wrapped it in linen cloth, and placed it in a tomb

out in the rock, one in which no-one had yet been laid.

It was in fact Preparation Day, and the Sabbath was near.
40z. Bakento bayiza yaandi batuuka mung‘allii balaanda batala
   a. Bakento bayiza yaandi baatuuka mung‘allii balaanda batala
   b. Bakento bayiza yaandi baatuuka mung‘allii balaanda batala

The women who had come with Jesus all the way from Galilee followed after and saw

41z. ndyamu ye-bonso bwaatuudulwa nitu aandi; bawutuka.
   a. ndyamu ye-bonso bwaatuudulwa nitu aandi; bawutuka.
   b. ndyamu ye-bonso bwaatuudulwa nitu aandi; bawutuka.

the tomb, and how his body was laid in it. Then they went back home

42z. bakubika an... nz‘eenzo myantsuunga ye-maszi; mulumtingu.
   b. bakubika nz‘eenzo myantsuunga ye-maszi, mulumtingu.

and prepared spices and perfume. On the Sabbath

43z. bvuuunda boontso buweni ntskudukusu. ...
   a. bvuuunda boontso buweni ntskudukusu. Lumbu kyantete... mulumtingu.
   b. bvuuunda boontso buweni ntskudukusu. Lumbu kyantete... mulumtingu.

they rested according to the commandment. On the first day of the week,

44z. nsbuka nabu bayiza kundambo banata ndzeenzo myantsuunga.
   a. nsbuka nabu bayiza kundambo banata ndzeenzo myantsuunga.
   b. nsbuka nabu bayiza kundambo banata ndzeenzo myantsuunga.

very early, they went to the tomb, carrying the spices

45z. mbakubika, Babwana tado... dinengomonu mundyamu; bakota.
   a. mbakubika, Babwana tado... dinengomonu mundyamu; bakota.
   b. mbakubika, Babwana tado... dinengomonu mundyamu; bakota.

that they had prepared. They found the stone rolled away from the tomb; they entered,

   b. kansi ka-babwana nitu afmumu Vitsu-ko. Bwakala

but could not find the body of the Lord Jesus. While

47z. bu-bakadila bo kidungu, tala, babakala bool batalama yaau.
   a. bu-bakadila bo kidungu, tala, babakala bool batalama yaau.
   b. bu-bakadila bo kidungu, tala, babakala bool batalama yaau.

they were hesitating, behold, two men stood there.

NB: 43a: ++ forceful.
49z. ye bay직ka zizi kyaa vantoto bvova kwabao: munkyaama
a. ye bay직ka zizi byaa vantoto bvova kwabao: munkyaama
b. ye bay직ka zizi byaa vantoto bvova kwabao: munkyaama
and bowed their faces to the ground, but [the men] said to
to them, 'Why

50z. lutombele wena mooyo mubafwa? Kena-vo-ko kaansi
a. lutombele wena mooyo mubafwa? Kena-vo-ko kaansi
b. lutombele wena mooyo mubafwa? Kena-vo-ko kaansi
do you look for the living among the dead? He is not here; on

51z. fulukidinti. Lubaambuka mooyo boonso bv-kavova kwabeno,
a. fulukidinti. Lubaambuka mooyo boonso bv-kavova kwabeno,
he has risen. Call to mind how he spoke to you,

52z. bu-kakedi yeno mungalili, wabova:vo: Mwaan amuntu.
a. bu-kakedi yeno mungalili, wabova:vo: Mwaan amuntu
b. bu-kakedi yeno mungalili, wabova:vo: Mwaan amuntu

53z. st-kayekulwa kaka momoko mabankwa myamumuy ya-komua
a. st-kayekulwa kaka momoko mabankwa myamumuy ya-komua
b. st-kayekulwa kaka momoko mabankwa myamumuy ya-komua
must be delivered into the hands of sinful men, and be crucified,

54z. vakulunsut ye-fulu byo fulambu kyantatu. Babambuka mooyo.
b. vakulunsut ye-fulu byo fulambu kyantatu. Babambuka mooyo.

55z. jamaambu mandi, baavutuka kway tukwa muntamu, bakaambaba
a. jamaambu mandi, baavutuka kway tukwa muntamu, bakaambaba
b. jamaambu mandi, baavutuka kway tukwa muntamu, bakaambaba
his words, and went back home from the tomb, and told
56z. "Moomo moomonsono kwakum, ye-most ye-kwaaboonsino.
   a. Moomo moomonsono kwakum, ye-most ye-kwaaboonsino banka,
   b. Moomo moomonsono kwakum, ye-most ye-kwaaboonsino,
   all these things to the Eleven and to all the others.

57z. Imalta wuwi-ngada Mangadal, ye-ye-bana ye-Malta t'ingude avakoibi;
   a. Malte wuwi Mangadal, ye-ye-bana ye-Malta t'ingude avakoibi;
   b. Malte wuwi ... Mangadal, ye-ye-bana ye-Malta t'ingude avakoibi;
   It was Mary Magdalene, Joanna, Mary the mother of James,

58z. Ye-bakeento banka baka la yau ... bakaamba maambu moomo
   a. Ye-bakeento banka baka la yau ... bakaamba maambu moomo.
   b. Ye-bakeento banka baka la yau ... bakaamba maambu moomo.
   and the other women who were with them who told these things

59z. Kwazintumwa, Maambu ma mmonikaka valuuse luwi boonso
   a. Kwazintumwa, Maambu ma mmonikaka valuuse luwi boonso
   b. Kwazintumwa, Maambu ma mmonikaka valuuse luwi boonso
   to the apostles. These things seemed in their view like

60z. Mpowa yankatu, ka-baleekila minu-ko, Tala, kina llumbu
   a. Mpowa yankatu, ... ka-baleekila minu-ko, Tala, kina llumbu.
   b. Mpowa yankatu, ka-baleekila minu-ko, Tala, kina llumbu nonsense, and they did not believe them. Behold, that same day

61z. Boole mubaau bayenda ye-nondiing, kuwata, nkumbo avata
   a. Boole mubaau bayenda ye-nondiing kuwata, nkumbo avata.
   b. Boole mubaau bayenda ye-nondiing kuwata, nkumbo avata.
   two of them were going sadly(?) to a village, the name of the
   village

62z. Emmaus, dyatatuka ye-valusalemi makumasaambanu ma stadiya.
   a. Emmaus, dyatatuka ye-valusalemi makumasaambanu ma stadiya.
   b. Emmaus, dyatatuka ye-valusalemi makumasaambanu ma stadiya.
   being Emmaus, distant from Jerusalem by 60 stadia.

   They were talking with each other about everything that had
   happened. As they were talking
64z. ... ye-yūrasanā, yaandī kibəent Vēisū waftinama wayənda
 a. ye-yūvulasanā, yaandī kibəent Vēesū waftinama wayənda
 b. ye- ... yuuvulasanā, yaandī kibəent Vēesū waftinama wayənda

and conversing with each other, Jesus himself came up and walked along

65z. yasū. Kansi mēeso mēyu mākākwa, ka-bi'dī kunzaya.
 a. yasū. Kansi mēeso mēyu mākākwa, ka-bi'dī kunzaya.
 b. yasū. Kansi mēeso mēyu mākākwa, ka-bi'dī kunzaya.

with them. But their eyes were deceived so that they did not recognise him.

66z. Ḫewūvā kwabäu: Nkī amaambu moomo mə-lwēti mōkina,
 a. Ḫewūvā kwabäu: Nkī amaambu moomo mə-lwēti mōkina,
 b. Ḫewūvā kwabäu: Nkī amaambu moomo mə-lwēti mōkina,

He asked them, 'What are these things that you are discussing

 a. ... bu-lwēti dyāsta? Basəlimpama ye-zīzi byanayēmbelee.

as you walk along? They stood still, with their faces downcast.

68z. Most nkumbu andī Klēopa, wawütuka, wawūvā kwabandī: Kadi
 a. Most nkumbu andī Klēopa, wawütuka wawūvā kwabandī: Kadi
 b. Most nkumbu andī Klēopa, wawütuka wawūvā kwabandī: Kadi

One of them, named Cleopas, answered and said to him, 'Surely

69z. ngēye kaka wena ndżēenza mūvelusalem, kuzeyi mōmo
 a. ngēye kākē wēnē ndżēenza mūvelusalem, kuzeyi mōmo
 b. ngēye kaka wena ndżēenza mūvelusalem, kuzeyi mōmo

you must just be a stranger to Jerusalem, that you don't know these things.

70z. mābūrti mūbyaabū lumbu-ko-ē? Wawūvā kwabäu: Nki 'alekwa?
 a. mābūrti mūbyaabū lumbu-ko-ē? Wawūvā kwabäu: Nki 'alekwa?
 b. mābūrti mūbyaabū lumbu-ko-ē? Wawūvā kwabäu: Nki 'alekwa?

which have happened these past few days?' He said to them, 'What things?'

71z. Bawūvā kwabandī: Mōmo mūvēsu, kwaemī Nazalētī,
 a. Bawūvā kwabandī: Mōmo mūvēsu, kwaemī Nazalētī,
 b. Bawūvā kwabandī: Mōmo mūvēsu, kwaemī Nazalētī,

They said to him, 'This about Jesus, a native of Nazareth;

NB: 68-70z: ++ fast.
72z. **wakedi mb'kudi : walu'leendo mumavaanga ye-mumambu maluse**
   a. **wakedi mb'kudi : walu'leendo mumavaanga ye-mumambu maluse**
   b. **wakedi mb'kudi : walu'leendo mumavaanga ye-mumambu maluse**

   He was a prophet powerful in deed and word before

73z. **lwandaambi ye-baantu baboonsono,** boonso buanyekole
   a. **lwandaambi ye-baantu baboonsono,** boonso buanyekole
   b. **lwandaambi ye-baantu baboonsono,** boonso buanyekole

   God and all the people, and how he was handed over

74z. **bangudi zangaanga ye-bakuluntu beeto munzeengolo aliufu,**
   a. **bangudi zangaanga ye-bakuluntu beeto munzeengolo aliufu,**
   b. **bangudi zangaanga ye-bakuluntu beeto munzeengolo aliufu,**

   by the chief priests and our leaders to a sentence of death,

75z. **bankomisa vakulunsi,**
   a. **bankomisa vakulunsi,**
   b. **bankomisa vakulunsi,**

   and they crucified him. But we had not left off hoping that he

76z. **indyena wakana kuula Isayeli; kans4 tuuka ntaangu**
   a. **indyena wakana kuula Isayeli; kans4 tuuka ntaangu**
   b. **indyena wakana kuula Isayeli; kans4 tuuka ntaangu**

   was the one who would redeem the tribe of Israel; but since the time

77z. **yauaangiua moomo mamoonsono, kyaki llumbu kyantatu, Bakeento**
   a. **yauaangiua moomo mamoonsono, kyaki llumbu kyantatu, Bakeento**
   b. **yauaangiua moomo mamoonsono, kyaki llumbu kyantatu, Bakeento**

   that all this was done, it is now the third day. Some women

78z. **bankaka mubeeto batubwitsi zengele-zengele, balweektungi**
   a. **bankaka mubeeto batubwitsi zengele-zengele, balweektungi**
   b. **bankaka mubeeto batubwitsi zengele-zengele, balweektungi**

   among us caused us great amazement; they arrived

79z. **nsuka naa kundyanu; bu-balambolo bwana nitu andi,** bizi
   a. **nsuka naa kundyanu; bu-balambolo bwana nitu andi,** bizi
   b. **ntsuka naa kundyanu; bu-balambolo bwana nitu andi,** bizi

   early in the morning at the tomb, but were unable to find his body, and came

NB: 75-76z: ++ crescendo.
saying they had seen a vision of angels who said that he was

Some of those who were with us went to the tomb

and found it exactly as the women had said, but him

they did not see.' He said to them, 'You fools, you who are

foolish and slow of heart to believe all the things.

that the prophets have spoken! Did not Christ have to suffer

these things and then enter his glory?' He started with Moses

these things and then enter his glory? He started with Moses

and all the prophets, and explained to them from all the Scriptures

NB: 81z: ++ crescendo. 84-85z: ++ rising.
those things which were about him. They approached the village to which they were going,

and Jesus acted as if he were going further. But they begged him saying,

'Stay with us, because evening has fallen, and the day is about to finish.'

And he went in to stay with them. While he was seated with them at the table, he took bread, gave thanks, broke it, and gave it to them.

Their eyes opened, and they recognised him, but he disappeared from their sight.

They said to each other, 'Were not our hearts burning within us when he was talking to us on the road, while he opened the Scriptures to us?'
That very hour they got up and returned to Jerusalem, and found the Eleven assembled together, and said, 'It is true.'

Then they recounted those things that had happened on the way, and how he was recognised by them when he broke the bread. As they spoke about these things, Jesus himself stood among them. They were startled, and fear assailed them, for they thought that they had seen a ghost. He said to them, 'Why are your hearts troubled, and why do doubts rise up in your hearts, Munktama babanza matelamene'...‘

NB: 96-97z: ++ distinct.
104z. muntima myéeno? Lutala móko maa méi ye-maalú maa mí vo
   a. muntima myéeno? Lutala móko maa méi ye-maalú maa mí vo
   b. muntima myéeno? Lutala móko maa méi ye-maalú maa mí vo

   in your hearts? Look at my hands and my feet, that [you may
   see]

105z. imono kwaamí. Luntsímba, lutala kadi mpeeve ka-yena
   a. imono kwaamí. Luntsímba, lutala kadi mpeeve ka-yena
   b. imono kwaamí. Luntsímba, lutala kadi mpeeve ka-yena

   it is I myself. Touch me and see; for a ghost does not have

106z. nsunt ye-vsti-ko, bonso bu-lumweent vo ngyena.
   a. nsunt ye-vsti-ko, bonso bu-lu Amweent vo ngyena.
   b. nsunt ye-vsti-ko, bonso bu-lu Amweent vo ngyena.

   flesh and bones, as you can see I have.
Text for chapter 9.
Dialect: kiManyanga.
Informant: Mr. A. Ndolo Menayame.
Source: own composition.

1. Mambu m'maâni. métî. sokwa_mudyaambô. dyasâdisë Tâta Kevin Donnelly. These words are composed in order to help Mr. Kevin Donnelly.

2. métî toonta longuka_mintingu myakîManyanga, ndînga who is trying to investigate the tones of kiManyanga, the language

3. yabistî-Manyanga mâLwoozî kunstî yâzatir. kiManyanga of the Manyanga of Lwozi, in the country of Zaire. The kiManyanga which is being spoken is the kiManyanga of Nsundi-Lutete, a large town which is not far from Lwozi or Kingoyi. We ask on Mr. Kevin's behalf

4. kyêtî uvûsa. kiManyanga kyâNsundi-Lutete, vûla dyenâ. ability and perceptiveness from the Lord God, so that he may do careful research in his work. We also ask again for him that

5. ntama ye-Luoozî évêî Kingôî. Twêtî loombîlë Tâta Kevin. in his work. We also ask again for him that

6. ngâlo ye-meelô. kwaTâta Nzaambô. pàstî. katoma. mûsuungâ ability and perceptiveness from the Lord God, so that he may do careful research in his work. We also ask again for him that

7. musalu kiâandî. Twêtî kumulombîlë dyâaka mpê. mpêstî vo. so that they also will try to examine it, and enlarge

8. kàndë. zayikisa ndînga yâayâ. kwabaântu babînti. he may be able to make known this language to many people,

9. mpêstî vo. baaâ. mpêstî. baaâ toonta mâlongukâ-ûô. ye-kudikila so that they also will try to examine it, and enlarge

10. dîêla dîêla. mboki mpê. toonta. muménûnûsa. salû. kyêtî their perceptions and afterwards try to extend the work which has been started by Mr. Kevin. KiManyanga has three tones (lit. sounds), but some people speak with four tones.

NB: 6: ** slow.
   These tones vary from person to person and sometimes
   also from area to area. The variation of these tones
   can also be studied, and enlarge our knowledge.
   Here I give examples to show that the variation
   of the tones or tone can change our comprehension
   of the words which are being spoken. I begin with single words,
   and afterwards I will take longer examples. The tones are
20. "Mfunu been? vo tusobele muntingu, tusobele mpe? mbamb?"
   very important indeed. If we change the tone, we change also
21. "Ma-tuzolele kaamba, kansi bantu balenda zaay? nki
   we wish to say, but people can know what
   we want to say, since the tone or tones change.
23. "Vava? biswaani: kunst?, kunst; veta, veta; loonga, lenga;
   Here are the examples: under, pillar; [to] plough, village; dish, [to] educate/teach;
   village, distance/length; weapon, [to] give birth to. Now I
   give the preceding
   examples in longer sentences: the dog has gone under the table,
   Christ is the pillar of the Church; the women are cultivating
   the field.

27.  `yandi impfumu avása; tuula madya muloonga, ngudFu. wëti
he is the chief of the village; put the food on the plate, the
mother is

28.  longi mean'andi; künkä abula këlle? , ndzôlele dzaya
the village; which village are you from? ( ? ) , I would
like to know

29.  bula buandzila yaya; mwaanë wëti sakanë ye-buta, yaandi.
the length of this road; the child is playing with a gun, she

30.  waabuwa mposa. / Boons, tulenda mona · miningu · milenda
the child is playing with a gun, she
gave birth to the chief. As we can see, the tones can:

31.  sobë vo tühéki mpouë mëst· most · ye bu-tubbéka•a · mpouë
change if we take individual words, and when we take words

32.  mumloonga myänë. Tutëndë mpë lónguë · ntsëbolë · miningu:
in longer stretches. We can also study the variation of the
tones

33.  mumloonga myändyë ye-tëbantë tõmbë · münkë andzëla
in longer stretches and try to find out in what way

34.  miningu myöomyë · ntsëbaënga, ye-tukë · kyë · ntsëbolë · zëzo. / 
these tones change, and the reason for these variations.

35.  Ntsëdë vuëvu vo buantu babëngë · bana lónguë · ye-sënikë
I greatly hope that many people will study, and publish

36.  ndòngokolo zëau · zakùManjëanga, bunë tulenda bëka mëtë · ...
their researches into, k'Manyanga, and then we will be able to
obtain answers

37.  mëbëvuë · të-tuvtëndë. Bisi-në · ye-bandëwënga · bandëndzë
the questions which we have posed. If native speakers and
foreign scholars

38.  vo bana sällë · vsëмоëstë · bunë st-tëbakëa · mëtë · zësikëla.
work together, then we will get the correct answers.

39.  Kwa'mwan' ami · Ndzëmbë këkëla yëaku! Twëna kyëse beenë?
To my son - God be with you! We were very pleased

40.  muttaambuła nk'andi · àakù · ye-nsangu zëaku. Twëna mëntë
receive your letter and your news. We are in good enough

NB: 35: + + fast.
41. health at home here, and we hope that you also are

42. completely well. ..... The children are working very hard.

43. The photos that you sent, up until now they have not arrived,

44. but I suppose it is necessary to send things by post. (?) If you
don't find time [to write]

45. when you get to Anvers, that's alright, but at a time that suits you

46. you can just reply [then].
Comparison passage for chapter 9: Laman.

11. ... Kifanaga kyenä ye-mentingu
l. ... Kifanaga kyenä ye-mentingu
n. ... Kifanaga kyenä ye-mentingu

12. mntatu káansi bankaka bazonqa nga ye-mentingu miya.
l. mntatu káansi bankaka bazonqa nga ye-mentingu miya.
n. mntatu káansi bankaka bazonqa nga ye-mentingu miya.

13. Mntingu myoomo misobaanga mumuntu ye-muntu ye-muntu
l. Mntingu myoomo misobaanga mumuntu ye-muntu ye-muntu
n. Mntingu myoomo misobaanga mumuntu ye-muntu ye-muntu

14. zankaka mpe muzuunga ye-zuunga. Tsobolo yamntingu
l. zankaka mpe muzuunga ye-zuunga. Tsobolo yamntingu
n. zankaka mpe muzuunga ye-zuunga. Tsobolo yamntingu

15. myoomo mntenda mpe longukwa, ye-kudtkila ndwenya zeeto.
l. myoomo mntenda mpe longukwa, ye-kudtkila ndwenya zeeto.
n. myoomo mntenda mpe longukwa, ye-kudtkila ndwenya zeeto.

16. Vava ngyeti vana bifwaant musonga vo ntsobolo.
l. Vava ngyeti vana bifwaant musonga vo ntsobolo
n. Vava ngyeti vana bifwaadit musonga vo ntsobolo

17. amntingu evu muntingu lenda soba nzilt lu zeeto.
l. amntingu evu muntingu lenda soba nzilt lu zeeto
n. amntingu evu muntingu lenda soba nzilt lu zeeto

18. zambo va zetl vówva. Ngyeti bedika ye-mpóva most most,
l. zambo va zetl vówva. Ngyeti bedika ye-mpóva most most,
n. zambo va zetl vówva. Ngyeti bedika ye-mpóva most most,

19. mboki ngina baka bifwaant byanda. Mntingu myeena.
l. mboki ngina baka bifwaant byanda. Mntingu myeena.
n. mboki ngina baka bifwaant byanda. Mntingu myeena.

20. mntnu bënti. Vo tusobele muntingu, tusobele mpe maambu
l. mntnu bënti. Vo tusobele muntingu, tusobele mpe maambu
n. mntnu bënti. Vo tusobele muntingu, tusobele mpe maambu
21. ma-tuzolele kaamba, kansi baantu balenda zaeya nkt
l. ma-tuzolele kaamba, kansi baantu balenda zaeya nkt
n. ma-tuzolele kaamba, kansi baantu balenda zaeya nkt

22. tuzolele kaamba mpeleko muntingu eva muntingu myanswásaana
l. tuzolele kaamba mpeleko muntingu eva muntingu myanswásaana
n. tuzolele kaamba - peleko muntingu eva muntingu - myanswásaana

23. Vava tbfwâani: ..... 
l. Vava tbfwâani: ..... 
n. Vava tbfwâani: ..... 

30. ..... Boonso tulenda mona mindingu milenda 
 l. ..... Boonso tulenda mona mindingu milenda 
 n. ..... Boonso tulenda mona mindingu milenda 

31. soba vo tubeki mpóva most moi ye bu-tubakaanga mpóva 
 l. soba vo tubeki mpóva most moi ye bu-tubakaanga mpóva 
 n. soba vo tubeki mpóva most moi ye bu-tubakaanga mpóva 

32. mumilloonga myanda. Tulenda mpe longuka ntsboló aminatingu 
 l. mumilloonga myanda. Tulenda mpe longuka ntsboló aminatingu 
 n. mumilloonga myanda. Tulenda mpe longuka ntsboló aminatingu 

33. mumilloonga myandza ye-toonta toomba munki andzila 
 l. mumilloonga myandza ye-toonta toomba munki andzila 
 n. mumilloonga myandza ye-toonta toomba munki andzila 

34. mindingu myombang mtsobaanga, ye-tuku kyantsboló zoozo. 
 l. mindingu myombang mtsobaanga, ye-tuku kyantsboló zoozo. 
 n. mindingu myombang mtsobaanga, ye-tuku kyantsboló zoozo. 

35. Ntsidí vuuvu vo baantu bântingi baná longuká ye-sônítá 
 l. Ntsidí vuuvu vo baantu bântingi baná longuká ye-sônítá 
 n. Ntsidí vuuvu vo baantu bântingi baná longuká ye-sônítá 

36. ndongokolo zëau zaktînyaâanga, bunâ tulêenda bâka muvû. 
 l. ndongokolo zëau zaktînyaâanga, bunâ tulêenda bâka muvû 
 n. ndongokolo zëau zaktînyaâanga, bunâ tulêenda bâka muvû
37. ម៉ុង៖ ឈុត ម៉ុង៖ មានពីរ ប៉ាន់ភាព។
1. ម៉ុង៖ ឈុត ម៉ុង៖ មានពីរ ប៉ាន់ភាព。
n. ម៉ុង៖ ឈុត ម៉ុង៖ មានពីរ ប៉ាន់ភាព。

38. ការវាសត្ថិរើក អំពីព្យាយាម។
1. ការវាសត្ថិរើក អំពីព្យាយាម。
n. ការវាសត្ថិរើក អំពីព្យាយាម。

Text for chapters 10 and 3.
Dialect: kisiNgombe.
Informant: Rev. A. Komy Banzadio.
Source: own composition.

1. Waawu. ndzolele kulosoonga maka maambu. mundzyeto lolo aame muntsi?
Now I would like to tell you a few things about my visit to the

2. aAngletser. Ndzolele vuvila. mukuma kyasaama-sk'ul ntete. /
of England. I would like to talk about the 'summer school' first.

3. Sama-sk'ul. Muntsi eto akoongo. katwena ye-lekwa kyiokwanga
The summer school. In our country of Congo we have nothing
referred to

4. nkumbu asama-sk'ulko. Inkumbu yandzenza muwa; ikuma, tekila
by the name of summer school. It is a strange name to hear; so,

5. kota mungudi ansamu, ndzolele vo twafflimpa ntete. mpili
getting to the heart of the matter, I would like us to examine
before

6. antsuungi zina zimonekene muntsi al'mphutu. / Linga, ntsuungi
of seasons which are seen in the land of Europe. Indeed, the
seasons

7. muntsi al'mphutu. intswaaswani beni kikilo. muntsi al'ntsungu zina
in the land of Europe are very different indeed from the
seasons which

8. zimonekene muntsi akoongo. Beeto muntsi akoongo. twena
are seen in the country of Congo. We in the country of Congo
have

9. ye-ntsuungi t'anu, buuna muntsi al'mphutu. bena ye-zilwa.
five seasons, whereas in the land of Europe they have four.
10. Ntsuungi zozo ziyikwanga munding' akiNgelezo. StoN, wintu,
Ntsuungi zozo ziyikwanga munding' akiNgelezo. StoN, wintu,
These seasons are called in the English language autumn, winter,

11. sprig, ye-sama. Vakati kwantsuungi zozo zawoonso, buna sama,

sprig, ye-sama. Vakati kwantsuungi zozo zawoonso, buna sama,
spring, and summer. Among all these seasons, well, summer

12. intsuungi yiyookokele muwete, yaa yilutidi zzolakana,

intsuungi yiyookokele muwete, yaa yilutidi zzolakana,
is the season which excels in beauty, it is very well-liked,

13. ekuma kad, yaa intsuungi amlini. / Musama, besi-Mphutu

ekuma kad, yaa intsuungi amlini. / Musama, besi-Mphutu
the reason being, it is the season of sun. In summer, Europeans

14. bayyangalalaanga beeni kikilu, ekuma kad, balenda yetila

bayyangalalaanga beeni kikilu, ekuma kad, balenda yetila
are very happy indeed, because they can sunbathe –

15. mutini, intsuungi yi-bakweenda yobilanga kumbu, ye yi-baluta

mutini, intsuungi yi-bakweenda yobilanga kumbu, ye yi-baluta
it is the season in which they go for a swim in the sea, and

16. zueetanga mumbaanza zamphila mumphila, eu nkutu, kiyiya

zueetanga mumbaanza zamphila mumphila, eu nkutu, kiyiya
visit various towns, or even go

17. muntsi zankaka. / Muntsuungi yeayi, bantu baluta bakkanga

muntsi zankaka. / Muntsuungi yeayi, bantu baluta bakkanga
to other countries. In this season, people often go on

18. vuundu; stkool zikaangamaanga; mbevo mutupitaal’

vuundu; stkool zikaangamaanga; mbevo mutupitaal’
holiday; the schools close; invalids in hospitals

19. ziyayiktswaanga kumbaiz, mphasi vo bayetila mutini.

ziyayiktswaanga kumbaiz, mphasi vo bayetila mutini.
are taken outside, so that they can sunbathe.
20. "Ka-mutini' angolo been-ko. ne' tmutini' antsi aKoongo, kaants' ut6.
Ka-mutini angolo been-ko. ne' tmutini' antsi aKoongo, kaants' ut6.

It is not a very strong sun, like the sun in the country of Congo, but yet

21. kisse kikalanga muyetile-wu, kemussungula kwamwst'-Afelika.
kisse kikalanga muyetile-wu, kemussungula kwamwst'-Afelika.

it is pleasant to bask in it, especially for an African.

22. MuAfelika, muntsi' ne' intst aKoongo, baantu ka-bena ye-ffu
MuAfelika, muntsi' ne' intst aKoongo, baantu ka-bena ye-ffu

In Africa, in a country like the country of Congo, people are
not in the habit of

23. kyayanama kumutini'-ko. Kaants' kumphutu, buu6, bawoonso
kyayanama kumutini'-ko. Kaants' kumphutu, buu6, bawoonso
lying in the sun. But in Europe, however, everyone

24. babindamene muyangidika nitu kumutini. Kadi vo mutini umonekene,
babindamene muyangidika nitu kumutini. Kadi vo mutini umonekene,
feels obliged to let his body enjoy the sun. Since the sun has
come out,

25. t'luv duadinene. / Imukuma kyoky6, mutsungini uayi mp6,
t'luv duadinene. / Imukuma kyoky6, mutsungini uayi mp6,

it is a great opportunity. It is for this reason, in this season
also,

26. bakkubika lekwa kibokulwanga nkuumbu asama-skuul, isya vo,
bakkubika lekwa kibokulwanga nkuumbu asama-skuul, isya vo,

that they prepare things which are given the name 'summer school',
that is,

27. nkuumbu yaayi yasama-skuul. yitukid6 musama. Imusama baana.

this name 'summer school' comes from 'summer'. It is in summer

28. isya vo matoko ye-zinduumba. bakwendanga ulolo kusama-skuul -
isya vo matoko ye-zinduumba. bakwendanga ulolo kusama-skuul -
that is, boys and girls, go in a crowd to the summer school -

29. mpil' asikola. zivaangwaangwa. isikola zamutini. kuuna baantu
mpil' asikola. zivaangwaangwa. isikola zamutini. kuuna baantu
a type of school designed to be a school [full of] sun, where
30. balenda vuundila, longuka ye-sakana. / Muntangu yasambe buuna
   balenda vuundila, longuka ye-sakana. / Muntangu yasambe buuna
   can relax, study and play. In the time of summer there are

31. sikola zazitingsi zikubikwaanga kwamabuundu  mampta mumpita,
   sikola zazitingsi zikubikwaanga kwamabuundu  mampta mumpita,
   many schools organised by Churches of various types,

32. muvuvu kyatoma fitnamo, evo kala bati-bati ye-bantweenyeno
   muvuvu kyatoma fitnamo, evo kala bati-bati ye-bantweenyeno
   in the hope of truly approaching, or getting close to, the young
   people,

33. yevo baleke, ye-mulukana lwa attoma kubasanso mumambu
   yevo baleke, ye-mulukana lwa attoma kubasanso mumambu
   or teenagers, and with the aim of really informing them about the
   matters

34. masalu kyandaambil - koos, mantsi aa; koole, muluyindulu
   masalu kyandaambil - koos, mantsi aa; koole, muluyindulu
   of the work of God - firstly, in their own countries; secondly,
   in the consideration

35. lwasalu kyandaambil muntsi zankaka zina zikwendanga
   lwasalu kyandaambil muntsi zankaka zina zikwendanga
   of the work of God in other countries which missionaries

36. bamsyoneer. Imuntaangu yoyo mpe, matoko ye-zindumbu
   bamsyoneer. Imuntaangu yoyo mpe, matoko ye-zindumbu
   go to. It is at this time also that the young men and women

37. bavvilukanga ntimo, ye-kota mudibuundu, ye-bankaka mubaau
   bavvilukanga ntimo, ye-kota mudibuundu, ye-bankaka mubaau
   cleanse their hearts, and enter the Church, and some of them

38. bakukisaangana ye-tanga kimbaangili mukitu semisyoneer
   bakukisaangana ye-tanga kimbaangili mukitu semisyoneer
   put their names down and bear witness to becoming now missionaries

39. muluzungu lwaau lwaunjimba. / Vava ntezele kulusonga
   muluzungu lwaau lwaunjimba. / Vava ntezele kulusonga
   in their whole life. Now, I have already told you
some things about the word 'summer' and the origin of the name 'summer school'.

It is not my main aim to talk about the word 'summer'. My main aim is to tell you how the Baptist Missionary Society summer-schools started, or their beginning. That is, I would like to give you information about the summer-schools which are organised by the B.M.S. It was in the year 1910 that the first B.M.S. summer-school began. It was in the town of Folkstone. The results were good. From this time on it became obvious that the growth of the work increased very much indeed. And it began to be seen that the people who continued to enrol...
50. mukuenda kusama-skuul • ka-bakala ffulu-ko, ka-babaka ffulu-ko, 
mukuenda kusama-skuul • ka-bakala ffulu-ko, ka-babaka ffulu-ko, 
to go to the summer school were no small group, and remained no small group,
51. kad • fimamaw • tezo kyamafuunda matatu • evo nkkutu mafuunda 
kad • fimamaw • tezo kyamafuunda matatu • evo nkkutu mafuunda 
for almost the number of 3,000, or even three and a half thousand enrolled to go to the summer school.
52. maattatu ye-ndaambu • makisonikisa • mukweenda kusama-skuul. / 
    maattatu ye-ndaambu • makisonikisa • mukweenda kusama-skuul. / 
The directors of the B.M.S. in London opened nine schools, or
53. Mbuta zabiyemese kuisondra • bazizibula sikola naana, evo 
    Mbuta zabiyemese kuisondra • bazizibula sikola naana, evo 
The directors of the B.M.S. in London opened nine schools, or
54. nkkutu kuumi, muna • muv myomo. / Musama-skulz zantet • dyamonika 
    nkkutu kuumi, muna • muv myomo. / Musama-skulz zantet • dyamonika 
even ten, in these years. In the first summer schools, it became apparent
55. vo • program • isya vo, maambu mana makubikwa • vo • imafueti 
    vo • program • isya vo, maambu mana makubikwa • vo • imafueti 
that 'programmes', that is, things which are prepared as a schedule
56. laande • maka bahfuana, ye matoma laande, ye-baleeka • 
    laande • maka bahfuana, ye matoma laande, ye-baleeka •
to be followed, were useful, and were carefully followed, and the young people
57. batoma mo-yangalala • mpe. Tuuka ntaangu yoyo, buuna sama-skulz •
    batoma mo-yangalala • mpe. Tuuka ntaangu yoyo, buuna sama-skulz •
greatly enjoyed them as well. From this time on, there were summer schools
58. zattatamana kubikuia, ye zittatemanaanga kubikuia, nate ye-ssaau. / 
    zattatamana kubikuia, ye zittatemanaanga kubikuia, nate ye-ssaau. / 
which were constantly organised, and are being constantly organised, up until now.
59. Munuy myaami mileendi, dimonekene vo • sama-skul yitikutuik. 
    In those following years, it became apparent that the summer school had now become
60. semp • atdiya dyaminkwikizi, tadiya dyana bandzaambi, 
    a kind of factory for believers, a factory for children of God,
a factory for the Soul. There, those who did not believe could
be taken aside to be told about matters of the Soul. There, each
and every young person became now a missionary, and he had the
responsibility of
learning about matters of the Soul, about praising God with respect,
about praying, and about singing to Him. Indeed, there too the
young people learn
how they ought to respect the possessions or the property of
others.
Indeed, the belief of the believer is a matter of no small
difficulty,
nor is it the type of thing which is apart from and
is often outside life. No, the belief
of the believer is the type of thing which ought to be sincere,
and self-evident, and apparent in his deeds and personality
and in his whole life. It can be seen that the young men
and women who go to the summer school, on their return
to their homes, continue to be steeped in things of the spirit,
75. muka'ti kwantu zaau • ye-mung'indu zae' mpe. Ye mumvu
as concerns their bodies, and their minds also. And in the
year
76. wa fu'unda dimosi nkhamu vua makuمساعدةبانو ye-ye • bu-twafulwa
1964, when we were brought
77. kumpu'tu mulonguka, mundwak' etc kw'ang'letser'mumvu wowu,
to Europe to study, on our arrival in England in this year,
78. Tata zor' Tomatala • ye-mon' • twab'ka lau dyakwenda
Mr. Georges Tomatala and I took the opportunity of going
79. kusama-skul. Sama-skul y'yanthete yi-twayend'o • yakala muntu'se
to a summer school. The first summer school that we went to was
in the country
80. apesi-de-gal • mzunga kya nyukasi-elm • mufwata fana nkumbu
of Wales, in the region of Newcastle Emlyn, in a little village
by the name
81. ak'gilwini. Koun' • twang'ingina tum'inga toole, laandila dyodyo.
of Cilgwyn. There we stayed for two weeks, and after this
82. twafulwa kusudu de y'ang'letser kumbanz' aboskombo,
we were taken to the south of England, to the town of Boscombe,
83. ku-tuakala • lum'inga lumusi kaka, ye-vazimunina • twayenda
where we were for just one week, and afterwards we went
84. kusama-skul y'ankal' • yakala kubart3si, luku fi ye-mbanz'
to another summer school which was at Barton-on-Sea, near the
town
85. anymilti • mzunga kya hamshi. / Mufulu byawaono
of New Milton, in the region of Hampshire. In all the places
86. bi-twa'yeeta, twatoma tt'ambula, twalombwa muyimbi
that we visited, we were very well received, and were asked to
sing
87. nkunga myaksisi-Kongo • ye twalombwa mpe • musonga ntsango
songs of Kongo culture, and we were also asked to give news
88. zakisi-Kongo • ye-ntsatu • adi' bundu dyakoongo. Waatu,
of Kongo life and the state (?) of the Kongo church. Now,
I would like to tell you what I saw at the summer school. The director, each task which is under the supervision (?) of the director, and about the directing of this work. So at the summer school as well I saw people who were chosen to organise the work, these people being called in the English language 'staff'. Every summer school has its staff. In this staff there is a president (or director), secretary (writer), missionaries, conference director (director of a meeting), group leaders (leaders of groups), cateress (preparer of meals), servants, and a matron (or nurse). At the end of the summer school, the president gives his report to the general secretary in London. The beginning: Let us talk about the beginning of the work at the summer school. Almost all the summer schools usually begin on Saturday, according to the day of the month which was chosen.
by the senior officials of the people who were chosen to organise
the youth work. These officials carry out their work in a building
which is given the name in French of 'departement de jeunesse',
and in English is called 'young people's department'.
Among these officials directing the youth work can be seen
a number of pastors, and the general secretary for the youth
is a pastor. I have already told you that the summer school usually
starts on a Saturday. At this time the general secretary
hands over the responsibility of running the summer school to
the staff.
Thus the staff arrive at the location of the summer school as
the first comers, before the arrival of the young people or of
other people.
This gives them the time to try to arrange their affairs
as regards the organisation of the work. From the second hour
(or two o'clock), the young people begin to arrive, and it is the
secretary
117. mukubakaambá: ye-kubásoonga, masuku, maau mändeeka. Madyá to welcome them and to show them their bedrooms. The

118. mankaâkila: makálaängó, mu'óla yantsambwádi. Bâantu bawóonsó, evening meal is at seven o'clock. Everyone,

119. vo baluungidóyó, buna mu'óla yangujá, yampímpá, bakútakananga when they are present, about eight o'clock in the evening, meets

120. mundzo, alukútakanu, buuna prédíó: okubakáyísaängó, in the assembly hall, and the president welcomes them

121. ye-kubazódilanga ndwe'kulu, umberó: kusâmá-skuul. / Móla and hopes they had a good journey to the summer school. The kind

122. zábaantu. Kusâmá-skuul: kulenda mónika mpóla zammónsó zábáantu. of people: At the summer school can be seen many kinds of people.

123. eyedí ndzole’eyó váka-baléeke kaka-kó, bakwendanga kuuna, What I would like to say is that it is not only young people who go there,

124. kaansi, ye-bámbutá, mpe. Mubámbutá buuna tulenda mônó, but adults as well. Among the adults, well, we can see

125. bápaástóór, biseelo, baldongí bast’koola, bápaastóór pastors, domestics, schoolteachers. Joyfully

126. bába bawóonsó: basángazananga ng’ündu, ye-bápaástóór all these people exchange ideas, and the pastors

127. basádisanga métoko yé-zindumbó: mumambó makimpéve. Ínga, assist the young men and women in spiritual matters. Indeed,

128. ka-vána b’bákó, vakáti kwámbutá ye-baléeke-kó, / Dyaambó there are no obstacles between the adults and the young people. This

129. dyáadi dituunganga zoka, vakáti kwáau, vakáti kwabálöngí state of affairs strengthens love between them, between the teachers

130. ye-bá구lundó, biseelo ye-bápaástóór, bá’lundu yé-zhanásí, and the Church, the domestics and the pastors, the Church and youth,
The purpose of the summer school: The summer school is not a place which is gone to with the aim only of relaxing, but also, it is a place where study goes on. That is, play and study, these two things go on together. The adults and the young people sit down together and learn, that is, discuss subjects concerned with the conduct of work in the Christian Church, and in which they may dedicate themselves for their entire life to working for God in other countries, or in their own country.

So now I would like to tell you some of the things which are studied at the summer school: the reading of the Bible; the leading of prayers; the asking of questions about the work of missionaries in foreign countries; the singing of hymns; the reading of books - that is, there is also a house of books (or 'library'), and the young people are encouraged to read them, because it is a help in strengthening...
145. They also learn to swim in the sea.

146. On the other hand, they can learn games of various sorts, like football, volley-ball, basketball, tennis, ping-pong or table-tennis, cricket.

147. Myo myaau * mumaambu makimpeeue. / Uasambu dyankaka, balenda their hearts in matters spiritual. On the other hand, they can

148. Ye-vaz'munina * balongukaang'a mpe * mutta mantsaya k'umbu. / and moreover they also learn to swim in the sea. 

149. *Salu kyalumba k'umbu. *Sama-skuul * yiyantikange kyasaabala, Day to day work: The summer school begins on Saturday,

150. Ye * yilusbnqelengë * ma'ana mavaangamanga mulumbu kyokyo. Waa, and I have already told you what happens on that day. Now,

151. Bik' twafl'mpa * Salu * byalumba byankkaka. / Pet' baso ono. let us look at the work [done] on other days. All of us

152. Tutwomene dyo-zayë, laendila ma'ana tyyt'gangang' muBibila know very well, according to what we read in the Bible

153. Mun'bow waantsë'mono andza, Ndzaamb' wäsala lumbu saambanö, about the creation of the world, that God worked six days

154. Mum'anisa salu kyand' kyawoonso mulumbu. Mukyantsë'mbaoö* to complete all his work entirely. On the seventh day

155. Wavundza, ye dysonama vô: 'Ziltisa lumbu kyavuundë, mphasi he rested, and it is written, 'Honour the day of rest, that

156. Wakt'ba-kyö * kyavuka. / Buunë, kusâmâ-skuul, lumbu kyokyo you may keep it sacred'. So at the summer school this day

157. Kitzitswangö bëeni k'kilu. Munyuku, kyalum'ingö, baëntu is held in very great respect. In the morning on Sunday,

158. Baso ono bakaëendanga kusâmbu kyabatl'istö * kita kena everyone goes to the Baptist church which is
159. lukufù...lukufù ye-sàmà-skul; munkooktile mpè bawgònsò
  close to the summer school; in the evening too everyone

160. ba'utukanga kùsaambù. Dyàmbù dyakísè edì vo. ìandìla
  returns to the church. A pleasant thing is that, following

161. màdyà mánköoktile, mu' bol' anàana yàmpìlimpo, buna ngìlabudulu.
  the evening meal, at eight o'clock in the evening, there is a
  hymn-singing session

162. zikubikwanga. Ìmpil' akìse mìwà. ngìlabudulu zìmbote-mbóto.
  organised. It is extremely enjoyable to hear the beautiful singing

163. kwàmatoko. ye-zìndúumba. Ìmìlùkkantu twàsìka Muvàangà, ìevo
  by the young men and women, with the object of praising our Maker,
  or

  Creator. The members of the church in the neighbourhood of the
  summer school go

165. Ìbuundananga yava. kwàsìtì. mìlùkantu twàsìka Ndzaambù mpà.
  to join them in the same place, with the intention of praising
  God also.

166. Tàskìla wàmbanà. buuna épilòg, ìs'a vò, ìmìbu kyàntàngulu
  Before the gathering breaks up, there is an epilogue, that is,
  a prayer consisting of a reading

167. Ìtòbibà, ye-ngìmbudulu. kivàangwànga. / Ìkòosò kyàmàndé,
  from the Bible, and singing, is made. Every Monday,

168. kyàzòole, kyàyà. ye-kyàtaànu, òtsàdulu yenà bonsò èbu: /
  Tuesday, Thursday and Friday, the schedule is like this:

169. Ìdol' antsàmbwàdi ye-ndàmbù: ntàngù. astìkàma, yàwòbìlà,
  7.30: time to get up, wash,

170. ye-yakàla bûkàbàma. / Ìdol' anàànà. ye-minuta kùmì ye-tsànòù:
  and get ready. 8.15:

171. ìmìmbù kyàntàkyuka - ìmìmbù kyàkà ìtìswàdùswàngwà, kwàbastàaf.
  morning prayer — this prayer is led by the staff,

172. kwàsìtì. ye-bàlèeke. Ìsàmbù kyànkufù kàkà, kyàminùta kùmì
together with the young people. It is only a short prayer of
173. ye-taanu. / bol' ana'ana ye-ndaambu: madya mantsy'uka. / 15 minutes. 8.30: morning meal.

174. bol' awa ye-ndaambu: lukutakanu; muntaangu yaayi, baantu bawoonsi. / 9.30: a meeting; at this time, everyone

175. ban'atanga maatibila maav, ye-lekwa byantsony'ina. / brings their Bibles, and writing materials.

176. bol' ak'umi: intaang'ay, agiyup da diskusyo, t'sya vo. baantu. / 10.00: it is time for the 'discussion group', that is, people

177. bawambusu mukuunku kayabantu naana evo k'umu, ye bakuwendanga are separated into groups of 8 or 10 people, and they go off

178. mufimp'ye-dol'azana byuuvo, ye-te'za sola, mbe'mu, mumaga to examine, and ask each other questions, and try to find answers for what

179. bawati'kulukutakanu. / bol' ak'umi zakoondia minute makumaya they have heard at the meeting. 10.45:

180. ye-taanu: baawoonsi. bavutukaang'a muna-suk'yayalukutakanu, everyone returns to the meeting-room,

181. ye-koonsi kabu. diskol'aga muntu. muvana'rap'o. evo ntsang' andre each group chooses a person to give a report, or account,

182. zamana ma-bafimpidi. / tuuka bol' ak'umi ye-mosi natee of what they have examined, from 11.00 to

183. ye-yakumt ye-zool: nthang'a awundu. / tuuka bol' amosi. / 12.00: free time. from 1.00

184. nate ye-bol' amosi ye-ndaambu: nthang'a adya. / mubola yazool: to 1.30: meal-time. 2.00:

185. nthang'a ants'aka z'mpila mumpila; banka bakuwendanga kumbu it is time for various games; some go to the sea

186. mulunguka ta mantsayi. evo yobila. / bol' ayi: ti kyankuk'ila. / to learn to swim, or for a dip. 4.00: evening tea.
187. *ool' **ntsambwadi: *madya manqoqotla. / **ool' anaana: luku/ikanu
187. *ool' **ntsambwadi: *madya manqoqotla. / **ool' anaana: luku/ikanu

188. *waankokotla; luku/ikanu waa/a *ludyatsutswanga kwabamisyane-ra
this meeting is conducted by the missionaries.

189. *lmuntaangku yia/yi *bamisyane-ra *basamunangwa *ntsangwa zasalu
It is at this time that the missionaries give an account of their

190. kyaa - muntsi za/basadiilanga salo kyaa, boonso *Koongo, work in the countries they are working in, such as Congo,

191. ye-india. Basdonganga sindima evi film, musoonga ntsi yi/a and India. They show movies or films, to show the country that

192. yi-basadiilanga salo kyaa, ye-noonayi mp* n'yi/aatlula asalu they are doing their work in, and also to show the progress of the work

193. kyaaDzambo * muntsi zo/zo. / lmuntaangku yia mp* basdonganga of God in these countries. It is at this time also that they explain

194. kwabaleeka * kusama-skuli * boonso bu-bau/a mbokolo * mukitu ka to the young people at the summer school how they heard the call to become

195. *misyane-ra, isya vo * bauvovanga kimbangi kyaa. Basdonganga mp* missionaries, that is, they give their witness. They also talk about

196. mphasti * ye-mawete mana ma-bam'onangwa * muntsi zo/zo. / Landa nile the difficulties and the pleasant things which they experience in those countries. Following

197. ntsoongolo entsangu zaa, baseek doing abakutulungula byuu/uu the giving of their account, the young people ask them questions

198. *byamphiila mumpifila. / *Dyambu dyaphi * dyen dyamfunu le/kulu, of various sorts. This event is of great importance,

199. ekuni kad * dituuntanga u/olo wamato ko ye-zinduumba * mukitu ka because it attracts a number of young men and women to become

200. semisyane-ra, ye ditubaanangwa nthangwa muyindula now missionaries, and gives them the opportunity to remember
the people of Africa and India in their prayers. Almost all the
missionaries, it was usually at the summer school that they heard
their call.

At this time also the Kongo people give an account of Congo
as regards the task of the Church and of young people. Questions
are also put to them, from 11.00 to

are also put to them, from 11.00 to

11.15: reading of the Bible

individually. 11.30: lights

out, and everyone goes to sleep. Every Wednesday is a day
for a visit to the town or to the sea. Every Friday, at

eight o'clock in the evening, is the day for the Lord's Supper,
or Communion.

These are the day-to-day events which occur at the summer school.
Text for chapter 11.
Dialect: kileta.
Informant: Mr. Y.K. Katesi.
Source: own composition.

1. Na kuyantilka A beno yamba mbote na mono. Awa mono ikele ngolo. 
   Na kuyantilka A beno yamba mbote na mono. Awa mono ikele ngolo.
   To begin with, accept my best wishes. Here I am well.

2. Mono kezaba ve kana beno kunaka ikele mpi mbote. Mono kumaka 
   Munu kezaba ve kana beno kunaka ikele mpi mbote. Mono kumaka
   I don't know if you there are also well. I arrived

3. Awa lawnthu go ntoyo ya baimindle na kilumbu ya kumi 
   Awa lawnthu go ntoyo ya baimindle na kilumbu ya kumi
   here in Europe, or the country of the white people, on the

4. na nane ya ngonda ugusti ya mbvula meluta yai. Na ntangu 
   na nane ya ngonda ugusti ya mbvula meluta yai. Na ntangu
   eighteenth day of the month of August of the year preceding this
   one. And when

5. ya munu kukulumukaka na pode ya zulu go avo-mbvula 
   ya munu kukulumukaka na pode ya zulu go avo-mbvula
   I disembarked from the aircraft, or aeroplane, it was

6. vanaka kunoka kantsi milee na mono kopolaka ve. Buna 
   vanaka kunoka kantsi milee na mono kopolaka ve. Buna
   raining, but my clothes did not get wet. None of my things

7. na mono yontso kopolaka mpi ve, sambu mbvula vanaka 
   na mono yontso kopolaka mpi ve, sambu mbvula vanaka
   got wet either, because the rain was

8. penez angular ve. Kilumbu yina ntangu kulalaka na ntangu.
   penez angular ve. Kilumbu yina ntangu kulalaka na ntangu
   not really heavy. That day the sun set when

9. ya beno vanaka ya kula kuna na bwala. Na mpinpa bo 
   ya beno vanaka ya kula kuna na bwala. Na mpinpa bo
   ours was going down there at the village. In the evening they
10. lit lamps on the streets, and it was as bright as

11. if the sun had not already set. On the eighteenth day,

12. I left the city I had first arrived in, and I

13. went to a small town by the name of Stratford-upon-

14. There I was received by a family. I stayed

15. two weeks in this village, and afterwards my sponsors sent

16. me to a town called Leeds. There I

17. studied at the university and at the end of the year I

18. got my diploma with good marks, because

19. I had read very good books, and [on account of] the calibre of

who were teaching me. When I got the certificate

21. Ya mukanda ya bo kapinga diploma, mone lomba ka na bantu ya munkanda ya bo kapinga diploma, mone lomba ka na bantu

they call a 'diploma', I asked the people

22. Ya van'aka kupesa mone mbongo sama bu na kulunguka dyaka ama ya van'aka kupesa mone mbongo sama bu na kulunguka dyaka ama

who were funding me about studying again here

23. Mbula yankaka. Bo kubuyaka ve ye bo kupesa mone ndzwa

mbula yankaka. Bo kubuyaka ve ye bo kupesa mone ntswa

for another year. They didn't refuse, and they gave me permission

24. Ya kubikala awa na Mputu. Voo yina beno monaka mone kuna

ya kubikala awa na Mputu. Voo yina beno monaka mone kuna

to remain here in Europe. And that's why you haven't seen me there

25. Na buala ve na ndzanguka ya meluta yai. Mba la yai mone

na buala ve na ndzanguka ya meluta yai. Mba la yai mone

at the village last Assumption. This time I

26. Fwetele kuvutuka na intsi na beto Zaïre, same mone kezola

fwetele kuvutuka na intsi na beto Zaïre same mone kezola

will return to our country, Zaire, because I do not want

27. Kubikala dyak' awa ve. Bamindele tikele bantu mosti ya mbote

kubikala awa dyak' ve. Bamindele tikele bantu mosti ya mbote

to remain here any longer. Europeans are good

28. Ti luzitu. Mone memona ntete kimia mosti ya mb a bo mesaala ve,

ti luzitu. Mone memona ntete kimia mosti ya mb a bo mesaala ve,

and respectful people. I have not yet seen one bad thing that they have done,

29. Kantsi mone lena kusoga bemo nde bo kezola kuma ti mingi.

kantsi mone lena kusonga bemo nde bo kezola kuma ti mingi.

but I can tell you that they like to drink a lot of tea.

* 15th August, used as the name of the period June-September.
30. **Bo keniua malafu miingi ve bontso be to bantu 'a Za'ir. Masa mpi**

They do not drink a lot of wine like us people in Zaire. Neither

31. **bo keniua miingi ve, kaka ti go kafe. Kuntsu mbala ya ngé**

bo keniua yo ngé miingi ve, kaka ti go kafe. Kuntsu mbala ya ngé do they drink a lot of water, only tea or coffee. Every time that you

32. **takwén'a kutela mundélé Awa na íntsi yāk, yāndi tayulá ngé**

takwenda kutela mundele Awa na intsi yak, yandikayula ngé go to visit a European here in this country, he will ask you

33. **kana ngé kezola kúndwa ti go kafe. Makáya mpi bo kendiwa yo**

kana ngé kezola kondwa ti go kafe. Makaya mpi bo kondwa yo whether you want a drink of tea or coffee. Tobacco too they smoke

34. **míngyi, bankénto ti bayakalalá, bana ya fyöti ti bambúta.**

míngyi, bankénto ti bayakalalá, bana ya fyöti ti bambúta. a lot, both men and women, young people and adults.

35. **Ntalu ya makaya meluta kitéso awa. Kíma yankáká ya munú**

The price of tobacco here is past measure. Another thing that I

36. **zoláka kuvíla na kusóna bénó yo yát - awá, katuka ngónda**

zolaka kuvíla na kusóna bénó yo yát - awá, katuka ngónda would like to note and to tell you is this - here, from the

37. **ya kumí na zólé ti ngónda ya tató, madídi kévándàka míngí.**

ya kumí na zólé ti ngónda ya tató, madídi kévándàka míngí. 12th month (December) to the third month (March), the cold is very great.

38. **Bantu yankáká ngé tamóna bo keváta bapantalo zólé ti**

Some people, you will see them wearing two pairs of trousers, as well as

39. **simísí ti télíká ti kazáká na zóló ya míféle yát yónso.**

a shirt, and a cardigan (?), and a coat (?) as well over all these clothes.

40. Na ntsungul ya madidi, mbvula kénokaka míngi vê aå', kántsí. Na ntsungul ya madidi, ... mbvula kénokaka míngi vê aå, kántsí. And in the cold season there is not much rain here, but

41. mpfumpfu ya mpémbe kébwaka na ntótó. Bandzó, babala-bálél tiled. mpfumpfu ya mpémbe kébwaka na ntótó. Bandzó, babala-bálél tiled. snow (lit. white flour) falls to the ground. The houses, the roads, and

42. mpfínda ké,kumaka mpémbe na ntsungul yaí. Ve ntángu yankaká. mpfínda ké,kumaka mpémbe na ntsungul yaí. Ve ntángu yankaká. the trees as well, become white in this season. And sometimes

43. mpíla ya kutambula na makulu gô kamínýo kévandáka ve. Bontso mpíla ya kutambula na makulu gô kamínýo kévandáka ve. Bontso, it is impossible to travel on foot or in a vehicle. As

44. bêno memuná móno kwáku òkéle mbote. Ndzo-nkánda kedyáta bêno memuná móno kwáku òkéle mbote. Ndzo-nkánda kedyáta you have seen, I am fine here. My studies are going on

45. mbote-mbóte, ndzo-nkán'a na móno òkéle pípí na kifulu ya móno mbote-mbóte, ndzo-nkán'da na móno òkéle pípí na kifulu ya móno very well; my place of study is near the place where I

46. kébíkala'ka, móno tápésa bêno ntsíni atá fuóti vé, móno kélandá kébíkala'ka. Móno tápésa bêno ntsíni atá fuóti vé. Móno kélandá am living. I will not give you the slightest reason to be ashamed of me. I am following

47. malôngyí ya bêno kupesaka móno na ntángu ya móno vandáka malôngyí ya bêno kupesaka móno na ntángu ya mónu vandáka the advice which you gave me when I was

48. kúkúis' awá, ye móno kétula kikésa míngi ná ndzo-nkánda. Bétó kúkúisá awá, ye móno kétula kikésa míngi ná ndzo-nkánda. Bétó coming here, and I am dedicating myself entirely to my studies (?). We

49. takutána na kísiwu yai; bêno bikal'a mbóte; ye bêno pésa mbóte takutána na kísiwu yai; bêno bikal'a mbóte; ye bêno pésa mbóte will meet again this dry season (May-August); take care, and give my best
50. In our family, we have many languages,
regards to all the elders of our family.

51. The languages of Zaire. In the country of Zaire we have many
languages, um,

52. some people say that we have

53. all the languages of Zaire. The biggest languages are

54. all the languages of Zaire. The biggest languages are

55. Ciluba. Baluba of Kasai

56. speak Ciluba, and the people who are beside them speak

57. that language too. Lingala is the language of the people of the
equatorial region, or of

58. Kinshasa, but the people of Bandundu or Bas-Zaire also speak it.

59. If you examine carefully, you will see that around Lake Blackwater

60. the people also speak Lingala. Kiswahili is spoken in Shaba,

61. Kivu, and also in Haut-Zaire. There in Haut-Zaire also, you will
see that

62. some people also speak Lingala. Kikongo is spoken in

63. Bandundu, in Kwilu-Kwango, and also in Bas-Zaire. But there
is no way of stating precisely where people speak these languages.

because you will notice that in one area people speak many languages -

you will notice each person sometimes speaks two languages,

or three languages, or four languages; he has the language of

his parents, his father's and mother's, um, he has

also that language from among (?) the four biggest languages of Zaire, that used

by government officials he knows, um, if he has gone to school

he will also speak French, um, some also learn English

there at school, um, and considering this troublesome situation, you might say that

some people speak far too many languages!

If people who have come to one place or who have congregated

at one place meet, we often see that they

speak the language of that place. If they have received a

lot of education as well, um, [if] they have been at school for a long period, or
at universities, you will see that they will often speak French, or they will speak Lingala or Kiswahili or Ciluba, and they will set aside there to one side the language of their home town, or they will speak it also, but not very much. Therefore, the leaders of our country, seeing the difficulties with these languages, that do not speak one language, are working very hard (lit. with great courage) so that the entire population of Zaire should speak one language, um, and the hard thing (?) for them is that I see that they would like Lingala to become the main language in Zaire, but not all the people agree.

If you consider carefully you will see that the people of Shaba or Kivu — there they do not like Lingala much. We should agree that our President Mobutu speaks Lingala when he speaks — when he addresses all the people. And music also, our musicians sing
92. na Lingala, e mu Lingala Democrats founding a base. Munu in Lingala, um, in, Lingala is also the language of the soloists. I

93. keba na ndinga ya mbala 'ankaka takuma ndinga mosi think that some time this language will become the main

94. ya nene ya Zair, mbal 'ankaka guvernamo tasonga bantu yonso language of Zaire; some time the government will tell the entire

95. tu ya Zair na kutuba yau, population of Zaire to speak it.

96. Kilumbu mosi, munu vandoka kutambula piri na mas, ye mono One day I was walking along by the river, and I

97. kumonaka bwatu msti kuna Nani kuvanaka kuna? Yo kuvandoka saw a boat there. Who was there? It was

98. mutambi mosi mono, kutelamaka ye kutalaka yandi Cutambi a fisherman. I stopped and watched him. The fisherman

99. kumonaka mono, ye yandi vandoka kukusaka penepene na saw me, and sailed over to the

100. mucidi mas kuvandoka nen yina y kubakaka mutambi bank of the river. The river was big, so it took

101. ntangu moni ming saum na kukuma na mucidi mono vandoka some time to reach the bank. I was

102. keka kutelamaka na kutula mutambi. Na ntangu bwatu na yandi still standing watching the fisherman. When his boat

103. kuku maka na mucidi mutambi basuka na bwatu ye kusaka reached the bank the fisherman got out and walked

104. penepene na mono go piri na mono. up to me.
APPENDIX 4
Summarised examples of variant contours

1a bay'indalele 'they looked sad' final
   b bay'indalele, ... non-final

2a yo-yu’yuzaan' 'and conversing with each other' emphatic, exclusive
   (speaker as spectator)(?)
   b yo-yu’yuzaan' inclusive (speaker as member of the group)(?)
   Both non-final

3a kwandi 'indeed' pity (cf. low key = gravity, seriousness)
   b kwandi sympathy, scorn, considered of low repute

4a wantu woolë 'two people' beginning the story, starting a new
   contrasting episode
   b wantu woolë

5a imuntu ambote 'he/it is a good person' third person
   b imuntu 'I am a good person' first person

6a kyambote 'how are you?' question
   b kyambote 'I am well' statement

7a NaFungwa mpi 'Mr. Owl also' emphasises preceding word, narrative
   b NaFungwa mpi emphasises NaFungwa

8a yakundimina 'where I am buried' non-final(?), first person
   b wakundimina 'where he was buried' final(?), third person

9a gogele nde 'she said' weak (lady speaking), agreement, not discussion,
   usual
   b kuNaNgundu nde '(he said) to Mr. Nightingale' special kiNtandu accent,
   strong, emphasises asking of favour, marked

10a nkutu-ko 'not at all' emphatic
    b nkutu-ko

11a ka-dyaambu-ko 'no matter!' reply to 'someone you have received
    something from', usual(?)
    b ka-dyaambu-ko reply to 'someone who wants to do something for you',
    polite/marked(?)
    Both final

12a kilumbu kimosti 'one day' beginning the story ('once upon a time')
    bitumbu bitanu 'five days' emphasises time lapse (high pitch on numeral)
13a kuna-gata dy^andi 'to his village' sadness, aggression, imperative  
   b kuna-gata dy^andi usual

14a y'tuuka^anga lunswa 'when the termites come out' non-final (cc.  
   y'tuuuka^anga lunswa )  
   b mumbaamb^isa lunswa 'to use the termites as bait for him' final (cc.  
   mumbaamb^isa lunswa )

15a kuntu nani 'on whose head is it?' question  
   b kuntu yaFungiua 'on Mr. Owl's head' statement

16a k'an^si 'but' replies, neutral  
   b k'an^si explains, marked, cautionary

17a katuzeye-k^o 'we do not know' neutral  
   b katuzeye-k^o emphatic

18a 'ephila y'ina y'atu 'the way in which people' emphatic  
   b ephila y'ina y'atu neutral

19a saatu alutidi y'owel' eluvuvamu, saatu alutidi y'owel' ezola 'people  
   often talk about peace, people often talk about love' same syntactic pattern, emphatic(?)  
   b saatu alutidi y'owel' eluvuvamu, ye-zol^a 'people often talk about  
   peace, and love' tacked on, addition, afterthought

20a vuluzwa ye-maambu maandi-k^o '(not) saved with all his problems' neutral  
   b vuluzwa ye-maambu maandi-k^o emphasises maambu

21a maambu 'matters' neutral  
   b maambu emphatic

22a muu-kati kwand^i 'inside him' neutral  
   b muu-kati kwand^i emphatic, angry

23a y'indwidi 'you were thinking' statement  
   b y'indwidi 'were you thinking?' question

24a ingindu zaame 'it is my opinion' non-final  
   b ingindu zaame final  
   c ingindu zaame sadness  
   d ingindu zaame impossible(?)
25a ngindu zəaku 'your opinion' neutral
   b ngindu zəaku opposite idea to follow ('it's a good idea, but ...')

26 ṭ muná-phwa yaphila yəayi 'in a situation of this kind' pondering, thinking, open, emphatic

27a yakala dimono 'my husband' final(?), answer
   b yakala dimono / yakala dimono pre-posed, stands out, marked

28a bu-katöombula 'when she dished (it) out' pausal
   b bu-katöombula ---

29a ngye 'you' final, pausal, emphatic(?)
   b ngye ---

30a monó kisalu kĩngi ntsadidi 'I did a lot of work' neutral
   b kisalu kĩkingi ntsadidi monó 'I did a great deal of work' emphatic
      (cf. extra-high pitch, postposed monó, extra prefix kɪ-)

Several conflicting examples

31a yandë si-wuzibika kyeelo 'he has to shut the door' emphatic(?)
   (cf. yandë si-wuzibika ...)
   b ngë si-wuzibika kyeelo 'you have to shut the door' basic pattern
      before bridging (cf. ngë si-wuzibika ...)

32a katala 'he saw' continuity, connection with preceding clause, comma
   b katala (or katala) connection with succeeding clause, colon
   c katala expected subsequent action, 'and ...'

33a ndeë monó taata mfuido 'aieee, by my father, I'm dying' exclamation
   b ndeë mono taata mfuido emphatic exclamation(?)

34a bankaka mubaau 'some of them' basic pattern before bridging, baau
   most important word
   b bankaka mubaau emphatic

35a batelama 'they stood' marked(?), emphasises verb, strong
   b batelama already given, neutral(?), weak, sad

36a imuntu walunuungu 'he is a righteous man' exclamation, emphasises
   b imuntu walunuungu
   c imuntu wambote · ye-walunuungu 'he is a good and righteous man'
      emphasises wambote
37a kyantatu 'third' neutral  
   b kyantatu sad, despairing

38a ka-bámween'íng'í-ko 'they did not see him' verb + object substitute  
   b ya-ndí-ka-bámween'íng'í-ko 'him they did not see' verb + object  
      substitute + pre-posed object

39a ya-ndí-ka-bámween'íng'í-ko 'him they did not see' ----  
   b ye-mávanga mau-ko 'and (not) their actions' emphatic

40a kak'ívulúsa 'let him save himself' emphatic(?) (cf. kak'ívulúsa)  
   b ukívulúsa 'save yourself' ----

41a Ye-su-ko '(not) Jesus' ----  
   b Ye-su-ko exclamation, astonishment

42a kulenda mónika 'there can be seen' emphasises mónika(?)  
   b tuléndá nona 'we can see' ----

43a ntéte 'first' final  
   b ntéte non-final

44a kúmbazí 'outside' final  
   b kúmbazí non-final

45a ndzólele kulúsoonga / ndzólele kulúsoonga 'I would like to tell you'  
      beginning new topic  
   b ndzólele kulúsoonga about to move on to new topic

46a lissya vô 'that is' neutral  
   b lissya vô marked, contrast

47a mulukkanú lwótsika Muváangí 'with the object of praising (our) Maker' ----  
   b mulukanú lwa-atsika Ndzaambi mpë 'with the object of praising God also'  
      marked(?), emphasises mpë(?)

48a musáma-skulz zántete 'in the first summer-schools' beginning sentence/  
      new topic, emphasises zántete  
   b musáma-skulz zántete in the middle of the sentence

49a madyá mánkookíla 'the evening meal' emphasises mánkookíla  
   b laandíla madyá mánkookíla 'following the evening meal' neutral
50a ye-zhanes 'and Youth' emphasises ye-
b ye-bapastöor 'and the pastors' neutral

51a tuuka ntangu yoyo 'from this time on' neutral
b tuuka ntaangu yöyö marked, contrast

Both non-final. Same distinction from Ndolo Menayame.
Appendix 5

Comparative list of cognates

The first column gives items from Laman 1936; the second, items from Carter 1980b; the third, items from Daeleman 1963, 1966; the fourth, items from Guthrie 1967-71. I am grateful to Dr. Jan Knappert for translating the glosses in Daeleman 1966, and to Prof. P.R. Bennett for drawing my attention to several CB reflexes I had omitted. Note that Guthrie's *c is here written *s, and his *j as *z (after Mann 1976). Brackets around a comparative series number indicate a partial series, and a + after a number indicates a CS marked by 1 or 2. Items from each source have been marked using the convention ˈ or ˈ = underlying high pitch, and no mark = low pitch. Underlining marks a syllabic nasal (m, n). Asterisks before an item indicate that it occurs in the reduced count (14.8.2).
1. falling class:

<table>
<thead>
<tr>
<th>Tswana Word</th>
<th>English words</th>
</tr>
</thead>
<tbody>
<tr>
<td>ngáni</td>
<td>strange, foreign</td>
</tr>
<tr>
<td>ngáni</td>
<td>tartness</td>
</tr>
<tr>
<td>máázi</td>
<td>fat</td>
</tr>
<tr>
<td>báá</td>
<td>palm-tree</td>
</tr>
<tr>
<td>bááka</td>
<td>to catch</td>
</tr>
<tr>
<td>mbáamba</td>
<td>palm-tree</td>
</tr>
<tr>
<td>mbáamba</td>
<td>type of snake</td>
</tr>
<tr>
<td>mbámbi</td>
<td>horn</td>
</tr>
<tr>
<td>mbámbi</td>
<td>giant lizard</td>
</tr>
<tr>
<td>mbángu</td>
<td>roof-beam</td>
</tr>
<tr>
<td>mbángu</td>
<td>basket</td>
</tr>
<tr>
<td>mbánza</td>
<td>city</td>
</tr>
<tr>
<td>mbéáti</td>
<td>court of law</td>
</tr>
<tr>
<td>mbéála</td>
<td>wrong</td>
</tr>
<tr>
<td>mbéála</td>
<td>proximity, border</td>
</tr>
<tr>
<td>mbéongo</td>
<td>rust</td>
</tr>
<tr>
<td>mbéongo</td>
<td>cloth</td>
</tr>
<tr>
<td>bündá</td>
<td>small duck</td>
</tr>
<tr>
<td>mbúndu</td>
<td>heart</td>
</tr>
<tr>
<td>mbúngu</td>
<td>beaker</td>
</tr>
<tr>
<td>ndíla</td>
<td>track of rats in the grass</td>
</tr>
</tbody>
</table>

Note: The table includes Tswana words and their English translations, followed by additional information in parentheses.
*ndôngu pepper
*kyêlo [kiêlo] door
fü custom
füka respect, homage
füku night
*mfúlu tortoise
*mfúmu chief
*mfwêlê manner of dying
mfwêla small black ants
muñi [muñi] sunshine
*ðîñu [ðiñu] tooth
*muñi smoke
*ðîñsu [ðiñsu] eye
káka only
nkáka pangolin
nkáma dam
*nkànda book
kànga to roast
nkàyîi grandparent
*nkàyîi antelope
nkàfwa pungent smell of pepper
kêle root of palm-branch

ndôngu M(?)
kàyîi M
ffû M
ffukan ? ceremony
mfúmu [bituti] M
mfwêlê M
mfwêlêla B
nkànda M
nkàyîi M
nkàfwa M
nkáma E
nkànda E
nkàyîi D
nkàyîi E
nkàfwa D
kâka E
kikêle E

-tôngû 718
-bédo 80 ?
tûku 1864
-kûdu 1259
-kûmu 1265
-kûîdês 1255 death
-yûno 2073
-yûkû 2054
-yûsô 2030
-kâka 991 anteater
-kânda 1003 skin
-kâng 1009
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<tr>
<th>English</th>
<th>Glotto</th>
<th>English</th>
<th>Glotto</th>
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<tr>
<td>*nkísi</td>
<td>fetiš</td>
<td>nkísi</td>
<td>-kiti</td>
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<td>kóko</td>
<td>scab</td>
<td>kóko D crust</td>
<td>-kóko</td>
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<tr>
<td>kóaba</td>
<td>to sweep</td>
<td>kkáomba</td>
<td>-kómb-</td>
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<td>*nkóombo</td>
<td>goat</td>
<td>nkóombo</td>
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<td>nkúndo</td>
<td>baobab tree</td>
<td>koonko ??</td>
<td></td>
</tr>
<tr>
<td>nkóngo</td>
<td>grasshopper</td>
<td>makósí E</td>
<td></td>
</tr>
<tr>
<td>nkósi</td>
<td>payment on account of adultery</td>
<td>makósi E</td>
<td></td>
</tr>
<tr>
<td>*kúba</td>
<td>bag, bale</td>
<td>cf. kúba to weave</td>
<td></td>
</tr>
<tr>
<td>kúla</td>
<td>to grow</td>
<td>kkúla M</td>
<td></td>
</tr>
<tr>
<td>*nkúlu</td>
<td>old person</td>
<td>nkkúlu M</td>
<td>-kúd-</td>
</tr>
<tr>
<td>nkúmbi</td>
<td>vassal, satrap</td>
<td>nkúmbi E paramount chief</td>
<td></td>
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<tr>
<td>nkúmbu</td>
<td>time</td>
<td>nkkúmbu M</td>
<td></td>
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<td>nkúta</td>
<td>stores, provisions</td>
<td>nkúta E</td>
<td>-kúd-</td>
</tr>
<tr>
<td>kkúlé</td>
<td>to marry</td>
<td>kkúléa ??</td>
<td></td>
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<tr>
<td>lámbo</td>
<td>to cook food</td>
<td>llásamba M</td>
<td>-damb-</td>
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<td>llú</td>
<td>lunatic</td>
<td>llú E</td>
<td></td>
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<tr>
<td>léba</td>
<td>fig-tree</td>
<td>maléba A fig-trees</td>
<td></td>
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<tr>
<td>maléba</td>
<td>someoone who gently exhorts</td>
<td>maléba E propitiation</td>
<td></td>
</tr>
<tr>
<td>lléeká</td>
<td>to sleep</td>
<td>lléeká H</td>
<td></td>
</tr>
<tr>
<td>llómbo</td>
<td>to pray</td>
<td>llómbo M</td>
<td></td>
</tr>
<tr>
<td>lwálá</td>
<td>to be wounded</td>
<td>llwálá M</td>
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<td>-dúd-</td>
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<td>Term</td>
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<td>quarrelsome/unlucky person</td>
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<td>tree whose fibres are used for rope</td>
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<tr>
<td>sạ̣̣ngu</td>
<td>grain of maize</td>
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- **nñi**: 1343
- **ñitu**: 2178
- **mp̣̣ká**: D
- **mp̣̣ku**: D
- **mp̣̣ndt**: A
- **mp̣̣ng̣̣/mp̣̣ndt**: E
- **mp̣̣lo**: E
- **mp̣̣ku**: A, fate, doom
- **mp̣̣ng̣̣**: E, fibres of a palm-tree
- **mp̣̣tu**: E
- **sṣ̣̣lạ̣**: M
- **sṣ̣̣kạ̣**: M, to be excessive
- **sṣ̣̣la**: E
- **sṣ̣̣lu**: M
- **ṣ̣̣mbu**: E
- **ṣ̣̣mbu**: D
- **nṣ̣̣nga/ṃ̣nṣ̣̣nga**: B
- **nṣ̣̣ng̣̣ea**: M
- **sạ̣̣ngu**: M, grain of maize
- **sạ̣̣ngu**: D
- **mp̣̣tu**: E
- **ṣ̣̣lu**: M
- **ṣ̣̣mbu**: E
- **nṣ̣̣nga**: B
- **nṣ̣̣ng̣̣ea**: grains
- **sạ̣̣ngu**: M, grain of maize
- **sạ̣̣ngu**: D
- **mp̣̣tu**: E
- **ṣ̣̣lu**: M
- **ṣ̣̣mbu**: E
- **nṣ̣̣nga**: B
- **nṣ̣̣ng̣̣ea**: grains
- **sạ̣̣ngu**: M, grain of maize
- **sạ̣̣ngu**: D
- **mp̣̣tu**: E
- **ṣ̣̣lu**: M
- **ṣ̣̣mbu**: E
- **nṣ̣̣nga**: B
- **nṣ̣̣ng̣̣ea**: grains
- **sạ̣̣ngu**: M, grain of maize
- **sạ̣̣ngu**: D
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<td><em>sé</em></td>
<td>-sé 303 his father</td>
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<td>st'ité to promise</td>
<td>st'ité to say for</td>
<td>ns'ité D</td>
</tr>
<tr>
<td>ns'ité type of tree</td>
<td>ns'ité</td>
<td>ns'ité E</td>
</tr>
<tr>
<td><em>ns'ité</em> player, performer</td>
<td><em>ns'ité</em></td>
<td>ns'ité</td>
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<td><em>nts'íngu</em> neck</td>
<td>nts'íngu</td>
<td>nts'íngu</td>
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<td><em>ns'veko</em> central leaf of banana plant</td>
<td><em>ns'veko</em></td>
<td><em>ns'veko</em> E</td>
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<td><em>ns'vembe</em> larva of palm-beetle</td>
<td><em>ns'vembe</em></td>
<td><em>ns'vembe</em> E</td>
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<td>sóna to show</td>
<td>sóna</td>
<td>-song 381</td>
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<td>sóóla to choose</td>
<td>sóóla</td>
<td>-sóóla 366</td>
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<td><em>táata/ táata</em> father</td>
<td><em>táata</em></td>
<td>-táata 1686</td>
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<tr>
<td>tála to see</td>
<td>tála</td>
<td>-tád 1638</td>
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<tr>
<td>tánga to read</td>
<td>tánga</td>
<td>-táng 1672</td>
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<td><em>nt'ángu</em> sun</td>
<td><em>nt'ángu</em></td>
<td>-tango 1679</td>
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<td><em>nt'ántu</em> enemy, stranger</td>
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<td><em>nt'ántu</em> E</td>
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<td><em>nt'ántu</em></td>
<td><em>nt'ántu</em> A liana used as bridge</td>
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<td>téésó measure</td>
<td>téésó</td>
<td>kitéésó B</td>
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<td><em>nt'éka</em> sale</td>
<td>cf. <em>nt'éki</em></td>
<td><em>nt'éka</em> E</td>
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<td>téléma to stand</td>
<td>téléma</td>
<td>-tédam 1692+</td>
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<td>nt'éte first</td>
<td>nt'éte</td>
<td>-tê 1729</td>
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<td>nt<em>tí</em></td>
<td>-t*tíma 1738</td>
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<td>nt'tíma heart</td>
<td>nt'tíma</td>
<td>-t'tíma 1738</td>
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<tr>
<td>tóma to be good</td>
<td>tóma to do well</td>
<td>-tóma 1738</td>
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</tbody>
</table>
tόnda  to thank
*ntόlu  chest
tόunga  to build
ttόukά to come from
ttόulά to put, lay
kόulu [kόlu]  leg
vόla to cool
*mvό year
vwά  nine
vwάtά to get dressed
mvyόzί  whistling
yάnga  crime, fine
nzάđί kinsman of the same generation
*nzάđί river
*nzάla nails, claws
*zίku hearth
*nzό house
*nzόnzί little fish
zόunga  to walk around

ntόndo  1789
ntόdu  1822
tόung-  1848
tόuk-  1828
tόud-  1818
gudu  884
pόd-  1564
bỹ  217
bỹa  219
dýst-  727  wear
doodž̃  642
rzάd̃  921
rzάd̃a  920  finger[-nail]
giko  828
γiko  2056
rzό  946
dgόung-  597  wander
2. rising class:

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<td>poisonous tuber</td>
<td>ngaamba A</td>
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<td>*ngambá</td>
<td>porter, carrier</td>
<td>ngaamba D</td>
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<td>word</td>
<td>diaambu</td>
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<td>ngaenga</td>
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<td>intelligence</td>
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<td>*mbazi</td>
<td>tomorrow</td>
<td>mbasi A</td>
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<td>bongá</td>
<td>to take</td>
<td>boonga to pick up</td>
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<td>*mbongó</td>
<td>harvest, produce</td>
<td>mboonga A</td>
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<td>boba'</td>
<td>old woman</td>
<td>kibóba B</td>
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<td>bundá'</td>
<td>old person</td>
<td>cf. buunda A bald patch</td>
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<td>*bundu</td>
<td>fruit</td>
<td>buundu A</td>
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<tr>
<td>*bundu</td>
<td>group</td>
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<td>bunga</td>
<td>to destroy</td>
<td>banga</td>
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<td>red, yellow, orange</td>
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<td>nduungu A</td>
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<td>to walk</td>
<td>fuka A</td>
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<td>fuká</td>
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-gamba 771 affair
- [n]gaanga 786
-badi, 25
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<td>place</td>
<td>ffulú</td>
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<td>savanna</td>
<td>ffuté, grass, jungle</td>
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<td>payment</td>
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<td>kinsu</td>
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<td>spouse</td>
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<td>grave</td>
<td>nkanda A</td>
<td>nkama A</td>
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<td>kanga</td>
<td>to tie, bind</td>
<td>nkanda A</td>
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<td>bean</td>
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<td>koti 1162, nape of neck</td>
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<td>abscess full of pus</td>
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<td>steamer</td>
<td>kumbí vehicle</td>
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<td>coward</td>
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<td>luck, chance</td>
<td>laú</td>
<td>laú A</td>
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<td>longá</td>
<td>to teach</td>
<td>lloônga</td>
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* indicates root form
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<td>to fight</td>
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<td>*ngó/</td>
<td>*ngó  leopard</td>
<td>ngó</td>
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<td>ngombé M</td>
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<td>mountain</td>
<td>moongó M</td>
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<td>life</td>
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<td>kyoózi M/ kyoózi M</td>
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<td>fish-hook</td>
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<td>sort, kind</td>
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<td>poverty</td>
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<td>kisadé A</td>
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<td>to laugh</td>
<td>ssevá</td>
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<td>nsokó</td>
<td>path</td>
<td>nsoko A</td>
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- *donga* 662+
- *dung-* 711 be fitting
- *du[an]* - 675
- *go* 834
- *godo* 640
- *goma* 844
- *gome* 849
- *gongo* 858 back, ridge, hill
- *yoyo* 2143
- *díçi* 608?
nsudí stench
nsudí type of bird
sukulá to wash
nsungú hive, conical basket
*ntalu price
timá to dig
*tokó youth
tuuta to crush, beat
*ngulú pig
*lumbú enclosure
*ngungá bell
*munungá salt
*munú person
valá wall-lizard
vilá to lose
vingá to inherit
vuná to tell a lie
vundá to rest
vuwanda to sit
yinitá to be pregnant
yukutá to be sated
*nzalá hunger

nsudi A
nsudi D
nsungu A
ntalu
ntimá
toko
tuuta
ngulu
luumbú
ngungá
muungá
muuntú
kigala A

nsudi 408
-sukud- 410
-tim- 1752
tuut- 1852 to knock, pound
guda 887
gunga 900
yungúá 2176
ntu 1798

-yinit- 2062
-yukut- 2057
-yugut- 2153
-zada 917
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<td>elephant</td>
<td>ndza'</td>
<td>nzau</td>
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<td>zeng'</td>
<td>to cut off</td>
<td>zzeenga</td>
<td>-zogu 951</td>
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<td>ziku</td>
<td>-seng- 321</td>
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<td>lawyer, judge</td>
<td>cf. nzonz'</td>
<td>nzonz' A</td>
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3. acute class:

(i) assigned to the falling class:

bända chief’s hat  kibända E
mbóko commission, bribe  mbóko E
kitböndu trunk of banana-tree  kiböndu E
ndömbe dark, black  ndömbe 'the Blackness'
(<lombé to get dark)

nkánu law-suit  nkánu

nkáta lap (<katá to fold)  nkáta

nkumbí rodent  nkumbí D

vúmi reverence  vúmi

(ii) assigned to the rising class:

*ndúmba maiden  ndúmba

*nkókíla [nkkitá] evening  nkókíla

nsömbe type of antelope  nsömbe A

ntákí papá  nteka A

*Nzámbí God  Nzámbí

*nzénza [nzenza] stranger  nzénza

*zúnda thousand  zúnda

cf. also táata/ tāata; bundú/ bundú; kosti/ makosti; zíku/ zíku.
Appendix 6

Reflexes of CB lh

The first column gives items from Guthrie 1967-71; the second, items from Laman 1936; the third, items from Carter 1980b; the fourth, items from Daeleman 1963, 1966. The items are grouped according to the reflex in Laman 1936.
Reflexes of CB *lh (grouped according to reflex in Laman 1936):

<p>| 120 | -bigá  | pot        | mběka      |
| 151 | -bitá  | war        | mvíta      |
| 163 | -bombó | forehead   | mbóombo nose |
| 194 | -bugí  | squirrel   | búktí      |
| 111 | -sukí  | hair       | lusúktí    |
| 692 | -dugú  | friend     | ndúku      |
| 743 | -dymbá | smell      | ndúmba     |
| 744 | -dympí | continuous rain | muúmbí     |
| 768 | -gadí  | nut of oil-palm | ngáží  |
| 780 | -gandá | village    | ngândá     |
| 875 | -gubú  | hippo      | ngúvu      |
| 700 | -gubú  | hippo      | mvúbu      |
| 941 | -ztúá  | path       | nzíla      |
| 959 | -zudú  | top, sky   | zúlu       |
| 1018| -káti  | inside     | káti       |
| 1097| -kobá  | box        | lukóbe     |
| 1242| -kutú  | scorpion   | nkútu      |
| 1243| -kutú  | ear        | kutú       |
| 1374| -nuní  | bird       | núní       |</p>
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Note: The Arabic words are in bold for emphasis.
Appendix 7

Dialect similarity: data and displays

The following section gives basic data for chapter 15, and various additional data and displays which would have been too bulky to fit into the text. They are as follows:

7/1: full pitch-count
7/2: collapsed pitch-count
7/3: 7/2 expressed as percentages
7/4: 7/3 in graphic display
7/5: ranking and matrices for the first method
7/6: matrix sequence for the first method phenogram
7/7: linkage diagrams for the first method
7/8: matrix sequence for the second method phenogram
7/9: linkage diagrams for the second method
7/10: matrix sequence for the third method phenogram
7/11: linkage diagrams for the third method
7/12: scattergrams
7/13: MDSCAL map for the first method
7/14: MDSCAL map for the second method
7/15: MDSCAL map for the third method.
Appendix 7/1: full pitch-count.

The pitch-count involved (i) place of high pitch, and (ii) type of word on which the high pitch occurred.

In the first case the following subdivisions were noted:

- **rs**: high pitch on root-syllable
- **prs**: bridge from prefix to root-syllable
- **sh**: high pitch one syllable leftwards from the root-syllable (shift)
- **lst**: high pitch on first syllable of the word (where this first syllable is not the root-syllable [rs] or the syllable preceding a root-syllable [sh])
- **pen**: high pitch on penultimate syllable
- **ult**: high pitch on last syllable
- **∅**: no high pitch
- **←**: no high pitch marked, since the word is inside a bridge
- **→**: bridges on individual words.

In the second case the following types of word were distinguished:

- **con**: connectives with ye-
- **gen**: genitives with -a-
- **loc**: locatives with ku-, mu-, va-
- **mun**: long locatives with kuna-, muna-, wana-
- **sta**: stabilised items with i-
- **IV**: items with initial vowel
- **nom**: nominals with none of the above prefixed elements
- **pro**: pronouns and possessive pronouns
- **vbl**: verbals
- **oth**: other items (demonstratives, conjunctions, etc.).

Before each pitch-count is given: the dialect abbreviation (see endnote 2 to chapter 15); the chapter in which the dialect is discussed; the name of the dialect; the informant; the source of the text; and the line numbers of the sample passage in the text (see Appendix 3).
**B: ch.4, kimbanz's Kongo: Ntoni-Nzinga, Bible, 23-36, 39-46.**

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**Y: ch.5, kivanda/kintandu: Ntoni-Nzinga, folktale, 52-83.**

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**Z: ch.6, kizombo: Ntoni-Nzinga, spontaneous, 33-58.**

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M1: ch.8, kīManyanga: Ntoni-Nzinga, Bible, 43-77.

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M2: ch.9, kīManyanga: Ndolo Menayame, own text, 11-23,30-38,42-46.

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S: ch.10, kisìNgombe: Komy Banzadio, own text, 128-167.

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total number of words: 237.
Appendix 7/2: collapsed pitch-count.

Place of high pitch is grouped in four main classes:
- rs: high pitch on the root-syllable, containing 7/1 rs and prs
- f: high pitch in front of (before) the root-syllable, containing 7/1 prs, sh and 1st
- b: high pitch behind (after) the root-syllable, containing 7/1 pen and ult
- z: no (zero) high pitch, containing 7/1 ø and ↔.

Type of word is grouped in four main classes:
- p: pre-prefixed, containing 7/1 con, gen, loc, mun, sta, IV
- n: nominal, containing 7/1 nom and pro
- v: verbal, containing 7/1 vbl
- o: other, containing 7/1 oth.

In the tables below, t stands for 'total'.

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Appendix 7/3: 7/2 expressed as percentages.

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The first section of each line shows the proportion in the rs column, the second (shaded) section shows that in the f column, and the third section shows that in the b column.

(based on an idea by Michael Mann)
Appendix 7/5: ranking and matrices for the first method.

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</tr>
<tr>
<td>Y 6%</td>
<td>Z 4 2</td>
<td>Z 23%</td>
<td>Z 20 19</td>
</tr>
<tr>
<td>Z 4%</td>
<td>N 1 5 3</td>
<td>M1 17%</td>
<td>N 29 10 9</td>
</tr>
<tr>
<td>N 1%</td>
<td>M1 14 8 10 13 11</td>
<td>N 14%</td>
<td>N 8 31 12 21</td>
</tr>
<tr>
<td>B 0%</td>
<td>M2 33 27 29 32 30 19</td>
<td>M2 13%</td>
<td>M1 26 13 6 3 18</td>
</tr>
<tr>
<td>B 0%</td>
<td>M2 33 27 29 32 30 19</td>
<td>Y 4%</td>
<td>M2 30 9 10 1 22 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>n(b)</th>
<th>B Y Z N S M1</th>
<th>B Y Z N S M1</th>
</tr>
</thead>
<tbody>
<tr>
<td>N 49%</td>
<td>B Y Z N S M1</td>
<td>B Y Z N S M1</td>
</tr>
<tr>
<td>Y 28%</td>
<td>Y 6</td>
<td>Z 23%</td>
</tr>
<tr>
<td>S 21%</td>
<td>Z 8 9</td>
<td>M1 17%</td>
</tr>
<tr>
<td>Z 19%</td>
<td>N 38 21 30</td>
<td>N 14%</td>
</tr>
<tr>
<td>B 11%</td>
<td>S 10 7 2 28</td>
<td>M2 13%</td>
</tr>
<tr>
<td>M2 5%</td>
<td>M2 8 25 16 46 18</td>
<td>Y 4%</td>
</tr>
<tr>
<td>M1 3%</td>
<td>M2 6 23 14 44 16 2</td>
<td>Y 4%</td>
</tr>
</tbody>
</table>
Appendix 7/6: matrix sequence for the first method phenogram.

In the original matrix (1), Z and S are most similar, with the lowest figure (5.4). They are therefore clustered as ZS. The average distance of each dialect from this new cluster is then computed; eg., for dialect B:
\[
B/ZS = (B/Z + B/S)/2 = (13.3 + 9.7)/2 = 23/2 = 11.5.
\]
This procedure gives the following matrix:

\[
\begin{array}{cccc}
B & Y & ZS & N \\
Y & 19.2 & & \\
ZS & 11.5 & 9.2 & \\
N & 21.1 & 9.9 & 12.7 \\
M1 & 18.5 & 12.1 & 10.6 & 16.2 \\
M2 & 24.4 & 11.8 & 14.8 & 15.0
\end{array}
\]

The circled figure is lowest in this new matrix, so M1 and M2 are clustered at that level and another matrix is computed:

\[
\begin{array}{cccc}
B & Y & ZS & N \\
Y & 19.2 & & \\
ZS & 11.5 & & \\
N & 21.1 & 9.9 & 12.7 \\
M1 & 21.5 & 12.0 & 12.7 & 15.6
\end{array}
\]

Y and ZS are then clustered, and the following matrix results:

\[
\begin{array}{cccc}
B & ZSY & N \\
ZSY & 15.4 & & \\
N & 21.1 & & \\
M1 & 21.5 & 12.4 & 15.6
\end{array}
\]

ZSY clusters with N to give a new matrix:

\[
\begin{array}{cc}
ZSY & ZSYN \\
ZSYN & 18.3 \\
MM & 21.5 & 14.0
\end{array}
\]

All the dialects except B cluster, to give the final matrix:

\[
\begin{array}{c}
B \\
ZSYNNM 19.9
\end{array}
\]

In matrix sequences for the second and third method phenograms (7/8, 7/10), the matrices will be numbered 1-6 as here, with the relevant figures circled, but no further explanation of the method will be given there.
Appendix 7/7: Linkage Diagrams for the First Method

\[ \text{\(0 = 0\)} \]

\[ \text{\(1 \leq 5.4\)} \]

\[ \text{\(2 \leq 7.3\)} \]

\[ \text{\(3 \leq 7.7\)} \]

\[ \text{\(4 \leq 9.0\)} \]

\[ \text{\(5 \leq 9.7\)} \]

\[ \text{\(6 \leq 9.1\)} \]

\[ \text{\(7 \leq 11.0\)} \]

\[ \text{\(8 \leq 11.8\)} \]

\[ \text{\(9/10 \leq 12.1\)} \]

\[ \text{\(11 \leq 12.4\)} \]

\[ \text{\(12 \leq 12.6\)} \]

\[ \text{\(13 \leq 13.0\)} \]

\[ \text{\(14 \leq 13.3\)} \]

\[ \text{\(15 \leq 15.0\)} \]

\[ \text{\(16 \leq 16.3\)} \]

\[ \text{\(17 \leq 16.9\)} \]

\[ \text{\(18 \leq 18.5\)} \]

\[ \text{\(19 \leq 19.2\)} \]

\[ \text{\(20 \leq 21.1\)} \]

\[ \text{\(21 \leq 21.6\)} \]
Appendix 7/8: matrix sequence for second method phenogram.

1) Z and S are most similar.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>ZS</th>
<th>N</th>
<th>M1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>22.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZS</td>
<td>13.3</td>
<td>12.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>24.6</td>
<td>11.1</td>
<td>16.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>21.2</td>
<td>13.6</td>
<td>11.3</td>
<td>20.9</td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td>27.0</td>
<td>14.4</td>
<td>16.4</td>
<td>19.7</td>
<td>10.3</td>
</tr>
</tbody>
</table>

2) BYZS

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>ZS</th>
<th>N</th>
<th>M1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>22.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZS</td>
<td>13.3</td>
<td>12.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>24.6</td>
<td>11.1</td>
<td>16.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>21.2</td>
<td>13.6</td>
<td>11.3</td>
<td>20.9</td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td>27.0</td>
<td>14.4</td>
<td>16.4</td>
<td>19.7</td>
<td>10.3</td>
</tr>
</tbody>
</table>

3) BYNS

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>ZS</th>
<th>M1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>22.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZS</td>
<td>13.3</td>
<td>12.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>24.6</td>
<td>11.1</td>
<td>16.0</td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>24.1</td>
<td>16.0</td>
<td>13.9</td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td>27.0</td>
<td>14.4</td>
<td>16.4</td>
<td></td>
</tr>
</tbody>
</table>

4) BZN

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>YN</th>
<th>ZS</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN</td>
<td>23.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZS</td>
<td>13.3</td>
<td>14.1</td>
<td></td>
</tr>
<tr>
<td>MM</td>
<td>24.1</td>
<td>17.2</td>
<td>13.9</td>
</tr>
</tbody>
</table>

5) BZNS

<table>
<thead>
<tr>
<th></th>
<th>BZS</th>
<th>YN</th>
</tr>
</thead>
<tbody>
<tr>
<td>YN</td>
<td>18.8</td>
<td></td>
</tr>
<tr>
<td>MM</td>
<td>19.0</td>
<td>17.2</td>
</tr>
</tbody>
</table>

6) BZNS

<table>
<thead>
<tr>
<th></th>
<th>BZNS YNMM</th>
</tr>
</thead>
<tbody>
<tr>
<td>YNM</td>
<td>18.9</td>
</tr>
</tbody>
</table>
Appendix 7/9: linkage diagrams for the second method

1 (≤ 6.6)

2 (≤ 9.4)

3 (≤ 9.6)

4 (≤ 10.3)

5 (≤ 11.1)

6 (≤ 11.5)

7 (≤ 13.2)

8 (≤ 13.6)

9 (≤ 14.4)

10 (≤ 14.5)

11 (≤ 14.8)

12 (≤ 15.0)

13 (≤ 15.2)

14 (≤ 16.8)

15 (≤ 18.2)

16 (≤ 19.7)

17 (≤ 20.9)

18 (≤ 21.2)

19 (≤ 22.2)

20 (≤ 24.6)

21 (≤ 27.0)
Appendix 7/10: matrix sequence for third method phenogram.

1) Z and S are most similar.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Y</th>
<th>ZS</th>
<th>N</th>
<th>M1</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>0.751</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZS</td>
<td>0.920</td>
<td>0.906</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>0.663</td>
<td>0.932</td>
<td>0.808</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>0.769</td>
<td>0.891</td>
<td>0.917</td>
<td>0.699</td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td>0.592</td>
<td>0.865</td>
<td>0.800</td>
<td>0.683</td>
<td>0.935</td>
</tr>
</tbody>
</table>

| (3) |     |     |     |     |     |
| Y  | 0.751 |     |     |     |     |
| ZS | 0.920 | 0.906 |     |     |     |
| N  | 0.663 | 0.932 | 0.808 |     |     |
| M1 | 0.680 | 0.878 | 0.859 | 0.691 |     |

| (4) |     |     |     |     |     |
| YN | 0.707 |     |     |     |     |
| ZS | 0.920 | 0.857 |     |     |     |
| M1 | 0.680 | 0.785 | 0.859 |     |     |

| (5) |     |     |     |     |     |
| BZS|     |     |     |     |     |
| YN | 0.782 |     |     |     |     |
| M1 | 0.770 | 0.785 |     |     |     |

<p>| (6) |     |     |     |     |     |
| BZS|     |     |     |     |     |
| YNMM| 0.776 |     |     |     |     |</p>
<table>
<thead>
<tr>
<th>1 ($&gt;0.972$)</th>
<th>2 ($&gt;0.950$)</th>
<th>3 ($&gt;0.946$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Diagram 1" /></td>
<td><img src="image2" alt="Diagram 2" /></td>
<td><img src="image3" alt="Diagram 3" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4 ($&gt;0.945$)</th>
<th>5 ($&gt;0.935$)</th>
<th>6 ($&gt;0.932$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image4" alt="Diagram 4" /></td>
<td><img src="image5" alt="Diagram 5" /></td>
<td><img src="image6" alt="Diagram 6" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7 ($&gt;0.891$)</th>
<th>8 ($&gt;0.889$)</th>
<th>9 ($&gt;0.888$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image7" alt="Diagram 7" /></td>
<td><img src="image8" alt="Diagram 8" /></td>
<td><img src="image9" alt="Diagram 9" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10 ($&gt;0.874$)</th>
<th>11 ($&gt;0.865$)</th>
<th>12 ($&gt;0.854$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image10" alt="Diagram 10" /></td>
<td><img src="image11" alt="Diagram 11" /></td>
<td><img src="image12" alt="Diagram 12" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13 ($&gt;0.838$)</th>
<th>14 ($&gt;0.778$)</th>
<th>15 ($&gt;0.769$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image13" alt="Diagram 13" /></td>
<td><img src="image14" alt="Diagram 14" /></td>
<td><img src="image15" alt="Diagram 15" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16 ($&gt;0.751$)</th>
<th>17 ($&gt;0.745$)</th>
<th>18 ($&gt;0.699$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image16" alt="Diagram 16" /></td>
<td><img src="image17" alt="Diagram 17" /></td>
<td><img src="image18" alt="Diagram 18" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>19 ($&gt;0.683$)</th>
<th>20 ($&gt;0.663$)</th>
<th>21 ($&gt;0.592$)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image19" alt="Diagram 19" /></td>
<td><img src="image20" alt="Diagram 20" /></td>
<td><img src="image21" alt="Diagram 21" /></td>
</tr>
</tbody>
</table>
Appendix 7/12: scattergrams (ctd.)

(c) M1/Y

(d) Z/S
Appendix 7/13: MDSCAL map for the first method