THE
BANTU
LANGUAGES
ROUTLEDGE LANGUAGE FAMILY SERIES

Each volume provides a detailed, reliable account of every member language, or representative languages of a particular family. Each account is a reliable source of data, arranged according to the natural system of classification: phonology, morphology, syntax, lexis, semantics, dialectology and socio-linguistics. Each volume is designed to be the essential source of reference for a particular linguistic community, as well as for linguists working on typology and syntax.

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CONTRIBUTORS

Yvonne Bastin, Royal Museum of Central Africa, Tervuren, Belgium
Thomas Bearth, University of Zurich, Switzerland
Robert Botne, Indiana University, Bloomington, USA
Katherine Demuth, Brown University, Providence, USA
Edward D. Elderkin, University of Namibia, Windhoek, Namibia
Derek Gowlett, University of Cape Town, South Africa
Claire Grégoire, Royal Museum of Central Africa, Tervuren, Belgium
Gladys Guarisma, Laboratoire de Langues et Civilisations à Tradition Orale, Villejuif, France
Tom Güldemann, University of Leipzig, Germany
Teresa Heath, SIL
Larry M. Hyman, University of California, Berkeley, USA
Francis Katamba, University of Lancaster, UK
Charles Kisseberth, Tel Aviv University, Israel
Myles Leitch, SIL
Constance Kutsch Lojenga, University of Leiden, The Netherlands
Ian Maddieson, University of California, Los Angeles, USA
Jouni Maho, Göteborg University, Sweden
Marie-Laure Montlahuc, INALCO, Paris, France
Maarten Mous, University of Leiden, The Netherlands
Salikoko S. Mufwene, University of Chicago, USA
Derek Nurse, Memorial University of Newfoundland, Canada
David Odden, Ohio State University, Columbus, USA
Gérard Philippson, INALCO, Paris, France
Thilo C. Schadeberg, University of Leiden, The Netherlands
Gabriele Sommer, University of Bayreuth, Germany
Lolke J. van der Veen, University of Lyon II, France
John R. Watters, SIL
ABBREVIATIONS

The Bantu area was divided by Guthrie into fifteen zones, lettered A, B, C, D, E, F, G, H, K, L, M, N, P, R, S. Tervuren scholars added a sixteenth, J, drawn from parts of D and E (leading to abbreviations such as DJ, EJ, or JD, JE). So one of these capital letters may refer to a zone. The zones are further broken down into groups, referred to by numbers, thus, A10, A11, A12, A13, etc. See, Ch. 31.

Many of the lower case abbreviations in this list may also occur as capitals.

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<td>ø</td>
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<td>CS</td>
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<td>subject; zone S</td>
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<td>SC/SCD</td>
<td>subject concord</td>
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<td>subject marker</td>
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<td>SUB</td>
<td>subordinate</td>
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<td>subj</td>
<td>subject (marker); subjunctive</td>
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<td>SVO</td>
<td>subject verb object (order)</td>
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<td>TAM</td>
<td>tense-aspect-mood</td>
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<td>tense (aspect)</td>
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<td>temporal</td>
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<td>V</td>
<td>verb; vowel</td>
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<td>verb(al) base</td>
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PART 2
CHAPTER FOURTEEN

GRASSFIELDS BANTU

John R. Watters

1 INTRODUCTION

1.1 Context, history, scripts

Grassfields Bantu (GB) consists of more than fifty languages spoken in the mountainous region of the West and North West Provinces of Cameroon. Two of the languages are found in the contiguous, mountainous, northeast portion of the SouthWest Province. Much of the landscape is covered with tall elephant or napier grass (*Pennisetum purpureum*). As Richardson (1957:61) noted, these languages are ‘often referred to by Europeans and Africans alike as “Grassfield” (or *grafil* in Pidgin) because of the nature of the terrain over which they are spoken’.

Besides the grass, mountains also serve as important natural features for the communities that speak these languages. Stallcup (1980a) points out that the mountain ridges serve as language boundaries. GB may be the most linguistically fragmented of any region in Africa. Stallcup calculates that on average each language occupies only 20 square kilometers or less. Breton and Fohlung (1991:18–19, 106–21, 129–41) provide excellent maps of the region and its languages. Greenberg (1980:40) suggests that the GB languages are spoken near the probable region of the origin of Bantu.

Despite this concentration of languages, the region had been among the more neglected in Africa for linguistic research. Stallcup (1980a:48–9) provides some of the geographic, demographic, political, and sociological reasons for this fact. Perhaps the earliest linguistic studies of Grassfields languages are Ward (1938) on Bamoun phonetics and Bruens (1942–5) on Nkom. Richardson (1957) included the GB languages in his survey of the northern Bantu borderland. The 1960s saw Dunstan (1963, 1964, 1966a, 1966b) produce articles on Ngwe, and Voorhoeve (1963, 1965, 1967, 1968) on the Bamileke languages. The most productive period began in the 1970s with Voorhoeve (1971, 1974), Hyman (1971, 1972), and Hyman *et al.* (1970), and the formation of the Grassfields Bantu Working Group. The results of this Group are reported in Hyman and Voorhoeve (1980, cf. Watters 1982). Work has continued through the 1980s and 1990s, including comparative, descriptive, and theoretical studies.

Until recently most of these languages had no recognized written form. The exceptions have been Bamoun (Shi ŕam), Megaka (Bagam), Madumba (Bangangte-Bamileke), Fe’fe’-Bamileke, Yemba (Dschang-Bamileke), and Mungaka. Bamoun, found in the West Province, has a syllabary that the Sultan of Foumban, from about 1903, devised and reduced from an original 510 characters to 80 (Dalby 1970:112). Bagam, a neighboring language, received a syllabary before 1917, possibly based on the Bamoun script. Both of these scripts are non-Roman. A written form of Madumba was formalized in the 1960s with the translation of portions of the Bible. Written forms of Fe’fe’-Bamileke and
Yemba, both in the West Province, were developed primarily after Second World War and serve as examples of community initiative to develop a written form of their language (see Sadembouo and Chumbow 1990). Mungaka, around Bali in the North West Province, received a written form in the first half of the twentieth century from the efforts of the Basel Mission. A revised, translated edition of Tischhauser’s Mungaka dictionary has recently been published (Stöckle 1992).

French and English are the official languages of Cameroon. For historical reasons French is predominant in the West Province and English in the North West and South West Provinces. Pidgin English serves as an important trade language throughout GB.
1.2 Classifications

1.2.1 External

The major question about external classification during the twentieth century has concerned the relationship of GB languages to Narrow Bantu. A more recent and yet equally important question has concerned their relationship to the other language clusters found in the immediate region of Cameroon and Nigeria. On the first question, most linguists today accept the GB languages, along with other language clusters in the Cameroon–Nigeria region, as the nearest cousins of Guthrie's Bantu.

On the second question, the GB languages are often listed as one language cluster among multiple parallel branches (e.g. Greenberg 1955, 1963a, Williamson 1971, Dieu and Renaud 1983, Watters and Leroy 1989). However, Bennett and Sterk (1977) and Piron (1995) provide more nuanced hypotheses, both based on lexicostatistical research. Bennett and Sterk suggest that at the lowest level the GB languages, represented by the Mbam-Nkam languages (a subset of GB), groups with the Ekoid cluster and the north-west Bantu languages. Piron suggests that at the lowest level GB groups with the Ekoid and Nyang clusters. These three then form a parallel branch with the Beboid and Tivoid clusters. Bennett and Sterk are reminiscent of Heine (1972–3) and Henrici (1973) in that a clear boundary does not appear between traditional Bantu and GB. In contrast, Piron suggests that a clearer boundary may exist, with GB closer to the Ekoid and Nyang than Narrow Bantu. Yet Piron (1995:15, 16) notes that GB does seem to have a close lexical similarity with at least Bantu A50.

In addition, when noun class features are included in the evaluation (see §1.2.2 and Stallcup 1980a:55, Voorhoeve 1980a), at least Eastern Grassfields languages group with Narrow Bantu. The western portion of GB – the Peripheral, Momo, and Ring languages – do not share these features and so remain more distant from Narrow Bantu.

1.2.2 Internal

The internal unity of GB is clear. Stallcup (1980a:54) claims these languages share a 60 percent lexical similarity, while Piron (1995:16) suggests 41 percent. The two major questions about the internal classification of GB languages concern the number of subdivisions and the criteria for making these divisions. Proposals have varied from two to twelve subdivisions. Richardson (1957:56–72) recognized a two-way division between the Nkom group and the Bamileke group. Later Williamson (1971:266) rejected Richardson's two-way division, suggesting twelve parallel groups (Williamson 1971:270–80).

More recent classifications return to fewer divisions. Stallcup (1980a:54–5) focuses on the major two-way split between eastern and western GB. He uses seven noun class criteria and two lexical criteria. Dieu and Renaud (1983), following Hombert's (1979) presentation at Leiden, recognize a four-way split. Hombert, like Hyman (1980c), excluded Menchum from GB, but Dieu and Renaud retained it, giving Menchum, Momo, Ring, and Eastern Grassfields. Watters and Leroy (1989) suggested a more graded division. Menchum was included on the basis of Boum's (1980) study. Menchum, Western Momo, and Grassfields thus formed three parallel branches. Grassfields then subdivided into Momo, Ring, and Mbam-Nkam. Piron’s (1995) lexicostatistical study, comparing 169 items and using the branch average method, arrived at similar results to those of Watters and Leroy. The only exceptions involved single languages: Ambele was probably separate from Western Momo, and Ndemli probably was within the narrow GB. Piron noted that the higher division could be seen as a two-way split between the narrow...
Grassfields and the remaining languages as periphery. Piron’s figure 7 (1995:16) is provided in figure 14.1, with the label ‘Peripheral Grassfields’ provided by me. The major problem presented in these studies concerns the Mbam-Nkam languages vs. the rest. The Mbam-Nkam languages share certain noun class features with the Narrow Bantu languages that are completely missing in the remainder of GB. For example, the Mbam-Nkam languages have nasal consonants in the prefixes of classes 1 and 3, all nouns in classes 9 and 10 have a nasal consonant in the prefix, classes 6 and 6a are not distinguished, and all noun prefixes have a low tone (see Stallcup 1980a:55). None of the other GB languages share these morphological features. For a group of languages like GB that are so tightly linked lexically, the puzzle is to understand how this morphological difference emerged. Voorhoeve’s (1980a) preferred explanation is that borrowing of vocabulary took place between these languages due to intensive economic contact. He cites Warnier (1976) to support this thesis. The scenario would involve the ancestor language of Mbam-Nkam coming into contact with the ancestors of the other GB languages through trade. The pre-Mbam-Nkam language already had the Bantu nasal innovations, and then over time took on significant vocabulary from their western neighbors. Hyman (1980c), however, suggests the thesis of possible multiple centers of innovation of the nasal classes coupled with spreading outward from these centers of innovation. For a third hypothesis, namely that the innovation is the loss of nasals, see Miehe (1991, cf. Hedinger 1993).

1.3 Language names and populations

The fifty-plus languages of GB are listed and classified below. The classification includes the language name, variants of the name, and an estimated population number. The subgroup classificatory names are given in bold and the individual language names in italics. Most of the names and alternative names come from Dieu and Renaud (1983) while the population estimates come from Grimes (2000). The classification follows Watters and Leroy (1989) but with more detailed modifications from Piron (1995). These modifications include: (1) the possible peripheral nature of Ambele, (2) the inclusion of Ndemli within Grassfields, and (3) the making of the North branch a parallel branch of Mbam-Nkam within Eastern Grassfields. Instead of using the binary split suggested by Piron in figure 14.1 above, the classification below lists the first three branches of GB, namely, Ambele, Western Momo, and Menchum, as parallel branches of the Narrow GB branch. The Narrow GB branch includes the majority of GB languages and three major

![Figure 14.1: Piron's Internal Classification of Wide Grassfields (Branch Average Method)](https://example.com/image.png)
branches: Momo, Ring, and Eastern Grassfields. Finally, within Eastern Grassfields, the North branch has been separated out based on Elias et al. (1984:71–4) and following Piron (1995:19), and made a parallel branch to Mbam-Nkam. Note that the GB languages do not include Tikar or the following groups: Beboid, Nyang, or Ekoid.

In the classification below, the primary name is in most cases the term used by speakers of the language. However, in some cases it is the name used in the linguistic literature. The following abbreviations are used:

| a: administrative name (see Dieu and Renaud 1983) |
| s: speaker’s name for the language |
| n: neighbors (see Dieu and Renaud 1983) |
| d: dialects (d+) additional dialects (see Dieu and Renaud 1983) |
| +: other names (see Dieu and Renaud 1983) |

Note that the population numbers from 1982 may today be 50–80 percent higher than those given, depending on population growth over the last two decades. Most population numbers are taken from Grimes (2000). Some questions that remain within each subgroup are listed at the end of each subgroup. These may serve as future research questions. The underlined names are those used in this chapter in place of the first and main name listed.

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**GRASSFIELDS BANTU Population**

1. **Ambele** (see Piron 1995:15–16) no estimate
   - **Question:** Should Ambele be separate or included within Western Momo?

2. **Western Momo**
   - (a) **Manta** (+Menta, Amasi, Amassi, Anta, Banta, Bantakpa) 13,600 (1982)
   - (b) **Busam** no estimate
   - (c) **Aton** no estimate
   - **Question:** What is the relationship of Ngwo to these languages? A recent survey of Manta indicates that the region of the village of Amassi may be better classified as a dialect of Ngwo (Ed Brye pc).

3. **Menchum**
   - **Question:** Is Modele one language or are Modele and Befang different languages?

4. **Narrow Grassfields**
   - (a) **Momo**
     - (i) **Ngwo** (d:Ngwo(a:Ngwo, Ngwaw)(n:Nguni, Mighuni)) 31,000 (1982)
     - (d+):Konda, Basa/Bassa, Ikweri/Ekperi, Banya, Bako, Okorobi
     - (ii) **Nghie** (a:Oshie; n:Mise) 5,000 (1984)
     - (iii) **Ngie** (n:ŋiŋiŋ, ʊgi) 26,000–31,000 (1982)
(iv) **Menka** 12,500 (1982)
(v) **Moghamo-Menemo cluster (Widikum-Tadkon)** 120,000 (2000)
(d: **Meta** *(a: Metta, Menemo)(n: Uta', Bameta) (+ Muta, Mitaa))* 50,000 (2000)
(d: **Moghamo** *(n: Muywi)(d: Iyirikum(a: Widekum, Twirikum?)) 70,000 (2000)
(d: **Batibo, Besi, Kugwe**
(d: **Ngamambo** *(n: Mbu, Mungyen) no estimate
(= Bafuchu, Banja, Nja, Njembo))
(vi) **Mundani** 34,000 (1987)

**Note:** Meta', Moghamo, and Ngamambo are treated as dialects of Moghamo-Menemo based on Klaus and Janice Spreda's evaluation reported by Ed Brye.

**Question:** Should 'Njen' of Stallcup (1980a) be included with Mundani?

(b) **Ring**

(i) **South**

(a) **Wushi** *(a: Babessi)(n: Vasi, Pesii, Sii) 12,000 (1982)
(b) **Bamunka** *(n: Mbika) 15,200 (1982)
(c) **Konswe nsei** *(a: Bamesing)(n: Vatso, Vatvaj, Bofo, Masin) 12,500 (1982)
(d) **Vojo** *(a: Babungo)(n: Yagwa, Vagi, Pagi, Yamu) 14,000 (1985)

**Note:** Watters and Leroy (1989) mistakenly referred to this group as 'North' (Piron 1995:17).

(ii) **East**

(a) **Lamnes’** *(s: Nso, Nsaw, Banso, Bansaw) 125,000 (1987)
(= Nsoh', Banso')

(iii) **Center**

(a) **Babanki** *(n: Kajang) 22,500 (2000)
(b) **Kom** *(n: Koj, Bikom, Nkom)(+ Mbizenaku) 127,000 (1982)
(c) **Ku’o** *(a: Okari)(n: Buvoee, Uku) 40,000 (1991)
(d) **Bum** *(n: Bom) 20,000 (2000)
(c) **Mmen** *(n: Bafmen)(a: Bafumen, Bafmeng, no estimate
Bafoumeng)

(iv) **West**

(a) **Aghem Cluster** *(d: Aghem, Wi-isu(Wi(a: Weh)), Isu (+Esu, Umusu Zoa, Kumfutu, Kung, Kuk, Cha’, Nyos, Fungom))
(i) **Aghem** 20,000–25,000 (1993)
(ii) **Weh** (+ Wi) 7,000 (1994)
(iii) **Isu** (+ Esu, Umusu) 10,400 (1994)
(iv) **Fungom** 1,000 (1994)
(v) **Oso** (+ Osso, Southern Fungom, Ndum) 31,000 (1982)
(vi) **Laimbue** (+ Cha’, Nyos) 5,000 (1994)
(b) **Mundabli** *(aka Bum) (+ Mundabli, Mufu, Bu) 575 (2000)
(= Piron’s ‘Bu’?)
**Question:** Are Aghem, Weh, and Isu separate languages? What of Laimbue (Cha’+Nyos), Oso, and Fungom? How do these three relate to Mundabli and Mmen of Center Ring? Piron’s (1995:17) numbers suggest one Aghem language. What of mutual intelligibility?

(c) **Ndemli** (see Piron 1995:16)  
**Question:** Is Ndemli really an isolate? To what subgrouping could it belong?

(d) **Eastern Grassfields**

(i) **North**

(a) **Limbum** (a:Wimbum) (n:Nsunli, Bojiin)  
(+Nde yulana)  
73,000 (1982)

(b) **Dzodinka** (a:Adere)  
2,500 (1994)

(c) **Mfumte** (+Nde Wuli, De wungtse)  
(+1/2 Kwaja, Ndaktup, Ncha, Bitui/Bitwi)  
25,000 (1982)

(d) **Yamba** (a:Kaka yamba) (+1/2 Kwaja)  
30,000–40,000 (1993)

Reference dialect is Mbem. Each of seventeen villages with a chief has its own dialect, forming a continuum of inter-intelligibility (Ginny Bradley pc)

(e) **Mbɔ’** (a:Mbaw, Mbo)(+Mbɔ (=Piron’s ‘Nde bukwok’?))  
no estimate

Refers to area known as Mbɔ Plain, on northern border of Yamba. Each of thirteen villages has its own language, some more closely related to Tikar. Same as Mbe’ in Grimes (2000:44) (Ginny Bradley pc).

(ii) **Mbam-Nkam**

(a) **Nun**

(i) **Mungaka** (d:Bali nyọa(a:Bali))  
50,000 (1982)

(d:Bapakum(a:Baba I,Bapa))

(d:Ti (a:Bati))(d:Ndc(a:Bandeng))

(ii) **Bamoun cluster**

[a] **Shūpamɔm (a:Bamoun, Bamun)((n)ɔ̃shyɔ, tsɔ, metɔ’)(+Bapi) 215,000(1982)**

[b] **Bafanji** (s:Nchufi)  
8,500 (1982)

[c] **Bamali**  
5,300 (1982)

[d] **Bambalang** (s:Mboyakum)  
14,500 (1982)

[e] **Bangolan**  
6,000–15,000 (1994)

(iii) **MἈm;'>2; scatterates; in the West Province, [b] through [e] in the North West Province.

**Question:** Do the Nun and Bamileke languages actually comprise three parallel subgroups to Ngemba, giving (1) Western Bamileke (i.e. Western Mbam-Nkam), (2) Eastern Bamileke with Madamba (i.e. Southern Mbam-Nkam), (3) Nun (i.e. Eastern Mbam-Nkam), (4) Ngemba (i.e. Northern Mbam-Nkam)?
Speakers of each language below refer to their language as ‘Ngemba.’

(i) Mundum (d:Mberewi(a:Mundum I, see Mankon Bamundum I))
(d:Anyang(a:Mundum II, Bamundum II))
(ii) Bafut (d:BuFe = Afulhe, Bafut(d:Beba’ (a:Mubadjij(nBaba’zhi)))
(+Batadji, Shishong, Babadji, Bebadji, Bazhi, Bâba)

(iii) Mankon (d:Mankup(a:Ngemba, Bandeng, Bande, Mankon))
(n:Bando’, Nkunz, Mokohn)
(d:Shomba(b:Bamechom, Alamatson))
(d:Songwa(+Bangwa, Njia)(d:Mbutu (+Bambutu, Alamatu))
(d:Njong(+Banjong)(d:Bagangu(a:Akum))

(iv) Bambili (d:Bmili(a:Bambili)(n:Mbili, 10,000 (1984)
Mboge))
(d:Bmobi(a:Bambui))

(v) Nkwen (d:Nkwen(+Bafreng))
(d:Mendankwe/Mandankwe(+Munda, Bamenda))

(vi) Pinyin (d:Pinyin(n:Palimpo)(d:Palatining)

(vii) Awing (d:Mbw’a’wi(a:Awing)(n:Awi, 7,000 (1989)
Bambuluwe))
(d:Bamunkumbit(+Bamunkum))

Question: On the basis of comparing vocabularies, Williamson (1971) suggested four subgroups: (1) Pinyin-Mankon-Awing, (2) Bafut, (3) Bambili-Nkwen, and (4) Mundum. Leroy (1977:16) suggests seven units based on intercomprehension. Piron (1995:19) suggests that Bafut-Bambili might be considered one language as well as Mankon-Awing. Piron further suggests that Pinyin subgroups with Bafut and Bambili. Recent surveys suggest Bamunkumbit is separate from Awing. What would further research on inter-comprehension, lexicostatistics, and reconstruction suggest?

c) Bamileke

(i) Ngombale (d:Babadjou(Basso, Nchobela))
(d:Bamessingue(Bassing))(d:Penyu)

(ii) Mogaka (s:gham(a:Bagam))
(+Mengaka, Bamendjin, Galim, Ghap, Benzing)

(iii) Ngomba (+Ndaa, Nd’a’a)
(d:Bameete(Babete), Bamjeninda, Bamess, Bamkumb, Bamenjondo)

(iv) Ngiemboom (Ngiemboom, previously
Ngiemboom)
(d:Bangang, Batcham, Balatchi, Bamoungong, Balassing)
(v) Yemba (Yemba) (s:Atsan)(a:Dschang)
    (d:East, West, Central, South, Southwest)
    (see Dieu and Renaud 1983 for details)
300,000 (1992)

(vi) Nweh (Ngwe) (+ŋwe, bangwa)
    (d:Fossimobing, Fontem, Bamok)
50,000 (1992)

(vii) Ghomala’ (Banjoun) (d:South, Central, North, Ngamba)
    (see Dieu and Renaud 1983 for further details)
260,000 (1982)

(viii) Fe’fe’ (d:Central, North)
    (see Dieu and Renaud 1983 for further details)
124,000 (1982)

(ix) Kwa’ (d:Kwa(+Bekwa, Mipa)(a:Bakoua, Babwa))(d:Mbyam)
1,000 (2000)

(x) Nda’nda’ (d:East(Undimeha), West (Ungameha), South)
    (see Dieu and Renaud 1983 for further details)
10,000 (1984)

(xi) Madumba (+Bangangté, Bandounga, Tonga, Bangoulap)
210,000 (1991)

**Question:** What might be the possible subgroupings of the eleven Bamileke languages? Do they form one coherent unit? Hyman’s (1972:7–9) comments based on noun class and phonological differences suggest that (i)–(vi) form a Western Bamileke, and (vii)–(x) an Eastern Bamileke, with the western Ngamba dialect of Ghomala’ serving as a transition dialect between the two. Would this be valid?

**Question:** Languages (iv)–(vi) form a continuum of dialects that might be considered one language as to mutual comprehension. We could refer to them as the ‘Bamboutos Cluster’ for the nearby mountains. Are the boundaries between these three and languages (i)–(iii) distinct?

2 PHONOLOGY

The phonologies referred to below represent differing levels of depth in their analyses. Re-analysis of those with larger phonemic inventories may reduce their inventories in significant ways.

2.1 Syllable and morpheme structure

The primary syllable structures for noun and verb roots include CV, CVC, CSV, CSVC and V, where S represents semi-vowels. In some cases CVV is interpreted as a single syllable, with VV being either a long vowel or a diphthong. Affixes and particles typically consist of CV, V, VC, N, and CVN. These features are true whether they be Momo languages such as Ngie (Hombert 1977) and Mundani (Parker 1981); Ring languages such as Babungo (Schaub 1985), Oku (Davis 1992), Aghem (Hyman 1979b); North languages of Eastern Grassfields such as Limbum (Fiore 1987) or Yamba (Scruggs 1980); or Mbam-Nkam languages such as Fanchi (Koopman 1994), Ngemba (Leroy 1977), Bafut (Mfonyam 1982), Fe’fe’ (Hyman 1972), Ngiemboon (Anderson 1983), Ngwe
(Dunstan 1964), or Banjoun (Nissim 1981). In Limbum (Fiore 1987:15) some dialects simplify CV-prefixes to C-, so that \(v\)i becomes \(p\)- or \(b\)-, and \(l\)i becomes \(r\)- or \(l\)-, as in \([p-t]\) ‘trees’ and \([rbu:]\) ‘egg’. In Ring languages, the prefix for classes 3 and 8 may include the labialization of the initial stem consonant: \(\dot{a}t\)äm ‘trap’ but \(\dot{a}twäm\) ‘traps’ in Kom (Hyman 1980a:254–5).

Lexical stems are commonly monosyllabic. Nissim (1981:78) reports that for Banjoun (Bamileke) 46 percent are open (CV) and 54 percent are closed (CVC). Thus, for nouns, the canonical Bantu disyllabic stems have been reduced to monosyllabic stems.

Syllabic nasals are commonly used as prefixes and grammatical markers. In some cases, nasal noun prefixes have been reinterpreted as part of the stem, producing NCV(C) and similar stems. Typical Bantu verbal prefixes for person and tense-aspect behave more like monosyllabic verbal clitics, separate from the verbal word, than affixes. Therefore, verb stems are also often monosyllabic. Disyllabic stems that do occur are usually composed of two morphemes.

### 2.2 Vowels

Elias et al. (1984:41) reconstruct seven vowels for Proto-Mbam-Nkam, which is the probable proto-system for GB as a whole. Systems of seven vowels are reported for Oku (Ring) \(/i\varepsilon\varepsilon\varepsilon\varepsilon/\) (Davis 1992:31), Limbum (North) \(/i\varepsilon\varepsilon\varepsilon\varepsilon/\) (Fiore 1987:60), Yamba (North) \(/i\varepsilon\varepsilon\varepsilon\varepsilon/\) (Scruggs 1980:24), and Ngjemboon (Bamileke) \(/i\varepsilon\varepsilon\varepsilon\varepsilon/\) (Anderson 1983:4). For these languages, the relevant distinctions are degrees of rounding and height.

Most GB languages, however, appear to have eight to ten vowels, whether they be found in the Momo, Ring, or Eastern Grassfields branches. These languages add the degree of backness to that of rounding and height. Examples include Mundani (Momo) (Parker 1981:22) with eight \(/i\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon/, Nge (Momo) (Hombert 1976) with ten vowels \(/i\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon/, Babungo (Ring) (Schaub 1985:259) with nine \(/i\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon/, Aghem (Ring) (Hyman 1979b:1) with nine \(/i\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon\varepsilon/, Mankon (Ngemba) (Leroy 1977:50) and Bafut (Ngemba) (Mfonyam 1982:17) having nine, and Banjoun (Bamileke) (Nissim 1981:176) having ten. Restricted environments within the word commonly accompany these larger vowel inventories, but one rarely finds more than seven vowels contrasting in any given environment. In some environments the contrasts are reduced to as few as two or three. Further research on these larger inventories might reveal only seven underlying vowels, with the additional phonetic variants resulting from the fusion of a semi-vowel with one of the seven vowels (Anderson pc).

Long vowels are common throughout GB, and so are diphthongs. One can expect that at least seven of the short vowel variants will also have long forms. In Limbum (Fiore 1987:58) ‘one-third of all [CV] stems end in long vowels’.

Various processes of vowel assimilation, lengthening, deletion, nasalization, velarization and gliding are reported in environments where two vowels coalesce. Of interest is the vowel glide formation reported for Aghem (Hyman 1979b:11) where \(e \rightarrow z, o \rightarrow w,\) and \(a \rightarrow gh\) when followed by \(/i/\) in demonstratives. Vowel harmony is not a significant issue given the monosyllabic nature of most stems in GB languages. However, vowel assimilation is found throughout GB in the form of ‘echo vowels’ – as suffixes on verbs and as final root vowels in nouns.

### 2.3 Consonants

Stops commonly include the opposition between the voiceless set \(/p t k/\) and the voiced set \(/b d g/\) (see Mundani (Momo) (Parker 1981:9)). However, the opposition between
voiceless and voiced bilabials /p/ and /b/ may be weak, as in Ngie (Momo) (Hombert 1977:1), or be absent, as in Mbam-Nkam, so that [p] and [b] are allophones and analyses vary as to which is chosen as the phonemic form: /b/ for Fe’fe’ (Bamileke) (Hyman 1972:30) and Ngjemboon (Anderson 1983:4), but /p/ for Yemba (Bird 1996) and Ngomba (Satre 1997). In Fanchi (Nun) (Koopman 1994:3) a distinction in aspiration substitutes for the more common voicing distinction, giving the aspirated set /pʰ tʰ kʰ/ and the unaspirated set /p t k/. Elias et al. (1984:39, 41) reconstruct the full voiceless and voiced set for Proto-Mbam-Nkam. In Mundani (Momo) (Parker 1981:9), Aghem (Ring) (Hyman 1979b:3), Yamba (North) (Scruggs 1980), and Nweh (Bamileke) (Dunstan 1964), a set of double-stops /kʰ gʰ/ are reported. In other languages such as Oku (Ring), Limbum (North), and Fanchi (Nun) the set is simply labialized /kʰ gʰ/. Otherwise double-stops are absent in many GB languages. The glottal stop /h/ is widely reported.

Fricatives include at least /f s/. However, various languages additionally include one or more of the following: /v z ʎ/. The Ring languages such as Babungo and Aghem use one or more of the alveo-palatal fricatives /ʃ ʒ/. Nweh (Dunstan 1966a) has the richest array of fricatives: labials /B f v/., alveolars /s z/., palatals /ʃ ʒ/., velars /ʎ/., and glottal /h/. The fricative glottal /h/ seems to be limited to only Eastern Grassfields languages, such as Limbum, Nweh, Fe’fe’, and Banjoun. However, /h/ in many of the GB languages is found primarily in loan words (Steve Anderson pc).

The sets of affricates /ts dz/ or /tʃ dʃ/ are common, with GB languages using one set or the other. However, in Yamba the full set of four affricates is systematic: /ts dz ch dʃ/ (Scruggs 1980:11–15). Bamileke languages often have an additional set of affricates: /pf bv/.. Banjoun (Nissim 1981:171–4) possesses both /pf/ and /bv/, while Ngjemboon (Anderson 1983:4) and Nweh (Dunstan 1966a) have only /pf/. The Ring language Aghem (Hyman 1979b:3) has /bv/.

The semi-vowels, or glides, /y w/ are nearly universal. In some cases, they occur as allophones, such as [y] as the realization of /j/ when not preceded by a nasal in Fe’fe’ (Hyman 1972). A third semi-vowel /ɛ/ is reported in Ngjemboon (Anderson 1983:4).

Laterals /l/ but not trills /r/ are found in Momo and Ring languages. Among the Mbam-Nkam languages, Limbum, Yamba and Nweh have both /r/ and /l/. But in various Bamileke languages, such as Nyemboon, Fe’fe’, Banjoun, [l] and [r] are often in allophonic relation with [d]. The Bamileke language Nweh (Dunstan 1966a), on the other hand, phonetically has both a voiced and voiceless bilabial trill [P] and [B]. These trills are releases of prenasalized bilabial stops (Ladefoged and Maddieson 1996:130–1).

The nasal set may include /m n ɲ/. The palatal nasal /ɲ/ occurs less frequently and its phonological status is often uncertain, but it is found in Momo languages such as Ngie and Mundani, and Ring languages such as Babungo and Aghem. In addition, Mundani and Aghem have the double-nasal [ɲm] before double-stops.

The consonants mentioned above all occur in the initial consonant position of the syllable (and stem). In contrast, the final consonant position of syllables, and stems, limits the consonants. Rather than fifteen to twenty-five consonants, only one to eight occur in the final position. The common sets involve three stops /p t k/ or /b d g/, and three nasals /m n ɲ/. Numerous languages include the glottal stop /h/. Other reported final consonants include /ɾ/, /ɬ/, /ɭ/, and /h/. The more limited sets are reported for Babungo (Schaub 1985:268), using only /ɲ /h/, and villages speaking Mfumte, namely Lus and Kofa (Elias et al. 1984:41), using only /ɾ/. If final consonants in ideophones were included in the inventory, the set might include a few more consonants.

Consonant harmony does not exist synchronically in GB languages. Consonant clusters are not common. Some noun forms initially have a homorganic nasal followed by stop or fricative. At times the nasal is syllabic, in other cases non-syllabic. Otherwise,
consonant clusters derive from palatalization or labialization, or from clusters across morpheme boundaries.

Various consonant processes are reported. Those that have phonological significance account for most of the morphophonemic processes in GB languages. The most common processes include aspiration, palatalization, and labialization.

Aspiration-type phenomena are widely attested in GB. They vary phonetically from language to language, from aspiration to fricativization. In Fanchi (Koopman 1994:3) the aspiration of stops is contrastive. Some Bamileke languages have homorganic voiceless fricative consonant offglides that may combine with palatalization and labialization. In some cases they lead to long consonants (Anderson 1982). Nweh (Dunstan 1966a) has affricates /kx, gy/ that may derive from an aspiration process. In Kom (Ring) (Hyman 1980a, Ladefoged and Maddieson 1996:366), a secondary articulation type occurs consisting of transitional labiodental fricatives (or ‘aspiration’). Thus, in the word iku ‘death’ the transition from k to u is a voiceless bilabial fricative Φ, giving [ikΦu], and in the word išu ‘sky’ the transition is a voiced bilabial fricative v, giving [išuvu].

This labiodental constriction is coarticulated with the velar and coronal closure. These varying realizations of aspiration may function quite differently in closely related languages: they are predictable in Ngiemboon and not predictable in neighboring Yemba. The historical source of these phenomena remains an open question.

In the Bamileke languages, palatalization and labialization represent a complex set of forms. For example, Ngiemboon (Anderson pc) has four phonetic offglide variants: front rounded and front unrounded, as well as back rounded and back unrounded. However, these converge to form only three phonological variants, with the front rounded and back unrounded as allophones (see also Haynes 1989 for Yemba). In Banjoun (Nissim 1981:175–6) four forms are reported: palatal, pre-dorsal, labio-velar, labio-palatal: /y, q, w, ŵ/. These may serve as ‘S’ modifications of the initial consonant in CSV(C) syllables (Nissim 1981:106–7), or as initial consonants in CV(C) syllables. As an initial consonant, the /ŵ/ is best reinterpreted as /yw/, a labialized palatal glide. In Aghem, labialization may produce double-stops, so that /k + w, b + w, g + w, ŕ + w/ produce /kp, gb, ŕm/.

For example, the singular /k’bâ/ ‘rope’ takes an /ô-/ prefix in the plural which would labialize the initial root consonant, giving us /b’ô/ However, instead of the expected *b’ô/ we find the plural /ô-gbâ/ ‘ropes’. Other examples include spirantization in Yamba, where /k/ becomes /x/ word final (Scruggs 1980:23), and affrication in Oku (Davis 1992), where /b k g/ become /bv kf gv/ before /a/.

Another process is the assimilation of nasal prefixes to the point of articulation of the initial root consonant. In the process, the initial root consonant may also assimilate, such as voiceless stops becoming voiced and so neutralizing the voicing distinction following nasal prefixes. Neutralization also occurs with stops in the final consonant position before pause, where they generally devoice or are unreleased.

2.4 Tones

Grassfields Bantu languages have some of the most complex tone systems of any group of languages in Africa. It is generally assumed that historically they had a tone system of two tone levels, H(igh) and L(ow), as reconstructed for Proto-Bantu (Greenberg 1948 and Meeussen 1967:84). Verbs divided into two classes: those with H tone and those with L. Nouns divided into four classes, all with L tone prefixes: L-LL, L-LH, L-HL, L-HH.

Disyllabic noun roots then lost final vowels or entire final syllables. Only a few Ngemba languages have maintained a second vowel, and syllable, a schwa /a/. The result was multiple monosyllabic noun roots. In the process, however, the tone of the lost vowel
or syllable remained a feature of the root—an exception is the present-day deletion of certain L tones in Aghem in specific contexts (Hyman 1987). In some cases this extra word-final tone joined with the preceding root tone to form a tonal contour, whether falling tone (i.e. H-L) or rising tone (i.e. L-H). In other cases it became a floating tone—i.e. a tone not associated with a specific syllable. In still other cases it led to the elaboration of additional pitch levels, including downstep terracing.

Furthermore, some languages also lost the segmental substance of the noun prefix in some classes, but again did not lose the prefix tone. This meant that some roots today have a prefix tone and a final root tone, neither of which is associated with a syllable at an underlying level of representation. Similar processes applied to verb roots and grammatical markers, so that verbs and grammatical markers often have floating tones as a feature of the morpheme. In many cases the grammatical markers are only marked by a floating tone, particularly verbal affixes.

To account for the varied tonal phenomena found in GB languages, Voorhoeve (1971), in his study of Bangangte nouns, proposed an underlying sequence of three tones for every noun, each tone being either high or low. Since most current noun forms are monosyllabic or disyllabic, some of the tones were ‘floating tones’. The tri-tonal nature of all nouns became the basis for most analyses of nominal tone in GB languages. More fundamentally, the assumption was that the best way to account for the complex tonal phenomena was to start with the historical antecedents and derive the modern-day surface forms from those antecedents. The evidence for this assumption was indirect, but lay in the impact of the floating tones on neighboring tones, and the otherwise inexplicable tonal behavior of nouns in various contexts. The assumption that tones can and do persist even when the segmental substance of entire syllables is lost became foundational to nearly all tone analyses of GB languages during the past thirty years. See Hombert (1976:11–15), Asongwed and Hyman (1976:32–43) and Hyman and Tadadjeu (1976) for examples. However, Chumbow and Nguendjio (1991) provide a synchronic analysis that does not use lexical floating tones for Bangwa (or Ndànda? East, a Bamileke language).

So what are some of the tonal phenomena that these analytical perspectives were created to address? If tone in GB languages is no longer a sequence of H and L tones, what was found? (See in particular Hyman 1976b, 1979c,d, 1987 for elaboration of the following comments.) All GB languages have at least four levels: high (H), mid (M), low (L), and low that falls (L). The mid tone in most languages is a downstepped high (↓H), with each new ↓H establishing a new ceiling for all following H tones. So most GB languages contrast a HH sequence from a H↓H sequence. In some cases an additional pitch level is identified. For example, Meta’ (Spreda 1986) has a ‘raised low’ that derives from the simplification of a HL sequence on a root with an L tone prefix. The ↓H is commonly explained by the presence of a preceding floating L tone that lowers the H. However, Hyman (1979d:15–16) suggests that ↓H ultimately derives from a preceding H-L contour tone so that H↓H derives from H-LH rather than H↓H. Most languages also have two different L tones, one that falls before pause, and the other that remains level. The first is understood as simple L with phrase final intonation, while the second is considered to be L followed by a floating H. The H blocks the normal fall of the L. We symbolize this L as L0. However, within Mbam-Nkam, for various languages in the Ngemba group, and for Bafanji in the Nun group the level low tone is not present. Instead of having a floating H following an L, the LH sequence is realized as a rising tone on the surface (Elias et al. 1984:62–70).

Besides these level tones, various contour tones are attested in all languages. Returning to the issue of M tones, some languages actually have M tone instead of ↓H. These include most of the Center Ring and East Ring languages (Grebe and Grebe 1975,
Hyman 1979c, Grebe 1982). An example is Babanki, a Center Ring language, with both an M tone, that may only occur before an H tone and never following pause, and 4H. Other languages with M tone include Bafut (Ngemba) (Mfonyam 1982), that has H, M, L, Lₙ, and Modele, a Peripheral GB language, that has a 4H that could just as well be interpreted as an M tone (Hyman 1979d:20–1). So common tonal antecedents can lead to different tone systems.

This variation from common antecedents is well exemplified by the southern Bamileke languages in contrast to the other Bamileke languages. Bamileke languages generally have the sequence H↓H, but not the southern Bamileke ones. They have M tone. The M derives from what was previously the H tone, and the current day H tone derives from what was the H tone that preceded 4H. The historic H before 4H first became a super-H tone, then became simply H when the 4H became M (Hyman 1976b:128ff.). So these languages have taken a further step in tonal reinterpretation, moving from a language with H, 4H, L, Lₙ to one with H, M, L, Lₙ. The phenomenon of making a super-H out of the H that used to precede a 4H is also attested in Ngemba with its tonal upstep (Leroy 1977). Tonal upstep in Ngemba not only derives from raising H tone in anticipation of a 4H, but also from an underlying L-HL-H sequence which becomes L-H-super-H.

A feature of West Ring languages and Babanki from Center Ring (Hyman 1979c:176–7) is automatic downdrift. Accompanied by downstepped H, these languages demonstrate a standard ‘terraced’ tone system, in which every H following a L is a little lower than any H preceding that L. Thus, the range of the pitches changes over the time of the utterance. In contrast, most other GB languages do not have automatic downdrift. This includes Momo, various Ring, and Eastern Grassfields languages.

Many of the tonal complexities of GB languages show themselves when nouns and verbs occur in phrases. With nouns, e.g. they may appear to have identical tone patterns in isolation, but then in another context, such as following a locative preposition, they may diverge. Thus, ultimately they need to be separated into two or more distinct tone classes. In Mankon (Ngemba), e.g. which is part of Mbam-Nkam and so only has L tone noun prefixes, the underlying tone patterns L-LH and L-HH are neutralized in certain contexts. They both produce a surface sequence L-LH through the spreading of L tone prefix in the case of L-HH nouns (Leroy 1979). In Babanki (Center Ring), with noun prefixes that usually have H tone, nouns with H-LH and H-HH patterns neutralize when they occur in the genitive or locative position, or have a nasal consonant depressing the tone (Hyman 1979c:164–6).

One of the less complex tone systems in the GB region is found in Aghem (West Ring). Aghem (Hyman 1979b:1, 12) has H, L, and downstepped high 4H, plus automatic downdrift. Aghem has four kinds of tone rules: (1) ‘tone grounding’ for the floating tones; (2) ‘tone spreading’, particularly from noun prefix to noun root; (3) ‘tone lowering’ which lowers a noun prefix tone from H to L when it follows a verb with a final L; and (4) ‘tone simplification’, which simplifies sequences like LH-H to L-H and L-LH to L-L. Significantly, these rules are common in GB languages.

Moving away from the West Ring languages to other Ring, Momo, and Eastern Grassfield languages, the tone systems become more complex. Though they do not have downdrift, they do have multiple phonetic pitch levels. Ngamambol (Momo) as presented by Asongwed and Hyman (1976) has five phonetic pitch levels and at least ten tone patterns on bisyllabic nouns. (This analysis is superseded by Hyman 1986 based on different data.) Ngie (Momo) (Hombert 1976) similarly has ten contrastive patterns on bisyllabic nouns, bisyllable being noun prefix plus the monosyllabic noun root.
Perhaps the most complex system in the GB region is that of Yemba (or Dschang-Bamileke) and its closest neighbors, Ngiemboon (Anderson 1983) and Nweh. Research on the tone system of Yemba has contributed significantly to the development of tone theory over the past thirty years. Following Voorhoeve (1971), Tadadjeu (1974) presented Yemba with its surprising combination of downstep without automatic downdrift, including both downstepped high and downstepped low tones. Downstepped low tones were something new. Yemba also allows for downstepped tones immediately after pause, another new twist. In addition, seven contrasts occur after H and eight after L, further confirming its complexities. These include discrete levels, downstepped levels, and double-downstepped levels (Hyman 1979c:13). Aghem, by contrast, would only have three contrasts after H and two after L.

Hyman and Tadadjeu (1976) provided a more comprehensive analysis of tone in the Mbam-Nkam languages, including a more detailed analysis of the unusual tone system of Yemba (Dschang-Bamileke). Additional studies of these complex systems are found in Anderson (1981, 1983), Stewart (1981), and Pulleyblank (1986). Pulleyblank notes that none of the other studies carefully distinguished between phonological and phonetic rules, which he concluded led to a certain confusion in their analyses. He himself argued for the application of a set of post-lexical rules: high tone spreading, lowering of high tone, and deletion of low and high tones. The unusual rule, however, involves metathesis of a HL tone sequence. The reversal of this order to LH accounts for surface-level downstepped-high tones as well as downstepped-low tones. Pulleyblank’s metathesis rule for Dschang is reminiscent of a similar rule in Anderson (1983) for Ngiemboon. Nissim (1981) reports a suffix in deverbal nouns with metathesis of H plus floating L to produce a rising LH tone. Articles that have contributed more recently to the theoretical discussion of Yemba tone include Hyman (1985), Clark (1993), Stewart (1993), and Snider (1999). Snider provides a different analysis of downstepped low tone.

3 MORPHOLOGY

3.1 Nouns

3.1.1 Noun classes

Some of the more significant studies of the noun classes in GB languages include Hyman and Voorhoeve (1980), Hyman (1980b), Leroy (1977), and Nissim (1981). Noun classes form a set of isoglosses that divide GB languages into two major subgroupings. One group consists of the Eastern Grassfields languages. The other consists of the Peripheral, Momo, and Ring languages. The following seven isoglosses distinguish these two subgroups (Stallcup 1980a:55). In table 14.1, ‘Eastern Grassfields’ is Stallcup’s ‘Mbam-Nkam’ and ‘Peripheral, Momo, and Ring’ are his ‘Western Grassfields’.

Contrary to table 14.1, Anderson (1980) claims that Ngiemboon (Eastern Grassfields) still has a class 4 based on its distinctive noun prefix meN-. Apart from the homorganic nasal N in the prefix, the me portion of the prefix and the concord is identical to class 6.

Hyman (1980c:182) provides a full set of reconstructed noun class formatives, specifically noun prefixes and concord affixes, for Proto-Eastern Grassfields as well as for the combination of Proto-Momo and Proto-Ring (i.e. ‘Western Grassfields’). These reconstructions demonstrate the criteria listed above.

Both the ‘n’ and ‘N’ prefixes represent homorganic nasals. In table 14.2, noun classes consist of a noun prefix and concord element. However, in some specific languages
a given class may use a noun suffix rather than a noun prefix, and in other cases the noun
prefix may be null.

The reconstructions above make the explicit claim that the GB noun classes corre-
spond to the Proto-Bantu noun classes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, and 19. In addition,
some GB languages distinguish noun class 6 from 6a, which is a pre-Proto-Bantu dis-
tinction. Class 6a is used for liquids and is phonologically similar to Proto-Bantu noun
class 6. Class 4 is present in only a few Peripheral-Momo-Ring languages. No GB lan-
guage attests to Proto-Bantu classes 11, 12, 14, or 15, though Schaub (1985:172) claims
15 for Babungo as distinct from 7.
As for the locative classes 16, 17, and 18, residual or foreshadowing forms of these Proto-Bantu classes are present in various languages. See §3.1.2 for more discussion.

Various articles on noun classes in GB support the reconstructions above. These include articles on Menchum (Boum 1980), a Peripheral GB language, as well as the Momo languages in general (Stallcup 1980b), and on Mundani (Parker 1989). Other articles include those on Babanki and the Ring languages in general (Hyman 1980a). Within Eastern Grassfields, they concern the North subgroup of languages such as Limbum (Voorhoeve 1980b) and Adere or Dzodinka (Voorhoeve 1980c). Mbam-Nkam is represented by Nun (Hombert 1980), Ngemba (Leroy 1977, 1980), and Bamileke, both eastern Bamileke (Nissim 1980) and western Bamileke (Tadadjeu 1980 and Anderson 1980).

3.1.1 Peripheral, Momo, Ring

The Menchum (Boum 1980), Momo (Stallcup 1980b), and Ring (Hyman 1980a) languages have maintained a larger set of noun classes than Eastern Grassfields and Mbam-Nkam. Thirteen are reconstructed in table 14.2. Not only do they have classes corresponding to 1 through 10, including class 4, but also 13, and 19, and the pre-Proto-Bantu 6a. Low tone is used for concord elements with classes 1, 9, and 6a, where the other classes use high tone.

In Menchum, and Modele in particular (Boum 1980), we find thirteen noun classes. Classes 1, 7, 9, and 6a all have what could be interpreted as double prefixes. The pre-prefix is lost, however, when the noun is the object of a preposition, whether locative or genitive (‘associative marker’): e.g. ùmbù ‘head (Cl.1)’ > ãyè mbù ‘on the head’, and kìdòg ‘chief’ (Cl.7) > ùmbù sìdòg ‘head of the chief’. Instead of having class 13 like other western GB languages, Modele has a class ‘18’. Class 18 uses a homorganic nasal in the prefix but m in the concord elements. Some concord elements in Modele take a concord prefix, while others simultaneously take a concord prefix and suffix. The genders in Modele include 1/2 (humans and borrowings), 3/4, 5/6, 7/8, 9/10 (many animals), 19/18, 6a, 5/4, 7/6, 3/10, and 9/2 (?).

In Momo, within Narrow GB, Moghamo (Stallcup 1980b:195) has eleven noun classes and Mundani (Parker 1989) has thirteen. Moghamo does not have classes 4 or 5, while formally classes 6 and 7 are fully merged in Mundani. Class 6 is plural, however, and class 7 singular. The merging of classes 6 and 7 is a feature of Momo languages in general, as well as Kom and Bum, both Center Ring languages, with class 7 using the formatives of class 6 (Stallcup 1980b:222–3). Class 10 commonly uses the noun suffix -tí rather than a prefix. In class 19 of Mundani (Parker 1989), k is present in both the prefix and concord elements. The expected f is present only in the concord elements along with k. This mixture is unusual and looks like an incomplete merger of the earlier 7 and 19. Also in Mundani, Gender 1b/2b may serve as a diminutive for a set of nouns such as a-nyá, a-nyá-tsá ‘animal, animals’ (gender 9/10) but á-nyá, bá-nyá ‘small animal/insect, small animals/insects’ (gender 1b/2b). The genders for Mundani include 1/2 (1a/2a, 1b/2b), 3/4 (3/6a?), 5/13, 7/8, 9/10, 19/13, 5/6, 6a. Gender 1/2 includes most nouns referring to humans, but also nouns referring to non-human categories. The gender 1a/2a includes kinship terms and titles within the social hierarchy, including professions. The gender 1b/2b refers to small people or young people.

In Ring, Babungo (South Ring) has fourteen classes (Schaub 1985:172), Babanki (Center Ring) has twelve (Hyman 1980a:226), and Aghem (West Ring) has twelve. Formally, Aghem only has nine distinct classes since 2 and 6, 3 and 8, and 4 and 5 are fully merged. Aghem genders include 1/2 (only nouns designating human beings), 3/4, 3/6a, 5/6, 5/13, 7/8, 9/13, 19/6a, 1/13, 3/6, 3/13, 7/4, 7/6, 7/6a, 7/13, 19/13. The single class genders are 3(=8), 4(=5), 9, 13, and 6a (designating masses or liquids).
In Ring, concords are complex and vary according to the syntactic construction. Prefixes, pre-prefixes, and suffixes are common. For example, for most nouns in Aghem, when the prefixed noun is followed by a modifying possessive, adjective, demonstrative, or genitive noun phrase, the noun prefix is deleted. Only with numerals is the prefix maintained. Thus, $f\bar{i}-nw\bar{i}$ ‘bird’ becomes $nw\bar{i}$ ‘my bird’, $nw\bar{i}$ $f\bar{i}d\bar{i}â\bar{u}f\bar{a}$ ‘big bird’, $nw\bar{i}$ ‘f\bar{i}n this bird’, $nw\bar{i}$ $f\bar{i}$ ‘w\bar{e}$ ‘bird of child’, but $f\bar{i}-nw\bar{i}$ $f\bar{i}$ $m\bar{y}$ ‘one bird’. In addition, nouns in Aghem vary between a prefixed and suffixed form depending on the syntactic construction type. So a given noun may have as many as three forms:

- $k\bar{i}-b\bar{h}\bar{e}$ ‘fufu’ (Object, ‘in-focus’, A-Form)
- $b\bar{h}^{-}k\bar{s}$ ‘fufu’ (Object, ‘out-of-focus’, B-Form)
- $b\bar{h}^{-}k\bar{i}$ ‘fufu’ (preceding verb, where $k\bar{i}$ is an agreement marker)

Considerable variation exists from language to language within Ring, and they indicate that morphological changes can be subject to areal diffusion in the same way that sound changes are (Hyman 1980a:256). Classes 10 and 13 are both found in Center Ring, but only 13 in West Ring, and only 10 in East Ring. In class 7, the Ring languages have the expected $k$ both in the prefix and concord elements, with the exception of Kom and Bum. In class 9 nouns demonstrate an interesting variation, with some nouns having a nasal prefix and others no prefix. This difference in prefix corresponds to a difference in tonal behavior as well. The suffix -$s\bar{i}$ in class 10 is common in Ring except for West Ring. Aghem (West Ring), e.g. uses class 13 as the plural of class 9 in place of 10, which is absent. In Ring class 4 is commonly absent, with gender 4/6a being replaced by 13/6a. Class 6a also serves as the plural of class 19. In Aghem, apart from a few exceptional nouns, all noun prefixes take a high tone. Many nouns in class 13 take a suffix -$a$. The subject concord in classes 1 and 9 has been reduced to a floating low tone only.

3.1.1.2 Eastern Grassfields

Eastern Grassfields has up to ten noun classes. Classes 4, 6a, and 19 are absent, though the Ngemba group has 19. Eastern Grassfields languages may have merged class 4 with 6 at a pre-Eastern Grassfields stage, as Tadadjeu (1980) has noted for Yemba (Dschang-Bamileke). Low tone is used throughout for concord in classes 1 and 9, and high tone for other classes. Nasal prefixes are present in classes 1, 3, 6, 9, and 10.

The eastern languages of Eastern Grassfields, whether from the North or Mbam-Nkam subgroups, have significantly reduced their noun class systems, while the western languages have been more conservative. Thus the North, the eastern Bamileke, and the Nun languages have reduced their systems to six, and even five, formal noun classes. In Banjoun (Ghomala?) the system no longer even marks agreement between the subject noun and the verb, though other agreement marking is in force.

Among the various noun class mergers in Eastern Grassfields, it is common to find that all eastern languages have merged 1 and 9, while the merging of 2 and 8 is often in process, if not yet completely achieved. For the eastern Bamileke and Nun languages in particular, 3 has merged with 7, and 8 with 10.

In the North subgroup, Limbum (Voorhoeve 1980b) has a complex system. It has many singular/plural genders with a small number of nouns in each due apparently to the incomplete merger of classes 2 and 8. Curiously, the system uses singular concords for the plural of human beings. The system could be said to have seven classes, three singular and four plural (Voorhoeve 1980b, Fiore 1987).
In Nun languages such as Bamoun and Bali the system has simplified to the point that the pronominal subject markers for third person distinguish only animate vs. inanimate referents rather than the full set of noun classes (Hombert 1980:163). The subject pronouns have been reduced to four forms:

<table>
<thead>
<tr>
<th>Animate</th>
<th>Inanimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd person singular</td>
<td>yí</td>
</tr>
<tr>
<td>3rd person plural</td>
<td>ëá</td>
</tr>
</tbody>
</table>

Most nouns in Bamoun distinguish their plural form from their singular form by the change in noun prefix. However, nouns with identical forms in the singular and plural, namely those without noun prefixes, mark number in various ways: (1) some use the quantifier rèn ‘many’ for plural, as in ën jù ‘bees’ and rèn jù ‘(many) bees’; (2) some use concord elements, as in pàm ë ‘my bag’ and pàm ë ‘my bags’; (3) some use tone, as in ë rà ‘trap’ and ë rò ‘traps’; still others use reduplication: ë ë ‘place’/ë ë ë ‘places’, and mf ë ‘chief’/fì mf ë ‘chiefs’.

By contrast, the western Bamileke languages such as Yemba (Dschang-Bamileke) (Tadadjeu 1980) distinguish eight classes and the Ngemba languages distinguish eight to ten. Those with fewer than ten have lost 19, or 19 and 10. Yemba has merged class 10 with 6. In contrast, Mankon (Leroy 1977, 1980) includes the full set of Eastern Grassfields classes, as well as class 19. Mankon also has nasals in the noun prefixes of classes 1, 3, 6, 9, and 10. These western and more conservative Eastern Grassfield languages have the following genders, using Mankon and Yemba as examples: 1/2, 3/6, 5/6, and 7/8. Mankon (Leroy 1980) has 19/6 and 9/10 where Yemba (Tadadjeu 1980:167–9) has 7/6 and 9/6. Both 7/6 and 9/6 along with 3/10 are secondary genders (i.e. genders with only a few members) in Mankon.

For the eastern and more change-prone languages, the genders are difficult to summarize because a given class corresponds often to two or more Proto-Bantu noun classes. Therefore, the noun class numbering system is less helpful. In any case, Limbumb (Voorhoeve 1980b) has five major double class genders, Bamoun (Hombert 1980) has seven, and Banjoun (Nissim 1981:197–8) has three, and three secondary ones.

3.1.2 Locative noun classes

In 3.1.1 above, the Proto-Bantu locative noun classes 16, 17, and 18 did not surface. However, Chia (1983), Leroy (1983a, 1983b), and Annett (1983) demonstrate that residual or foreshadowing forms of Proto-Bantu locative classes are present in GB. Claims for forms reminiscent of classes 16 and 17 are fairly solid, but claims for class 18 are not firmly established (Grégoire 1983:140).

What distinguishes these classes from the other GB noun classes is that they do not have a noun prefix as the exponent of the class. Instead, what appears as a general locative preposition or pre-nominal locative clitic, ã, serves as the head of the noun phrase. This locative ã behaves like a noun prefix in that it controls agreement of various nominal modifiers.

The locative forms appear in Kom, a Ring language, as adverbial locatives (Chia 1983:75–8), anaphoric pronouns with a locative function (Chia 1983:80–2), as demonstratives, relative pronouns, and genitive markers (Chia 1983:82–7), and finally a locative interrogative. Examples of locative concord are given in (1) and (2).
I PRESENT: come LOC Cl.9-house Cl.17-this/*Cl.9-this
‘I am from this house.’

In (1) and (2b), the noun ‘house’ is in class 9 when it is singular, so we would expect class 9 concord like we find in (2a) /ndó zia/ ‘this house’. Instead, since ‘house’ follows the locative preposition /á/, we find class 17 concord /yèn, yèn/, not class 9 /yèn, zia/.

In addition, Kom attests to a locative form with the concord consonant t- (Chia 1983:78–82). In some cases it parallels Proto-Bantu class 18 semantically, but in form it is reminiscent of class 13. However, class 13 in Kom has its own set of concords different from this additional locative class.

In Mundani, a Momo language, locative agreement appears in demonstratives and genitive markers (Annett 1983:123, 126). Consider the following examples of demonstrative agreement:

(3) lób yáá ‘this house’
á lób yáá ‘in this house’

The associative locative agreement shows up as a floating high tone on the prefix of the second noun in the genitive construction:

(4) ḋgél éwét [L-L-H L-H-L] ‘the side of the fire’
á ḋgél éwét [H L-L-H H-L-L] ‘at the side of the fire’

The high tone locative marker, á, requires a high tone genitive marker between the nouns.

In Mankon (Leroy 1983a), a Ngemba language, locative agreement occurs with demonstratives, relative markers, and genitive markers. However, in the case of demonstratives and relatives, the noun they modify must be in the singular. Otherwise the normal plural class agreement is used.

In Yamba (Leroy 1983b), a North language, traces of a locative class show up in the locative interrogative and the adverbial locatives. They resemble class 16.

### 3.2 Pronouns

Independent pronoun systems in GB generally distinguish singular from plural, and first, second, and third persons. They also distinguish inclusive from exclusive. An additional ‘dual inclusive’ category opposed to ‘plural inclusive’ in the first person is reported for various Eastern Grassfields languages, including Bamileke languages, Mankon /i/ (Leroy 1977:3) or Limbum /sô/ (Fransen 1995:179). Case is distinguished, with nominative, accusative, and genitive forms.

Logophoric pronoun systems are found in Momo languages such as Ngie (Watters 1980) and Ngwo (Voorhoeve 1980d), and in Ring languages such as Kom (Voorhoeve
1980d), Babungo (Schaub 1985:111–13), and Aghem (Hyman 1979b:50–1). They are reported also in Mbam-Nkam languages such as Yemba (Dschang-Bamileke) (Hyman pc) and Ngiemboon (Anderson pc).

Pronoun systems indicating same subject vs. different subject across two coordinated clauses are also present. While logophoric pronouns occur in embedded clauses of reported speech to indicate the same referent as one in the main clause, same and different subject pronouns occur in the second clause of coordinate clauses. In these cases the different-subject marker is identical to the normal subject marker, while the same-subject marker has its own form. Some times the same subject marker is analyzed as a conjunction. See §4.7.1 on the Consecutive Clause for examples.

Demonstratives consistently distinguish three degrees of deixis: near speaker, near hearer, and distant. The ‘near hearer’ form is also often referred to as the anaphoric demonstrative (see Hyman 1980a for Ring, and Parker 1989 for Mundani). The relative marker or pronoun often consists of the demonstrative plus the vowel -a. Anaphoric demonstratives are used in ways reminiscent of definite articles. In Babungo (Ring) (Schaub 1985:192) their form varies according to noun class, but in Ngiemboon (Mbam-Nkam) (Anderson pc) it has an invariant form.

Pronoun conjunction is a common feature of GB languages. In Aghem, e.g. it includes both a ‘cumulative bond’ and an ‘incorporative bond’ (Hyman 1979b:53). In the cumulative pattern a plural pronoun takes the first position in the conjunction only if the second pronoun is higher on the pronominal hierarchy, where first person is higher than second, and second higher than third. So we can have ghé à múc ‘them and me’. In the incorporative pattern, the first position can only have a plural form, even if the meaning is singular (so), as in gháùtə wò ‘we exclusive and you (so)’ = ‘me and you (so)’. So we can have gháùtə ghé ‘us including them; them including us; us including him/her; them including me’, contrasting with the cumulative pattern in ghé à múc ‘them and me’.

According to Hyman (1980a:250), the Ring languages are the only GB languages that have introduced new third person pronoun forms using the root ‘body’.

3.3 Verbs

The canonical form of verb stems in GB languages is generally -CV or -CVC. No final theme vowels operate. Verb stems of the form -CVV and -CVCV are also found. Most -CV and -CVV roots have gained this structure through the loss of a final, or second, consonant.

GB languages have two verb classes, one class with high tone and the other with low tone. GB languages have a limited set of verbal suffixes, or extensions. These do not include passive or applicative forms. They are generally productive with a limited set of verb roots, and their semantics are often complex. Primarily four suffixes are attested: -sV ‘causative’, -tV ‘pluralizer, distributive, attenuative’, -nV ‘reciprocal, valence change’, and -kV ‘iterative’. Anderson (1979:80–1) and Schaub (1985:210ff.) report for Aghem and Babungo (Ring) the -sV and -nV suffixes. Mfonyam (1982:199ff.) and Leroy (1982) report for Bafut and Mankon (Ngemba) the -sV, -tV, -nV, and -kV suffixes. Nissim (1981:91–2), Harro (1989), and Mba (1996–7) give evidence from Banjoun (Ghomala) and Yemba (Dschang-Bamileke) for the -tV and -nV suffixes. Ngomba (Satre 1998) has a -iV extension in addition to -sV and -nV, but its meaning is not clear. Note, however, that Fransen (1995:198–208) reports seven extensions for Limbum.

The use of the Bantu pre-final -at/m (Meeussen 1967:110) is widely attested throughout Bantoid outside Narrow Bantu, the GB languages being no exception. In GB it serves as an imperfective suffix -a.
Denominative verbal bases (Meeussen 1967:90) are not productive, though it might be possible to find residual forms in GB.

The tense-aspect-mood (TAM) systems of GB are usually complex, involving a full set of past and future tenses. The Bamileke languages have among the most complex of these TAM systems within GB. For example, Ngiemboon (Anderson 1983:52–7) divides the TAM system between realis and irrealis forms as follows. Realis subdivides into past and present tense forms. Both of these further subdivide into perfective and imperfective categories, with imperfective distinguishing non-progressive (i.e. general imperfective) and progressive. Irrealis subdivides into present and future. Present is always imperfective in form, either non-progressive or progressive. Future is either perfective or imperfective, with imperfective again distinguishing non-progressive and progressive.

The internal structure of the Ngiemboon verb (Anderson 1983:58–9) is:

\[(5) \quad V \rightarrow (\text{Prefix-1}) \text{Prefix-2 Verb-Stem (Suffix-2) (Suffix-3)}
\]

Verb-Stem \rightarrow Verb-Root (Suffix-1)

Where:

- Prefix-1 = realis imperfective prefix (N-)
- Prefix-2 = realis or irrealis polar tones
- Suffix 1 = toneless \(-te\) syllable (see above for \(-tV\))
- Suffix-2 = irrealis polar tone
- Suffix-3 = imperfective suffix (\(-a\))

Note that the verb in GB languages consists primarily of the verb root and a set of TAM affixes. In GB, no language has object prefixes. Consider these examples of the tense distinctions in the realis and irrealis moods and their formal markers in Ngiemboon (Anderson 1983:246ff.). It distinguishes four degrees of past and four degrees of future, but only a few illustrative examples are given here. All are given in the perfective aspect.

- 'P' refers to past and 'F' to future, with the attached numbers referring to degrees of past and future.

\[(6) \quad (a) \; P3 \text{ Perfective}
\]
\[\dot{\text{\(a\)}} \text{ \(l\(\text{\(a\)}} \text{ \(n\(\text{\(z\(\text{\(a\)}} \text{ \(m\(\text{\(b\(\text{\(a\)}} \text{ \(b\(\text{\(a\)}} \text{'he cut the meat (some time ago)'}
\]
\[3s \; 3s \text{ cut meat}
\]

\[(b) \; P2 \text{ Perfective}
\]
\[\dot{\text{\(a\)}} \text{ \(k\(\text{\(a\)}} \text{ \(z\(\text{\(a\)}} \text{ \(m\(\text{\(b\(\text{\(a\)}} \text{ \(b\(\text{\(a\)}} \text{'he cut the meat (yesterday)'}
\]
\[3s \; 3s \text{ cut meat}
\]

\[(c) \; F2 \text{ Perfective}
\]
\[\dot{\text{\(a\)}} \text{ \(t\(\text{\(a\)}} \text{ \(z\(\text{\(a\)}} \text{ \(m\(\text{\(b\(\text{\(a\)}} \text{ \(a\)}} \text{'he will cut the meat (tomorrow)'}
\]
\[3s \; 3s \text{ cut meat}
\]

\[(d) \; F3 \text{ Perfective}
\]
\[\dot{\text{\(a\)}} \text{ \(\text{\(f\(\text{\(a\)}} \text{ \(z\(\text{\(a\)}} \text{ \(m\(\text{\(b\(\text{\(a\)}} \text{ \(a\)}} \text{'he will cut the meat (some time from now)'}
\]
\[3s \; 3s \text{ cut meat}
\]

These tenses are relative tenses in the sense that they do not necessarily refer to absolute points of time. Instead, the time reference is relative to the context provided by other tense markers and the larger context. In addition, as Hyman (1980d) demonstrated for Yemba (Dschang-Bamileke), closely related to Ngiemboon, some tense markers may co-occur with other tense markers to form additional, subtly different readings.

When comparing Bamileke languages, most mark four degrees of Past and four degrees of Future, along with a Present tense that also may serve as a Perfect. See

The future markers in Dschang and Bangwa clearly involve verb roots. For example, in Bangwa, zi in F3 means ‘sleep’ and ch in F4 means ‘stay’. In all of these languages, the past tense markers occur before the negative marker and the verb stem, while the future tense markers usually occur after the negative marker but before the verb stem. The future markers come from earlier consecutive constructions, or even relate to current consecutive constructions.

These forms can be compared to those found in Bafut (Mfonyam 1982:176ff.), a Ngemba, Mbam-Nkam language; Babungo (Schaub 1985:212ff.) and Aghem (Anderson 1979:86ff.), both Ring languages; and Ngie (Watters 1980), a Momo language. A general observation is that Mbam-Nkam (and perhaps Eastern Grassfields Bantu in general), exemplified by the Bamileke languages and Bafut, have the largest number of formal tense distinctions. As one moves to the Ring languages we see that in Babungo r1 and r2 form a single category, as do F3 and F4. In Aghem, P3 and P4 form a single category, as do F3 and F4. However, in Babungo, the r1-r3 category for distant past has the form ‘/f/’ and is found only in the first sentence of a narrative. It indicates the time setting for the story as the distant narrative past. Preliminary data in Ngie, a Momo language, indicate that r1 and r2 form one category as do F3 and F4. Both past tenses are indicated only by tone, although the presence of the tone motivates the presence of an additional vocalic element. In the future tenses only one form is used to mark a general future. So the Ring and Momo languages have less complex TAM systems than Mbam-Nkam.

Turning to imperfective forms, the non-progressive imperfective in Ngiemboon includes an imperfective vocalic suffix ‘-a’, while the progressive imperfective involves the progressive marker ‘ne ‘PROG’ and the imperfective vocalic verbal suffix. The realis progressive may also be marked by ssé, or both ssé and ne together. Similarly Nweh uses asé or ná, or both together.

As for other GB languages, Bafut (Ngemba, Mbam-Nkam), Babungo (Ring, South), Aghem (Ring, West), and Ngie (Momo) display the following characteristics in the imperfective. Bafut (Mfonyam 1982:203ff.) has the following three imperfective markers: a replacive HL tone sequence in present tense and r1, while r2 and r3 have /s/ immediately after the past tense marker, and future tenses use /k/ following the future tense marker. Babungo (Schaub 1985:215ff.) uses tone to distinguish perfective from imperfective aspect, with perfective taking a floating low tone before the verb, and imperfective taking a floating high tone. In some cases this distinction is neutralized. The progressive aspect uses a CV-reduplication of the initial consonant of the verb root plus a central vowel. In Aghem (Anderson 1979:94ff.) and Ngie (Momo) (Watters 1980) the imperfective aspect is simply indicated by a verbal suffix ‘-a’ on to the verb with various realizations depending on the shape of the root and its root vowel.

Finally, it is not uncommon to find verbal categories with one form for main clauses and another for relative clauses. These relative forms may also be used with interrogative word questions and answers to those questions (see Hyman and Watters 1984).

4 SYNTAX

All of the syntax studies to date concern Narrow Grassfields languages rather than any Peripheral ones (see §1.2.2 and 1.3 for ‘Narrow’ vs. ‘Peripheral’). NKEMNJI’s (1995) study of Nweh provides one of the more current syntactic studies – an insightful study within the Principles and Parameters theoretical model. It interestingly treats number and class within noun phrases as phrasal projections, i.e. as syntactic properties spelled out on
the noun prefix rather than lexical properties of the noun. Within the same theory, Magba (1995) considers the INFL category in Mundani. Other syntactic studies include a descriptive one of Limbum by Fransen (1995), of Babungo by Schaub (1985), and a functional one of focus constructions in Aghem by Watters (1977). Otherwise most syntactic studies of these languages consist of articles on particular topics, including Parker (1989, 1991a,b) on the nominal phrase, conditional clauses, and complex sentences and subordination in Mundani.

4.1 Basic word order

The basic word order of GB is SVO, with some interesting variation in certain construction types. Head-complement order thus dominates. Possessive and demonstrative adjectives as well as genitive phrases and relative clauses all follow their head noun. Adpositions are universally prepositions. Objects and other adjuncts follow their head verb. As with other Bantu languages, agreement of noun complements with the head noun is pervasive.

Within the noun phrase, the Momo languages such as Modele (Boum 1980) and Mundani (Parker 1989:160ff.), as well as Ring languages such as Aghem (Hyman 1979b:27), have strict head initial noun phrases. Exceptions to this order include the following. First, in Njie (Watters 1980), the possessive adjective for first and second person, whether singular or plural, precedes the head noun. Third person follows.

Second, for contrastive purposes, it is not uncommon for the order to be reversed to form phrases such as ‘MY dog’ or ‘my OWN dog’. In the case of Nweh (Nkemnji 1995:28–9), when the order is reversed for contrastive purposes, the possessive form is prefixed with the verb agreement marker for the noun class of the head noun, thus serving as a type of predicate nominal form ‘it is mine the bird’. Compare (7a) and (7b). (’SM’ refers to the verb subject marker):

(7) (a) sèŋ _ARGUMENT_ 1:bird 1:my ‘my bird’
(b) à- _ARGUMENT_ 1:sm- 1:my 1:bird ‘my (contrastive) bird’

Both à- and 1:sm in (7b) agree with the noun class of ‘bird’ (Cl.1).

These types of variant word orders in noun phrases are found in various languages, particularly in the Mbam-Nkam region.

4.2 Agreement: subject, object, and VP

Verb phrases (VP) generally agree with their subjects. For most noun classes in most GB languages, the agreement marker is a (C)V- syllable or a homorganic nasal. In Aghem (Hyman 1979b:48), however, an exceptional form is used in which a low tone alone marks subject agreement on the verb for classes 1 and 9 when the subject is a noun. Also it is common for personal subject pronouns to be obligatorily present, including third person personal subject pronouns, in the absence of a subject noun. In Nweh (Nkemnji 1995:9–10), however, personal subject pronouns may be absent in third person singular, but a third person singular agreement marker is still present. In third person plural the norm holds with the personal subject pronoun required in the absence of a noun. In some languages, like Babungo (Schaub 1985), verb agreement seems to be absent, with only independent pronouns used to indicate subject number and person.
Grassfields Bantu languages do not have object agreement in the form of prefixes so common in Bantu. However, many GB languages use an object marker following the verb. Like so much else in GB languages, these are often minimal forms, sometimes a verb final vowel or simply a tone. In Ngiemboon (Anderson 1983:208ff.) e.g. the object marker varies according to the noun class membership of the object noun. If the object noun belongs to class 2, 4, 5, or 6, all classes with CV(N)- nominal prefixes, the object marker is a high tone /´/. For other noun classes (1, 3, 7, 8, 9, 10) the object marker is null. In Ngomba these object markers are identical to the possessive pronouns (Satre 1997).

4.3 Questions

4.3.1 Yes–no and leading questions

Grassfields Bantu languages form yes–no questions with a sentence final question marker. This marker varies from language to language, and may also vary according to phonological and syntactic conditions of a specific language, as in Nweh (Nkemnji 1995:151–6).

(8) (Nkemnji 1995:149, 152)
(a) Njikèm ã kë? npfèt akend’eg if
Njikem 3s PAST:1 eat plantains QUESTION MARKER
‘Did Njikem eat plantains?’
(b) Njikèm ã kë? njiù mbâb ëë
Njikem 3s PAST:1 buy meat QUESTION MARKER
‘Did Njikem buy meat?’

Leading (‘evidential’) questions also use special sentence final particles such as kà in Nweh (Nkemnji 1995:157) and mé in Babungo.

4.3.2 Interrogative word questions

Considerable variation exists in how interrogative word questions are formed. In Ngie (Momo) (Watters 1980) the interrogative word is used in a cleft-like construction such as ‘It was WHO that bought the plantains?’ More commonly GB languages simply substitute the interrogative word in the syntactic position of the noun phrase it questions. For example, in Nweh (Bamileke) (Nkemnji 1995:153), this strategy is used.

(9) Nweh (Nkemnji 1995:153)
(a) awì ã kë? npfèt akend’eg if
who 3s PAST:1 eat plantains QUESTION MARKER
‘Who ate plantains?’
(b) Njikèm ã kò npfèt ak3 ajiù a
Njikem 3s PAST:2 eat what yesterday QUESTION MARKER
‘What did Njikem eat yesterday?’

Babungo (Ring) (Schaub 1985:10) uses a similar strategy to that of Nweh, except that when the subject noun phrase is questioned, the interrogative word occurs following the verb and a reduplicated form of the verb follows. In this way, an SV order becomes VSV.

(10) kò ndò kò ká û Ndulà
give:PFV who give:PFV money to Ndula
‘Who gave money to Ndula?’
Aghem (Ring) (Watters 1979) demonstrates a further development and generalization of the word order in Babungo. The general principle is that any questioned constituent occurs in the position immediately following the verb. The noun phrase that answers the question also occurs in the position immediately following the verb. This suggests the word order SV(FOC)OX (FOC = 'focus' position, X = adjuncts). Consider these examples that question the subject, object, and various adverbial adjuncts.

\[(11)\] (a) à mò zi ndúghɔ bɛ-ɔkɔ
\[\text{D:SM PAST:2 eat who fufu}\]
‘Who ate the fufu?’

(b) fil ã mò zi kwɔ
\[\text{friends c1.2:SM PAST:2 eat what}\]
‘What did the friends eat?’

(c) fil ã mò zi ghɛ bɛ-ɔkɔ
\[\text{friends c1.2:SM PAST:2 eat where fufu}\]
‘Where did the friends eat fufu?’

### 4.4 Negation

#### 4.4.1 Sentence

The simplest way to negate a sentence is to modify the verbal word or phrase with a negative morpheme. Consider the following example from Aghem:

\[(12)\] (a) ò bò fi-ghm ‘he has hit the mat’
\[\text{3SG hit c7-mat}\]

(b) ò kà bó ghâm-fɔ ‘he has not hit the mat’
\[\text{3SG NEG hit mat-c7 (demphasized noun form required with negatives)}\]

In fact, Aghem (Anderson 1979:118ff.) has a basic perfective, negative /kà/ which has four variant forms, and an imperfective, negative /yɔ/. The perfective negative occurs between the subject and the verb, while the imperfective negative occurs following the verb and before any object.

More common in GB, however, is the use of a discontinuous form. The first morpheme occurs within the verbal word while the second morpheme occurs at the end of the clause or sentence. The negative forms in Ngiemboon (Anderson 1983), e.g. involve a discontinuous form, with tɛ positioned before the verb root and wɔ at the end of the clause.

\[(13)\] (a) r3 Negative Perfective
\[\text{à là tɛ zɔ? mbàb wɔ }\]
‘he did not cut the meat (some time ago)’
\[\text{3s r3 NEG cut meat NEG}\]

(b) r3 Negative Non-progressive Imperfective
\[\text{à làa tɛ nɔzɔ? mbàb wɔ }\]
‘he did not use to cut meat (some time ago)’
\[\text{3s r3 NEG cut meat NEG}\]

The discontinuous morpheme /tɛ ... wɔ/ is used for negation in all tenses but the present. In the present tense, it is /kà ... wɔ/. Note that the tɛ and kà occur after the past tense markers but before the future markers, and wɔ is always a clause or sentence final clitic.
In Bangwa (Nguendjio 1992:95), the negative marker is also a discontinuous /kə ... wɔ/, used with past and future tenses. In Nweh (Nkemnji 1995:112ff.) one finds either /te ... bɔ/, with bɔ occurring clause (or sentence) final, or bɔ is absent and the verb occurs in the clause final position, as follows.

(14) (a) Njikèm à kɔ te flà nkâp anbô Atem ajùa bɔ
Njikem 3s r2 NEG give money to Atem yesterday NEG
‘Njikem did not give money to Atem yesterday.’

(b) Njikèm à kɔ te nkâp anbô Atem ajùa flà
Njikem 3s r2 money to Atem yesterday give
‘Njikem did not give money to Atem yesterday.’

The two ways of marking sentence negation in Nweh likely reflect two different scopes of negation: the entire verb phrase in (14a) and a specific constituent in (14b).

Turning to negative forms in other languages, Bafut (Ngemba, Mbam-Nkam), Babungo (Ring, South), Aghem (Ring, West), and Ngie (Momo) display the following characteristics. In Bafut (Mfonymam 1982:223ff.) negative constructions have these general properties: the verb is clause final, and the negative marker is a discontinuous morpheme with the first morpheme kaa occurring clause initial and the second morpheme following the subject and tense marker. The second morpheme is either sI or sI, in the present tense, and /wá’/ in all past and future tenses.

Babungo (Schaub 1985:91ff.) also has a discontinuous marking of sentence negation. The first negative morpheme kèe occurs after the past tense marker and before the verb, as well as before the future tense marker and verb, as in Ngiemboon. The second morpheme, mè, occurs at the end of the clause. In complex sentences, the second morpheme follows noun clauses or relative clauses, but precedes a following adverbial clause.

Ngie (Watters 1980) appears to have the commonly attested discontinuous marker also, the first morpheme being kî with past tenses, kî with the future tense, and kɔrɔ with all imperfective forms. However, in the second position the morpheme is apparently the repetition of the subject after the verb in the form of the possessive pronoun. This pronoun agrees in person and number with the subject. In addition, rather than occurring at the end of the clause it occurs immediately after the verb and before the object.

(15) wɔ-ɔ kî kɔm-3 mà bòu ‘he did not hit the dog’
3s-r2 NEG hit-IMPFV 3s:POSS dog

Repetition of the subject after the verb by using a (possessive) pronominal form is also found in Momo (e.g. Ngamambo) and Mbam-Nkam (e.g. Ngemba in one tense).

4.4.2 Constituent negation

Most GB languages may use a cleft-like construction for negation of specific constituents. However, a combination of normal negation along with normal focus morphemes or focus constructions may also allow for negation of specific constituents. Consider the example from Nweh (Nkemnji 1995:140) where the verb, repeated, is focused and thus becomes the negated constituent.

(16) Atem a kɔ? te ciù akënd`ŋ ciù bɔ
Atem 3s PAST:1 NEG boil plantains boil NEG
‘Atem did not BOIL plantains.’
4.5 Topics, passives, voice, valency

Grassfields Bantu languages do not have passive morphology or syntax. There is no presence of the Bantu -we extension. Instead GB languages use an indefinite personal form, usually a third person plural pronoun, instead of passives. Thus, locatives and instrumental do not have access to the subject position via promotion to object position and passivization. Other common extensions are absent or limited in use (see §3.3). Applicative notions such as benefactive and dative are generally expressed by prepositional phrases. However, they may also occur preceding the direct object to form SVOO constructions. Though some verbs take causative affixes, causative is also often expressed periphrastically using the verb ‘to do’.

Topics commonly are sentence initial. In some cases a morpheme may set the topic off from the rest of the sentence; in other cases no special marking may be used; in others the subject may occur after the verb, producing a V-S order, as in Babungo (Schaub 1985:131). Reflexive equivalents may use the noun ‘body’ and the possessive pronoun that is coreferential with the subject in person and number. Reciprocals in Babungo use the reduplication of the third person plural pronoun along with ‘bodies’ as in:

(17) Babungo (South Ring) (Schaub 1985:199)

\[
\begin{array}{c}
\text{vög gänö} \quad \text{yĩywáa vôy, vôy vôy} \\
3pl. help:PV bodies 3PL, 3PL 3PL
\end{array}
\]

‘They helped each other.’

4.6 Focus (or ‘emphasis’)

The more common way to mark emphasis or focus is to use morphological and syntactic marking. These mechanisms are used to indicate assertive focus (e.g. answers to interrogative word questions) and counter-assertive (or ‘contrastive’) focus (see Watters 1979). The simplest system might be that in Ngie (Momo), which uses cleft-like constructions to ask interrogative word questions, to answer them, and to mark counter-assertive focus.

Other languages, such as Nweh (Nkemnji 1995:136), use a focus marker for counter-assertive focus. In Nweh the focused constituent is the one that the focus marker mö separates from the verb: the subject in (18a) and object in (18b).

(18) Nweh (Nkemnji 1995:136)

\[(a) \quad Njikem \quad mö \quad a \quad kë? \quad nčūù \quad akendęŋ \]
\[Njikem \quad foc \quad 3s \quad past:1 \quad boil \quad plantains \]

‘NJIKEM boiled plantains.’

\[(b) \quad Njikem \quad a \quad kë? \quad nčūù \quad mö \quad akendęŋ \]
\[Njikem \quad 3s \quad past:1 \quad boil \quad foc \quad plantains \]

‘Njikem boiled PLANTAINS.’

If the focus is the verb rather than the subject, object or adjunct, the verb root is simply reduplicated (Nkemnji 1995:138).

(19) Atem \quad a \quad kë? \quad nčūù \quad akendęŋ \quad chūū

\[Atem \quad 3s \quad past:1 \quad boil \quad plantains \quad boil \]

‘Atem BOILED plantains.’
Babungo uses a number of morphemes to mark assertive and counter-assertive focus (see Schaub 1985:120). In addition, Babungo has a movement strategy. However, it is used only with subjects. They are placed in a position immediately following the verb. If the sentence contains an object, the verb must be repeated (20b).

(20) Babungo (Schaub 1985:122)
(a) Lambil gà taaa yi’weyi go:PV Lambi to market
‘Lambi has gone to the market.’
(b) Lambil nà f’ianò yii nyò go:PV Lambi build house this
‘Lambi built this house.’

A more elaborate system is found in Aghem (Watters 1979). In some cases it uses a focus particle *nô ‘focus (FOC)* to indicate counter-assertive focus. This morpheme may only mark one constituent per sentence, and must be postverbal.

(21) Aghem (Watters 1979:167)
(a) fú kì mò nîyi nò a ki’-bè rat it past run FOC in compound
‘The rat ran (did not walk) in the compound.’
(b) fú kì mò nîyi a ki’-bè nò rat it past run in Compound FOC
‘The rat ran inside the compound (not inside the house).’

Aghem also uses word order. The immediately postverbal position is used for focus, whether interrogative word questions or answers to them. Consider the interrogative word questions in (11) in §4.3.4. Consider question (11c), repeated here as (22a), and its answers in (22b, c). The use of an immediately preverbal position for presupposed information that usually follows the verb is shown in (11c).

(22) (a) QUESTION:
fil à mò zi ghè bè-kò friends Cl.2:SM PAST:2 eat where fufu
‘Where did the friends eat fufu?’
(b) ANSWER (assertive or counter-assertive)
(fil à mò zi) ân *sòm (bè-kò)
(friends Cl.2:SM P2 eat) in farm (fufu)
‘(The friends ate fufu) in the farm.’
(c) ANSWER (counter-assertive only)
(fil à mò bè-kì zi) ân *sòm
(friends Cl.2:SM P2 fufu eat) in farm
‘(The friends ate fufu) IN THE FARM.’

Finally, Aghem may mark counter-assertive focus on the truth-value of the utterance. This is marked through the use of a different set of tense-aspect markers (see Watters
1979:164 for details). A minimal contrast to show the distinction is:

(23) (a) énà? mò fùo kí-bè à fìn-ghà
Inah r2 give fufu to friends
‘Inah gave fufu to (his) friends.’
(b) énà? mó? fùo bë-kɔ̀ à fìn-ghà
Inah r2 ʃ roc give fufu to friends
‘Inah did give fufu to (his) friends.’ (=That Inah gave fufu to (his) friends
is true.)

An affirmative and negative set of tense-aspect markers are available for r0,
r1, and r2.

4.7 Compound and complex sentences

Among the various compound and complex sentences, in this section only consecutive
constructions, serial constructions, and relative clauses are presented. Studies on other
topics involving sentences with multiple clauses include one on relative time reference
(Hyman 1980d), a couple on conditionals in Mundan (Parker 1991a) and complex
sentences and subordination in Mundan (Parker 1991b), markers of parallelism in Meta’
(Spreda 1991), and prominence in Bafut (Mfonyam 1991).

4.7.1 Consecutive constructions

Consecutive constructions are common in GB languages. In such constructions, the two
coordinated clauses agree in tense and aspect. In the examples below from Bafut
(Wiesemann et al. 1984:89) the nasal on the verb ‘catch’ in (26a) marks the sequencing
of the clauses and serves as a same-subject (SS) marker. The normal ‘3s’ subject marker
á- in (26b) marks a different subject.

(24) Bafut

(a) á-ghèë ńdà ǹ-kwèrɔ̀ fɔ̀rɔ̀
3s-go house ss-catch rat
‘then he went to the house and caught a rat’
(b) á-ghèë ńdà ngwà á-kwèrɔ̀ fɔ̀rɔ̀
3s-go house of-Ngwa 3s-catch rat
‘then he went to Ngwa’s house and he (Ngwa) caught a rat’

Identical same-subject markers are found in Fe’fe’ (Mbam-Nkam) (Hyman 1971) and
Mundani (Momo). Mundani has a different form for the same-subject marker when it
occurs in the irrealis mood (Wiesemann et al. 1984:89–90).

4.7.2 Serial constructions

Sometimes what is linked by coordination are two verb phrases rather than two clauses.
In these cases we can talk of ‘serial verb constructions’ or ‘serialization’. Consider this
example from Babungo.

(25) mò gò țiɲ ngà
1 go-IMFV shoot-NEUTR animal
‘I went to shoot an animal.’
These sequences of verbs share the same subject noun phrase and may have an intervening object between the verbs. The second verb is not marked for tense-aspect. Often one of the verbs serves more as an auxiliary verb with a meaning different from its core meaning. In this case, ‘go’ means ‘go with a purpose’.

4.7.3 Relative (adjectival) clauses

Generally, a distinction between restrictive and non-restrictive relative clauses has not been reported, except in the case of Babungo. If the subject of the relative clause is relativized, a gap is commonly left in the subject position, with the class subject marker still present. If the object is relativized, a gap is also generally left, though a resumptive pronoun may be used, either for emphasis or to disambiguate pronoun reference. If an oblique noun phrase is relativized, a resumptive pronoun is generally obligatory.

In Banjoun (Ghomala) (Nissim 1981:242) the relative is formed with a discontinuous morpheme that marks the beginning and end of the relative clause.

(26) *mo yɔ — e jɔ siŋ a’á*

man REL <gap> 3ps seePAST bird REL

‘… the man who saw the bird’

In Nweh (Nkemnji 1995:51ff.) the relative marker is identical to the ‘distant’ demonstrative pronoun. No discontinuous morpheme is used. In Babungo (Schaub 1985:32, 208) the relative clause is marked by a subordinating marker *fá* ‘which’ (some people use the form *yúu*), different from any demonstrative form. This form is non-restrictive. To make it restrictive, the interrogative pronoun relevant to the noun class of the head noun must immediately precede the subordinating pronoun.

5 CONCLUSION

Enormous progress has been made during the past thirty years in our understanding of the GB languages. We have a clearer picture of the classificatory and historical issues, as well as the descriptive issues in the phonology and grammar of these languages. This understanding has contributed in particular to broadening the discussion on historical issues within Bantoid and Bantu, and also to what is possible phonologically – particularly with tone. However, as our understanding has grown we have also been left with a growing list of questions. Much remains to be researched and learned about these languages, whether through more in-depth studies of specific languages, or through comparative and historical studies.

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corrections on §1.3 from recent surveys of GB languages, along with comments he passed along from Ginny Bradley, Joseph Mfonyam, Janice Sprede, and Klaus Spreda. In the end, however, I have to take full responsibility for the choices made and any errors or shortcomings present in the chapter.

REFERENCES

CHAPTER FIFTEEN

BASAÁ (A43)

Larry M. Hyman

1 INTRODUCTION

The Basaá [basáá] language is spoken by an estimated 282,000 people (SIL 1982, cited in Grimes 2000), with relatively minor dialect variation, in Province du Centre and Province du Littoral in southern Cameroon. Guthrie (1967–71) separates Basaá into two groups: Mbéné A43a, spoken in the departments of Nkam, Wouri, Sanaga-Maritime, Nyong et Kellé and Kribi, and Bakóko A43b, spoken in the departments of Nkam and Sanaga-Maritime. The Ethnologue lists the following dialects: Bakem, Bon, Bibeng, Diboum, Log, Mpo, Mbang, Ndokama, Basso, Ndokbele, Ndokpenta, Nyamtam. The standard dialect, a form of Mbéné, is said to be spoken in the area around Pouma in Sanaga-Maritime, but has a widespread distribution in the Basaá-speaking region. In addition, Basaá is spoken as a vehicular language in the Bakóko and Tunen areas (Breton and Fohtung 1991:21). Although quite evolved, Basaá is easily identifiable as Bantu by its lexicon as well as by its morphology, e.g. its noun class marking and verb extensions. The language is particularly noteworthy for the phonological changes it has undergone, which have in turn had a major effect on the verb stem morphology.

Among the earliest grammatical works on Basaá are Rosenhuber (1908), Scholaster (1914) and Schürle (1912). More recent extensive works dealing with Basaá phonology, grammar, and lexicon which I have consulted are Bot Ba Njock (1970), Lemb and de Gastines (1973), Janssens (1982, 1986), Dimmendaal (1988), and Bitjaa Kody (1990). A wide-ranging Basaá bibliography of over fifty items is indexed by Barreteau et al. (1993:226).

The sections which follow are devoted to phonology (§2), noun and noun phrase (§3), verb derivation (§4), and basic clause structure and verb inflection (§5).

2 PHONOLOGY

It is in its phonology that Basaá seems so non-Bantu-like. Diverging from ‘canonical’ Bantu languages, Basaá allows both open and closed syllables and does not require surface syllable onsets, as exemplified in the following monosyllabic noun and verb forms:

CV:  
- *sui* ‘face’  
- *pa* ‘machete’  
- *jé* ‘eat’  
- *ló* ‘come, arrive’

V:  
- *ú* ‘night’  
- *é* ‘clear brush’  
- *ó* ‘grow (plant)’

CVC:  
- *kóp* ‘chicken’  
- *put* ‘forest, bush’  
- *lém* ‘become extinguished’  
- *ók* ‘rot’

VC:  
- *mb* ‘caterpillar’  
- *on* ‘island’  
- *ág* ‘count, read’

G~l ‘rot’ ~k ‘curse’
2.1 Vowels

Basaá distinguishes the seven vowels /i, e, u, o, ñ, a/, which occur long and short, and which contrast in open and closed syllables:

<table>
<thead>
<tr>
<th>CVV:</th>
<th>VV:</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/ : tí</td>
<td>sii</td>
</tr>
<tr>
<td>/e/ : ye</td>
<td>sée</td>
</tr>
<tr>
<td>/ë/ : në</td>
<td>see</td>
</tr>
<tr>
<td>/u/ : tú</td>
<td>suu</td>
</tr>
<tr>
<td>/o/ : jo</td>
<td>soo</td>
</tr>
<tr>
<td>/a/ : lá</td>
<td>sâa</td>
</tr>
<tr>
<td>/ñ/</td>
<td>sç'o</td>
</tr>
</tbody>
</table>

However, as Janssens (1986:189–90) shows, the relation of these seven vowels to the seven-vowel system of Proto-Bantu (PB) is not always direct. For instance, the vowel of noun and verb stems which have lost a final *a are one degree lower than in PB:

*di'ba  ‘water’  > ma#lëp  6  ‘water’ (cf. lëp 5 ‘rivière, ruisseau’)
*kiba  ‘hen’  > kôp  9  ‘hen, rooster’
*binga  ‘pigeon’  > hi#beg  19  ‘pigeon’
*gamba  ‘sterile female’  > kôm  9  ‘sterility’
*dim-a  ‘extinguish’  > lêm  ‘extinguish’
*djët-a  ‘pull’  > ot  ‘pull, draw, smoke’
*bid-(u)-a  ‘be cooked’  > biël  ‘be cooked’
*tim-a  ‘send’  > ñm  ‘send’

The vowel alternations that occur in derived verb forms, e.g. applicative limil, udul, bëlël, ômol, are discussed in §4.2.

2.2 Consonants

The Basaá consonant system is considerably more complex and requires that one distinguish stem-initial vs. other positions in the word. For this purpose we recognize the ‘prosodic stem’ (root + suffixes) for which the following shapes are attested:

1 syllable

<table>
<thead>
<tr>
<th>CV</th>
<th>CVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>lá</td>
<td>hôl</td>
</tr>
<tr>
<td>nô</td>
<td>bay</td>
</tr>
</tbody>
</table>
As illustrated, the prosodic stem contains a maximum of three syllables, four consonants (C1, C2, C3, C4) and three vowels (V1, V2, V3). In addition, the initial syllable of bisyllabic stems may either be light or heavy, while the initial syllable of trisyllabic stems must be heavy.

Within the prosodic stem, the number of underlying consonant oppositions is progressively smaller as one passes from C1 to C2 to C3 to C4:

<table>
<thead>
<tr>
<th></th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
</tr>
</thead>
<tbody>
<tr>
<td>/p, t, c, k, kw/</td>
<td>/p, t, k, p, t, k/</td>
<td>/s, h, s, s, s/</td>
<td>/0, l, j, gw, l, l/</td>
<td></td>
</tr>
<tr>
<td>/m, n, ny, η/</td>
<td>/m, n, η/</td>
<td>/m, n, η/</td>
<td>/m, n, n, mb, nd, ηg/</td>
<td></td>
</tr>
</tbody>
</table>

The full range of 22 consonants contrast in C1 position vs. 12, 6 and 3 in each successive position. In addition, while /k, s, n/ all occur as C4 in CVCCCV stems, only /k/ appears in CVCCVC stems, e.g. /máglak ‘en ouvrant’. The palatal affricates /c, j/ can be analyzed as /ty, ly/ and the voiced labiovelars /gw, ñw/ as /by, my/. In present day Basaa the only surface C + y sequence is /hy/, which some speakers simplify to [h], e.g. hyembí ~ hembi ‘song’.

Besides the gradual decrease in consonant oppositions, /p, t, k, s/ are realized differently according to their position within the template: in C1 position, /p, t, k, s/ are realized [p, t, k, s], independent of whether there is a preceding prefix or not, e.g. class 5 /li/: /li=pan ‘forest’, /li=tam ‘fruit’, /li=kuŋ ‘owl’, /li=san ‘time, occasion’. /s/ contrasts with /h/ in this position; cf. /li=hay ‘animal track’. On the other hand, /p, t, k/ are realized voiced when not in C1 position, and when not occurring before pause. Written ‘b, d, g’, the voiced variants are often also spirantized to [b, d, g], especially when occurring postvocically. Thus, compare the following underlying, orthographic and phonetic representations of the following words (cf. Hyman 1990, 2000):

<table>
<thead>
<tr>
<th>Underlying</th>
<th>Orthographic</th>
<th>Phonetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>/titiki/</td>
<td>tîdgi</td>
<td>tîrgi ‘small’</td>
</tr>
<tr>
<td>/bomta/</td>
<td>bûmda</td>
<td>bûmdà ‘trip (v.)’</td>
</tr>
<tr>
<td>/pitip/</td>
<td>pîrip</td>
<td>pîrip ‘scorn’</td>
</tr>
<tr>
<td>/li=mapka/</td>
<td>li=maβga</td>
<td>li=maβga ‘taking form’</td>
</tr>
<tr>
<td>/kokna/</td>
<td>kôynə</td>
<td>kôynə ‘crush each other’</td>
</tr>
</tbody>
</table>

This voicing (and spirantization), which is predictable once the stem-boundary (＃) is recognized, also occurs in prefixes and other grammatical morphemes, e.g. bi- (class 8), bi (general past tense), di- (class 13), di (First person plural), gá (general future tense).
Exceptions which occur fall into two categories. The first consists of borrowings, e.g. *dáktá ‘doctor’, *dála ‘five francs’ (*‘dollar’), *pásto ‘paster’, *sitá ‘sister’, *sitámp ‘stamp, seal’, *hási ‘horse’, *páppá ‘papaya’, *kakáó ‘cacao’. The second category of exceptions consists of words whose two CV sequences are identical, e.g. *pápáy ‘wing’, *tátá ‘my father’, *kékét ‘edible caterpillar’, *sísígá ‘hiccup’. As we shall see in §3.1, nouns may undergo a diminutization process involving reduplication, which not only results in C2 [p, t, s], e.g. *sú ‘face’ → *hi#sú ‘small face’, but also permits underlying consonants that would not normally appear in C2 position, e.g. *ngwó ‘dog’ → *hi#ngwó ‘small dog’. It should be noted that non-stem-initial /p, t, k/ are written as p, t, k when word-final, otherwise as b, d, g, e.g. níp ‘steal’, nib-á ‘be stolen’ (passive).

When stem-final, the stops /p, t, k/ are typically realized voiced and contiguous in connected speech (e.g. *corek + dinán [coróy rinán] ‘your (pl.) stars’), but as voiceless before pause. As a consequence, they are generally transcribed as voiceless whenever word-final, e.g. li#yét ‘poverty’, li#yêt ‘anger’, li#lók ‘dancing’. However, there is variation, e.g. /mut/ ‘person’ can be heard as [mut], [mutº], [mud] or even [mur]. /s/ is realized [s] as C1 and before pause, e.g. li#sín ‘red fly (sp.)’, li#kas ‘corner, angle’. Elsewhere, /s/ is realized as [h], thereby neutralizing with /h/. The differential realization of /s/ as [s] vs. [h] is often seen in the derivational verb morphology, e.g. tís ‘touch’, tíhá ‘be touched’ (passive), íhó ‘touch for/at’ (applicative), íhóba ‘touch’ (reflexive). Since only /h/ occurs finally as C4, C4 /s/ is always prevocalic and appears as [h], e.g. pinglaha ‘make move’, indirect causative of pingl ‘move (sth.).’ Finally, researchers concur that the prenasalized consonants /mb, nd, ng/ are voiceless, even before pause, e.g. li#umb ‘alcohol’, li#wend ‘barrier’, li#séng ‘parasol-holder’.

2.3 Tone

As seen in the above examples, Basaá contrasts H(igh) and L(ow) tone (Bot Ba Njock 1964, Dimmendaal 1988). H is marked by an acute accent, while L is unmarked. A syllable may be either all H or L, or may involve a fall from H to L to a rise from L to H. The resulting four-way tonal opposition is found on CVC and CVV roots:

<table>
<thead>
<tr>
<th>sound</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kóm</td>
<td>‘rice’</td>
</tr>
<tr>
<td>bén</td>
<td>‘hole’</td>
</tr>
<tr>
<td>sl̀</td>
<td>‘basket’</td>
</tr>
<tr>
<td>lé</td>
<td>‘feather’</td>
</tr>
<tr>
<td>kǒl</td>
<td>‘charcoal’</td>
</tr>
<tr>
<td>tůú</td>
<td>‘shoulder’</td>
</tr>
<tr>
<td>ǹsp</td>
<td>‘rain’</td>
</tr>
<tr>
<td>nyà</td>
<td>‘snake’</td>
</tr>
</tbody>
</table>

As Janssens (1986:184–6) demonstrates, these H and L tones generally correspond to PB, as seen in the following cases where PB *CVCV > CVV through the loss of the second stem consonant:

* -* gudu ‘leg’ > koo ‘leg’
* -* bígà ‘pot’ > li#-bíé ‘pot’
* -* táá ‘three’ > áá [áá] ‘three’
* -* pídi ‘viper’ > péé ‘viper’

Where the final vowel is lost, the one remaining tone is identical to the first tone of the PB reconstruction:

* -* bímo ‘belly’ > li#bim ‘belly’
* -* dágú ‘brother’ > lòk ‘family, lineage, of the same tribe’
* -* jàá ‘child’ > m#áń ‘child’ (/m’ #án/)
* -* tambí ‘sole of foot’ > tám ‘shoe’
The major tone rule in present-day Basaá is High Tone Spreading (HTS), by which a /H–L/ sequence becomes [H–HL] (high-falling) on the surface. The rule applies extensively to both nouns and verbs (Dimmendaal 1988:29):

/kémbe/ → këmbë ‘goat’
/lí#phël/ → lí#phël ‘comb’
/hòlöl/ → hòlöl ‘ripen’
/këngëp/ → këngëp ‘get fat’

The rule also applies across a word boundary. Thus njëë ‘which’ + mut ‘person’ → njëë mët ‘which person?’. Compare also njëk yëm ‘my elephant’ vs. ñgëk yëm ‘my pride’.

In certain situations HTS provides a window into the underlying syllable structure of a form. This is seen particularly clearly in derived verb forms:

<table>
<thead>
<tr>
<th>Passive</th>
<th>Applicative</th>
</tr>
</thead>
<tbody>
<tr>
<td>bëp ‘beat’</td>
<td>bëpá bëbël</td>
</tr>
<tr>
<td>kët ‘pick’</td>
<td>këdë këdël</td>
</tr>
<tr>
<td>kôböl ‘peel’</td>
<td>kôbla kôblene</td>
</tr>
<tr>
<td>ságäl ‘unhook’</td>
<td>ságla ságlene</td>
</tr>
</tbody>
</table>

As seen in the first pair of examples, when the L tone passive suffix -a or applicative suffix -Vl is added to a H tone CVC verb, the H spreads to create a HL falling tone on the suffix. As also seen, root vowels sometimes undergo a vowel raising or umlaut process (cf. §4.2). In the second pair of examples involving CVVC verbs, the passive is again marked by -a, while in this case the applicative suffix has the shape -ene. In neither case does the root H create a falling tone on the next vowel. (Vowel raising also does not apply.) We can account for this most straightforwardly if we assume a derivation such as the following:

HTS syncope
/kôböl-a/ ‘be peeled’ → kôbëla → kôbla
/ságäl-a/ ‘be unhooked’ → ságëla → ságla

First HTS spreading applies onto the medial vowel, as shown, and then this vowel is deleted by the following syncope rule:

\[ V \rightarrow \emptyset / V C _ _ C V \]

Besides its interaction with this syncope process, HTS can provide evidence for whether a long vowel should be analyzed as tauto- vs. heterosyllabic. Thus, consider the following minimal pair, whose derived forms should be compared to those seen above:

<table>
<thead>
<tr>
<th>Passive</th>
<th>Applicative</th>
</tr>
</thead>
<tbody>
<tr>
<td>sàá /sàC/ ‘spread’</td>
<td>sëà /sëCa/ sëë /sëCeC/</td>
</tr>
<tr>
<td>sàá /sàCaC/ ‘pay’</td>
<td>sëëa /sëCCa/ sàéë /sàëEnE/</td>
</tr>
</tbody>
</table>

When the passive suffix -a is added to a H tone CVV verb, the latter undergoes vowel shortening (and vowel raising). As seen, such verbs are analyzed with a final ghost /C/, which can provide length only if it is in coda position. In addition, rather than adding /-Vl/, H tone CVV verbs typically form their applicative by changing their vowel and acquiring a HL tone. On the other hand, a CVV verb which has a HHL tonal contour keeps its length in the passive and uses the -(‡)n‡ allomorph of the applicative. As seen, such verbs are underlying bisyllabic with two ghost /C/s.
Note finally that contour tones often simplify when not in pre-pause position. Although there is variation, when followed by a H tone, a rising tone typically becomes L, e.g. "joy your name", "joy your name". Similarly, a HL falling tone may simplify to H in connected speech, e.g. "tata ‘father’, tata wés ‘our father’

When followed by a H, a falling tone will also be simplified to H. In this case, the delinked L tone causes a downstep on the following H, e.g. "nácëp branch", "nácëp your branch’. There are many other contexts in which downstepped Hs are produced. These all have in common that an unlinked or floating L tone is wedged between two H tones. There are two such downsteps in the following sentence:

\[ a bì 'tí bò 'kòn ‘he gave them beans’ \]

The first unlinked L follows the general past marker ë, while the second is a floating L prefix on class 9 kòn ‘beans, rice’. This latter L shows that all nouns have a L prefix, whether it is realized segmentally or not.

3 THE NOUN AND NOUN PHRASE

As in other Bantu languages, Basaá nouns consist of a prefix + stem and condition noun class concord on agreeing elements (cf. Bot Ba Njock 1970, Dimmendaal 1988). Table 15.1 provides an overview of noun class marking in Basaá. As seen, noun and concord prefixes may be either segmental or non-segmental and may have different realizations before consonant- vs. vowel-initial roots. Before a consonant, two kinds of homorganic nasal prefix must be distinguished: class 1,3 N#, which is moraic and tone-bearing vs. class 9/10 N-, which is non-moraic and non-tone-bearing.

3.1 Nouns

In all cases, the basic tone of noun prefixes is L (which will float if the prefix is non-segmental or non-moraic, e.g. in classes 1a, 3a, 7, 9, and 10). Examples are provided in table 15.2.

**TABLE 15.1: NOUN CLASS MARKING IN BASAÁ**

<table>
<thead>
<tr>
<th>Class</th>
<th>Noun prefix</th>
<th>/__V</th>
<th>Concord prefix</th>
<th>/__V</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(a)</td>
<td>N#, Ø-</td>
<td>m-, yw-</td>
<td>w-</td>
<td>a- w-</td>
</tr>
<tr>
<td>2</td>
<td>N#</td>
<td>y-</td>
<td>i-</td>
<td>w-</td>
</tr>
<tr>
<td>3</td>
<td>Ø-</td>
<td>w-</td>
<td>i-</td>
<td>w-</td>
</tr>
<tr>
<td>3a</td>
<td>Ø#</td>
<td>y-</td>
<td>i-</td>
<td>w-</td>
</tr>
<tr>
<td>4</td>
<td>mN#</td>
<td>m-</td>
<td>m-</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>l#</td>
<td>j-</td>
<td>j-</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>m#</td>
<td>m-</td>
<td>m-</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Ø-</td>
<td>y-</td>
<td>y-</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>bi#</td>
<td>gw-</td>
<td>bi-</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ø- N#</td>
<td>n-</td>
<td>y-</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Ø- N#</td>
<td>n-</td>
<td>y-</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>di#</td>
<td>c-</td>
<td>c-</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>hi#</td>
<td>hy-</td>
<td>hi-</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>Singular</td>
<td>Plural</td>
<td>Meaning</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
<td>--------</td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td>n # lóm</td>
<td>ba # lóm</td>
<td>‘husband, male’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>y # jô</td>
<td>ba # jô</td>
<td>‘enemy’</td>
<td></td>
</tr>
<tr>
<td>m-ut</td>
<td>b-ut</td>
<td>m-ut</td>
<td>‘person’</td>
<td></td>
</tr>
<tr>
<td>m-ulaá</td>
<td>b-odaá</td>
<td>m-ulaá</td>
<td>‘woman’</td>
<td></td>
</tr>
<tr>
<td>m-aaggé</td>
<td>b-odaagé</td>
<td>m-aaggé</td>
<td>‘child’</td>
<td></td>
</tr>
<tr>
<td>yw-aá</td>
<td>b-aá</td>
<td>yw-aá</td>
<td>‘wife’</td>
<td></td>
</tr>
<tr>
<td>nyámbé</td>
<td>ba # nyámbé</td>
<td>nyámbé</td>
<td>‘God’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3/4</td>
<td>m # pek</td>
<td>‘bag’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n # kómá</td>
<td>mi-m # kómá</td>
<td>‘sheep’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>y # kôl</td>
<td>mi-y # kôl</td>
<td>‘slave’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n # sëm</td>
<td>mi-n # sëm</td>
<td>‘flower’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>y # 3</td>
<td>mi-y # 3</td>
<td>‘head’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>y # èm</td>
<td>mi-y # èm</td>
<td>‘heart’</td>
<td></td>
</tr>
<tr>
<td>3a/6</td>
<td>ny ñ</td>
<td>ma # ny ñ</td>
<td>‘mouth’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>koo</td>
<td>ma # koo</td>
<td>‘leg’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sù</td>
<td>ma # sù</td>
<td>‘face’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sô</td>
<td>ma # sô</td>
<td>‘ear’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>w-cô</td>
<td>m-ô</td>
<td>‘hand’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>w-ëm</td>
<td>m-ëm</td>
<td>‘mushroom’ (sp.)</td>
<td></td>
</tr>
<tr>
<td>5/6</td>
<td>li # pa</td>
<td>ma # pa</td>
<td>‘forest’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>li # fum</td>
<td>ma # fum</td>
<td>‘belly’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>li # èn</td>
<td>ma # èn</td>
<td>‘oil palm’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>li # âá</td>
<td>ma # âá</td>
<td>‘rock’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>j-ôl</td>
<td>m-ôl</td>
<td>‘nose’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>j-ôs</td>
<td>m-ôs</td>
<td>‘eye’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>j-ôá</td>
<td>m-ôá</td>
<td>‘crab’</td>
<td></td>
</tr>
<tr>
<td>7/8</td>
<td>dôg</td>
<td>bi # dôg</td>
<td>‘horn’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hês</td>
<td>bi # hês</td>
<td>‘bone’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ë</td>
<td>bi # ë</td>
<td>‘tree’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ñmb</td>
<td>bi # ñmb</td>
<td>‘caterpillar’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>y-óm</td>
<td>gw-ôm</td>
<td>‘thing’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>y-ôô</td>
<td>gw-ôô</td>
<td>‘yam’</td>
<td></td>
</tr>
<tr>
<td>9/10</td>
<td>pèn</td>
<td>pèn</td>
<td>‘arrow’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tòk</td>
<td>tòk</td>
<td>‘spoon’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>kîl</td>
<td>kîl</td>
<td>‘tortoise’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>m-bôm</td>
<td>m-bôm</td>
<td>‘python’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n-dèk</td>
<td>n-dèk</td>
<td>‘calabash’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>y-gwô</td>
<td>y-gwô</td>
<td>‘dog’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sôg</td>
<td>sôg</td>
<td>‘moon, month’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nyôy</td>
<td>nyôy</td>
<td>‘bee’</td>
<td></td>
</tr>
<tr>
<td>9/6</td>
<td>pôô</td>
<td>ma # pôô</td>
<td>‘wound’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>kîg</td>
<td>ma # kîg</td>
<td>‘neck, voice’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>m-bôs</td>
<td>ma # m-bôs</td>
<td>‘cloth, clothing’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n-dâp</td>
<td>ma # n-dâp</td>
<td>‘house’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>y-gand</td>
<td>ma # y-gand</td>
<td>‘feast’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nyu</td>
<td>ma # nyu</td>
<td>‘body’</td>
<td></td>
</tr>
<tr>
<td>19/13</td>
<td>hë # tám</td>
<td>di # tám</td>
<td>‘kidney’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hë # keg</td>
<td>di # keg</td>
<td>‘knife’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hë # st</td>
<td>di # st</td>
<td>‘earth, ground’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hë # núñí</td>
<td>di # núñí</td>
<td>‘bird’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hë # e</td>
<td>di # e</td>
<td>‘scorpion’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hë # ag</td>
<td>di # ag</td>
<td>‘flute, trumpet’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hy-oê</td>
<td>c-ôê</td>
<td>‘leaf’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hy-oô</td>
<td>c-ôô</td>
<td>‘hair’</td>
<td></td>
</tr>
</tbody>
</table>
As in other Bantu languages, most nouns occur in singular/plural pairs or ‘genders’, as illustrated in the table. The following points can be noted about the noun class pairings in table 15.2.

Class 1/2 nouns show a wide array of prefixal irregularity, usually involving a nasal in the singular and an implosive labial in the plural. While many members of 1/2 designate humans, many others do not. Most of these lack a nasal prefix in the singular and can be identified as class 1a: tolo ‘mouse’ (pl. ba#tolo), biỳà ‘brain’ (pl. bià#biỳà), sap ‘type of trap’ (pl. ba#sap).

Class 3 nouns are marked by a homorganic moraic nasal prefix (N#), realized as velar before a vowel, which is distinct in two ways from the non-moraic prefix (N-) found in 9/10. First, it can appear before the consonants [p, t, c, k, s, h], while 9/10 N- appears only before [b, d, j, g]. Second, it counts as a tone-bearing unit for the purpose of HTS. Thus compare: li#wàndà li #j#kól ‘friend of a slave (class 3)’ vs. li#wàndà li m#b#m ‘friend of a python (class 9)’ (m-b#m). The plural in class 4 is constructed by adding mi- to the singular nasal prefix.

Class 3a conditions the same agreements as class 3. It differs from class 3 in its plural (class 6 vs. class 4) and its prefix. Rather than a nasal, the class 3a prefix is realized ò before a consonant and w- before a vowel (</u-/), which derives from PB *du- (11), *bu- (14) or *ku- (15), which are not distinguished in Basàì.

Genders 3a/6, 5/6, 7/8, and 19/13 all show important prefix variants depending on whether the stem begins with a consonant or a vowel. These alternations, which are attested also in the concord system, are an important part of the phonetic history of the language and are duplicated within morphemes as well. Thus, the same li-/j- and bi-/gw- alternations seen in classes 5 and 8 are observed in verb roots such as jì ‘eat’ (<PB *#dì-a) and gwìlì ‘give birth’ (<PB *#bijàd-). While vowel prefixes fuse before root vowels in several of the cited nouns, other nouns in the above table show the preconsonantal prefix forms ò- or CV- before apparent vowel-initial roots. Thus compare class 3a w-3d ‘hand’ vs. òò ‘ear’, class 5 j-àlà ‘crab’ vs. li#àà ‘rock’, class 7 y-3ì ‘thing’ vs. èè ‘tree’, and class 19 hy-ój ‘hair’ vs. li#ìg ‘flute’. The answer proposed by Schmidt (1994), Buckley (1997), and others is that non-fused root-initial vowels are preceded by a synchronic ghost consonant similar to the h-aspiré phenomenon in French, e.g. /li#Cèn/ ‘oil palm’ (vs. /li-ìs/ ‘eye’). In general, roots which fuse with their prefix are those which reconstruct with *j and are vowel-initial in much of the Bantu area, while those which do not fuse have lost their historical initial consonant more recently, e.g. jìs ‘eye’ vs. li#èn ‘oil palm’, from earlier *di#jìco and *di#tìndè, respectively. Note, finally, that when a prefix fuses with an H root, the result is a LH rising tone, e.g. wìp(3a) ‘theft’ (</u-ip/). This suggests that the class 9 nouns nyèmb ‘death’, nỳòy ‘bee’, and nỳët ‘buffalo’ might be analyzed as vowel-initial with a ny- prefix. All vowel-initial verbs behave as if there is a ghost consonant, and the nasal prefix found in inflection takes a velar shape (as in noun class 3), e.g. li#kìndà #jì#3 ‘the banana tree has grown’ (< ‘grow’).

Classes 9 and 10 provide an additional analytical dilemma: should the non-moraic nasal that is found in mb, nd, nj, and ng combinations be segmented off as a prefix, as in PB, or should it be considered part of the stem? Besides the historical argument, the major reason for considering the nasality to be a prefix is that it is a sheer numbers: class 9 initial mb, nd, nj, ng vastly outnumber all other initial consonants combined. However, other arguments suggest that the nasal is not a prefix, synchronically. First, Basàì has prenasalized consonants in other positions, including C2, e.g. pend ‘fence in’, høng ‘snore’, and C1 in verbs, where there is no question of prefixation, e.g. ndìng ‘swing’, njìhà ‘beg cleverly’. In addition, there are quite a few noun stems in classes other than 9 and 10 which begin with NC,
e.g. \( li\neq ndu \) 'palm fiber' (5/6), \( hi\neq gcyi \) 'Adam's apple'. Even if it could be shown that such nouns were shifted from class 9, there is no synchronic evidence for double prefixation, i.e. \( li\neq n-du, hi\neq g-go\). The fact is that the nasal is not replaced by prefix substitution here, nor when class 6 \( ma \) is added to the singular in 9/6 nouns, e.g. \( ma\neq n-dap \) 'houses'.

The same inseparability of 9/10 initial nasality is observed in the productive process of diminutivization. A noun may be diminutivized by reduplicating its stem and shifting it into 19/13. In addition, although there is considerable variation, a suffix -a is frequently added as is an H tone suffix. This produces variants such as the following in the singular (the corresponding plurals have the class 13 prefix \( di- \)):

\[
\begin{align*}
\text{ye}p & \quad \text{‘buttock’} \\
(\text{class } 7) & \quad \text{hi}\#\text{yey}\check{e}p \quad \text{hi}\#\text{yey}\check{e}p \quad \text{hi}\#\text{yey}\check{e}ba \\
\text{li}\#\text{bu}m & \quad \text{‘belly’} \\
(\text{class } 5) & \quad \text{hi}\#\text{bu}b\check{u}m \quad \text{hi}\#\text{bu}b\check{u}m\check{a} \quad \text{hi}\#\text{bu}b\check{u}m\check{a} \\
n\text{je}c & \quad \text{‘leopard’} \\
(\text{class } 9) & \quad \text{hi}\#\text{njenj}\check{c} \quad \text{hi}\#\text{njenj}\check{c}\check{a} \quad \text{hi}\#\text{njenj}\check{e}a
\end{align*}
\]

As seen, the prefix \( hi- \) will replace the class 5 prefix \( li- \), but not the nasal of class 9, consistent with the position that the nasal is no longer a prefix in that class. However, there is one problem with this argumentation, which can be seen from the following additional reduplications:

\[
\begin{align*}
j\text{-am/m-\text{am}} & \quad \text{‘thing, matter’} \\
(\text{class } 5/6) & \quad \text{hi}\#\text{jaj}\check{a}m\check{a} \quad \text{hi}\#\text{jaj}\check{a}m\check{a} \\
\text{di-}\text{\text{am/m-\text{am}}} & \quad \text{hi}\#\text{mum}\check{u}d\check{a} \quad \text{hi}\#\text{mum}\check{u}d\check{a} \\
\text{m-\text{ut/b-\text{ot}}} & \quad \text{‘person’} \\
(\text{class } 1/2) & \quad \text{hi}\#\text{mum}\check{u}d\check{a} \quad \text{hi}\#\text{mum}\check{u}d\check{a} \\
\text{di-\text{m-\text{ut/b-\text{ot}}}} & \quad \text{hi}\#\text{bob}\check{o}\check{d}\check{a} \quad \text{hi}\#\text{bob}\check{o}\check{d}\check{a}
\end{align*}
\]

Besides the tonal variants which are represented, we see a choice in the plural: the class 13 prefix can be added to either the reduplicated singular stem (\( jam, mu\)t) or to the reduplicated plural stem (\( mam, bol\)). Although there is no difference in meaning, one can propose that \( di\#\text{jaj}\check{a}m\check{a} \) and \( di\#\text{mum}\check{u}d\check{a} \) are pluralized diminutives, while \( di\#\text{mum}\check{u}d\check{a} \) and \( di\#\text{bob}\check{o}\check{d}\check{a} \) are diminutivized plurals. The difference between Noun → Diminutive → Plural vs. Noun → Plural → Diminutive is only visible in cases where there is different fused prefix in singular and plural. What one does not obtain, however, is derivations like \( jam \rightarrow hyam \rightarrow ^{*}hyahyama \), where class 19 \( hi- \) replaces the fused prefix. The observed inseparability of \( j-, m-, \) etc. does not argue that they are not prefixes, only that they are more tightly bound prefixes (e.g. spelled out at stratum 1 in a lexical phonology framework). The same can therefore be said about the preconsonantal nasal in classes 9 and 10: it is a prefix spelled out at an earlier stratum than non-fused prefixes.

Basá does not have Bantu diminutive class 12 *\( ka- \), and has only relics of the locative classes, e.g. PB class 16 *\( pa > h: h\text{ma} \) ‘place’ (1a/2), \( ji\check{e} \) ‘where’, \( h\check{a}h \) ‘that place’, PB class 18 *\( nu > m\check{a} \) ‘in it’ (Griégoire 1975; cf. Boum 1983 for a treatment of Basá locative expressions in general).

### 3.2 Possessive pronouns

Table 15.3 presents the possessive pronouns in all twelve of the formally distinct noun classes in Basá. As can be extracted from this table, the six pronominal stems are
TABLE 15.3: POSSESSIVE PRONOUNS

<table>
<thead>
<tr>
<th>Class</th>
<th>‘mine’</th>
<th>‘yours sg.’</th>
<th>‘his/hers’</th>
<th>‘ours’</th>
<th>‘yours pl.’</th>
<th>‘theirs’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>wem</td>
<td>wè</td>
<td>wèé</td>
<td>wè́</td>
<td>nàm</td>
<td>wúp</td>
</tr>
<tr>
<td>2</td>
<td>bém</td>
<td>bè́</td>
<td>bèé</td>
<td>bè́</td>
<td>nàn</td>
<td>bàp</td>
</tr>
<tr>
<td>3</td>
<td>wèm</td>
<td>wè́</td>
<td>wèé</td>
<td>wè́</td>
<td>nàn</td>
<td>wúp</td>
</tr>
<tr>
<td>4</td>
<td>gwém</td>
<td>gwè́</td>
<td>gwèé</td>
<td>gwè́</td>
<td>minàn</td>
<td>gwàp</td>
</tr>
<tr>
<td>5</td>
<td>jém</td>
<td>jè́</td>
<td>jèé</td>
<td>jè́</td>
<td>linàn</td>
<td>yàp</td>
</tr>
<tr>
<td>6</td>
<td>mèm</td>
<td>mè́</td>
<td>mèé</td>
<td>mè́</td>
<td>mànàn</td>
<td>màp</td>
</tr>
<tr>
<td>7</td>
<td>yèm</td>
<td>yè́</td>
<td>yèé</td>
<td>yè́</td>
<td>nàn</td>
<td>yàp</td>
</tr>
<tr>
<td>8</td>
<td>gwèm</td>
<td>gwè́</td>
<td>gwèé</td>
<td>gwè́</td>
<td>bìnàn</td>
<td>gwàp</td>
</tr>
<tr>
<td>9</td>
<td>yèm</td>
<td>yè́</td>
<td>yèé</td>
<td>yè́</td>
<td>nàn</td>
<td>yàp</td>
</tr>
<tr>
<td>10</td>
<td>yèm</td>
<td>yè́</td>
<td>yèé</td>
<td>yè́</td>
<td>nàn</td>
<td>yàp</td>
</tr>
<tr>
<td>11</td>
<td>hyèm</td>
<td>hyè́</td>
<td>hyèé</td>
<td>hyè́</td>
<td>hìnàn</td>
<td>hìyàp</td>
</tr>
<tr>
<td>12</td>
<td>cèm</td>
<td>cè́</td>
<td>cèé</td>
<td>cè́</td>
<td>dìnàn</td>
<td>càp</td>
</tr>
</tbody>
</table>

-ém, -η, -ê, -ès, -nan and -áp. The concord prefixes are those found before a vowel, except before the second person plural root -nan, which has a consonant. Classes 1 and 9 have a L tone concord which creates an LH rising tone when combining with a H pronominal root. This tonal difference is seen in such 9/10 nouns as njɔk yɛm ‘my elephant’ (class 9), vs. njɔk yɛm ‘my elephants’ (class 10). The tonal distinction on possessive pronouns is neutralized, however, when a preceding noun ends in a H and HTS applies: njɔwɔ yɛm ‘my dog/dogs’ (class 9/10). Note that when occurring in isolation or initially within the noun phrase, these possessive forms take an i- prefix, which generally assimilates to [u] before rounded consonants and to the nasal of classes 4 and 6. Thus, the respective forms for ‘mine’ are: u-wem, i-bém, u-wêm, ƞ-γwêm, i-jɛm, m-mɛm, i-yɛm, u-gwɛm, i-yɛm, i-hyɛm, and i-cɛm.

3.3 Connective and demonstratives

Because of their formal similarity, the connective ‘of’, which is used when the possessor is a noun, and demonstratives are considered together in table 15.4. As in other Bantu languages, the connective is required between nouns within a genitive construction, e.g. liwàndà li kàŋjè ‘the friend of the chief’. Although only class 9 has a L tone marker, i, both it and class 1 mù may be deleted, particularly in the case of class 1a nouns, e.g. hɔmá ‘kòm ‘place of the rice’, njɔk (i) li ≠wàndà ‘elephant of the friend’. Whereas a possessive pronoun may either precede or follow the possessed noun, a genitive noun must follow it. In addition, if the genitive noun begins with an overt L prefix, this L will be raised to H without conditioning a downstep on a following H: liwàndà li mìntɔm̄ba ‘friend of sheep (pl.).’ On the other hand, if the genitive noun is prefixless and L–H, e.g. nugged ‘animal’, a downstep will be obtained: liwàndà li nù-gà. The analysis is that the connective causes a prefix to be raised to H, which also applies between a verb and the following object (§5.3). This process is distinct from HTS, which may apply subsequently:

<table>
<thead>
<tr>
<th></th>
<th>nugu →</th>
<th>li</th>
<th>nugu →</th>
<th>li</th>
<th>nugu</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>L</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
</tbody>
</table>

The three demonstratives show considerable resemblance to the connective, especially as concerns class 1 mû (mùnû, mû, mûiû) and the L of class 9 i (îû, i, iiû). The demonstrative
### TABLE 15.4: CONNECTIVE AND DEMONSTRATIVES

<table>
<thead>
<tr>
<th>Class</th>
<th>Connective</th>
<th>‘this’ (n.s.)</th>
<th>‘that’ (n.h.)</th>
<th>‘that’ (far)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>nù</td>
<td>nù</td>
<td>nù</td>
<td>nù</td>
</tr>
<tr>
<td>2</td>
<td>bù</td>
<td>bınà</td>
<td>bù</td>
<td>bù</td>
</tr>
<tr>
<td>3</td>
<td>ú</td>
<td>únú</td>
<td>ú</td>
<td>ú</td>
</tr>
<tr>
<td>4</td>
<td>mì</td>
<td>mìnì</td>
<td>mì</td>
<td>mì</td>
</tr>
<tr>
<td>5</td>
<td>lì</td>
<td>lìnì</td>
<td>lì</td>
<td>lì</td>
</tr>
<tr>
<td>6</td>
<td>má</td>
<td>mánà</td>
<td>má</td>
<td>mánà</td>
</tr>
<tr>
<td>7</td>
<td>í</td>
<td>ínì</td>
<td>í</td>
<td>í</td>
</tr>
<tr>
<td>8</td>
<td>bì</td>
<td>bìnì</td>
<td>bì</td>
<td>bì</td>
</tr>
<tr>
<td>9</td>
<td>i</td>
<td>ínì</td>
<td>í</td>
<td>í</td>
</tr>
<tr>
<td>10</td>
<td>bì</td>
<td>bìnì</td>
<td>bì</td>
<td>bì</td>
</tr>
<tr>
<td>11</td>
<td>iì</td>
<td>iìnì</td>
<td>iì</td>
<td>iì</td>
</tr>
<tr>
<td>12</td>
<td>bì</td>
<td>bìnì</td>
<td>bì</td>
<td>bì</td>
</tr>
<tr>
<td>13</td>
<td>bì</td>
<td>bìnì</td>
<td>bì</td>
<td>bì</td>
</tr>
</tbody>
</table>

The near-hearer form may also be used as a general referential ‘the one in question’.

Demonstratives may either precede or follow the noun they modify, e.g. tìnì dimùnì = dimùnì tìnì ‘these birds’, lì’wàndà = lì’wàndà lìi ‘that friend’. These examples show two interesting facts. First, there is no HTS between preposed demonstrative + noun. Second, whenever there is a postposed demonstrative, the noun class prefix acquires an H tone. Dimmendaal (1988:58) analyzes this as an underlying /-/- which surfaces on nouns which are either prefixless or whose prefix has fused with its vowel-initial stem (see table 15.5). As seen, this H may also cause a downstep on the noun stem. If it is left out, the result is a presentative construction: lì’wàndà lìi ‘here’s a friend’, di#nùnì tìnì ‘here are the birds’. This determiner H tone, which we can interpret as a trace of the PB augment, is also required when a noun is relativized:

- di#nùnì di bì kwo  ‘the birds fell’
- di#nùnì di bì kwo  ‘the birds which fell’
- di#nùnì lì’wàndà li bì ‘têhê  ‘the birds (that) the friend saw’

### TABLE 15.5: H TONE PREFIX ON NOUN + DEMONSTRATIVE ‘THIS’

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>maànggè</td>
<td>m#maànggè mìnù</td>
<td>‘this child’</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>bɔɔnggè</td>
<td>i#bɔɔnggè bınà</td>
<td>‘these children’</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>g#kɔɔl</td>
<td>ŋ#kɔɔl inà</td>
<td>‘this slave’</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>mì-g#kɔɔl</td>
<td>mì-g#kɔɔl minì</td>
<td>‘these slaves’</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>lì#wàndà</td>
<td>lì#’wàndà lìnì</td>
<td>‘this friend’</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>ma#wàndà</td>
<td>mà#’wàndà mànà</td>
<td>‘these friends’</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>sel</td>
<td>i#sel ínì</td>
<td>‘this basket’</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>bì#sel</td>
<td>bì#sel ínì</td>
<td>‘these baskets’</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>n+jòk</td>
<td>n+jòk ínì</td>
<td>‘this elephant’</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>n+jòk</td>
<td>n+jòk ínì</td>
<td>‘these elephants’</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>lì#nùnì</td>
<td>lì#nùnì hìnì</td>
<td>‘this bird’</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>di#nùnì</td>
<td>di#nùnì tìnì</td>
<td>‘these birds’</td>
<td></td>
</tr>
</tbody>
</table>
3.4 Numerals

In isolation, e.g. when counting, the numbers ‘one’ to ‘ten’ are as follows:

<table>
<thead>
<tr>
<th>P tôk</th>
<th>Baa</th>
<th>Àâ</th>
<th>N.na</th>
<th>Itan</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘one’</td>
<td>‘two’</td>
<td>‘three’</td>
<td>‘four’</td>
<td>‘five’</td>
</tr>
<tr>
<td>isâmål</td>
<td>isâm bôk</td>
<td>jwem</td>
<td>bôô</td>
<td>jîm</td>
</tr>
<tr>
<td>‘six’</td>
<td>‘seven’</td>
<td>‘eight’</td>
<td>‘nine’</td>
<td>‘ten’</td>
</tr>
</tbody>
</table>

Of these, only the numerals ‘one’ to ‘seven’ take noun class agreements, as seen in table 15.6. Here we also observe that the root for ‘one’ is -âdâ rather than p tôk. These numerals follow the noun they modify, e.g. mut wâdâ ‘one person’, di núni dînà ‘four birds’. The numeral jîm ‘ten’ is a noun that belongs to class 5. It may be used either after the noun (as in the case of other numerals), e.g. ma âdâ jîm ‘ten friends’, or may be prepended, in which case the connective li is required, e.g. jom li mâwântâ. Both jôm and its class 6 plural môm are used in combination with ‘1’ through ‘9’ to form compound numerals, e.g. jôm ni bôn ‘19’. If the numeral following ni ‘and, with’ is ‘1’ through ‘7’, it will agree with the noun, e.g. bût jôm ni wâdà ‘11 people’. Decades are formed by multiples of môm ‘tens’, e.g. môm môm (~ moomâa) ‘twenty’ (lit. tens + two). Higher basic numbers include mbôgôl ‘100’ and hi kôô ‘1000’ (pl. di kôô).

3.5 Adjectives

As in most Bantu languages (and many other African languages), adjectives are characterized by nominal morphology in Basaâ and will be referred to as ‘adjectival nouns’. As

| Table 15.6: Noun Class Concord on Numerals ‘1’–’7’ |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1/2 | 3/4 | 5/6 | 7/8 | 9/10 | 19/13 |
| ‘1’ | wâdâ | wâdâ | jâm | yâm | yâm | yâm | hêyâm |
| ‘2’ | bûâ | bûâ | mânà | bônâ | bônà | bônà | dîbôa |
| ‘3’ | bût | bût | mânà | bônà | bônà | bônà | dîbôa |
| ‘4’ | bût | bût | mânà | bônà | bônà | bônà | dîbôa |
| ‘5’ | bût | bût | mânà | bônà | bônà | bônà | dîbôa |
| ‘6’ | bósámal | bósámal | básámal | básámal | básámal | básámal | básámal |
| ‘7’ | bósâmbôk | bósâmbôk | básámbôk | básámbôk | básámbôk | básámbôk | básámbôk |

| Table 15.7: Adjectival Nouns |
|----------------|----------------|----------------|----------------|----------------|
| 1 | n lâm | ‘beautiful’ | n lâm mut | ‘beautiful person’ |
| 2 | bâ lâm | ‘beautiful’ | bâ lâm bôt | ‘beautiful person’ |
| 3 | m bôgô | ‘long, tall’ | m bôgô mût | ‘tall person’ |
| 4 | m–m bôgô | ‘long’ | m–m bôgô mít | ‘tall people’ |
| 5 | li kôgê | ‘clever’ | li kôgê lî mît | ‘clever person’ |
| 6 | m–kôgê | ‘good’ | m–kôgê mî fôt | ‘good person’ |
| 7 | lôgê | ‘good’ | lôgê mût | ‘good people’ |
| 8 | hi lôgê | ‘good’ | hi lôgê bî fôt | ‘good people’ |
| 9 | m bôk | ‘mute’ | m bôk mût | ‘mute person’ |
| 10 | m bôk | ‘mute’ | m bôk mût | ‘mute person’ |
| 11 | hi yêmà | ‘poor’ | hi yêmà hî mût | ‘poor person’ |
| 12 | di yêmà | ‘poor’ | di yêmà hî fôt | ‘poor person’ |
such, they themselves have inherent gender and belong to one of six noun class pairings. Illustrations of the six adjectival noun genders are seen in table 15.7. As we have seen, the noun class of the adjectival noun conditions the appropriate connective morpheme. Unlike the genitive construction, an adjectival + noun must agree in number, hence *hi#yębá 'hi böt, *dí#yębá 'di mút. Class 1/2 adjectival nouns show an interesting peculiarity (with some variation). While they participate in the above connective construction, they may also follow the noun, in which case they acquire a L tone prefix agreeing with the preceding noun: n#tídgi hi#nuni = hi#nuni hi#tídgi 'small bird', bá#tídgi bá di#nuni = di#nuni di#tídgi 'small birds'. These postposed forms can be identified as 'adjectives' even though almost all of them are either derived from or related to adjectival nouns in class 1/2. When the adjectival noun precedes, a remarkable fact is that other modifiers that are present must agree with it, rather than the modified noun:

\[
\text{Adjectival nouns are numerous in Basaa. In some cases the adjectival noun may independently exist as a noun of quality, e.g. li#këngë 'intelligence', lïngë 'goodness'. The corresponding phrases in table 15.7 may thus have once meant '(an) intelligence of person', '(a) goodness of person', etc. There are also a few cases where the modifying noun appears as the second member of the connective construction. In this case it is invariable: mud wim 'greedy person', pl. bot bá wim (lit. people of greed), nuggà mà#h3y 'fat(ty) animal', pl. bi#rugà bi mà#h3y (lit. animals of fats; cf. sg. li#h3y 'animal fat').}

### 3.6 The pronominal system

Table 15.8 presents the major different forms of pronouns in Basaa (cf. Bot Ba Njock 1970:255). Subject pronouns precede the verb, while the independent pronouns are used for all other argument positions, including object (§5). As we have seen, the independent pronouns of classes other than class 1 end in -3. Emphatic pronouns are formed by

<table>
<thead>
<tr>
<th>TABLE 15.8: SIMPLEX PRONOUNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>1st pers. sg.</td>
</tr>
<tr>
<td>1st pers. pl.</td>
</tr>
<tr>
<td>2nd pers. sg.</td>
</tr>
<tr>
<td>2nd pers. pl.</td>
</tr>
<tr>
<td>Class 1</td>
</tr>
<tr>
<td>Class 2</td>
</tr>
<tr>
<td>Class 3</td>
</tr>
<tr>
<td>Class 4</td>
</tr>
<tr>
<td>Class 5</td>
</tr>
<tr>
<td>Class 6</td>
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<tr>
<td>Class 7</td>
</tr>
<tr>
<td>Class 8</td>
</tr>
<tr>
<td>Class 9</td>
</tr>
<tr>
<td>Class 10</td>
</tr>
<tr>
<td>Class 19</td>
</tr>
</tbody>
</table>
suffixing -n to the independent pronouns, e.g. mën ‘it’s me’, gwôn ‘it’s them’ (cl.4). The last column shows the recent development of a set of pronouns having the meaning ‘too’. Bot Ba Njock (1970:252) shows that these derive from a fuller form involving the independent pronoun + ki ‘also’, e.g. me ki ~ mek ‘me too’, b5k ~ b5 ki ‘them too’. In addition to the forms in table 15.8, a reflexive form is possible by adding medê to the independent pronoun, nyê medê ‘himself’, mês medê ‘themselves’ (cl.6). The first and second person singular independent pronouns acquire a H tone: më medê ‘myself’, wë medê ‘yourself’. As in the independent and ‘too’ forms, the third person plural pronoun follows the first and second person plural pronouns: bës b5 medê ‘ourselves’, bee b5 medê ‘yourselves’.

In addition, conjoined and compound pronouns are exemplified in table 15.9. There are potentially two ways to combine pronouns. The first is to conjoin them with the conjunction ni ‘with, and’, which is also used with nouns: me ni nyê ‘me and him’, ñgwô ni nyô ‘a dog and a snake’. In this case, both conjuncts are interpreted independently. The second process derives what we might define as compound pronouns. In this case a plural pronoun is followed by the marker na, which indicates that the second conjunct is included in the first: bës na nyê ‘me and him’ (literally, ‘we including him’). Whereas the first conjunct marks person, the second conjunct is interpreted independently. The major constraint that determines the order of the two conjuncts in both conjoined and compound pronouns has to do with person: 1st ⊃ 2nd ⊃ 3rd.

### 3.7 Noun phrase structure

Noun phrase structure in Basaa is highly complex and subtle. Ignoring the various uses of the connective for the moment, the remaining noun modifiers show considerable variation in their ordering. Possessives and demonstratives may either follow or precede the noun: dinuni cêm/i=cêm dinuni ‘my birds’, dinuni tini/tini dinuni ‘these birds’. When a possessive pronoun precedes, it takes an i- prefix. When a demonstrative follows, the prefix of the first word of the noun phrase receives a H tone. When used together, one may precede and the other follow, both may precede, or both may follow: The following variants all mean ‘these birds of mine’:

- tini dinuni cêm
- dinuni tini
- i cêm dinuni tini
- dinuni cêm tini
- *dinuni tini cêm
As seen, the only combination which is ruled out is when a demonstrative is followed by a possessive. Other modifiers such as adjectives and numerals, which must occur post-nominally, are freely ordered with respect to possessives, but also precede a demonstrative, which generally occurs last among postposed modifiers. The following variants all mean 'these five black birds of mine':

\[
\begin{align*}
\text{dinuni cêm dihindi ditân tini} & \quad \text{cf.} \quad *\text{dinuni tini cêm dihindi ditân} \\
\text{dinuni cêm ditân dihindi tini} & \quad *\text{dinuni tini dihindi cêm ditân} \\
\text{dinuni dihindi cêm ditân tini} & \quad *\text{dinuni cêm tini dihindi ditân} \\
\text{dinuni ditân cêm dihindi tini} & \quad *\text{dinuni cêm tini ditân dihindi} \\
\text{dinuni ditân dihindi cêm tini} & \quad \text{etc.}
\end{align*}
\]

The starred forms on the right are all ungrammatical because of the non-final placement of tini 'these'.

In general, genitive nouns show the same flexibility as possessives, except that they cannot be preposed to the noun:

\[
\begin{align*}
\text{dinuni di mawándá dihindi} & \quad \text{‘the friends’ black birds’} \\
\text{dinuni dihindi di mawándá} & \\
\text{dinuni di mawándá ditân} & \quad \text{‘the friends’ five birds’} \\
\text{dinuni ditân di mawándá} & \\
\text{*dinuni tini di mawándá} & \quad \text{‘these birds of the friends’} \\
\text{tini dinuni di mawándá} & \\
\end{align*}
\]

As seen in the last set, a genitive noun may not follow a demonstrative, which must occur last or be preposed to the noun.

In addition to the above, the adjective, numeral or demonstrative may modify the genitive noun:

\[
\begin{align*}
\text{dinuni di mawándá mêm} & \quad \text{‘the birds of my children’} \\
\text{dinuni di mêm mawándá} & \\
\text{dinuni di mawándá mâná} & \quad \text{‘the birds of these friends’} \\
\text{dinuni di mâná mawándá} & \\
\text{dinuni di mawándá matidgi} & \quad \text{‘the small friends’ birds’} \\
\text{dinuni di mawándá matân} & \quad \text{‘the children’s five birds’}
\end{align*}
\]

Circumstances permitting, each noun may be modified simultaneously:

\[
\begin{align*}
\text{tini dinuni di mawándá mêm} & \quad \text{‘these birds of my friends’} \\
\text{tini dinuni di mêm mawándá} & \\
\text{dinuni di mawándá mêm tini} & \\
\text{dinuni di mêm mawándá tini} & \\
\text{bifoto gywé bi mawándá mêm} & \quad \text{‘his photographs of my friends’} \\
\text{bifoto gywé bi mêm mawándá} & \\
\text{ugwéé bifoto bi mawándá mêm} & \\
\text{ugwéé bifoto bi mêm mawándá}
\end{align*}
\]
In addition, as in most other languages, Basaá allows genitive recursion involving both bracketings shown below:

\[ \text{dinuni di m\text{-}w\text{-}ánd\text{-}á mà bǐ\text{-}yě\text{ng}e} \quad \text{‘the birds of the friends of the children’} \]
\[ \text{bǐ\text{-}yě\text{ng}o di dinuni bi m\text{-}w\text{-}ánd\text{-}á} \quad \text{‘the friends’ photographs of birds’} \]

These clearly provide for even greater complexity when further modification of any or all of the nouns is involved.

Similar — but not quite identical — variations are found when the connective involves one or more adjectival noun. Except with a postposed adjective, where there is variation, agreement is with the adjectival noun rather than with the internal noun:

- \[ \text{minlăngá mi dinuni \~g\text{-}wěm} \quad \text{‘my black birds’ (\text{c\~e\~m})} \]
- \[ \text{\~g\text{-}wěm minlăngá mi dinuni} \quad \text{‘these black birds’ (\text{t\~i\~n\~i})} \]
- \[ \text{minlăngá mi dinuni mini \~g\text{-}wěm} \quad \text{‘five black birds’ (\text{d\~i\~t\~ā\~n})} \]

But:

- \[ \text{minlăngá mi dinuni d\~i\~t\~ī\~g\~i} \quad \text{‘black little birds’ (\text{m\~i\~t\~ī\~g\~i})} \]

Curiously, unless occurring adjacent to it, when there is more than one adjectival noun, agreement is preferentially with the closest rather than topmost one:

- \[ \text{bǐ\~yě\~g\~e bi minlăngá mi dinuni mini} \quad \text{‘these good black birds’ (\text{b\~i\~n\~i\~n\~i}, \text{t\~i\~n\~i})} \]
- \[ \text{bǐ\~yě\~g\~e bi minlăngá mi dinuni \~g\~wěm} \quad \text{‘my good black birds’ (\text{g\~w\~e\~m}, \text{c\~e\~m})} \]

Attempts to place modifiers in other positions, e.g. preposed possessives, result in other interpretations:

- \[ \text{bǐ\~yě\~g\~e bi \~g\~wěm minlăngá mi dinuni} \quad \text{‘the good ones of my black birds’} \]
- \[ \text{bǐ\~yě\~g\~e bi minlăngá mi c\~e\~m dinuni} \quad \text{‘the good black ones of my birds’} \]

What this shows is that adjectival nouns, like all other modifiers, can appear with a null head, e.g. \text{c\~e\~m} ‘mine’, \text{t\~i\~n\~i} ‘these’, \text{d\~i\~t\~ī\~g\~i} ‘the small ones’, \text{d\~i\~t\~ā\~n} ‘five (of them)’.

Finally, care should be taken to distinguish noun phrases from the presentative construction, which is formed with a (null head) demonstrative, but without the H prefix required in a noun phrase: \text{li\~w\~a\~n\~d\~ā j\~e\~m l\~i\~n\~i} ‘here’s my friend’ (cf. \text{li\~w\~a\~n\~d\~ā j\~e\~m l\~i\~n\~i} ‘this friend of mine’), \text{di\~n\~u\~n\~i di\~h\~i\~nd\~i di\~t\~ā\~n t\~i\~n\~i} ‘here are the five black birds’ (cf. \text{di\~n\~u\~n\~i di\~h\~i\~nd\~i di\~t\~ā\~n t\~i\~n\~i} ‘these five black birds’).

4 VERB DERIVATION

As illustrated in §2.2, the Basaá verb stem consists of a maximum of three syllables (Bitjaa Kody 1990:162) and exhibits the following shapes (where \text{C} can be null): \text{CV}, \text{CVC}, \text{CVCV}, \text{CVCCV}, \text{CVCCVC}, \text{CVCCVVC}. Also Basaá has a surface opposition between long and short vowels (§2.1). These do not correspond to the distinction in PB. Rather, there is clear evidence that long vowels more recently derive from
*VC sequences. The following vowel length alternations show that they still function as /VC/ within the synchronic phonology:

\[\begin{align*}
&ee \quad \text{‘cry, weep for’} & ea \quad \text{‘be wept for’} & (<PB *-did-)
\end{align*}\]

\[\begin{align*}
&buu \quad \text{‘chase (away)’} & bua \quad \text{‘be chased’} & (<PB *-bujim-)
\end{align*}\]

\[\begin{align*}
&saá \quad \text{‘scatter’} & séá \quad \text{‘be scattered’} & (<PB *-can-)
\end{align*}\]

Monosyllabic CVV verbs lose their length when a vowel suffix follows, here passive -a. Since Basaa has been argued to have ghost consonants (Schmidt 1994, Buckley 1997), we can informally represent these roots as \(\text{CeCa, } /\text{BuCa, } /\text{sáCá}\). What we see then is that the ghost C contributes vowel length only if it is in the coda of the syllable, not if it is syllabified as an onset. We also explain why verbs such as \(\text{sáá ‘scatter’}\) are single tone-bearing units, realized H rather than with a fall to L.

4.1 Verb stems

The morphological structure of the Basaa verb stem is as follows:

Verb root + (extensions) + (final vowel)

A verb stem may be monomorphemic or may include one or two derivational suffixes (extensions). Unlike most other Bantu languages, it need not end in a final vowel (FV) morpheme. There are at most three V positions. While all seven vowels occur as V1, the following generalizations characterize vowel shapes in V2 and V3 positions:

First, only the three vowels -i, -e, -a occur as the FV of bi- and trisyllabic stems, and -i occurs only in CV-i stems:

\[\begin{align*}
&bügi \quad \text{‘break (intr.)’} & – & –
\end{align*}\]

\[\begin{align*}
&jélè \quad \text{‘surpass’} & bóble \quad \text{‘touch’} & seglène \quad \text{‘sort for’}
\end{align*}\]

\[\begin{align*}
&bíma \quad \text{‘meet’} & níma \quad \text{‘kill e.o.’} & cimbaha \quad \text{‘make sneeze’}
\end{align*}\]

CV verbs do not take a FV synchronically.

Second, V1 and V2 must be identical in CVCV stems:

\[\begin{align*}
&/i/: \quad \text{tígil ‘detach’} & \text{limik ‘being quiet’}
\end{align*}\]

\[\begin{align*}
&/e/: \quad \text{sebel ‘call’} & \text{békék ‘beating’}
\end{align*}\]

\[\begin{align*}
&/e/: \quad \text{legel ‘transmit’} & \text{kékék ‘tattooing’}
\end{align*}\]

\[\begin{align*}
&/uí/: \quad \text{nihé ‘stay up/awake’} & \text{kunuk ‘choosing’}
\end{align*}\]

\[\begin{align*}
&/oi/: \quad \text{lòhòl ‘skin’} & \text{hòlok ‘sharpening’}
\end{align*}\]

\[\begin{align*}
&/oi/: \quad \text{bôgèl ‘dislodge’} & \text{hôtôk ‘swimming’}
\end{align*}\]

\[\begin{align*}
&/ai/: \quad \text{bàgàl ‘separate’} & \text{pàdàk ‘picking’}
\end{align*}\]

Third, V2 and V3 must be identical in CVCCV stems, as in the following applicative and reciprocal forms of the above CVCV1 verbs:

\[\begin{align*}
&/i/: \quad \text{tíglèn ‘detach for/at’} & \text{típlàna ‘detach each other’}
\end{align*}\]

\[\begin{align*}
&/e/: \quad \text{seblèn ‘call for/at’} & \text{seplàna ‘call each other’}
\end{align*}\]

\[\begin{align*}
&/e/: \quad \text{leglèn ‘transmit for/at’} & \text{legplàna ‘transmit to each other’}
\end{align*}\]

\[\begin{align*}
&/uí/: \quad \text{nihèln ‘stay up for/at’} & \text{nihplàna ‘stay up at each other’s’}
\end{align*}\]

\[\begin{align*}
&/oi/: \quad \text{lòhlèn ‘skin for/at’} & \text{lòhlàna ‘skin each other’}
\end{align*}\]

\[\begin{align*}
&/oi/: \quad \text{bôglèn ‘dislodge for/at’} & \text{bôglàna ‘dislodge each other’}
\end{align*}\]

\[\begin{align*}
&/ai/: \quad \text{bàglèn ‘separate for/at’} & \text{bàglàna ‘separate each other’}
\end{align*}\]
Finally, the only CVCCVC verbs end in -ak, the allomorph of the imperfective suffix used with CVCVC verb bases:

/i/ : tiglak ‘detaching’
/e/ : seblak ‘calling’
/e/ : leglak ‘transmitting’
/u/ : nǔhlak ‘staying up/awake’
/o/ : lóhlak ‘skinning’
/a/ : báglak ‘dislodging’

As discussed in §2.2, there are fewer consonants possible in each successive C slot within Basaá verb stems. The attested C3 consonants are /p, t, k, s, l, n/, while the C4 consonants consist solely of /k, s, n/. Only /k/ occurs as stem-final C4.

### 4.2 Extensions

The above and other distributional properties of consonants and vowels can best be examined by means of the derivational suffixes or verb extensions found in Basaá and summarized in table 15.10. As seen, some suffixes appear only after monosyllabic CV or CVC verb roots, while others have special allomorphs when the verb base is longer. The symbol” indicates a height umlaut that occurs with certain suffixes. In its most general form, the vowels /e, o/ raise to [i, u], /‡/ raise to [e] and /~/ raises to [o] (Voorhoeve 1980c, Schmidt 1994, Mutaka and Bitjaa Kody, in press). The causative and applicative suffixes show this raising in table 15.11.

### TABLE 15.10: VERB EXTENSIONS AND THEIR ALLOMORPHS

<table>
<thead>
<tr>
<th></th>
<th>After CV(C) radical</th>
<th>Later in verb stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>reversive</td>
<td>&quot;-l, -l&quot;</td>
<td>-</td>
</tr>
<tr>
<td>reflexive</td>
<td>-b [p], -b-a,-b-a</td>
<td>-</td>
</tr>
<tr>
<td>causative</td>
<td>&quot;-s&quot;</td>
<td>-</td>
</tr>
<tr>
<td>indirect causative</td>
<td>&quot;-h-a /-s-a/&quot;</td>
<td>&quot;-b-a /-s-a/&quot;</td>
</tr>
<tr>
<td>applicative</td>
<td>&quot;-l&quot;</td>
<td>-n-a</td>
</tr>
<tr>
<td>reciprocal</td>
<td>-n-a</td>
<td>-a</td>
</tr>
<tr>
<td>passive</td>
<td>&quot;-a,-b-a&quot;</td>
<td>-a,-n-a</td>
</tr>
<tr>
<td>habitual</td>
<td>&quot;a&quot;</td>
<td>-</td>
</tr>
<tr>
<td>stative</td>
<td>&quot;-i&quot;</td>
<td>-</td>
</tr>
<tr>
<td>imperfective</td>
<td>-g [k]</td>
<td>-ag [ak]</td>
</tr>
</tbody>
</table>

### TABLE 15.11: VOWEL RAISING WITH CAUSATIVE "-s AND APPLICATIVE "-l"

<table>
<thead>
<tr>
<th></th>
<th>Causative (‘make …’)</th>
<th>Applicative (‘… for/with/at’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>lim</td>
<td>‘be silent’</td>
<td>limís</td>
</tr>
<tr>
<td>bëp</td>
<td>‘beat’</td>
<td>bëbís</td>
</tr>
<tr>
<td>kép</td>
<td>‘tattoo’</td>
<td>kébës</td>
</tr>
<tr>
<td>kun</td>
<td>‘choose’</td>
<td>kunís</td>
</tr>
<tr>
<td>hól</td>
<td>‘sharpen’</td>
<td>hólëís</td>
</tr>
<tr>
<td>ëël</td>
<td>‘rot’</td>
<td>ëëlëís</td>
</tr>
<tr>
<td>pât</td>
<td>‘pick off’</td>
<td>pëdëís</td>
</tr>
</tbody>
</table>

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Among the suffixes in table 15.10, the least productive is the reversive, which is responsible for verb pairs such as the following: ték ‘lay (sth.) flat’, tégél ‘remove (sth.) lying flat’; lý ‘cork, block’, lýnl ‘uncork, unblock’; tám ‘spread (in sun) to dry’, támâl ‘remove from heat’. In contradistinction with applicative `-l`, only the mid vowels /e/, /o/ undergo raising with the reversive (Janssens 1986), e.g. kweś ‘lock’, kwêlil ‘unlock’; tey ‘attach’, tigil ‘detach’.

The reflexive suffix has three allomorphs which can attach only to monosyllabic verb bases. CVV verbs take the allomorph `-ba`, e.g. hó `cover`, hóbdá `cover oneself`; sá `purify`, sohá `purify oneself`. A small number of CV verbs, a number with ‘adjectival meaning’ use the allomorph `-b` (cf. Proto-Bantu *-p-), which devolves to [p] before pause, e.g. tey ‘attach’, tepê ‘attach oneself’; hót `bend`, hódóp `bend oneself`. As seen, a V2 identical to V1 is required for syllabification. Most CV verbs, however, take the reflexive suffix `-a`, e.g. nun `look at`, nunba `look at oneself`; pêk `fan`, pêgba `fan oneself`. In addition four CV verbs have also been found to allow a `-a` reversive suffix: ane `to order`, anba `to order oneself`; kwiye `light (fire)`, kwiýba `light itself`; pude `fall on`, pudba `get oneself mixed up in something stupid`; núyì `heat up`, núýba `be heated up`. The postconsonantal allomorph `-b-a` provides additional evidence that CVV verbs are underlyingly CV: hóó `smear, coat`, hôóba `smear oneself`; kweś `circumcise`, kwêba `get oneself circumcised`.

The (direct) causative suffix `-s`, which was illustrated with CVC verb roots in table 15.11, can be added directly to CVV verbs, e.g. jé `eat`, jês `make eat, feed`; lâ `lick`, lês `make lick`, nó `rain`, nôs `make rain`. CVV verbs also take `-s`, e.g. wâs `be tired`, wêês `make tired`, where the latter’s tones indicate a wêCês structure. The indirect causative suffix `-h-a` may also be added to monosyllabic verb bases, e.g. cê `destroy`, cihá `make destroy`; han `be proud`, hena `make proud`; ló `surpass`, looho `exaggerate, overflow`. In case the verb base is bisyllabic, only the indirect causative may be used: cîngâp `be dishonest`, cêngbáha `make dishonest`; jîngp `be silly`, jîngbáha `make silly`; nêmîl `quarrel`, nêmâla `make quarrel`. As seen, the umlaut effect of `-h-a` goes right through the epenthetic [a] of `-a` onto the root vowel. The following sentences illustrate the semantic difference between the two causative forms, both based on the verb hîât `go up, climb`:

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>me m=#bêdës m-bêge hi=kôa</td>
<td>‘I carried the baggages up the hill’</td>
</tr>
<tr>
<td>me m=#bêdëhá bôngë hi=kôa</td>
<td>‘I made the children go up the hill’</td>
</tr>
</tbody>
</table>

In the first sentence, direct causation is used to illustrate that physically carrying the baggages, which is not the case with indirect causation in the second sentence, where it is not possible to substitute mbêge `baggages` for bôngë `children`. Note, finally, that the same formal suffix `-s` may instead provide an aspectual connotation of simultaneity, e.g. memle `contemplate`, memlâha `contemplate at the same time`; gwâl `give birth`, gwêlha `give birth at the same time`.

As in other Bantu languages, the applicative is used to mark dative objects, manner, location and time (Lemb and de Gastines 1973:37). The `-l` allomorph, which was illustrated on CVC verbs in table 15.11 also occurs on CV verb bases: jé `eat`, jêl `eat for/with/at`; jo `bury`, juj `bury for/with/at`. CVV verbs, on the other hand, typically undergo vowel raising without the final `-l`: hóó `smear`, hóó `smear for/with/at`; kâa `plead`, kêé `plead for/with/at`. This suggests the derived structure kêCês, where the `-l` has “assimilated” to the ghost consonant of the root. A similar assimilation is found when the verb base has the shape CVV: nyy `rest`, nayay `rest for/at`; bây `be sour`, bêyêy `be sour for/at`. Bisyllabic bases show one of the realizations of the (non-umlauting) `-n-e` allomorph: ane `order`, anne `order for`, bêgës `praise`, bêghëne `praise for/at`; hóyâ `forget`, hóyna `forget for/at`.
When added to verbs of the shapes CVlV and CVVV, the resulting outputs are CVVln and CVVCVn: hókí l ‘ripen’, hóólne ‘ripen for/at’; bégge ‘carry’, bégggne ‘carry for/at’. In the case of CVCl verbs, where the applicative form is expected to be CVClene, a shortened CVClens form is also attested, e.g. luhul ‘chase away’ → luhulne ~ luhls.

The reciprocal suffix -n-a may be added to mono- or bisyllabic verbs: cé ‘destroy’, céná ‘destroy each other’; kék ‘hurt’, kegna ‘hurt each other’; pohl ‘choose’, phhlana ‘choose each other’; témhē ‘lie’, témmbana ‘lie to each other’. It may also have an associative or comitative meaning, e.g. hók ‘swim’, hógn ‘swim with’; jop ‘enter’, johna ‘enter with’.

The passive suffix has four allomorphs. The umlauting allomorphs -n- is related to the applicative or comitative extension.

The habitual extension is -a: nít ‘kill’, níšt ‘kill habitually’; nógló ‘obey habitually’; yagal ‘beg’, yagla ‘beg habitually’. It appears that the -n-a suffix also can be used with habitual meaning (e.g. with vowel-final verb bases): jo ‘bury’, jona ‘bury habitually’; legü ‘receive’, leögana ‘receive habitually’.

The stative suffix -i is restricted to CVC-i verb stems: kwes ‘lock’, kwíhi ‘be locked’; pak ‘occupy’, pegj ‘be occupied’. When the base already ends in -i, one sometimes observes only a tonal change in the stative: héní ‘place crookedly’, héní ‘be crooked’; nit ‘lay’, nit ‘be lying’. Other bisyllabic bases replace their V2(C) by i in the stative, e.g. níngj ‘set (trap)’, níngj ‘be set (trap)’; koyop ‘become red’, kuyi ‘be red’.

The last suffix to be discussed is the imperfective, which takes the allomorph -g ([-k] before pause), when added to monosyllabic bases: cé ‘destroy’, cék ‘destroying’; ká ‘hate’, kák ‘hating’, bég ‘beat’, bégkě ‘beating’. Longer bases take the allomorph -ak: tigj ‘detach’, tigjgak ‘detaching’, bégkēs ‘praise’, bégkak ‘praising’; bini ‘bend back’, binák ‘bending back’. In different tenses this suffix acquires imperfective meanings such as durative, progressive, iterative, and habitual (Bitjaa Kody 1990:414–15). It is also frequently used in deverbal nominals, e.g. bég ‘beat’, liʃŋbégk ‘way of beating’; lok ‘deceive’, liʃŋlogok ‘way of deceiving’.

While the above represents the general situation, there are small numbers of exceptions for many of the suffixes. Thus, the applicative and causative forms of ke ‘go’ are kl and kis, not the expected *kel and *kes. In addition, not every extension can be used on every verb root, nor is the meaning always compositional. Finally, there are possibilities for combining two suffixes, as long as one does not exceed the three-syllable maximum for prosodic stems. The extension sequences in table 15.12 are reported by Lemb and de Gastines for the verb teŋ ‘attach’ (teŋ-b-ad-a is expected to be teŋ-b-ad-a).

| TABLE 15.12: EXTENSION COMBINATIONS REPORTS BY LEMB AND DE GASTINES (1973:35) |
|-----------------|--------|--------|--------|--------|--------|
| Root            | Basic  | Applicative | Causative | Ind. caus. | Reciprocal | Passive |
| teŋ             | teŋ    | teŋ-dl    | teŋ-is   | teŋ-b-a   | teŋ-n-a   | teŋ-a   |
| Reversive       | teŋ-il | teŋ-l-en-e | –        | teŋ-l-ad-a | teŋ-l-an-a | teŋ-l-a  |
| Reflexive       | teŋ-eb | teŋ-b-en-e | –        | teŋ-b-ad-a | teŋ-b-an-a | teŋ-b-a  |
| Stative         | teŋ-i  | teŋ-n-e   | –        | –         | –         | –       |
| Habitual        | teŋ-a  | –         | –        | –         | –         | –       |
In addition, three other combinations have also been found on forms within the dictionary itself:

<table>
<thead>
<tr>
<th>causative</th>
<th>causative</th>
<th>applicative</th>
<th>reciprocal</th>
</tr>
</thead>
<tbody>
<tr>
<td>tomb-os</td>
<td>tomb-</td>
<td>tomb-h-an-a</td>
<td></td>
</tr>
<tr>
<td>bemb-el</td>
<td></td>
<td></td>
<td>bemb-l-an-a</td>
</tr>
</tbody>
</table>

- tomatoes: 'be soft, tired'
- bembel: 'spread (sth.) out'
- tombos: 'soften, make tired'
- bembel: 'spread for/at'
- tombhene: 'soften for/with'
- bembelana: 'spread for each other'

A small number of verb stems involve two instances of the same suffix, where one changes the meaning in unpredictable ways, e.g. kap 'share, distribute' → kebel 'feed' → kebêna 'feed for/with/at' (root + appl + appl); sey 'attach' → tiplha 'make attach' → tiplha 'hold/delay someone'.

The following schema accounts for the linear ordering of consonants observed in Basaa verb stems: Root C's ⊃ {b, l} ⊃ s [h] ⊃ n ⊃ g. In addition, examples cited above show that the FV -a overrides -e, which in turn overrides -i, e.g. bêga 'look at', bêgâna 'look at each other'; nigi 'be lying (e.g. in bed)', nignê 'be lying at/on'.

The same generalizations cover deverbal nominals which are discussed by Bot Ba Njock (1970) and Lemb and de Gastines (1973). These can be based on simple verb bases or extended ones. Thus, from the verb bëny 'do', one can derive m#bëny/a#bëny 'doer(s)', and from its applicative bëpôl 'do for/with/at', one derives m#bëpôl/a#bëpôl 'servant(s)'. While deverbal nouns in class 1 express agentives, those in class 3 mark the state or situation of an action, e.g. kap 'share' → n#kabâk 'that which has just been shared'; keba 'be shared' (passive) → n#këbâk 'that which was shared some time ago'; kabna 'share with' (associative) → n#kåbnà 'that which has been shared with/among'. Besides the temporal nuances indicated by Lemb and de Gastines (1973:46), the imperfective suffix -sg is also present as it is in class 5 deverbal nouns which describe the manner of action: gwel 'catch, hold' → li#gwêlêk 'manner of catching, holding'; gweli/-ya 'cling' (reflective) → li#gwêliagà 'manner of clinging'. Verbs can also be nominalized as instruments in (prefixless) class 9, e.g. gwel 'catch, hold' → gwêlêl 'handle by which one grabs an object'; bômol 'knock against, nail' → bômlênê 'object used to nail with'. As seen, instrumental nouns require an applicative extension and an H suffixal tone.

Finally, although Basaa has no overtly marked infinitive, Dimmendaal (1988:65) hypothesizes that the class 3 verbal agreement that verbal nouns condition derives from PB class 15 *ku, e.g. bû#yê/lêngê 'to question is good'.

5 BASIC CLAUSE STRUCTURE

Although Basaa has maintained much of the original Bantu morphology, its clause structure shows a drift towards analytic marking of grammatical relations and inflection.

5.1 Word order

The basic word order in Basaa is Subject – Aux – Verb – Object – Adjunct:

friend my SP PRES do-often eat food in house

‘my friend often eats food in the house’
As also seen in this example, the subject pronouns in table 15.8 are required for subject agreement, as in Bantu generally, although there is no evidence that such markers are prefixed to the auxiliary or verb that follows. In fact, although the nasal marking present tense in this example is typically written as a prefix, it too could be analyzed as a proclitic and written as a separate syntactic element. In short, Basaá lacks the Bantu prefixal system on verbs.

The independent pronouns in table 15.8 are used to express non-subject arguments, including object. They follow the verb in all cases: a bí nujál li#tám ‘he sold a fruit’; a bí nujál jò ‘he sold it’. The direct object precedes any overtly marked prepositional phrase or other adjunct, e.g. a m#púhlé mè i’mbús ‘he surprised me from behind’; malèt a m#bibil bà#údú ni y#yò ‘the teacher is beating the students with a rattan stick’.

5.2 Grammatical relations

As in other Bantu languages, the major issue concerning grammatical relations is the analysis of subject properties. Only a few unextended verbs can take two objects, e.g. tí ‘give’: me n#ti bòbbégé bijék ‘I gave the children food’. The reverse word order, ?me n#ti bijék bòbbégé, is dispreferred and gives the impression of meaning ‘I gave the children to the food’. Either or both of the two objects can be pronominalized. When both are pronominalized, the recipient must precede the patient: me n#ti bòbbégé gw5 ‘I gave them it’ (*me n#ti gw5 bòbbégé). Again, only one order is possible when only the recipient is pronominalized: me n#ti bòbbégé gw5 ‘I gave them food’ (*me n#ti bijék bòbbégé). On the other hand, the patient can be pronominalized in situ: me n#ti bòbbégé gw5 ‘I gave the children it’, in which case ‘the children’ is old information; or it can be pronominalized right after the verb: me n#ti gw5 bòbbégé ‘I gave it to the children’, in which case ‘the children’ is new information.

A natural interpretation of these facts is that the recipient is the ‘primary’ object, and that proximity to the verb is one criterion for such status. As seen, the tendency for a pronoun to precede a noun, motivated by discourse considerations, may cause a minor conflict, thereby producing both orders just seen.

Besides word order, the second criterion is that the primary object can become the subject of the corresponding passive, whereas the secondary object cannot: bòbbégé bà n#tibá bijék ‘the children were given food’; *bijék bì n#tibá bòbbégé ‘the food was given (to) the children’. Sentences involving the applicative form of the verb làmb ‘cook’ show the same word order facts as with the verb tí ‘give’ (Hyman and Duranti 1982:236):

\[
\begin{align*}
& me n#lémbél bòbbégé bijék & ‘I cooked the children food’ \\
& ?me n#lémbél bòbbégé & ‘I cooked them it’ \\
& me n#lémbél bòbbégé gw5 & ‘I cooked them food’ \\
& *me n#lémbél gw5 bòbbégé & ‘I cooked the children it’ \\
& me n#lémbél bijék & ‘I cooked it (for) the children’ \\
& *me n#lémbél bòbbégé gw5 & ‘the food was cooked for the children’ \\
& me n#lémbél gw5 bòbbégé & ‘the food was cooked for the children’ \\
\end{align*}
\]
The agent of the passive may be introduced by *ni.* However, given the shape of the applicative suffix in these examples, namely -n-, it would seem that they have the underlying structure of an applicativized passive, where this allomorph is chosen because the input base to applicativization is bisyllabic (lém'b-á ‘be cooked’). The expected form, lembła, is not accepted by all speakers, although when it is accepted, the syntax appears to be reversed:

*bijék bí ň#lémbla b'ángé*

It may be, therefore, that the two verbs have the following two different morphosyntactic structures and hence different syntactic properties as per the ‘mirror principle’ (Baker 1988b).

In the case of the second structure, one can think of first deriving the passive lemb-a and then ‘interfixing’ the applicative -n- between lemb- and -a.

A similar complication is found when we applicativize the verb *tɪ* ‘give’, to create the following sequence of three unmarked objects:

\[
\begin{array}{ccc}
\text{lamb} & \text{PASS} & \text{lamb} \\
\text{APP} & \text{PASS} & \text{APP}
\end{array}
\]

In this case note that the -n- of the applicative occurs between the two parts of the passive extension -b-a. Again, the analysis is that *tɪbá* is an applicativized passive, not the more widespread Bantu passivized applicative.

In terms of Bresnan and Moshi’s (1990) dichotomy, Basá appears to be an ‘asymmetric’ object language in that one argument claims primary object status as judged by the word order and passive tests. However, some of its properties are still unexpected. As seen in the following, Basá has widespread optional possessor raising which carries the nuance that the possessor is affected by the action:

\[
\begin{array}{c}
\text{me ň#jé ň#gá (i) mangé} 'I ate the child’s meat' \\
\text{me ň#jé mangé mugá} 'I ate the child’s meat'
\end{array}
\]

The first sentence is passivized as expected, with the full possessive noun phrase as subject:

*nugá (i) mangé i ň#jébá ‘the child’s meat was eaten’*
With possessor raising, Basaá quite differently from other Bantu languages, allows only the possessed object to become the subject of the corresponding passive:

\[
\text{nugá i n#jébá mangé} \quad \text{‘the child’s meat was eaten’ (lit. meat was eaten child)}
\]

\[
\text{*mangé a n#jébá ní’gá} \quad (*\text{child was eaten meat})
\]

On the other hand, either or both nouns can be prominalized in situ:

\[
\begin{align*}
\text{me n#jé nyé nugá} & \quad \text{‘I ate his meat’ (lit. ‘I ate him meat’)} \\
\text{me n#jé mangé yó} & \quad \text{‘I ate the child’s [meat]’ (lit. ‘I ate the child it’) (*yó mangé)} \\
\text{me n#jé nyé yó} & \quad \text{‘I ate his’ (lit. ‘I ate him it’)}
\end{align*}
\]

Possessor raising potentially allows for multiple unmarked noun phrases in sequence:

\[
\text{me m#bók [múdaa [man [w33] \quad \text{‘I broke the arm of child of the woman’} (lit. ‘I broke the woman the child the arm’)}
\]

Given the discourse-dependence of the different options, it is not surprising that whether one does possessor raising or not depends to a large extent on the context and the nature of the participants, e.g. whether first, second or third person.

Finally, a brief note that certain oblique objects may be introduced by ni ‘with, and’, sometimes as an option to the verb extension -n-a, e.g. I#má mangé ‘bring the child’ (<I#s ‘come’), I#s ni mangé ‘come with/bring the child’. Locatives are typically introduced by i, e.g. i’n’dáp ‘in the house’ (Boum 1983).

### 5.3 Verb inflection

As mentioned, Basaá lacks the Bantu system of verb prefixation and most tense, aspect, mood, and polarity distinctions are expressed by means of clitics and particles, as well as newly grammaticalized auxiliaries.

The basic tense system is identified and exemplified in table 15.13 (vowel length automatically resulting from a rising tone). As seen, Basaá distinguishes three degrees of past and two degrees of future tense. The different verb tenses, subjunctive and imperative in table 15.13 are presented in the perfective, whose formation (including tones) is exemplified by the verbs jé ‘eat’ and jó ‘come’. As seen, the verb stem may acquire a prefixal or suffixal tone, which may form a contour with the verb tone or condition downstep. The segmental marking of these forms precede the verb as particles or proclitics, except for the negative particle, which immediately follows the verb and precedes any object, e.g. a gá jé ‘he will not eat food’. The plural imperative is formed by a suffix -ná, which, however, is optional in the negative: ni jé(ná) bá’ý ‘don’t (pl.) eat!’. The corresponding imperfective can be formed by suffixing -g/-ag to the verb base in any tense. This suffix is also found in what Bitjaa Kody (1990:451) identifies as the persitivive: a ngi jé ‘he is still eating’, a ngi lík ‘he is still coming’. He also reports a perfect/linger construction marked by /ma/ (?< mal ‘finish’): a má jé ‘he has already eaten’, a má jó ‘he has already come’.

In addition to the tones which are involved in forming the tenses in table 15.13, there is a dichotomy with respect to the tone on a noun object that immediately follows the verb. In most tenses, an H appears between the two that will be realized on the V2 and V3 of the verb, if available, as well as on the noun prefix, e.g. a bi nügá ‘he sold’, a bi nügá bӀ #sel ‘he sold baskets’ (<b# #sel). In the P3, future perfect, subjunctive and
imperative, the L prefix of such a noun is not affected, e.g. *nuːl bi/HS11005s‘sell baskets’!
These latter tenses are exactly those which have a floating H that causes an L CV verb to
imperative, the L prefix of such a noun is not affected, e.g.
These latter tenses are exactly those which have a floating H that causes an L CV verb to
progressive markers, a

TABLE 15.13: VERB TENSES + SUBJUNCTIVE AND IMPERATIVE

<table>
<thead>
<tr>
<th>Tense/markings</th>
<th>Affirmative</th>
<th>Negative</th>
<th>Main uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>a n#jé</td>
<td>a n#jé 'bē</td>
<td>today past tense</td>
</tr>
<tr>
<td>/N/ H-</td>
<td>a n#jé</td>
<td>a n#jé 'bē</td>
<td></td>
</tr>
<tr>
<td>P2</td>
<td>a bi jé</td>
<td>a bi jé 'bē</td>
<td>general past tense, e.g.</td>
</tr>
<tr>
<td>/pi L-</td>
<td>a bi lō</td>
<td>a bi lō 'bē</td>
<td>yesterday or earlier</td>
</tr>
<tr>
<td>P3</td>
<td>a jé</td>
<td>a jé 'bē</td>
<td>pluperfect; distant past</td>
</tr>
<tr>
<td>/V/</td>
<td>a lō</td>
<td>a lō 'bē</td>
<td></td>
</tr>
<tr>
<td>Narrative</td>
<td>a jé</td>
<td>a jé 'bē</td>
<td>consecutive or</td>
</tr>
<tr>
<td>/H/</td>
<td>a lō</td>
<td>a lō 'bē</td>
<td>unspecified past</td>
</tr>
<tr>
<td>Present</td>
<td>a n#jé</td>
<td>a n#jé 'bē</td>
<td>present; habitual; near</td>
</tr>
<tr>
<td>/N H-</td>
<td>a n#jé</td>
<td>a n#jé 'bē</td>
<td>‘about to’ future</td>
</tr>
<tr>
<td>F1</td>
<td>a gā jē</td>
<td>a gā jē 'bē</td>
<td>general future, e.g.</td>
</tr>
<tr>
<td>/k/jà L- … -H/</td>
<td>a gā lō</td>
<td>a gā lō 'bē</td>
<td>tomorrow; some days</td>
</tr>
<tr>
<td>P2</td>
<td>a₃ jé</td>
<td>a₃ jé 'bē</td>
<td>distant or unspecified future</td>
</tr>
<tr>
<td>/a/</td>
<td>a₃ lō</td>
<td>a₃ lō 'bē</td>
<td></td>
</tr>
<tr>
<td>Future perfect</td>
<td>à jé</td>
<td>à jé 'bē</td>
<td>future perfect or consecutive;</td>
</tr>
<tr>
<td>/H H- … -H/</td>
<td>à lō</td>
<td>à lō 'bē</td>
<td></td>
</tr>
<tr>
<td>Subjunctive</td>
<td>à jé</td>
<td>à jé 'bē</td>
<td>subjunctive/hortative;</td>
</tr>
<tr>
<td>/H/</td>
<td>à lō</td>
<td>à lō 'bē</td>
<td></td>
</tr>
<tr>
<td>Imperative</td>
<td>jé (pl. jénà)</td>
<td>unjé báŋ</td>
<td>commands</td>
</tr>
</tbody>
</table>

The imperative, the L prefix of such a noun is not affected, e.g. *nuːl bi/HS11005s‘sell baskets’!
These latter tenses are exactly those which have a floating H that causes an L CV verb to
lengthen, e.g. à lō ‘he will have come’. Perhaps these acquire an HL rather than H floating
tone.

As illustrated in table 15.14, three different forms of the copula are used to form the
progressive aspect. The copula /ye/ may be replaced by /ta/ in the negative forms: a ta bē jé ‘he is not eating’, a ta bē lō ‘he is not coming’. The forms /bē, bá/ are derived from
bā ‘be’. The negative marker bē always follows ye or ta. Although it follows the
progressive markers, bē, bā in table 15.14, bē may alternatively follow the main verb: a bē jé 'bē, a bē lō 'bē, a bā jé 'bē, a bā lō 'bē. This may show the changing status of copular
bē and bā from main verb to auxiliary. In other periphrastic constructions, the negative
must follow the auxiliary verb, as in table 15.15.

Other auxiliary verbs are treated in Bitjaa Kody (1990).

TABLE 15.14: PROGRESSIVE ASPECT

<table>
<thead>
<tr>
<th>Tense/markings</th>
<th>Affirmative</th>
<th>Negative</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present prog</td>
<td>a ye jé</td>
<td>a ye bējé</td>
<td>‘he is (not) eating’</td>
</tr>
<tr>
<td>/H-ye/</td>
<td>a ye lō</td>
<td>a ye lō’bē</td>
<td>coming’</td>
</tr>
<tr>
<td>P2 prog</td>
<td>a bi jé</td>
<td>a bi jé ‘bē</td>
<td>‘he was (not) eating’</td>
</tr>
<tr>
<td>/bē/</td>
<td>a bi lō</td>
<td>a bi lō’bē</td>
<td>(e.g. yesterday)</td>
</tr>
<tr>
<td>P3 prog</td>
<td>a bā jé</td>
<td>a bā jé ‘bē</td>
<td>‘he was (not) eating’</td>
</tr>
<tr>
<td>/bā/</td>
<td>a bā lō</td>
<td>a bā lō’bē</td>
<td>‘he was (not) eating’</td>
</tr>
</tbody>
</table>

imperative, the L prefix of such a noun is not affected, e.g. *nuːl bi/HS11005s‘sell baskets’!
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bā ‘be’. The negative marker bē always follows ye or ta. Although it follows the
progressive markers, bē, bā in table 15.14, bē may alternatively follow the main verb: a bē jé ‘bē, a bē lō ‘bē, a bā jé ‘bē, a bā lō ‘bē. This may show the changing status of copular
bē and bā from main verb to auxiliary. In other periphrastic constructions, the negative
must follow the auxiliary verb, as in table 15.15.

Other auxiliary verbs are treated in Bitjaa Kody (1990).
ACKNOWLEDGMENTS

My personal familiarity with Basaá stems mostly from a field methods course which I taught at the University of Southern California in 1983–4, followed up by additional informant work with Victor and Anne Bikai-Nyounai and Jean-Pierre Nyounai. I have benefitted from the contributions of Jose Hualdé, Mohammad I. Mohammad and Deborah (Schlindwein) Schmidt, as well as from consultations with Marie Anne Ndongo Sémengué and Zachée Denis Bitjaa Kody. I am also grateful to Gisèle Teil-Dautrey of the Laboratoire Dynamique du Langage (Université de Lyon2/CNRS) and my undergraduate student, Peter Wong, whose electronic lexicons of Basaá were particularly helpful to me in preparing this chapter.

REFERENCES


<table>
<thead>
<tr>
<th>TABLE 15.15: OTHER PERIPHERATIC FORMS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Affirmative</td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td>Pres perfect = P1 +</td>
<td>a n tip 1jé</td>
<td>a n tip 1jé</td>
</tr>
<tr>
<td>tip ‘finish’</td>
<td>a n tip 1l3</td>
<td>a n tip 1l5</td>
</tr>
<tr>
<td>Pres hab = Pres +</td>
<td>a m bëna 1jé</td>
<td>a m bëna 1j5</td>
</tr>
<tr>
<td>bèna ‘do often’</td>
<td>a m bëna 1l5</td>
<td>a m bëna 1l5</td>
</tr>
<tr>
<td>Past hab = P3 +</td>
<td>a bë bëna 1jé</td>
<td>a bë bëna 1j5</td>
</tr>
<tr>
<td>bèna ‘do often’</td>
<td>a bë bëna 1l5</td>
<td>a bë bëna 1l5</td>
</tr>
</tbody>
</table>

Note: The symbols and numbers represent linguistic forms from the Bantu languages, specifically Basaá.
CHAPTER SIXTEEN

NEN (A44)

Maarten Mous

ABBREVIATIONS

BJ Baudouin Janssens
DC Dugast (1975)
DG Dugast (1971)
DL Dugast (1967)
EB Emanuel Bakoui
HB Honoré Boyoleba Balehen

1 INTRODUCTION

Nen (Tunen, Tunen, Tunon) is spoken by over 35,000 speakers (Grimes 2000, based on figures from 1982) in and around the town of Ndikinimeki in Cameroon where the forest becomes savannah. The people are known as Ba-nen, which is an adaptation of mìnìní ‘man in power and rich’. The language has the code A44 in Guthrie’s system but, together with its closest relatives Nyokon or Nyọ’ọ (A45), Maande (A46) and Bonek, it is closer to the A60 languages, such as Gunu and Yambasa, than it is to its neighbor Basaa A43 (Mous and Breedveld 1986). In a number of lexicostatistic classifications, Nen and its relatives often appear as a group separate from the other zone A languages and separate from central Bantu languages (Bastin and Piron 1999:153–5). Among the many influences that Nen underwent, one possible influence can be attributed to the influx of slaves (Abwa 1995). Ndiki, Aliŋa or Eling, Ndogbiakat are names for dialects. A large community of speakers reside in Duala, which can be reached by a path through the forest. Education by the Protestants here used to be in Duala, which explains the Duala loans. Other loans come from Pidgin English, which at one time was actively used in Ndikinimeki and is still remembered by older men. Nen has an official orthography. Some of the older publications in Duala deviate from this orthography. The development of a written tradition is still incipient.

Present-day studies including this article draw heavily on the monumental work by the French ethnographer Idelette Dugast. She published a two-volume ethnography (1955, 1960), a lexicon (1967), here referred to as DL, a descriptive grammar (1971), DG, and a collection of stories (1975), DC. All these works show a high quality of precision. They are also characterized by the lack of linguistic abstraction and generalization. Both qualities are evident in the very detailed tone notation in the texts where all downstepped levels are indicated, without recognizing the concept of downstep, while in the lexicon the isolation form of the words is given. Unfortunately, in isolation many of the lexical tonal distinctions are neutralized and the final vowel is not realized. Subsequent synchronic
linguistic analyses were done by Wilkinson (1975), Stewart and Van Leynseele (1979), Mous (1986, 1997), Janssens (1988), and Bancel (1991). From a Bantu point of view Nen has a number of interesting features:

- The object precedes the verb; and this is not limited to certain moods or tenses as is the case for related languages such as Tikar.
- There is a full vowel harmony system with the word (and beyond) as domain and with alternations not only in affixes but also in roots.
- One of the verbal derivations, expressing middle voice, is a prefix and not a suffix.

The consonant harmony for the feature fortis/lenis as proposed by Van Leynseele and Stewart (1980) for a previous stage is not synchronically valid. The three remarkable features mentioned above are innovations.

2 PHONETICS AND PHONOLOGY

2.1 Consonants

The consonant inventory is given in table 16.1.

The bilabial stop varies between [b] and [p]; the variation is both lexically and individually determined and typically one of a sound change in progress. Nen has no voice opposition; the variation b/p is not phonemic. The velar fricative x does not occur word-initially; it is realized as [h] between vowels and has a palatalized realization after front vowels. The labial stops are rounded before x.

The coalescence of a nasal and an obstruent results in a prenasalized voiced stop; thus fricatives become stops and voiceless becomes voiced; nasal + h becomes mb. When the second consonant is a nasal or liquid the coalescence results in simple nasal with no oral stop component.

There is sporadic consonant metathesis, e.g. ndès or sind ‘limp’, èmbèndè ‘hero’ from ndamb ‘be warlike’.

2.2 Vowels

Length is not distinguished in vowels. Vowel reduction to whispered vowels or deletion occurs word-finally depending on the final tone sequence (see 2.3). The most pervasive quality of the vowel system is the vowel harmony system (see table 16.2). There are two sets of vowels that are mutually exclusive within the word.

<table>
<thead>
<tr>
<th>TABLE 16.1: CONSONANT PHONEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>b [p]</td>
</tr>
<tr>
<td>f</td>
</tr>
<tr>
<td>m n</td>
</tr>
<tr>
<td>mb nd</td>
</tr>
<tr>
<td>w</td>
</tr>
</tbody>
</table>
In accordance with common usage for the cross-height vowel harmony systems of Africa, I use (+)ATR as the feature distinguishing the dominant from the recessive set, without making claims about the articulatory realization of the phonological distinction. Recessive – ATR vowels change to their dominant +ATR counterpart under the influence of dominant +ATR vowels in the same word. Affixes with recessive vowels alternate with their dominant +ATR counterpart when combined with a dominant root. The vowel alternation pairs are u–ø, ø–ø, ø–ø, and i–ε (or i–ε). Alternation in affixes occurs predominantly in noun prefixes (1) and verb suffixes (table 16.3). The alternation of the mid-vowels ø–ø occurs only in roots, not in affixes. Root vowels of verbs alternate under the influence of the dominant causative suffix -i (table 16.3).

(1) ó-ndømb (class 3), pl: è-ndømb (class 4), coll: mà-ndømb (class 6) 'sheep'
   (ð→ù-mbu (3), pl: (è→ì)-mbù (4), coll: (mà→mù)-mbù (6) 'grass'

Dominant prefixes occur in the pronominal prefixes of classes 3, and 13 containing u, 4 (= 10) and 19 containing i. Dominant prefixes are rare in vowel harmony systems and in Nen they are restricted to closed sets of pronominals. Optional harmony across word boundaries is strictly leftwards (3).

There is some dialectal variation in the pronunciation of the vowel that acts as the recessive counterpart of the high round vowel. In some dialects, notably in Ndokbassabem and the dialect of Bancel’s informants, this vowel is realized as different from the dominant mid-round vowel o; in the dialect described by Dugast and on which I have most data, there is no such distinction and there is complete neutralization between the recessive high round vowel and the dominant mid round vowel (2). A comparison of Bancel’s and my own recordings showed dialect differences in this respect. Booklets in Tunen printed in Duala make a distinction.

| TABLE 16.2: VOWEL PHONEMES AND HARMONY SETS |
| Dominant (+ATR): i ø o u |
| Recessive (−ATR): e æ o o |

<p>| TABLE 16.3: EXAMPLES WITH RECESSIVE AND DOMINANT VERB SUFFIX |</p>
<table>
<thead>
<tr>
<th>Root</th>
<th>Dom/rec</th>
<th>Meaning</th>
<th>-er apl</th>
<th>-i caus</th>
</tr>
</thead>
<tbody>
<tr>
<td>fábab</td>
<td>rec</td>
<td>build</td>
<td>fábáñ</td>
<td>f“ábáñ</td>
</tr>
<tr>
<td>fábab</td>
<td>dom</td>
<td>exchange</td>
<td>fábáñ</td>
<td>fábáñ</td>
</tr>
<tr>
<td>fáb</td>
<td>rec</td>
<td>borrow</td>
<td>fábáñ</td>
<td>fábáñ</td>
</tr>
<tr>
<td>fáb</td>
<td>dom</td>
<td>go and buy</td>
<td>fábáñ</td>
<td>fábáñ</td>
</tr>
<tr>
<td>kól</td>
<td>rec</td>
<td>protective medicine</td>
<td>kól</td>
<td>kól</td>
</tr>
<tr>
<td>kól</td>
<td>dom</td>
<td>create</td>
<td>kól</td>
<td>kól</td>
</tr>
<tr>
<td>húk</td>
<td>dom</td>
<td>blow</td>
<td>húkín</td>
<td>húkí</td>
</tr>
</tbody>
</table>
The alternation i–e occurs in noun class prefixes only; elsewhere, in roots and in suffixes, the alternation in the front vowels is i–e. In the noun class prefixes too there is variation in the phonetic realization of the recessive front vowel, e or e, but for some classes, such as class 19 he–, e is obligatory; otherwise prefixes tend to be realized as e when the first root vowel is e, or, to a lesser extent, when it is ə. A similar assimilation, though less frequent, can be observed in the prefixes containing o which assimilate to ə before roots with a mid-vowel as their first vowel. The vowel e does not occur in roots; hence synchronically, I consider these instances of [e] as a phonetic variant of ə. Dugast has [e] in some roots; I have [ə] in those cases. The dominant i is sometimes realized as [e] before n and y. Phonetically [e] is parallel to [o] in that it can co-occur with vowels of either set; phonemically it does not exist.

The domain of the vowel harmony is the word. In fast speech, however, the final syllable of the preceding word can also be affected (3). This rule may operate iteratively across monosyllabic words or clitics (Bancel 1991). As a kind of playful language usage whole sentences can be uttered with dominant vowels (Janssens pc).

(3) ını́hɪ̀k á nɛ̀mɔnɗ ını́hɪ̀k á ni mʊwɔ́nɗu
‘axe of man’ ‘axe of woman’

In addition to vowel harmony, there are other non-adjacent vowel sequences that do not occur in roots; in particular only low or identical vowels precede round vowels, and a mid round vowel may not be preceded by a low vowel. Thus, excluded sequences are: i–o, i–u, e–o, e–ə, o–ə, o–u, ɨ–o, ɨ–ə, o–ɨ. In addition a–e is excluded.

Vowel coalescence: if two vowels coalesce in morphological derivation, then the first vowel drops if it is low; it fuses with the second vowel if the two are identical or otherwise it becomes a glide, often written as a high vowel; when the first vowel is round the realization need not be a glide; it can also be realized as [ə]. The tones remain; although some people simplify rising tones to Low as a late realization rule. There are a few exceptions to the coalescence rule such as nɪs, pl: m̥̃ɔ́s (not mɪs) ‘eye’.

2.3 Tone

Phonemically there are two units of tone, High and Low. Highs after Lows are realized lower (automatic downstep). Downstepped Highs also occur as the manifestations of unrealized Lows before Highs. The High immediately preceding a downstepped High is realized slightly higher, thus producing an allophonic phonetic effect aiding the perceptual distinction but without phonemic consequences. In several respects tone rules and rules affecting syllable structure are interdependent.

One of the most drastic tone rules is that of sentence final lowering. This process is intricately related to that of sentence final vowel reduction. A final vowel is only fully realized if the underlying tone sequence of the last two syllables is rising, LH. The tonal realization of such a sequence is LL, however; it is as if an underlying rise induces more power or breath and thus a full realization of the vowel. The formulation of the tone and vowel reduction rule is cumbersome in any phonological framework that separates tones from vowels and that does not allow vowels and tones to be treated in one statement, as
pointed out by Janssens (1988). Evidence for these underlying tones comes from drum language in which the underlying tone pattern is drummed, e.g. òndõmb `sheep' is drummed LH, mû̀sõy `palm oil' LLL, and mûtékà LLH (Dugast 1959:575, 579, 600). Sentence final sequences of High vowels on noun roots are realized as low. In fact, unless the preceding consonant is a nasal, the reduction of the final vowel is not necessarily deletion, but rather devoicing. The realization of disyllabic noun roots before a pause is given in table 16.4 (see Janssens (1988) for lexical exceptions).


The same rule of vowel elision also applies optionally to final vowels that are followed by a vowel initial word, that is, final vowels are elided unless the root has a final LH sequence, which in this context is still realized as LH. The High tone of such an elided vowel is realized on the next vowel. The Low tone of an elided vowel disappears; it is not realized on the next syllable and it does not induce downstep.

Syllable structure plays a role in these reduction rules in that monosyllabic roots do not undergo final vowel reduction. In non-final position before a consonant initial word these nouns with monosyllabic roots are even `expanded' by an epenthetic vowel a/i, but the vowel sequence is immediately reduced again by the rule of vowel coalescence. Nouns with monosyllabic roots ending in dominant o are excluded and do not receive an epenthetic vowel in this environment. The High tone lowering before a pause does occur with words containing monosyllabic roots; here there is a group of exceptions that can be characterized as historically containing HL roots and this Low is still realized on the epenthetic vowel when present.

H tone perseveration: a High tone spreads and replaces the Low of the next syllable. The process applies only once; a High tone that has arisen from this process cannot spread again to the next Low, as in (4). The High tone does not spread to a `double' Low tone, i.e. a vowel that resulted from coalescence of two Low-toned vowels (5).

(4) bá-ná núiyí sákä-ak → bá-ná núiyí sákä `They made a bridge of lianas across the river' (DL 166)

(5) hi-nöni bë-ës → hinöni hës `a nice bird', but më-lli më-ös → miëli mëös `a new moon' (DG 154–5)

The process applies in certain environments and is blocked by stronger syntactic boundaries. Within the noun, H perseveration is a feature of fast speech. Within verb stems the High tone of the Middle prefix bë spreads, as do the High tones of verb roots onto derivational suffixes (6).

(6) bë-faláb → béfálab `MIDDLE-build' (DG 239), lëŋ-ën → lëngen `whistle-APPL' (DG 232)

| TABLE 16.4: TONE AND FINAL VOWEL REDUCTION IN DISYLLABIC NOUN ROOTS |
|----------------|------------------------------------------------|
| CVCV → CVC     |                                              |
| CCSV → CVC     |                                              |
| CVCC → CVC     |                                              |
| CVCC → CVCV    |                                              |
Within the noun phrase the High spreads to the following adjective (7), with the exception of numeral adjectives and the quantifier kim ‘all’. The High of the connective spreads to the next noun (8), but not the High of the head noun to the connective (9).

(7) mówkilo mő-tátan 3.foot 3-big → mówkilo mő-tátan ‘big foot’
(8) mówkiga wá bółe 3.root 3.of tree → mówkiga wá bółe ‘root of tree’ (DG 104)
(9) mísık yé mänd 9.chicken 9.of woman ‘chicken of a woman’ (DG 133)

The final High of modifiers that precede the noun spread to the noun (10), in particular the contrastive particle á which is often added to the possessive modifier (11), but not the proximal demonstrative that consists solely of the pronominal prefix, nor the quantifier éjána ‘without’.

(10) máyé má-hök 6:those 6-hoe → máyé máhök ‘those hoes’ (DG 95)
(11) yómi á mèsò 4:my calabash → yómiá mésò (→) yò 4 myself mèsò ‘my calabash’

Within the verb phrase the High tone of the object spreads to the verb (13) and from the verb to a following noun only if it is an object, but not from the tense marker to the object; exceptions are the rising tones of the future markers ná and sá whose High does spread. In imperative sentences the High tone of the first object spreads to the second object noun (14).

(13) më-ná bèlémá lémának → mëná bèlémá lémának ‘I dreamt (dreams)’ (DL 103)

A rising tone is realized as a downstepped High after a High (5, 11). A Low tone after a High and before a High on a monosyllabic root is realized as a downstepped High (14).

(14) òsókinò mëna böyan → òsókinò i mëna böyan
   sing child song
   ‘Sing the child a song!’

### 3 VERBS

The verb root is most often CVC, sometimes CV. The initial consonant may be absent; the final consonant may be a voiced nasal stop cluster. Examples of CV stems are sì ‘look for’, bè ‘pull out’, wó ‘die’, só ‘wash’, bó ‘like each other’, yó ‘feel ashamed’, nyó ‘work’, hó ‘talk; finish’, bó ‘get medicine, undergo divination’, nyá ‘drink’, là ‘say’, etc.

The verb does not have the common Bantu inflectional final vowel. Under certain circumstances which include a Low toned verb root and a tense that changes the tonal shape of the verb, final vowels do show up. These circumstances suggest that the original inflectional final vowel eroded due to reduction processes similar to those in noun roots. While monosyllabic verb roots contain a final vowel that is not necessarily the usual inflectional final vowel a, nor a derivational vowel, but part of the root itself, polysyllabic verb roots that end in a vowel are instances of a frozen derivational suffix that consists of a vowel only. Both the form of the final vowel and the meaning of these verbs are in line with such an interpretation. Roots that are polysyllabic contain a frozen extension, e.g. ómbók ‘throw’, búnjil ‘mix’, bilò ‘be joyful, triumph’, tèyên ‘damage’ (DG 255–7).

In addition, there are a number of polysyllabic roots that do not contain a frozen...
extension or they contain one that is synchronically no longer recognizable as a former extension, e.g. rûb ‘cut’, fûlûk ‘build’, fûbûn ‘be missing, fail’, mitû ‘wring’. Finally, there are a number of polysyllabic roots that begin in i and that have a final vowel; not all of these can be analysed as a frozen extension, rather the initial i is a candidate for a frozen formative: îtî ‘hold’, îndî or îndî ‘give’.

3.1 Verbal derivation

There are a number of verbal derivational suffixes, some of them not so common in Bantu, such as a Diminutive and an Intensive. There is no passive extension. Also remarkable is the Middle prefix be-. Apart from the Middle prefix be-, the verbal extensions are the following: Applicative enùn, Diminutive el/îl and al/îl, Positional enâm, Intensive enùn, Separative onîn, Reciprocal anîn, Short Causative i, Long Causative asì, Neuter e/î and a non-productive Impressive e/î, and the Pluractional suffix ak/ôk, which has an inflectional function in the tense system as well. Fixed combinations of extensions are Double Intensive enën, Strong Repetitive olôn and alien; a recurrent combination is Applicative-Reciprocal enam.

The extensions that end in (consist of) a vowel, that is the Causative, the Impressive and the Neuter, only occur at the very end. The Pluractional suffix always occurs immediately after the root as can be seen in the behavior of the lexeme eôn ‘see’, which contains a frozen Applicative and has sícê as its Pluractional form. The Diminutive is also close to the root; the Diminutive form of eôn ‘see’ is sícê. This is also reflected in the fact that the Diminutive is the first formative in fixed combinations of extensions such as olôn and alien.

All suffixes containing low vowels show height harmony after o. The neuter e undergoes complete assimilation to the preceding round vowel if the intervening consonant is an alveolar consonant, l, n, and nd (no examples of d).

All derivational final vowels have a Low tone. As a rule, the derivational suffixes are Low but a High tone of a verb root spreads one syllable onto the first extension. High tone verbs with frozen extensions do not spread their High tone (again), thus tâbôn-ân, sâbôn-ân, bînîl-in, bilôn-in, but also tiáb-ên. High tone verbs that have a final (Low) vowel in their base form (i.e. a frozen neuter, impositive or causative extension) have a Low tone on the following extension, thus bâk-êm from bâkê, luîg-im from luîgi, el-ôn from élê, leîj-ôn from lêpê, bêsâkôn from bêsâkê, êkên from êkê. These lexemes may also have other derivations with a regular High tone spread; such regular forms are taken to be derived from the original CVC root, e.g. luîg-im from *luîg as opposed to luîg-im from luîgi, êk-ôn from *êk as opposed to êkên from êkê.

Pluractional -ak indicates that the action is plural because it is repetitive or durative or due to a plurality of objects, or, only for intransitive verbs, due to a plurality of subjects. Verbs with an Intensive derivation take the Pluractional if the action is plural. The Pluractional is (obligatory) part of the hodiernal future tense and is excluded from certain other tenses, notably in negative verb forms. Thus functionally the Pluractional is inflectional rather than derivational.

Diminutive extensions -a/ and -el indicate that the action is shorter than usual, less intensively, to a lesser extent, only once, with less attention, in a careful way. Both extensions have the same meaning and undergo the usual harmony processes, but the choice between them is lexically determined.

(15) tân ‘cut’ tânêl ‘injure lightly’
sêm ‘sell’ sêmâl ‘sell in small amounts’
îtî ‘hold’ îtîl ‘touch’
Positional -em indicates a position reached through the activity of the verb. A number of these have a transitive counterpart with a frozen impositive extension ε; these are lénè ‘bend’, élè ‘hang’, fàŋgè ‘put behind a rod’, and bàkè ‘move apart’.

(16) tèn ‘plant’ tènɛm ‘be upright’
    bù ‘hide’ bùtǐm ‘be hidden, hiding oneself’
    kōnd ‘add’ kōndɛm ‘climb to the top’

Applicative extension -en indicates that the action is directed to or from, that is, benefactive to a person or directed against a person, using a certain instrument, at or from a certain place, caused by a certain fact. The extension thus always has an effect on the semantic scheme of the argument(s) of the verb: a new person, object or place to or from which the action is directed is always introduced.

(17) kànj ‘lie’ kànjɛn ‘lie to, about, because of’
    lùn ‘forge’ lùnɛn ‘forge for somebody, at a certain place’

Separative -on indicates that the action separates two entities. In a number of cases the underived verb brings the two objects together and the separative reverses that action.

(18) hà ‘put’ hùn ‘lift the excess’
    sùm ‘put a pot on the fire’ sùmùn ‘take off the fire’
    bàk ‘twist a rope’ bàkɔn ‘unravel a rope’

Reciprocal -an indicates that the subject (or the addressee) is plural and that the patient is included in the subject, while the action is singular. It can be followed by the fixed combination -mùn na -ìn ‘each other’, lit. one and that one. The reciprocal is also used to indicate the plural addressee of imperatives. Verbs with the reciprocal extensions always have patients and therefore reciprocal derivations of some intransitive roots require an extra Applicative extension, -enɛn. The fixed combination mi RECC Aus expresses simultaneous action by a plural subject.

(19) sàl ‘cut’ sàlɛn ‘divide between two people’
    sàbɔn ‘pay’ sàbɔnɛn ‘pay each other’
    hɔ ‘talk’ hɔɛnɛn ‘talk to each other’
    kàn ‘open’ kànɛn ‘open together’

Intensive -en and its reduplicated form -enɛn indicate that the action is intensive, repetitive, for a long time, often, or executed to the extreme. A greater degree of intensity is expressed by the fixed combinations -C˘Ú ðɛm-sep or -elian. Frequency or intensity can also be expressed by reduplication.

(20) kànd ‘walk’ kàndɛn ‘walk many times’
    lɛl ‘cry’ lɛlɛn ‘cry a lot’
    kànj ‘lie’ kànjɛnɛn ‘lie all the time’
    ɔŋɛ ‘follow’ ɔŋɛlɔn ‘follow all the time’
    kōnd ‘add’ kōndɛlɛn ‘continue to add a lot’

Neuter -ɛ indicates that the subject, which is also the agent, has no control. The vowel completely assimilates to round vowels if the intervening consonant is an alveolar consonant n, l or nd.

(21) nɔk ‘break tr’ nɔkɛ ‘break intr’
    fàt ‘close hands’ fàtɛ ‘clench spontaneously’
Causative -i, -isi introduces an external causer of the action which is expressed as subject of the verb. The long form is used with CV roots. Some lexemes have two causative derivations, a short one and a long one, or, for CV roots, a long one and a double long one, -āsisi. The second causative indicates a causative of a causative i.e. an indirect causative.

(22) fin ‘enter’ fini ‘introduce’
nā‘g ‘be white’ nāgi ‘whiten’
yô ‘be ashamed’ yōsi ‘shame tr’
nim ‘extinguish’ nimbasi ‘let disappear’
sō ‘wash’ sūsisi, sūsāsisi ‘let sb wash’

The middle is expressed by a prefix bê-. The High tone spreads to the first syllable of the verb stem. It is indeed part of the verb word because vowel harmony applies obligatorily and the vowel coalescence rule applies with vowel-initial verb roots. The prefix is derivational, however, because some derived verbs have specialized meaning, e.g. bili ‘put the head down’ from lô ‘hang from’; and the derived form with be- is used as basis for nominalization, e.g. hēbēsākē‘carrying instrument’, or nēbēsākē ‘carrying’ from bēsākē from sākē. Dugast calls it ‘passive’ but the derivation is not restricted to transitive verb roots, e.g. bisokol ‘complain about’ is derived from sāk ‘be bitter’; and the result need not be intransitive, e.g. bimido ‘cost’ from nom ‘buy’. The basic meaning is middle. It can also be used with a fixed pronoun combination ‘each other’ that is usually combined with the reciprocal extension (23).

(23) bi-hsi bīlī nú-bé-lât-ākā bō-mōnē nā bā-în (DG 338)
8-our 8:work HOD.PAST-MIDDLE-mix-PL 14-one and 14-that.one
‘Our activities are mixed with each other.’

3.2 Verbal inflection

The tenses are expressed by a combination of inflectional elements and tone on the verb. These inflectional elements are separate words and not prefixes to the verb since they are separated from the verb by the object. The verb itself has no inflectional affixes, apart from the Pluractional -ak and a final High tone inducing tonal changes. The inflectional element may contain several TAM markers and can be followed by the deixis markers ka thither or nāa hither. The inflectional element is preceded by the subject pronoun. The subject pronouns immediately precede these inflectional elements but the vowel harmony rule cannot give us a clue whether the subject pronouns and the inflectional elements form one phonological word or not since all the relevant morphemes are recursive; the same applies to the deixis elements that follow the inflectional element. For nominal subjects there is no additional subject pronoun unless the subject is a topic and followed by a pause. Nen is a ‘pro-drop’ language which is uncommon among Bantu languages. The tone of pronominal subjects is part of the inflectional complex and may be influenced by a preceding floating High in certain tenses. The following TAM markers occur: ’, le’, ‘ndō, nó, nā, ’sā, ’sā, sā, nā, pō, sō. The order of inflectional elements are summarized in (24), where # symbolizes a word boundary.

(24) (Subj) (TAM)5(Deixis) # (Obj) # Verb(-T)

Verb roots are lexically High or Low and these types again have two tonal shapes across the various tenses: the basic shape and the High tone shape which originates in an inflectional final High tone. The High tone shape of Low tone verbs can be derived from the base verb by assuming a final High tone that grounds on the last vowel and on any
additional preceding syllable i.e. not part of the root and toneless underlyingly, i.e. an
extension. Since the object precedes the verb, the verb is usually sentence final; but if it
is not, it receives an epenthetic vowel. In the basic form this epenthetic vowel has the
same tone as the preceding vowel. In the High tone shape the final High tone grounds on
the epenthetic vowel. The epenthetic vowel coalesces with a following vowel, which is
often the locative preposition o; it does show up, however, before consonant initial words,
which is often the general preposition na. Another approach would be to consider these
epenthetic vowels part of the verb and use the sentence final reduction rules introduced
for the nouns to derive the verb shape in sentence final position. I opt for an epenthetic
vowel solution because the vowel quality is predictable, the tone in the basic shape is
copied, and because there are other final vowels that appear in the tense system that have
to be distinguished from the ‘epenthetic’ vowels. These other final vowels show up in the
High tone shape of certain Low-toned roots, and these are present even in sentence final
positions, see DG 229–32 for an incomplete list of such verbs. The fact that these roots
are limited to Low tone roots and that the final vowel only appears in the High tone shape
suggests that this final vowel resisted a general reduction of final vowels in sentence final
position as a consequence of the LH tone sequence, parallel to the resistance to vowel
reduction in sentence final nouns. For the verbs I consider this vowel reduction to be
a historical process. I tentatively assume an extra final floating High tone for these verbs
as a way of marking them lexically. Although most verb tokens end in a consonant, there
are four sources of vowel final verbs:

1 CV roots
2 Verbs with a (frozen) derivational suffix (causative i, neuter or impositive ë)
3 Verbs (marked by ’) with a Low tone root and a final vowel in the H shape form
4 Verbs that are not in sentence final position.

The H tone shape occurs in most negative tenses, in the hodiernal past, and in the opta-
tive (see table 16.7 for details), and this distribution suggests an origin in a High tone
final vowel inflection. Table 16.5 gives an overview of the High tone shapes for the

<table>
<thead>
<tr>
<th>Underlying (U)</th>
<th>Basic shape (B)</th>
<th>H shape with epenthetic vowel (H-ep)</th>
<th>H shape sentence finally (H-fi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 CV</td>
<td>CV</td>
<td>CV</td>
<td>CV</td>
</tr>
<tr>
<td>A2 CV'</td>
<td>CV</td>
<td>CV</td>
<td>CVvà</td>
</tr>
<tr>
<td>A3 CV</td>
<td>CV</td>
<td>CV</td>
<td>CV</td>
</tr>
<tr>
<td>B1 CV'C</td>
<td>CV'C</td>
<td>CV Cá</td>
<td>CV'C</td>
</tr>
<tr>
<td>B2 CV'C'</td>
<td>CV'C</td>
<td>CV Cá</td>
<td>CV'Cà</td>
</tr>
<tr>
<td>B3 CV'C</td>
<td>CV'C</td>
<td>CV Cá</td>
<td>CV'C</td>
</tr>
<tr>
<td>C1 CV'C</td>
<td>CV'C</td>
<td>CV Cá</td>
<td>CV'C</td>
</tr>
<tr>
<td>C2 CV'C</td>
<td>CV'C</td>
<td>CV Cá</td>
<td>CV'C</td>
</tr>
<tr>
<td>D1 CV'CvC</td>
<td>CV'CvC</td>
<td>CV'CvCá</td>
<td>CV'CvC</td>
</tr>
<tr>
<td>D2 CV'CvC</td>
<td>CV'CvC</td>
<td>CV'CvCá</td>
<td>CV'CvC</td>
</tr>
<tr>
<td>D3 CV'CvC</td>
<td>CV'CvC</td>
<td>CV'CvCá</td>
<td>CV'CvC</td>
</tr>
<tr>
<td>E1 CV'Cv'C</td>
<td>CV'Cv'C</td>
<td>CV'CvC'</td>
<td>CV'Cv'C</td>
</tr>
<tr>
<td>E2 CV'Cv'C</td>
<td>CV'Cv'C</td>
<td>CV'CvC'</td>
<td>CV'Cv'C</td>
</tr>
<tr>
<td>F1 CV'Cv'CvC</td>
<td>CV'Cv'CvC</td>
<td>CV'Cv'CvC</td>
<td>CV'Cv'CvC</td>
</tr>
<tr>
<td>F2 CV'Cv'CvC</td>
<td>CV'Cv'CvC</td>
<td>CV'Cv'CvC</td>
<td>CV'Cv'CvC</td>
</tr>
</tbody>
</table>
various classes of verb roots. I have only a few examples for the non sentence-final position, but I assume that those forms with a High final lexical vowel in sentence final position are identical to their equivalent in non-final position, i.e. C1-2, E1-2. Examples for these shapes are given separately in table 16.6.

The High tone shapes in non-final position can be derived from the underlying form by adding the epenthetic vowel a and grounding the final floating High tone onto it while any preceding tonally unspecified vowel (extensions) takes a High tone from the final tone. The same is true for verbs ending in a derivational vowel (C1, C2, E1, E2) regardless of the position, sentence-final or not. The verbs that are marked lexically with a floating High tone show a realization of the final vowel and a lowering of the tone to Low in sentence final position (A2, B2), L Hàn → LL. The most common verb shapes, B1 and B3, A1 and A3 show a tone in sentence final position for the High tone shape i.e. opposite to the one in the basic tone shape; this is why Dugast calls the High tone shape, ton contraire. However, comparison with the form with the epenthetic vowel shows that this is not an instance of polar tone but rather the effect of sentence final tone lowering. The lowering does not occur on stems of three (or more) syllables (F1–2). This lowering is reminiscent of the sentence-final tone lowering in nouns. Assuming a final floating High tone for the High tone shape, the lowering rule for the verbal system is Hlex(H) Hàn → L(L), which accounts for the sentence final lowering in A3, B3, D2. For B1, Low tone CVC roots, the final High tone moves on to the root vowel and displaces the Low tone of the root to the left, which shows itself in the form of a downstep, provided that the preceding syllable is High. Examples can be found in objectless hodiernal past sentences with a High tone nÁ TAM marker.

The first syllable of the verb optionally becomes High under High spread from the preceding object noun. The High tone of the tense markers does not spread, not onto the verb radical, nor onto a following object, with the exception of sÁ NEG.FUT and nÁ INDEF.FUT.

### Table 16.6: Examples of High Tone Shapes

<table>
<thead>
<tr>
<th>Basic</th>
<th>Meaning</th>
<th>H-ep</th>
<th>H-fi</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>mÁ5</td>
<td>mÁ5</td>
<td></td>
<td>DL 118</td>
</tr>
<tr>
<td>A2</td>
<td>kÁ5</td>
<td>kÁ5</td>
<td></td>
<td>DL 96</td>
</tr>
<tr>
<td>A3</td>
<td>nÁ5</td>
<td>nÁ5</td>
<td></td>
<td>DG 173</td>
</tr>
<tr>
<td>B1</td>
<td>twÁ5</td>
<td>twÁ5</td>
<td></td>
<td>DG 173, 178</td>
</tr>
<tr>
<td>B2</td>
<td>mÁ5</td>
<td>mÁ5</td>
<td></td>
<td>DL 113, BJ 142</td>
</tr>
<tr>
<td>B3</td>
<td>fÁ5</td>
<td>fÁ5</td>
<td></td>
<td>BJ 260</td>
</tr>
<tr>
<td>C1</td>
<td>nÁ5</td>
<td>nÁ5</td>
<td></td>
<td>BJ 157, 173</td>
</tr>
<tr>
<td>C2</td>
<td>sÁmÁ5</td>
<td>sÁmÁ5</td>
<td>sÁmÁ5</td>
<td>DG 178–9</td>
</tr>
<tr>
<td>D1</td>
<td>liÁ5</td>
<td>liÁ5</td>
<td></td>
<td>DG 233</td>
</tr>
<tr>
<td>D2</td>
<td>sÁkÁ5</td>
<td>sÁkÁ5</td>
<td></td>
<td>DL 170</td>
</tr>
<tr>
<td>D2</td>
<td>tÁbÁ5</td>
<td>tÁbÁ5</td>
<td></td>
<td>DL 179</td>
</tr>
<tr>
<td>D2</td>
<td>sÁbÁ5</td>
<td>sÁbÁ5</td>
<td></td>
<td>BJ 482</td>
</tr>
<tr>
<td>D3</td>
<td>pÁlÁ5</td>
<td>pÁlÁ5</td>
<td></td>
<td>DL 233</td>
</tr>
<tr>
<td>E1</td>
<td>bÁyÁnÁ5</td>
<td>bÁyÁnÁ5</td>
<td></td>
<td>DG 236</td>
</tr>
<tr>
<td>E2</td>
<td>bÁtÁmÁ5</td>
<td>bÁtÁmÁ5</td>
<td></td>
<td>DG 237</td>
</tr>
<tr>
<td>F1</td>
<td>kÁndÁmÁ5</td>
<td>kÁndÁmÁ5</td>
<td></td>
<td>DG 237</td>
</tr>
<tr>
<td>F2</td>
<td>bÁfÁlÁbÁ5</td>
<td>bÁfÁlÁbÁ5</td>
<td></td>
<td>DL 50</td>
</tr>
</tbody>
</table>
3.2.1 The imperative

The imperative verb form consists of the stem (25), and for durative verbs of the stem with the Pluractional extension (26). Imperative verb forms also have a final High tone, which does not always show up in isolation (45) but as soon as any material follows the imperative verb, e.g. an object, the High tone appears on the epenthetic vowel after the verb stem (27); a resultant rising tone is simplified to a Low (97). Any extension, including the Pluractional of durative verbs, assimilates in tone to this final High tone.

(25) kònd 'add!’
(26) këndâk ‘walk!’ from kënd ‘walk’ (DG 191)
(27) kòndá tǖfà ‘add fish’ (DG 108)

The final High tone does not spread to the following object (28). However if the imperative final High tone is realized on an epenthetic vowel following a Low toned root syllable, it may optionally spread to the next syllable (29); it appears also on the initial vowel of the next word when that vowel prevents the addition of an epenthetic vowel and when the preceding vowel is a Low tone root vowel (30).

(28) tômènà yòkù ò nibàn ‘Place the chair to touch the gable’ from tômèn ‘touch’ (DL 186)
(29) kòndá bëlògòt
  bátà mütëkà ‘add seeds!’ (DG 106)
  bátà hisin ‘Pick up the pot!’ from bát (DG 96)
(30) kònd ‘éfèny ‘add maize porridge!’ (DG 102)

Imperatives are marked for plural addressee by the addition of a reciprocal extension with a High tone assimilated to the final High tone (31). Orders are also expressed by optative and negative optative verb forms (§3.2.2).

(31) nòkòlòn èm̀bàn ’break (pl) the sticks!’ from nòk ‘to break’ (DL 148)

3.2.2 The simple tenses

The tenses can now be listed as combinations of inflectional elements and presence or absence of final High tone. In the table of the basic tenses the label is from DG; the glossing follows the proposals by the editors of this book. The gloss is not meant as characterization of the tense but used for glossing the TAM marker only. The third column tells whether there is a High tone that makes the subject pronoun High. The fourth column gives the polarity marker and the fifth column gives the TAM marker. The subject pronoun, if there is one, precedes the (polarity marker and) TAM marker. The sixth column indicates whether the Pluractional suffix -ak is impossible (−), obligatory (+) or permitted (±) for the tense in question. The last column indicates whether the tense has a final High tone (H) or not.

Some negative tenses are in form based on an affirmative equivalent and derived by adding a negative element lè before the TAM marker; other tenses with a negative meaning are formally on a par with the affirmative tenses and replace the TAM marker with a negative TAM marker containing sa; the negative future adds a negative element só in the polarity slot. The various negation markers with sa as segmental material are taken to be different TAM markers synchronically because nothing can be gained in terms of...
economy of description by extracting a common negative element *sá* and several floating tones and tone rules. Negative tenses exclude the use of Pluractional *-ak*. Most but not all negative tenses have a final H tone.

The floating High tone in the position preceding the subject pronoun is assumed in order to allow for the generalization that the downstep on High TAM markers is induced by a displaced Low tone from the subject pronoun due to the grounding of High on the following subject marker. However, in the case of the progressive marker *ndó* it is attractive to assume a floating High before the TAM marker because the negative equivalent of the progressive has a High tone on the negative element *lè* which occurs immediately before the TAM marker and after the subject prefix.

### 3.2.3 Complex tenses

In addition to the basic tenses, there is a more complex tense that consists of a High subject pronoun with a TAM marker *sé* which in its turn is followed by a second subject pronoun, which is High again. And there are two tenses that consist of a fixed element of verbal origin followed by a basic tense. In one of these, *étássé*, the element *sé* appears again. These three additional tenses with Dugast’s labels are:

(32) *étássé* + optative *futur immédiat* IMM.FUT
    *abákà*  ‘it is’ + SUB.PRO-V présent habitude IMP.PAST
    * + SUB.PRO + *sè* + * + SUB.PRO-V immémance IMM

The imminent tense expresses that the action starts at the moment or just after the moment of speech, or the point of reference, ‘is about to’, ‘être sur le point de’ (33).

(33) *émólà yè sè yè kò* (DG 175)
    9.rain 9 IMM 9 fall
    ‘It is about to rain.’
3.2.4 Compound tenses

Compound tenses exist as well. A regular pattern is that of an inflected verb ‘to be’ followed by the verb in the progressive to indicate iterativity. For the indeterminate iterative future the verb is in its basic form (aorist) rather than in the progressive and the High tone of bá ‘to be’ spreads onto the subject marker. A double progressive indicates a durative immediate past.

\[
\begin{array}{c|c}
\text{PROG} & \text{passé immédiat duratif} \\
\text{HOD.PAST} & \text{passé proche itératif} \\
\text{PAST} & \text{passé ancien itératif} \\
\text{FUT} & \text{futur déterminé itératif} \\
\text{INDEF.FUT} & \text{futur indéterminé itératif} \\
\end{array}
\]

Other fixed combinations with ‘to be’ are:

\[
\begin{array}{c|c}
\text{SUBJ.PRO-} & \text{iminience} \\
\text{HOD.PAST} & \text{présent ponctuel} \\
\text{INDEF.PAST} & \text{présent ponctuel} \\
\text{HOD.FUT} & \text{iminience} \\
\end{array}
\]

Dugast uses the term \text{présent ponctuel} for several tenses (see also table 16.7); the differences in meaning and function, if any, remain unclear. A very common auxiliary which takes the infinitive as its complement, is the verb bál ‘to start, begin’, very often in the hodiernal past (37).

3.2.5 The function of the tenses

Note that the term ‘tense’ is used here in its common meaning of a conjugation of the verb; it is not meant to be opposed to aspect. Semantically the tenses can be schematized as in table 16.8.

3.2.5.1 Aorist or default tense

The tense consisting of just the verb (DG, \textit{aoriste}) indicates a general fact, situation, habit or character (36); or is used in continuation of the tense of the previous verb within one sentence (37).

\[
\begin{array}{c}
\text{mésé lè bélèhènà bë bëndò nè (DG 173)} \\
\text{chimps NEG 8.food 8.of 2.people eat:H} \\
\text{‘Chimpanzees don’t eat food that humans eat.’} \\
\end{array}
\]

\[
\begin{array}{c}
\text{à nà-bál ògywà à këndàk à hiàmàk (DG 172)} \\
\text{1 HOD.PAST-start friend 15:look.for 1 walk:PL 1 look.about.for:sb:PL} \\
\text{‘He started to look for his friend, he walked and he looked for him’} \\
\end{array}
\]

3.2.5.2 Progressive

The progressive tense (DG: \textit{présent ponctuel}) indicates that the action is taking place at this moment, or at the moment of reference. It is always implied that the action takes

\[
\begin{array}{c|c|c}
\text{TABLE 16.8: SEMANTIC SCHEME OF TENSES} \\
\hline
\text{(GEN)PAST} & \text{GEN} & \text{(GEN)FUT/INDEF.FUT} \\
\text{FAR.PAST} & \text{HOD.PAST} & \text{IMM.PAST} \\
\text{IMM} & \text{PROG} & \text{IMM.FUT HOD.FUT} \\
\text{OPT} & \hline
\end{array}
\]
some time. The marker may combine with active verbs, as well as with (non-permanent) stative verbs (38). The Pluractional extension -ôk which normally expresses multiplicity of the action, including duration, is not needed with the progressive marker 'ndò to indicate duration. In fact, if one adds the Pluractional marker, the meaning becomes 'near future', which is treated as a separate tense.

(38) mè ndò wò mòndò kólóm (DG 176)
1SG PROG 1:DEM,PROX 1.person afraid
'I am afraid of that person.'

3.2.5.3 Optative

The optative indicates a wish, an imperative, a hortative, an intention. These senses of the central optative meaning can be differentiated according to the exponent of the category of person of the subject: with a second person subject a strong imperative is expressed, with a first person plural the function is hortative, with the first person singular an intention is expressed, and with a third person subject a wish of the speaker is expressed. The optative is also used for an action linked to a preceding imperative, (39).

(39) ètà mb ó 'sìn (DG 189)
take and OPT:2SG come:H
'Take and come!'

3.2.5.4 Past tenses

The ka tense, PAST (40), is a general or default past tense which is often used with time expressions. In addition there are specific past tenses for actions that have just happened, IMM.PAST (41,42), happened today, HOD.PAST (43), or happened long time ago, FAR.PAST (44). The imminence in the immediate past can be highlighted by reduplicating the verb root (42). The hodiernal past (an inappropriate term for Nen) is the most common one in stories which are situated in an unspecified far past where it serves to indicate a succession of events. The far past also functions as a pluperfect (45).

(40) à kà mìnàni siëkìn òmbélà (DG 180)
2SG PAST chief see home
'Did you see the chief at his home?'

(41) mè nò mòkòlò nàk (DG 176)
1SG IMM.PAST 3.foot break
'I just broke my foot.'

(42) à nò òtòmbòtòmb òbàn (DG 177)
1 IMM.PAST pass(red) really
'He really just passed this minute.'

(43) mè nà niñú sàmbë ò biùñà mùswò (DG 178)
1SG HOD.PAST parcel put:H LOC bed under
'I have put the parcel under the bed.'

(44) mèkà lè wùmùà mòn jìn (DG 182)
leopard FAR.PAST my child kill
'The leopard killed my child.'

(45) mèkà lè fèkàk à sè? ikitì bákà mènyàiùà yìnggìn (DG 182)
leopard FAR.PAST think:PL that ram be 9.animal 9:of strength
'The leopard thought that the ram was strong.'
The so-called passé indéterminé is used in temporal conditions (‘when’). It consists of the hodiernal past marker ná and the verb is in the basic tone pattern, not in the deviant one with a final High tone.

(46) n'ýé mé l'na bôliá bóly mé ná mënyāmà mikëm ëlìäkën (DG 178)
    thus 1SG COND.PAST tree see 1SG COND.PAST 4.animals 4:all call:PL.
    ‘When I saw the tree, I called all the animals.’

DG (181) reports on a special non-specified past tense ká (High tone instead of Low tone), passé ancien indéfini, but the single example that she gives does not reveal whether it is really different from the ká passé ancien because in the example the High tone on ká could have been spread from the preceding High tone syllable.

3.2.5.5 Negative past tenses

The far past tense has its own negation in form, but it negates the verb for the whole past period until now (47). In addition there are two past negative tenses, differing only in the tone on the TAM marker sa. The High tone sá is the default negative past (48). The Low tone sà is used to negate an indicated period of time in the past rather than the action as such, e.g. ‘A year was not finished when the pangolin died’ and ‘The antelope didn’t sleep hungry (not even) one day’ (DG 181).

(47) wàmiá mòn àtà mëñë à lë lë ná (DG 182)
    1:my 1.child even one 1 NEG FAR.PAST îll
    ‘None of my children has ever been ill.’

(48) ó sà miàjò sìn (DG 179)
    H:2SG PAST.NEG me see
    ‘You didn’t see me.’

3.2.5.6 The future tenses

The most common future marker is the general future marker ño FUT for something that will happen at a point in time that is known either from context or from a time expression in the sentence (49). Other future tenses are: an immediate future (50), a hodiernal future (51), and an indefinite future, INDEF. FUT (DG: futur indeterminé). The last one is used when the exact point in the future is not known and not relevant, as in (52) ‘at that moment in the future when we die, whenever that is’.

(49) mé ñó ndà-sá bûlîlô (DG 187)
    H:1SG FUT HITH-come tomorrow
    ‘I’ll come tomorrow.’

(50) ëkë ò sà lâ bôk à b à ná ënëk-ën,
    if H:2SG PAST.NEG say 8:thing LOC 8:rel 2SG HOD.PAST laugh-APPL:H, 
    ëtësë nëhëlënà në bë³ëkë hë (DG 183)
    IMM.FUT 5.marriage 5 1PL finish
    ‘If you don’t say why you laugh, our marriage is finished.’

(51) mé ndò buá bûhinò sàbôn-àk (DG 184)
    1SG PROG 14:your 14.debt pay-PL
    ‘I’ll pay your debt.’ (‘today’ is implied)
3.2.5.7 The negative future tenses

The future marker \( \text{i} \) has its own negative form (53) and it negates an action in the future, without referring to any particular point of time in the future. The only other negative future tense has the TAM marker \( \text{s} \), which negates the action for the whole period of the future. The latter is often reinforced by the addition of the hither marker.

(53) \( \text{a sô jô fâm ò \text{i} \text{mîmô}} \) (DG 188)
1 NEG FUT leave LOC house
‘He won’t leave the house.’

(54) \( \text{më sà nd \text{a} jô bôl ìndî} \) (DG 186)
1SG NEG.FUT HITH 2SG 14.thing give
‘I will never give you anything.’

The markers \( \text{n} \) and \( \text{s} \) appear with different tonal patterns in several tenses which are taken to be distinct tense markers. Presenting them together suggests that the tonally distinct \( \text{n} \) and \( \text{s} \) developed from markers that indicated time distance or focus rather than (relative) time:

(55) \( \text{ná} \) HOD.PAST \( \text{sá} \) NEG.(HOD.)PAST
\( \text{á} \) HOD.PAST \( \text{á} \) NEG.(HOD.)PAST
\( \text{ná} \) INDEF.FUT \( \text{sá} \) NEG.INDEF.FUT

4 NOUNS AND NOMINALS

On the basis of agreement of the pronominal prefix, twelve noun classes can be distinguished. The noun class prefixes and the agreement prefixes are given in table 16.8. The numbering follows the usual Bantu reference system. Nouns occur in the following singular/plural pairs: 1/2, 3/4, 5/6, 7/8, 9/4, 19/13, 14/6. Minor pairs are: 7/13 (two words), 9/8 (21 words), 14/8 (12 words). The noun classes with an initial \( \text{m} \), 1, 3, 4, 6 and 9, have subclasses 1a, 3a, 4a, 6a and 9a, for which the prefix lacks the initial nasal. The nouns in these subclasses are the only ones that can have collectives. This difference manifests itself only in noun prefixes and not in any of the agreement prefixes. That is why I consider these groups of nouns subclasses, see 4.3. The nominal derivation is summarized in 4.4 where I also mention an adverbalizing clitic.

The class pair 1, 1a/2 contains mainly humans but it does also contain some words that are not humans, or animates. The first and second person pronouns also take class 1 (sg)/2 (pl) agreement in the expression -\( \text{mîn} \) na -in NUM.PFX-one and PRO.PFX-that:one ‘each other’, but such semantic agreement with the feature human does not extend to human nouns in other classes.

There is a minor pair 3/6 which has its origin in an earlier pair 15/6, containing words such as ‘ear’, ‘foot’, ‘arm’. The class pair 5/6 contains two nouns that have a prefix \( \text{mú} \) from a former class 11, \( \text{mú} \) and \( \text{mú} \) ‘river’ and \( \text{mú} \) ‘coconut pestle’.

Nouns in class 6 derived from verbs of collecting and harvesting denote a large quantity or the totality of collection: \( \text{mú} \) ‘harvesting yams’, \( \text{mú} \) ‘a large quantity of harvested yams’ from \( \text{hú} \) ‘harvest’. The same semantic effect is achieved by deriving
a class 6 plurals of abstract class 14 words, e.g. màhúk (6) ‘extreme beauty, all kinds of beauty’ from bòhúk (14) ‘beauty’, ultimately from húk ‘be beautiful’.

Placing nouns from other classes into 19/13 renders them diminutive. This derivation is often coupled with reduplication of the root and for those nouns that are ultimately derived from verbs, a Diminutive verbal extension is sometimes added.

4.1 Agreeing modifiers and pronominals

The basis of the noun class system is the agreement with the head noun of words that depend on it. The various agreement prefixes are presented in table 16.9. The noun prefix is given in the second column for comparison. The last column gives the subject pronouns. The remaining columns give the three sets of agreement prefixes for modifiers of the head noun and pronominals that refer to a noun: the independent pronominal prefix, the numeral prefix and the pronominal prefix. The numeral prefix is used with the numerals ‘one, some’, ‘two’ and the question word ‘how many’; the pronominal prefix is used with the connective, the possessive modifiers and the possessive pronominals, the demonstrative modifiers and the demonstrative pronominals, the question modifiers ‘which?’, ‘whose?’ and ‘where?’, and with the emphatic complement pronouns; the independent pronominal prefixes are used with the emphatic demonstrative modifiers and pronominals and with the complement pronouns (see tables 16.10–16.13). On adjectives the noun prefix is used.

The nominal and independent pronominal prefixes differ from the numeral and the pronominal prefixes in that they have an initial m- in classes 1, 3, 4 and 9. Nominal prefixes all have a Low tone; independent pronominal prefixes are all High; the pronominal prefixes and the subject pronouns are Low in classes 1 and 9 only; the numeral prefix in class 1 only. The agreement prefixes, as opposed to the noun prefixes, have high dominant vowels in classes 3, 4, 19, and 13, but not in classes 1, 5, 7, 8, 14, which have recessive mid vowels. Such a distinction is not present in the value of the vowels of the Proto-Bantu agreement prefixes. The pronominal prefixes and subject pronouns have an initial homorganic glide where the corresponding numeral prefix only consists of a vowel. The noun prefixes that only consist of a vowel are realized as glides before vowel-initial roots.

### TABLE 16.9: NOMINAL AND PRONOMINAL PREFIXES

<table>
<thead>
<tr>
<th>Class</th>
<th>Noun. pfx</th>
<th>Indep. pfx</th>
<th>Num. pfx</th>
<th>Pron. pfx</th>
<th>Subj. pro</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mò, ò</td>
<td>mó</td>
<td>ò</td>
<td>wò</td>
<td>à</td>
</tr>
<tr>
<td>2</td>
<td>bà</td>
<td>bá</td>
<td>bá</td>
<td>bà</td>
<td>bà</td>
</tr>
<tr>
<td>3</td>
<td>mò, ò</td>
<td>mà</td>
<td>ò</td>
<td>wò</td>
<td>wò</td>
</tr>
<tr>
<td>4</td>
<td>mè, è</td>
<td>mì</td>
<td>ì</td>
<td>yì</td>
<td>yé</td>
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<tr>
<td>5</td>
<td>nè</td>
<td>nè</td>
<td>nè</td>
<td>nè</td>
<td>nè</td>
</tr>
<tr>
<td>6</td>
<td>mà, à</td>
<td>mà</td>
<td>mà</td>
<td>mà</td>
<td>mà</td>
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<tr>
<td>7</td>
<td>è</td>
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<td>é</td>
<td>yé</td>
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<td>8</td>
<td>bè</td>
<td>bè</td>
<td>bè</td>
<td>bè</td>
<td>bè</td>
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<tr>
<td>9</td>
<td>mè, ê</td>
<td>mé</td>
<td>ê</td>
<td>yè</td>
<td>yè</td>
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<tr>
<td>19</td>
<td>hè</td>
<td>ì</td>
<td>ì</td>
<td>hè</td>
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<td>13</td>
<td>tò</td>
<td>tò</td>
<td>tò</td>
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<tr>
<td>14</td>
<td>bò</td>
<td>bò</td>
<td>bò</td>
<td>bò</td>
<td>bò</td>
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</tbody>
</table>


<table>
<thead>
<tr>
<th>Root</th>
<th>Gloss</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>mòtè</td>
<td>one (sg),</td>
<td>mólyáf ōmòtè ‘one branch’ (cl. 3), bánà bámòtè ‘some children’</td>
</tr>
<tr>
<td></td>
<td>some (pl)</td>
<td>(cl. 2)</td>
</tr>
<tr>
<td>fándè</td>
<td>two</td>
<td>bánà báfándè ‘two branches’ (cl. 4), mélíyáf ifándè ‘two branches’</td>
</tr>
<tr>
<td>nè</td>
<td>how many?</td>
<td>bánà bâné ‘how many children’ (cl. 2), mélíyáf iní ‘how many children’</td>
</tr>
</tbody>
</table>

---

**TABLE 16.10: MODIFIERS WITH A NUMERAL PREFIX**

<table>
<thead>
<tr>
<th>Root</th>
<th>Gloss</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>nîmá</td>
<td>emph.dem.pro</td>
<td>má’ímán mályáf ‘this very branch’ (cl. 3)</td>
</tr>
<tr>
<td>ñéní ~ ñmí</td>
<td>emph.dem.dist</td>
<td>má’íni ‘those (cl. 6) very ones’</td>
</tr>
<tr>
<td>ñúyé</td>
<td>emph.dem.ref</td>
<td>mórúyé ‘this very one (cl. 1) mentioned’</td>
</tr>
<tr>
<td>èt</td>
<td>compl.pro</td>
<td>mî-èt → mût → mít ‘it’ (cl. 4) and bê-èt → bêmít ‘it’ (cl. 8)</td>
</tr>
</tbody>
</table>

Note: The human classes have deviant forms for the complement pronouns: wèy cl. 1, bâh or b’a'hú cl. 2.

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**TABLE 16.11: PRONOMINALS WITH INDEPENDENT PRONOMINAL PREFIXES**

<table>
<thead>
<tr>
<th>Root</th>
<th>Gloss</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>å</td>
<td>con</td>
<td>mòkàngá wó bólè ‘the root of the tree’ (DG 133)</td>
</tr>
<tr>
<td>òmè</td>
<td>poss.mod</td>
<td>wàmè món ‘my child’ (cl. 1), niå’miá nèhìkà ‘my hoe’ (cl. 5) (DG 135)</td>
</tr>
<tr>
<td>òmè</td>
<td>poss.pro</td>
<td>ylóm òmè ‘bákà mèhè, tòmòtò yù mèhè ‘My dogs’ (cl. 4) are bad, watch yours (cl. 4).’ (DG 136)</td>
</tr>
<tr>
<td>–</td>
<td>prox.dem.mod</td>
<td>nè nèhìk ‘this hoe’ (cl. 5) (DG 136)</td>
</tr>
<tr>
<td>iní</td>
<td>dist.dem.mod</td>
<td>níni nèhìk ‘that hoe’ (DG 136)</td>
</tr>
<tr>
<td>ñèyé</td>
<td>ref.dem.mod</td>
<td>nèyé nèhìk ‘this hoe (mentioned)’ (DG 136)</td>
</tr>
<tr>
<td>’Cñ</td>
<td>prox.dem.pro</td>
<td>ò wâmè wàwà ‘this one (cl. 1) is mine’</td>
</tr>
<tr>
<td>iní</td>
<td>dist.dem.pro</td>
<td>wèn ‘that one’ (cl. 1), b’ìn ‘those ones’ (cl. 2)</td>
</tr>
<tr>
<td>ñúyé</td>
<td>emph.compl.pro</td>
<td>ò niáyé ‘it’ (cl. 5)</td>
</tr>
<tr>
<td>ñíñí</td>
<td>which?</td>
<td>ò nórò bòmò nèhìkà nò níñí ‘which hoe disappeared?’ (DG 147)</td>
</tr>
<tr>
<td>ñèmè</td>
<td>whose?</td>
<td>níñí nèhìk ‘whose hoe is it?’ (DG 147)</td>
</tr>
<tr>
<td>iní</td>
<td>where?</td>
<td>níñí nèhìk ‘where is the hoe?’ (DG 148)</td>
</tr>
</tbody>
</table>

Note: The proximal demonstrative modifier consists of just the pronominal prefix; the proximal demonstrative pronoun copies the consonant of pronominal prefix with a falling tone imposed on it.

The possessives are made up of the pronominal prefix plus the connective and the person roots which are given in table 16.13 together with the personal pronouns (subject and oblique). For emphasis one can use the possessive pronouns as oblique personal pronouns (last column).
TABLE 16.13: PERSONAL PRONOUNS

<table>
<thead>
<tr>
<th>Person</th>
<th>Possessive stem</th>
<th>Subject pronoun</th>
<th>Oblique</th>
<th>Emphatic oblique</th>
</tr>
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<tbody>
<tr>
<td>1sg</td>
<td>mè</td>
<td>mè</td>
<td>miądó</td>
<td>miamdè</td>
</tr>
<tr>
<td>2sg</td>
<td>–</td>
<td>ò</td>
<td>wáè</td>
<td>wágà</td>
</tr>
<tr>
<td>3sg.hum=cl.1</td>
<td>yéyè</td>
<td>subj.pro.1</td>
<td>wéyé</td>
<td>wéyé</td>
</tr>
<tr>
<td>1pl</td>
<td>sù</td>
<td>tù</td>
<td>b'ùbù</td>
<td>ṭùbù</td>
</tr>
<tr>
<td>2pl</td>
<td>nù</td>
<td>nù</td>
<td>b'ùnù</td>
<td>nùbù</td>
</tr>
<tr>
<td>3pl.hum=cl.2</td>
<td>ᴍu</td>
<td>subj.pro.2</td>
<td>b'ùbù</td>
<td>=</td>
</tr>
</tbody>
</table>

4.2 Adjectives

Adjectives follow the head noun and agree in noun class with the noun prefix as agreement marker; first and second person take class 1 and 2 agreement (57). The adjectival agreement with nouns in the subclasses is the nasal initial mV- noun prefix (56). For predicative usage the copula lè or the verb bak ‘be’ can but need not be used (56,57). DG 153 gives the following list of adjectives: kim ‘complete (sg), all (pl)’, tò ‘tò ‘small’, énég ‘big’, tó ‘long’ kité ‘short’, à ‘fresh, raw’, ò ‘new, weak, soft’, òm ‘new’, nàjì ‘white, clean’, ìnd ‘other, different’, ñ ‘many’, hè ‘bad’, è ‘good, nice’, mb ‘nice’. Half of the adjectival roots contain segmental reduplication.

(56) òmbá mò-tò ‘ì 3a. bag 3-small ‘a small bag, the bag is small’

(57) mè lè mì-èx 1sg cop 1-good ‘I am fine’

4.3 Nouns with vowel prefixes

The nasal-initial noun prefixes have a variant that could be analysed as VN-. Although historically the shape of these variants is VN-, synchronically I analyse them as consisting of a vowel only. As a consequence, those roots that show traces of nasals in the root-initial consonant after these vowel prefixes are root variants. The distinction of the subclasses of nouns with such a V- prefix instead of an mV- prefix is lexical: no semantic characterization has been found with the exception of class 6a which is the collective variant of class 6; class 6 mìa-, can be used for collectives of the vowel-initial subclasses 3a/4a and 9a/4a (58). Due to a reinterpretation of the collective as regular plural, the minor class pairings 9/6 (68 words) and 3a/6a arose. The collectives refer to ‘all sorts’ of the referent implying that the individual entities differ from each other (59). There may be some individual variation in the productivity of collectives, or the fact that collectives involve root alternation (DG 68, 72) may be a reason that they are under threat because my informant in Ndiñime (Emmanuel Bakou) did not accept them.

(58) òndìmb (3a), pl.: òndìmb (4a), coll.: màndìmb (6) ‘sheep’
    nibì (5), pl.: mòndìmb (6), coll.: òmbì (6a) ‘palm oil’
    nèfè (5), mafì (6), coll.: òmbì (6a) ‘melon’
    nèmbè (5), pl.: mìndìmb (6), coll.: òmbè (6a) ‘cola nut’

(59) ìndìmb ínm ‘many tree trunks’, mòndìmb mò ‘many tree trunks of various sizes and sorts’

The subclasses show in most but not all cases a trace of a nasal preceding the noun root. The presence of a nasal element in the prefix can be deduced from the alternations in 1a/2, 3a/6 and in the collectives of 3a/4a and of 9a/4a (60), as well as in 3a or 9a nouns.
derived from verbs. Note that the prenasalized counterpart of h and k is mb. Some roots in the subclasses show no sign of nasals (61). There are also alternations between plain consonants and nasals or nasal compounds in other parts of the grammar where there is less reason to assume a nasal element in an affix (62).

(60) òmbôm/bâhôm (1a/2) ‘older man’
êmbôm ‘forest’ (9a/4a), coll.: mâhôm ~ mambôm (6)
nèkkôl ‘cola nut’ (5), coll.: âmbôkôl (6a)

(61) ósânô (3a/6) ‘rising sun’
obôbô (3a/6) ‘elephant tusk’, coll.: ámbôbô (6a)
ùkôl (3a/6) ‘sort, type’

(62) èmbèkèt (7/8) ‘complaint’ from bèkèt ‘be dissatisfied’
mânjîlôl (6) ‘duck’s cry’ from sîlôl ‘cry like a duck’

4.4 Nominal derivation
A number of nouns are derived from other nouns by transferring them into another noun class. There are also nouns derived from verbs by placement into a noun class which may or may not be accompanied by a vowel suffix. These derivations are not productive and given the final vowel reduction, the derivational suffix cannot always be traced. Clear examples of a derivational suffix are the agentive nouns ending in -i. Some nouns derived from verbs contain the Pluractional -ak (DG 361). Many nominalized verbs contain a reduplicated root. The only fully productive nominalization is the infinitive in class 3a.

The only productive deverbal suffix is -ato. The suffix is invariable; it does not undergo vowel harmony. It is often preceded by the Pluractional extension -ak. The meaning is to indicate resultant state (64), quality or capacity (63). The ato-derived forms are used as the complement of a copula (DG 362). The word class of the ato-derived form is neither a noun nor an adjective since it lacks a noun class prefix, nor is it a verb since it requires a copula; thus it is an adverb.

(63) mònâ lè kênd-ák-á tô
child COP walk-PL-ADV
‘The child is capable of walking.’

(64) bôtê bâká tit-ák-á tô
savannah be burn-PL-ADV
‘The savannah is burnt.’

5 SYNTAX
This section is based on Mous (1997). The order within the noun phrase is generally Modified-Modifier. Adjectives, connectives, relative clauses follow the head noun (65).

(65) mündô mò-tàtân 1.man 1.tall ‘a tall person’
mündô wà bôkôlôm 1.man 1.CON 14.fear ‘a man who is afraid’
wò mônd [òwá ánà mònd â jéan nànêkôl] ánà miyôjô pât nîyên
that man REL 1:HOD.PAST money ask to Jean yesterday 1:HOD.PAST me ask today
‘The man who asked Jean money yesterday asked me today.’
However selectional modifiers precede the head noun with the appropriate noun class concord. Such selectional modifiers are demonstratives, possessives, the question words ‘whose?’, ‘which?’, ‘where?’, and ‘how many?’ as well as the numeral ‘one’ when it means ‘another’ or ‘some’. All these modifiers select from a given set. Possessives follow the noun in lexicalized contractions involving words for relatives or friends which shows that the possessive followed the noun at an earlier stage of the language (66).

(66) mūkinám ‘my in-law’ from mūkinó wāmiá (DG 137–8)
     ḍthwám ‘my friend’ from ḍthwáyé wám

### 5.1 The position of the object

In imperative sentences, the object follows the verb. If there are two objects, the recipient obligatorily precedes the goal object, and the two objects form one phrase since H spread does apply. Syntactic phrases can be deduced from the boundaries over which H spread does not apply.

(67) indiò miàngò mìyf (EB)
     give me hoe
     ‘Give me the hoe!’

Otherwise, objects precede the verb. If there are two objects, the recipient object (mostly human or animate) precedes the goal object. H spread may apply between the two objects and between the object and the verb, all of them forming one phrase; it cannot apply between the TAM marker and what follows. We have to assume a stronger syntactic boundary after the tense marker even if it is prefixed to a following verb radical adapting to it in vowel harmony; such cliticization never happens to the object noun (phrase).

(68) mè-go ṣápé mímì ʃ’mlíbi (EB)
     H:1SG-FUT you house build:CAUS
     ‘I’ll build a house for you.’

Placing the object after the verb is comparable in function to placing the modifier before the noun; it selects the object in question against all other possible objects expressing contrastive emphasis, with a contrastive preposition á (69), in particular after particles for ‘only’, ‘just’, or ‘even’. A bare noun object (which is not a locative) after the verb forms one phrase with it, as H-spread shows, reminiscent of the conjoint verb forms in Southern Bantu (70).

(69) mè-nádi ní á bóniák (EB)
     1SG-PROG eat CONTR yams
     ‘What I eat is yams.’

(70) á-ná kêmáká ʃ’mák (DG 58)
     1-HOD.PAST tap:H palm wine
     ‘He tapped palm wine!’
5.2 Discontinuous complement noun phrases

Modifiers can occur after the verb while their head noun precedes the verb to indicate contrastive focus on the modifier (71). Only post-nominal modifiers and only modifiers of the last preverbal noun phrase can follow the verb. Numeral modifiers are mostly postverbal due to their selectional property (72). The postverbal modifier still agrees in noun class with the preverbal head noun, but semantically it seems to be somewhat loose from the noun it refers to and syntactically it is a separate phrase; H spread does not apply.

(71) mè-nà ìnitò yè m"ùnéfí ìndì mè-nàgò ì hèbòbòtò (EB)
1SG-HOD.PAST 9:calabash 9:of 6:water give:3 9-big LOC 19:child
'I gave the BIG water calabash to the child.'

(72) ëbàkó nà ëm'ñà ìnìbò ëm'ñà:ì (DC 63)
lizard HOD.PAST dog medicine hit:3 one
'The lizard hit the dog by magic.'

5.3 Locative and infinitival complements

Locative complements always follow the verb even if they are objects in the sense of an obligatory complement of the verb (73), in which case they are part of the VP since H spread applies. Locative phrases tend to have a preposition ò LOC; nouns that are inherently locative can occur without the initial ò (74).

(73) à-nà hisini tàlì à nèkò (EB)
1-HOD.PAST pot put:H LOC fire
'She put the pot on the fire.'

(74) à-nà-ndà-hiàn ìsèl (DC 65)
1-HOD.PAST-IE thematicise:H riverside
'He arrived at the riverside.'

Infinitival complements behave like locatives; they are placed after the verb and the infinitive is a class 3a noun with the nominal prefix ò, homophonous with the locative preposition ò (75). An infinitival phrase with a patient noun preceding the infinitive begins in this locative preposition ò, which may precede any other noun in the infinitival phrase (76).

(75) à nà-bál oìl (DC 63)
1-HOD.PAST-begin 3a:rain
'It starts to rain.'

(76) à-nà huànàru ò wàw ò m"ùúk òwìndì (EB)
1-HOD.PAST must:H LOC you LOC wine 3a:give
'She/He must give you wine.'

ACKNOWLEDGMENTS

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REFERENCES

CHAPTER SEVENTEEN

*Kpāʔ (A53)*

Gladys Guarisma

SYMBOLS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
<th>Incep</th>
<th>Inj</th>
<th>Intr</th>
<th>I PFV</th>
<th>Iter</th>
<th>Met</th>
<th>Mid</th>
<th>Per</th>
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1 INTRODUCTION

The *kpāʔ* language is spoken in the northern Bantu border area in Cameroon, where languages belonging to three linguistic families (Niger-Congo, Nilo-Saharan and Afro-Asiatic) are to be found side by side with the two official languages: English and French.

*kpāʔ* is usually known as ‘Bafia’, a name more widely applied to Guthrie’s A50 group. There are about 25,000 speakers occupying an area on the right bank of the Mbam, Bafia Prefecture, Mbam Department.

The members of Guthrie’s A50 are: A51 fai (lə-fəʔ or Balom), A52 kaalong (ri-pəʔ or Mbom), A53 kpa (ri-kpəʔ or Bafia), A54 ngayaba (ti-bèʔ or Djanti).

This classification is broadly confirmed by a dialectometric study (Guarisma and Paulian 1986) which also shows that ri-kpəʔ and lə-fəʔ form a close cluster (similarity index above 800), whereas ti-bèʔ is more distant (indices around 300, barely above those with neighboring A70 dialects).

Apart from my own contributions, *kpāʔ* is little documented: two books and a few articles. G. Tessmann (1934) is a reference work on Bafia society and culture, including an overview on noun classes and a copious glossary. L. K. Anderson (1935), focuses more on the language: phonology (although tones are only indicated in the Bafia–English
glossary), noun classes and noun qualifiers, an inventory of verb forms (tense, aspect, extensions), prepositions, adverbial forms, order of meaningful elements in utterances.

The articles include an instrumental phonetic study of vowels and tones (Aroga Bessong and Marchal n.d.), an attempt at translation of Bafia verb forms (Aroga Bessong 1982), and a study of Bafia conjugation according to the linguistic model ‘Meaning ⇔ Text’ (MTS) (Aroga Bessong and Mel’tük 1983).

My own data base includes a large amount of lexical material with sentences collected by myself in the field from about twenty speakers, as well as oral literature texts, proverbs and spontaneous narratives.

The theoretical approach followed here is that of the French functionalist school, with an attempt at adapting the terminology to an Anglo-Saxon audience. The transcription is based on the principles of the IPA, with the exception of IPA [j] rendered here as [y] and IPA [dʒ], here [ʒ].

2 PHONOLOGY

Stem-initially, there are twenty-five consonants in kpǎː?:

2.1 Consonants

<table>
<thead>
<tr>
<th>Anterior</th>
<th>Central</th>
<th>Posterior</th>
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<tbody>
<tr>
<td>ORAL</td>
<td>Bilabial Labio-</td>
<td>Apical</td>
</tr>
<tr>
<td>Implosives</td>
<td>ṣ</td>
<td>d</td>
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<tr>
<td>−voice</td>
<td>p</td>
<td>f</td>
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<tr>
<td>+voice</td>
<td>b</td>
<td>v</td>
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<tr>
<td>Continuants</td>
<td>w</td>
<td>l</td>
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<tr>
<td>NASAL</td>
<td>m</td>
<td>n</td>
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</table>

Oral consonants are basically arranged in pairs on the basis of the [voice] feature (p/b, f/v, t/d, s/z, c/j, k/q, kp/gb). Voiced obstruents are generally found initially in nouns belonging to cl. 9/10 (as a result of coalescence with the nasal prefix). v is found in a handful of items (ideophones or loans): ḏi-v∀á ‘squint’, vā́a ‘guard’ (cf. German Wacht), ḏa ‘heavily’, vē̂mzèn ‘breathing’ (cf. -fē̂̑mzèn ‘breathe’), νi̞lmvilm ‘impulsive’, kī-ŭi̞n ‘sling’, vīrāŋ ‘gaping’, etc. f and ʒ (not included in the table) are variants of sy and ʒy respectively.

Word-final consonants include only p, s, ?, l and m, n, ŋ:
\( p \) alternates with \( \theta \) before vowel (cf. suffixation, noun and verb phrases).

\[
\begin{align*}
\text{ri-kåp} & \quad \text{‘sell’} \\
\text{ña-kåft} & \quad \text{‘seller’} \\
\text{ri-túp} & \quad \text{‘pierce’} \\
\text{at-túft} & \quad \text{‘he pierced’} \\
\end{align*}
\]

cl. 1 +pierce +rvv

Final \( \gamma \) is always preceded by a short [+high] vocalic transition with the same point of articulation as the syllable center (except when the latter is itself [+high]):

-\( i \), with front vowels (\( e, a, \alpha \)):

\[
\begin{align*}
\text{tí-fi} & \quad \text{[ti-fi]} \quad \text{‘excrement’} \\
\text{i-té} & \quad \text{[i-té]} \quad \text{‘strength’} \\
\text{ri-wè} & \quad \text{[ri-wè]} \quad \text{‘laughing’} \\
\text{h-tå} & \quad \text{[h-tå]} \quad \text{‘basket sp.’} \\
\end{align*}
\]

-\( u \), with back [-round] vowels (\( o, \sigma \)):

\[
\begin{align*}
\text{ki-tù} & \quad \text{[ki-tù]} \quad \text{‘old man’} \\
\text{ki-bå} & \quad \text{[ki-bå]} \quad \text{‘mortar for pounding (maize or beans)’} \\
\text{ki-få} & \quad \text{[ki-få]} \quad \text{‘shed’} \\
\end{align*}
\]

-\( i \) with back [-round] vowels (\( å, \lambda, \alpha \)):

\[
\begin{align*}
\text{d-i} & \quad \text{[d-i]} \quad \text{‘egg’} \\
\text{ri-bå} & \quad \text{[ri-bå]} \quad \text{‘premeditate’} \\
\text{h-tå} & \quad \text{[h-tå]} \quad \text{‘load’} \\
\text{fi-bå} & \quad \text{[fi-bå]} \quad \text{‘obstacle’} \\
\end{align*}
\]

Items of the type /Cw[-back]/ can be compared with items of the type /CV[+back]#/ frequently encountered in ri-kpå?:

\[
\begin{align*}
\text{ri-fwè} & \quad \text{[kifwè]} \quad \text{‘sniff’} \\
\text{böl} & \quad \text{[bwéy/é:]} \quad \text{‘rain’} \\
\text{ri-fwè} & \quad \text{[kifwè]} \quad \text{‘fill’} \\
\text{ri-fàl} & \quad \text{[rifwéy/é:]} \quad \text{‘get tired’} \\
\text{ki-kwi} & \quad \text{[kkwi]} \quad \text{‘cloud’} \\
\text{kùl} & \quad \text{[kwi:]} \quad \text{‘turtle, leprosy’} \\
\end{align*}
\]

Under the influence of the final alveolar consonant the [+back] feature is removed from the vowel and associates to the initial consonant.

Following a vowel, \( \gamma \) generally alternates with \( r \) after [-back] and \( y \) after [+back]:

\[
\begin{align*}
\gamma > r & \quad \text{‘throw’, criticize’} \\
\text{ri-té} & \quad \text{[ā-té]ri} \quad \text{‘he took’} \\
\end{align*}
\]

cl. 1-take +rvv

\[
\begin{align*}
\gamma > y & \quad \text{‘he threw’} \\
\text{ri-pì} & \quad \text{[ā-pìy]} \quad \text{‘he thought’} \\
\text{ri-bø} & \quad \text{[ā-bøy]} \quad \text{‘he beat’} \\
\text{ri-bø} & \quad \text{[ā-bøy]} \quad \text{‘he climbed on the tree’} \\
\end{align*}
\]

In fà? (A51) \( \gamma \) corresponds to \( t \) (after [+back]) and to \( k \) (after [+back] only). \( \gamma \) in kpå? thus represents the neutralization of the \( t/k \) opposition stem-finally; this consonant
neutralization is compensated by the creation of a new vocalic series: the [+back] [+round] vowels (Guarisma 1980):

<table>
<thead>
<tr>
<th>ri-kpä?</th>
<th>lò-fà? tìngjì?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV [+back] ?</td>
<td>CV [+back] t</td>
</tr>
</tbody>
</table>

| ‘excrement’ | tì-bì’t | tì-bì’t |
| ‘caterpillar sp.’ | zyè’t [n-zyè’t] | nsyè’t |
| ‘ten’ | n-tè’t [mù-tè’t] | n-tè’t |
| ‘leave (tr)’ | rì-cà’t [fì-cà’t] | tì-cà’t |

<table>
<thead>
<tr>
<th>(C)wV [+back] ?</th>
<th>(C)wV [+back] t</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cloud’</td>
<td>kì-kwi’ [kì-kwì’t]</td>
</tr>
<tr>
<td>‘sniff’</td>
<td>ri-fwò’ [fì-fwò’t]</td>
</tr>
<tr>
<td>‘criticize’</td>
<td>rì-wè’t [fì-wè’t]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CV [+back] [+round] ?</th>
<th>CV [+back] [±round] k</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘throw’</td>
<td>rì-pi’ [fì-pì’k]</td>
</tr>
<tr>
<td>‘yoke’</td>
<td>kì-bè’ [kì-bè’k]</td>
</tr>
<tr>
<td>‘plait’</td>
<td>rì-nè’ [fì-nè’k]</td>
</tr>
<tr>
<td>‘feel, smell, hear’</td>
<td>rì-wò’ [fì-wò’k]</td>
</tr>
<tr>
<td>‘crush’</td>
<td>rì-kò’ [fì-kò’k]</td>
</tr>
<tr>
<td>‘buy’</td>
<td>rì-là’ [fì-là’k]</td>
</tr>
</tbody>
</table>

2.2 Vowels

<table>
<thead>
<tr>
<th>[−back]</th>
<th>[+back]</th>
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<tbody>
<tr>
<td>i</td>
<td>i</td>
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</table>

Vowels can be short or long. [+back] [−round] vowels are generally short (except in the case of coalescence with a vowel-initial morpheme) and are mostly to be found in contact with a [+back] consonant or else in affixes (always non-accented); this confirms their being innovations with respect to the original system. There is however a tendency for these vowels to spread even to alveolar or palatal contexts: zi ‘earth’, ji ‘he, him (cl. 1)’, ri-ji ‘know’.

2.3 Tones

Bafia is essentially a two-tone language. Phonetically, however, three registers are to be found: v (High, realized as slightly rising after a [ +voice] non-implosive consonant b, d,
z, ź, j, ź), ̃ Mid and ̃ (Low, slightly falling). Low and Mid registers are only distinct before pause (especially with older, non-urban, speakers):

bèp ‘cane rat’ [']
bèn ‘termite(s) sp.’ [']
bèn ‘rib(s)’ [']
ki-kò? ‘calabash tree’ [']
ki-kɔm ‘liver’ [']
ki-kòp ‘box’ [']

Elsewhere only H and L are found:

bèp yì ‘these cane rats’ [’]
bèn yì ‘these termites sp.’ [']
bèn yì ‘these ribs’ [']
ki-kò? kì ‘this calabash tree’ [’]
ki-kɔm kì ‘this liver’ [’]
ki-kòp kì ‘this box’ [’]

The two complex tones (rising ̄v and falling ̄v), always associated with long vowels (mɔ̃ ‘oil’, tɔ̃ ‘five’), can be analysed as combinations of LH and HL respectively.

Apart from stems derived by suffixation or reduplication, lexemes are generally monosyllabic. Their behaviour in the spoken chain, however, suggests that these lexemes must formerly have been disyllabic, of the type (C)V(C) (V=accented vowel), and that the deletion of the final non-accented vowel has led to the restructuring of the tone system: creation of the M tone from B and collapsing of HB and H1, thus: | B B | > B, | B H | > M, | H B | and | H H | > H. This analysis is corroborated by tone correspondences between kpà and Common Bantu, as well as by the percentages for single tones: L 27 percent, M 15, 47 percent, H 54, 26 percent (i.e. more than L and M combined) (Guarisma 1983, 1992, 2000).

2.4 Downstep and upstep

These two phenomena clearly reveal the underlying tonal structure. Their realization depends conjointly on two factors: tonal structure and the accentual status of morphemes. These facts can be subsumed under two rules (Guarisma 1992, 1994, 2000):

- Any floating tone will be represented on the following item: an L lowers a following H and an H raises a following L (replacing a non-accented and combining with an accented L).

bèp yì | ń-bèp’ ę ‘these cane-rats’
bèn yì | ń-bèn’ ę ‘these handles’
bèn yì | ń-bèn’ ę ‘these termites sp.’
bèn yì | ń-bèn’ ę ‘these ribs’
bèp i-nò | ń-bèp’ i-nò ‘this cane-rat’
bèn i-nò | ń-bèn’ i-nò ‘this handle’
bèn i-nò | ń-bèn’ i-nò ‘this termite sp.’
bèn i-nò | ń-bèn’ i-nò ‘this rib’
bèp yèm | ń-bèp’ i-èm ‘my cane-rats’
bèn yèm [yèm] | ń-bèn’ i-èm ‘my handles’
When two accented Hs follow each other, the second is downstepped:

(1)  
\[ \text{mù-rò???} \quad \text{mù-qqèvè} \quad B \text{- BB II-H} \rightarrow BB II-H \quad \text{‘much wine’} \]

\[ \text{cl. 6-wine} \quad \text{cl. 6-much} \]

(2)  
\[ \text{n-ù-tùli} \quad B \text{- II-H} \rightarrow B \text{- H-H} \quad \text{‘I don’t know’} \]

\[ \text{I-know} + 	ext{NEG} \]

(3)  
\[ \text{ài-bù? \quad nì} \quad B \text{- H-H} \rightarrow B \text{- H-H} \quad \text{‘he beats him’} \]

\[ \text{cl. 1 - beat} \quad \text{him} \]

Downstep is thus to be seen as a manifestation of accent, with an essentially demarcative function: it separates items making up a phrase or utterance.

2.5 Downdrift

Downdrift is systematic in every succession HBH: the second H is realized lower than the first:

\[ \text{bòòbò} \quad \text{‘medicine’} \]

\[ \text{bààràà} \quad \text{‘tree sp.’} \]

(4)  
\[ \text{m-ùm \quad à-nò} \quad \text{‘this man’} \]

\[ \text{cl. 1-man} \quad \text{cl. 1-this} \]

(5)  
\[ \text{à-wèl-à} \quad gìn \quad i \quad gíp \quad \text{cl. 1-marry-RET} \quad \text{cl. 9+ girl} \quad \text{cl. 9} \quad \text{cl. 1+ woman} \]

\[ \text{‘he married a girl’} \]

(6)  
\[ \text{ài-kpàg \quad jàŋ \quad bò? \quad ri \quad m-èë} \quad \text{cl. 1 - arrive} \quad \text{cl. 9 + place} \quad \text{cl. 9 + one} \quad \text{with cl. 6-house} \]

\[ \text{‘he came near the house’} \]

It is possible for a H to be realized L, sometimes slightly falling, before pause, similar to a L (cf. following examples).

The limit of downdrift is the utterance, or the clause in complex utterances.

(7)  
\[ \text{m-ùm \quad à-sà-yà} \quad \text{mìn \quad ë-yà? \quad à \ nd-tò} \]

\[ \text{cl. 1-person} \quad \text{cl. 1-put-RET then cl. 8-hands on cl. 3-head} \]

‘The person then put his hands on his head’

(8)  
\[ \text{nò \quad m-ùm \quad à-yù-yà, \à-kpàg \quad fàkì \quad ë-sù \ û \ m-èë} \]

\[ \text{then cl. 1-person} \quad \text{cl. 1-come-RET / cl. 1-come out thus to cl. 3a-face cl. 3} \quad \text{cl. 6-hut} \]

‘Then the person came and came out in front of the house.’
### Table of prefixes

<table>
<thead>
<tr>
<th>Classes</th>
<th>NP</th>
<th>Dependent Prefixes</th>
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<td>m-V</td>
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kpâ has twelve noun classes (genders : 1/2, 3/4, 5/6, 7/8, 9/10, 19/13). Each class is indicated by a nominal prefix (NP) and dependent prefixes (DP) varying according to the category of the item in question: DP I | (C)̃- : adjectives (colors, deverbatives), stem for ‘all’ and numeral ‘one’; DP II | ̃- (cl. 1 and 9), | (C)̃- : demonstrative, anaphoric, possessives, stem for ‘other, some’, dependent interrogatives, nominal substitute, adjective (cf. determinative phrase); DP III | ̃- (cl. 1 and 9), | (C)̃- : connective, numeral and verbal prefixes. The distinction between DP II and III is based on the tonal behaviour of determiners:

• with DP II of classes other than 1 and 9, L determiners remain L, whereas H determiners are downstepped:

(9) b̃-ūm b̃i-בג | b̃i-בג-בג | ‘brown people’
   cl. 2-people cl. 2-red, brown
(10) b̃-ūm b̃i-בג | b̃i-בג-בג | ‘black people’
   cl. 2-people cl. 2-black

• with DP III for the same classes, L determiners are raised to H, whereas H determiners remain H:

(11) b̃-ūm b̃i-בג | b̃i-בג-בג | ‘two people’
   cl. 2-people cl. 2-two
(12) b̃-ūm b̃i-בג | b̃i-בג-בג | ‘three people’
   cl. 2-people cl. 2-three

Classes 1 and 3 are differentiated by their concords and by the NP of vowel-initial stems (m- / n-). Classes 4 and 6 are differentiated by the NP of vowel-initial stems (my- / m-) and their singular-plural pairings (3/4 vs. 5/6) (cf. Kadima 1969).

3.1 Nominal prefixes

All are L-toned [(C)̃-]. A small number of cl. 1/2 stems take a nasal prefix in the sg. which is retained in the pl. They mostly refer to plants and animals and can be considered as being originally cl. 9/10 items transferred to 1/2:

ñ-běnê/b̃i-בג-בג ‘thick porridge made of cassava’
̃-dåmbål/b̃i-בג-בג ‘rubber’
̃-lå/б̃i-בג-בג ‘larva of Rhynchophorus phoenicis’
̃-gåm/b̃i-בג-בג ‘leopard’

A few 7/8 nouns, also referring to plants or animals have a [+ voice] stem-initial consonant (probably also due originally to the 9/10 nasal prefix):

k̃i-zån / б̃i-בג ‘fish’
ki-gåm / б̃i-gåm ‘adder sp.’

Two 3/4 nouns have an alternation of sg. w and pl. m: wêl/mêl ‘war’ < CB *bîtå, wên/mên ‘dance’ < bînå. The w- *b correspondence shows, however, that w (stem-initial consonant) has been reanalyzed as a class prefix. This is confirmed by the comparison with the normal shape of cl. 4 prefix before vowel-initial stem (my- or m-).
3.2 Dependent prefixes I

These are prefixed to color adjectives and deverbatives when in attributive function (see below DP II-Adj in N+Adj. phrases), to the numeral -föi ‘one’ and the stem -cém ‘all’. They are distinct from NP in cl. 3 and 10 only:

(13) kí-là | kí-ri | kí-púp | ‘the cloth is white’
   cl. 7-clotl cl. 7-be cl. 7-white
(14) bù | i-ri | i-fín | ‘the dogs are black’
   cl. 10+dog cl. 10-be cl. 10-black
(15) nyú-óm | ies-föi | ‘one mouth’
   cl. 3-mouth cl. 3-one
(16) òt-cém | òt-cém | ‘all the people, everybody’
   cl. 2-people cl. 2-all
(17) ty-3l | ti-cém | ‘all the stars’
   cl. 13-star cl. 13-all

3.3 Dependent prefixes II (pronominal)

These are L in cl. 1 and 9 and H (accented) in other classes. They mark agreement on a large number of determiners.

3.3.1 Anaphoric -én

The anaphoric stem-vowel assimilates to the vowel of the prefix, with the following results: e after [+back] v, i after [+high] v. In classes 1 and 9, the anaphoric stem is preceded by -ná:

   cl. 1  1-néén | 1-néén | 2 béén | 2 béén |
   cl. 5  5-d'in | 5-d'in | 6 méén | 6 méén |
   cl. 9  9-i-néén | 9-néén | 10 yín | 10 yín |
   cl. 19 19-én | 19-én | 13 tún | 13 tún |

The tones remain the same whenever the DP is H (i.e. in all classes but 1 and 9) and the tone pattern of the previous noun stem is BB, BH or HH, or whenever the DP is L (cl. 1 and 9) and the noun stem LL:

(18) d-óm | d-óm | 3-d-óm’ 3-d-óm | ‘the stomach in question’
(19) m-s-fom | m-s-fom' | m-s-fom | ‘the chiefs in question’
(20) béé y-in | n-béé’ i-en | ‘the path in question’
(21) nám i-néén | n-nám’ i-néén | ‘the animal in question’

In all other cases, the anaphoric is realized L:

(22) nás i-néén | i-néén | n-nás’ i-néén | ‘the sesame in question’
(23) m-s-nit’ m-én | m-s-nit’ m-én | ‘the water in question’
(24) 9i ideal n-én | n-íp’ 9i ideal n-én | ‘the woman in question’
(25) béé i-néén | n-íp’ i-néén | ‘the path in question’

3.3.2 Indefinite -dágy ‘other, some’

(26) m-óm | m-óm’ á-dágy | ‘another/some person’
   cl. 1-person cl. 1-other
3.3.3 Possessives

The forms resulting from the coalescence of the DP with these stems, are under the influence of the previous noun stem:

<table>
<thead>
<tr>
<th>Persons</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>-ém</td>
<td>-is</td>
</tr>
<tr>
<td>2nd</td>
<td>-íi</td>
<td>-ín</td>
</tr>
<tr>
<td>3rd</td>
<td>-íi</td>
<td>-íi</td>
</tr>
</tbody>
</table>

(28) \(m\-án\)  
cl. 1-child  
| w-ém | m\-án\-ú-ém | my child |

(29) \(gíp\)  
cl. 1+woman  
| w-éém | n-ýíp\-ú-ém | my wife |

(30) \(béé\)  
cl. 9+path  
| y-íi | n-béé\-i-íi | his path |

(31) \(c\-cé\)  
cl. 7-bunch (palm)  
| k-íí | c-cé\-kí-íí | your palm bunch |

(32) \(f\-íí\)  
cl. 19-dirt  
| fíí | fíí-fíí | his dirt |

3.3.4 Dependent interrogatives -áý ‘how many/much?’ et -bé ‘which?’

(33) \(béé\)  
cl. 10+path  
| y-áý | n-béé\-i-áý | how many paths? |

(34) \(m\-án\)  
cl. 1-child  
| á-bé | m\-án\-á-bé | which child? |

(35) \(b\-úm\)  
cl. 2-person  
| bíč\-bé | bíč-bé | which people? |

3.3.5 Adjective

Within the phrase (NP-N + PI-Adj.) except in cl. 1 and 9:

(36) \(b\-úm\)  
cl. 2-person  
| bíč\-púp | bíč\-púp | white persons |

(37) \(c\-ó\)  
cl. 7-forest  
| kí\-fíí | kí\-ók\-kí\-fíí | a black forest |

(38) \(b\-úm\)  
cl. 2-person  
| bíč\-tíí | bíč\-tíí | brown people |

In cl. 1 et 9, the ‘adjective’ behaves as a cl. 1 nominal:

(39) \(m\-án\)  
cl. 1-child  
| á\-n-fíí | m\-án\-á\-n-fíí | a black child |
3.3.5.1 Nominal substitutive

Apart from cl. 1 (nî or nî) (which is an unanalyzable morpheme, like the person markers), nominal substitutives are based on a stem -ê:

<table>
<thead>
<tr>
<th>person markers</th>
</tr>
</thead>
<tbody>
<tr>
<td>singular</td>
</tr>
<tr>
<td>1st</td>
</tr>
<tr>
<td>2nd</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>nominal substitutives</th>
</tr>
</thead>
<tbody>
<tr>
<td>singular</td>
</tr>
<tr>
<td>cl. 1</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>19</td>
</tr>
</tbody>
</table>

(41) à-fâ nî by-ên ‘She gives him (cl. 1) meat’
cl. 1-give cl. 1-cl. 8-meat
(42) à-fâ yê by-ên | iê |
cl. 1-give cl. 9-it cl. 8-meat
(43) ëë-ëô | bê-ëô | ‘They beat them (cl. 2)’
cl. 2-beat cl. 2-they

DP II serve also as demonstratives (with an element -nô in cl. 1 et 9):

(44) dûm dî | dûm dî | ‘this stomach’
cl. 5-stomach cl. 5
(45) i-sîk kî | kî-sîk kî | ‘this lid’
cl. 7-lid cl. 7
(46) gîp à-ñô | à-ñô | ‘this woman’
cl. 1-woman cl. 1-this
(47) nûm i-ñô | nûm i-ñô | ‘this animal’
cl. 9-animal cl. 9-this

3.4 Dependent prefixes III

Due to their formal identity we designate thus the connective, or genitive marker, the prefixe of numeral stems (2 to 5) and the verbal subject prefix. For the distinction DP II/DP III, see above:

(48) nûm i c-ô | nûm i kî-ô | ‘animal of the forest’
cl. 9-animal cl. 9 cl. 7-forest
4 DIMINUTIVE AND AUGMENTATIVE

These are originally nouns (m-án/b- jn ‘child/children’ and c-óm/ý-óm ‘thing(s)’). They still keep the tonal trace of the corresponding connective (L in cl. 1, H in 2, 7 and 8). In principle, nominal qualifiers take the class concords of the diminutive (1/2) or augmentative (7/8).

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-áá</td>
<td>small</td>
</tr>
<tr>
<td>zú?</td>
<td>cl. 1-small</td>
</tr>
<tr>
<td>ń-púp</td>
<td>cl. 9+chicken</td>
</tr>
<tr>
<td>màá’ ń-sák’ ń-púp</td>
<td>cl. 1</td>
</tr>
<tr>
<td>‘the small white chicken’</td>
<td></td>
</tr>
</tbody>
</table>

However, if the genitive reference is that of container to content, the head nominal can determine the concord (especially with the augmentative):

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>c-óó</td>
<td>big</td>
</tr>
<tr>
<td>bós</td>
<td>cl. 7-big</td>
</tr>
<tr>
<td>i</td>
<td>cl. 9+calabash</td>
</tr>
<tr>
<td>m-éli’</td>
<td>cl. 9</td>
</tr>
<tr>
<td>‘a big calabash of milk’</td>
<td></td>
</tr>
</tbody>
</table>

5 VERB MORPHOLOGY

The maximal verb structure is: Prefix-VM1-RAD (-extensions) -VM2-VM3-VM3-VM3.

The markers generally coalesce with surface results often quite different from their underlying shape.

5.1 Extensions

-si (-zi) CAUSative, -áó HABitual, -ó INTRTransitive, -ó (-ó’ó) PERsitive (Intensive), -ki (= -gi (?)) ITERative, -(ó)ó n REFlexive = RECiprocal. Two extensions in succession can be seen in the following example:

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>á-pwágíti</td>
<td>cl. 1-gnaw (ITER, PER)</td>
</tr>
<tr>
<td>bí-kám</td>
<td>cl. 2-liana</td>
</tr>
<tr>
<td>‘He gnaws the lianas’</td>
<td></td>
</tr>
</tbody>
</table>
Extensions of the type -(C)én, glossed as REFlexive, take a reciprocal meaning with a plural subject marker:

(57)  
m-úm m-án  
cl. 1-person cl. 1-beat + PV cl. 1-child  
\text{‘The person beat the child.’}

(58)  
m-úm á-küleńkulén  
cl. 1-person cl. 1+PROG - beat oneself (REF, CONT)  
\text{‘The person is beating himself.’}

(59)  
b-ún bié̂e-küleńkulén  
cl. 2-child cl. 2+PROG - fight (REF, CONT)  
\text{‘Children fight (with one another).’}

These same extensions when preceded by certain consonants indicate, besides reflexive, strong involvement of the agent, sometimes combined with passive (-mén), associative, causative (-sén, -zén), intensive (haphazard) (-tén, -dén), applicative or autobenefactive (-rén).

-ši? ‘catch unawares’ -šikmén ‘be caught unawares’
*-yēʔ, -yērende ‘acquiesce’ -yēćeń ‘salute’
-sād ‘spill’ -sāatě́n ‘disperse (intr.)’
-fṓr ‘think, measure’ -fṓrě́n ‘attempt, try’

5.2 Indicative verb forms

They always include a person marker or DP III and often other prefixes and/or suffixes.

<table>
<thead>
<tr>
<th>Person markers</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Singular</td>
<td>mā́-</td>
</tr>
<tr>
<td>2nd Singular</td>
<td>wā́-</td>
</tr>
<tr>
<td>1st Plural</td>
<td>ti-</td>
</tr>
<tr>
<td>2nd Plural</td>
<td>bī-C, by-V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class prefixes</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>á-</td>
</tr>
<tr>
<td>2</td>
<td>bā-C, b-V</td>
</tr>
<tr>
<td>3</td>
<td>ū-C, w-V</td>
</tr>
<tr>
<td>4</td>
<td>mā-C, m-V</td>
</tr>
<tr>
<td>5</td>
<td>ū-C, w-V</td>
</tr>
<tr>
<td>6</td>
<td>mā-C, m-V</td>
</tr>
<tr>
<td>7</td>
<td>ki-C, k-V</td>
</tr>
<tr>
<td>8</td>
<td>bī-C, by-V</td>
</tr>
<tr>
<td>9</td>
<td>i-C, y-V</td>
</tr>
<tr>
<td>10</td>
<td>i-C, y-V</td>
</tr>
<tr>
<td>13</td>
<td>ti-</td>
</tr>
</tbody>
</table>

5.3 Prefixes (VM1)

These generally refer more to aspect than tense. Two sub-categories can be distinguished (VM1 and VM1”) according to their combinatory possibilities.
5.4 Suffixes

5.4.1 VM2

They mostly have modal value (view of the speaker on the process): Perfective (PFV - realis), Imperfective (IPFV - virtual), RETrospective.

<table>
<thead>
<tr>
<th>VM1</th>
<th>-á-</th>
<th>IMMEDIATE</th>
<th>Same day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-ń-</td>
<td>MIDdle</td>
<td>Previous days</td>
</tr>
<tr>
<td></td>
<td>-ē-</td>
<td>PROGressive</td>
<td>In progress</td>
</tr>
<tr>
<td></td>
<td>-ńt-</td>
<td>HYPOthetical</td>
<td>Possible but not certain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VM1’</th>
<th>-má-</th>
<th>INCEPtive</th>
<th>Intended or initiated action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-ńń-</td>
<td>ANTerior</td>
<td>Action previous to another</td>
</tr>
<tr>
<td></td>
<td>-ń-</td>
<td>CONClusive</td>
<td>Action taking place eventually (unexpectedly)</td>
</tr>
</tbody>
</table>

The verbal radical (+ ± ext.) with or without VM2 suffixes (-ø=-no VM2). VM1 and VM1’ necessarily combine with VM2: VM1 +PFV, VM1’+IPFV or RET. Imperfective is manifested by METatony: a H associates to the post-radical syllables (extensions or reduplicated part) as well as to a following non-accented L syllable, if and only if the verb is not phrase-final (see examples below).

<table>
<thead>
<tr>
<th>VM2</th>
<th>-ñ-</th>
<th>-í-</th>
<th>-ñń-</th>
<th>-ñ-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PFV</td>
<td>IPFV</td>
<td>RET</td>
<td>RET</td>
</tr>
<tr>
<td>VM1</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>VM1’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PROG</td>
<td>HYPO</td>
<td>INCEP</td>
<td>ANT</td>
</tr>
<tr>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

5.4.1.1 -o- R -ø-

This form is neutral as to aspect or mood:

(60)   n-yu  ‘I come’
     I come

(61)   m-an  a-bi?   yu-ap  ‘-bëk’  ‘The child breaks the branch’
     cl. 1-child cl. 1-break cl. 3-branch

(62)   ki-té  ki-kpii  ‘ki’-kpi | ‘The tree falls’
     cl. 7-tree cl. 7-fall
It is found in clauses referring to actions consecutive to a previous (main) clause:

(63)  m-án  á-kèn  á  fy-èè,  á-la?  bì-zén  
cl. 1-child  cl. 1-go  to  cl. 19-market  /  cl. 1-buy  cl. 7-fish  
‘The child goes to the market and buys fish.’

(64)  zyón  i-rèn  ñ-kpás,  i-bòì?  ñ-qìn  
cl. 9+Antelope  sp.  cl. 9-cut  cl. 3-whip  /  cl. 9-beat  cl. 1-Panther  
‘Antelope  sp.  cuts  a  whip  and  beats  Panther.’

5.4.1.2  -ø  -R  -VM2

-ø  -R  -i
-CVC  (p, ?)+i>+ -consonant  alternation  (see  above).  
-CV-  et  -CVn+i>i>lengthening  of  radical  V.

(65)  ñ-yùú  |  -yù-i  |  ‘I  came’  
I-come  +PFV

(66)  ù- kpíi  |  -kpi-i  |  ‘You  fell’  
you  -fall  +PFV

(67)  á-bòó  ‘ròó  ‘róp  |  -bòó-i  |  ‘He  treated  the  sick  person’  
cl. 1-treat  +PFV  cl. 1a+sick  person

(68)  bì-yèè  zò?  |  -yèn-i  |  ‘They  saw  an  elephant’  
cl. 2-see  +PFV  cl. 9+elephant

-ø  -R  -yà
-ŋà  (nasal  C-ŋà>-qà,  CVk-ŋà>kà,  CVl-ŋà>là)  is  most  frequent  in  oral  literature  texts,  
especially  in  main  clauses  of  complex  sentences  where  it  defines  the  background  to  the  process:

(69)  bèl  i-bíà-ŋà  rì  b-ìn  b-ìi  bìi- ‘ràà  
cl. 9+Ancestor  cl. 9-be-RET  with  cl. 2-child  cl. 2-his  cl. 2-three  
‘God  had  three  children …’

(70)  ñ-nò  i  á-bòì-kà  mì-tèn,  á-tà?  mì-rà?  
then  if  cl. 1-climb-RET  cl. 6-palm-tree  /  cl. 1-take  cl. 6-wine  
‘Then,  if  he  climbed  the  palm-trees,  he  tapped  wine.’

(71)  yèè  gèm  i-kpi-ŋà,  i-bùmbùn  c-à?  
when  cl. 9+monkey  cl. 9-fall-RET  /  cl. 9-break  (CONT)  cl. 7-arm  
‘When  the  monkey  fell,  he  broke  his  arm.’

5.4.1.3  -VM1  -R  -VM2

-  á  -R  -i

(72)  á-á-ýàl-i  |  ri-fàs  |  á-á-yàl-i  |  
cl. 1-IMM-give  birth-PFV  cl. 5-twins  
‘She  gave  birth  to  twins  (today).’
5.4.1.4 -VM1’- R- VM2

This form includes a VM1’ (PROG, HYP, INCEP, ANT, CONC) which, apart from PROG, is generally found in dependent clauses of complex sentences.

- ė- R -MET

-ē- is in fact likely to be the same morpheme (-focus) found in the presentative nominal form, as well as in focalization (see below):

(74) rí-fóm dy-ëë dëi | dì-ë ëi | ‘Here is the chief.’
   cl. 5-chief cl. 5 -FOC cl. 5

(75) zi y-ëë-nô ëë i-nô | ‘Here is the land.’
   cl. 9-land cl. 1-FOC-cl. 9 +this

(76) c-ó? k-ëë k-in | kì-ë kì-in | ‘Here is the forest in question.’
   cl. 7-forest cl. 7-FOC cl. 7-ANAPH

The use of -ē- in verb forms is accompanied by reduplication of the stem (continuous). The following examples show the identity of the PROG form with those involving focalization of the subject.

(77) ñ-ðêm w-ëë-fâfâ bwap | ù-ë-fâfâ-MET |
   cl. 3-heart cl. 3-PROG-give (CONT) +IPFV cl. 9 + blood
   ‘(It is) the heart (which) gives blood.’

(78) ki-pâŋ k-ëë-bòôô biôô | ki-tô | ki-ë-bôôbôô-MET |
   cl. 7-albino cl. 7-PROG-hit (CONT) +IPFV cl. 7-tree
   ‘(It is) the albino (which) is hitting the tree.’

With subject markers for persons and cl. 1 and 9, PROG adds a H to their basic L tone.

(79) ti-këñkëñ ‘We are going’ | ti-ó-këñkëñ-(MET) |
   we + PROG-go (CONT) + (IPFV)

(80) à- ë-dëì i- ’pêû | ‘He is eating fufu’ | à-ó-dëì-MET |
   cl. 1 + PROG-eat + IPFV cl. 7-stiff porridge

- ri- R -MET

(81) àrì- ’kpaŋ ri dëì | àrì-kpaŋ-MET |
   cl. 1 - HPYO - leave + PFV with cl. 9 + dawn
   ‘He would go tomorrow.’

- mà - R -MET

(82) dì-ûm dì-mà- ’tôûn bì fâk | dì- ’mà-tôûn-MET |
   cl. 5-stomach cl. 5 - INCEP - swell + IPFV him thus
   ‘His stomach starts swelling.’
Then Giant Rat attempts to lift the firewood.

As soon as Tortoise comes out, …

They first of all look for the disease (which is at the base) of this illness.

He hasn’t finished yet to pay the bridewealth.

‘He eventually takes the clothes.

‘…the stomach swells and eventually hardens’

‘…he eventually abducts women.’

‘If you eventually come to his place, you stay here in the field.’

‘He had tried to kill him.

‘He had gone at first.

‘He had eventually cut.’
Three markers are suffixes to the verb stem (with or without VM2). They can combine, which justifies their being distinguished as VM3 (Directional (centrifugal)), VM3’ (Potential), VM3” (Negative).

(94) bï–yèèn- yi fi-râp ‘They see from afar.’

-qi generally combines with PFV, even when the VM1 is ri- (only possibility), in spite of the fact that this marker is normally accompanied byMET.

(95) à-kpâŋ- i- ṣâ cl. 1-leave-PFV-POT
‘He may/might leave.’

(96) à-rï- kpâŋ rï ‘dâri | à-rï-kpâŋ-MET
cl. 1-HYPO-leave+PFV with cl. 9-tomorrow
‘He’d leave tomorrow.’

(97) à-rï- kpâŋ- i- ṣâ cl. 1-HYPO-leave-PFV-POT
‘He’ll doubtless leave.’

Use of ṣâ as a noun in the following proverb, plus its initial [+voice] consonant (cl. 9?) suggest a nominal origin.

(98) iṣço ṣo ṣu-bâsi  à-râkâ ṣâ | à-râk- ṣo ṣu-âkâ cl. 1a+Isong cl. 1-Mbusi cl. 1-prohibit+RET cl. 9+future
‘A man called Isong (son) of Mbusi had prohibited the future.’ (i.e. never put off until tomorrow…)

bï | bï’ is used in simple sentences, in combination with PFV or RET.

(99) à-kpâŋ- i- bï cl. 1-leave-PFV-NEG
‘He hasn’t left.’

(100) à-kpâŋ-ôbï | à-kpâŋ-ɡâ-bï’ | ‘He hadn’t left.’ cl. 1-leave+RET-NEG

In complex sentences, it only appears in the main clause or in a conditional or causal dependent clause.

(101) mì  n-ônèè- fï c-ôm, c-ôm kì-yîn bï rï-ôbë cl. 7-thing cl. 7-thing cl. 7-not be in cl. 5-pit
‘I didn’t find anything, there is nothing in the pit.’

(102) i bï- kâ-kii- fï kì- fâ? k-in ...
if cl. 2-ANT-do+PFV-NEG cl. 7-cure sp. cl. 7-ANAPH
‘If you don’t first do the ki-fâ?, …’

(103) à-kpâŋ- i- kì  ñ-ôyû-ôô cl. 1-leave-PFV because you-come+PFV-NEG
‘He left because you hadn’t come.’

<table>
<thead>
<tr>
<th>DIR -yi</th>
<th>POT -gâ</th>
<th>NEG -ôî</th>
</tr>
</thead>
<tbody>
<tr>
<td>-i- PFV</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-MET- IPFV</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-ôyû- RET</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>
Apart from the above contexts, negation is rendered by a morpheme këè ‘without’ plus the injunctive (cf. negative injunctive).

-ôi appears also in a verb form found in sayings expressing a prohibition and having a marker -á- (?), always in combination with IPFV.

(104) ò-àá-fyàří-bì | ò-këè | ò-àá-fyàří-MET-bì’ |
cl. 2-?-disappoint+IPFV-NEG cl. 1-stranger
‘One does not disappoint a stranger.’

(105) gêpsën | y-àá-bá-bì | ki- ‘bàá? | ki-fòi’ | i-à-bá-MET-bì’ |
cl. 9+help cl. 9-?-be+IPFV-NEG cl. 7-side cl. 7-one
‘Aid should not always be one-sided.’

If the subject is in cl. 1, the shape of the marker is -má- instead of -á-, thus | à-a-mà-
R-MET-bì’ |

(106) ò-këè | à-má-sìi-bì | zì
cl. 1-stranger cl. 1+PROG-?-have an exclusive privilege+IPFV-NEG cl. 9-land
‘A stranger cannot have exclusive usage of the land.’ | à-má-sík-MET-bì’ |

Another example also illustrates how -á- combines with a VM1’ (ANT):

(107) w-àá-kà-dì-bì | i- ’dýán | lìcè | ù-à-kà-dì-MET-bì’ |
you -?-ANT-eat+IPFV-NEG cl. 7-cassava why?
‘Why don’t you eat cassava leaves instead?’

5.5 Imperative

Affirmative imperative is formed with a suffix -á (plural -i è nà), without person marker:

(108) (a) yèn-á | look-IMP
look-IMP pl. ‘Look (sg.)!’
(b) yèn-ì nà | ‘Look (pl.)!’

If the verb stem ends with an extension, this associates to a H tone:

(109) (a) pëksën | pëksën-i nà
look away+IMP | go away+IMP pl.
‘Go away (sg.)!’
(b) pëksën-i nà | ‘Go away (pl.)!’

The shape of the negative imperative is identical to the negative INJunctive (see below).

5.6 Affirmative injunctive

The INJunctive has the following characteristics: H tone for all subject markers (in the case of the basically L-toned person and cl. 1 subject markers, this H superimposes itself on the L) followed by HB(H) for the verb stem; if both the subject marker and the verb radical are H, there is no change:

(110) tà-këèn | tà-----këè | ‘Let’s go!’
we + INS-go

(111) à-dìì | ki-pèn | à-----dì | ‘Let him eat fufu!’
cl. 1+INS-eat cl. 7-fufu
5.7 Negative imperative/injunctive

These are formed from the Injunctive combined with the morpheme *kēkē*, marking negative noun coordination (*kēkē m-ñi* ‘without money’). *kēkē* follows the lexical subject, the independent personal pronoun, the subject marker for persons and cl. other than 1 and 9; with cl. 1 and 9 it precedes the subject marker. In the cases where it follows the subject marker, it seems to coalesce with FOC (see PROG). The general scheme is:

<table>
<thead>
<tr>
<th>IPP (NP)</th>
<th>kēkē</th>
<th>kēkē</th>
<th>+ INJ-RAD + IPFV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NP)</td>
<td>1 cl. + FOC</td>
<td>I cl. (+ FOC)</td>
<td></td>
</tr>
</tbody>
</table>

(116) (a) *kē-dī*  
| *kē-pēn* | *kē-gēnī* | ‘Let them pester the brothers’! |
| cl. 2 + INJ-eat | cl. 2-brother | |
| 7-fufu | 2-brother | |

<table>
<thead>
<tr>
<th>IPP (NP)</th>
<th>kēkē</th>
<th>kēkē</th>
<th>+ INJ-RAD + IPFV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NP)</td>
<td>1 cl. + FOC</td>
<td>I cl. (+ FOC)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IPP (NP)</th>
<th>kēkē</th>
<th>kēkē</th>
<th>+ INJ-RAD + IPFV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NP)</td>
<td>1 cl. + FOC</td>
<td>I cl. (+ FOC)</td>
<td></td>
</tr>
</tbody>
</table>

(116) (b) *kōkō-dī*  
| *kē-pēn* | *kē-gēnī* | ‘Let them pester the brothers’! |
| cl. 2 + INJ-eat | cl. 2-brother | |
| 7-fufu | 2-brother | |

<table>
<thead>
<tr>
<th>IPP (NP)</th>
<th>kēkē</th>
<th>kēkē</th>
<th>+ INJ-RAD + IPFV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NP)</td>
<td>1 cl. + FOC</td>
<td>I cl. (+ FOC)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IPP (NP)</th>
<th>kēkē</th>
<th>kēkē</th>
<th>+ INJ-RAD + IPFV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(NP)</td>
<td>1 cl. + FOC</td>
<td>I cl. (+ FOC)</td>
<td></td>
</tr>
</tbody>
</table>

(117) *kēkē-kpāŋ*  
‘Don’t go (pl.)!’  
| *kēkē-ā-kālī-kpāŋ* | ‘Don’t go (pl.)!’  |
| without-you + INJ-leave + IPFV | |

Negative Injunctive appears in negative main clauses preceded by a dependent condition clause and in certain negative dependent clauses.

(118) *i ú-tō-bī*  
| *bōbō* | *kēkē-ā-kālī-wān-met* | ‘If you don’t take the medicine, you won’t recover.’ |
| cl. 9 | medicine/ without + you + INJ-recover + IPFV | |

(119) *ū-rī’-tō?*  
| *m-ē* | *m-ii* | *kēkē-kālī* | ‘If you asked him where his house is, he wouldn’t tell you’ |
| cl. 6-house | cl. 6-his | without-you + INJ-ask + IPFV | |

(120) *rī-sūm*  
| *dy-āā-kpāŋ-i* | *kēkē-dī-yēn* | ‘The chief left without seeing the child.’  |
| cl. 5-chief | cl. 5-IMM-leave + IPFV | *m-ān* | |

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5.8 Other verb forms

Other verb forms include a ‘verboid’ stem (without any marker) or a motion verb followed by another verb. Verboids are: -rì ‘be’, -ti ‘be (PFV)’ and -yín ‘be (NEG)’

<table>
<thead>
<tr>
<th>Verboid</th>
<th>Stem</th>
<th>Other Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-rì</td>
<td>à</td>
<td>m-êé</td>
<td>‘He is at home.’</td>
</tr>
<tr>
<td>-ti</td>
<td>à</td>
<td>n-syóm</td>
<td>‘He already was at the river.’</td>
</tr>
<tr>
<td>-yín</td>
<td>à</td>
<td>‘m-êé</td>
<td>‘He is not at home.’</td>
</tr>
</tbody>
</table>

In all verb forms including a ‘verboid’, this can be considered as a modal auxiliary.

5.8.1 cl.-ê+ cl.-Verb (CONT, HAB, PER, ITER)

These utterances refer to actions performed either habitually or exclusively:

<table>
<thead>
<tr>
<th>Verboid</th>
<th>Stem</th>
<th>Other Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>w3-tì</td>
<td>w3-fyôgâ-yì</td>
<td>fô yô</td>
<td>‘Which way do you usually pass?’</td>
</tr>
<tr>
<td>à-tì</td>
<td>à-kwêngì</td>
<td>rêêz</td>
<td>‘He only likes rice’</td>
</tr>
</tbody>
</table>

5.8.2 cl.-tì, -ti or -yín + INJ + cl.-Verb

In their various combinations (±INJ), these forms refer to the possibility, impossibility or intention to carry out an action:

<table>
<thead>
<tr>
<th>Verboid</th>
<th>Stem</th>
<th>Other Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>à-rì</td>
<td>lì</td>
<td>à-kêèn</td>
<td>‘He could go.’</td>
</tr>
<tr>
<td>à-tì</td>
<td>lì</td>
<td>à-kêèn</td>
<td>‘He can go.’</td>
</tr>
<tr>
<td>à-yín</td>
<td>lì</td>
<td>à-kêèn</td>
<td>‘He cannot go.’</td>
</tr>
<tr>
<td>à-tì</td>
<td>lì</td>
<td>à-kêèn</td>
<td>‘He is ready to go.’</td>
</tr>
<tr>
<td>à-yín</td>
<td>lì</td>
<td>à-kêèn</td>
<td>‘It is impossible for him to go.’</td>
</tr>
</tbody>
</table>
5.8.3 cl.-Motion verb + cl.-Verb

These utterances appear as juxtaposed clauses (same subject in both, with the second a consequence of the first), but the first verb behaves as an auxiliary (i.e. no VM, nor complement) only the second is semantically defined, the whole being indissociable.

(134) m-úm à-kèn à-jáàmžën ‘The person goes into hiding.’
      cl. 1-person cl. 1-go cl. 1-hider

(135) n-yù n-tél wò ‘I’ve come to fetch you.’
      l-come l-take you

(136) tî-wèn tî-yùù tî-kaày ri ki-të
      cl. 13-firewood cl. 13-come cl. 13-tie with cl. 7-tree
      ‘The firewood had come and tied itself to the tree.’

6 SENTENCE STRUCTURE

Word order is Subject Predicate Complement. Complements can be either direct or indirect. If only one direct (non-circumstantial) complement appears, it generally refers to the object (patient):

(137) mààk-làà nàs ‘I bought sesame.’
      cl. 9 + sesame

(138) bît-tûm àt-rèn ‘They start crying.’
      cl. 5-tear

(139) c-bblezën kì-kì m-úm ‘Heat overwhelms the person.’
      cl. 7-heat cl. 1-person

(140) à-yùyì i-sëni ‘He rushes coming down.’
      cl. 1-rush cl. 7-coming down

In some such cases, the verb has a more or less fossilized extension -(C)ën (‘wash’, ‘be mistaken’, ‘forget’, ‘meet’, ‘resemble’, ‘hate’) and an object which can be a part of the body, a faculty, a person, etc.:

(141) à-soòtënsòtën by-à? ‘He washes hands.’
      cl. 8-arm, hand

(142) à-nànnën bìi-tòki ‘He talks nonsense.’
      cl. 8-words, speech

(143) gîp à-tànëm m-àn ‘The woman meets the child.’
      cl. 1-woman cl. 1-meet cl. 1-child

(144) à-d’tëmzën zëm ‘He forgets the machete.’
      cl. 1-forget (‘make oneself disappear’) cl. 9+machete

(145) à-písën génì w-ìì ‘He looks like his brother.’
      cl. 1-resemble cl. 1a+brother cl. 1-his

A number of examples illustrate the use of a verb with a direct complement which cannot be considered an object:

• V (motion) + Complement (traditional activity). These examples imply that the agent is directly affected. They contrast with examples where the same complement is preceded
by a preposition:

(146)  á-á-kḕ  rí-wéy  
cl. 1-IMM-go +PFV  cl. 5-wedding
cl. 1-IMM-go +PFV  at  cl. 5-wedding
‘He went and got married.’  ‘He attended (someone else’s) wedding.’

- V (state, change of state, physiology, feeling)+Obligatory Complement (state, attribute of agent, result or cause of process, means by which the agent fulfils or undergoes action):

(147)  á-ríp  i-síkèrì  ‘He remains a cripple.’  
cl. 1-stay  cl. 7-cripple
(148)  á-yáy  n-gún  ‘He becomes a panther.’  
cl. 1-become  cl. 1-panther
(149)  á-lá̀rèn  ñàm  ‘He turns into an animal.’  
cl. 1-turn (int.)  cl. 9+animal
(150)  n-dá́ríp  kī-tám  ‘I suffer from an abscess.’  
I+PROG-be sick (CONT) +PFV  cl. 7-abscess
(151)  á-á-ywà́n-i  mí-rò?  mì  báà́zì  
cl. 1-IMM-get drunk +PFV  cl. 6-wine  cl. 6  9+maize
‘He got drunk on maize beer.’
(152)  á-sikmèn  rí-yù  dì  gènì  w-ù  
cl. 1-be surprised cl. 5-coming cl. 5 cl. 1a-brother cl. 1-his
‘He is surprised at his brother’s coming.’

In the case of several non-circumstantial direct complements, the order is generally: beneficiary (goal)+object (patient) (+other).

(153)  á-fā  ‘gip  m-áñì  ‘He gives the woman money.’  
cl. 1-give  cl. 1+woman  cl. 6-money
(154)  ból  i-yóksìì  má  gòò  ‘The rain ruined my shoes.’  
cl. 9+rain  cl. 9-spoil+PFV  me  cl. 10+shoe
(155)  á-yàì  m-án  i-yòì?  ‘He makes the child crazy.’  
cl. 1-make become  cl. 1-child  cl. 7-crazy

With state or motion verbs, the direct complement is generally an adjunct:

<table>
<thead>
<tr>
<th>Locative</th>
<th>Temporal</th>
<th>Manner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interrogative</td>
<td>fò ‘where?’</td>
<td>fìn ‘when?’</td>
</tr>
<tr>
<td>Affirmative</td>
<td>fì ‘here’</td>
<td>c-èénkò ‘evening’</td>
</tr>
<tr>
<td>‘there’</td>
<td>‘now’</td>
<td></td>
</tr>
<tr>
<td>‘yonder’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(156)  wàá-kpìì  fò  ‘Where did you fall?’  
you+IMM-fall+PFV  where?
(157)  màá-kpìì  wò  ‘I fell there.’  
I+IMM-fall+PFV  there
Complements can be indirect (governed by a preposition):

<table>
<thead>
<tr>
<th>Explaining</th>
<th>ǹsọ̀ ‘even’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ọt ‘that, such as’</td>
</tr>
<tr>
<td>Comparing</td>
<td>yèè ‘as’</td>
</tr>
<tr>
<td></td>
<td>ri ‘with’</td>
</tr>
<tr>
<td></td>
<td>bẹẹ ‘together with’</td>
</tr>
<tr>
<td></td>
<td>ẹẹ ‘without’</td>
</tr>
<tr>
<td></td>
<td>ẹ ‘at, to’</td>
</tr>
<tr>
<td>Localizing</td>
<td>bẹ ‘at, to, on, in, by, towards, from, on account of’</td>
</tr>
<tr>
<td></td>
<td>yèè ‘at (someone’s place)’</td>
</tr>
</tbody>
</table>

(158) à-ǹ-kàp-i
hàm ọ̀ ǹkà è-ò
cl. 1-MID-tie-PFV cl. 1a + bag with cl. 1-small cl. 3-rope
‘He tied the bag with a string.’

(159) à-ǹ-duù
bẹẹ ǹìnị̀n w-ii
cl. 1-MID-fight-PFV with cl. 1a + friend cl. 1-his
‘He fought with his friend.’

(160) à-rèlì-yà
bì i-ọ̀
cl. 1-stand-RET on cl. 7-tree
‘He was standing on the tree.’

(161) bì-fà bì- hà bì ọ̀-tí bì mì-cèp
cl. 2-thought cl. 1-rise in cl. 3-head through cl. 6-vein, nerve
‘Thoughts ascend to the head through conduits.’

(162) à-pèěsè-yì
bì ǹà à ọ̀y
cl. 1-leave + PFV-DIR from prison (hunger room)
‘He came out of jail.’

(163) à-à-kèè
rì-wèy yèè rì-fòm
cl. 1-IMM-go+PFV cl. 5-wedding at cl. 5-chief
‘He went and got married at the chief’s.’

To specify location, à and bì combine with a few nouns (zi ‘earth, ground’, dọ-ọ̀ ‘sky, top’, ọ̀-sì ‘face’, jẹm ‘behind’, dọ-ẹm ‘outside’, dọ-ọm ‘stomach, inside’, etc.); concords are always determined by the class of the nominal:

(164) à ọ̀ ọ̀ kì-té
zi ọ̀ ọ̀ cl. 9 + ground cl. 9 cl. 7-tree
‘under the tree’

(165) à ọ̀ ọ̀ ọ̀ g̀p
sú ọ̀ ọ̀ cl. 3a -face cl. 3 cl. 1 + woman
‘before the woman’

(166) bì dọ-ọ̀m dì ọ̀ ọ̀ yà
cl. 9-stomach cl. 5 cl. 19-pot
‘inside the pot’

(167) bì ọ̀ ọ̀ ọ̀ g̀p
sú ọ̀ ọ̀ cl. 3a +face cl. 3 cl. 1 + woman
‘in front of the woman’
These locative phrases can be postposed to the nominal; this implies greater involvement of the agent:

\[(168) \quad \text{á-kiá'kíá́} \quad \text{áip} \quad \text{á'-sí} \]
\[
\text{cl. 1-walk (cont) \ cl. 1+woman at \ (cl. 3a) before}
\]
\`He is walking before the woman.'

Direct non-circumstantial complements precede circumstantials (±direct):

\[(169) \quad \text{á-roó'm-yí} \quad \text{bí'-géni} \quad \text{b-í} \quad \text{fí} \]
\[
\text{cl. 1-send-DIR \ cl. 2-brother \ cl. 2-his \ here}
\]
\`He sends his brothers here.'

\[(170) \quad \text{á-tíri} \quad \text{m-úm} \quad \text{c-á?} \quad \text{bí} \quad \text{bí-yí-ás} \]
\[
\text{cl. 1-pass \ cl. 1-person cl. 7-hand on cl. 8-back}
\]
\`He passes his hand on the person’s back.'

Several (direct and/or indirect) circumstantial complements can combine:

\[(171) \quad \text{á-yía} \quad \text{fí} \quad \text{tóróóp} \]
\[
\text{cl. 1-come+PFV \ here \ noon}
\]
\`He came here at noon.'

\[(172) \quad \text{á-kbí} \quad \text{fó} \quad \text{rí} \quad \text{b-í} \]
\[
\text{cl. 1-stay \ yonder with \ cl. 2-them}
\]
\`He stays there with them.'

\[(173) \quad \text{á-kpí} \quad \text{rí} \quad \text{pi} \quad \text{bí} \quad \text{má-níú} \]
\[
\text{cl. 1-fall \ with \ him (cl. 1) in \ cl. 6-water}
\]
\`He falls with him into the water.'

When two circumstantial complements (direct+indirect) follow each other, the second refers to the first:

\[(174) \quad \text{á-nápi} \quad \text{fí} \quad \text{bí} \quad \text{zi} \]
\[
\text{cl. 1- lie down here on cl. 9+ground}
\]
\`He lies down here on the ground.'

### 6.1 Complex sentences

They are made up of two or more clauses (C) in juxtaposition or linked by a subordinating element (pre- or postposition).

#### 6.1.1 Clauses in juxtaposition

Generally, C2 (subordinate)=explanation or consequence of C1. Formal characteristics:

\(a)\) no VM in C2; \(b)\) if the complement of the verb in C1 is also that of the verb in C2, it is not repeated in the latter; \(c)\) a subordinating element (míí?) can optionally be inserted in C2.

\[(175) \quad \text{áip} \quad \text{á-kéé} \quad \text{á fy-čč,} \quad \text{á-la?} \quad \text{bí-zén} \]
\[
\text{cl. 1+woman \ cl. 1-go+PFV to cl. 19-market/ \ cl. 1-buy \ cl. 7-fish}
\]
\`The woman went to the market and bought fish.'
(176) à-fiàn 'gám, à-pì? à zì
cl. 1-catch cl. 9-spider/ cl. 1-throw to cl. 9-ground
‘He catches the spider and throws it on the ground.’

(177) à-yëë biùù, à-dìgi mìì?
cl. 1-see+PFV cl. 9-hole/ cl. 1-enter within
‘He sees a hole and enters it.’

6.1.2 Clauses introduced by a subordinating element

There are six subordinating prepositions (P), of which four are also nominal prepositions:

<table>
<thead>
<tr>
<th>P1</th>
<th>i ‘if’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yëë ‘as, when’</td>
</tr>
<tr>
<td></td>
<td>ñsoò ‘even if’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P2</th>
<th>là ‘that, so that, because’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dì ‘while, until, when’</td>
</tr>
<tr>
<td></td>
<td>këé ‘without’</td>
</tr>
</tbody>
</table>

(178) i ù-kpáy-i, mà n-kën irì?
if you-go-REF I 1-go too
‘If you go, I go too.’

yëë can introduce C1 or C2.

(179) yëë gém i-kpi-ỳà, i-bùnbùn c-àì?
as cl. 9+monkey cl. 9-fall-RET/ cl. 9-break (CONT) cl. 7-arm
‘As Monkey fell, he broke his arm.’

(180) gàrò ri-sùù-rìn bì rì-bìy là rù?,
c. 10+bird sp cl. 10-return (REF) in cl. 5-river that in flock /
yëë ri-bà-yày
as cl. 10-be-RET+DIR
‘The gàrò birds returned to the river, as they were (before coming).’

nsóò introduces concessives. It can combine with yëë ‘as’ et avec là ‘that’:

(181) ñsoò yëë ù-màà mà, n bì i-bàà
even as you-throw+PFV me / I on cl. 7-answering
‘Even if you were to reject me, I would answer.’

(182) ñsoò là à-yì mì-yëë,
even that cl. 1-know cl. 6-witchcraft/
wè bëò wè-éè-nàòòì pì
you cl. 9+God you-FOC-chase him (cl. 1)
‘Even if he knows witchcraft, it is you, God, who chase him.’

là introduces:
• completives of main clauses whose verb is -kàli ‘say’, -ỳén ‘see’, -kùn ‘want’, -ỳëërn
‘accept’, -rési ‘show’, -yí ‘know’:

(183) à-kâlù  kí  wɔ-rí  i-yá?  ‘He says that you are mad.’
   cl. 1-say  that  you-be  cl. 7-mad

• purpose or goal clauses:

(184) à-rí  rí  ki-náà  lì  gíp  w-úí  à-á-yáldí
   cl. 1-be  with  cl. 7-joy  because  cl. 1+  cl. 1-his  cl. 1-IMM-give
   woman  birth
   ‘He is happy because his wife gave birth (to a boy).’

dí (cf. ri ‘with’) introduces a clause simultaneous with the main clause:

(185) à-káákáá  dí  à-dundún  ‘She sings as she is pounding.’
   cl. 1+PROG-sing  while  cl. 1+PROG-pound
   (CONT)+IPFV  (CONT)+IPFV

këë is a negative coordinating element:

(186) ù-rí-tòí?  m-èé  m-úí,  këë-kâlù  wò
   you-HYPO-cl. 6-house  cl. 6-his/without+cl. 1+you
   ask+IPFV  EN-tell+IPFV
   ‘If you were to ask him where his house his, he wouldn’t tell you.’

6.1.3 Relative clauses

They determine nominals and are always introduced by a demonstrative:

(187) m-ám  ànò  à-n-íyáú  rí  n-kòáà,  à-rí  rí-fòm
   cl. 1-person  cl. 1-this  cl. 1-MID- with  cl.1(?)-  cl. 1-be  cl. 5-chief
   come+PFV  yesterday
   ‘The man who came yesterday is the chief.’

(188) à-á-tèrí  ki-làà  lì  màa-fâa  jí
   cl. 1-IMM-  cl. 7-clothes  cl. 7  1-IMM-give+PFV  him (cl. 1)
   take+IPFV
   ‘He took the clothes I gave him.’

(189) kpày-á  jày  i-nò  wò-yíí
   go out-IMP  cl. 9+place  cl. 9-this  you-know
   ‘Go out through the place you know.’

6.2 Focalization

Subject focalization is formed with focus -è- and -rí ‘be’ (same tone pattern in all classes, save 1 and 9):

(190) nàm  yèè-rí  | à-nàm  ‘i  ‘è-rí  | ‘They are animals.’
   cl. 10+animal  cl. 10-FOC-be

(191) c-òò  kèè-rí  | kí-òò  ‘kí  ‘è-rí  | ‘It is a forest.’
   cl. 7-forest  cl. 7-FOC-be

(192) nàm  yèè-rí  | à-nàm  ‘i  ‘è-rí  | ‘It is an animal.’
   cl. 9+animal  cl. 9-FOC-be
In cl. 1, the independent pronoun is used instead of the subject prefix:

(193) \( m\-\text{án} \ n\text{-jëë-ri} \) | \( m\-\text{án} \text{-} n\text{-ë} \) ‘He is a child.’
    cl. 1-child him (cl. 1)-FOC-be

Complement focalization is marked by a presentative construction (with FOC) and preposing of the noun:

(194) \( \text{kí-pén} \) \( k\text{-ë} \) \( k\text{i} \) \( ì\-\text{-dë} \) ‘It is fufu that he ate.’
    cl. 7-fufu cl. 7-FOC cl. 7| cl. 1-IMM-eat+PFV

6.3 Thematization

This is indicated by preposing of the complement:

(195) \( b\text{-ö}, \) \( b\text{-ë-båây} \) \( b\text{i} \) \( w\) ‘Years, they are counted thanks to you.’
    cl. 10+year cl. 2-count on you (Moon)

This can combine with determination of the complement by a relative clause:

(196) \( b\text{-iùm} \) \( b\text{í} \) \( ù\text{-sëëdë-yà} \) \( ìn\text{i} \) \( ù\text{-tøåtøå} \) \( r\text{i} \) \( b\) ‘The people that you had taken down there, I had talked with them.’
    cl. 2-person cl. 2 you-take yonder / l-speak with cl. 2-them
    down-RET (CONT)

Word order change also serves to enhance salience:

(197) \( m\text{í} \) \( ñ\text{-yëëëdë-fíi} \) \( m\text{-án} \) \( w\text{-ëm} \) \( l\text{í} \) \( ì\text{-këën} \) ‘I don’t accept for my daughter that she should go away.’
    cl. 1-accept+PFV-NEG cl. 1-child cl. 1-my / that cl. 1+INV-go

REFERENCES

CHAPTER EIGHTEEN

MAKAA (A83)

Teresa Heath

1 INTRODUCTION

Makaa is spoken in the Upper Nyong department of the Eastern province of the Republic of Cameroon. The Makaa people are a predominantly agricultural society; an estimated 15 percent of the 80,000 speakers live in cities throughout Cameroon.

The Makaa people refer to both themselves and the language as Makaa. Guthrie (1971) identifies Maka as (A83), part of the Maka-Njem group. Grimes (2000) lists it as Makaa (or Mekaa, South Makaa, South Mekaa). Dieu and Renaud (1983) classify it in Zone 4 under the Equatorial branch of the Bantu languages and refer to it as miska. They also indicate that the administration uses the names maka and maky, whereas neighboring people groups use the names maky, makae, mokay, mkey, mka, or mika. In linguistic write-ups, we use the name Makaa when writing in English, and mekaa when writing in French.

Makaa is still heavily used in oral communication, even among highly educated speakers. French has long been used for written communication and education. Churches have been using other Cameroonian languages, Ewondo and Bulu, and French. The Makaa people are beginning to show an interest in written Makaa in the schools and churches.

Makaa has many sub-dialects, due to the mixing of family groups by colonials at the beginning of the twentieth century. We have identified four major dialects (Mbwaanz, Bimb, Shikunda, and Besip), which are ethnic subgroups as much as linguistic dialects. The differences are mostly phonological and lexical, but also syntactic. Dialects of neighboring languages usually understand each other, so that the situation is actually a language chain, where boundaries of languages are difficult to determine. This is especially true of Bikele, the language to the south and intelligible to the Bimb dialect; similarly, Byep or Northern Makaa, the language to the north, is intelligible to the Besip dialect. Other neighboring languages in the Maka-Njem group are Koonzime and So to the south.

2 PHONOLOGY

2.1 Segmental phonemes

Makaa has eleven vowels, twenty-two consonants, and two phonemic tone levels (table 18.1).

The vowel system is very unusual for Bantu languages, in that it is not symmetrical (Welmers 1973). It has four front vowels, i, I, e, and e, and only two back vowels, u and o. The vowel o has two allophones, o and o, which occur in free variation in many environments. Instead of one central vowel, there are three, i, a, and a. Only two of the vowels, e and o, have phonemic nasal counterparts, g, and q, even though all the vowels are nasalized before z and zh.
### TABLE 18.1: VOWELS (UNDERLYING)

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>Mid-high</td>
<td>i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid</td>
<td>e</td>
<td>ø</td>
<td>o &amp; ø</td>
</tr>
<tr>
<td>Open</td>
<td>e &amp; ë</td>
<td></td>
<td>a</td>
</tr>
</tbody>
</table>

### TABLE 18.2: CONSONANTS

<table>
<thead>
<tr>
<th></th>
<th>Labial</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Labio-velar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td>b</td>
<td>c</td>
<td>k</td>
<td>kp</td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>ny</td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
<td>f</td>
<td>s</td>
<td>sh</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-vowels</td>
<td>w</td>
<td>y</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All the vowels can occur long and short, making a total of twenty-two, e.g. ѝ ‘to stay’ and ѝì ‘to cry’. We have interpreted long vowels as single phonemes, because native speakers react to these as one vowel, not two. The same tone patterns found on short vowels are also found on long vowels.

Makaa has twenty-two simple consonants, plus eight prenasalized stops, as shown in table 18.2. Like many languages in the area, it has the doubly articulated stop kp, though it is very rare, occurring only syllable-initially, and never prenasalized. The voiceless stop p occurs only with prenasalization (mp) or in the doubly articulated stop (kp). This is also common of many Bantu languages of southern Cameroon, especially A70 languages.

The stops lose their voicing contrast word-finally, where they are realized as unreleased and devoiced, e.g. the final consonant in cùd’il ‘empty’. When a suffix is added, they are realized as the voiced stop, e.g. cùd’ilgò ‘really empty’. Therefore, we write them with the symbols for voiced stops.

Stops can be prenasalized. The fricatives are not prenasalized as in neighboring languages such as Ewondo (A70). However, when z and zh occur medially or finally, they always occur following phonetically nasalized vowels. It may be that z and zh were prenasalized historically, but now the prenasalization is reflected in nasalization of the preceding vowels. The voiceless fricative h is rare.

Labialization and palatalization are syllable-level prosodies, realized on the consonant in the onset, and sometimes on the vowel. The vowel œ becomes i (high front open allophone) following palatal or palatalized consonants, e.g. yò [yì] ‘give’.

### 2.2 Syllable types

Makaa has three types of syllables, CV, CVC, and V. The most common are CV and CVC, e.g. L-kà ‘leaf’ (C7) and Ø-kùm ‘monkey’ (C1). (Note that L stands for a floating low
tone, Θ stands for a zero prefix, and later, H stands for a floating high tone. These tones are morphophonological.)

The onset of these syllables can be labialized or palatalized, e.g. Θ-\k\v\'\m\ ‘bag’ (C9) and myè\v\ ‘to spread’. The V syllable occurs word-initially, usually as a prefix, or word-finally, after a CV syllable, e.g. i-\f\i\ ‘ashes’ (C8). This complex tone pattern, a low followed by a high–low, suggests that a consonant has been dropped. This complex tone pattern occurs only rarely, and only word-finally. Native speakers recognize it as a complex pattern. Interpreting this as a sequence of vowels does not add another syllable pattern, since there is already a V syllable. Interpreting other long vowels as two phonemes would add the VC syllable pattern, as in Θ-w\v\‘g ‘chimpanzee’ (C1).

Closed syllables always occur word-finally, because Makaa does not allow consecutive consonants. When two consonants do occur consecutively at morpheme boundaries, the epenthetic vowel i is inserted to avoid having to pronounce consecutive consonants. Prenasalized consonants are considered single consonants, because there is no intervening i and in reduplication both are reduplicated, e.g. L-nj\j\w ‘small house’ (C7). Prenasalized stops can occur in the onset or final position, e.g. c\c\ ‘to change’. Nasals can be syllabic when carrying grammatical tone, e.g. \g\j\w ‘where’ with locative high tone on ɣ.

2.3 Morphophonemic processes

Morphophonological processes include elision and assimilation. Vowel elision occurs where the subject marker is followed by a vowel-initial tense marker, such as m\a\ å k\  ‘I went’ becoming [måkå], where the å is slightly lengthened.

Vowel assimilation occurs in reduplication. In order to derive a participle from a verb or a diminutive from another noun, the onset and tone of the first syllable are duplicated, and the epenthetic i is inserted, e.g. kik\g\ ‘small child’. Following a labial or labialized consonant, the i becomes u, as in the gerund fuf\m\ ‘whiteness’. Following a palatal or palatalized consonant, the i becomes i, as in y\i\nd ‘blackness’.

In the attributive noun phrase, the associative marker i or ô becomes a semi-vowel ɣ or w when followed by the marker å. Thus, i-s\a\ å l\el\ ‘third thing’ becomes [i-såyålå]. Similarly, the class 2 noun prefix ô becomes w’ when preceding a noun beginning with å-, as in w-al\a\då ‘hot pepper’.

Consonant assimilation occurs during prefixation, as part of the process of deriving nouns from verbs. When a nasal prefix is added to a verb stem, it assimilates to the place of articulation of the stop to which it is prefixed, as in Θ-\g\w\a\g\lå ‘anointed one’ (C3) from g\w\a\g\lå ‘to anoint’.

2.4 Tones

Makaa is a tonal language, with contrastive high and low, e.g. Θ-kå ‘wicker’ (C5) and L-kå ‘leaf’ (C7). The tones may occur singly or in sequences, resulting in high-low and low–high tone sequences, e.g. kå ‘down there’ and délå ‘eating’. A high tone may be lowered in certain environments, which results in downstep, e.g. m\a\ m\c\ ‘I have seen’, or in reduplication.

Some morphemes have polar tone, e.g. álåm ‘beloved one’ where the tone of the nominalizing prefix å- is opposite to the following tone. Some syllables are analysed as being toneless, e.g. kå ‘to go’; if they do not receive a grammatical tone, they receive a default low tone. We discuss the tonal processes more in the relevant sections of the chapter.
3 NOUNS AND NOUN PHRASES

3.1 Nouns

3.1.1 Noun class system

Every Makaa noun belongs to a class, and the ten noun classes and their prefixes are as listed in table 18.3. (Note that N stands for a nasal consonant.)

There remain a few vestiges of other classes, e.g. the locative wú ‘place’ takes an unusual relative marker, wí, which is usually a plural, C2, and also, the head noun ndú ‘manner’ is the only word to take the relative marker nö. The ten noun classes form the following genders: 1/2, 1a/2a, 3/4, 3/6, 5/6, 7/8, 7/10, and 9/6. The single class genders are 4, 6, 8, and 10.

The 1/2 gender includes most nouns referring to humans and many animals. Nouns denoting paired body parts often are in 5/6. Derived diminutives and nouns denoting objects or tools are often in 7/8. C6 includes most mass nouns (liquids and uncountables) and abstract derived nouns. C4 or 8 include abstract nouns for qualities or habits. C10 is made up of collective nouns and takes the same concord as C9, including tone.

Class membership is changing somewhat. Some nouns, e.g. Ø-sás (C5) ‘young woman’ may now take C1 concord because people are usually in C1. Nouns may change class membership between dialects, e.g. ‘tree’ is Ø-li i (C5) or L-li i (C7).

3.1.2 Reduplicated nominals

A diminutive noun is formed by reduplicating the tone and the onset consonant of the first syllable of the noun stem, including any segmental class prefix, and assigning it to gender 7/8. The vowel in the reduplicant is usually an epenthetic l, e.g. L-kágá ‘small child’ (7/8) from L-ká ‘child’ (7/8). The vowel may be assimilated to become a u or i as described in §2.

3.1.3 Nominal derivation

Nouns may be derived either from action verbs or from other nouns by adding various derivational affixes (table 18.4). The type of affix added to the verb stem indicates the

<table>
<thead>
<tr>
<th>Class</th>
<th>Prefix</th>
<th>Example</th>
<th>Class</th>
<th>Prefix</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>m-</td>
<td>m-úùd ‘person’</td>
<td>2</td>
<td>b-</td>
<td>b-úùd ‘people’</td>
</tr>
<tr>
<td></td>
<td>N-</td>
<td>n-jój ‘stranger’</td>
<td></td>
<td>ò-</td>
<td>ò-kóm ‘monkeys’</td>
</tr>
<tr>
<td>1a</td>
<td>Ø-</td>
<td>Ø-kám ‘monkey’</td>
<td>2a</td>
<td>ò-</td>
<td>ò-kám ‘monkeys’</td>
</tr>
<tr>
<td></td>
<td>ø-</td>
<td>ø-çéncéni ‘stars’</td>
<td></td>
<td>w-</td>
<td>w-çéncéni ‘stars’</td>
</tr>
<tr>
<td>3</td>
<td>L-</td>
<td>L-lúm ‘heart’</td>
<td>4</td>
<td>mi</td>
<td>mi-kám ‘hearts’</td>
</tr>
<tr>
<td>5</td>
<td>Ø-</td>
<td>Ø-ñiùn ‘hole’</td>
<td>6</td>
<td>m-</td>
<td>m-ñïùni ‘holes’</td>
</tr>
<tr>
<td></td>
<td>d-</td>
<td>d-ñmd ‘home village’</td>
<td></td>
<td>m-</td>
<td>m-ñmd ‘home villages’</td>
</tr>
<tr>
<td></td>
<td>j-</td>
<td>j-wóñ ‘day’</td>
<td></td>
<td>m-</td>
<td>m-wóñ ‘days’</td>
</tr>
<tr>
<td>7</td>
<td>L-</td>
<td>L-ká ‘leaf’</td>
<td>8</td>
<td>i-</td>
<td>i-ñká ‘leaves’</td>
</tr>
<tr>
<td></td>
<td>L-búmá ‘(one) seed’</td>
<td></td>
<td>i-</td>
<td>i-búmá ‘seeds’</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ø-</td>
<td>Ø-ñù ‘machete’</td>
<td>10</td>
<td>N-</td>
<td>m-púmá ‘seed’</td>
</tr>
</tbody>
</table>
TABLE 18.4: SUMMARY OF NOUN DERIVATION IN MAKAA

<table>
<thead>
<tr>
<th>Noun type</th>
<th>Verb +</th>
<th>Affixation</th>
<th>→ Noun</th>
<th>Noun class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent</td>
<td>wééš ‘reveal’</td>
<td>-é</td>
<td>Ø-wééš-é ‘reveal’</td>
<td>C1/2</td>
</tr>
<tr>
<td>Instrument</td>
<td>fáflá ‘to blow on’</td>
<td>-à</td>
<td>L-fáflá ‘fan’</td>
<td>C7/8</td>
</tr>
<tr>
<td>Result or</td>
<td>cziéli ‘to love’</td>
<td>-í</td>
<td>L-cziéli ‘love’ (C7)</td>
<td>Not</td>
</tr>
<tr>
<td>Object</td>
<td>njáglá ‘to teach’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result</td>
<td>kál ‘to be/become hard’</td>
<td>Θ</td>
<td>má-kál ‘hardness’</td>
<td>C6</td>
</tr>
<tr>
<td>Action</td>
<td>bá ‘to marry’</td>
<td>spreading</td>
<td>Ø-bá ‘marriage’ (5/6)</td>
<td>Not</td>
</tr>
<tr>
<td>Action</td>
<td>jíwó ‘to steel’</td>
<td>high tone</td>
<td>Ø-jíwó ‘theft’ (7)</td>
<td>C3/4; 5/6; or</td>
</tr>
<tr>
<td>Action</td>
<td>jáánd ‘to walk’</td>
<td>vowel change</td>
<td>L-jáánd ‘journey’ (3)</td>
<td>7/8</td>
</tr>
</tbody>
</table>

TABLE 18.5: MAKAA NOUN COMPOUNDING PROCESSES

| N + N | mpágl ‘vaccine’ | Ø-bág ‘shoulder’ (C5) | Ø-ámpábg ‘vaccination’ (C1/2) |
| V + N | kólá ‘to transmit’ | + mí-lësá ‘discussions’ (C4) | Ø-kólámilësá ‘transmit’ (C1/2) |
| V + V | gwiá ‘to be distant’ | + zhà ‘to come from’ | Ø-gwáízhà ‘person’ (C1/2) |
| N + V | Ø-npwiømbá ‘forehead’ (C9) | + tí ‘to be red’ | Ø-npwiømbá ‘white man’ (1/2) |
| N + Conj | Ø-yógy ‘the cold’ | Nk ‘and’ | Ø-yógy ‘the cold’ (C5) | Ø-yógyhñoýyógy ‘the cold’ (C7) |
| N + Adv. | ‘malaria’ (C1) | Ø-bá ‘to walk’ | Ø-bá ‘be distant’ (C5) | Ø-bá ‘marriage’ (5/6) |

3.1.4 Compound nominals

Compound nouns may be a combination of nouns, verbs, adverbs, or conjunctions in Makaa, as shown in table 18.5. A high tone is often added at the juncture of the two lexemes.

Many compounds take the nominalizing prefix a- with polar tone. This prefix also occurs on many gender 1/2 nouns, where this prefix seems to have been added and then relexicalized, before the noun class prefix is added, e.g. Ø-ákpág, w-ákpág ‘bark clothing’.

3.2 Noun modifiers

Noun modifiers include ‘real’ adjectives, possessives, demonstratives, numerals, quantifiers, interrogatives, and determiners. Except for adjectives, each modifier takes concord to agree with the noun it modifies and a H occurs between the noun and modifier. This H coalesces with any following high tone.

Semantic type of the derived noun. After the derivational affix is added, the noun is assigned to a noun class. If assigned to 3/4, 9/6, or 10, it is prenasalized. This prenasalization is relexicalized as part of the noun stem. Finally, the noun class prefix is added as an inflectional prefix.
Noun modifiers normally occur post-nominally. Possessives, demonstratives, and interrogatives may be fronted to precede the noun, in order to signal focus. When fronted, the concord on noun modifiers remains the same, except for demonstratives (see table 18.7:I). However, adjectives that emphasize size and determiners that pragmatically add emphasis to the noun always occur pre-nominally.

With possessives, demonstratives, quantifiers, interrogatives, and numerals, the head noun may be implied, as in Ā jì-sà (mwàn) wàm ‘He is mine (my child)’. Such a modifier appears to be a pronoun, replacing a noun, but it has the same form as the modifier occurring with the noun. Therefore, we still consider them modifiers. The different forms and some examples of the possessives are listed in table 18.6.

‘Real’ adjectives are few in number, including zhwòg ‘many’ (e.g. zhwòg b-ùùd ‘many people’ (C2)), nčúlyá ‘many’, bǐbǐyá ‘little’, ńkán ‘someone else’s’, and shísh ‘different’.

Demonstratives make a three-way spatial distinction: near to speaker -gà-, further from speaker -ní-, and out of sight of speaker -mt (see table 18.7:I). Each has two forms, e.g. L-tòw ‘ga’ ‘this goat’ (C7) [tòw i gà], and fronted, ji-gà L-tòw ‘this goat’.

Quantifiers include -èsh, which means ‘every’ or ‘each’ in the singular and ‘all’ in the plural (table 18.7:II), and -ñè ‘how many?’ (table 18.7:IV). The interrogative is -èyè ‘which?’ (table 18.7:III). Numerals ‘two’ through ‘six’ take low tone concord, e.g. b-wàn

### TABLE 18.6: POSSESSIVE CONCORD

<table>
<thead>
<tr>
<th>Noun class</th>
<th>1SG</th>
<th>2SG</th>
<th>3SG</th>
<th>1PL (excl)</th>
<th>1PL (incl)</th>
<th>2PL</th>
<th>3PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ám</td>
<td>-óó</td>
<td>-é</td>
<td>-sá</td>
<td>-shó</td>
<td>-ín</td>
<td>-ág</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>w-ám</td>
<td>w-óó</td>
<td>y-é</td>
<td>wá-sú</td>
<td>i-shé</td>
<td>w-án</td>
</tr>
<tr>
<td>2</td>
<td>b-ám</td>
<td>bw-óó</td>
<td>b-é</td>
<td>bbi-sú</td>
<td>o-shé</td>
<td>b-in</td>
<td>b-ág</td>
</tr>
<tr>
<td>3</td>
<td>w-ám</td>
<td>w-óó</td>
<td>y-é</td>
<td>wá-sú</td>
<td>i-shé</td>
<td>w-án</td>
<td>w-ág</td>
</tr>
<tr>
<td>4</td>
<td>my-ám</td>
<td>my-óó</td>
<td>my-é</td>
<td>mi-sú</td>
<td>mi-shé</td>
<td>m-in</td>
<td>my-ág</td>
</tr>
<tr>
<td>5</td>
<td>d-ám</td>
<td>dw-óó</td>
<td>d-é</td>
<td>dll-sú</td>
<td>i-shé</td>
<td>d-in</td>
<td>d-ág</td>
</tr>
<tr>
<td>6</td>
<td>m-ám</td>
<td>mw-óó</td>
<td>m-é</td>
<td>ml-sú</td>
<td>mód-shé</td>
<td>m-in</td>
<td>m-ág</td>
</tr>
<tr>
<td>7</td>
<td>j-ám</td>
<td>gw-óó</td>
<td>j-é</td>
<td>jis-sú</td>
<td>i-shé</td>
<td>j-in</td>
<td>j-ág</td>
</tr>
<tr>
<td>8</td>
<td>by-ám</td>
<td>by-óó</td>
<td>by-é</td>
<td>bi-sú</td>
<td>i-shé</td>
<td>b-in</td>
<td>by-ág</td>
</tr>
<tr>
<td>9/10</td>
<td>ny-ám</td>
<td>nyw-óó</td>
<td>ny-é</td>
<td>nyí-sú</td>
<td>i-shé</td>
<td>ny-in</td>
<td>ny-ág</td>
</tr>
</tbody>
</table>

Note: Examples: b-wàn bw-óó ‘your (SG) children’ (C2), j-ám L-tòw ‘my hoe’ (C7).

### TABLE 18.7: NOUN MODIFIER AND COPULA CONCORD

<table>
<thead>
<tr>
<th>Noun class</th>
<th>I (normal)</th>
<th>I (fronted)</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>-gà / -ni / -mi</td>
<td>-èsh</td>
<td>-èyè</td>
<td>-nè</td>
<td>-lìgà</td>
<td>-òggú</td>
<td>-ág</td>
<td>-òkó</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>ě</td>
<td>nyí</td>
<td>y</td>
<td>m</td>
<td>y</td>
<td>w</td>
<td>ny</td>
<td>ji</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ó</td>
<td>bì</td>
<td>b</td>
<td>b</td>
<td>ó</td>
<td>bòò</td>
<td>b</td>
<td>b</td>
<td>bá</td>
</tr>
<tr>
<td>3</td>
<td>H-</td>
<td>wá</td>
<td>w</td>
<td>w</td>
<td>wá</td>
<td>w</td>
<td>w</td>
<td>wá</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>mì</td>
<td>mi</td>
<td>mi</td>
<td>my</td>
<td>mi</td>
<td>mi</td>
<td>mi</td>
<td>mi</td>
<td>mi</td>
</tr>
</tbody>
</table>
| 5          | H- | dì | d | d | d | d | d | d | d
| 6          | mò | mò | m | m | mò | m | m | m | m
| 7          | H- | jì | j | j | gá | j | j | j | j
| 8          | i- | bì | by | by | bì | by | by | by | by |
| 9/10       | H- | nyí | ny | ny | ny | ny | ny | ny | ny |

Note: Column VIII shows the concord on the copula, which agrees with its subject.
Determiners are here defined as modifiers that indicate the type of reference. They include the non-anaphoric -lígy ‘a’ or ‘another’ (e.g. dú-lígy j-wów ‘one day’ (C5)) (table 18.7:V), the anaphoric -öngü ‘that’ (e.g. Ø-njów w-öngü ‘that house’(C3)) (table 18.7:VI), and the contrastive -än ‘this, that’ (e.g. ny-än Ø-mpáwó … ny-än Ø-mpáwó ‘this animal … that animal’ (C9)) (table 18.7:VII).

3.3 Associative noun phrases

An associative noun phrase usually consists of a head noun and its modifying noun plus the associative marker (or connective) between the two nouns (see table 18.8). The associative marker agrees in class with the first or head noun, e.g. mi-njów (C4) ‘houses’ + mi + b-iúd (C2) ‘people’ −→ minjów mi bÍuđ ‘families’. Sometimes a gerund, an adverb, an ordinal numeral, or even a prepositional phrase replaces the second noun, e.g. mi-kâándó my-à fújumó ‘white clothes’ (C4) where fújumó is derived from fúm ‘to be white’.

Complex rules govern the realization of the H, similar to the rules for the realization of the H in the verbal unit (§4.2). When the first tone on the second noun stem is high or high-low, and there is no syllabic prefix, the H coalesces with that high or high-low tone, e.g. L-shishá (C7) ‘big’ + H + Ø-cůdú (C1) ‘animal’ + j-öngü (C7) ‘that’ −→ shishá cůdú jöngü ‘that big animal’.

When the second noun has a low tone syllabic prefix, the H replaces the low tone, and the low tone is deleted (as in example 1 below). When the second noun has a low tone noun stem and no syllabic prefix, the H is realized to the left, on an epenthetic vowel (as in 2) or on the preceding vowel if the first noun ends in an open syllable (as in 3). For more rules, including one where the segmental associative marker takes a low tone after a low tone noun and before a high tone noun of class 1, 5, or 9/10 (as in 4), see Heath (1991a).

(1) L-mómá (C7) ‘big’ + H + mi-kwás (C4) ‘pencils’ −→ mímá mi-kwás ‘big pencils’
(2) lál ‘to be hard’ + L-njónd (C3) ‘trip’ −→ lál i njónd ‘hard trip’ (walked fast)
(3) L-mbçé (C7) ‘inferior’ + H + L-kwás (C3) ‘pencil’ −→ mbçé kwás ‘inferior pencil’
(4) mi-fidyé (C4) ‘sticks’ + mi + Ø-cůdú (C1) ‘animal’ −→ mífidyé mi cůdú ‘sticks of animal’

When one noun possesses the other in an associative phrase, the possessive marker mód is used instead of the associative marker when the first noun is singular, e.g. L-njów (C3) ‘house’ + mód + L-kúkímá (C7) ‘chief’ −→ njów mód kúkímá ‘house of the chief’.

When the second noun expresses an attribute or characteristic of the first noun, the attributive marker a is inserted after the associative marker, e.g. Ø-kwááádó (C9) a Ból ‘village named Ból’ and L-kâándó (C3) a mód-bwám (C6) ‘dirty cloth’ or ‘cloth that has dirt’.

<table>
<thead>
<tr>
<th>Noun class</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associative marker</td>
<td>Ø</td>
<td>ò</td>
<td>H</td>
<td>mi</td>
<td>l</td>
<td>mód</td>
<td>H</td>
<td>i</td>
<td>Ø</td>
</tr>
</tbody>
</table>
3.4 Pronouns

All personal pronouns are marked for person, number and noun class of the referent, but not sex. In addition to the singular and plural distinction in the second and third person pronouns, first person pronouns also distinguish between dual and plural, inclusive and exclusive. Table 18.9 shows how similar the object pronoun is to the subject and object markers (verbal prefixes) in classes 1/2, described in sections 4.2.1 and 4.2.6.

Object pronouns can take suffixes to form restrictive or contrastive pronouns, which may be used along with the noun or another pronoun, to focus on the referent. The restrictive pronoun indicates that the person referred to is acting alone, is formed by suffixing -m∔(C)wó onto the object pronoun, e.g. ny[C]wó ‘himself’ or ‘by himself’.

The contrastive pronoun indicates that the speaker refers to a specific referent and not to others. For singular pronouns, the suffix -Ú is added, e.g. ny-Ú ‘he (not others).’ For plural pronouns, the determiner -á˘ with concord is suffixed, e.g. s-há˘ ‘we (I and they).’

Coordinate pronouns indicate that two parties (A and B) are involved in an action, or that the party in focus, A, is accompanied by B. A coordinate pronoun consists of a plural pronoun and a suffix. The pronoun is in the same person as party A and the suffix is either the dual -ná or the plural -nó˘, e.g. bíná Zhá˘ ‘you and John’ or sá-nó˘ ‘we (I and they).’ The suffixes were formed by fusing the preposition ná ‘with’ with the class 1 prefix a- or the class 2 prefix ó-. A noun or pronoun identifying party B may follow the coordinate.

The pronoun -ó˘g functions as the head of a relative clause, e.g. b-ó˘g bwó ngó sè˘ wá ‘those who are working’, taking the same concord as -ó˘gá ‘that’ (table 18.7:VI).

4 VERB

Makaa verbs consist of a radical, usually monosyllabic, preceded by free morphemes marking tense, aspect and mood, and sometimes followed by derivational extensions.

4.1 Verbal radicals and extensions

Makaa verbal radicals are monosyllabic, CV or CVC. Verbal radicals that appear to be polysyllabic are a radical with one or two extensions.
Certain verbal extensions change the valency of the verb, e.g. passive -òw (-yòw after vowels), reciprocal/reflexive -là or -jà, causative -àl or vowel change a→e, and resultative -yà plus vowel change. The passive may follow another extension, e.g. bwàåd ‘to clothe oneself’ + causative + passive → bwèéd-òw ‘to be worn’. The limiting extension is unique, consisting of full reduplication plus the suffix -g; it indicates that the agent is doing only the action indicated and not any action that logically follows, e.g. à ògò às lás-ìg ‘he is only talking (but will not follow through on anything said).’ Other extensions add new nuances to the meaning of the radical in different, unpredictable ways, e.g. wààmb ‘to chase’ → wààmb-àlà ‘to sweep’. Sometimes the radical no longer occurs without the extension, e.g. for bàng-à-wò ‘to be clear or open’ with no corresponding radical bàg.

4.2 Verbal unit

The Makaa verbal unit has two parts, the Inflection (subject and tense markers) and Macrostem (rest of the verbal unit), as shown in the table 18.10.

The verbal unit is divided into the Inflection and the Macrostem for two reasons. First, an inflectional clitic (indicating imperative, hortative, or negative) may be attached to the first morpheme of the Macrostem, but it is never attached to a morpheme of the Inflection.

Second, a floating high tone, labeled Macrostem High (MacH) occurs in certain TAM constructions. This tone occurs after every morpheme in the Macrostem, but not in the Inflection. A similar tone occurs in Koonzime, but marks different TAM constructions.

The morphemes in the Macrostem include pre-root and post-root morphemes. The pre-root morphemes (clause marker, aspect marker, adverbs, and auxiliaries) are more loosely linked to the verb radical, because they can have both a MacH and an inflectional clitic (negative, hortative, imperative) separating them from the verb. Neither the MacH nor a clitic can separate the post-root verbal extensions from the verb radical. Some pre-root morphemes can also occur in other contexts as verb roots. Therefore, the pre-root morphemes are free forms, having the same syllable structures as other words, while post-root verbal extensions are bound forms, usually a suffix consisting of a continuant (l, y, w, sh, or s) and a vowel.

The MacH is sensitive to the tone on its right. When the following associated tone is high, the MacH coalesces with it. When the following associated tone is low, the MacH associates with the preceding word. However, a MacH that occurs following the verb root and preceding a noun of class 1, 2, 4, 5, 6, 8, or 9, spreads right. It disassociates the low tone in the plural prefix (class 2, 4, 6, or 8) or the first tone in the stem after the Ø prefix (class 1, 5, or 9), as in 5 below. When the MacH occurs following the verb and

<table>
<thead>
<tr>
<th>TABLE 18.10: MAKAA VERBAL UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflection</td>
</tr>
<tr>
<td>Subject mkr</td>
</tr>
<tr>
<td>Clause mkr*</td>
</tr>
<tr>
<td>Object mkr</td>
</tr>
</tbody>
</table>

Note: * An inflectional clitic (imperative, hortative, or negative) may be added to whatever morpheme occurs first in the Macrostem (except object marker).
preceding a noun of class 3 or 7, or a preposition or pronoun, the MacH associates left-
ward, with the preceding word, as in 6.

(5) mò ámò dig ámò dig kiùù → Mò ámò dig kiùù.
   I P1 see MacH C1-parrot ‘I saw the parrot.’

(6) mò ámò nyìngò gù L-gvòô
   I P1 again MacH pick MacH C7-mushroom Mò ámò nyìngò gù gvòô. ‘I again picked a mushroom.’

4.2.1 Subject markers

The different subject markers are listed in table 18.9. Third person subject markers in class 1/2 may be deleted when a noun is the subject.

4.2.2 Tense

Tense markers in Makaa, listed in table 18.11, all occur in the Inflection, except the distant future marker bá. Bá occurs in the Macrostem as a clause marker and can take the negative clitic, e.g. ábílé ‘will not’. In addition to tense markers, the distant past is distinguished by being the only tense that does not include the MacH in the Macrostem.

When the morpheme following the H carries a high tone, the H coalesces with it, and the tone of the morpheme preceding the toneless segment a or e spreads onto it. When the following morpheme carries a low, the H spreads left, onto the toneless segment if present.

(7) Mò e’ cál mò-landú → Mò è cál mò-landú.
   I F1 cut down MacH C6-palm tree ‘I will cut down the palm trees (today).’

4.2.3 Clause markers

Clause markers are morphemes within the verbal unit that function more on the clause level than on the phrase level, e.g. shí, a counter-assertive marker, and bá, the distant future or certainty marker. Some morphemes in this position never allow the attachment of an inflectional clitic, and thus they do not function as part of the verbal unit as much as on the paragraph level, e.g. kà ‘therefore’, mù ‘then’ and múdù ‘finally’.

4.2.4 Aspect

A three-way aspectual distinction exists in Makaa, perfective (zero-marked), progressive (ggá), and habitual or iterative (dí); it is indicated in the second position of the

<table>
<thead>
<tr>
<th>TABLE 18.11: TENSE IN THE INDICATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tense</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>Distant past (P2)</td>
</tr>
<tr>
<td>Recent past (P1)</td>
</tr>
<tr>
<td>Present (voss)</td>
</tr>
<tr>
<td>Near future (F1)</td>
</tr>
<tr>
<td>Distant future (F2)</td>
</tr>
</tbody>
</table>
Macrostem. The habitual and progressive markers may occur together. The anterior, also
in the second position of the Macrostem, is marked by mə followed by a floating L, which
causes downstep of a following associated high tone. The progressive marker seems to
block the MacH from occurring on any part of the Macrostem that follows it, as shown
below.

(8) mə kə’ nyëngə ṣgə wàambilə ifambə
I NEG HORT MacH again MacH PROG clear C8-field
Mə kə nyëngə ṣgə wàambilə ifambə. ‘I am not again clearing the fields.’

4.2.5 Adverbs and auxiliaries

Adverbs that occur within the Macrostem include ná ‘still’, not yet’, ṣvá ‘almost’, and ëëël
‘quickly’. Auxiliaries can occur in other verbal units as the verb root, e.g. zə (inceptive)
from zə ‘to come’, kə (terminative) from kə ‘to go’, and bëy ‘long ago’ from bëy ‘to
take a long time’.

4.2.6 Object markers

The object markers are listed in table 18.9. In some dialects of Makaa, an object
marker may occur within the Macrostem, but only if the object is a C1 noun. Otherwise,
the object occurs as a noun or pronoun following the verb. The object marker is consid-
ered a prefix on the verb radical because an inflectional clitic may not separate it from
the verb root. When there are no other morphemes preceding the verb root in the
Macrostem, the inflectional morpheme is attached to the verb root and the object occurs
following the verb, as a pronoun or noun.

(9) Mə ḣ shíg ṣág → Mə ḣ shíg ṣág.
I P2 NEG him(C1) See ‘I didn’t see him.’

4.2.7 Mood

Makaa distinguishes three moods: indicative, hortative, and imperative; these are marked
by an inflectional clitic on the first morpheme in the Macrostem. The indicative is the
unmarked or default construction, used to express realis situations, or irrealis situations
with auxiliaries, adverbs, or clause markers (e.g. jé ‘might’ or é bá ‘certainly’) to indi-
cate different degrees of necessity or possibility.

The hortative and imperative are both marked by the inflectional clitic -g and a high
tone. In the hortative, the high tone replaces the first tone of the Macrostem, e.g. wò
cá-ig ‘you should cut down’ from cá. In the imperative the high tone occurs on the final
vowel of the first word of the Macrostem, e.g. cál-ig! ‘cut down!’ The MacH does not
occur in present plural imperatives. In a plural imperative, the clitic -g takes the plural
marker -a as suffix, e.g. cál-ig-á mò-lândú ‘cut down (pl) the palm trees!’ compared to
cál-igá mò-lândú ‘cut down (sg) the palm trees!’ with the MacH.

4.2.8 Negation

Negation in the indicative is expressed by a discontinuous clitic on the first word of the
Macrostem. The clitic (toneless a prefix + H + suffix ḣ or ê) varies somewhat from tense
to tense. In past tenses, the clitic has no prefix and attaches on the counter-assertive mor-
pheme shí, resulting in shíg as in example (9) above. In the present, the negative clitic
also has L as well as a- in the prefix. The toneless a- takes the same tone as the preceding subject marker or pronoun. If the a- is associated to a low tone, the L coalesces with it. If the a- is associated to a high tone, the L remains a L and causes downstep of a high tone that immediately follows it.

(10)  
Mɔ a- cal -ɛ  mɔ-lɔndu  
L L L H H H L H H  
I NEG cut + NEG NEG MacH C6-palm tree  
Mɔ àcålɛ mɔlɔndu ‘I do not cut down palm trees.’

(11)  
Sɔ a- cal -ɛ  mɔ-lɔndu  
H L L H H H L H H  
We NEG cut + NEG NEG MacH C6-palm tree  
Sɔ ãказать mɔlɔndu ‘We do not cut down palm trees.’

Negation is expressed by the clause marker ká + L in the hortative and imperative, where the L causes downstep of a following high.

(12)  
ku wii ˘g o-mpy  
H L HH H L-HL  
NEG chase MacH C2-dog  
Kú wiing ómryã! ‘Do not chase the dogs!’

5 SYNTAX

5.1 Word order and variability

Makaa is an SVO language with most word order patterns following a head-initial syntax. Any argument of the verb may be left-dislocated for topicalization. A fronted personal pronoun takes a contrastive suffix, described in §3.4. Often the fronted noun or pronoun begins a cleft construction; see §5.2 below.

5.2 Main clause types

Verbal clauses have action or process verbs in the predicate. The subject of process verbs is the semantic patient, e.g. L-nywáag i mɔ tì ‘the mango has ripened (is ripe).’ This construction can also carry a resultative sense, e.g. Ø-föh i mɔ jìg ‘the paper was burned’, with focus on the state of the subject. Such process verbs become transitive by adding the causative extension -ãl, which in effect adds an argument (the agent, as subject), e.g. mɔ mɔ jìgàl Ø-föh ‘I burned the paper’.

In the passive voice, the agent is usually left unexpressed, e.g. L-kaândə mɔ nyëyɔw ‘the cloth was torn’. The passive often carries a negative implication, that the agent was at fault, whereas the resultative construction carries no negative implications.

An instrument or location cannot be subject of a passive verb, but a benefactive NP can serve as subject of a passive verb, if it is in the indirect object position in the active clause. This construction is also pejorative, implying negative feelings towards the passive subject.

(13)  
mù-ud  nyɔ ˘d ˘yó  yôw  L-kiwó  
C1-person he P2 Give PASS chicken(C7)  
Mùud nyɔ ˘d ˘yôwò kìwó.  
‘The person was given a chicken.’ (implying he forced the gift)
Non-verbal clauses include both those with the copula -sá and those with the focus marker ó. Clauses with the copula as the predicate express attribution, equation, location, or possession. In the present perfective indicative, the copula takes a concord prefix (see table 18.7). Often the -sá is deleted, leaving only the concord. In other TAM constructions, the copula becomes bò without concord prefix, and takes limits TAM inflections.

In locational clauses, a locative follows the copula, as in b-wáñ bì-sá tóö'n 'the children (C2) are outside'. Locative nouns are usually marked either by a high tone prefix, e.g. i-fámbó 'to the fields' (C8), or by the suffix, -d in Ø-kúád-d 'in the basket' (C5), or -di in L-tiwi-di 'on/at/near the table' (C7). Location may be further specified by an adverb, e.g. L-njów-dí (C3) with cú 'in'. Locational clauses can also be formed with stative verbs that are limited in TAM forms, e.g. A mbúg sít 'He's lying down'.

Attribution clauses have a noun modifier, formed by prefixing ýkì to a verb root, following the copula, e.g. L-njów wi-sá ýkì-fámbó. ‘The house (C3) is white’. In possession clauses, a prepositional phrase beginning with ná ‘with’ follows the copula, as in b-wáñ bì ná á-kálád ‘the children are with (have) books’.

Non-verbal clauses that use the focus marker ó instead of the copula -sá are cleft constructions, e.g. j-inó d-ám ó Mpa ‘it is my name (C5) that is Mpa’, or nyó ó Ø-yigè ‘it is he who is the teacher (C1)’, or mór ó 'zá ‘it’s me here’. The cleft construction often includes what seems to be a relative clause (RC) though lacking a relative marker.

(14) Má dì mò jàámb → Má dì mò jàámb.
   me NEG FOC I cook ‘It’s not me who cooks.’

5.3 Subordinate clauses

All subordinate clauses, whether RCs, adverbial clauses, or complement clauses, are marked with a high tone on the conjunction or in the verb.

Relative clauses are postnominal in Makaa. The head of the RC can be a noun or the pronoun -əng with concord. Tonally, a high tone that replaces the first tone of the subject NP, and another high tone that replaces the tones on the first morpheme of the verb mark the RC. Finally, a relative marker/relativizer agreeing with the head occurs at the end of the RC: ýe (C1), wá (C2), yí (C3, 5, 7, 8, 9/10), nyá (C4), or má (C6).

(15) mò cëéél b-əng bwo dì ’ bùl ’ sèy wá
   I want C2-those C2:they HAB MacH lot MacH work C2:REL MKR
   Mò cëéél báang bwo dì bùl sèy wá. ‘I like those who work hard.’

When the head noun of the RC (NP_{REL}) is the subject or direct object of the RC, there is gapping, with the NP_{REL} unexpressed within the RC, although the subject marker remains on the verb. When the NP_{REL} is the indirect object or the object of a preposition, it is marked by a pronoun trace: an object pronoun or the uninflected pronoun ndí. When the NP_{REL} is locative, the locative -d is suffixed to the relative marker, or a locative word is used, e.g. kíl ‘place’ (C7) as head noun and gapping as if the locative is direct object.

(16) mi-njów L-kíl bwo ŋgó wáł a-cúdú yí
   C4-houses C7-place they PROG boil C1-meat C7:REL MKR
   Minjów, kíl bwo ŋgó wáł cúdú yí
   The houses, (the place) where they are boiling meat

When the NP_{REL} is a possessor in the RC, there is a possessive adjective, which agrees in person and number with the head noun and in class with the genitive noun.
Subordinate clauses that express time, location, or manner, are not adverbial clauses, but RCs, in which the head noun signals the type of clause, e.g. L-jà ‘C7-time’, L-kil ‘C7-place’, or L-mbi ‘C3-way’, and gapping as if the head is direct object.

Adverbial clauses in Makaa are marked by a conjunction or a morpheme in the verb, always carrying a high tone, e.g. the conjunction shù nò or nò ‘in order that’ for purpose clauses, mëcë ‘because’ for reason clauses, and the adverb tìém ‘even if’ for concessive clauses. Simultaneous clauses are marked only by the progressive marker carrying a high tone, ngå, in the second clause, following the main clause.

\[(17) \text{ò-jòg ó mò wòòs sò-mò ngò ðò} \]
\[\text{C2-visitor C2:they ANT arrive we PROG + H eat} \]
\[\text{Ójòg ó mò wòòs, sò mò ngò ðò. ‘The visitors arrived while we were eating.’} \]

‘Real’ conditional clauses (Thompson and Longacre 1994) are marked either by ṅkì ‘if’ clause initially or by ká ‘if-non past’, báig ‘if-past’, or bò kù ‘be not’ (negative) following the subject. Imaginary conditionals include counterfactual conditionals, marked by the auxiliary ṣwá ‘would have’, and hypothetical conditionals, marked by mbò ‘if’ following the subject in both the main and conditional clauses.

Complement clauses include sentence-like clauses (in the indicative or hortative) and gerundive clauses. Sentence-like clauses begin with the complementizer nò ‘that’. The indicative mood is used after verbs of cognition, utterance, and perception, e.g. gwág ‘hear’. The hortative mood occurs after verbs of feeling, manipulation, and comment, e.g. i jìì ‘it is necessary (literally, it wants).’

A gerundive clause consists of a gerund (formed by suffixing ‘l onto the first morpheme of the Macrostem) that may have its own subject and/or object. This clause functions as the object of complement-taking verbs such as tèéd ‘begin’ and cèéé ‘like’, as the subject or complement of non-verbal clauses, or as the object of prepositions.

\[(18) \text{mò ngò -là wòòs ó gà} \]
\[\text{I PROG -GERUND SUFFIX arrive FOC this} \]
\[\text{Mbò ngòlò wòòs ó gà. ‘This is my arrival.’} \]

6 CONCLUSION

Makaa is an SVO language, with a verb phrase that differs strongly from more typical Bantu languages. Makaa still has an elaborate noun class system and complex tone rules. The tone rules in the Makaa noun phrase and the verbal unit are strikingly similar, both containing a floating high tone. The phonology is interesting, with its asymmetrical vowel system and its prenasalized stops in syllable-final position.

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REFERENCES


FURTHER READING

1 INTRODUCTION

1.1
One conclusion immediately imposes itself when one considers the totality of the languages spoken in the vast region covered by the equatorial forest. The forest is not an area of linguistic homogeneity: quite the contrary, it is an area of contacts and borders. Although it is imaginable that all the peoples of the forest have a rather analogous way of life, the study of the linguistic divisions rather points to the fact that the forest is an environment that is difficult to access, where communication is essentially established via the waterways and where the absence of regular contacts maintains the existing borders between different linguistic groups. Thus, the forest is the place where the Bantu languages border on the Ubangian languages to the west and on the Central Sudanic languages to the east. It is also the place where one finds the dividing lines which the classification shows between, on the one hand, the Bantu languages of the eastern and the western block; and, on the other hand, between the Bantu languages of the northwest (zone A + B10, B20, B30) and the rest of the western languages. All types of borders can thus be found in this biotope: borders between different genetic families, borders between different groups of the same family and borders between the major subgroups that are distinguished within the group of Bantu languages itself.

1.2
The languages of zone A and of the B40–50 groups will not be discussed here. But, dealing with the other Bantu languages of the forest (B10–70, C10–70 and D10–40 in Guthrie’s classification) in about twenty pages remains a bold venture. The diversity of the languages that should be presented is considerable and is directly reflected in all classifications, above all in the lexicostatistical ones. Moreover, the particularly delicate question raised by the presence of Pygmy populations throughout the forest zone at least has to be dealt with. Finally, the documentary gaps are still very numerous and hamper our knowledge of the languages of the forest to the extent that any synthesis is still problematic.

1.3
Obviously, the reading of the following pages presupposes a basic knowledge of the Bantu languages in general, be it of their major phonological and phonetic characteristics or of the general make-up of their morphology. Only the specific characteristics of the groups under discussion will be described here; characteristics which, sometimes, are proper to the languages of the forest in general, but which, most of the time, individualize certain
MAP 19.1 THE MAIN BANTU LANGUAGES OF THE FOREST (ZONES B, C AND D)
regional, more or less extensive language groups with variable internal coherence. Although the models inspired by the reconstruction of Proto-Bantu cannot be entirely absent from such a description, an effort will be made to present the facts from a synchronic perspective. Surely, to speak of the Bantu languages from the eastern block when discussing languages such as Nyanga (D43), Lega (D25), Binja North and Binja South (D26) or Mituku (D13) could already be seen as a concession to comparative classifications. It will be shown, however, that this grouping is equally justified by purely descriptive criteria.

The reader should keep in mind that very few of the currently available descriptions give direct and unambiguous access to detailed phonetic data. Finally, phonology and morphology will be treated successively, except in those cases where both aspects are so intricately related and intertwined that a separate presentation would render the treatment of the facts completely artificial.

2 PHONOLOGY

2.1 Vowel systems

The majority of the Bantu languages of the forest have a vowel system with seven oppositions [i e a ø o u]. One could say that this is a major property these languages have in common, as if they had been spared the innovation that reduced the number of vowels to five [i e a o u]. Yet, some languages are exceptional. Two examples of the rare languages with a system reduced to five distinctive vowels are Lengola (D12) and Nyali (D33). Others, conversely, have more than seven vowel phonemes, like Boa (C44) and Bali (D21) which have eight [i e æ ø o u], or Bodo (D35) which, according to Asangama (1983) and Kutsch Lojenga (1994a), counts nine vowel phonemes [i i e æ ø o u] and applies a process of vowel assimilation based on an opposition of the type [± ATR]. All these languages are located in the northeast of the forest zone and show several properties that might originate from an enduring contact with the Central Sudanic languages. This, however, is a hypothesis that demands further scrutiny.

Eventually, a number of forest languages present nasalized vowels, the status of which is often phonetic. But they can be on the way of becoming phonological like in Bali (D21) or in Boa (C44). This is not the place to give a survey of the languages which possess nasalized vowels, but it is important to note that in certain idioms such as the Myene-languages (B10), Fumu (B77b) or Binza (C30 Ngori), these vowels appear either between a nasal consonant and an NC-sequence or between two nasal consonants (cf. Myene-Nkomi: öniñzi ‘professor’; inìggò ‘smells’), whereas in Ndumu (B63), Boa (C44) and Bali (D21), they appear word-initially before a sequence NC or NS (cf. Bali: ìnzì ‘village’; ìmìvà ‘dog’; ìyìkwò ‘salt’; ììñìñì ‘he has cut’). In Bali, the nasal consonant is hardly perceptible when followed by a voiced consonant. For Boa, free allophony has been reported between realizations of the type [ɔyéká] and [jyéká] ‘you (sg.) leave him’, which clearly testifies of a tendency towards phonologization of the nasalized realizations. In Leke (C14), the disappearance of the consonant ñ in prefixes causes the next vowel to be nasalized. The latter then assimilates the previous vowel with which it enters into direct contact, either with or without the feature of nasalization. The following are examples of this: [ba-‘bà-má-n + kàbá] → [bànkúbà] or [bànkúbà] ‘small fields’; [±dòdè + mò + sàndà#] → [dòdò ñsàndà] or [dòdò ñsàndà] ‘a great man’; [±mí + ±jímí + kùgà#] → [míñi kùgù] or [míñi kùgù] ‘it is painful’. Clearly, in these languages the nasalized vowels i, ù, û, and ù are distinctive, which is rather exceptional among the forest languages described at present.
Another characteristic that seems to be fairly widespread among these languages is the extreme tolerance they show for vowel sequences, a tolerance that often coincides with a rather unsystematic application of either vocalic elision or semi-vocalization wherever morphemes come into contact. In certain languages, vowel sequences can equally appear due to the elision of certain consonants placed in specific environments. This elision can be obligatory or optional, or be linked to the speed of speech. Except in the groups B10, B60 and B70, the languages of the forest generally display numerous vowel sequences within nominal stems as well as at the contact between morphemes, especially between prefixes and stems, within the derived verb or in the sequences of morphemes placed before the verb stem. Several authors insist on the fact that the different successive vowels belong to different syllables, even if they do not analyze the syllable structures along the lines of contemporary theories. Certain languages, like Aka (C10), exclude sequences of two front or two back mid-vowels which only differ in aperture, but other languages tolerate them (cf. Bodo D35: ñèè ‘beard’; Babole C14: éél ‘thigh’). Several languages, finally, attest sequences of three or four vowels. For example:

(1) Aka (C10) mögùìì ‘depth’ (vs. ëpùìì ‘ant’) 
   ngùìì ‘river hog’ (vs. ëngùìì ‘kind of dance’) 
   mòëì ‘belly’ 

Tofoke (C53) bëáíò ‘our (class 2)’ 
Lombo (C54) liòì ‘speech’ 
   bàùë ‘cries’ 

Mongo (C61) lòìà ‘water on the plants’ 
   lëëù ‘lip’ 
   àòààà ‘he has acquired’ 
   êòëkà ‘he has sung’ 

Kela (C75) àòààà ‘he hides’ 
   bàòààà ‘they hide them’ 

Enya (D14) mòìàbà ‘in the river’

Detailed phonetic studies together with a profound analysis of the possible syllable structures would be extremely interesting in these languages. They would allow us to solve the problems that a conventional notation often leaves undecided. A notation like ei, for instance, can cover the realizations [êi] or [ëi], and the sources do not always provide a choice between them. Likewise, notations of the type VxVx can refer to successions of two identical vowels (what certain authors explicitly state), but equally well to long vowels. In certain cases, like in Mongo (C61), the author himself hesitates between these distinct realizations (Hulstaert 1938). Thus, although it appears to be rather clear that vowel length is phonological in the B60, B70 and B80 languages, as well as in Bobangi (C32), Ngombe (C41), Boa (C44), Tofoke (C53), Tetela (C71), Lengola (D12), Enya (D14) and Bali (D21), the exact geographical distribution of this feature is difficult to establish at present. But note that various authors point out that, although vowel length is relevant, minimal pairs that oppose a short vowel to a long vowel of the same quality are rare.

Two peculiarities deserve some more attention. The first concerns Lega (D25), a forest language from the eastern Bantu block. This language accepts vowel sequences such as ei or iç (cf. hëèì ‘thieves’, bòìì ‘face’), yet it features a succession of the type Vzi in a series of words where the forest languages of zone C most often have vowel sequences. Examples are:

(2) ‘ear’ Lega kòtòìì Aka dìlùë Nkundo lìtòì Lengola ótóì 
   ‘four’ Lega -nàzìì Aka -nàìì Nkundo çè’ñàì
The second peculiarity is that in Zamba (C30 Ngiri) and in Leke (C14) final vowels tend to be devoiced, whereas in Nkundo and Eleku (C60), final i and u are elided if preceded by the consonant m, which is then realized as syllabic if the elided vowel carried a high tone (cf. Nkundo C61: nkìmù → nkám ‘dignitary’, bónkùmù → bónkùm ‘tree (species)’, lólèmi or lólémi → lólé ‘language’, jóm ‘ten’; Eleku C60: +lám ‘good’, bòlám ‘goodness’). Meeussen (1952) signals the same fact for Ombo (C76), where one has: jóm, pl. bájom ‘ten’, lólém, pl. ndém ‘language(s)’, while it hasn’t been recorded for the C50 languages nor for Tetela (C71), Yela-Kela (C74–75) and Mbole-Tooli (C60), in other words, for the languages which separate Ombo from the so-called Mongo languages. Note that the forest languages, especially those of zone C, border on languages more to the south in which the syllables with a consonantal coda are regular word-finally. This could be a case of accidental correspondence, but these facts could equally well follow from a similar tendency.

2.2 Consonant systems

The consonant systems of the languages of the forest are marked by a rather large number of particularities. It is impossible to envisage them all in this limited synthesis. Only the most salient ones will be treated here in a succinct manner.

Although the labiovelar consonants kp, gb, gkp, ggb or the implosives b, d are not limited to this area, they are much more frequent here than elsewhere in the Bantu domain. A possible influence from adjacent non-Bantu languages cannot be excluded, but as far as I know this has never been proven.

The different labiovelar consonants are not equally well represented: the voiceless kp is more frequent than the voiced gb, which is also less frequent than pre-nasal ggb. Certain languages display a free alternation between kw and kp, (y)gw and (y)gb and, at least from a comparative perspective, it seems clear that sequences of the type kw, gw and bw, preceded or not by a nasal, are most often at the origin of the reported labiovelar consonants. Further note that gb is the representation of the nominal prefix of class 14 before stems with an initial vowel in Doko (C40), whereas in Beo (C45), a nominal prefix kp-, which could be the one from class 15, alternates with the nominal prefix of class 6 m- before stems of this type (cf. kpòlá, pl. màlá ‘nail(s)’, kpìnyò, pl. mìnyò ‘tooth/teeth’). This is characteristic of the languages of the C30 Ngiri or of the C50 languages such as Lombo, Gesogo and Tofoke, however. The languages spoken in the northwest of zone D have labiovelar consonants the origin of which is definitely different. Thus, Bali (D21), for instance, has the consonants kp, gb and ggb, while having kwá ‘die!’ and gwá ‘fall!’

The languages of zone A excluded, labio-velar consonants can only be found in the C-River languages, in the Aka-Mbati-Ngando group (C10), in the C50 languages, and in the northern languages of zone D (Lengola D12, Mituku D13, Enya D14, Bali D21, Bira D32, Bodo D35, etc.). This is equally the zone where one finds the implosive consonants b and d, which are either optional vs. contextually determined realizations of b and d; or phonologically opposed to these consonants like in Boa (C44) and Lengola (D12); or else have phonological status in a language in which b and d do not occur, such as Aka and Ngando (C10) or the Myene-idioms of group B10. It should be noted that in at least one C30 Ngiri language, Motembo, b and d are the only voiced labial or dental plosives, and that, curiously, b is often dropped in word or phrase internal position. The latter is a typical behavior of the non-implosive b in very many languages of the centre of zone C.
The languages of B30, B60, B70, C60 and C70 groups generally have no implosive consonants, nor labio-velar phonemes (except sometimes in the ideophones).

Another strange phenomenon that marks the use of consonants in a particular region is the absence of labial nasals in the prefixed forms. This phenomenon is both of a phonological and a morphological nature, because the m-consonants of the other languages correspond to ʙ in the prefixed forms of the type CV-, but correspond to m elsewhere. This can be observed in the area which is covered by the C60 languages of the so-called Mongo-group and which extends to Ngando (C63), Yela-Kela (C74–75) and Ndengese (C81) as well as to Ombo (C76). Tetela (C71) exhibits this feature as well in the concord prefixes, but not in the nominal prefixes, which in this language are vocalic in the relevant classes. The same applies to Mbole-Tooli (C60). In the C50 group, Kele and Gesogo display this characteristic, whereas in other languages it only shows up in certain classes. Thus, Tofoke (C53), for instance, has a locative preposition mò which corresponds to the prefix of class 18; and Mbesa (C51) has a class 6 with prefix ba-, but prefixes of the type mV- in all other classes where one expects to find them. This is clearly bound to a rather compact region. Nevertheless, it is interesting to note that it is equally found in the northern variant of Bubi of Bioko (A31), where it is extended to all nasal consonants in most of the contexts in which they should appear, except in final position.

Several languages of zone C show a marked tendency to drop certain consonants in rapid speech, at least in some specific contexts. The most vulnerable consonants are ʙ and l, but in several languages it can also apply to m, t, k and z. These optional elisions can only be observed for consonants in intervocalic position inside the clause or phrase, and especially for prefix-consonants. The same consonant in clause-initial position is never elided. The speaker applies the elision of consonants in normal speech but is always able to re-establish the dropped consonants, without any difficulty or hesitation.

The optional elision of ʙ is rather typical of the so-called Mongo languages (C60) but can also be observed in several nearby languages such as Ngando (C63), Mbesa (C51), certain variants of Tofoke (C53) or Kela (C75). Thus, one can find in Kela: bōnt’ōnd’òmbé for bōntó bōndá bōmbē ‘an ugly man’. The optional omission of a t in prefixes or of a nasal consonant n in the initial position of pronominal stems can also be observed in certain languages known as Mongo but it is much rarer and restricted to particular phrases. Leke (C14) jointly applies the optional but regular elision of ʙ and m in prefixes, and the elision of z and k in some specific contexts. Non-nasal labial plosives are only omitted in prefixes if situated between two identical vowels, one of which is in word-final or morpheme-final position (cf. ̀ǎmbó ǹbòmbó ǹdō – ̀ǎmbó ǹköñzi bōdō ‘accept the title of chief’; tǎbàyéngyé ~ tǔàyéngyé ‘you (pl.) search them (cl.2)’). Nasal labials are elided in the same contexts, except that the two surrounding vowels do not have to be identical. If they are different, the first assimilates to the second and both can be nasalized (cf. bédëdë mákàmbó ~ bédëdë ākàmbó ‘they cut up the branches’; bōmòkàngyì ~ bojòkàngyì ‘they have joined it’). Finally, z, k and b are omitted in initial position of the pronominal forms which participate in the expression of the possessive (cf. ìsàngwà zí zàbàŋgá ~ ìsàngwà zà ábàngá ‘our maize’; ínkàsò zí ̀z‘ëì ~ ínkàsó ̀z‘ëì ‘his wrist’).

In conclusion, the languages C60 and 70, spoken in a continuous area going from the confluence of the Ruki and the Congo river to the border of the Tetela-region between the Jwafa and the Loilaka, apply elision of the l of the prefix of class 11 and of the prefix of class 5 (singular of class 6 and plural of class 7) when these prefixes are in phrase-initial position. In Mbole, Kutu and Mbwanga (C60), l is elided in any case (cf. Mbwanga: là ̀tòòò liné ~ là ̀tòòò inè ‘with these cloths’). In Eleku (C60), Yela (C74) and Kela (C75), the elision of l brings about the appearance of a vowel ə, possibly epenthetic because its tone is identical to the tone of the preceding vowel (cf. Eleku: lìnì tàà ìnàmì ‘my tooth’;
This kind of phenomenon certainly deserves to be studied in much more detail, because it is interesting in more than one respect, notably concerning the appearance of prefixes of the vocalic type and with respect to the existence of particular realizations of the prefixes of class 5 and 11 in the languages of the northwest, the origin of which is still not understood. But it is also interesting with regard to the determination of the syntagmatic units within the clause or the occurrence of syllable schemes and successions that are not frequent in the Bantu languages. An example like:

(3) Kela (C75) lipēlē linda bēsālī
lipēlw’ āind’ ēsālī
’slim thighs’

combines the aphaeresis of the consonant b and the representation of the prefix-consonant l as a vowel a. It shows the very important effect these two phenomena have on the representation of utterances.

In the same geographical area, and more specifically in the western part of it, the glottal stop ? systematically replaces the prefixes of the type bi- (cl. 8) and ji- (cl. 5) if they are not followed by a sequence mC and if they are not in clause-initial position. Some languages introduce a vowel a in the same case, which precedes the glottal stop. For example: tipēlā ıkāmbō jinō ’I have no other concern any more’ (cf. jīkāmbō ‘concern’); bǐmbēngā īsātō ‘three doves’; áfōkisì à ipāngā ’he doesn’t live in Jipanga’; aōōmā žkējp ālīsātō ’he has killed three ants’ (cf. bīnkējp ‘ants’). In Nkengo, the glottal stop ? is the obligatory representation of the prefix li- of class 5 (singular of class 6 and plural of class 7) in every context. Its presence brings about the presence of a stop or an affricate in the initial position of stems whose plural of class 2/6 or singular of class 7 have an initial fricative or glide (cf. ǐbhā, pl. ǐbhāv ‘palm tree’, ǐpaʃtā, pl. ǐpaʃtā ‘wing’, ǐtsōkō, pl. ǐbsōkō ‘shoulder’, ēwā, pl. ǐwā ‘domesticated animal’). This is all the more interesting because there are some Hendo idioms (C70) adjacent to Tetela, in which the class 5 prefix is represented by ?, while in others this prefix is marked by a lengthening of the stem-initial consonant, which is also strengthened in case it is not a stop (cf. bbbōŋqā, pl. əbhōŋqā ‘knee’; kkkcē, pl. əkkcē ‘tooth’; mnu, pl. mnu ‘frog’; ddēmbhā, pl. ḏēmbhā ‘body’; ccɔkɔ, pl. əɔsɔkɔ ‘buttock’; əkkfūtā, pl. kkkfūtā ‘calabash’; ēsēnjel, pl. cccēnjel ‘squirrel’; ēsāmbhē, pl. ccāmbhē ‘house’; ēpēkō, pl. ppēkō ‘iron object’ etc …). In Tetela (C71), the same type of phenomenon is much more systematic, not only in class 5 singular and plural, but also in class 19 and inside stems. Being better known, these facts are analyzed in many sources and will not be discussed in detail here. But note that consonant lengthening equally exists in Lega (D25) where every consonant is long if preceded by a vowel i in word- or morpheme-initial position. In this environment, the representations of l and y are [d:] and [d’:] respectively.

The sequences of a nasal and an oral consonant which can be found in the languages of the forest also exhibit some interesting characteristics, be it of their own, or by their geographical distribution. The first point that merits some discussion is the presence or absence of sequences of a nasal and a voiceless consonant. These sequences are absent in numerous languages of zone B (Pove B22c, Kota B25, Tsogo B31, Pinji B30, Nzebi B52, Fumu B77b, etc.), as well as in Koyo (C24) and Mboshi (C25), in Aka (C10), in the northern languages of the Ngiri (C30), in the languages of group C50, and also in certain languages in the north of zone D (Lengola D12, Mituku D13, Bira D32, Nyali D33, Bodo D35, etc.). Generally speaking, this absence is predominantly found in the
North. The southern languages (Tetela C71, Kela C75, Lega D25, Nyanga D43) have both the sequences \( NC \) and \( NC' \) sequences are represented by the corresponding voiceless consonant (Gesogo: \( \bar{m} \), \( \bar{n} \)). However, the most interesting characteristic is, that in Mbesa (C51) and Gesogo (C52), the sequence found in other languages tends to appear as \( g \), at least in word-initial position. Gesogo: \( ng \) ‘neck’; Mbesa: \( ng \) ‘ape’), while certain \( N + \) voiced \( C \) sequences are represented by the corresponding voiceless consonant (Gesogo: \( \bar{m} \)). Mbole-Tooli evolves towards a confusion of \( g \) and \( \bar{m} \), which tend to merge into a single representation, viz. \( k \), in word-initial position (cf. \( k \) ‘leopard’). Mbole-Tooli also has \( nt \) ‘to marry’ (verb stem: \( +\bar{m} \)) in Mbole-Tooli (C60), for instance (cf. \( l \) ‘to call me’). Thus, Ngando has: \( n \) ‘to arrive’ (verb stem: \( +\bar{m} \)) but the language has also \( ng \) ‘ape’ and \( ng \) ‘hippopotamus’).

Finally, in some languages more to the south, \( NC \) sequences can undergo other types of reduction. In one rather compact area (Tetela C71, Kela C75, Ombo C76, and Mituku D13), Meinhof’s Rule reduces the successions of a nasal and a voiced oral consonant to a homorganic nasal (which is sometimes long) if the onset of the next syllable is a nasal or a sequence of \( N + \) voiced \( C \). The same phenomenon also applies to the representations \( mb- \) and \( nd- \) of the prefixes of the type \( \cdot N \)- which appear before stems with an initial vowel. We thus find in Kela (C75): \( g \) ‘crocodile’, \( g \) ‘to marry’, and in Mituku (D13): \( l \) ‘to criticize me’ but \( l \) ‘to call me’ with a first person singular object prefix which is \( n \) before verb stems beginning in a vowel but \( n \) if the verb stem is of the type \( +\bar{m} \)-; in Ombo (C76): \( l \) ‘to see’, \( l \) (cf. \( l \) ‘chief’). Nkengo and Ngando (C60) systematically reduce \( N \) and \( +\bar{m} \) sequences to a homorganic nasal consonant in all contexts, in word initial as well as in interior position. Thus, Ngando has: \( n \) ‘rain’, \( n \) ‘dog’, \( e \) ‘cloth’ (cf. Nkundo: \( e \)); Nkengo has: \( n \) ‘banana’, \( n \) ‘back’; \( n \) ‘marshy land’ (cf. Nkundo: \( n \)). Finally, Hulstaert (1978), Picavet (1947) and Motingea (1993) signal that the Pygmy languages of the Ingende and Bonkoto regions systematically reduce the NC sequences (apart from \( mb \), sometimes) to the non-nasal consonant or at least to a corresponding non-nasal consonant. Examples are:

\[
\begin{align*}
(4) & \quad \text{Tswa-Lonkundo} & \text{Tswa-Bonkoto} \\
\text{täg} & \quad \text{‘bed’} & \text{Nkundo} & \quad \text{näng} \\
\text{kīgō} & \quad \text{‘neck’} & \text{Nkundo} & \quad \text{nīngō} \\
\text{ōfōfo} & \quad \text{‘wind’} & \text{Nkundo} & \quad \text{bōmpōmpō} \\
\text{lisī} & \quad \text{‘heal’} & \text{Nkundo} & \quad \text{lisī} \\
\text{Nkundo} & \quad \text{bō(n)kōnjī} \\
\text{likōnjō} & \quad \text{‘banana’} & \text{Nkundo} & \quad \text{linkōnjō} \\
\text{taba} & \quad \text{‘goat’} & \text{Nkundo} & \quad \text{ntā} \\
\text{eggāmbi} & \quad \text{‘firstborn’} & \text{Ntomba} & \quad \text{eggāmbi} \\
\text{boq} & \quad \text{‘dog’} & \text{Nkundo} & \quad \text{mbwā} \\
\text{baloggo} & \quad \text{‘blood’} & \text{Nkundo} & \quad \text{bālōngō}
\end{align*}
\]

Note that a long consonant alternates with the lengthening of the preceding vowel in the notations. These are certainly compensatory mechanisms that may differ depending
on the dialect group, but the notations are not sufficiently precise and phonetically too unreliable to be integrated into a more elaborated reflection.

None of the facts signalled here is restricted to the forest languages. A more complete study of them would be useful for a better understanding of similar processes which can be observed in other languages of the northwest, or even in certain southern Bantu languages.

2.3 Tonality

The tonal systems of the forest languages don’t show any uniformity either. They are of quite variable types, so that it is difficult to give an overall description of them in a relatively succinct way, the more so because many are not completely described.

The central and southern forest languages (like Bobangi C32, the so-called Mongo group C60, Tetela C71, Lega D25, Nyanga D43) can be considered as having a rather classical tone system, which does not normally pose major problems to the descriptive linguist. While certain languages of zone D such as Lega (D25) have two register tones and downstep of high tones, most languages of the south and centre of zone C attest high tones, low tones and contour tones which manifest great stability and are hardly modified within the clause, if one excludes the rules which apply at the contact between morphemes or words. However, these contacts have an important impact on the tonality because of the numerous elisions of vowels and consonants (optional or obligatory) which have been discussed in the preceding paragraphs. Most often the tones are combined and they may form the contour tones HLH or LHL, which are exceedingly abundant in these languages. Also note that Tetela (C71) has a process of high tone spread, which is rather frequent in the Bantu family as a whole, but appears to be rare in this part of zone C, although it equally exists in some languages of the C30 Ngiri group.

Probably under the influence of the Central Sudanic languages on the one hand and the Ubangian languages on the other hand, some northernmost languages of zone D and C have three tones: high, mid and low. This is the case in Bira (D21) and in Nyali (D33), and also in Mbati (C10), where an extra-high tone level appears in addition. However, the tone systems of these languages are not sufficiently known yet.

The most complex tone systems delimit two particular areas: these are on the one hand the area occupied by the languages of the C30 Ngiri group and on the other hand the western forest region where the languages are classified in zone B. We do not yet know the tone systems of all C30 Ngiri languages very well, but we can affirm that they belong to two types. Languages like Bobangi, Binza, Loi, Mbonji and Balobo, which are all situated between the Congo and the Ngiri, have tone systems of the Lingala type, the analysis of which is rather uncomplicated. The languages situated either more upstream alongside the Congo River (Mabale, Poto, Motembo, Doko) or between the Ngiri and the Ubangi (Zamba, Lobala, Bomboma, Lingonda, Ebuku), on the other hand, have a very complicated tonality. According to Twilingiyimana (1984) and Kamanda (1991), Doko and Zamba have downstep. Moreover, the tone contours of nominal forms are highly dependent on the influence of initial high tones, which are present due to the persistence of the augment. In Bomboma, nominal forms show tonal modifications that depend on their function and place in the clause. This reminds us of similar phenomena in various languages of zone B and in the languages of the Kongo type. Conversely, the C10 and C20 languages do not display these particularities, as far as their tone systems are known. Aka (C10), Koyo (C24) and Mbooshi (C25), for instance, have a tone system of the classical type. The same goes for Leke (C14), although this language exhibits downstep, as in Zamba or Doko, and applies numerous contact tone rules due to the marked tendency of many of its consonants not to be represented in more rapid speech.
The languages of zone B, which occupy the western part of the forest, often have complex tone systems as well, but these are rather well known at present. These systems can have ‘tonal cases’ and thus are of the Kongo type. The reader is referred to the works of Blanchon for the B40 and B50 languages, and to Marchal-Nasse (1989) for Nzebi (B52). The B30 languages do not belong to this type, but the tonality of their nouns could be influenced by the more or less residual augment, which is the case in Himba e.g. Tsogo (B31) exhibits a mechanism of high tone shift, rather frequent in the Bantu languages. The situation is more complex in the idioms of group B10 where the opposition definite vs. indefinite is expressed by means of the tones on the nominal forms, which is rather rare and which determines realizations for which no complete explanation has yet been proposed, although Philippson and Puech (n.d) represents a significant progress towards an acceptable solution.

2.4 Syllable structures

The forest languages exhibit some peculiarities with respect to the syllable structures they admit or privilege. Apart from the forest languages of zone A, which will not be discussed here, they generally have almost no syllables with a consonantal coda. This type of syllable appears more systematically in the B80 and C80 languages that are spoken immediately south of the forest. Yet, it has been noted above that several so-called Mongo languages (C60) as well as Ombo (C76) exhibit a syllable scheme with coda \( m \), where the adjacent languages display a final syllable \( mi \), and sometimes \( mu \).

The most notable peculiarity with respect to the syllabic types in the forest languages of the groups B30, C10, C50, C60, C70 and D10 seems to be the abundance of syllables reduced to the nucleus. This is provoked by several of the phonological facts described above and, particularly, the unstable character of certain consonants in onset position. It would be interesting systematically to study the strategies of resyllabification used by the languages that attest this type of consonantal instability, but it has been noted in §2.1 that many forest languages admit the realization of more than two successive vowels. An accurate study of syllable types and of their combinations within words would then be all the more interesting since to these problems are added, in several languages, other problems posed by the emergence of long consonants in onset position, the reduction of NC sequences to either the oral consonant or the nasal consonant even outside the context of application of Meinhof’s rule; and the often peculiar treatment of \( ng \) and \( mb \), which, e.g. in the reduplicated infinitives or nominal forms of Tetela (C71), can function in a manner which differentiates them from the other NC groups.

3 MORPHOLOGY

3.1 Class systems and nominal forms

3.1.1

Certain features of the class system deserve some attention, although only a very small number of properties specific to the forest languages can be determined. Most characteristics that will be discussed are only attested in parts of the geographical area dealt with and thus only concern certain more closely related languages.

3.1.2

If one excludes the forest languages of the south of zone D, which mostly have a full class system, resembling very much those of the central Bantu languages, the languages of the
forest have, at least, one particularity in common: location is not expressed by means of
nominal classes whose pre-prefixed morphemes regularly determine agreement within
the noun phrase as well as on the verbs that have the locative as their subject.

Exceptions to this situation are rare and very divergent anyway when compared to what
can be observed in the centre of the Bantu domain. Thus, Tsogo (B31) has two locative
nouns gǒmá and vǒmá ‘place’, the second determines concord that is proper to it and that
belongs to a remaining class 16 (cf. vǒmá vè évá vândé tè vávò gǒ mòbôkà nè čòdù ‘this
place is unique in the village’). Beo (C45) has four nominal prefixes which mark location
(hu- ‘in’, na- ‘towards’, ka- and ta- ‘near’), which is rather curious if one considers its very
northern position. Formally, these prefixes do not directly correspond to those of class 16,
17 and 18. Nevertheless, they determine concord within the phrase, notably on the adjective
and on the connective. In general, however, the languages of the forest do not have
locative classes. The locative morphemes are of the type ɣò– and on the connective. In general, however, the languages of the forest do not have
locative classes. The locative morphemes are of the type gǒ– in the languages of zone B,
of type ɣor ɣ in the C10 languages and the languages of the C30 Ngiri group, as well as
in Bolia and in Ntomba (C35), of the type ndà or å in the C60 languages, and of the type
là in the Tetela group (C71–3). Ngando (C63) has a preposition mà (cf. mà lìhôkù ‘in the
ditch’). A morpheme ka has been found in Boa (C44), Bira (D32) and Nyali (D33), where
it coexists with da ‘at’. The same morpheme possibly also occurs in the locative noun
kàmà in Ombo (C76) which determines agreements in ka- within the noun phrase, but
verbal agreement of class 15/17. The locative morphemes of Tofôke (C53) and Gesogo (C52)
are more classic, of the type gǒ and mà. Lombo-Turumbu (C54) has kò, but also ta, which
can equally be found in Beo (C45) and Ngombe (C41). All these morphemes function syn-
chronically as prepositions and have to be analyzed as such. The most ambiguous situa-
tions are the ones that can be found in zone B where the disappearance of class 17 and, at
times, class 16 has not yet been accomplished.

3.1.3

The number of non-locative classes is by and large reduced because of the generalized
absence of class 12, which hardly exists in the forest zone, except in Tetela (C71) and in
the southwestern languages of zone D (Mitiku D13, Enya D14, Lega D25, Nyanga D43,
etc ...). Class 15 as well is not frequent in the central forest languages, but exists in the
southern languages of zone D and in certain languages of zone B. In Bali (D21) there are
a class 15 singular of class 6 and a class 15 plural of class 3, the origin of which is not
very clear. But note that in zone B a class with nominal prefix ɣor often results from the
fusion of class 15, 11 and/or 14. Some remnants of noun class 15 have been observed in
Ndumu (B63), where kudù (pl. mìle) ‘leg’ and kwògo (pl. mògo) ‘arm’ have their agree-
ments in class 7, but also in Aka (C10), where ôbô ‘arm’ takes its concords in class 3, as
well as in Lengola (D12) where the same can be stated of ôbù (pl. màbù) ‘ear’ or of ôbù
‘arm’. In zone C, infinitives are not generally of class 15. However, traces of this class can
sometimes be identified in composed conjugation, and some isolated languages do have
infinitives of class 15, such as Likata, Ebuku, or Loi among the C30 Ngiri languages. On
the other hand, class 13 and 19, which form the class pair of the diminutive, are very well
represented. But class 19 is absent in the southern languages of zone D and the pair 13/19
exists neither in the B60–70 languages (Mbaama-Lempiini B62, Ndumu B63, Laale
B73b, Yaa B73c, Fumu B77b), nor in Bébangi (C32), in the C30 Ngiri group, in Leke
(C14), in certain languages of the northeast like Boa (C44), Beo (C45) and Bali (D21).

Finally, the reduction of the number of nominal classes is particularly drastic in the
central forest languages (C60 and C70) where the prefixes of type mV- do not exist and
where, consequently, the classes 1, 3 and 14 and also the classes 2 and 6 tend to merge
or to be confused. Class 4 and 8 usually remain distinct, due to the degree of aperture of their prefix vowel (cl. 4 \( be- \), but cl. 8 \( bi- \)). This process is typical for the so-called Mongo languages (C60) as well as for languages like Kela (C75), Ndengese (C81) and even Tetela (C71) where it can only be recognized in the form of the concord prefixes, because the nominal prefixes are vocalic in the relevant classes. In the languages of group C50 this phenomenon is much less systematic. Thus, Mbesa (C51) only mixes up class 2 and 6 (PN \( ba- \); Tofoke (C53), which has a locative preposition \( mo \), has concords of class 1/14 that are different from those of class 3, which is also the case in Ombo (C76).

It might be interesting to draw attention to the fact that, according to Picavet (1947), the Pygmies of Bombwanja and Wangata employ a nominal prefix of class 1 \( mo- \) in some nouns (cf. \( mòtò \) ‘person’, \( mènà \) ‘child’) and that, according to Hulstaert (1978), the Pygmies of Basankusu alternately use \( bo-, vo- \) and \( mo- \) forms in class 1, \( ba- \) and \( ma- \) in class 6, and \( mo- \) and \( vo- \) in class 3. Hence, these Pygmy variants to a certain extent seem to maintain nominal prefixes of the \( mV- \) type, which the adjacent Mongo languages do not exhibit at all. It should be stressed that, apart from a dialectal variant of Bubi of Bioko (A31), this type of reduction of the class system is found nowhere else, and particularly that it is absent in zone B, in the C10 languages, in Bobangi (C32), in the C30 Ngiri group and in zone D.

3.1.4

Several other characteristics of the class system deserve some discussion. One of these is the existence of a class 1 with nominal prefix \( a- \) in a series of languages generally situated in the northeast of the forest. This subclass groups a small number of nouns designating animals and plants, and, more rarely, members of the family. It has been attested notably in Buja (C37), Doko (C40), Boa (C44), Lombo-Turumbu (C54), Kele (C55), Mbole-Tooli (C60), Lengola (D12), Mituku (D13) and Nyali (D33). In a region where the consonant \( k \) rarely occurs in prefixes, one could wonder whether this is not a residual class 12, the more so because Lengola (D12) has a word \( agùà \) ‘mouth’, which is usually of class 12 in Bantu. This hypothesis, however, is not very satisfactory, since Mituku (D13), for instance, has at the same time: cl.1 \( ãèbàlà \) ‘pepper’, \( ãòòngà \) ‘cock’, \( ãsélà \) ‘cucumber’ and a diminutive class 12 of which the nominal prefix is \( kà- \). As far as Enya is concerned, it simultaneously has a pair 12/13 of which the prefixes are \( kà- \) and \( tò- \), and some nouns of class 1, the nominal prefix of which is \( ãmò- \) or \( à- \) followed by a syllable \( mò \) which is integrated in the noun stem (cf. \( ãmò:mè \), pl. \( bàömè \) ‘man’, \( ãmòkàli \), pl. \( bàömòkàli \) ‘woman’). The latter examples rather point to a unified augment \( a- \), which exists in Nyanga (D43) for instance. Additional research could be done in order to determine the origin (or origins?) of this class 1 with prefix \( a- \). The matter is not without importance, even though it is geographically restricted.

The following facts should also be mentioned:

- The existence of a class with nominal prefix \( mò- \), \( mì- \) or \( mà- \) which forms the plural of one of the classes 15 \( kù- \) in Bali (D21) and of class 11 \( lì- \) in Nyali (D33). This class might also exist in Boa (C44) in the alternation of the forms \( mò- \) and \( mà- \) of the so-called class 6 prefix. This might be interesting with respect to the frequent occurrence of a plural class with prefix \( mù- \) in the northwestern Bantu languages.

- The rather widespread occurrence of a plural class with a nominal prefix \( li- \) or \( di- \) which can be identical to the one of class 5, but doesn’t necessarily have to. Two separate forest regions exhibit this plural class and it is consequently difficult to say whether the two are linked in one way or another. The first of these regions is the one covered by the B10–B30 languages, where the phenomenon is known as class 10b. This name is justified by the fact that the plural class with nominal prefix \( di- \), and with
a singular generally in class 11/15 (/14) has the same agreement morphemes as class 10 with prefix N-. In this area, the nominal prefix of the plural class under discussion is different from the prefix of class 5. A lot has been written on this subject. Therefore, more attention will be given to the second relevant area, covered by a series of C60 languages, going from the confluence of the Congo river and the Ruki, between the Jwafa, the Lomela and the Loilaka to the area occupied by the C70 languages (Yela C74, Kela C75 and Tetela C71). In this zone, there is a class which forms a pair with class 7 and is generally described as a plural class 5, because the forms of its prefixes are identical to those of class 5, the most particular representations of them included. This remark concerns the C60 and 70 languages, in which the prefixes of type li- sg. and pl. are represented by ai- in intervocalic position and in rapid speech (cf. Yela C74: litòó ëkò ~ litòó ëkò ‘these fabrics’). It is equally valid for the languages of the region where the same nominal prefix is represented either by the glottal stop ? followed by a strengthened consonant (cf. Nkengo C60: cl. 7, 5 ëyòŋò, pl. ëyòŋ ‘china clay’), or by the lengthening of this strong consonant without any other segmental representation (cf. Tetela C71: cl. 7, 5 ètëndò, pl. tìëndò ‘bed’; élëmbà, pl. dëmbà ‘thigh of an animal’; èlôngâlôngà, pl. dëlongâlongà ‘bird of the poultry yard’). There is also a plural class with a nominal prefix of the type jù-, jò-, ë- which exists in Mbole-Tooli (C60) and Lengola (D12) where it forms the plural of class 11 without being mixed up with class 10, which has N- as its prefix (cf. Lengola D12: ëmòbò, pl. jìmìbò ‘song’; ëgìbò, pl. jëgìbò ‘wall’; ëbìkò, pl. jëbìkò ‘dispute’; Mbole-Tooli C60: ëwàlà, pl. zàlà ‘neal’; lòkà, pl. zòkà ‘day’). The situation in Nyali (D33) is difficult to assess, but certain nouns with prefix i- in the singular form their plural with the prefixes li- or di- (cf. ësàjì, pl. ësàjå ‘branch’; ëkòndò, pl. ëkåndò ‘arm’).

- The indubitable existence of augments which sometimes fulfil a grammatical role, sometimes have become frozen, although they can still contribute to the expression of definiteness in certain cases, and finally sometimes are simply present in the structure of the nominal prefixes. The clearest augments are found in the C30 Ngirí languages like Zamba, in Doko (C40), and in the languages of the group B10–30 such as Myene and Himba. Nevertheless, although Zamba, for instance, expresses the opposition definite vs. indefinite by means of the presence or absence of the augment (Kamanda 1991), it is rather the alternation of different types of nominal prefix which permits to affirm that there are traces of the augment in most of the languages cited. As a matter of fact, the nominal prefixes in the forest languages are most often of the type CV-, except in classes 7 and 19 where their vocalic structure results from the absence of the consonants k and p in prefixes. These classes only have a CV- prefix in the southern languages of zone D (Mituka D13, Enya D14, Lega D25, Binja D20), in Tetela (C71) and in part of zone B (Tsoo B31, Pove B22c, Nzebi B52, Ndumu B63). For the other classes, however, there are many languages where the prefixes are either of the type V-vs. VC-, depending on the class (e.g. Tetela C71; Mbole-Tooli C60), or of the type (C)V- vs. (V)(C)V-, depending on the syllable structure of the noun stem. Thus, in Doko (C40) for instance, the nominal prefixes take a (C)V-form before stems with an initial consonant and a VC(V)-form before stems which begin in a vowel (cf. ësàlì, pl. ësàlì ‘worker’ but ëmbà, pl. ëühìmà ‘child’). The same is true for certain languages of group B60 and for languages outside the forest of group C20, such as Koyo (C24) and Mboshi (C25) where the nominal prefixes are of the type V- or C(V)-depending on the structure of the stem. In the B10 languages, the alternating prefixes are of the type Fm-in class 1, 3, 4 and 6 when the stem begins in a labial consonant, of the V-type in all classes before stems with any other consonant in initial position, and of the VC(V)-type when the stem begins in a vowel. It seems that this situation, as well as the existence of
With respect to the structure of the nominal prefixes it can be mentioned that in many languages of zone B, in part of zone C (Bolia and Ntomba C35, Konda C60, certain C30 Ngiri languages) and in zone D, the nominal prefix of class 5 is of the type $i$- or $e$- before stems with an initial consonant, but of the type CV- or C- before stems which begin in a vowel, the consonant in this latter type being $d$, $l$ and, less frequently, a fricative $z$, $3$ or an affricate $dʒ$. Certain languages like Lengola (D12) and some so-called Mongo idioms (C60) have an $i$- when the stem begins with $+i$ or with a vowel of the first degree, whereas before other vowels a consonant $dʒ$- or $j$- is used (cf. Lengola D12: ikūmī ‘ten’, lpjy ‘tooth’, lidʒ ‘eye’ but ljōi ‘voice, speech’). Conversely, in a more central region, the noun prefix of class 5 is always of the type CV- (or even VCV- or CVVC), independent of the syllable structure of the stem. This latter situation can be found in some B60–70 languages (Ndumu B63, Fumu B77b), in most of the known languages of group C10 (Aka, Ngando and Babole), in the majority of the C30 Ngiri languages, in Bobangi (C32), in some of the so-called Mongo languages (C60), in Yela (C74), Kela (C75) and Ombo (C76), as well as in the C50 group. The consonant of the nominal prefix in these languages is mostly $l$ or $d$, but it is $z$ or $dʒ$ before stems with an initial vowel. However, a number of languages (Aka C10, Babole-Dzeke C14, Nkengo C60, Ombo C76, etc.) maintain the consonant $l$ when the initial vowel of the stem is $i$ (cf. Ombo C76: libélé ‘breast’, jōm ‘ten’ but lām ‘tooth’). Also note the existence of prefix sequences like izi-, lizi- in Zamba or lij- in Lilenge (cf. ljōi, pl. māmō ‘business’), which appear in the Ngiri region where the augment is prominently present. Finally, in certain languages the nominal prefix of class 5 is $Ø$, without any modification of the initial consonant of the stem (cf. Laale B73b: bā, pl. mābā ‘palm tree’) or with an initial voiced consonant opposed to the voiceless consonant which is used in the plural (cf. Aka of Bayanga C10: bāpā, pl. māpāpā ‘wing’; dōngā, pl. mātōŋā ‘double oyster’). It has already been mentioned that the nominal prefix of class 5 can also manifest itself by the appearance of a sequence $?+$ strong consonant (cf. Nkengo C60: bā, pl. bāvā ‘palm tree’, tōsōkō, pl. bāsōkō ‘shoulder’; ŋyŋŋ, pl. ŋyŋŋ ‘china clay’) or by the appearance of a long strengthened consonant (cf. Tetela C71: ddēmbā, pl. alēmbā ‘body’).

3.1.5

Although considerable progress has recently been made in this domain, our knowledge of the Bantu languages that are isolated between the Ubangian or Sudanic languages remains fragmentary. The same is true of certain Bantu languages situated on the border of the Bantu domain. Their detailed description, however, would lead to a better comprehension of the history of the linguistic fragmentation in the region and to a refinement of the theories concerning the creation of ‘mixed’ languages arising from the contact between languages of different groups or families. Some particular facts can briefly be cited. For example, Boa (C44) features class suffixes which can be used together with nominal prefixes: this is sufficiently exceptional to deserve mention. Languages like Mbati (C10),...
Pere (D31) or Bira (D32) show a strong breakdown of the class system, which is not present in certain adjacent languages such as Aka and Ngando (C10), or Nyali and Bodo (D30). Thus, Mbati (C10) opposes a singular mò- or ō- to a generalized and often additive plural bà-. There is no agreement, except with adjectives, and the choice between the only two singular verbal prefixes ã- and õ- depends on whether the subject is animate or not, while the verbal prefix of the plural is always bà-. The opposition [± animate] is also basic in Pere (D31) and in Bira (D32). Indeed, in the first of these languages, the nouns of which the stem designates an animate entity generally have a prefix of the type mò-, mì-, n- in the singular and a prefix bà- in the plural (cf. mìkkà:ngà, pl. bákà:ngà ‘weaver’), while nouns with a stem designating inanimate entities do not have a commutable prefix and form their plural by the attachment of -àti ‘many, a lot’ or by reduplication (cf. mì:, pl. mì:áti ‘head’; mbàtà, pl. mbàtàmbàtà ‘chair’). In Bira (D32), [+animate] nouns have a singular with prefix m(V)- and a plural with prefix bà-; they only determine agreement on the adjective in the singular (cf. nicà mòlùkà, pl. bàicà lùkù ‘small boy’), whereas [−animate] nouns do not have a morphological plural but trigger the appearance of a morpheme ã- which is prefixed to the verb.

It is not possible here to digress on systems of this type, on which the reader is invited to consult the available descriptions. They are all the more interesting since they coexist, in the same region, with sometimes less classic, though extremely productive class systems, which definitely implies that contacts between languages from different phyla have been established following different processes.

3.2.1 The verbal prefixes

In the classes, the verbal prefixes do not exhibit any marked particularities in the languages of the forest. The verbal prefix of class 1 is generally ã- (ã- in Tofoke C53 and Lega D25), but ã- in Mituku (D13) and ã- in Enya (D14). Some C30 Ngiri languages have alternating forms ka- (Libobi, Lobala, Kunda, Motombo) or ta- (Babale) which are used in certain tenses. These forms could stem from the agglutination of a pre-initial element, but this still has to be proved.

For the persons, the languages of the forest have less classic verbal prefixes. Most often they have nà- for the first person singular. This prefix can be found in Tsogo (B31), Aka (C10), Ntomba-Tumba (C35), Doko (C40), Mpunza, Lifonga, Loi, Mbonji, Litoka, Balobo, Ndobo (C30 Ngiri), Beo (C45) and Bodo (D35). Alternating forms nè- or ni-figure in some C30 Ngiri languages (cf. Likata: nè ~ nà; Libobi: ne-, na-, ni-), in Boa (C44) and in Mituku (D13) where a form nè- is attested. Lega (D25) and Bira (D32) only have one form ni-, while Lombo (C54) and Tetela (C71) respectively display a form le- and a form la- alternating with n-. In B10, B30 or Pove (B22c) the verbal prefix of the first person singular is me-, which certainly originates from the substitutive. This form seems to agglutinate to the verbal prefix of class la- in Ndumu (B63), where the authors note mà- or (me) à-. A verbal prefix le- exists in Mbudza (C30 Ngiri) as well as in Tofoke (C53), Kele (C55) and Mbole-Tooli (C60). The other C60–70 idioms (Nkundo, Nkengo and Kela) as well as Babale (C30 Ngiri), Bolia (C35) and Enya (D14) have a verbal prefix N- which also occurs in Fumu (B77b) where it alternates, according to the tense, with a prefix e-.

The verbal prefix of the second person singular is ò- in almost all languages. Nevertheless, Ndumu (B63) and Fumu (B77b) use the substitutive pronoun with the
verbal prefix a- of class 1. Lega (D25) has ò- ~ gò-. Kele (C55) and Tofoke (C53) respectively have (b)ò- and bò-. Some languages of the C30 Ngiri group alternately have ò- ~ ko- (Libobi, Lobala, Kunda and Motembo). The most remarkable fact is definitely that a rather high number of C10 (Leke), C30 Ngiri (Lifonga, Likata, Libobi, Lobala, Kunda, Motembo, Babale), C40 (Doko), C50 (Kele, Tofoke) and C60 (Mbole-Too li) languages have the same verbal prefix in the second person singular and in the second person plural (except if, by any chance, there exists a tonal difference which is not marked in the sources). The strategy employed by these languages to neutralize the ambiguity is not always known, but it is interesting to note that some of them have generalized, in the set of ambiguous verb forms, the usage of the morpheme of the type (-yâni), which often marks the plural of the imperative in Bantu. Thus, Mbole-Too li (C60) has: ósókâmbâ ‘you (sg.) work’ and ósókâmbâyâ ‘you (pl.) work’. Lifonga and Likata (C30 Ngiri) have a morpheme ni in clause-final position (cf. Lifonga: oike obokila gbâla ni ‘you (pl.) are not going to hunt’; Likata: òikâ ò bâ bôkîla gbâla ni, same meaning).

In those cases where it is not identical to the one of the second person singular, the verbal prefix of the second person plural is nó- (Tsogo B31 and Pove B22c), bó-, wó- (Tofoke C53, Lombo C54, Kele C55, Enya D14, Bira D32, Ntomba C35 and C30 Ngiri; Mpu nza, Loi, Litoka, Balobo). It is li- or lô- in Ndumu (B63) and Fumu (B77b), ló- in Bolia (C35), Mongo-Nkundo (C61), Kela (C75), Zamba and Mbonji (C30 Ngiri), mó- in Boa (C44), Beo (C45), Mituku (D13) and Lega (D25). In Tetela (C71) it is nyó-.

The verbal prefix of the first person plural is most often tó- (tè- in Boa C44), although Ndumu (B63) has li-, Loi and Ndobo (C30 Ngiri) have lí-, and Bira (D32) ki-.

In most of the Bantu languages of the forest, the verbal prefixes have a low tone for the persons and in class 1 and a high tone in the other classes.

3.2.2 The object prefixes

 Virtually all the forest languages examined have a full range of object prefixes, for the persons as well as for the classes or the reflexive. Mbole-Too li (C60), Enya (D14) and the C50 languages (Lombo, Tofoke, Kele), however, are exceptional: they do not feature these morphemes, although, curiously, object prefixes can be found in Mituku D13, Bira D32, and Bodo D35 where they can be obligatory in case there is an object noun, e.g. in Mituku. Also note the absence of object prefixes in the B10 group, in Pove (B22c), as well as in Ndumu (B63) and Fumu (B77b). Leke (C14) alternatively exhibits utterances like òdèzé ò ngà ‘he made me cry’ and òmômbètè ‘he makes me come’ where the postposed substitutive pronoun alternates with the first person singular object prefix -ò-. This object prefix is the only one that exists for the persons in Leke, whereas all object prefixes of the classes as well as the reflexive object prefix are attested. The situation is the other way round in Boa (C44), where the object prefixes only exist for the reflexive. Moreover, in this language the object prefixes of the first and second person singular are -è- or -ò-, those of the first and second person plural are -è- or -ò-; and the reflexive prefix is -è-. This points to a tendency towards a formal confusion of different object prefixes, a tendency which is very clear in the C30 Ngiri languages, as well as in Mbole-Too li (C60). The general tendency is to mix up the prefixes of the second person singular and plural. Thus, Mbole-Too li (C60) has ò- and -ò-; Mpondza, Mbonji and Balobo (C30 Ngiri) have -bo- and -bo-; Lifonga, Likata, Libobi and Lobala (C30 Ngiri) have -e- and -e-. The formal confusion can even go further in C30 Ngiri because, according to Motingea (1996), Kunda has the same object prefix -mo- for the first person plural,
the second person singular and plural; and for class 1, whereas in Babale, -mo- is used in
class 1 and in the second person singular and plural.

The object prefix of the first person singular is generally a nasal consonant; the one of
the first person plural is normally -to-, but Zamba, Loi and Mbonji have -lo-, which is
the object prefix of the second person plural in Bolia (C35), in Nkengo and Nkundo
(C60) or in Kela (C75). It is by far the reflexive object prefix that has the most particu-
lar forms. The two dominant forms in the forest languages are -yá-, which is to be found
in Leke (C14), Ntomba (C35), the so-called Mongo languages (C60), Kela (C75) or
Tetela (C71), and -mi- which figures in the C30 Ngiri languages. Dokó (C40) has alter-
nately -mi- or -má-; and -ma- is the only form cited in the sources for Motembo
(C30 Ngiri). Several more isolated forms can also be mentioned, like -ka- in Bolia (C35),
-kí- in Bira (D32) or forms of the vocalic type like -á- in Mbudza (C30 Ngiri) or -é-
in Boa (C44) and Beo (C45).

According to the authors, the object prefixes are either low for the persons and class 1,
but high for the other classes, or low for the singular persons and for class 1, but high for
the plural persons and for the other classes.

3.2.3 The derivation

Although there are few particularities concerning the verb stems, some things can be
noted about the verbal derivation. Generally speaking, this procedure functions rather
well in the Bantu languages of the forest, even though the number of derivational suffixes
is lower here than in the central Bantu languages. The following are found in almost all
forest languages: the applicative suffix (-ee-, -e-), the reciprocal suffix -an-, the
stative suffix -am-, -em-, sometimes -Vm-, the pair of reversive suffixes: transitive -ol-
and intransitive -o- and less frequently a neuter suffix -eg-, -ik- or -i-. The long causative
suffix of the type -is-, -ih-, -es- is attested in quite a lot of languages, notably in Ndumu
(B63), Leke (C14), Balobo, Lilenge, Kunda, Mbonji, Zamba, Lobala, Libobi, Lifonga
(C30 Ngiri), Dokó (C40), Boa (C44), Beo (C45), Tofóke (C53), Lombo (C54), Kele
(C55), Mbole-Toooli (C60), Mituku (D13), Bira (D32) and Bodo (D35). But the short
form -i-, -y- isn’t rare either. It coexists with the long form in Beo (C45) or Leke (C14),
and seems to be dominant in the central languages of the south, like Ntomba and Bolia
(C35), the so-called Mongo languages (C60), Kela (C75) and some C30 Ngiri languages
such as Litoka, Loi or Motembo. Pove (B22c) has -i- and a -id-i sequence, while Tsogo
(B31) has a causative suffix -id- and an applicative suffix -é- (cf. ékádámédí ‘he has
made cicatrize’; mábókámé ‘I raised my eyes towards…’).

The forest languages often convey the passive by means of a verb form derived with
the suffix -am-. The passive suffix of the type -u-, -ibu- is very rare among these lan-
guages, although it has been found in zone B (Pove B22c, Tsogo B31), in C30 Ngiri
(Mpunza: -ubu-, -iubu-), in C40 (Beo C44: -u-) and in C50 (Kele C55: -o-).

Sequences of derivational suffixes have been attested in all languages and certain descrip-
tions give numerous examples showing the productivity of the derivational microsystem.

3.2.4 The conjugation

It is impossible to give an overview here of the conjugation or of the verbal morphemes
used in it. The forest languages are too numerous and too diverse for this to be possible,
the more so because in this region, as in the entirety of the Bantu domain, the
conjugation is the microsystem in which the distinctions are the strongest. We will therefore limit ourselves to note a number of interesting particularities.

- Without being unique to the forest languages, the existence of conjugated forms which clearly result from the agglutination in one single form of sequences containing an auxiliary verb and an infinitive form is massively attested in the central forest languages, and notably in the C60 and southern C30 (Ntomba, Bolivia) languages. The reader is referred to Hadermann (1994b), especially for the conjugated forms that include formatives of the type -yo- or -to-, which have an evident relation with the auxiliaries meaning ‘to come’ or ‘to go’. In order to stay within a purely synchronic perspective, this analysis will not be further pursued. The generalized presence of a past tense with a final morpheme -i in the forest languages and the almost complete absence of the final element -le are more directly accessible to a synchronic approach. The latter final as such is only present in Bolia (C35) in the affirmative perfect past forms, as well as in Ntomba (C35), Beo (C45) and Lombo (C54) in the negative perfect past, to the exception, of course, of the southern languages of zone D, such as Lega (D25), which belong to the eastern block. Next to the past tense with finale -i, many forest languages also have a past tense with final -ak-i or -ik-i. This tense is often described as a remote imperfect past (cf. Babale C30 Ngiri: báabóó básìsù básìyùndákìni ‘all men looked at you (pl.)’; Mbole-Tooli C60: ólámìbì ‘you cooked before, yesterday’ vs. ólámì ‘you cooked today’).

- Another striking characteristic of the conjugation in the forest languages seems to be the use of temporal/aspectual morphemes which have the status of either postfinal elements or adverbs which come after the verb, the two of which are not always clearly distinguished in the sources. These morphemes are numerous and their presence has been attested in zone B as well as in zone C and D, but there is very little formal correspondence between them. Their meanings, by contrast, are fairly recurrent. These are notably either the affirmative and negative inceptive (cf. Pove B22c: -tè in the affirmative inceptive and -dò in the negative; Mbudza C30 Ngiri: -yò in the negative inceptive), or specifications meaning ‘near’ or ‘remote’ with respect to the past or future tense (cf. Babele C30 Ngiri: -è̃bì or -è̃nò for the remote future and -kábì for recent past; Doko C40: -bì in the remote past and -dè in the remote future; Motembo C30 Ngiri: -bì in the past tense which refers to yesterday), or else they refer to perfect or imperfect aspect (cf. Litoka C30 Ngiri: -ko in the perfect; Motembo C30 Ngiri: -tì in the imperfect). Tofoke (C53) uses a postfinal element -ndè the signification of which is difficult to assess, as well in the future tense (cf. bòlogàndè ‘you will braid’) as in the near and remote past (cf. bòlogàndè ‘they have braided today’; élogàndè ‘he has braided a long time ago’). Finally, in zone D, Enya (D14) expresses remoteness (in the past and in the future) by placing an adverbial mìnì ~ mì after the verb; and temporal proximity by postponing sènì ~ sè, whereas ìbì expresses the fact that the past or future action is situated in the preceding or following day. Mituku (D13), a language that is close to Enya, also uses the adverbial mìnì to express temporal remoteness and a postfinal element -bì for the recent past perfect.

- Most of the forest languages have a postfinal morpheme of the type -ì(m)i. One of its functions is to express the second person plural of the imperative (opposed to the second person singular). This morpheme has been found in zone B (Myene B10, Tsogo B31, Pove B22c), zone C (C30 Ngiri: Mbudza, Kunda, Babale, Motembo; Doko C40, Boa C44, Beo C45, Tofoke C53, Lombo C54, Kele C55) and zone D (Mituku D13, Lega D25, Bira D32, Bodo D35). It is interesting to note that in Bodo (D35) the same morpheme is used for the second person plural in the conditional and in the subjunctive,
while in Mbole-Tooli (C60) it is used with the same function in all tenses where the final morpheme is -e or -a, which can possibly be explained by the fact that, in this language, the verbal prefixes of the second person singular and plural have an identical form - (cf. ósökambáy ‘you work (sg.)’ vs. ósökambádyi ‘you work (pl.)’), as has been said above. Some other noteworthy facts can be mentioned. Babale (C30 Ngiri) uses the morpheme -n to counterbalance the ambiguity that rests on the object prefix -m- of the second person singular and plural (cf. bámuyëndàkigi ‘they looked at you (pl.)’). Doko (C40) forms its negative imperative by postponing an infinitive of class 5 to a form kàkè (cf. kàkè isalá ‘do not work (sg.)’). In the second person plural, the postfinal -nì is attached to the infinitive, which gives kàk ‘ìdiànnì ‘do not come (pl.)’, for instance. Finally, Lífonga (C30 Ngiri) in its turn expresses the imperative plural with a morpheme nì, which is placed in clause-final position and is thus not a postfinal morpheme. For example: gýà tómà tótà nì ‘eat (pl.) these things’.

In general, the morpheme of the type -nì is present in zone B and D, in the C40 and C50 groups, and in part of the C30 Ngiri group. On the other hand, it does not exist in several languages, such as the so-called Mongo idioms and in the C70 group. It has not been attested in the C10 languages either, but these are not well known yet.

- Some comments can be added concerning the morphemes that are proper to the negative verb forms, even though the languages of the forest are not radically distinct from the other Bantu languages in this respect. The most common final morphemes in the negative conjugation are -i and -e. Negation markers as a rule are either prefinal morphemes (fairly often of the type nỳà- or nỳà-), or postinitial morphemes that can be of the type -ni-, -ë-, -tì-, -tà-, but also -i- (Mbole-Tooli C60, Lombo C54 and C30 Ngiri: Likata, Libobi). Niomba (C35), Nkengo, Nkundo (C60), Tetelá (C71) and Kela (C75) have postinitial morphemes -ò-, -ò-, -ò-, -ò-, -ò-, -ò-, etc. in which a form of the negative copula can be recognized. Another means of expressing negation is certainly more typical of the northern forest languages: it consists of using an independent negative morpheme that modifies the entire clause. It is usually placed in sentence final position and most often supposes the use of a negative verb form or, in certain languages, of another negative morpheme, which is placed before the verb and which is described as a separate word in the sources. Examples are: Loi (C30 Ngiri): tó lòbëtemikì ò tòkì kà ‘we have not laid on the mat’; Mbudza (C30 Ngiri): tòjòtòmè tì ‘we have not sent’. Other examples of phrasal negatives of this type are: wo or we in Fumu (B77b), kpà in Kunda (C30 Ngiri), ka in Ndobo (C30 Ngiri), kòmò or tì in Bodo (D35), wè in Bira (D32). These languages belong to the groups B70, C30 and D30, but the list is not necessarily exhaustive.

3.2.5 The infinitive

The forest languages exhibit a complex situation with respect to what is traditionally called the infinitive. This is not so much the case for the languages of zone B, although the nature of the nominal prefix used to form the infinitive is rather diverse here: class 5 è- in Tsogo (B31), class 15 in Mbaama (B62), Laale (B73b), Yaa (B73c) and Fumu (B77b), but class 7 in Nduum (B63) and in certain Ťeke languages (B70), class 3 in Himba (B30), class 5 with zero nominal prefix in Pove (B22c). Even if the situation is rather heterogeneous in the languages of this zone, it is much more so in the forest languages of zone C and D (except, of course, in the south of zone D, where the infinitive is of class 15 and can co-occur with a deverbal nominal form of class 5). In zone C, most authors list an impressive number of nomino-verbal forms the uses of which certainly differ, but in a way that the actual descriptions do not allow us to understand exactly.
Thus, for instance, the term ‘gerund’ is often used by the authors without being defined, and the least one can say is that its meaning is not very clear. Moreover, the languages of zone C frequently compose verb forms, as well as structures in which auxiliaries (or pseudo-auxiliaries) are followed by a deverbal nominal form the structure of which differs according to the circumstances and should be systematically analyzed. We will limit ourselves to establishing a non-exhaustive typology of the nomino-verbal forms most frequently attested in the languages of zone C and the north of zone D. While the different types are listed, an overview of their distribution will be given. The name of the same language can appear for different types, due to the very frequent co-occurrence of several ‘infinitive’ forms in the described languages. The ‘classic’ type NPcl.15 + stem -a, -á exists in C30 Ngiri (Lifonga, Likata, Libobi, Loi, Balobo), C50 (Kele, Tofoke), C60 (Nkundo, Mbote-Tooli) and D10–20 (Mituku, Enya, Lega), whereas the equally classic type NPcl.5 + stem -a, -á can be found in C30 (Bolia, Lifonga, Likata, Litoka, Ndobo), C60 (Nkengo) and C70 (Kela). Also well represented are: the forms of the type PNcl.14 + stem -é, -a, -á which can be found in Leke (C14) and in C30 Ngiri (Mbudza, Lifonga, Likata, Mbonji, Babale, Motembo, Litoka, Balobo); the forms of the type Ø + stem -a, -á, -é which one encounters in Aka (C10), C30 Ngiri (Libobi, Lobala, Zamba, Mbonji, Balobo), Boa (C44), Bodo (D35) and Bira (D32); then also forms of the type na, ne + stem -a, -á which are restricted to C30 Ngiri group (Zamba, Loi, Mbonji, Balobo, Ndobo) and Sengele (C33), as well as the forms of the type NPcl.9 + stem -a, -á to be found in Ntomba and Bolia (C35), Boa (C44), Nkengo and Nkundo (C60), Tetela (C71) and Ombo (C76). Some languages equally have a form NPcl.11 + stem -i (C30 Ngiri: Zamba, Kundo and Lombo C54), a form of the type ka + stem -a, -á (Ndobo C30 Ngiri and Beo C45) or a form of the type ya + stem -a, -á (C30 Ngiri: Lobala, Loi and Mbonji).

It is often impossible to specify the concords of the forms with a zero nominal prefix or of those with a prefix na-, ne-, ya- that does not correspond to an easily recognizable noun class. Furthermore, the concords of the infinitival forms are at times surprising. In Ombo (C76), for instance, the infinitives with a nasal consonant as prefix have their concords in a class 15/17 with prefixes of the type ko-. A systematic study of the set of nomino-verbal forms found in the forest languages would be useful, also of the negative infinitives, which are fairly frequent (cf. Tofoke C53: ngolémá ‘not to cultivate’, njággá ‘not to collect’) or of the infinitives that include displacement markers (cf. Bolia C35: ikélá ‘to make’, ivókelá ‘to come and make’ and itókelá ‘to go and make’).

Other points of interest also merit some attention, like the manifestations of the rule of metatony which is applied, for example in the infinitive and in certain tenses in Mituku (D13) and Lega (D25), in the infinitive in Mbote-Tooli (C60) (cf. ólambhá ‘to cook, to prepare’ vs. ólambá ‘to cook food’) and in the present affirmative in Pove (B22c) (cf. mékápedá ‘I dig’ vs. mékápede bémbe ‘I dig the hole’), or like the manifestations of the nominal prefix of class 9 in the infinitives of Tetela (C71) and Ombo (C76) (N-before +C; mb- before +V if the second consonant of the verbal stem is an non-nasal consonant; application of Meinhof’s rule when the verb stem is of the type +(C)VNC- or +(C)VN-). Note also the application of assimilation rules to the final vowel of nomino-verbal or the unusual appearance of infinitives with a final vowel -o (cf. Himba B30: mótonágó ‘to deny’, móbikágó ‘to live’). This small list is far from complete.

4 CONCLUSION

Very numerous, very diverse, sometimes marked by their adjacency to languages that belong to other families or to other Niger-Congo groups, the Bantu languages of the forest still form an open domain of research, very interesting if only for the study of
substrate and adstrate phenomena, or for the study of the typical features of the language use of Pygmy groups and of Bantu isolates, fairly numerous in this part of Central Africa. In spite of the progress that has been made in the past decades, a lot of work is still to be done in order to arrive at a sufficiently profound knowledge for the reconstruction of the ancient linguistic history of the region.

The reading of the preceding pages, even though it only provides a very superficial view on the facts, should show to what extent the forest is an area of linguistic diversity, where very different languages meet and border each other. If one excludes the languages of zone A (without forgetting them), one can surely identify four major typological groups within the Bantu languages of the forest: a western group including the languages of zone B, a central group which contains the languages of zone C, a northeastern group with the northern languages of zone D and a southeastern group covering the zone D languages of the south, which belong to the eastern Bantu block.

More particular sets can be identified, at least as a working hypothesis. Thus, it is rather obvious that, within zone C, the C30 languages of the Ngiri and the adjacent C40 languages exhibit features that neatly set them apart (presence or traces of augments, presence of \(mV\)- prefixes, tone systems with tonal reduplication and/or tonal shift, lexical peculiarities, etc. . .). The southern C30 languages (Ntomba and Bolia C35), in contrast, share some characteristics with the C60 languages of the so-called Mongo group. The latter is certainly far less homogeneous than has been maintained by Hulstaert. Note, on the one hand, the very specific traits that can be found in the languages of the zone covered by the river complex Jwafa–Lomela–Loilaka. These traits represent a transition towards Yela (C74), Kela (C75) and Hendo (C70), which already display some features that are shared by Tetela (C71), notably the existence of a class 5 singular of class 6 and plural of class 7, with all the special representations of its prefixes. The C50 languages (Mbesa C51, Tofoke C53, Lombo C54, Kele C55, etc.) equally have some very marked characteristics and form a zone of transition where certain innovations of the central C60 languages, such as the mixing up of the prefixes \(bV\)- and \(mV\)-, are irregularly applied. With Mbole-Tooli (C60) or Ombo (C76) situated more southward, these languages are spoken on the fringe of the northeastern group and sometimes exhibit features similar to those of the adjacent D languages. One could suggest that the same holds, in the west, for the C10–20 languages, which seem to have characteristics that principally belong to zone C, but also some peculiarities typical of the languages of the neighbouring zone B. The C10–20 cluster is not sufficiently known yet to give anything more about them than some superficial impressions. Nevertheless, it is interesting to note, for instance, that the word for ‘person(s)’ has a final vowel \(-u\) in singular, but \(-i\) or \(-e\) in the plural, not only in C20 languages (Mbossi C25: \(m\)ñ\(ò\)r, pl. \(b\)á\(r\)è), but also in certain B60 and B70 languages (Ndumu C63: \(m\)ut\(u\), pl. \(b\)ati; Mbaama-Lempini B62: \(m\)vu\(r\)u, pl. \(b\)á\(r\)ì; Teke of Gabon B70: \(m\)vú\(ù\), pl. \(b\)á\(r\)è). Moreover, certain C10 languages have words that are very frequent in zone B, like \(m\)b\(ó\)á\(n\)dé ‘dog’ in Aka (C10), or like +\(h\)ë\(s\)e ‘bone’ and +\(p\)ë\(i\), +\(p\)\(o\)nd\(ì\) ‘path’ in certain Babole idioms (C14), whereas other C10 languages express the same meanings with words that are more common in zone C. So we have: \(m\)b\(ó\)á ‘dog’ in Ngando (C10), \(m\)b\(u\)á ‘dog’ in Mbati (C10), +\(k\)ù ‘bone’ and \(n\)\(d\)zë ‘path’ in other Babole idioms (C14). It would be interesting to see, on the basis of more complete lexical surveys, whether the C10 group isn’t crossed by a significant number of isoglosses of this type.

By way of conclusion, a word on the language uses of the Pygmy groups scattered throughout the forest zone. Significant progress has been made in recent years with respect to their description. Yet, the language or dialectal peculiarities of too many of these Pygmy groups remain unknown, so that it is impossible to formulate anything more
than some hypotheses about a linguistic history that could only be understood by means of more and better descriptions. These descriptions should not only take into consideration the languages or variants used by the Pygmies, but also those of the non-Pygmy groups living in the same regions. Would it otherwise be possible to affirm that certain words are exclusively Pygmy; that some Pygmy group has its proper language or speaks a certain language with some special characteristics that are not observed elsewhere? Would it above all be possible to emit anything else than suppositions about the older linguistic history of the Pygmy groups? To continue the descriptive efforts already started, would certainly be more successful, in the hope that one of the most interesting problems posed by the ancient history of Africa could be solved progressively.

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NOTE

1 For a map of C30 Ngiri languages, see Motingea Mangulu, 1996.

REFERENCES


4 Conclusion Bouquiaux and Thomas 1994; Cloarec-Heiss and Thomas 1978; Thomas 1976; Thomas and Bahuchet 1983.
CHAPTER TWENTY

THE B30 LANGUAGE GROUP

Lolke J. van der Veen

1 INTRODUCTION

For a long time B30 has been one of the least studied and documented language groups of Gabon. Although Guthrie (1953 and 1967–71) provided scholars with a first approximation of its main characteristics, his account was necessarily incomplete. As a matter of fact his research was based on rather limited personal field notes and on data taken from Raponda-Walker (RW) (1950) concerning only two out of seven languages (see below).

More recent investigation has allowed us to elaborate a much more accurate picture of the group as a whole and of its individual languages. In order to describe the present state of affairs, this chapter will present a summary of the main results of linguistic research on this barely known but nonetheless very interesting language group. These results not only concern sociolinguistic aspects such as the internal composition of the group and its relationships with other language groups, but most obviously also descriptive linguistics. The (predominantly) sociolinguistic aspects will be set out hereafter, whereas the main phonological and morphological features of the individual varieties as well as the common structural features will be discussed in some detail in the sections following this introduction. Syntax, for which only limited data are available, will be discussed as a subsidiary (see Conclusion).

1.1 The inventory

The B30 group comprises seven language varieties, all of which are spoken in the central, rainforest, part of Gabon. The group as a whole doesn’t have one distinct and generally accepted (ethnic) name. According to some of its members it ought to be called Okani (meaning ‘Let’s go!’ in most of the B30 languages); others prefer Mbembe or do not name it at all. The generally accepted names of the individual varieties are Tsogo, Vove, Viya, Pinzi(pinzi), Kande, Himba(ka) and Bongwe. Each of these varieties will be presented briefly. (See also Map 20.1, for their approximate location.)

Tsogo

(ye-tsغا; T hereafter; speakers: Mitsogo)

Classification: B31 (Guthrie 1953).

Location: a rather elongated area situated to the northeast of Mouila on the right bank of the River Ngounié, having as upper limit the village of Sindara, north of Fougamou.

Estimated number of speakers: 9000.

Neighboring languages: B30, B40 and B50 languages.

class morphology. Van der Veen (VdV) (1991b). A non-published dictionary (about 6000 entries) elaborated by RW.

Other: being the privileged means of communication of the local Bwiti cult which has initiates all over the country, T has considerable social and cultural prestige.

Vove (Pove)
(yé-fáfè; Vo hereafter; speakers: Bavove)

Classification: not mentioned as a B30 language by Guthrie. B22c according to Bryan (1959). However, Jacquot (1978, 1983) has shown Vo to be a typical B30 language from a morphological perspective. VdV's work (1986, 1987, 1991a) on the phonology, the morphology, the lexicon and the syntax of one of the southern varieties of Vo has corroborated this conclusion.

Location: area to the south-west of Koulamoutou defined by the town of Koulamoutou (east side), a village called Mouila (west side) and the village of Bagnati (north side; bordering an uninhabited region).

Estimated number of speakers: 4000.

Neighboring languages: Sangu (B40) and Nzebi (B50) (southern region).

Other: Vo is a cluster of language varieties. Their exact number is unknown. The southern dialects seem to have been considerably influenced by the neighboring languages. The more conservative Pove varieties are situated in the northern region.

Viya
(yè-bîya; Vi hereafter; speakers: Eviya (also Evia or Avias))

Classification: not mentioned by Guthrie (1953), Bastin (1978) or Jacquot (1978, 1983). RW (1967) considers Vi to be a mixture of T and Sira (B41). As VdV has shown, Vi fundamentally is a B30 language variety but its lexicon has indeed been rather strongly influenced by the Sira language. This conclusion corroborates and refines Blanchon's (1988c) earlier findings.

Location: the village of Mavono, on the right bank of River Ngounié, facing the town of Fougamou.

Estimated number of speakers: 300–400. Real fluency for 50 speakers at the most.

Neighboring languages: T (same village), Sira (Fougamou) and other B40 languages.


Other: due to epidemics, rural depopulation, bilingualism, etc., Vi is nearly extinct.

Pinzi(pinzi)
(ýe-pinzi(pinzi); P hereafter; speakers: Apindji/Gapindji)

Classification: mere dialectal form of T according to Guthrie (1953:64). Jacquot (1983) and VdV (1991a), both based on more or less extensive field work, have shown P to be clearly distinct from T. The Gapindjii themselves consider their language to be very closely related to the B30 varieties Kande (below) and Himba(ka) (below).

Location: seven villages situated on the right bank River Ngounié, between Mouila and River Waka.

Estimated number of speakers: 200–300 (?).

Neighboring languages: Punu (B43) and Sira (B41) (opposite side of River Ngounié).


Other: nearly extinct minority group. Dialectal differences exist. The data examined by VdV correspond to a somewhat different variety from the one described by Jacquot (1983). The latter is slightly closer to T and this may explain why Guthrie assumed it to be a dialect of T.

Kande
(o-kande; K hereafter; speakers: Okande)

Classification: B32 (Guthrie 1953). Confirmed by more recent investigation.

Location: three villages situated on the left bank of River (Moyen-)Ogooué, between the confluence of River Boleko and River Aschouka.

Estimated number of speakers: a few dozen at the most.

Neighboring languages: B10, B20, A70 (Fang).

Other: the Okande were once a culturally significant and rather well-known ethnic group. Reliable historical documents refer to intensive trading with the Nenga of Lambaréné (B10), the Galoa (B10), the Sake and the Kota (B20). At present, they are near to extinction.

Himba(ka)

(ye-himba(ka); H hereafter; speakers: Simba or Himba)

Classification: H’s main phonological and morphological characteristics (see VdV 1991a:233–41) unambiguously show that it is to be reckoned among the B30 languages. According to the Simba themselves, H is closely related to P and K, and only slightly less to Vo and T.

Location: a limited number of villages of which three are situated in the Booué area and one in the area situated to the north of Mimongo in the Ngounié district, i.e. Massima Camp.

Estimated number of speakers: a few hundred. Complete fluency is rare.

Neighboring languages: B10, B20, A70 (Fang).

Main publication: VdV (1991a) (basic outline of phonology and morphology).

Other: nearly extinct group. Very poorly documented B30 variety.

Bongwe

((ye-)bongwe; B hereafter; speakers: Babongo)

Classification: variety considered to be a mere amalgam of various Gabonese idioms by RW (1937). VdV (1991a) has shown it to be very closely related to T.

Location: (Ngounié) districts of Sindara-Fougamou and Mimongo-Gendjambwe, south to the Apindji.

Estimated number of speakers: unknown.

Neighboring languages: unknown.


Other: dialectal B30 variety spoken by the Babongo pygmies (bongwe 1/2). Although diachronically very interesting as it corresponds in many ways to an earlier stage of T, B is the least known variety of B30. As no recent and reliable data are available for the time being, B will only incidentally be taken into account below.

1.2 B30’s internal structure

A rather accurate picture of B30’s internal organization has been obtained from VdV’s dialectometrical and lexicostatistical study (VdV 1991a:353–68). The main conclusions of this study clearly corroborate the results of the study of the phonology and the morphology of the B30 languages (see below). Fundamentally, two subgroups need to be distinguished: one being the closely united P/K/H cluster, the other being the considerably less solidly knitted ‘agglomerate’ T/Vo/Vi. The former will henceforth be referred to as Northern B30 (N-B30) and the latter as Southern B30 (S-B30). P, K and H can be regarded as three dialectal varieties of one language (cluster) but the varieties of S-B30 cannot. As shown on Map 20.1, the N-B30 varieties are not geographically close nowadays. One
must therefore conclude that this group has come to split up only quite recently. Within the group as a whole T holds a rather central position.

1.3 The group’s lexical identity

The outcome of another detailed comparative study bearing on B30’s lexical stock (VdV 1991a:368–402) allows us to define common lexical forms on different levels: group level, subgroup level, etc. Taking into account both Guthrie’s CS (Comparative Series) and data from the highest possible number of Gabonese languages, this study has also pointed out potential lexical innovations, on various levels. An adequate picture of B30’s lexical identity is now available. For reasons of conciseness, only the main results will be presented here.

One of the most important findings has turned out to be the difficulty or even the impossibility in quite a number of cases to reconstruct just one lexeme for the group as a whole. Divergences between N-B30 and S-B30 are rather numerous. Nevertheless, it has proved to be possible to set up a list of diachronically interesting lexical items.

The following lexemes are possible candidates for common-B30 lexical innovations. Not all of these items can be put forward with the same degree of certainty. Further research, taking also into account non-Gabonese languages, will allow us to restrict their number.

<table>
<thead>
<tr>
<th>Item</th>
<th>Gloss</th>
<th>Gender</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>*-bend-</td>
<td>(to) say’, (to) tell’</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>*bolongo</td>
<td>‘egg’</td>
<td>5/6</td>
<td>(borrowed from B40?)</td>
</tr>
<tr>
<td>*bumba</td>
<td>‘liver’</td>
<td>5/6</td>
<td></td>
</tr>
<tr>
<td>*buni</td>
<td>‘belly’</td>
<td>5/6</td>
<td></td>
</tr>
<tr>
<td>*deck</td>
<td>‘chin’</td>
<td>7/8</td>
<td></td>
</tr>
<tr>
<td>*dyale</td>
<td>‘seed’</td>
<td>3/4</td>
<td></td>
</tr>
<tr>
<td>*dyco</td>
<td>‘hair’, ‘fur’</td>
<td>3/4</td>
<td></td>
</tr>
<tr>
<td>*eko</td>
<td>‘bark’</td>
<td>11/10</td>
<td></td>
</tr>
<tr>
<td>*manz-</td>
<td>(to) hit’, (to) strike’</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>*nts-</td>
<td>(to) give’</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>*kondo</td>
<td>‘buttock’</td>
<td>9/10</td>
<td>(?)</td>
</tr>
<tr>
<td>*mboma</td>
<td>‘chest’</td>
<td>9/10</td>
<td></td>
</tr>
<tr>
<td>*men-</td>
<td>‘neck’</td>
<td>7/8</td>
<td>(elsewhere only B44)</td>
</tr>
<tr>
<td>*ngina</td>
<td>‘louse’</td>
<td>9/10</td>
<td></td>
</tr>
<tr>
<td>*nzima</td>
<td>‘ten’</td>
<td>9/10</td>
<td></td>
</tr>
<tr>
<td>*sayo</td>
<td>‘iron’</td>
<td>3/4</td>
<td></td>
</tr>
<tr>
<td>*sako</td>
<td>‘firewood’</td>
<td>7/8</td>
<td></td>
</tr>
<tr>
<td>*tanda</td>
<td>‘leg’</td>
<td>3/4</td>
<td></td>
</tr>
<tr>
<td>*tsba</td>
<td>‘horn’</td>
<td>9/10</td>
<td></td>
</tr>
<tr>
<td>*tsuma</td>
<td>‘knife’</td>
<td>9/10</td>
<td></td>
</tr>
<tr>
<td>*bel-</td>
<td>(to) fly’</td>
<td>–</td>
<td>(elsewhere only B42)</td>
</tr>
<tr>
<td>*bumebe-</td>
<td>(to) blow’</td>
<td>–</td>
<td>(S-B30/H/(P))</td>
</tr>
</tbody>
</table>

Other potential candidates, common on some inferior level, are:

<table>
<thead>
<tr>
<th>Item</th>
<th>Gloss</th>
<th>Gender</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>-buka</td>
<td>‘nine’</td>
<td>–</td>
<td>N-B30</td>
</tr>
<tr>
<td>-bwan-</td>
<td>(to) sit down’</td>
<td>–</td>
<td>N-B30</td>
</tr>
</tbody>
</table>
For other potential innovations and also for outstanding features (as formal properties, content or exclusive use in Gabon) concerning common-B30 words which have a corresponding reconstructed CB form, see VdV (1991a:399–400).

1.4 Relationship with other language groups

VdV (1991a) has pointed out that substantial and probably rather ancient morphological and lexical affinities exist between B30 as a whole and B10 (Myene), as well as some quite ancient but less obvious lexical affinities between B30 and certain B20 languages. (Cf. Bastin and Piron 1999.)

Lexical ties are strongest between N-B30 and B10. These links are reinforced by some morphological affinities (see Noun morphology, pp. 382–387 below). Since syntax doesn’t seem to be affected, the most probable scenario for their origin is that B30 acquired these features by borrowing during a period of intensive (trade) contact (see below).

At S-B30 level, lexical affinities are less easy to define. Altogether, this subgroup predominantly presents lexical similarities with the neighboring B40 and B50 languages. It is not always easy to determine whether the latter influenced S-B30 or vice versa. For historical and sociolinguistic reasons (e.g. B30’s fragility), it is reasonable to think that the neighboring languages have been exerting considerable pressure on this subgroup for quite a long time. (For a more detailed specification, see VdV (1991b, 1999a).)

1.5 The historical and geographical origin of the group

The available (oral) literature almost unanimously refers to the Ivindo District (situated in the northeastern part of the country) as the geographical origin of the B30-speaking ethnic groups. This may be correct, but in that case the region referred to is more probably to be regarded as a place of transit. Furthermore, most of the oral texts mention a subsequent migration into the coastal region as well as a rather long stay in this area, intensive trade contacts with members of the Myene group (B10) during that period, a return to the inner parts of the country (most probably due to the slave-trade), and
finally, social and cultural interaction with several other ethnic groups (especially B40, B50) after settling down in this central area.

Although information of this type should be treated with caution, the presently available linguistic evidence tends to confirm the oral documents. It furthermore suggests that Guthrie’s (1953) claim about lexical similarities between T and zone C are erroneous (cf. VdV 1991a:407). Instead, more or less important lexical resemblances have shown up with languages that have come from the North or the North East (zone A). According to VdV (1991a:444–51), B30 possesses a vast majority of lexical items reconstructed (by Guthrie) for the following zones: N., W., N. & C. West., NW. and CW.

1.6 Chances for survival

Most B30 languages are doomed to disappear in the near future. The splitting up of the group is nowadays being accelerated by several extralinguistic and (socio)linguistic factors, such as the uneven multilingualism, the growing pressure exerted by the surrounding groups, the loss of prestige, the gradual loss of linguistic competence, the very low birthrate, diseases, exogamy and rural depopulation.

The most seriously threatened varieties are K and Vi. T, because of its special cultural and religious prestige (see above), appears to be more resistant.

This disastrous state of affairs, however, raises important theoretical questions, especially concerning language death and the linguistic processes that accompany this worldwide phenomenon. B30 languages offer the extraordinary opportunity to observe changes while working in the field and explore simultaneously different hypotheses about the presumed relationship between language change, language acquisition and language death.

2 PHONOLOGY

This section will highlight the main phonological features encountered in B30. Both segmental and suprasegmental characteristics will be briefly discussed. Emphasis will be placed on common features, but specific diverging features will also be pointed out. The B variety will only occasionally be taken into account.

2.1 Segmental phonology

2.1.1 Phoneme inventories

2.1.1.1 Vowel systems

All B30 languages have a seven-vowel system in which length and nasalization do not play a distinctive role:

<table>
<thead>
<tr>
<th>Anterior</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
</tr>
<tr>
<td>Mid-high</td>
<td>e</td>
</tr>
<tr>
<td>Mid-low</td>
<td>e</td>
</tr>
<tr>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>
It should be noted that the mid-high vowels of Vo are realized as particularly close ([ε]) and ([o]) respectively. Vowels in root position are significantly longer than in any other position. See VdV (1987, 1991a) for these features.

In this language, especially in rapid speech, vowels in word-final position undergo several phonological processes:

(a) Final non-high vowels will be realized with a centralized quality in isolation (V₂##). The low vowel will also be centralized preceding consonant-initial words (a₂#C). For example, /mùgò/ ‘neck’ gives [mùgò] in isolation or in front of a consonant, and /tsèy/ ‘mandrill’ is realized [tsèy] in isolation.

(b) Final non-low vowels become phonetic glides (i, e, e → y and u, o, o → w) when they precede vowel-initial words (V₂#V). For example, /póyò/ ‘the (specific) rat’ gives [póywò].

(c) The final low vowel drops when it precedes vowel-initial words (a₂#V). For example, /mùgò/ ‘the (specific) neck’ is realized [mùgò].

(d) The intermediate degree vowels (mid-high and mid-low) become phonetically high when followed by a consonant (V₂#C). For example, /nzùbìn/ ‘these panthers over there’ is very frequently realized as [nzúbìn].

Moreover:

(a) All final vowels tend to become devoiced. This regressive devoicing process may also affect the preceding voiced consonants, as is shown in [èbèy] ‘word’.

(b) In prefixal position the anterior mid-high vowel is always realized as a central vowel ([ə]). For example, [vəbə́] for /bə́/ ‘Gevove (language)’.

These processes considerably reduce the phonetic word-final vowel inventory. Instead of seven distinct vowel qualities, often only three qualities are found, i.e. [i], [u] and [ə]. This change is presently taking place at the phonetic level in Vo, whereas in non-B30 languages like B52 a very similar process has already brought about important structural changes (cf. Blanchon 1987:33, VdV 1991b:68). See VdV (1987, 1991b) for a more detailed account.

2.1.1.2 Consonant systems

The B30 consonant systems have in common the following structural features and characteristics:

- a high degree of resemblance;
- very regular synchronic correspondences;
- the presence of two prenasalized series (plosives and fricatives);
- the very marginal status of the phonemes /w/, /l/ (Vi only) /l/ (Vi and N-B30) and /mf/ (Vi and K) or the absence of these segments of which /r, f, m/ cannot be reconstructed at the proto-B30 level;
- the absence of a velar nasal phoneme and a velar plosive phoneme.

It should be noticed that in all languages the μ̂/ pheme is realized as a prenasalized affricate [μ̂dz]. The voiced plosives are all realized as implosives. T has the least complex system (18 segments), and Vi the most complex one (23 segments). For that reason, the latter will be given here for reference. The other systems will be succinctly compared to it.
In Vi the /w/ phoneme is realized [q] in front of high front vowels. The coronal nasal has a strong tendency to palatalize before /i/. Vi is the only language that has a /r/ phoneme, most probably obtained by borrowing from neighboring B40 languages.

T doesn’t have the following phonemes: /dy/ (having merged with /y/; earlier varieties of T however possessed this phoneme, cf. RW 1950), /f/, /mf/, /l/ and /r/. B has /l/ and /dy/ where T has Ø and /y/ respectively. Furthermore, it has Ø where all the other varieties have /y/. Vo doesn’t have /y/, /dy/, /l/ and /r/. In this language, the /w/ phoneme is realized [q] in front of high front vowels, as in Vi and in H (infra).

P, K and H (N-B30) have very similar systems. All of them have a marginal /i/ phoneme. None of them have a /r/ phoneme. The only difference between P and H is that H has /y/ instead of /i/. In both varieties the coronal nasal is not found in the C2 and C3 positions before /i/. K is the only variety of these three that has a (very marginal) /mғ/ phoneme. Its /ts/ phoneme is realized as a post-aveolar affricate [tʃ] and its /w/ phoneme as [q] before high front vowels.

A detailed study of regular sound correspondences (VdV 1991a:259–85) leads to positing the following common-B30 vowel and consonant systems:


The *g is highly hypothetical. Its existence has been assumed in order to account for certain specific sound correspondences (see VdV 1991b:284–5). Evidence from Janssens (1991) has nevertheless pointed out that these correspondences can best be interpreted as the result of morphological alternations of which the conditioning environments have become opaque (see also p. 381).

### 2.1.2 Syllable types

No closed syllables are found. Prenasalized consonants having been interpreted as units, it can be stated that the only possible syllable types, occurring in all seven languages, are (C)V and (C)AV (where A = approximant).
2.2 Suprasegmental phonology

2.2.1 Vowel harmony in B30

All languages examined in VdV (1991a) possess a (progressive) vowel harmony system (within the noun stem or the verb stem) which has as its main feature the mutual exclusiveness of the second and third degree of vowel height. This can be shown from the following data:

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>T</th>
<th>Vi</th>
<th>Vo</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘skin’</td>
<td>/mʊɣɔba/</td>
<td>/mʊɣɔba/</td>
<td>/mʊɣɔba/</td>
<td>/mʊɣɔba/</td>
</tr>
<tr>
<td>‘woman’</td>
<td>–</td>
<td>/mʊɣ̪ɪtɔ/</td>
<td>/mʊɣ̪ɪtɔ/</td>
<td>/mʊɣ̪ɪtɔ/</td>
</tr>
<tr>
<td>‘husband’</td>
<td>/mʊnɔmɛ/</td>
<td>/mʊmɛ/</td>
<td>/mʊmɛ/</td>
<td>/mʊmɛ/</td>
</tr>
<tr>
<td>‘buttock’</td>
<td>/kɔndɔ/</td>
<td>/kɔndɔ/</td>
<td>/kɔndɔ/</td>
<td>–</td>
</tr>
</tbody>
</table>

Some differences exist, however. T and N-B30 (at least P and H) share an important feature: they are less restrictive than Vo and Vi, which possess additional constraints. These constraints may schematically be described as the incompatibility between high or low vowels (in root position) and mid-low vowels (in non-root position). The following items exemplify these differences.

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>T</th>
<th>Vi</th>
<th>Vo</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘eye’</td>
<td>/ɪtsɔ/</td>
<td>/ɪsɔ/</td>
<td>/ɪsɔ/</td>
<td>/ɪsɔ/</td>
</tr>
<tr>
<td>‘tooth’</td>
<td>/ɪŋɔ/</td>
<td>/ɪnɔ/</td>
<td>/ɪnɔ/</td>
<td>/ɪnɔ/</td>
</tr>
<tr>
<td>‘sand’</td>
<td>/mɔsɪyɛ/</td>
<td>/mɔsɪyɛ/</td>
<td>–</td>
<td>/mʊsɪyɛ/</td>
</tr>
</tbody>
</table>

2.2.2 Tone systems

T, Vo and Vi have in common a tone system with four underlying melodies for the nouns (i.e. H, L, HL and LH) and two for the verbs (i.e. H and L). Tonal correspondences are about regular. No reliable tonal data are available for N-B30 so far.

<table>
<thead>
<tr>
<th></th>
<th>T/Vi/Vo</th>
<th>Gloss</th>
<th>T/Vi/Vo</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>/tsɔsɔ/</td>
<td>‘chicken’</td>
<td>H</td>
<td>/bɛnd-/ ‘say’</td>
</tr>
<tr>
<td>L</td>
<td>/tɔbɔ/</td>
<td>‘goat’</td>
<td>L</td>
<td>/dʊt-/ ‘draw’</td>
</tr>
<tr>
<td>HL</td>
<td>/mʊ-tɛmɛ/</td>
<td>‘heart’</td>
<td>LH</td>
<td>/mʊ-bɔŋɔ/</td>
</tr>
</tbody>
</table>

Within S-B30, two basic types of tone systems can be distinguished: one characterized by the absence of tone spreading and the other by the presence of such a parameter.

Tones don’t spread in Vo. Some simple (mostly vertical) assimilation rules suffice to account for its system. For example, /γwɔtɔ dʊ ŷ wɔbɔŋɔ/ ‘fingernails of the Pygmies’ will be realized [γwɔtɔdʊ wɔbɔŋɔ] in rapid speech. These processes are the result of the particular weakness of the final syllable (above).

The absence of the LH pattern in monosyllabic stems should be noticed. The noun prefixes are all underlyingly L. Word games have shown that the stem is the domain of tone, not the syllable. Downdrift occurs in HLH sequences: the second H is phonetically lower than the first. It also appears in a series of L-tones.

One other interesting feature is neutralization that results in lowering in utterance-final position. The only tone that can occur in this position is a low (falling) tone. See example above.
Rightward Tone Spreading occurs in T and Vi. In T they spread freely within a certain number of well-defined domains. For a detailed but tentative description, see Marchal-Nasse (1979).

As far as Vi is concerned, it is not the syllable but the phonological word that has proved to be the domain of tone. Tones associate in a one-to-one fashion, from left to right, after which spreading may occur. This process is entirely conditioned by the nature of the underlying tone situated immediately to the right. If the following structural tone is low or if the subsequent morpheme is tonally unspecified, spreading takes place. If an H-tone follows, the tone(s) remain linked to their initial skeletal position.

Moving tones undergo automatic delinking if a major pause, a tonally unspecified segment or a structural L-tone precedes them. Only the final reassociation link will be maintained. This results in tone lowering on the surface. No delinking will occur if an H-tone precedes. In the latter case, a plateau of H-tones will appear, as shown in the following example:

\[ \text{tòmà àmòkwe lòme mo βe γe} \]

Spreading ceases when the moving tone reaches an H-tone (cf. the preceding example: spreading of first H-tone). Besides, a tone on the move will never go beyond the root vowel of the following lexeme (cf. preceding example: spreading of second H-tone) or cross a second word boundary. For example, \( \text{tòmà àmòkwe lòme mo βe γe} \) ‘he sends a servant to the widow’.

Vi avoids contour tones and downstep. Only one tone at a time can be associated with a skeletal position. If for some reason this Well-formedness Condition is violated, a repair strategy will apply. It won’t, however, apply in utterance-penultimate position, which is the only (prosodically marked) position where a falling HL-tone may appear. For example, \( \text{nà ànyàmòpêkà àmòkwe lòme mo βe γe} \) ‘I’ll send him’ (\( \text{e-pêka} \) L ‘to seize’, H-tone originating from the Object Marker).

In order to explain a certain number of Vi’s tonal phenomena, the existence of floating tones has been claimed. Their behavior is governed by specific constraints which will not be commented on here, owing to limitations of space.

For more detailed descriptions concerning T, Vo and Vi, see VdV (1991a, 1992 and 1999a/b).

### 2.3 Some diachronic aspects

Only a few remarks on reflexes and sound changes can be made here. For a detailed discussion of especially the main hypotheses proposed to account for the ‘multiple reflexes dilemma’, i.e. the fortis/lenis hypothesis and the derivation hypothesis, see VdV (1991a), Stewart (1989), Van Leynseele and Stewart (1980) and Janssens (1991). The group as a whole has double or sometimes even triple (apparently) non-conditioned reflexes for \( *p, *c, *k, *d, \) and \( *g \).
B30 vowel reflexes are extremely conservative. In the large majority of cases the B30 vowels match perfectly with the ones found in the CB reconstructed forms. The two subgroups can also be distinguished by means of the following diachronic features:

**N-B30**

- double reflexes for *g in C₂ position and triple reflexes for *d (in particular the n reflex).
- the sound ‘change’ *d > d/ ___ *i.
- the change *e > ts/no- ___ (noun class 11 marker).
- isolated cases of consonant alternations, stem-initially, for the 5/6 pairing, with, in parallel, a tendency towards reanalysis by analogy.

**S-B30**

- the absence of double reflexes for *g in C₂ position.
- triple reflexes for *d (the most interesting features being the non-segmental reflex Ø and the absence of the n reflex).

The T/B/P/H cluster shares the conditioned sound change *n > Ø/ ___ *i

### 3 NOUN MORPHOLOGY

This second main section will sketch a brief outline of the most important facts the study of B30 noun morphology has revealed so far.

Noun stems in B30 are predominantly bisyllabic. Although less common, plurisyllabic stems are well represented too. Most of them have either three or four syllables, e.g. (Vi) ye-seta + miso B + HB ‘dizziness’. Monosyllabic stems are rare, e.g. (Vo) mu-ja L ‘mouth’, (P) e-fa ‘dog’.

A considerable set of reduplicated stems exists in S-B30, most of which are reduplicated bisyllabic stems, e.g. (Vi) pedi + vedi HB + HB ‘lightning’. Semantically, reduplication often denotes intensiveness, large size or repetition, e.g. (Vi) ye-yeta + yeta HB + HB ‘a real woman’ (from mo-yeta HB ‘woman’).

Other frequent morphologically complex nouns are either compounds (having generally a V + N or N₁ + N₂ structure) or associative structures (N₁ + Associative Marker + N₂). Cf. ye-seta + miso (above), which has a V + N structure.

An important number of noun stems have been derived from verbs. They often bear a derivational suffix. Some of these suffixes are still highly productive (cf. the very common agentive suffixe /-ì/).

#### 3.1 Noun class markers

The following table (table 20.1) presents the B30 noun class markers (NCM). In most cases, two allomorphs exist for each marker, one occurring before consonant-initial stems and the other before vowel-initial stems. A few cases of (apparently) free variation have been recorded. All markers are underlingly L, at least in S-B30.

Some of the NCM have played or still play a role in derivation. (For more details, see VdV 1999a:20–7 on Vi’s noun morphology.)
The following features deserve special attention:

(a) The group as a whole shares some specific features:

- the absence of noun class (NC) 15, rather frequent in surrounding languages.

All B30 varieties however, preserve one or two traces of this NC: eg. T/Vi/Vo

---

**TABLE 20.1: B30 NOUN CLASS MARKERS**

<table>
<thead>
<tr>
<th>cl.</th>
<th>T</th>
<th>Vo</th>
<th>Vi</th>
<th>P</th>
<th>K</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mo-/</td>
<td>mu-/</td>
<td>mo-/</td>
<td>mo-/</td>
<td>mo-/</td>
<td>mo-/</td>
</tr>
<tr>
<td>2</td>
<td>wa-/</td>
<td>wa-/</td>
<td>wa-/</td>
<td>a-</td>
<td>a-</td>
<td>a-</td>
</tr>
<tr>
<td>3</td>
<td>mo-/</td>
<td>mo-/</td>
<td>mo-/</td>
<td>mo-/</td>
<td>mo-/</td>
<td>mo-/</td>
</tr>
<tr>
<td>3a</td>
<td>mi-/</td>
<td>mi-/</td>
<td>mi-/</td>
<td>mi-/</td>
<td>mi-/</td>
<td>mi-/</td>
</tr>
<tr>
<td>4</td>
<td>my-/</td>
<td>my-/</td>
<td>my-/</td>
<td>my-/</td>
<td>mim</td>
<td>mim</td>
</tr>
<tr>
<td>5</td>
<td>e/-</td>
<td>e/-</td>
<td>e/-</td>
<td>n-</td>
<td>i-</td>
<td>i-</td>
</tr>
<tr>
<td>6</td>
<td>ma-/</td>
<td>ma-/</td>
<td>ma-/</td>
<td>ma-/</td>
<td>ma-/</td>
<td>ma-/</td>
</tr>
<tr>
<td>7</td>
<td>ye-/s-</td>
<td>ye-/s-</td>
<td>ye-/s-</td>
<td>ye-/s-</td>
<td>ye-/s-</td>
<td>ye-/s-</td>
</tr>
<tr>
<td>7a</td>
<td>ye-/</td>
<td>ye-/</td>
<td>ye-/</td>
<td>ye-/</td>
<td>ye-/</td>
<td>ye-/</td>
</tr>
<tr>
<td>8</td>
<td>e/-</td>
<td>e/-</td>
<td>e/-</td>
<td>e/-</td>
<td>e/-</td>
<td>e/-</td>
</tr>
<tr>
<td>9</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
</tr>
<tr>
<td>9a</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
</tr>
<tr>
<td>10</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
</tr>
<tr>
<td>10a</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
<td>(N)-</td>
</tr>
<tr>
<td>11</td>
<td>o/-</td>
<td>o/-</td>
<td>o/-</td>
<td>o/-</td>
<td>o/-</td>
<td>o/-</td>
</tr>
<tr>
<td>12</td>
<td>w-,</td>
<td>w-,</td>
<td>w-,</td>
<td>w-,</td>
<td>w-,</td>
<td>w-,</td>
</tr>
<tr>
<td>13</td>
<td>tw-</td>
<td>tw-</td>
<td>tw-</td>
<td>tw-</td>
<td>tw-</td>
<td>tw-</td>
</tr>
<tr>
<td>14</td>
<td>bo-/</td>
<td>bo-/</td>
<td>bo-/</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>15</td>
<td>bw-</td>
<td>bw-</td>
<td>bw-</td>
<td>bw-</td>
<td>bw-</td>
<td>bw-</td>
</tr>
<tr>
<td>16</td>
<td>βa-</td>
<td>βa-</td>
<td>βa-</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>17</td>
<td>yow-/</td>
<td>yow-/</td>
<td>yow-/</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>18</td>
<td>fiw-</td>
<td>fiw-</td>
<td>fiw-</td>
<td>fiw-</td>
<td>fiw-</td>
<td>fiw-</td>
</tr>
<tr>
<td>19</td>
<td>ββ-</td>
<td>ββ-</td>
<td>ββ-</td>
<td>ββ-</td>
<td>ββ-</td>
<td>ββ-</td>
</tr>
</tbody>
</table>

Note: Distribution of allomorphs (separated by a slash): the first form appears before consonant-initial stems, the other(s) before vowel-initial stems. The nasal consonant of classes 9, 10 and 10a (as well as perhaps the P/K/H cluster's class 11), put in brackets, doesn't synchronically belong to the prefix but to the stem. All markers are underlyingly L.
o-gγγ/μ-γγ (11/6 +), P o-gγγ/mi-γγ (3a/4), K r-γγ/mam-γγ (5/6) and H o-gγγ/m-γγ (3a/6 +) ‘arm’; T/Vi/Vo o-γγ/odo/m-odo (11/6 +) ‘foot’. The plural forms (except the one of P) show that both items have a vowel-initial stem, i.e. respectively -γγ and -odo. These lexemes have undergone one or more class changes.

- the existence of a NC 10a (plural) (except for Vo), also found in B10.
- the e- shape of NCM 8 (opposed to θ- or y- in B10, bi- or be- in B20 and bi- in B40 and B50).

(b) The northern subgroup differs from S-B30 by the following features:

- the existence of a distinct NC 3a and of some (isolated) cases of consonant alternations (stem-initially).
- the absence of the traditional NCs 9 and 10 (replaced by classes 9a and 10a), well represented in S-B30.
- the shape of NCM 9a and 11: e(N)- and no(N)- respectively.
- the ((C)VC(G)-) shape NCM take when they precede vowel-initial stems. Having a more elaborated structure than the more traditional NCM found in S-B30, this shape most probably results from the addition of an augment to the NCM. In this respect, VdV (1991a:344) demonstrates that B10 shares this particular structural feature and has argued that N-B30 may even reflect an anterior stage of what is found in the languages of this group where the augment still seems to be partly functional.
- the absence (or extreme rarity) of NC 14. This NC may have undergone morphological reanalysis. It may also be that this NC initially did not occur in B30 at all and that S-B30 has acquired it by borrowing from surrounding languages where it appears to be rather common.

(c) As far as NC 5 is concerned, some kind of free variation exists in T, Vo and Vi (e- ~ θ-).

The zero prefix seems to be the generally preferred allomorph, especially before vowel-initial stems. Only Vo and Vi have a (rare) NC 5a (plural: 6), borrowed from surrounding B40 or B50 languages.

### 3.2 Noun class pairings

Table 20.2 shows the main B30 noun class pairings (NCP) as well as their occurrence in the individual languages.

**TABLE 20.2: B30 NOUN CLASS PAIRINGS**

<table>
<thead>
<tr>
<th>Class</th>
<th>T</th>
<th>Vo</th>
<th>Vi</th>
<th>P</th>
<th>K</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3/4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>3a/4</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5/6</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5a/6(a)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>7/8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>7a/8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>9/10</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>11/10</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>11/10a</td>
<td>✓</td>
<td>?</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>11/6</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>19/13</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
<td>–</td>
<td>?</td>
</tr>
</tbody>
</table>

*Note: A tick indicates that the pairing in question exists. A dash indicates its absence.*
The following important features can be isolated:

(a) For the group as a whole (B included), the NCP 19/13 and 11/10a (except for Vo!). The former still functions as a diminutive marker in most B30 languages, but its productivity is rather low and not always semantically transparent. In Gabon, this gender is only found in some of the B20 languages (Seki, Kele, Ngom and perhaps also Sake).

The astonishing 11/10a gender, which has almost completely replaced the more traditional 11/10 pairing, could possibly be a B30 innovation, but as VdV (1991a:341-2) has shown, it also exists in B10 where it has erroneously been interpreted as a (highly unusual) 11/19 pairing (cf. Guthrie 1953 and Jacquot 1983). Its origin, however, remains obscure.

(b) N-B30 differs from S-B30 by a 3a/4 pairing, the absence of genders 11/10 and 11/6 (still sporadically found in S-B30).

The items belonging to the (not very frequent) NCP 3a/4 correspond in S-B30 to items that predominantly occur as part of 11/10a (or 11/10, see below). NCM 3a (N-B30) and 11 (S-B30) are homophones. Considering its rather uncommon nature, the preceding statements and the strong lexical links with B10, borrowing from this group is the most plausible hypothesis concerning its origin (VdV 1991a:342–3).

The gender 11/10a is found instead of 11/10. The latter occasionally occurs in S-B30 (T, Vi), but the lexical items that belong to it are increasingly used with the 11/10a pairing. (Cf. (Vi) ‘hair’ can be isôyê or tsôyê (the latter form being judged to be more archaic).)

3.3 Noun modifiers

The noun modifiers presented here mainly concern S-B30. In some cases, however, data are available for P and allow a broader comparison. It should be noticed that whereas in S-B30 all modifiers generally follow the head of the NP, P makes some of them precede it (see below).

Although not shown here, some qualifiers have been found in T and Vi. Their number, however, does not exceed three or four. The same is true for P.

3.3.1 Demonstrative markers

Two types of demonstratives occur in S-B30: a close demonstrative and a distant one. In Vi, and probably also elsewhere, prosodic features add a third degree (i.e. extremely distant). The close demonstrative systematically has the rather curious structure: concord marker + /-V-+/ concord marker, e.g. (Vo) yébôò yéyô ‘this old man over here’. (In T, its central part corresponds to the weak demonstrative (see below).) The distant demonstrative is /-nê/ (/-nê/ for Vi), e.g. (Vo) wâyêtô dyôksô wâné ‘all these women over there’. The latter also exists in P.

In N-B30 the structure of the near demonstrative, however, is far less complex than in S-B30 and corresponds often to nothing else than the (appropriate) concord marker, as mostly is the case in the surrounding B10 and B20 languages.

3.3.2 Referential marker (or weak demonstrative)

S-B30 has the rather common marker /-ê/ (see the Vo example in §2.1.1 Vowels systems). A different form has been found for P, which is the only language that places this
marker before the head it determines, e.g. à˘gátómídyá àsè à mwánà ‘he’ll make us send the child’.

3.3.3 Associative marker (AM)

All S-B30 languages (including B!) as well as P, have the (for Gabon) more conservative form /-à/. Many surrounding languages have /-θ/. The concord markers, which precede the AM, are underlyingly H, except for classes 1 and 9 (S-B30).

3.3.4 Possessive determiners

Table 20.3 presents the Possessive Determiners found in S-B30 and in P. No clear tendencies emerge from these data. T shares features with Vo and Vi on the one hand, but on the other also with P. T’s forms (and to a lesser extent the ones that occur in P) look very similar to those described for B11a (i.e. -ami, -s, -é, -azo, -ani, -ao).

3.3.5 Indefinite determiners (ID)

S-B30 Indefinite determiners (table 20.4) all follow the head of the NP. In case the noun is followed by the Referential or by a Demonstrative, the ID follow this modifier. Examples: for ‘all’, see the example given in §3.3.1 above. ‘Only’/‘self’: (Vi) nà dyò mé mwéné gó mbókà ‘I go to the village myself’. ‘Other’: (Vo) yèmòny yècé yèngé ‘this other lemon’.

### TABLE 20.3: POSSESSIVE DETERMINERS

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>Vo</th>
<th>Vi</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>sg. 1</td>
<td>-âmi</td>
<td>-âmé</td>
<td>-âmé</td>
<td>-ayí</td>
</tr>
<tr>
<td>2</td>
<td>-á</td>
<td>-â</td>
<td>-â</td>
<td>?</td>
</tr>
<tr>
<td>3</td>
<td>-àdi</td>
<td>-àdi</td>
<td>-drí</td>
<td>-aggo</td>
</tr>
<tr>
<td>pl 1</td>
<td>-âsó</td>
<td>-âtô</td>
<td>-âtô</td>
<td>-aso</td>
</tr>
<tr>
<td>2</td>
<td>-atô</td>
<td>-ânó</td>
<td>-ânú</td>
<td>-apo</td>
</tr>
<tr>
<td>3</td>
<td>-âô</td>
<td>-âa</td>
<td>-âo</td>
<td>-aggo</td>
</tr>
</tbody>
</table>

### TABLE 20.4: INDEFINITE DETERMINERS

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>Vo</th>
<th>Vi</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘all’</td>
<td>-âtsó</td>
<td>-âtsó</td>
<td>-âtsó</td>
</tr>
<tr>
<td>‘only’</td>
<td>-énté</td>
<td>-énté</td>
<td>-énté</td>
</tr>
<tr>
<td>‘self’</td>
<td>-énté</td>
<td>-énté</td>
<td>-énté</td>
</tr>
<tr>
<td>‘other’</td>
<td>-énté</td>
<td>-énté</td>
<td>-énté</td>
</tr>
</tbody>
</table>

3.3.6 Some interrogative markers (table 20.5)

### TABLE 20.5: SOME INTERROGATIVE MARKERS

<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>Vo</th>
<th>Vi</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘who’</td>
<td>ndá</td>
<td>(ônjá</td>
<td>ndá</td>
<td>ndýndé</td>
</tr>
<tr>
<td>‘what’</td>
<td>ndé</td>
<td>7/gâá</td>
<td>ndé</td>
<td>yé</td>
</tr>
<tr>
<td>‘where’</td>
<td>yôní</td>
<td>yôó</td>
<td>yô yé</td>
<td>?</td>
</tr>
<tr>
<td>‘why’</td>
<td>yôndé</td>
<td>nàá</td>
<td>yé ndé</td>
<td>?</td>
</tr>
<tr>
<td>‘how many’</td>
<td>-ké</td>
<td>-ké</td>
<td>-ké</td>
<td>?</td>
</tr>
</tbody>
</table>
3.3.7 (Cardinal) numeral determiners (table 20.6)

<table>
<thead>
<tr>
<th>Table 20.6: Numeral Determiners</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T</strong></td>
</tr>
<tr>
<td>‘one’</td>
</tr>
<tr>
<td>‘two’</td>
</tr>
<tr>
<td>‘three’</td>
</tr>
<tr>
<td>‘four’</td>
</tr>
<tr>
<td>‘five’</td>
</tr>
<tr>
<td>‘six’</td>
</tr>
<tr>
<td>‘seven’</td>
</tr>
<tr>
<td>‘eight’</td>
</tr>
<tr>
<td>‘nine’</td>
</tr>
<tr>
<td>‘ten’</td>
</tr>
<tr>
<td>‘hundred’</td>
</tr>
</tbody>
</table>

4 VERB MORPHOLOGY

Only the main lines of B30 verb morphology have been studied so far. This section will present in a systematic way the most important facts that have emerged.

The syllable structure of the verb stem and more generally of the verbal constituent obviously depends on the morphological complexity. The verb has the following overall morphological structure in (S-)B30:

```
Subject Marker (Negation M.) Tense/Aspect M. (Object M. if any) Verb Stem.
```

(E.g. (Vi) tó sá + ngá + mó + tómá yó pindí ‘we will not send him into the forest’. For more examples, see §4.3 below.) The verb stem is typically composed of a root, one or more extensions, and a final vowel. With rarely more than four syllables, it is the domain of Vowel Harmony processes that have been extensively described in VdV (1991a:Part I). (See §2 on Phonology.) One specific constraint concerns the final -a suffix: immediately following a mid-low back vowel in root position, this suffix fully harmonizes, e.g. (Vi) /é-sómmb-á/ ‘borrow’ becomes [ésómmb]. This constraint also applies to some extensions.

The canonical morphological structure of the root is -(A)VC-. It may also be less complex: -VC-, -(A)VC- or even -V-, -(C)A-. For the extensions, the most common shapes are -VC- and -V-.

Infinitives bear the NC 5 marker in S-B30 (though - in Vo) and the NC 3 marker in N-B30. Examples: /é-támmbá/ ‘burn (tr.)’ (Vi) (cf/támmbáká/(Vo)) vs. /mo-ýéndáyá/ ‘go’ (P).

4.1 Subject marking

All examined languages have both Subject Markers (SM) and Subject Pronouns (SP). The latter function as strong forms in independent clauses. Only the SM are part of the verb’s morphology.
4.1.1 Subject markers

SM are attached to the verb as prefixes. For Vi however, VdV (1999b) has seriously questioned this prefixal status. Vi’s SM tonally behave as proclitics!

Table 20.7 only presents the SM that formally differ from the corresponding NCM. Tone is underlyingly high except for classes 1 and 9 and for first and second person markers.

P’s forms have been taken from Jacquot (1983), but match my data. Should also be noticed the class 5 SM: ni-. No data are available for classes 3, 3a, 4, 7, 8 and 10a.

A homogeneous picture arises here. The nà- marker (1st p. sing.) certainly is the most interesting form, for it doesn’t occur anywhere else in Gabon. Vo has mé-, a form most probably borrowed from B52 which has mè-, just as many other neighboring languages. Altogether, the SM present similarities with markers found in at least some of the B40 languages.

4.1.2 Subject pronouns

In independent clauses, the SP generally precede the SM, e.g. (Vi) mè(ní). tsás̀̀ndákà ‘me, I never practice witchcraft’. In relative clauses, they immediately follow the verb, e.g. (Vi) à bàngì moyètì à singikì mènì ‘he has killed the woman I loved’. T and P share the highest number of forms. Vo and Vi also have several forms in common. Of these two, Vo diverges most from T and P (table 20.8).

4.1.3 Reflexive marker

T and Vi have -á/- (tone uncertain for T), not found in Vo so far, e.g. (Vi) à màgbàngà ‘he has killed himself (recently)’.

### Table 20.7: Subject Markers that Formally Differ from the Corresponding Noun Class Markers

<table>
<thead>
<tr>
<th>Class</th>
<th>T</th>
<th>Vo</th>
<th>Vi</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 p.sing.</td>
<td>nà-</td>
<td>mé-</td>
<td>ná</td>
<td>na-</td>
</tr>
<tr>
<td>1 p.plur.</td>
<td>tò-</td>
<td>tù-</td>
<td>tò</td>
<td>to-</td>
</tr>
<tr>
<td>2 p.sing.</td>
<td>o-</td>
<td>o-</td>
<td>o-</td>
<td>o-</td>
</tr>
<tr>
<td>2 p.plur.</td>
<td>nó-</td>
<td>nà-</td>
<td>nò</td>
<td>no-</td>
</tr>
<tr>
<td>3 p./cl.1</td>
<td>à-</td>
<td>à-</td>
<td>à</td>
<td>a-</td>
</tr>
<tr>
<td>3 p./cl.2</td>
<td>à-</td>
<td>wà-</td>
<td>wà</td>
<td>wa-</td>
</tr>
<tr>
<td>-/cl.9</td>
<td>é-</td>
<td>é-</td>
<td>è</td>
<td>è-</td>
</tr>
<tr>
<td>-/cl.10</td>
<td>dì-</td>
<td>dì-</td>
<td>dì</td>
<td>–</td>
</tr>
</tbody>
</table>

### Table 20.8: Subject Pronouns

<table>
<thead>
<tr>
<th>Class</th>
<th>T</th>
<th>Vo</th>
<th>Vi</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>sg. 1</td>
<td>mè</td>
<td>mé(ní)</td>
<td>mè(ní)</td>
<td>imè</td>
</tr>
<tr>
<td>2</td>
<td>èwè</td>
<td>èwè(ní)</td>
<td>èwè</td>
<td>èwè</td>
</tr>
<tr>
<td>3</td>
<td>àggò</td>
<td>édì</td>
<td>èndà</td>
<td>àggò</td>
</tr>
<tr>
<td>pl. 1</td>
<td>wè</td>
<td>itù</td>
<td>itó</td>
<td>àùè</td>
</tr>
<tr>
<td>2</td>
<td>àngè</td>
<td>inà</td>
<td>inò</td>
<td>àngè</td>
</tr>
<tr>
<td>3</td>
<td>àggò</td>
<td>wà</td>
<td>(è)àò</td>
<td>àggò</td>
</tr>
</tbody>
</table>
4.2 Object marking

At least two out of the four languages examined so far have two formally distinct series: (infixed) Object Markers (OM) and (independent) Object Pronouns (OP). They are found in T, Vi, and also in some dialects of P (cf. Jacquot 1983). Only the OM are part of the verb’s morphology. Vo and other dialects of P possess only one series.

4.2.1 Object markers

The (infixed) OM are placed between the predicative marker (below) and the verb stem, e.g. (Vi) nà mèmàtòmà ‘I’ve just sent him’. Table 20.9 only presents the OM that are not identical to the corresponding NCM. T and Vi have many identical forms.

4.2.2 Object pronouns

(Independent) OP either precede or follow the verb, e.g. (Vo) mèkàdèvàù na mwènè ‘I alone am working’, mèni, mèkàtimè yiñàkà ‘Me, I like dancing’. They are formally identical with the SP presented above (table 20.8), e.g. (P (no-OM varieties)) àngàòòìàvà ąsè ą mwàñà ‘he’ll make us send the child’. Specific markers have been found for classes 3 to 19, i.e. -sò (T), -s (Concord Marker)-óó (Vo) and - ét (Vi), e.g. (T) nènà yèsmùbí, nàbòògò sùngò yà pìndì ‘I see a basket. I take it into the forest’.

OP adopt the same order as noun phrases in complement position (dative-accusative), e.g. (Vo) àkàbìkì mènì gòvò ‘he gave it (the lemon) to me’.

4.3 Predicative markers (PM)

Table 20.10 shows the main Tense/Aspect Markers and also some Negation Markers. A blank square points out that no particular PM has been encountered. All the examples that follow except one have been taken from Vi: (e-pèka L ‘to seize’, e-puma H ‘to go out’) nà mèmòpèkà ‘I’ve just seized him’, nà mòpèkà ‘I sent him (recently)’, nà mèmòpèkà ‘I’ve sent him (a long time ago)’, nà mèmòpèkà ‘I’ll send him’, tò kàpèkàmà ‘we’ll seize each other (once, in the future)’, nà kàpèmà yò òbwà ‘I’m going out into the courtyard’, nà yèmòpèkà ‘I seize him once more’, tòmòpèkà ‘I don’t seize him’ (NB t 1st p sg is an allomorph of na), tòmòpèkà ‘I didn’t seize him (recently)’. (Vo) mèmìbòmà wè ‘I’m going to beat you (now)’.

In spite of several differences and uncertainties, a common stock emerges. The latter comprises among others the future tense marker -ngà- and the negation markers -sá- and -sì-. The FTM has not been found in any other Gabonese languages. T and Vi share the

4.3.1 Tense and aspect markers

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Table 20.9: Object markers that formally differ from the corresponding noun class markers

<table>
<thead>
<tr>
<th>Person</th>
<th>T</th>
<th>Vi</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 p. sing.</td>
<td>-má-</td>
<td>-nì-</td>
</tr>
<tr>
<td>1 p. plur.</td>
<td>-óó-</td>
<td>-ító-</td>
</tr>
<tr>
<td>2 p. sing.</td>
<td>-yó-</td>
<td>-yó-</td>
</tr>
<tr>
<td>2 p. plur.</td>
<td>-mó-</td>
<td>-mó-</td>
</tr>
<tr>
<td>-cl.3</td>
<td>-dì-</td>
<td>-dì-</td>
</tr>
<tr>
<td>-cl.9</td>
<td>-mì-</td>
<td>-è-</td>
</tr>
<tr>
<td>-cl.10</td>
<td>-dì-</td>
<td>-dì-</td>
</tr>
</tbody>
</table>
largest number of forms. Vo often uses periphrastic constructions to express the tense/aspect values examined here.

A broad comparison, taking into account the PM found in neighboring languages, has revealed some similarities between S-B30 and B40/B50. It should be kept in mind, though, that these domains are still to be studied much more extensively. Very few resemblances with B10’s PM have come up so far.

4.4 Verbal extensions

Compared to the verbal extensions found in the other neighbouring languages, the following suffixes have shown to be the most productive in T, Vi and Vo. (Insufficient data available for N-B30.)

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ed(y)</td>
<td>CAUS</td>
</tr>
<tr>
<td>-e</td>
<td>APPLIC</td>
</tr>
<tr>
<td>-an</td>
<td>RECIPR</td>
</tr>
<tr>
<td>-am</td>
<td>STAT</td>
</tr>
<tr>
<td>-ak</td>
<td>HAB</td>
</tr>
<tr>
<td>-oγ'-arγ'</td>
<td>INTRANS</td>
</tr>
<tr>
<td>-o/-u</td>
<td>TRANS</td>
</tr>
</tbody>
</table>

The extensions can be exemplified by data from Vi: ná mótōmēdā ‘I make him send’ (e-toma H ‘to send’), ná mótōmēdā ‘I send on his behalf’, wá pēkāgā ‘they seize each other’ (e-peka L ‘to seize’), e-behanna H ‘to be closed in’ (e-beba H ‘to close in’), ná mōpēkākā ‘I seize him habitually’ (e-peka L ‘to seize’), ná kūndīgā ‘I rise’, nā kūndīgā ‘I raise’.

From a comparative perspective, the shape of the Causative Marker is the most intriguing. It has not been found as such in any of the surrounding languages and is probably a specific B30 feature, at least within the Gabonese context.

The Passive Marker is -u in S-B30. Example: (Vi) e-peka L ‘to be seized’. In Vi one encounters the suffix /-eo/ too. Other interesting facts emerge from the study of copulas and subjunctive structure(s). Because of lack of space, these aspects cannot be commented on.

5 CONCLUSION

Recent linguistic research on B30 has furnished a much more accurate picture of a typologically interesting group. Several structural features define its identity. T’s central position within this group stands out clearly. Although the available syntactic data show a somewhat less homogeneous picture, the same subdivisions appear.
The homogeneous northern subgroup presents noteworthy lexical and morphological similarities with B10. From a syntactic perspective, however, similarities appear to be much rarer.

Within S-B30, T and Vi are closest. Vo stands out as the most innovative of all three in its syntax (e.g. subordinating conjunctions, /-na/- morpheme following the concord marker in relatives (cf. tsójkà dingàkàéčí mënì ‘the calebashes I see’) and in some parts of its (verb) morphology (periphrastic constructions)). From a tonal perspective, though, it is more conservative than T/Vi. It should furthermore be kept in mind that more conservative varieties of Vo exist.

Unfortunately B30 is in the process of splitting up and is not far from total disintegration. Scientific investigation should therefore speed up in order to refine our knowledge of this group. The recently published Viya-French dictionary is one important contribution to this cause.

REFERENCES

FURTHER READING
Bodinga-bwa-Bodinga and Van der Veen 1995; Van der Veen 1991a, 1999b; Van der Veen and Bodinga-bwa-Bodinga 2002.
In this chapter, I provide an overview of the phonology, morphology and syntax of Babole, a representative Bantu C language. I will look first at phonological issues of segmental contrasts in consonants and vowels, vowel harmony and tone in nominal forms. Next I will survey aspects of nominal and verbal morphology, including the noun class system, de-verbal nominalization, and tense/mood/aspect (TMA) morphology in verbs. Finally I will sketch selected elements of the syntax of Babole, including the demonstrative system, the associative system, pronouns, and various aspects of noun phrase modification. I conclude with a description of Babole relative clauses.

1 SPEECH COMMUNITY, CLASSIFICATION, AND DIALECTS

The Babole language is spoken by about 4000 people living in 14 villages (between one and two degrees of latitude North) along the Likouala-Aux-Herbes river system in the District of Epena, Likouala Region, of the Republic of Congo (Brazzaville). The Babole
area is only accessible by going south on the river from the town of Epena, the district
capital. Adults who have had access to secondary education normally speak some French,
the official language of Congo. Everyone except small children speaks and understands
Lingala, the regional national language, to some degree. However Babole people in their
own villages rarely speak anything but the Babole language. French and Lingala are con-
sidered appropriate only for communicating with non-Babole, according to the situation,
French being more ‘official’ and of higher status. The Babole area is almost 100 percent
linguistically homogeneous, mainly because of the extreme isolation of the language
area. The author lived for three years in the Babole village of Dzeke and was able to
observe these language use patterns and attitudes directly.

Although each village has a characteristic speech form, Babole divides into three main
dialect areas, North, Central, and South (Leitch 1989). The dialects are distinguished by
lexical differences and by phonological ‘accent’ effects such as whether initial ‘p’ is as
[p] (Northern and Southern Dialect) or as [p] (Central Dialect). The variety described in
this chapter is that spoken in the villages of Impongui and Dzeke in the Northern dialect
area. Babole was undescribed and unclassified before the author conducted an intensive
period of fieldwork from 1988 to 1992. Summarizing the linguistic surveys conducted in
the region by the author and colleagues (Leitch 1989, Gardner 1990), it is clear that
Babole is somewhat distantly related to the other language spoken in the district of
Epena, Bomitaba (see Vanhoudt 1987 on the Leke variety of Bomitaba). On the basis on
this fieldwork I propose that Babole be classified tentatively as C10 in the Guthrie 1967
system. Detailed comparative work would be needed to clarify the complex relationships
between C10 (Bongili type), C20 (Mbosi type) and C30 (Bobangi type) languages.

2 PHONOLOGY

2.1 Vowels and vowel harmony

Babole shares with most Bantu C languages the seven-vowel inventory in (1).

(1) Bantu C seven-vowel inventory

\[
\begin{array}{ccc}
\text{Front} & \text{Central} & \text{Back} \\
\text{i} & u & \text{high} \\
\text{e} & o & \text{‘closed’ mid} \\
\text{e} & \text{‘open’ mid [rtr]} & a \\
\end{array}
\]

Babole vowels participate in a vowel ‘harmony’ system where only certain vowels are
found together in particular morphological domains. This harmony system involves only
the low and mid-vowels and may be characterized in the following way. The ‘open’ and
‘closed’ mid-vowels are never found ‘mixed’ in the morphological stem domain in either
verbal or nominal forms. Similarly, the low vowel [a] is never found together with [e] or
[a]. Otherwise any vowels may co-occur freely. This system may be analyzed as involving
assimilation (or ‘spreading’) of a phonological ‘retracted tongue root’ feature [rtr], which
is a basic lexical property of root morphemes (Archangeli and Pulleyblank 1995 and ref-
ences therein). A root morpheme is hypothesized to either have or not have the harmonic
feature. This results in nouns as in (2), where stems with mid-vowels are either uniformly
‘open’ if the harmonic feature is present, or ‘closed’, if the harmonic feature is absent.
Nothing in this description depends on the choice of [rtr] as the crucial harmonic feature.
Babole Nouns and Tongue Retraction Feature

with [rtr] without [rtr]

\[ \text{mo} \# \text{èk} \text{ò} \quad \text{‘joke 3/4’} \quad \text{mo} \# \text{kèng} \text{ò} \quad \text{‘trimming of wine palm 3’} \]

\[ \text{mo} \# \text{èk} \text{i} \quad \text{‘alouette 3/4’} \quad \text{bo} \# \text{èlè} \quad \text{‘man 4’} \]

\[ \text{di} \# \text{p} \text{èt} \quad \text{‘labyrinth 5/6’} \quad \text{mo} \# \text{kòt} \text{è} \quad \text{‘house 3/4’} \]

\[ \text{di} \# \text{bng} \text{ò} \quad \text{‘art of pottery 5’} \quad \text{bo} \# \text{lòlò} \quad \text{‘bitterness (taste) 14’} \]

Note that mid-vowel prefixes are not affected by the vowel harmony process affecting the stem. This is a peculiarity of Babole that is shared by several other of Bantu C languages.

In the verbal system there are interesting vowel harmony alternations that are not observable in static noun morphology. In particular note in (3) when there is an open mid-vowel in the verb root that any low vowel suffixes become a copy of the preceding vowel. So both underlying [e] and [a] become [ə] following [ə], and both [o] and [a] become [ø] following [ø]. To see this clearly, compare the Applicative and Passive paradigms in (3), in particular the forms indicated by a bolded arrow, which have an open mid-vowel in the root.

2.2 Consonant inventory and consonant processes

Babole has the consonant inventory shown in (4). The consonant segments shown in brackets do not have a robust positional distribution in Babole and so do not fully participate in the system of contrasts normally associated with ‘phonemes’. They are either ‘derived’ in the morphophonology from vowels (the case of [w], [y] and [dz], [ts]) or they have a very skewed distribution.

(4) Babole consonants

<table>
<thead>
<tr>
<th>p ~ h</th>
<th>t</th>
<th>k</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b ~ φ)</td>
<td>(d ~ l)</td>
<td></td>
</tr>
<tr>
<td>s</td>
<td></td>
<td>h</td>
</tr>
<tr>
<td>(ts)</td>
<td>(dz)</td>
<td></td>
</tr>
<tr>
<td>(mp)</td>
<td>(nt)</td>
<td>(nṣ)</td>
</tr>
<tr>
<td>mb</td>
<td>nd</td>
<td>(ndz)</td>
</tr>
<tr>
<td>l</td>
<td>m</td>
<td>n</td>
</tr>
<tr>
<td>(w)</td>
<td>(y)</td>
<td></td>
</tr>
</tbody>
</table>
2.2.1 Voiced occlusives

A striking feature of the Babole consonant system is the marginality of the voiced occlusive series (line 2 in the chart in (4)). The voiced velar occlusive [g] simply is not found at all while both [d] and [b] have a highly restricted distribution. The phone [d] is best analyzed as an allophone of the phoneme [l]. Basically we find [l] before each of the vowels except [i], and we find [d] only before [i].

[d] / [i]  [l] / [a, e, o, u]

Similarly, the phone [b] is only robustly attested in two environments, (i) before the high vowels [i] and [u] and (ii) phrase initially. Where the local trade language Lingala has root-initial [b], Babole has a 'silent' or 'ghost' consonant which has no articulatory manifestation but acts like a consonant in terms of syllabic structure. The [b] has 'dropped out' in the stem initial position before non-high vowels.

(5) Loss of [b] in Babole

Babole  à#òm-i  ‘he killed’
Lingala  à#bóm-i  ‘he killed’

With vowel-initial verbs like -òm-, as in (6), the ‘ghost’ [b] is not perceived directly but it shows up explicitly in class 9 nominalizations and in the maintenance of vowel-hiatus in class 3/4 forms. In a form like /mo-òm/, e.g. one would normally expect vowel elision to yield [mòmí] but in fact we get [moòmí]. There is a systematic failure of vowel elision where historically there was a [b].

(6) ‘Ghost’ [b]-initial roots

<table>
<thead>
<tr>
<th>Root</th>
<th>Gloss</th>
<th>Class 9</th>
<th>Other</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>-òm-</td>
<td>‘kill’</td>
<td>mhômi</td>
<td>moômi</td>
<td>‘killer 3’</td>
</tr>
<tr>
<td>-èś-</td>
<td>‘complain’</td>
<td>mhèśà</td>
<td>moéśà</td>
<td>‘complainer 3’</td>
</tr>
<tr>
<td>-óòt-</td>
<td>‘give birth’</td>
<td>diòta</td>
<td>miòta*</td>
<td>‘family likeness 5’</td>
</tr>
<tr>
<td>-éd-</td>
<td>‘blame’</td>
<td>mhèdì</td>
<td>moèdì</td>
<td>‘blamer 3’</td>
</tr>
</tbody>
</table>

In contrast to (6), there is a class of true vowel-initial roots, exemplified in (7), which show a different pattern of class 9 nominalization and exhibit the normal hiatus avoidance processes of vowel elision, gliding, and affrication across the prefix-stem boundary in classes 3, 4, 5, and 14. In particular, contrast the class 3 forms for ‘bailing tool’, [mòhò] from underlying /mo-òhm/ in (7) with the word for ‘killer’, [moòmí] from underlying /mo-òm/ in (6).

(7) Real vowel-initial roots

<table>
<thead>
<tr>
<th>Root</th>
<th>Gloss</th>
<th>Class 9</th>
<th>Other</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>-òh-</td>
<td>‘bail out’</td>
<td>ndzòhà</td>
<td>mòhò</td>
<td>‘bailing tool 3’</td>
</tr>
</tbody>
</table>
Because of the difference between true-vowel initial roots (7) and ‘ghost b’ roots (6), there are pairs like the following in the lexicon:

\[\text{bo.àtö} \quad \text{‘femininity 14’} \quad \text{bwá.àtö} \quad \text{‘canoe 14’} \]
\[\text{di.àlé} \quad \text{‘liver 5’} \quad \text{dzá.lé} \quad \text{‘open space in floating vegetation 5’} \]

These contrasts confirm the presence of a ‘silent’ consonant which is blocking gliding or affrication processes in the Babole forms for ‘femininity’ and ‘liver’ but not in the forms for ‘canoe’ and ‘open space in floating vegetation’, where gliding and affrication transform the underlying prefix shapes bo- and di- to bw- and dz- respectively.

### 2.2.2 Prenasalized Consonants

The distribution of the voiced and voiceless prenasalized segments is worthy of a close look since there are interesting asymmetries that exist. The first fact to note is that the whole range of prenasals is found freely in the stem-initial position (following a noun-class prefix). This is illustrated in (8).

#### (8) Stem-initial prenasalized obstruents following noun class prefixes

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
<th>NC</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>[\text{mu} # \text{mp’mbóhà} ]</td>
<td>[\text{mimp’mbóhà} ]</td>
<td>3/4</td>
<td>‘message drum’</td>
</tr>
<tr>
<td>[\text{mu} # \text{mbákà} ]</td>
<td>[\text{mimbákà} ]</td>
<td>3/4</td>
<td>‘succulent wild fruit’</td>
</tr>
<tr>
<td>[\text{di} # \text{nljimú} ]</td>
<td>[\text{mantjimú} ]</td>
<td>5/6</td>
<td>‘aggressive arboreal ant’</td>
</tr>
<tr>
<td>[\text{di} # \text{ndjändú} ]</td>
<td>[\text{mandjändú} ]</td>
<td>5/6</td>
<td>‘air bubble in water’</td>
</tr>
<tr>
<td>[\text{di} # \text{nsdíótsá} ]</td>
<td>[\text{mansdíótsá} ]</td>
<td>5/6</td>
<td>‘a punch with the fist’</td>
</tr>
<tr>
<td>[\text{di} # \text{ndjókà} ]</td>
<td>[\text{mandjókà} ]</td>
<td>5/6</td>
<td>‘traditional hat’</td>
</tr>
<tr>
<td>[\text{di} # \text{ndjókà} ]</td>
<td>[\text{mandjókà} ]</td>
<td>5/6</td>
<td>‘a punch with the fist’</td>
</tr>
<tr>
<td>[\text{di} # \text{ngàsé} ]</td>
<td>[\text{mangàsé} ]</td>
<td>5/6</td>
<td>‘horn of an animal’</td>
</tr>
<tr>
<td>[\text{di} # \text{nsái} ]</td>
<td>[\text{mansái} ]</td>
<td>5/6</td>
<td>‘little cola nut’</td>
</tr>
<tr>
<td>[\text{e} # \text{nsáè} ]</td>
<td>[\text{binsáè} ]</td>
<td>7/8</td>
<td>‘finger/toe nails’</td>
</tr>
</tbody>
</table>

Second, the full range of prenasals is found word-initially in class 9 nominal forms, as illustrated in (9). Even though the class 9 prefix is \textit{ex hypothesi} a syllabic nasal [N-], identifying a prefix-stem boundary is not always straightforward. This is most dramatic in forms like [ngɔndá], ‘chimpanzee’ where the morpheme analysis should be /N-ɡɔndá/, but the phone [ɡ] does not otherwise exist on its own and so /gɔndá/ is not a possible theme morpheme. Contrast this with nsaɛló ‘downstream’, which is clearly derived by prefixation of the verb root -sá- ‘float downstream’, with the class 9 prefix N- and the suffix -elo.
‘Ordinary’ prenasalization is expressed with the voiced prenasal set in (9) as a super-scripted preceding nasal in the pronunciation column. In contrast there is only slight nasalization of the epenthetic initial high vowel in the case of voiced obstruents (I have thus shown the initial vowel without nasalization in the voiced obstruent case). When the obstruent is voiceless, on the other hand, the nasalization is very heavy on the initial vowel, but the stem initial obstruent carries almost no nasalization. The disfavoring of nasality on voiceless obstruents is expressed positionally as well in the language. Although we find many verb roots like the ones in (10), a parallel verb root such as -hámp- would be completely impossible in Babole, only the voiced prenasal series occurs in the root-internal C2 position.

(10) Verb roots with C2 prenasalized

\[
\begin{array}{ll}
\text{Verb root} & \text{Gloss} \\
\hline
#hámp- & ‘to curse’ \\
#hând- & ‘to start again’ \\
#hâng- & ‘become mean’ \\
\end{array}
\]

Schematically in Babole stems, we see that C1, the stem initial consonant position, may be filled by any prenasal or other consonant, while the C2 position cannot be [mp, nt, ns, nts, nk]. This recalls the prosodically motivated distributional asymmetries pointed out in Hyman (1989).

Consider finally verb roots with initial prenasalized consonants. In the Babole lexicon there are a good number of verb roots beginning with either voiced and voiceless prenasalized obstruents. In the completive paradigm (11), nasalization is clearly manifested in both the voiced and voiceless cases, with the phonetic provisos sketched above.

(11) Prenasal-initial verb roots in completive paradigm

\[
\begin{array}{ll}
(i) /â-ndûm-i/ & [â.˚dà.mi] ‘he stuffed his mouth’ \\
& 3s-stuff_mouth-CMPL \\
(ii) /â-nêng-i/ & [â.tê.ngí] ‘he writhed’ \\
& 3s-writhe-CMPL
\end{array}
\]

Now the imperative of a root like #ndûm-, ‘to stuff the mouth’, is morphologically /ndûm-á/. This is pronounced simply [˚dà.mâ], with two syllables. However the imperative of a root such as #nêng-, ‘to writhe’, while morphologically represented as /nêng-á/, is pronounced as [˚tê.ngâ], completely dropping the root-initial nasalization. Since no prefix vowel can license the nasality in the case of the imperative, the nasalization is just lost when the initial consonant is voiceless. The prohibition on [mp, nt, nts, ns, nk] in the
root-internal \( C_2 \) position requires a different explanation. See Leitch (1994b) for an explanation of the overall Babole prenasalized distribution pattern within Optimality Theory (Prince and Smolensky 1995). All of these considerations lead us to consider the voiceless prenasalized series \([mp, nt, nts, ns, nk]\) as not participating robustly in the systematic phonological oppositions of the language.

### 2.3 Tone in nominal forms

Babole displays the classic Bantu pattern of four basic tone patterns on disyllabic noun stems; HL, HH, LL, LH. These four patterns are more or less equally represented in the nominal lexicon with no pattern being dominant and no gaps occurring. Nominal prefixes are always low-toned and so I do not represent tone on noun prefixes in this chapter.

#### (12) Minimal tone pairs in disyllabic noun stems

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Word</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH</td>
<td>e-lɔngɔ́ ‘caterpillar’</td>
<td></td>
</tr>
<tr>
<td>HL</td>
<td>e-lɔngɔ́ ‘stable’</td>
<td>LH mu-nɔ tí ‘sweet banana’</td>
</tr>
<tr>
<td>HLLL</td>
<td>mu-mplù ‘fever treatment’</td>
<td>LH mu-nɔxə ‘date palm leaf’</td>
</tr>
<tr>
<td>HLLL</td>
<td>mu-ngəlɔ́ ‘tabacco’</td>
<td>LL di-kəsə ‘louse egg’</td>
</tr>
<tr>
<td>HLLL</td>
<td>mu-ngəlɔ́ ‘water shortcut’</td>
<td>HH di-kəsə ‘palm of hand’</td>
</tr>
</tbody>
</table>

Tone patterns on nominals derived from verbs are more complex and reflect the tonal properties of verbal stems where, as we will see, the tone of the initial (left-most) syllable is lexically determined, and the following span of syllables are all characterized by a single tone depending on the type of nominalization. Good examples of this come from nominalizations of verb roots where one can note that the tone on the non-initial stem syllable is determined by the kind of nominalization, as in (13).

#### (13) Suffixal Tone Patterns on Deverbal Nouns

<table>
<thead>
<tr>
<th>Root</th>
<th>Gloss</th>
<th>Nominalization</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>#̣sã-</td>
<td>‘go downstream’</td>
<td>ẹsã-ɛl-á</td>
<td>‘descent of a river 7’</td>
</tr>
<tr>
<td>#̣sã-</td>
<td>‘go downstream’</td>
<td>ṇsã-ɛlɔ</td>
<td>‘downstream 9’</td>
</tr>
<tr>
<td>#̣dïnd-</td>
<td>‘fall (tree)’</td>
<td>ṇdïnd-ək-ɔ</td>
<td>‘felling of trees 9’</td>
</tr>
<tr>
<td>#̣dïnd-</td>
<td>‘sink, flood’</td>
<td>ṇdïnd-ək-ɔ</td>
<td>‘flooding of ground 9’</td>
</tr>
<tr>
<td>#̣hɔ-</td>
<td>‘speak’</td>
<td>ẹhw-ɔx-ək-ɔ</td>
<td>‘which causes talk 7’</td>
</tr>
<tr>
<td>#̣ãŋgo-</td>
<td>‘complement’</td>
<td>dị̃ongó</td>
<td>‘cooperative work 5’</td>
</tr>
<tr>
<td>#̣ãŋgo-</td>
<td>‘complement’</td>
<td>mɔ̣ãŋgɔ̣d-ı</td>
<td>‘cooperative worker 3’</td>
</tr>
<tr>
<td>#̣pɔmb-</td>
<td>‘arrive’</td>
<td>mɔ̣pɔmb-ı</td>
<td>‘person arriving 3’</td>
</tr>
<tr>
<td>#̣tãŋ-</td>
<td>‘to visit’</td>
<td>mɔ̣tãŋ-ı</td>
<td>‘visit 3’</td>
</tr>
</tbody>
</table>

### 2.4 Tone and prosodic structure of verb roots/stems

The structure of Babole verbs is such that a lexical tone (High or Low) is always associated with the initial verb root syllable. The tone-bearing unit (TBU) is the syllable in Babole and there is no contrastive vowel length. Depending on the tense/mode/aspect involved, the subsequent syllables of the stem will have particular tonal properties as
sketched in the section on verbal stem morphology. The basic stem tone situation can be abstractly schematized in the autosegmental representation in (14).

(14) Basic stem tonal schema

\[
\text{\#[CVCVCVCVC-V]}
\]

\[
\begin{array}{c|c}
\text{H/L} & \text{H/L} \\
\end{array}
\]

The initial verb root syllable has a fixed lexical tone, either H(igh) or L(ow), which may be thought of as underlyingly associated with the stem-initial vowel. The non-initial stem syllables take a tonal specification provided by suffixal inflection tone melodies. Additional suffixal tones add complexities which will be treated later in this chapter (see §3.2.2 for details). Except for the final vowel, all non-initial syllables in the verb stem can be analyzed as underlyingly toneless. Verb roots come in many different prosodic shapes. The examples provided below in (15) show the attested range. Although the basic root shape is -CVC-, historical consonant loss on the one hand and incorporation of suffixal material on the other has resulted in a rather large variety of possible root shapes. I have provided examples with near past and hortative forms to illustrate the pattern schematized in (14). Completes involve a plateau of final high tones while hortatives show a plateau of final low tones.

(15) Prosodic shape of verb roots

<table>
<thead>
<tr>
<th>Shape</th>
<th>Root</th>
<th>Gloss</th>
<th>3s completive</th>
<th>3s hortative</th>
</tr>
</thead>
<tbody>
<tr>
<td>-V-</td>
<td>-ú-</td>
<td>‘be cancelled’</td>
<td>áúí</td>
<td>áúé</td>
</tr>
<tr>
<td>-VC-</td>
<td>-ák-</td>
<td>‘hit your foot on a stone’</td>
<td>áákí</td>
<td>áákè</td>
</tr>
<tr>
<td>-VCVC</td>
<td>-áke-</td>
<td>‘become caught on something’</td>
<td>áákéí</td>
<td>áákèè</td>
</tr>
<tr>
<td>-VCVCV-</td>
<td>ékod-</td>
<td>‘study, learn’</td>
<td>áékódi</td>
<td>áékólé</td>
</tr>
<tr>
<td>-CV-</td>
<td>-ha-</td>
<td>‘become’</td>
<td>áhái</td>
<td>áhè</td>
</tr>
<tr>
<td>-CVV-</td>
<td>-sáo-</td>
<td>‘become faded or insipid’</td>
<td>ásáoi</td>
<td>ásáøé</td>
</tr>
<tr>
<td>-CVC-</td>
<td>-sát-</td>
<td>‘help’</td>
<td>ásátí</td>
<td>ásátè</td>
</tr>
<tr>
<td>-CVVC-</td>
<td>-sán-</td>
<td>‘complain’</td>
<td>ásáání</td>
<td>ásáané</td>
</tr>
<tr>
<td>-CVCV-</td>
<td>-sèñe-</td>
<td>‘press or push’</td>
<td>ásènèí</td>
<td>ásènèì</td>
</tr>
<tr>
<td>-CVVCVC-</td>
<td>-sísod-</td>
<td>‘frighten’</td>
<td>ásí sódi</td>
<td>ásí sólè</td>
</tr>
<tr>
<td>-CVVCVCVC-</td>
<td>-kóngmő-</td>
<td>‘roll’</td>
<td>ákóngmőí</td>
<td>ákóngmőè</td>
</tr>
<tr>
<td>-CVVCVCVC-</td>
<td>-kítumbód-</td>
<td>‘cough’</td>
<td>ákítumbóí</td>
<td>ákítumbölè</td>
</tr>
</tbody>
</table>

While forms like -kóngmő-, ‘roll’, might be attributed a morphological analysis /kóng-mő/ involving the passive derivational suffix -mő (a vowel harmony variant of -am), no root -kóng- with a related meaning exists in the current language.

3 MORPHOLOGY

This section covers first nominal morphology and then verb morphology. The section on verb morphology contains much detail that could equally have been treated in the section on syntax.
3.1.1 Noun class system

Babole shows the range of noun classes in (16). A distinct class is considered to exist when either the prefix has a distinct phonological form or different concord/agreement markers are generated. See Leitch (to appear) for an exhaustive analysis of the Babole noun class system. I also show the corresponding verbal agreement markers corresponding to each noun class. While the noun prefixes are always low toned the verbal prefixes corresponding to nouns are high-toned.

(16) Babole noun classes and verbal agreements

<table>
<thead>
<tr>
<th>Class</th>
<th>Noun prefixes</th>
<th>Examples</th>
<th>Glosses</th>
<th>Verb agreement prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mo-</td>
<td>molómi</td>
<td>‘husband’</td>
<td>à-</td>
<td></td>
</tr>
<tr>
<td>1a ø</td>
<td>kálé</td>
<td>‘field’</td>
<td>à-</td>
<td></td>
</tr>
<tr>
<td>2 baa-</td>
<td>baalómi</td>
<td>‘husbands’</td>
<td>bá-</td>
<td></td>
</tr>
<tr>
<td>2a baa-</td>
<td>baakálé</td>
<td>‘fields’</td>
<td>bá-</td>
<td></td>
</tr>
<tr>
<td>3 mo-</td>
<td>mokité</td>
<td>‘house’</td>
<td>ó-</td>
<td></td>
</tr>
<tr>
<td>mu-</td>
<td>mungátó</td>
<td>‘shrimp (fresh water)’</td>
<td>ó-</td>
<td></td>
</tr>
<tr>
<td>m-</td>
<td>mwángó</td>
<td>‘beak of bird’</td>
<td>ó-</td>
<td></td>
</tr>
<tr>
<td>4 mi-</td>
<td>mikoité</td>
<td>‘houses’</td>
<td>mï-</td>
<td></td>
</tr>
<tr>
<td>my-</td>
<td>myántó</td>
<td>‘shrimp (pl)’</td>
<td>mï-</td>
<td></td>
</tr>
<tr>
<td>5 di-</td>
<td>dibító</td>
<td>‘python’</td>
<td>dí-</td>
<td></td>
</tr>
<tr>
<td>dz-</td>
<td>dzúmbá</td>
<td>‘thing’</td>
<td>dí-</td>
<td></td>
</tr>
<tr>
<td>6 ma-</td>
<td>màbitó</td>
<td>‘pythons’</td>
<td>mà-</td>
<td></td>
</tr>
<tr>
<td>m-</td>
<td>múmbá</td>
<td>‘things’</td>
<td>mà-</td>
<td></td>
</tr>
<tr>
<td>7 e-</td>
<td>ehⁿtó</td>
<td>‘hunting net (traditional)’</td>
<td>é-</td>
<td></td>
</tr>
<tr>
<td>7a by-</td>
<td>byúmbá</td>
<td>‘things (specific counted number)’</td>
<td>é-</td>
<td></td>
</tr>
<tr>
<td>8 bi-</td>
<td>bíhⁿtó</td>
<td>‘hunting nets (traditional)’</td>
<td>bi-</td>
<td></td>
</tr>
<tr>
<td>n-</td>
<td>mbyⁿmá</td>
<td>‘boa constrictor’</td>
<td>ã-</td>
<td></td>
</tr>
<tr>
<td>10 n-</td>
<td>mbyⁿmá</td>
<td>‘boa constrictors’</td>
<td>ã-</td>
<td></td>
</tr>
<tr>
<td>11 lo-</td>
<td>lòmá</td>
<td>‘cleanliness’</td>
<td>bó-</td>
<td></td>
</tr>
<tr>
<td>14 bo-</td>
<td>bodító</td>
<td>‘weight’</td>
<td>bó-</td>
<td></td>
</tr>
<tr>
<td>bw-</td>
<td>bwátó</td>
<td>‘canoe’</td>
<td>bó-</td>
<td></td>
</tr>
<tr>
<td>b-</td>
<td>bádì</td>
<td>‘adultery’</td>
<td>bó-</td>
<td></td>
</tr>
<tr>
<td>16 ha</td>
<td>húká</td>
<td>‘place (general area)’</td>
<td>há</td>
<td></td>
</tr>
<tr>
<td>17 lo</td>
<td>lúká</td>
<td>‘place (specific)’</td>
<td>lò</td>
<td></td>
</tr>
<tr>
<td>18 mu</td>
<td>múká</td>
<td>‘places’</td>
<td>mú-</td>
<td></td>
</tr>
<tr>
<td>19 mwá</td>
<td>múká</td>
<td>‘diminutive (singular)’</td>
<td>hì-</td>
<td></td>
</tr>
<tr>
<td>20 báná</td>
<td>‘diminutive (plural)’</td>
<td>tó-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The singular–plural pairings of noun classes are traditionally referred to as ‘genders’. So there is a 1/2 gender, a 3/4 gender, etc. Babole has the unusual characteristic of allowing
many nouns to form a concrete ‘counting’ plural in the regular gender pair, and also
an abstract non-counting plural in class 10. A class 5 noun that allows both a regular
class 6 counting plural and a class 10 non-counting plural would be designated by the
gender 5/6,10, etc. The diminutives determine the agreements generated by the NP to
which they attach. They attach to fully formed words and so are different from the other
noun prefixes which attach to stems.

The singular–plural pairing possibilities are quite complex. These are summed up
graphically in (17).

(17) Singular/plural pairings (genders)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>1/2; 1a/2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>3/4; 3/4,10</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>5/6; 5/6,10</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>7/8; 7/8,10</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>9/6; 9/6,10; 9/10</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>11/</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>14/6; 14/6,10</td>
</tr>
<tr>
<td>16</td>
<td>18</td>
<td>16/18</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>17/18</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>19/20</td>
</tr>
</tbody>
</table>

3.1.2 Deverbal noun suffixes

In (18) I provide examples of various deverbal single-vowel suffixed forms. There are
two interesting gaps that occur. One is the complete absence of forms with a low-toned
-e suffix. Parallel to this there is only one true example of a form with a high-toned -o
suffix. These gaps are unexplained.

(18) Single vowel nominal suffixes

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Example</th>
<th>Gloss</th>
<th>Root</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>-i</td>
<td>mo#là-i</td>
<td>‘person who spreads out’ cl. 1.</td>
<td>-là-</td>
<td>‘spread out’</td>
</tr>
<tr>
<td>-i</td>
<td>bo#pód-i</td>
<td>‘person who arrives’</td>
<td>-pód-</td>
<td>‘arrive’</td>
</tr>
<tr>
<td>-é</td>
<td>e#là-é</td>
<td>‘manner of spreading’</td>
<td>-là-</td>
<td>‘spread out’</td>
</tr>
<tr>
<td></td>
<td>e#sè-é</td>
<td>‘place where manioc is left underwater’</td>
<td>-sè-</td>
<td>‘put X under water’</td>
</tr>
<tr>
<td></td>
<td>e#künd-é</td>
<td>‘place where someone is buried (cemetery)’</td>
<td>-künd-</td>
<td>‘bury X’</td>
</tr>
<tr>
<td></td>
<td>e#kum-é</td>
<td>‘temporal or physical ending (result)’</td>
<td>-kum-</td>
<td>‘come to an end’</td>
</tr>
<tr>
<td>-à</td>
<td>n#sák-à</td>
<td>‘an extra portion (gift)’</td>
<td>-sák-</td>
<td>‘be joyful’</td>
</tr>
<tr>
<td></td>
<td>bo#häng-à</td>
<td>‘meaness/toughness’</td>
<td>-häng-</td>
<td>‘become mean’</td>
</tr>
<tr>
<td></td>
<td>bo#hind-à</td>
<td>‘rightness (judicial)’</td>
<td>-hind-</td>
<td>‘be right’</td>
</tr>
<tr>
<td></td>
<td>bo#lèmb-à</td>
<td>‘sorcery/knowing’</td>
<td>-lèmb-</td>
<td>‘know’</td>
</tr>
<tr>
<td></td>
<td>n#tük-à</td>
<td>‘state of well-being’</td>
<td>-tük-</td>
<td>‘become rich, get fat’</td>
</tr>
</tbody>
</table>
an exhaustive list of derived nominals from my lexicon.

This suffixal process is most productive in classes 5 and 7 as can be seen in (19), where the final -o is part of the verb root in each case and not a suffix. A few forms have manner type meanings. Note also the obligatory passive morpheme -am- in enwémélo, ‘spring’; ekóémélo, ‘exit’; and ekwélamélo, ‘entrance’. The tonal melody associated with the -elo derivation is a plateau of lows following the lexical verb root tone. This suffixal process is most productive in classes 5 and 7 as can be seen in (19), an exhaustive list of derived -elo nominals from my lexicon.

3.1.3 -elo/-elɔ nominalizations

As can be seen in (19) below, most -elo nominals have a base meaning of ‘the place where action X takes place’, or ‘the place where you end up after doing X’. A few forms have manner type meanings. Note also the obligatory passive morpheme -am- in enwémélo, ‘spring’; ekóémélo, ‘exit’; and ekwélamélo, ‘entrance’. The tonal melody associated with the -elo derivation is a plateau of lows following the lexical verb root tone. This suffixal process is most productive in classes 5 and 7 as can be seen in (19), an exhaustive list of derived -elo nominals from my lexicon.

(19) -elo/-elɔ Derived nominals

<table>
<thead>
<tr>
<th>-elo form</th>
<th>Meaning</th>
<th>Root</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>mo=dzélɔ</td>
<td>‘way of eating’</td>
<td>-dzè-</td>
<td>‘eat’</td>
</tr>
<tr>
<td>mo=kèlɔ</td>
<td>‘way of walking (or a walk)’</td>
<td>-kè-</td>
<td>‘go, walk, leave’</td>
</tr>
<tr>
<td>mo=sènélɔ</td>
<td>‘greeting’</td>
<td>-sèned-</td>
<td>‘greet’</td>
</tr>
<tr>
<td>di=nkòmbèlɔ</td>
<td>‘circular ring of iron wire for scraping’</td>
<td>-kòmbèt-</td>
<td>‘scrape the bottom of X’</td>
</tr>
<tr>
<td>di=tálɛlɔ</td>
<td>‘place of cutting up meat’</td>
<td>-tàl-</td>
<td>‘cut up meat’</td>
</tr>
<tr>
<td>di=yèlɔ</td>
<td>‘place of sharing’</td>
<td>-yè-</td>
<td>‘share’</td>
</tr>
</tbody>
</table>
| dzáhwélɔ | ‘entrance to a secondary path’ | -áho- | ?

Note that a form like mansélo, ‘praise names’, is based on the root -sè-, ‘praise’, but undergoes a double prefixation process, first with class 9 N- and then with class 6 ma-. The other forms such as di=bútɔ and di=kìpɔ shown as examples of high-toned final -o are in fact false examples since the final o is part of the verb root in each case and not a suffix. ~

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3.2 Verbal morphology

As in many Bantu languages much of the morphosyntactic complexity of the language shows up in the verb morphology where both inflectional and derivational morphology are realized. I go into quite a bit of detail on the preverbal inflectional morphology but give less attention to the suffixal derivational morphology and final vowels.

3.2.1 Inflectional morphology

In Babole the verbal prefixes mark tense, mood, aspect, negation, and subject agreement. There is an additional optional morpheme which marks reflexivity and functions as a direct object pronoun anaphorically bound by the agreement features of the syntactic subject.

(20) Verbal morphology schema

\[ \text{AGR}-(\text{NEG})-(\text{TNS/COND})-(\text{FUT/PROG})-(\text{REFLX})-(\text{VERB ROOT})-(\text{EXT1})-(\text{EXT2})-(\text{PRE})-(\text{FV}) \]

Such a ‘slot-and-filler’ schematic, while helpful expositionally, can only ever tell a small part of the real story since many of the syntactic constraints and complexities of the languages syntax are reflected in the verb morphology. I provide an example of a conditional verb form below to give the reader a feel for the complexity of the verbal morphology.

(21) Example of complex verb morphology

\[
\begin{align*}
\text{di-hášá} & \quad \text{bim'bédzá ná mo-húmá} \\
\text{di-hásà} & \quad \text{bi-m'èdž-á} \\
\text{ndi-hásà} & \quad \text{bim'bédzá ná mo-húmá} \\
\text{bim'bédzá} & \quad \text{in 3-morning} \\
\text{5-twin AGR5-NEG-COND-REFLX-hit-INTNS-FV} \\
\end{align*}
\]

'The twin would not hit himself very hard in the morning.'
3.2.2 Survey of tense/mode/aspect forms

In this section, I will describe the range of tense/mode/aspects (TMA) forms in Babole. For the description of each TMA form I will provide an illustrative sample sentence and show how the form would be negated. Examples are built using personal pronoun subject agreement rather than full NP subjects, but I provide one example of agreement morpheme corresponding to a full NP in each case. The ‘personal’ pronoun agreement prefix set is shown in (22a). These ‘bound’ morphemes are all low-toned, except for the third person plural which is high-toned. The verb agreement prefixes corresponding to each noun class are high-toned except for class 1 (humans) and class 9 (animals), which are low-toned (see (16)). I include the independent object pronouns in (22b) for comparison 's sake.

Note that the plural object pronouns all have a tonal downstep built into them.

(22) (a) Bound ‘personal’ prefixes

1s nì-, tì-, nì- ‘I
ámé ‘me’

2s ò-, ‘you’

3s ò-, ‘he, she, it’
ëë ‘him, her’

1p tò- ‘we’

2p bò-, ‘you (plural)’

3p bá-, ‘they’

(b) Free object pronouns

báási hyékà
bá-ás-l hyékà
3p-steal-CMPL 8:food
‘They stole the food.’ / ‘They have stolen the food.’

I will look first at the ‘epistemic’ forms, past and future tenses, aspectualized forms, etc., and then turn to the ‘deontic’ forms: imperatives and subjunctives (see Palmer 1986 for the epistemic/deontic distinction).

3.2.2.1 Near past tense/completive aspect

This form is the morphologically simplest form in the language and is statistically the most commonly used TMA in conversational discourse. With psychological or experiencer predicates such as -Cn-, ‘see’, -lèmb-, ‘know’ and -dìng-, ‘want’, the meaning is ‘present’. With all other verbs, the meaning is of Recent past (earlier today) as in (23). This form has an aspectual sense of completion (hence the gloss ‘completive’ for the final vowel suffix -í). Nonetheless this form is unmarked for aspect and differs formally from constructions like the progressive where aspect is formally marked.

(23) Recent past

báási hyékà
bá-ás-l hyékà
3p-steal-CMPL 8:food
‘They stole the food.’ / ‘They have stolen the food.’

There is no overt tense prefix, but other facts indicate that this form participates in the formal tense system of the language, as the unmarked member of that family. The agreement or personal prefix is attached directly to the verb root in the affirmative voice, but I assume a null present tense prefix in this case. Phonetically there is no tone lowering (downstepping) between the three high tones in an example like (23), but just a plateau of 3 high-toned syllables pronounced with the same pitch. The negation is shown in (24). The morphological negation morpheme -ká- is always followed by a tonal downstep (an small audible drop in pitch), indicated by a superscripted exclamation mark. In (24) there is a single pitch lowering following -ká- and the next two syllables are pronounced on the same lowered high pitch.
(24) Negative recent past

báká ásí byéká
3p-NEG-steal-CMPL  C8:food
‘They have not stolen the food.’

The use of the pre-final morpheme -ak- with the recent past as in (25) gives a meaning of anteriority that distances the action from the present (while maintaining the ‘today’ requirement). Someone recounting at dusk an incident that had happened in the morning might use this construction.

(25) Anteriorized recent past

báá-sáí byéká ná mó-húmá
3p-steal-ANT-CMPL 8:food of C3-morning
‘They stole the food this morning.’ / ‘They had stolen the food that morning.’

French-bilingual native speakers of Babole frequently translate these anteriorized expressions by a French plus-que-parfait, rendered by English past perfect in the free-translation line of (25) above. Note that (25) could be negated just by adding in the negation morpheme as in the previous sentence. Note that with a vowel initial verb root there is neither gliding nor vowel elision lexically across the agreement/verb root boundary in (26).

(26) Recent past paradigm (vowel-initial verb)

1s niási ‘I stole’ /n#á-si/
2s óási ‘you stole’ /o#á-si/
3s áási ‘he stole’ /á#á-si/
1p tóási ‘we stole’ /t#ó-si/
2p bót ási ‘you stole’ /b#ó-si/
3p báá-si ‘they stole’ /b#á#á-si/ *bási no vowel elision
cl. 5 dísási ‘it worked’ /d#í-si/ NP = dingóndélé ‘child’

Post-lexically (in casual speech) one can find /b#ó-si/ pronounced as [bwá.á.si] which although relieving the vowel-hiatus, nonetheless preserves the prosodic structure of 3 syllables and corresponding tones.

3.2.2.2 Present statives

Formally the present forms of the stative (27 and 28) are not part of the near past paradigm. There is no evidence of the presence of suffixal -i. Possessives and existentials are both based on the stative verb and are followed by the genitive preposition ná whose function is presumably to assign (genitive) case to the post verbal NP (Chomsky 1982).

(27) Present stative

1s né ‘I am’ /n-é/
2s wé ‘you are’ /ó-é/
3s é ‘he is’ /á-é/
1p twé ‘we are’ /t#ó-é/
2p bwe ‘you are’ /b#ó-é/
3p bé ‘they are’ /bá-é/
cl. 5 dzé ‘the child is’ /d#í-é/ NP = dingóndélé, ‘child’
cl. 16 hé ná múngwá ‘there is salt …’ /há-é/ existential
në ná múngwá ‘I have salt …’ /n-é/ possessive
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(28) Negative present stative

1s nětǐ ‘I am not’ /n-ětí/
2s wětǐ ‘you are not’ /ò-ětí/
3s ĕtǐ ‘he is not’ /à-ětí/
1p twětǐ ‘we are not’ /hò-ětí/
2p bwětǐ ‘you are not’ /bò-ětí/
3p bě’tǐ ‘they are not’ /bá-ětí/
cl. 5 dzě’tǐ ‘the child is not’ /di-ětí/ NP = dingmdélé ‘child’
cl. 16 hě’tǐ nà ‘there is not …’ /há-ětí/ existential

In (27) and (28) when the subject agreement prefix is high-toned, vowel elision (together with constraints that preserve High tones rather than Low tones) produces a downstep in the middle of the word. The low tone that produces the downstep is underlyingly associated with the initial syllable of -ětí. In addition to these present stative forms, there is a stative verb root -ěk- which does conjugate regularly in the near past and true past.

3.2.2.3 True past

For events that happened yesterday or farther back, the true past is used. This construction shares some formal characteristics with the recent past (negation with -k- (e.g.) that set it apart from other constructions but it crucially differs from the recent past in the tonal properties displayed under relativization. We will see this in detail in the section on syntax later in the chapter. The true past is marked by both a prefix -ā- and a final vowel morpheme -ā (or vowel harmony variants -é -ā).

(29) True past paradigm

1s ná’sálā ‘I worked’ /n-â’sál-â/
2s wá’sálā ‘you worked’ /ò-â’sál-â/
3s â’sálā ‘he worked’ /à-â’sál-â/
1p twá’sálā ‘we worked’ /hò-â’sál-â/
2p bwá’sálā ‘you worked’ /bò-â’sál-â/
3p bá’sálā ‘they worked’ /bá-â’sál-â/
cl. 5 dzá’sálā ‘it worked’ /di-â’sál-â/ NP = dzókó ‘otter’

In the true past, a high-toned morpheme -â- follows the negation morpheme when it is present: the order is AGR-(NEG)-TNS. Note that there is both gliding and vowel elision to relieve vowel hiatus across the agreement/tense morpheme boundary, consistently at the expense of the subject agreement low tones, which are simply lost in (29). As with the negation morpheme, the true past morpheme is always followed by a downstep (the downstep is of course only audible when a high tone follows). The meaning of the true past is that the event happened yesterday or farther back, diminishing the relevance of the event from the pragmatic context of the speaker. If we added the anteriority morpheme -ak- to the affirmative true past form, as in (30) we get an even ‘more remote’ past reading. The reader will recall that all postinitial stem syllables, including all extensions and the prefinal -ak-, are underlyingly toneless. Descriptively all non-initial verb stem syllables ‘receive’ a tonal specification from the final vowel. This is a fairly common pattern in the Bantu C zone and is found in Lingala (Dzikanga 1979) as well. See (14) in §2.4 for an informal autosegmental representation of this pattern.
(30) Remoter past paradigm

1s ná’sáláká ‘I worked’ /n-á'-sál-ak-á/
2s wá’sáláká ‘you worked’ /ò-á'-sál-ak-á/
3s á’sáláká ‘he worked’ /á-á'-sál-ak-á/
1p tvá’sáláká ‘we worked’ /ò-á'-sál-ak-á/
2p bwá’sáláká ‘you worked’ /bò-á'-sál-ak-á/
3p bá’sáláká ‘they worked’ /bá-á'-sál-ak-á/
cl. 5 dzá’sáláká ‘it worked’ /dí-á'-sál-ak-á/ NP = dzőkó ‘otter’

In the negation of the true past, (31), I posit elision between the vowels of the negation and past tense morphemes, which reduces underlying /ká'-á/- to surface [-ká-]. Of interest here is that the prefixal morpheme -ak- is obligatory under negation in the true past. I have no explanation for this.

(31) True past negative paradigm

1s níká-sáláká ‘I didn’t work’ /ní-ká-á'-sál-ak-á/ *niká’sálá
2s
3p báká-sáláká ‘they didn’t work’ /bá-ká-á'-sál-ak-á/
cl. 5 diká-sáláká ‘it didn’t work’ /dí-ká-á'-sál-ak-á/ NP = dzőkó ‘otter’

I consider the recent past (which has a zero tense prefix) and true past (-á'-) paradigms to pattern together as true tensed forms in Babole. They share the formal features of -ká- negation and optional use of -ak- with an anteriorizing meaning in the affirmative. They also differ in crucial ways, such as the true past requirement for -ak- under negation and in the suffixal tone pattern under relativization. The true past static is built from the same verb root -ék- as the near past static. The final vowel -é is the vowel harmony variant of the true past final vowel morpheme -á. The true past static is negated parallel to regular true past negation in (31).

(32) True past static

1s ná’éké ‘I was’ /n-á'-ék-á/
2s
3p bá’éké ‘they were’ /bá-á'-ék-á/
cl. 5 dzá’éké ‘the child was’ /dí-á'-ék-á/ NP = ding’ndélé ‘child’
cl. 17 hà’éké ná ‘there was …’ /há-á'-ék-á/ existential

3.2.2.4 Future and conditional forms

There are three prefixal morphemes which relate to future or conditional time:

F₁ -pá’- future possible prefix
F₂ -lá’- future possible (same meaning as F₁) prefix
F₃ -só’- conditional prefix

In all of these forms the final vowel is -á or a vowel harmony variant. But the suffixal tone pattern is different from the near and distant past forms we have seen so far. The suffixal tone melody associated with the future and conditional forms is a low–high
melody, but the high only manifests under certain conditions. I will explain this below, in the context of a concrete example. These morphemes appear to occupy the same ‘slot’ as the past tense morpheme, but otherwise have very different formal properties in the verbal system. For example the pre-final morpheme -ak- is not permitted with these forms and -ká- negation is available only with F3 (although this is subject to dialectal variation). In addition to the formal criteria for grouping these forms, the semantics of futurity and conditionality have a lot in common. All treat the realm of possibility, rather than certainty. Using the now familiar root -á-s-, ‘steal’, I provide examples of this form in (33).

(33) Future tonal melody with ‘short’ verb stem

(a) bá-pá-á-sá
   bá-pá’-ás-á
   3p-steal-CMPL
   ‘They will steal.’

(b) bá-pá’-ás-á
   bá-pá’-ás-á
   3p-steal-CMPL
   C8-food
   ‘They will steal the food.’

The suffixal high tone in all the future time forms is manifested on the final vowel -a only if there is some postverbal material. It may be a argument of the verb (as in (33b)) or any kind of postverbal adjunct or adverbial. Any postverbal material causes the high tone to manifest on the final vowel. However if the final vowel is pre-pausal, (33a), the high tone is simply lost and the final vowel becomes low-toned. Note that this is independent of the phrase-final-lowering of High tones that occurs across the board. With CVC or VC roots like -á-s- there is a downstep between the High of the stem-initial syllable and the high of the future suffix. The suffixal melody for the future group of forms appears to be a low tone followed by a High tone. The mysterious second downstep in (33b) becomes less so when we consider verbs with longer stems. Consider the reduplicated verb root -bêndêndê-, ‘to become very fat’, as an example. What we see in (34a) is that the two syllables following the stem-initial high-toned syllable are low-toned and then the final syllable of the verb stem is high when followed by some postverbal material.

(34) Future tonal melody with longer verb stem

(a) bá-pá’bêndêndê bwa.
   bá-pá-bêndêndêl-á
   3p-FUT-become_fat-FV
   ‘They will become very fat in that way.’

(b) bá-pá’bêndêndêl-á
   bá-pá-bêndêndêl-á
   3p-FUT-become_fat-FV
   ‘They will become very fat.’

The same low tone that is causing the downstep in (33b) is manifesting as a trough of pre-final Lows in (34a). The suffixal ‘boundary’ high tone associated with these tenses is forced to manifest on the FV by any material following the verb. If there is a syntactic pause (phrase boundary) instead, the High is lost. This stem tone pattern will be seen with other TMA configurations as well.

To negate the -pá- future, a periphrastic strategy using the negative of the copula followed by a complementizer is used. Syntactically this is very interesting since it preserves the future morphology within a negated matrix complementizer phrase.
(35) Periphrastic complement structure negation of future

twětì tē tópá’ásá ábyéká
 tô-êti tē ô-pá’-ás-á by-êká
lp-be:NEG that lp-FUT-steal-FV C8-food
‘We will not steal the food.’ (Literally: ‘We are not that we will steal the food.’)

The future morpheme -tá- has the same meaning and morphosyntactic properties as -pá-
future.

The conditional is used to convey contrary-to-fact meaning as in (36).

(36) Contrary to fact conditional

Dzéngà bisè nà muntékú, tôsóláá l’éálé.
Dzéngà bisè nà mu-ntékú tô-só-là-á lá e-ále
C5:be us with C3-fish_net, 1p-COND-lay_out-FV at C7-river
‘If we had a fish net, we would put (it) in the river.’

In contrast to the future forms, the conditional in Dzeke Babole may be negated
morphologically with -ká- as in (38).

(37) Contrary to fact Negative Conditional

Dzéngà bisè nà muntékú, tôká sóláá l’éálé.
Dzéngà bisè nà mu-ntékú tô-ká’só-là-á lá e-ále
C5:be us with C3-fish_net, 1p-NEG-COND-lay_out-FV at C7-river
‘If we had a fish net, would not put (it) in the river.’

The facts above hold for the Dzeke dialect of Babole. The Mongouma-Baillly variety, in
contrast, allows all three of -pá’, -tá’, and -só’, to be negated with -ká’. I have chosen
to group these in Babole on the basis of the segmental and tonal properties of the FV
suffix and the shared prohibition on -ak-.

An interesting fact is that both the conditional and future prefixes can show up in
nominal or infinitive forms while tense and negation never do. From my lexicon and texts
I have these examples.

(38) Nominals/infinities with incorporated prefixes

(a) [nsóhóí] /n-só’-hó-i/ ‘sth. dangerous that
can be predicted’
C9-COND-say-FV (literally: ‘thing one would say’)

(b) [téé l’ópá’pómbë] /téé lá (b) pómb-á’ éëi/ ‘until his
until at C14-FUT-come-FV he (future) coming.’

The lack of vowel harmony in (38a) is a clue that -só- is outside of the stem vowel
harmony domain. Recall that infinitives in Babole are simply class 14 nominals. (38b) is
a futurized infinitive nominal following the case-assigning preposition lá, ‘at’. The point
here is that neither negation or tense morphemes ever appear in these kind of deverbal
nominals so the grouping of future and conditional together is justified by independent
morphosyntactic evidence.

3.2.2.5 Imperatives and hortatives

These ‘deontic’ forms share enough formal characteristics to be treated together in a descriptive essay, although the syntactic structures involved vary. In particular, the prefixal morpheme -ak- is permitted in the affirmative of both ‘deontic’ forms but with the aspectual meaning of habitual or repetitive action. The anteriority/pragmatic-distance meaning for -ak- is restricted to ‘epistemic’ or ‘tensed’ forms, in a kind of complementary distribution of meaning by formal environment. In addition, there is neutralization of negative form possibilities with the deontic forms; a single set of negative forms is used with both imperatives and hortatives. I provide the basic imperative and hortative paradigms below. There is no prefix in the singular imperative.

(39) Imperatives: (a) singular (b) plural
   (a) lâà muntêkú l’êalê
       là-á mu-ntêkú là e-âlê
       lay_out-FV:IMP C3-fish_net at C7-river
       ‘Put the fish-net in the water!’
   (b) bölâà muntêkú l’êalê
       bö-là-á mu-ntêkú là e-âlê
       2p-lay_out-FV:IMP C3-fish_net at C7-river
       ‘You all put the fish-net in the river!’

(40) Habitual/repetitive imperatives
    làâká muntêkú l’êalê
    là-ak-á mu-ntêkú là e-âlê
    lay_out-HAB-FV:IMP C3-fish_net at C7-river
    ‘Continue to (repeatedly or habitually) put the fish-net in the water!’

The negative imperatives are simply the second person forms of the negative hortative forms from (45) below.

(41) Negative imperatives: (a) singular (b) plural
    (a) kôlââká muntêkú l’êalê
        kâ-ô-là-ak-á mu-ntêkú là e-âlê
        NEG-2s:HORT-lay_out-PRE-FV C3-fish_net at C7-river
        ‘Do not put the fish-net in the river!’
    (b) kôöôlââká muntêkú l’êalê
        kâ-(b)ô-là-ak-á mu-ntêkú là e-âlê
        NEG-2p:HORT-lay_out-PRE-FV C3-fish_net at C7-river
        ‘You all do not put the fish-net in the river!’

(42) Hortative affirmative
    ínlê ín-là-ê ‘I should lay out’
    ôlê ô-là-ê ‘you should lay out’
    âlê â-là-ê ‘he should lay out’
    tôlâ ô-ô-là-ê ‘we should lay out’
    bölâ bô-là-ê ‘you (pl) should lay out’
    bâlâ bâ-là-ê ‘they should lay out’
(43) Hortative affirmative habitual

Low-toned verb

\[ \text{inlāākè} \quad \text{in-}lā-ak-è \quad \text{‘I should habitually lay out’} \]

\[ \text{olāākè} \quad \text{o-}lā-ak-è \quad \text{‘you should habitually…’} \]

\[ \text{ālāākè} \quad \text{ā-}lā-ak-è \quad \text{‘he should habitually’} \]

\[ \text{tōlāākè} \quad \text{tō-}lā-ak-è \quad \text{‘we should habitually’} \]

\[ \text{bōlāākè} \quad \text{bō-}lā-ak-è \quad \text{‘you (pl) should habitually…’} \]

\[ \text{bālāākè} \quad \text{bā-}lā-ak-è \quad \text{‘they should habitually…’} \]

In case there is a full NP subject for a hortative, the appropriate verbal concord prefix with a high tone would be used in place of the ‘personal’ prefixes. A few comments are in order for the hortative affirmative forms in (42) and (43). The Hortative is marked by high tones on the ‘personal’ prefix set (normally they are low-toned except for 3p) and by a low-toned suffix -è. The habitual aspect suffix -ak- is low-toned because the FV is low-toned. In the case of a high-toned verb root in the hortative, there is a raising of the pitch that occurs between the hortative prefix high and the initial verb root syllable high as in (44). Whether this audible pitch rise is because the prefix high is lowered or because the second high is raised is unclear at present. An acoustic study of the fundamental frequency values for various classes of Babole high tone, downstepped high tone and raised high tone would be very revealing in this regard. Snider (1998) is an excellent example of such a study.

(44) Hortative tonal upstep

\[ /ā-ās-è/ \quad [ā̃sè] \quad [\quad \quad] \]

3s-steal-FV:HORT

The negative hortatives, (45), use the familiar negation morpheme -kā’-, but this time the morpheme is initial and is low-toned. The personal agreement markers are high-toned as in the affirmative hortative and there is an anomalous third person singular form -mó-, instead of -ā- as in the affirmative. Finally, this form requires the presence of -ak- in the negative just as the True Past negative did. The requirement for -ak- under deontic negation is unexplained.

(45) Negative hortative with high root

<table>
<thead>
<tr>
<th>Affirmative</th>
<th>Negative</th>
<th>Underlying</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nî̃āsè</td>
<td>kā̃nî̃āsākā</td>
<td>kā-ñî-ās-ak-ā</td>
<td>‘I shouldn’t steal …’</td>
</tr>
<tr>
<td>ò̃āsè</td>
<td>kō̃āsākā</td>
<td>kā-ō̃-ās-ak-ā</td>
<td>‘you (sg) shouldn’t steal/don’t steal!’</td>
</tr>
<tr>
<td>ā̃āsè</td>
<td>kāmō̃āsākā</td>
<td>kā-mō̃-ās-ak-ā</td>
<td>‘he shouldn’t steal/let him not steal’</td>
</tr>
<tr>
<td>tō̃āsè</td>
<td>kātō̃āsākā</td>
<td>kā-tō̃-ās-ak-ā</td>
<td>‘we shouldn’t steal/let’s not steal!’</td>
</tr>
<tr>
<td>bō̃āsè</td>
<td>kāō̃āsākā</td>
<td>kā-(b)ō̃-ās-ak-ā</td>
<td>‘you shouldn’t steal/don’t you (pl) steal!’</td>
</tr>
<tr>
<td>bā’̃āsè</td>
<td>kāā́sākā</td>
<td>kā-(b)ā’-ās-ak-ā</td>
<td>‘they shouldn’t steal/let them not steal’</td>
</tr>
</tbody>
</table>

Note that the regular process of ‘b-drop’ is at work in the second and third person plural forms in (45), but that vowel elision does not follow ‘b-drop’ within ‘words’ but rather hiatus is maintained in [kā-ō …] and [kā-ā …] just as with the ‘ghost’ [b] forms in (6). In contrast, the prepositional phrase /lā ̃bōsālō̃/, in the yard, is simply [lō̃sālō̃] in normal connected speech. The underlined word-initial [b] drops out creating vowel hiatus which is resolved by eliding the vowel [a], V-1. The generalization is that you can have vowel elision in derived environments (those created by [b]-drop) post-lexically, but not lexically.
3.2.2.6 Progressive aspect

This form has an inherent meaning of progression, being in the process of doing an action. The prefinal aspectual morpheme -ak- is obligatory in the progressive aspect construction. The prefixal morpheme -ó' occasions a downstep which can be heard when the verb root tone is high. The stem suffixal tone pattern is the same low–high melody described for the future and conditional forms. I do not attempt to represent the low–high tonal melody in the underlying representations below.

(46) Present progressive with low verb -lél- ‘cry’

<table>
<thead>
<tr>
<th>Affirmative</th>
<th>Underlying</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nólélákà</td>
<td>n-ó #lél-ak-a LH</td>
<td>‘I am crying’</td>
</tr>
<tr>
<td>ólélákà</td>
<td>ó-ó #lél-ak-a</td>
<td>‘you are crying’</td>
</tr>
<tr>
<td>ólélákà</td>
<td>a-ó #lél-ak-a</td>
<td>‘he is crying’</td>
</tr>
<tr>
<td>tólélákà</td>
<td>tó-ó #lél-ak-a</td>
<td>‘we are crying’</td>
</tr>
<tr>
<td>bóélélákà</td>
<td>bó-ó #lél-ak-a</td>
<td>‘you (pl) are crying’</td>
</tr>
<tr>
<td>bóélélákà</td>
<td>bá-ó #lél-ak-a</td>
<td>‘they are crying’</td>
</tr>
</tbody>
</table>

(47) Final high tone in progressive

(i) ólélákà ndé?
(ii) ólélákà

ó #lél-ak-á    | ndé?    | ó #lél-ak-á
2s-PROG-cry-HAB-FV | what   | 2s-PROG-cry-HAB-FV
‘What are you crying (about)’? | ‘You are crying’

(48) Present progressive with high verb -sál- ‘do’ (Dzeke dialect)

<table>
<thead>
<tr>
<th>Affirmative</th>
<th>Morpheme analysis</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nôsálákà</td>
<td>n-ó #sál-ak-a</td>
<td>‘I am doing’</td>
</tr>
<tr>
<td>ósálákà</td>
<td>ó-ó #sál-ak-a</td>
<td>‘you are doing’</td>
</tr>
<tr>
<td>ósálákà</td>
<td>a-ó #sál-ak-a</td>
<td>‘he is doing’</td>
</tr>
<tr>
<td>tôsálákà</td>
<td>tô-ó #sál-ak-a</td>
<td>‘we are doing’</td>
</tr>
<tr>
<td>bóśálákà</td>
<td>bó-ó #sál-ak-a</td>
<td>‘you (pl) are doing’</td>
</tr>
<tr>
<td>bóśálákà</td>
<td>bá-ó #sál-ak-a</td>
<td>‘they are doing’</td>
</tr>
</tbody>
</table>

Note that there is homophony between the second and third person forms (both singular and plural) in the Dzeke dialect in (46) and (48) because of regular vocalic elision processes operating in the language. The Mongouma Bailly dialect, however, shown in (49), has a rule that produces a labial glide [w] rather than V₁ vowel-elision in the environment [... o-o ...].

(49) Present progressive affirmative with high verb -sál- ‘do’ (Mongouma Bailly dialect)

<table>
<thead>
<tr>
<th>Affirmative</th>
<th>Underlying</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nô'ösálákà</td>
<td>n-ó #sál-ak-a</td>
<td>‘I am doing’</td>
</tr>
<tr>
<td>wôśálákà</td>
<td>ó-ó #sál-ak-a</td>
<td>‘you are doing’</td>
</tr>
<tr>
<td>óśálákà</td>
<td>a-ó #sál-ak-a</td>
<td>‘he is doing’</td>
</tr>
<tr>
<td>tôśálákà</td>
<td>tô-ó #sál-ak-a</td>
<td>‘we are doing’</td>
</tr>
<tr>
<td>bwôśálákà</td>
<td>bó-ó #sál-ak-a</td>
<td>‘you (pl) are doing’</td>
</tr>
<tr>
<td>bóśálákà</td>
<td>bá-ó #sál-ak-a</td>
<td>‘they are doing’</td>
</tr>
</tbody>
</table>
(50) Present progressive negative of high verb -sál- ‘do’ (Dzeke dialect)

<table>
<thead>
<tr>
<th>Rapid speech</th>
<th>Careful speech</th>
<th>Underlying</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nētsō' sālākā</td>
<td>nētiōsālākā</td>
<td>n-ēti-ō # sāl-ak-a</td>
<td>‘I am not doing’</td>
</tr>
<tr>
<td>wētsō' sālākā</td>
<td>wētiōsālākā</td>
<td>ō-ēti-ō # sāl-ak-a</td>
<td>‘you are not doing’</td>
</tr>
<tr>
<td>ētsō' sālākā</td>
<td>ētiōsālākā</td>
<td>ā-ēti-ō # sāl-ak-a</td>
<td>‘he is not doing’</td>
</tr>
<tr>
<td>twētsō' sālākā</td>
<td>twētiōsālākā</td>
<td>ū-ēti-ō # sāl-ak-a</td>
<td>‘we are not doing’</td>
</tr>
<tr>
<td>bētsō' sālākā</td>
<td>bētiōsālākā</td>
<td>bō-ēti-ō # sāl-ak-a</td>
<td>‘you (pl) are not doing’</td>
</tr>
<tr>
<td>bē' sō' sālākā</td>
<td>bē' tiōsālākā</td>
<td>bā-ēti-ō # sāl-ak-a</td>
<td>‘they are not doing’</td>
</tr>
</tbody>
</table>

The careful speech negative forms in (50) show the progressive morpheme with a low tone. The progressive morpheme displays tonal polarity in that it is high-toned when preceded by a low tone (49), but low-toned when preceded by a high tone (50). This only emerges clearly in the careful speech paradigm and is hidden by the normal speech affrication of [t] to [ts] before a high vowel and the by now familiar phonological processes that produce a downstep. Recall that ēti is simply the negative of the present stative (see (28)).

Note the similarity to the future forms which could not be negated simply with -kā-. In essence only ‘tensed’ forms can be negated with -kā-. For the forms marked for futurity or aspect, a negative form of the copula is ‘inserted’ in the morphosyntactic structure to host the semantic feature of negation. In fact the progressive reveals a lot about how this system works because the progressive can be construed with past tense as well. Parallel to the negation case above, an aspectualized verb cannot be further inflected for tense directly. The past form of the progressive involves the idiosyncratic past tense forms of the stative verb that we have already seen (see (32)).

(51) Past progressive of high verb -sāl- ‘do’

<table>
<thead>
<tr>
<th>Underlying</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nā ūkēōsālākā</td>
<td>n-ā-ēkō-ō # sāl-ak-a LH</td>
</tr>
<tr>
<td>wā ūkēōsālākā</td>
<td>ō-ā-ēkō-ō # sāl-ak-a</td>
</tr>
<tr>
<td>ā ūkēōsālākā</td>
<td>ā-ā-ēkō-ō # sāl-ak-a</td>
</tr>
<tr>
<td>twā ūkēōsālākā</td>
<td>ū-ā-ēkō-ō # sāl-ak-a</td>
</tr>
<tr>
<td>bwā ūkēōsālākā</td>
<td>bō-ā-ēkō-ō # sāl-ak-a</td>
</tr>
<tr>
<td>bā ūkēōsālākā</td>
<td>bā-ā-ēkō-ō # sāl-ak-a</td>
</tr>
</tbody>
</table>

(52) Past progressive negative of high verb -sāl- ‘do’

<table>
<thead>
<tr>
<th>Underlying</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nikā ūkēōsālākā</td>
<td>nī-kā-ēkō-ō # sāl-ak-a LH</td>
</tr>
<tr>
<td>ōkā ūkēōsālākā</td>
<td>ō-kā-ēkō-ō # sāl-ak-a</td>
</tr>
<tr>
<td>ākā ūkēōsālākā</td>
<td>ā-kā-ēkō-ō # sāl-ak-a</td>
</tr>
<tr>
<td>tōkā ūkēōsālākā</td>
<td>tō-kā-ēkō-ō # sāl-ak-a</td>
</tr>
<tr>
<td>bōkā ūkēōsālākā</td>
<td>bō-kā-ēkō-ō # sāl-ak-a</td>
</tr>
<tr>
<td>bākā ūkēōsālākā</td>
<td>bā-kā-ēkō-ō # sāl-ak-a</td>
</tr>
</tbody>
</table>

3.2.2.7 Hortative Motional Verb Forms

This form builds on the hortative form as a base and has the meaning of ‘come over here and do X’. It is the softest and most gentle form of request possible in the language and is frequently used with small children.
Hortative motional with high verb

\( kó \text{-}[ô-sál-é]-^{IH} \quad \text{mo-sálá}^{##} \quad kó\text{-}[ô-sál-é]-^{IH} ## \\
\text{MOT-[2HHORT-do-FV]}-^{IH} \quad \text{C3-work} \quad \text{MOT-[2HHORT-make-FV]}-^{IH} \\
\text{‘Come here (child) and do this work!’ ‘Come here (child) and do (this)!’}

With a high-toned verb (53), it becomes clear that the motional morpheme imposes a suffixal high tone on an already composed hortative verb-word. The low tone of the subjunctive final vowel is retained as a downstep when the motional suffixal high tone is added. In autosegmental terms, the high docks on the final vowel, floating the hortative low and producing a downstep. If the habitual prefinal morpheme \(-ak\) is added to one of the forms in (53), the low tone manifests on the available penultimate vowel as in (54). This is the same stem tone alternation that we saw in the future and progressive forms earlier.

(54) Hortative motional habitual

\( ká\text{-}[ô-sál-ak]-^{IH} \quad \text{mo-sálá}^{##} \quad \text{C3-work} \)

\text{‘Come here children and do this work continuously.’}

The internal structure of these motional subjunctive forms is better understood when one considers the overall paradigm of complements of motional verbs. Intransitive motional verbs may take a special ‘motional purposive’ complement.

(55) Motional purposive complements

\( níkéi \text{-}kátóká \text{-}mái } \\
\text{ni-\text{-}kě\text{-}í \quad ká-tóká-}^{IH} \text{mái}^{##} \\
\text{1s-go-CMPL \text{MOT-fetch-FV-}}^{IH} 6: \text{water} \\
\text{‘I am going to fetch water.’}

The class of motional verbs that may take -\( ká\) complements includes -\( swé\), ‘come from’, -\( kě\), ‘go’, and a few others. The motional complement prefix \( ká\) is a kind of special locative complementizer. The \( ká\) complement imposes the same stem tone pattern as future, progressive and hortative motional forms: low plateau if phrase final, otherwise a single final high. The parallel stem tone melody suggests that all the verbal paradigms having this tone pattern evolved from verb-verb or auxiliary-verb complementation structures like (55).

3.2.3 Reflexive

The Babole reflexive morpheme appears directly preceding the verb root. It has the particularity of being both preceded and followed by a tonal downstep. The crucial contrast for this case is seen by looking at (56) and (57) introduces downsteps before and after the morpheme showing that the downsteps must be included in the underlying form of the reflexive morpheme. Other preverbal morphemes have downsteps following but never preceding.

(56) Simple completive

\( bá\text{-}bimbí \text{ Jean} \\
\text{bá-bimb-í \ Jean} \\
\text{3p-hit-CMPL \ Jean} \\
\text{‘They hit John.’}

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In (57) one can see the reflexive morpheme with its double downstep structure.

(57) Completive Reflexive

\[ \text{bá-á' bimbí} \]
\[ \text{bá'-á' -bimb-í} \]

3p-REFLX-hit-CMPL

'They hit themselves.'

3.2.4 Derivational suffixes (extensions) and final vowels

Babole has the set of derivational suffixes (extensions) in (58). Except for -edz- (intensive) the extensions change the verbs argument structure in various ways. The combinations and sequences of extensions that are allowed and disallowed are complex and depend on subtle issues in the argument structure of particular verb classes. Extensions are toneless and receive a tonal specification from suffixal inflections.

(58) Extensions

- **-am-** ‘passive’
  \[ \text{bá=bimb-ám-i} \]
  ‘They were hit’
  (nà Serge)
  (by Serge),’

- **-el-** ‘applicative’
  \[ \text{á=bimb-éd-i} \]
  ‘He hit Serge for me.’
  ámè Serge

- **-edz-** ‘intensive’
  \[ \text{á=bimb-édz-á} \]
  ‘He really hit Serge.’
  Serge

- **-y-** ‘causitive’
  \[ *\text{á=bik-á} \]
  ‘He caused Serge to become well (healed him).’
  *\text{á=bik-á} Sergè

- **-ol-** ‘reversive’
  \[ *\text{tò=kánd-ól-è} \]
  ‘Let’s remove him from dominating (us).’
  *\text{tò=kánd-ól-è} è

- **-an-** ‘reciprocal’
  \[ \text{Bisè na Serge to bimb-á} \]
  ‘Serge and us guys hit each other.’

* - **-bik-** ‘be healed, be well (intransitive)’

% - **-kánd-** ‘dominate’

Babole has three final vowels (not counting vowel harmony variants). The morphological default final vowel is used in all tense/mode/aspect forms other than completive and hortative and is high or low depending on the TMA involved.

(59) Final vowels

- **-i** ‘completive’
  ‘completive (high tone)’

- **-e, -e** ‘non-completive’
  ‘hortative (low tone)’

- **-a, -e, -ó** ‘default’
  ‘past, progressive, future, conditional (high or low)’

4 SYNTAX

4.1 Demonstrative/deictic system

The Babole demonstrative deictic system can be described as a simple matrix generated by the noun class system and five deictic categories giving a total of \(5 \times 17 = 85\) forms.
Babole deictic forms

<table>
<thead>
<tr>
<th>Class</th>
<th>Prefix</th>
<th>Proximate 1</th>
<th>Proximate 2</th>
<th>Distant 1</th>
<th>Distant 2</th>
<th>Interrogative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>a, mo-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>2</td>
<td>baa-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>3</td>
<td>mo-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>4</td>
<td>mi-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>5</td>
<td>di-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>6</td>
<td>ma-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>7</td>
<td>e-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>8</td>
<td>bi-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>9</td>
<td>N-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>10</td>
<td>i-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>11</td>
<td>lo-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>12</td>
<td>bo-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>13</td>
<td>hà-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>14</td>
<td>lò-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>15</td>
<td>mú-</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>16</td>
<td>mwá</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
<tr>
<td>17</td>
<td>bájá</td>
<td>-ò</td>
<td>-nì</td>
<td>-wà</td>
<td>-nà</td>
<td>-sò</td>
</tr>
</tbody>
</table>

Four of the deictic categories have a clear spatial interpretation:

(i) close to the speaker -nì dzùmbá ìnì ‘this thing close to me’
(ii) close to the hearer -ò múmbá múò ‘those things close to you’
(iii) far but within sight -wà nyámù ìwà ‘those animals over there’
(iv) far and out of sight -nà lùkú lònà ‘that place out of sight’

The fifth deictic category has interrogative meaning:

(v) which thing -sò dzùmbá-disò ‘which thing?’

The interrogative deictics above, where one is questioning the correct choice among a range of identified entities, are different from the invariable WH-interrogative particles ndzá and ndé.

<table>
<thead>
<tr>
<th>Interrogative wh-words</th>
</tr>
</thead>
<tbody>
<tr>
<td>ndzá</td>
</tr>
<tr>
<td>bwéndó ndzá?</td>
</tr>
<tr>
<td>ndzá ìpódi?</td>
</tr>
<tr>
<td>ndé</td>
</tr>
<tr>
<td>mbándó ndé?</td>
</tr>
<tr>
<td>ìdíhí ndé?</td>
</tr>
</tbody>
</table>

These two are used where the identity of the questioned person or thing is not established, that is to say, they are not referential. The invariable interrogative particles do not require an antecedent in the pragmatic or discourse context. I note in passing that these wh-words occur in situ and are not fronted in Babole.
The deictics can either be used modificationally as in (62a) or as stand-alone pro-forms (62b).

(62) Modifier and pronominal uses of deictics

(a) Demonstrative modifier

<table>
<thead>
<tr>
<th>dzúmbá</th>
<th>díni</th>
<th>(dzé) dibé.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:thing</td>
<td>5:thing (close to me)</td>
<td>5:be 5:bad</td>
</tr>
</tbody>
</table>

‘This thing is bad.’

<table>
<thead>
<tr>
<th>múmbá</th>
<th>máo</th>
<th>(mé) mabé.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:things</td>
<td>6:those (close to you)</td>
<td>be:6 6:bad</td>
</tr>
</tbody>
</table>

‘Those things are bad.’

(b) Demonstrative pronoun

<table>
<thead>
<tr>
<th>díni</th>
<th>(dzé)</th>
<th>dibé.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:thing (thing close to me)</td>
<td>5:be</td>
<td>5:bad</td>
</tr>
</tbody>
</table>

‘This (one) is bad.’

<table>
<thead>
<tr>
<th>máo</th>
<th>(mé)</th>
<th>mabé.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:those (things close to you)</td>
<td>6:be</td>
<td>6:bad</td>
</tr>
</tbody>
</table>

‘Those (ones) are bad.’

The -wà demonstratives also serves the crucial function of discourse reference as illustrated in the example below.

<table>
<thead>
<tr>
<th>dzúmbá</th>
<th>díwà</th>
<th>(dzé) dílamù.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:thing</td>
<td>5:that</td>
<td>5:good</td>
</tr>
</tbody>
</table>

‘That thing (just mentioned) is good.’

4.2 Pronouns, quantifiers, adjectives, cardinals

Just as the demonstrative system shows a fully developed concord set, pronouns, quantifiers, cardinal numbers, and adjectives all show concording behavior. There are some tonal subtleties to be noted in the summarizing table (63). Classes 1 and 9 show low toned prefixes in pronouns, quantifiers, and modifying adjectives, while the other classes have a high-downstepped high melody.

(63) Babole concording pronouns, modifiers, and quantifiers

<table>
<thead>
<tr>
<th>Class</th>
<th>‘it, them’</th>
<th>‘all’</th>
<th>Nominal adjectives</th>
<th>Modifier adjectives</th>
<th>Cardinals</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>wângó</td>
<td>wêsù</td>
<td>molâmù</td>
<td>òmòlâmù</td>
<td>mòhôkó</td>
<td>‘one’</td>
</tr>
<tr>
<td>2</td>
<td>bà/ngó</td>
<td>bêsù</td>
<td>balâmù</td>
<td>bá/lâmù</td>
<td>bâ/éngé</td>
<td>‘two’</td>
</tr>
<tr>
<td>3</td>
<td>wá/ngó</td>
<td>wêśù</td>
<td>molâmù</td>
<td>mó/lâmù</td>
<td>mòhôkó</td>
<td>‘one’</td>
</tr>
<tr>
<td>4</td>
<td>myá/ngó</td>
<td>mëśù</td>
<td>mîlâmù</td>
<td>mî/lâmù</td>
<td>mî/éngé</td>
<td>‘two’</td>
</tr>
<tr>
<td>5</td>
<td>dzá/ngó</td>
<td>dzësù</td>
<td>dîlâmù</td>
<td>dî/lâmù</td>
<td>dìhëkó</td>
<td>‘one’</td>
</tr>
<tr>
<td>6</td>
<td>mâ/ngó</td>
<td>mëśù</td>
<td>mûlâmù</td>
<td>mû/lâmù</td>
<td>mû/éngé</td>
<td>‘two’</td>
</tr>
<tr>
<td>7</td>
<td>yá/ngó</td>
<td>yêsù</td>
<td>elâmù</td>
<td>é/lâmù</td>
<td>éhëkó</td>
<td>‘one’</td>
</tr>
<tr>
<td>8</td>
<td>byá/ngó</td>
<td>byêsù</td>
<td>bilâmù</td>
<td>bî/lâmù</td>
<td>bì/éngé</td>
<td>‘two’</td>
</tr>
<tr>
<td>9</td>
<td>yangó</td>
<td>yêsù</td>
<td>ndâmù</td>
<td>ñdâmù</td>
<td>nìpëkó</td>
<td>‘one’</td>
</tr>
<tr>
<td>10</td>
<td>yá/ngó</td>
<td>yêsù</td>
<td>ndâmù</td>
<td>i/lâmù</td>
<td>iëngé</td>
<td>‘two’</td>
</tr>
</tbody>
</table>
There is a small class of 'adjective' roots in Babole including:

- bê ‘bad’
- lâmù ‘good’
- sênî ‘small’
- ngâtă ‘big’

These have the property of being able to appear with any nominal prefix. In stative and 'presentative' constructions the adjectives look and act like ordinary nouns with a low-toned prefix ('nominal' adjectives in fact). The ‘nominal’ adjective constructions in (64) have propositional meaning whether the stative verb is present or not.

(64) ‘Nominal’ adjectives

Stative with ‘be’ without ‘be’

\[ \text{dih} \, \text{dzé} \, \text{dilâmù} = \text{dih} \, \text{dilámù} = \text{‘The affair is good.’} \]
\[ \text{mah} \, \text{mé} \, \text{malâmù} = \text{mah} \, \text{malámù} = \text{‘The affairs are good.’} \]
\[ \text{byékà} \, \text{byé} \, \text{bilâmù} = \text{byékà} \, \text{bilámù} = \text{‘The food is good.’} \]

In the modificational use of adjectives, a high tone is imposed on the noun class prefix, creating a high-downstepped high sequence if the initial stem tone is high as in (66).

(65) Modificational use of adjective

\[ \text{dih} \, \text{dilámù} \, \text{disidí} \]
\[ \text{C5-affair C5-good AGR5-finish-CMPL} \]

‘The good affair is finished.’

In (66) I propose a sample derivation for the modificational adjective. An initial high tone is added to the ‘nominal’ adjective. This high tone obligatorily links to the vowel of the prefix and causes the prefix low to ‘float’, creating the downstep configuration.

(66) Derivation of modificational adjective

There are significant parallels between the structure of modificational adjectives and relative clauses (see §4.4).
4.3 Associative noun phrases

Associative markers are used to link nouns that are in a semantic relationship of possession or association of some kind. The associative marker ‘agrees’ with the head noun in the associative construction (normally the first NP in an NP-ASSOC-NP sequence). The ‘short’ associatives lack the initial ‘determiner’ vowel which is obligatory with possessives. The short associatives are the only ones allowed in a variety of non-possessive associatives. See examples (d), (e), and (f) in (68).

(67) Babole associative markers

<table>
<thead>
<tr>
<th>Class</th>
<th>Full form</th>
<th>Short</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>óà</td>
<td>wà</td>
</tr>
<tr>
<td>2</td>
<td>í’bá’</td>
<td>‘bá’</td>
</tr>
<tr>
<td>3</td>
<td>ó’á’</td>
<td>’wá’</td>
</tr>
<tr>
<td>4</td>
<td>í’má’</td>
<td>’má’</td>
</tr>
<tr>
<td>5</td>
<td>í’dzú’</td>
<td>’dzú’</td>
</tr>
<tr>
<td>6</td>
<td>í’má’</td>
<td>’má’</td>
</tr>
<tr>
<td>7</td>
<td>é’d’</td>
<td>’yá’</td>
</tr>
<tr>
<td>8</td>
<td>í’byá’</td>
<td>’byá’</td>
</tr>
<tr>
<td>9</td>
<td>ó’á’</td>
<td>yá</td>
</tr>
<tr>
<td>10</td>
<td>í’á’</td>
<td>’yá’</td>
</tr>
<tr>
<td>11</td>
<td>ó’bwá’</td>
<td>’bwá’</td>
</tr>
<tr>
<td>12</td>
<td>í’hwá’</td>
<td>’hwá’</td>
</tr>
<tr>
<td>13</td>
<td>í’hwá’</td>
<td>’hwá’</td>
</tr>
<tr>
<td>14</td>
<td>í’dú’</td>
<td>’dú’</td>
</tr>
<tr>
<td>15</td>
<td>í’dú’</td>
<td>’dú’</td>
</tr>
<tr>
<td>16</td>
<td>í’dwá’</td>
<td>’dwá’</td>
</tr>
<tr>
<td>17</td>
<td>í’dwá’</td>
<td>’dwá’</td>
</tr>
<tr>
<td>18</td>
<td>í’mwá’</td>
<td>’mwá’</td>
</tr>
<tr>
<td>19</td>
<td>í’hyá’</td>
<td>’hyá’</td>
</tr>
<tr>
<td>20</td>
<td>ó’twá’</td>
<td>’twá’</td>
</tr>
</tbody>
</table>

(68) Examples of associative construction

(a) byèkà byá bàà-hútí
   8:food 8:ASS 2:visitors
   ‘food (set apart) for the visitors’

(b) byèkà [í’byá ámë]
   8:food 8:ASS me
   ‘my food’

(c) [í’byá ámë] byèkà
   8:ASS me food
   ‘my food’

(d) mil’ngó ‘myá’ nsòsò
   4:rows 4:ASS 10:chickens
   ‘rows of chickens’

(e) bokìlà bwá’ ngùmá
   14:hunt 14:ASS 10:elephants
   ‘elephant hunt’

(f) molòmì wá’ nsòsò
   3:male 4:ASS 9:chickens
   ‘male chicken’
The basic distinction in associatives is between those requiring the determiner-like initial vowel and those prohibiting it. Although this topic requires more research, it appears that it is the semantic feature of definiteness i.e. carried by the initial vowel in Babole associatives. Thus it is only in true genitive possessives like (68b), that the definiteness feature is inherent and so required. The semantic feature of definiteness is inappropriate on the other hand in the non-possessive associatives and so the initial vowel is disallowed there. Associative ‘inversion’ is only allowed in the special sub case of a pronominal possessor, (68c). The associative inversion phenomena can be explained by cliticization of the pronominal ‘head’ to the associative followed by optional ‘raising’ of the clitic-host to a pre-nominal determiner position.

4.4 Syntax of relativized verbs

4.4.1 Relativized completives

In this final section, I will present the basic structure of relativized verbal constructions in Babole. I will present both subject and object relatives for the completive verb form.

In a straightforward affirmative sentence like (69), we see the underlying Subject–Verb–Object (SVO) word order with the verb ‘agreeing’ with the preverbal class 5 subject NP.

(69) Simple affirmative with SVO order

\[ \text{dingúngú } \text{d idézi } \text{byéká} \]
\[ \text{d i - ngingú } \text{di - dzé - i} ] \text{bi - éká} \]
\[ \text{C5 - mosquito } \text{AGR: C5 - eat - CMPL } \text{C8 - food} \]
\[ ‘\text{The mosquito has eaten the food.’} \]

In (69) note that there are no tonal downsteps in the inflected verb, neither between the high-toned subject agreement marker and the high-toned verb root, or between the verb root and the high-toned completive final vowel. Now compare this with (70), a subject relative based on (69). The relativization consists of two tonal downsteps which separate the three high tones in the verb phrase. In non-relative contexts the subject agreement markers are never followed by a downstep. In a relative clause the subject agreement marker is followed by a downstep. An additional downstep appears following the verb’s high tone. I interpret these tonal pitch drops as due to the presence of floating low-tone relative markers in the morphological verb phrase. This is shown in the morpheme analysis line in (70).

(70) Subject relative with full NP subject

\[ \text{[dingúngú di - dzé - i byéká] dzé d ilámú} \]
\[ \text{di - ngingú } \text{di - ‘ - dzé - ’ - i} ] \text{bi - éká} \text{di - é } \text{di - lámú} \]
\[ \text{C5 - mosquito } \text{AGR: C5 - REL - eat - REL - CMPL } \text{C8 - food } \text{AGR: C5 - be good} \]
\[ ‘\text{The mosquito who has eaten the food is good.’} \]

The object relative version of the same sentence is shown in (71). The relativized object is now in the sentence initial subject position (has become the syntactic subject of the relative clause) and the relativized verb agrees with it. The ‘underlying’ subject now...
appears immediately following the relativized verb. The matrix clause verb byé agrees with the relative head byékà.

(71) Corresponding object relative

\[
\text{byékà bì‘dzé ‘i dingúngù byé bilámù} \\
\text{bi-ékà bi- ‘-dzé- ‘-i} \\
\text{di-ngúngù bi-è bi-lámù} \\
\text{C8-food AGR:C8-rel-eat-REL-CMPL C8-food AGR: C8-be C8-good} \\
\]  \\
\text{‘The food that the mosquito has eaten is good.’}

A different relativization pattern occurs when the subject is a ‘personal’ pronoun rather than a full NP. In (72) we find a class 8 associative marker ibyá agreeing with the class 8 relative head NP byékà. This associative marker is drawn from the ‘full form’ column of associative markers in (67). The preference of a ‘definite’ interpretation of relative clause head nouns explains why the ‘short’ form associatives are not acceptable as relative pronouns in such clauses.

(72) Object relative with personal pronoun subject

\[
\text{byékà i‘byá nidżé ‘i} \\
\text{byé bilámù} \\
\text{bi-ékà ibyá ní-dzé- ‘-i} \\
\text{bi-è bi-lámù} \\
\text{C8-food ASS:8 1s-eat-REL-CMPL AGR:C8-be C8-good} \\
\]  \\
\text{‘The food that I ate is good.’}

The presence of the subject pronoun clitic/prefix prevents the verb from agreeing directly with the relative head noun and so the associative is inserted to host the complementizer, agreement and definiteness features. I point out in closing that the suffixal tone pattern on a true past relative is different. The crucial difference is seen in (73) where I use an anteriorized true past to show that the expected suffixal low tone is missing and we find only a plateau of highs just as in the non-relativized verb.

(73) Object relative in true past with personal pronoun subject

\[
\text{byékà i‘byá ná‘dzákà} \\
\text{byá‘éké bilámù} \\
\text{bi-ékà ibyá ná‘dzé-ak-à} \\
\text{bi-è‘ék-è bi-lámù} \\
\text{C8-food ASS:8 1s-PST-eat-PRE-FV AGR:C8-PST-be:PST-FV C8-good} \\
\]  \\
\text{‘The food that I had eaten was good.’}

This difference between the suffixal tone pattern on near past and true past relatives suggests that the near past suffix is relatively ‘shallow’, being added ‘after’ relativization (perhaps originally an adverb). With the true past relative, there is no inserted low tone to cause a downstep, suggesting that relativization in some sense ‘follows’ true past morphology formation in the word building process. The derivational order would be (i) true past formation, (ii) relativization, (iii) addition of recent past suffix.

ACKNOWLEDGMENTS

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REFERENCES

CHAPTER TWENTY-TWO

LEGA (BEYA DIALECT) (D25)

Robert Botne

1 INTRODUCTION

Lega, or Kilega, is spoken in the eastern region of the Democratic Republic of Congo by an estimated 440,000 people (Grimes 2000), situated primarily in the southern area of Kivu Region, an area that is primarily equatorial rainforest.

Lega can be subdivided into two major varieties: Isile (also Kisile or Ishile), also referred to as Lega-Ntara, and Lega-Malinga, having about 67 percent lexical similarity (Grimes 2000). Isile is spoken in the eastern part of Lega territory, primarily in the north and east of the district of Mwenga (Lungumbu 1988). Lega-Malinga, which comprises the remainder of the Lega-speaking community, includes a number of major sub-varieties: Kikanu in the north (southern Walikale District); Kigala, Kiyoma, Kiliga, Kisede, and Gonzabale in the central area (Shabunda District); Beya (also called Kinyamunsange) in the west (Pangi District). There appears to be no clear consensus on names and not always an indication of location (cf. Grimes 2000, Kadima et al. 1983, and Lungumbu 1988). This chapter outlines the Beya variety of Pangi District, which may be compared with the Gonzabale variety of Mwenga District (Lungumbu 1988) and with what Meeussen calls the Banagabo (= Kiliga?) variety of Shabunda District (Meeussen 1971).
Lega has been introduced as a language of instruction in schools. However, it is not known what materials, if any, have been published in the language. No standard orthography exists.

2 PHONOLOGY

2.1 The vowel system

Lega has a system of seven vowel phonemes: /ɪ, i, e, a, o, u, ŭ/. The vowels /ɪ, i, ŭ/ and /u, ŭ/ are all high vowels. Advanced Tongue Root (ATR) is, perhaps, the differentiating feature.

```
+   -   +
ɪ i u ŭ +
-------
e o a - high
```

MAP 22.2 APPROXIMATE LEGA DIALECT AREAS

Lega has been introduced as a language of instruction in schools. However, it is not known what materials, if any, have been published in the language. No standard orthography exists.
2.2 Vowel assimilation

There are two types of vowel assimilation, both involving /i/ and /u/. First, in verbal suffixes these vowels remain unchanged following +ATR vowels or low /a/, but assimilate in height to a mid-vowel in the preceding stem. Second, /i/ and /u/ of noun class prefixes become [j] and [–], respectively, i.e. assimilate in ATR value to high vowels in the stem.

2.2.1 Assimilation in verb suffixes

Vowel assimilation occurs in verbal suffixes that have the vowel /i/ or /u/. There are four suffixes with /i/ (see §4.2 for discussion of labels): applicative /-il-/, efficerative and ostensive /-ik-/, and persistive /-ilil-/. In each case, the vowel [i] alternates with the vowel [e], the latter occurring following a mid vowel in the verb stem, either [e] or [o].

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicative -il- ~ -el-</td>
<td>-básála ‘go/come via a place’ &lt; -bása ‘go out’</td>
</tr>
<tr>
<td>-búmina ‘bark at’ &lt; -búma ‘bark’</td>
<td></td>
</tr>
<tr>
<td>-réndela ‘speak on behalf of’ &lt; -rénda ‘speak’</td>
<td></td>
</tr>
<tr>
<td>Efficerative -ik- ~ -ek-</td>
<td>-gyíka ‘cook’ &lt; -gyá [−gi+a] ‘burn vi’</td>
</tr>
<tr>
<td>-sendéka ‘put into a leaning position’ &lt; -sendama ‘be leaning’</td>
<td></td>
</tr>
<tr>
<td>Ostensive -ik- ~ -ek-</td>
<td>-ínika ‘be soft’ &lt; -ína ‘soften by soaking’</td>
</tr>
<tr>
<td>-béleka ‘be broken’ &lt; -béla ‘break’</td>
<td></td>
</tr>
<tr>
<td>-móneka ‘be in sight, visible’ &lt; -móna ‘see’</td>
<td></td>
</tr>
<tr>
<td>Persistive -ilil- ~ -elel-</td>
<td>-úngwilíla ‘listen (to)’ &lt; -úngwa ‘hear’</td>
</tr>
<tr>
<td>-ógelela ‘swim’ &lt; -óga ‘bathe vi’</td>
<td></td>
</tr>
</tbody>
</table>

With suffixes having the comparable back vowel [u], i.e. the suffixes -ul- and -uk-, whether iterative, reversive, or valency changing, assimilation only occurs when the preceding stem vowel is round.

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>-bangula ‘peck at repeatedly’ &lt; -bangá ‘strike with a pointed obj’</td>
<td></td>
</tr>
<tr>
<td>-remuka ‘drip’ &lt; -rema ‘drop intentionally’</td>
<td></td>
</tr>
<tr>
<td>-gelula ‘turn sth. vt’ -bobola ‘soften by soaking’ vt</td>
<td></td>
</tr>
<tr>
<td>-geluka ‘change position’ vi -boboka ‘become soft’ vi</td>
<td></td>
</tr>
</tbody>
</table>

2.2.2 Assimilation in nouns

The vowels /i/ and /u/ in noun class prefixes assimilate in ATR value to following high vowels appearing in the noun stem. Thus, /i/ → [j] and /u/ → [–] when the vowel of the root is either /i/ or /u/, but remain /i/ and /u/ elsewhere.

<table>
<thead>
<tr>
<th>Noun</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>mi.kíla</td>
<td>‘blood’</td>
</tr>
<tr>
<td>ki.gúma</td>
<td>‘fruit’</td>
</tr>
<tr>
<td>bu.kíba</td>
<td>‘chest’</td>
</tr>
<tr>
<td>lu.kíndo</td>
<td>‘sound of a footstep’</td>
</tr>
<tr>
<td>mi.kíla</td>
<td>‘tails’</td>
</tr>
<tr>
<td>ki.búkása</td>
<td>‘viper (sp.)’</td>
</tr>
<tr>
<td>bu.géma</td>
<td>‘breast milk’</td>
</tr>
<tr>
<td>lu.kumbí</td>
<td>‘talking drum’</td>
</tr>
</tbody>
</table>
This assimilation also occurs in two other contexts. The prefix vowel /i/ is usually realized as [j] if the stem has a non-high vowel followed by a high vowel. Hence, /i/ → j + C V C V

\[ \text{ki.belu} \quad \text{‘thigh’} \quad \text{ki.lega} \quad \text{‘Lega language’} \]
\[ \text{ki.gonu} \quad \text{‘fish weir’} \quad \text{ki.rógo} \quad \text{‘vegetable’} \]
\[ \text{ki.kasì} \quad \text{‘palm nut’} \quad \text{but} \quad \text{ki.kàmbì} \quad \text{‘mouthful’} \]

The prefix vowel /u/ is realized as [u] in a similar environment, but the second vowel must be [u] (and cannot be [j]).

\[ /u/ \rightarrow u + C V C V \]

\[ \text{mu.lecì} \quad \text{‘fly’} \quad \text{mu.lezì} \quad \text{‘nursemaid’} \]
\[ \text{mu.zìngù} \quad \text{‘cassava loaf’} \quad \text{mu.bùì} \quad \text{‘louse’} \]
\[ \text{lu.pàgù} \quad \text{‘small wooden spoon’} \quad \text{bu.zàmbì} \quad \text{‘poverty’} \]

### 2.3 Glide formation

The high vowels /i, ɪ/ and /u, ŭ/ become glides /y/ and /w/, respectively, when they occur before another vowel that is not of the same set, as for example in /-gi-ik/-’cook’ > ku-gyiik-a ‘to cook’. Before vowels of the same set, they delete.

### 2.4 Vowel length

Underlying long vowels occur most commonly in ideophones (as below), although a few other words have them as well, e.g. kináanà ‘eight’, -këékë ‘small’, and Zuúla ‘a woman’s name’.

\[ \text{mwàamwàa} \quad \text{‘of being scattered willy-nilly’} \]
\[ \text{kwoókwoó} \quad \text{‘of gulping food’} \]
\[ \text{pij} \quad \text{‘of becoming very dark’} \]
\[ \text{zuu} \quad \text{‘of looking fixedly’} \]

Vowels are lengthened in the penultimate syllable of a word in phrase-final position, as in [nákärílë ŋkusu] ‘I trapped a grey parrot’. However, if there is a high tone on the final vowel, lengthening does not occur, as, e.g. in [nákärílë kapusú] ‘I trapped a fisherman’.

### 2.5 Consonant inventory

Lega has a relatively small inventory of eighteen consonant phonemes. Of these eighteen, /f, v, ŋ, ñ/ – only occur in words borrowed from other languages, primarily from Swahili. The fricative sh [s] is extremely rare, appearing in only a few words. The approximant [w] is normally derived from an underlying round, back vowel. However, there are several instances where it appears to be phonemic.
\(/t/ is realized intervocally as [r], except following the class 5 noun prefix \(i\)-. /l/ is realized as [d] following a nasal or the class 5 noun prefix \(i\)-. /g/ is often realized as the fricative [\(\tilde{g}\)] intervocally. In some instances – particularly when it appears in the last syllable of a word – it is even deleted altogether, producing a long final vowel.

The phonemic status of /\(\tilde{g}\)/ is uncertain. Cases of palatalized [\(\tilde{g}y\)] arising from the shift of a front vowel to a glide before another vowel are very similar, if not identical, in pronunciation. Both [\(\tilde{g}\)] and [\(\tilde{g}y\)] are written here as \(gy\).

### 2.6 Nasals and nasal sequences

The palatal nasal /\(\tilde{n}\)/ is clearly distinct from the phonetically similar palatalized nasal [\(\tilde{n}\)^\(\alpha\)], which is pronounced as a sequence of nasal and glide. In careful speech, [\(\tilde{n}\)^\(\alpha\)] is apt to occur as [\(\tilde{n}\)i]. There are nine prenasalized obstruents that occur. In all cases the nasal onset is homorganic with the obstruent.

\[
\begin{array}{ccc}
\text{mp} & \text{nt} & \eta k \\
\text{mb} & \text{nd} & \eta g y \\
\text{ns} & \\
\text{nz} & \\
\end{array}
\]

Each nasal may occur as geminate. Usually this arises from the addition of a nasal noun class prefix to a nasal initial root, as in \(p,poko\) ‘your mother’. Only one instance of a geminate nasal in a root was found: -\(in\ha\) ‘squeeze or press’.

The glides [\(w\)] and [\(y\)] occur following a consonant and preceding a vowel. The only exceptions to this generalization are the verb -\(w\)aza ‘think’ (borrowed from Swahili) and the adverbs \(w\)\(al\)\(ub\)i ‘yesterday; tomorrow’; and \(w\)\(an\)\(d\)\(el\)\(e\) ‘day before yesterday’.

All consonants, with the exception of palatals, can co-occur with the glides.

### 2.7 Syllable structure

The canonical syllable structure is CV; other types are V, NCV, CGV, and NCGV.

### 2.8 Tone

Lega is a tone language, having the following tones: \(H(\tilde{g})\), M(id) or downstepped \(H(\tilde{g})\), R(ising), F(alling) and L(ow). \(H\) and \(L\) are phonemically distinctive, as, apparently, is \(F\) in a few words. \(R\) and downstepped \(H\) tones are always derived, \(R\) from a combination of
underlying L plus H. R and F may occur on short vowels. Mid tones pose a problem in that it is not clear whether they should be considered downstepped Hs. The environments for M and downstepped Hs are inadequately understood at this time, as it has not been possible to analyze tonal phenomena fully. Examples of the five phonetic realizations of tone are illustrated below.

<table>
<thead>
<tr>
<th>Tone Type</th>
<th>Phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (´)</td>
<td>masángá</td>
<td>‘bead’</td>
</tr>
<tr>
<td>Mid (¯)</td>
<td>bábáñó</td>
<td>‘this very one’</td>
</tr>
<tr>
<td>Downstepped (high) (¡)</td>
<td>bswiéínéé</td>
<td>‘ourselves’</td>
</tr>
<tr>
<td>Rising (ˇ)</td>
<td>gözo</td>
<td>‘that’</td>
</tr>
<tr>
<td>Falling (ˆ)</td>
<td>mubúlá</td>
<td>‘nine’</td>
</tr>
<tr>
<td>Low (unmarked)</td>
<td>kíso go</td>
<td>‘mud’</td>
</tr>
</tbody>
</table>

3 NOUN MORPHOLOGY

3.1 The noun class system

Lega has a system of 19 noun classes, most of which have an overt class prefix (NPfx), as e.g. in mu.límu ‘ghost, spirit’ and ki.kíko ‘broom’ (see table 22.1). A few nouns consist only of a root, as in gyegya ‘older sibling or cousin’, and consequently, are treated as having a null (º) class prefix. Unlike many Bantu languages, Lega does not have augments (pre-prefixes). In several cases subclasses have been added to the traditional class numbers where Lega has innovated new forms. Prefixes are, with one exception, low-toned.

The form of the noun class prefix varies according to phonological features of the noun stem. For underlying /Ci/ and /Cu/ prefixes, the form of the vowel depends on three factors. First, if the stem is consonant-initial and the first stem vowel is close /j/ or /ʒ/, the prefix is realized as Cj- or Cj-; otherwise it is realized as Ci- or Cj-.

Underlying /Cu/ prefixes are realized as C- before vowel-initial stems. The class 5 prefix is realized as jz- before j-, jgy- before other vowel-initial stems, and

**TABLE 22.1: NOUN CLASS PREFIXES**

<table>
<thead>
<tr>
<th>Class</th>
<th>Lega NPfx</th>
<th>Class</th>
<th>Lega NPfx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mu-, mu-, mw-, m-</td>
<td>8</td>
<td>br-, br-, br-, b-</td>
</tr>
<tr>
<td>1a</td>
<td>θ</td>
<td>9</td>
<td>n-, m-, jr-, g-</td>
</tr>
<tr>
<td>1a'</td>
<td>n-, m-, jr-</td>
<td>9a</td>
<td>Ø</td>
</tr>
<tr>
<td>1b</td>
<td>wa-</td>
<td>10</td>
<td>n-, m-, jr-, g-</td>
</tr>
<tr>
<td>1c</td>
<td>mi-</td>
<td>10a</td>
<td>Ø</td>
</tr>
<tr>
<td>2</td>
<td>ba-, b-</td>
<td>11</td>
<td>lr-, lp-, lw-, l-</td>
</tr>
<tr>
<td>2a</td>
<td>bá-</td>
<td>12</td>
<td>ka-, k-</td>
</tr>
<tr>
<td>3</td>
<td>mu-, mu-, mw-, m-</td>
<td>13</td>
<td>te-, tp-, tw-, t-</td>
</tr>
<tr>
<td>4</td>
<td>m1-, mj-, my-, m-</td>
<td>14</td>
<td>bu-, bμ-, bw-</td>
</tr>
<tr>
<td>5</td>
<td>i-, igy-, iz-</td>
<td>15</td>
<td>ka-, kw-</td>
</tr>
<tr>
<td>5a</td>
<td>l-, ly-, l-</td>
<td>16</td>
<td>go-</td>
</tr>
<tr>
<td>5b</td>
<td>Ø</td>
<td>17</td>
<td>ka-</td>
</tr>
<tr>
<td>6</td>
<td>ma-, m-</td>
<td>18</td>
<td>mu-</td>
</tr>
<tr>
<td>7</td>
<td>ki-, kj-, ky-, k-</td>
<td>19</td>
<td>si-, sy-, s-</td>
</tr>
</tbody>
</table>
as \( j^- \) before consonant-initial stems. Nasal class prefixes are homorganic with consonant-initial stems, \([n]\) before vowel-initial stems.

Noun classes are usually linked in singular/plural pairs, called genders, of which there are 18 in Lega. Sub-classes, when the agreement patterns and the paired plural are identical, are subsumed under the main class, hence, 1a under 1. Most genders subsume at least one coherent semantic concept that links a large set of the nouns occurring in that gender. This underlying semantic nexus is listed in table 22.2 following the prefix forms. \( \&^- \), in table 22.2, indicates that the prefix consists solely of a homorganic nasal. Although most nouns occur in gender pairings of two noun classes, some occur only in a single noun class. Non-paired nouns usually occur with what would be a singular class prefix in the gender pairings, although a few do occur with a plural class prefix. These single-class genders are listed in table 22.3, following the same classificatory schema used for the

**TABLE 22.2: NOUN GENDERS: PAIRED SINGULAR/PLURAL CLASSES**

<table>
<thead>
<tr>
<th>Class</th>
<th>Singular prefix</th>
<th>Plural prefix</th>
<th>Semantic nexus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2</td>
<td>mu-</td>
<td></td>
<td>humans</td>
</tr>
<tr>
<td>1a/2</td>
<td>( \emptyset )</td>
<td>ba-</td>
<td>kin terms (older than ego)</td>
</tr>
<tr>
<td>1a'/2</td>
<td>( &amp;^- )</td>
<td>[only 2 words]</td>
<td>terms for ‘mother (in-law)’</td>
</tr>
<tr>
<td>1b/2</td>
<td>wa-</td>
<td></td>
<td>‘close friend of POSS’</td>
</tr>
<tr>
<td>3/4</td>
<td>mu-</td>
<td>mi-</td>
<td>extension in space</td>
</tr>
<tr>
<td>5/6</td>
<td>j-</td>
<td>ma-</td>
<td>natural sets (esp. paired or doublets); borrowed words</td>
</tr>
<tr>
<td>5a/6</td>
<td>li-</td>
<td>ma-</td>
<td>borrowed words</td>
</tr>
<tr>
<td>5b/6</td>
<td>( \emptyset )</td>
<td>bi-</td>
<td>small, diminished, defective items; super-augmentative</td>
</tr>
<tr>
<td>7/8</td>
<td>ki-</td>
<td></td>
<td>repository; outline shape; animals</td>
</tr>
<tr>
<td>9/10</td>
<td>( &amp;^- )</td>
<td></td>
<td>borrowed words</td>
</tr>
<tr>
<td>9a/6</td>
<td>( \emptyset )</td>
<td>ma-</td>
<td>borrowed words</td>
</tr>
<tr>
<td>11/10</td>
<td>lu-</td>
<td>( &amp;^- )</td>
<td>curved contour; augmentative</td>
</tr>
<tr>
<td>12/13</td>
<td>ka-</td>
<td>tu-</td>
<td>diminutive</td>
</tr>
<tr>
<td>14/6</td>
<td>bu-</td>
<td>ma-</td>
<td>body parts</td>
</tr>
<tr>
<td>15/6</td>
<td>ka-</td>
<td>ma-</td>
<td>paired extremities</td>
</tr>
<tr>
<td>19/13</td>
<td>sj-</td>
<td>tu-</td>
<td>super-diminitive (derived only)</td>
</tr>
</tbody>
</table>

**TABLE 22.3: NOUN GENDERS: NON-PAIRED NOUN CLASSES**

<table>
<thead>
<tr>
<th>Class</th>
<th>Lega NPfx</th>
<th>Semantic nexus</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>mu-</td>
<td>aggregates</td>
</tr>
<tr>
<td>4</td>
<td>mi-</td>
<td>borrowings from French</td>
</tr>
<tr>
<td>5</td>
<td>j-</td>
<td>non-countable mass</td>
</tr>
<tr>
<td>6</td>
<td>ma-</td>
<td>liquids; granular items</td>
</tr>
<tr>
<td>7</td>
<td>ki-</td>
<td>languages; manner; spirits</td>
</tr>
<tr>
<td>8</td>
<td>bi-</td>
<td>unsafe/tainted item or mass</td>
</tr>
<tr>
<td>9</td>
<td>( &amp;^- )</td>
<td>sensations; physical/emotional traits</td>
</tr>
<tr>
<td>9a</td>
<td>( \emptyset )</td>
<td>borrowed words</td>
</tr>
<tr>
<td>11</td>
<td>lu-</td>
<td>pain and illness; bitter things</td>
</tr>
<tr>
<td>12</td>
<td>ka-</td>
<td>illness</td>
</tr>
<tr>
<td>14</td>
<td>bu-</td>
<td>gelatinous substances; abstract nouns</td>
</tr>
<tr>
<td>15</td>
<td>ka-</td>
<td>infinitives</td>
</tr>
</tbody>
</table>
paired genders above. As with the paired noun classes above, nouns in the non-paired noun classes often exhibit some semantic links. Any apparent semantic nexus, if there is one, is indicated following the form of the prefix.

3.2 Nominal derivation

Nouns may be derived from verbs by adding an appropriate class prefix and, in most cases, replacing the stem final vowel -a with another vowel, most commonly -j or -o.

- **-j** (agentive)  
  
  *mu.réj* ‘hunter’ &lt; *ku.rég* ‘to hunt’
  
  *mu.sámj* ‘sick person’ &lt; *ku.sám*ba ‘to become sick’

- **-j** (non-agent)  
  
  *m.bogibi* ‘happiness’ &lt; *ku.bogaboga* ‘to become happy’
  
  *ki.kós*zi ‘cough’ &lt; *ku.kós*ola ‘to cough’

- **-e** (rare)  
  
  *m.pyéné* ‘heir’ &lt; *ku.pyén* ‘to inherit’
  
  *n.sá*sé ‘spark’ &lt; *ku.sás*uka ‘to fly off, as sparks’

- **-o**  
  
  *igv.úgo* ‘odor’ &lt; *k.úga* ‘to smell’
  
  *ma.lebo* ‘courtship’ &lt; *ku.leb*ela ‘to seek a spouse’

- **-a**  
  
  *ki.bimba* ‘boil, abscess’ &lt; *ku.bim*ba ‘to swell’
  
  *j.biura* ‘birth’ &lt; *ku.biura* ‘to give birth’

3.3 Compound nominals

Compound nominals appear to be rare. The few that exist are formed in one of three ways: (1) noun + connective + noun, (2) noun + noun, or (3) verb + noun.

**Noun + connective + noun**  

*m.balezjú* ‘kneecap’  

*m.bale* ‘lg. oval seed’ + *za ‘of’ + *jú ‘knee’

**Noun + noun**  

*mwíyakú*mo ‘village chief’  

*mwíy*ga ‘owner’ + *kú*mo ‘village’

**Verb + noun**  

*ka.nkú*mbamá*zi* ‘great, great grandchild’  

- *kú*mba ‘bend’ + *ma*zi ‘knees’

3.4 Reduplicated nominals

Reduplicated nominals, though more common than compounds, are infrequent. Examples below illustrate reduplication of both mono- and disyllabic stems, and of the entire word.

**Monosyllabic stems**  

*ma.ru*ru ‘navel’

*ki.kú*sí ‘cave’

**Disyllabic stems**  

*ki.ség*sége ‘baldness’

*lu.kén*kení ‘star; firefly’

**Word**  

*n.sek*únséku ‘hiccup’

*i.kila*kíla ‘spider’

3.5 Diminutives

Semantically, there are two diminutives, one for ‘small’, the other for ‘very small, tiny’. This distinction is made only in the singular – class 12 *ka-* for a small entity, class 19 *sj-* for a tiny one. The plural for both is the class 13 prefix *tu-*.
Diminutives are formed in two ways. In pattern 1, the inherent nominal class prefix is replaced with the appropriate diminutive prefix. In pattern 2, the class prefix attaches to associative -á preceding the normal noun.

Pattern 1: DIM + root

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>kantu</td>
<td>tuntu</td>
<td>(&lt; muntu)</td>
</tr>
<tr>
<td>Suddenly</td>
<td>tiny or sickly person</td>
<td></td>
</tr>
<tr>
<td>kapéné</td>
<td>tupéné</td>
<td>(&lt; mpéné)</td>
</tr>
<tr>
<td>small goat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sipéné</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tiny goat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pattern 2: DIM + á + CL + root

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>kákyina</td>
<td>twáhyina</td>
<td>(&lt; kýiná)</td>
</tr>
<tr>
<td>Small fish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>syákyina</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tiny fish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kiñama</td>
<td>twáñama</td>
<td>(&lt; pýama)</td>
</tr>
<tr>
<td>some meat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>syáñama</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tiny bit of meat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The distribution of these two patterns of construction is not clearcut. Classes 1/2 (humans) are always formed on the basis of diminutive pattern 1. Nouns from genders 7/8, 11/10, 12/13, and 14/6 are formed on the basis of pattern 2, with occasional exceptions, such as kížímu ‘insect’, which may have either form: kázímu or kákížímu ‘small insect’. Nouns from genders 3/4 and 9/10 appear in both forms or in pattern 2 alone.

3.6 Augmentatives

Augmentatives, like diminutives, pattern in two ways: Class 11 lu- indicates a large entity, class 7 ki- a huge one; the plural in both cases is the class 8 prefix bi-. Like the diminutive, the augmentative can be constructed in two ways: (1) by simply replacing the inherent class prefix with the augmentative prefix, or (2) by attaching the class prefix to the associative -á preceding the normal noun.

Pattern 1: AUG + root

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>lantu</td>
<td>bintu</td>
<td>(&lt; muntu)</td>
</tr>
<tr>
<td>‘large person’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sintu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘huge person’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lázumbá</td>
<td>túzumbá</td>
<td>(&lt; púmbá)</td>
</tr>
<tr>
<td>‘big house’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kízumbá</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘huge house’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pattern 2: AUG + á + CL + root

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>lwákimená</td>
<td>byábimená</td>
<td>(&lt; kímena)</td>
</tr>
<tr>
<td>‘large crocodile’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kyákimená</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘huge crocodile’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lwáñama</td>
<td>byáñama</td>
<td>(&lt; pýama)</td>
</tr>
<tr>
<td>‘large animal’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kyáñama</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘huge beast’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It appears from the limited data available that the simple replacement pattern most frequently occurs with gender 1/2 nouns (human). Others usually take pattern 2, even in cases where the diminutive may have alternate forms.
3.7 Pronouns

3.7.1 Subject pronouns

Independent subject pronouns, typically used emphatically, occur in singular, dual, and plural forms.

<table>
<thead>
<tr>
<th>Singular</th>
<th>Dual</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>nne</em></td>
<td><em>i</em>jwé*</td>
</tr>
<tr>
<td>2</td>
<td><em>ugwe</em></td>
<td><em>i</em>jwé*</td>
</tr>
<tr>
<td>3</td>
<td><em>gwé</em></td>
<td><em>bo</em></td>
</tr>
</tbody>
</table>

*i*jwé bá*bili mukwenda kwí*jswá* ‘you two, you are going to the field’
*bí*jwé bá*sá*ru mwá*mukár*ýé ‘you three will help her’

3.7.2 Object pronouns

Object pronouns are similar to their subject counterparts, but no dual distinction is made. They are typically used when a second object pronoun is necessary, since only one object prefix can be marked on the verb (see §5.2 for discussion of object marking).

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>jnne</em> (b)</td>
</tr>
<tr>
<td>2</td>
<td><em>ugwe</em> (b)</td>
</tr>
<tr>
<td>3</td>
<td>1 4 2  (b)ábo</td>
</tr>
<tr>
<td>5</td>
<td><em>lyó</em> 6</td>
</tr>
<tr>
<td>7</td>
<td><em>kyó</em> 8</td>
</tr>
<tr>
<td>9</td>
<td><em>zó</em> 10</td>
</tr>
<tr>
<td>11</td>
<td><em>ló</em> see 10</td>
</tr>
<tr>
<td>12</td>
<td><em>kó</em> 13</td>
</tr>
<tr>
<td>14</td>
<td><em>bó</em> see 16</td>
</tr>
<tr>
<td>15</td>
<td><em>kó</em> see 16</td>
</tr>
</tbody>
</table>

*nigv*ubakínde zó ‘I built it [house] (by) myself’
/n*-jgy-ubak-jn.de/
1S-REFL-build-BEN.CMP
*imba* n’inne ‘sing with me’
*mi*na nagé ‘dance with her’

3.7.3 Reflexive pronouns

Reflexive pronouns, like the object pronouns, occur only in singular and plural.

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>mnínéné</em></td>
</tr>
<tr>
<td>2</td>
<td><em>ugw</em>ínéné*</td>
</tr>
<tr>
<td>3</td>
<td><em>(g)<em>jwí</em>néné</em> -bí<em>néné</em></td>
</tr>
</tbody>
</table>

*tvá*káwynde jswá b*í*jswí*bí*néné* ‘we cleared the fields ourselves’
*árür*ile mumpunge wí*néné* ‘she pounded the rice by herself’
3.7.4 Possessive (agreement prefix + poss)

Possessive pronouns are formed by combining the agreement marker (see table 22.4 and §3.8) of the appropriate noun class with the possessive root.

1s -ánē  
2s -óbē  
3s -ágē  
līlyo lī lānē ‘that’s mine (field)’
lāzī zāgē ‘it’s not his’

3.8 Agreement

All modifiers and verbs exhibit agreement with the head noun through affixation of an agreement prefix. The form of the agreement prefix attached to the modifier or verb differs for each noun class. There are two general patterns, as shown in table 22.4.

3.9 Connective -á

Connective -á is used to join two nouns in a genitive construction, requiring agreement with the head noun.

bunga bwá mīzōngū ‘cassava flour’ [lit. flour of cassava]
bantu bá lubanda ‘people of the forest’

**TABLE 22.4: AGREEMENT PREFIXES**

<table>
<thead>
<tr>
<th>Pattern</th>
<th>N pfx</th>
<th>1</th>
<th>2a</th>
<th>2b</th>
<th>Demns</th>
<th>Conn. -a &amp; Colors</th>
<th>Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>mu-</td>
<td>-é ‘which/what’</td>
<td>(g)jn-</td>
<td>(g)jn-</td>
<td>w-</td>
<td>á-é-</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ba-</td>
<td>-á</td>
<td>ba-</td>
<td>bá-</td>
<td>b-</td>
<td>bá-bé-</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>mu-</td>
<td>-á</td>
<td>ba-</td>
<td>bá-</td>
<td>b-</td>
<td>bá-bé-</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>mi-</td>
<td>-í</td>
<td>ñg-</td>
<td>zé-</td>
<td>z-</td>
<td>zí-</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>tá-</td>
<td>-í</td>
<td>li-</td>
<td>ly-</td>
<td>l-</td>
<td>li-</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>ma-</td>
<td>ma-</td>
<td>ma-</td>
<td>m-</td>
<td>ma-mí</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>ki-</td>
<td>ki-</td>
<td>ki-</td>
<td>ky-</td>
<td>k-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>bi-</td>
<td>bi-</td>
<td>bi-</td>
<td>by-</td>
<td>h-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>n-</td>
<td>-í</td>
<td>(z)é-</td>
<td>z-</td>
<td>zí-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>n-</td>
<td>-í</td>
<td>zé-</td>
<td>z'-</td>
<td>zí-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>lu-</td>
<td>lu-</td>
<td>lu-</td>
<td>lw-</td>
<td>l-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
<td>k-</td>
<td>ka-kí</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>tu-</td>
<td>tu-</td>
<td>tu-</td>
<td>tw-</td>
<td>tu-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>bu-</td>
<td>bu-</td>
<td>bu-</td>
<td>bw-</td>
<td>bu-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>ku-</td>
<td>ku-</td>
<td>ku-</td>
<td>kw-</td>
<td>ku-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>ga-</td>
<td>ga-</td>
<td>ga-</td>
<td>ge-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>ku-</td>
<td>ku-</td>
<td>ku-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>mu-</td>
<td>mu-</td>
<td>mu-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>sî-</td>
<td>sî-</td>
<td>sî-</td>
<td>sî-</td>
<td>sy-</td>
<td>sî-</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1 (g)jn- appears with a high tone with the quantifier ‘all’.
2 é- is an optional form for the quantifier ‘all’.
3.10 Demonstratives

There are six demonstrative roots in Beya Lega. Five are used spatially, two are used specifically in discourse. In Table 22.5, templates of the pre-stem pattern for the various demonstratives are given for the non-nasal class prefixes, followed by examples from class 2. The appropriate prefix forms for other non-nasal classes are given in Table 22.6. Demonstratives formed from class prefixes containing a nasal require a different pre-stem template from the non-nasal prefixes. These are given in Table 22.7; examples of class 1 and pre-stem forms for the other classes are shown in Table 22.8. Demonstratives precede the noun they modify.

*kinkiguma kyabolá* ‘this fruit is rotten’
*ũllyo ibakánj lýáné* ‘that bowl of mine’
*mámom asișpa* ‘those bottles’
*zelyá mpěně* ‘that goat yonder’

3.11 Adjectives

There exist only about twenty true adjectives in Lega, listed in Table 22.9. These adjectives follow the noun and require agreement with the noun that they modify. Certain English

<table>
<thead>
<tr>
<th>TABLE 22.5: TEMPLATES FOR NON-NASAL PREFIXES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cl. 2 demonstratives</td>
</tr>
<tr>
<td>cvcv-no ‘this’ (very one)</td>
</tr>
<tr>
<td>cv-no ‘this’</td>
</tr>
<tr>
<td>cv(-o) ‘that’</td>
</tr>
<tr>
<td>cvcv-lyá ‘that yonder’</td>
</tr>
<tr>
<td>cv-óngo ‘that’ (just mentioned)</td>
</tr>
<tr>
<td>cv-lyá ‘that’ (discussed previously)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 22.6: DEMONSTRATIVE PREFIXES BASED ON TEMPLATE FORMS FOR EACH NON-NASAL CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 5 6 7 8 11 12 13 14 15</td>
</tr>
<tr>
<td>līlī- māmā- kibī- lālā- kākā- rùrù- bùbù- kākā-</td>
</tr>
<tr>
<td>lī- má- kī- bī- lī- kā- rī- bā- kā-</td>
</tr>
<tr>
<td>līly- mām̩- kibī- lībī- līl̩- kāk̩- rùrù- bùbù- kāk̩-</td>
</tr>
<tr>
<td>līī- mān̩- kibī- lībī- līl̩- kāk̩- rùrù- bùbù- kāk̩-</td>
</tr>
<tr>
<td>lī- mā- kī- bī- lī- kā- rī- bī- kī-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 22.7: TEMPLATES FOR NASAL CLASSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>N class 10 3 1, 4, 9</td>
</tr>
<tr>
<td>cvv-no cvv-no cvv-nō ‘this’ (very one)</td>
</tr>
<tr>
<td>cv-no cvv-no cvv-nō ‘this’</td>
</tr>
<tr>
<td>cv-cv cv-cv ‘that’</td>
</tr>
<tr>
<td>cv-lyá cv-lyá cv-lyá ‘that yonder’</td>
</tr>
<tr>
<td>cv-óngo cv-óngo cv-óngo ‘that’ (just mentioned)</td>
</tr>
<tr>
<td>cv-lyá cv-lyá cv-lyá ‘that’ (discussed previously)</td>
</tr>
</tbody>
</table>
adjectives are expressed through intransitive verbs in Lega, e.g. ‘be red’ -kísimina vi, ‘become thin’ -ównda vi, and ‘be fatty’ -ñona vi. In such cases, the adjectival phrase consists of the head noun followed by a conjugated form of the verb.

<table>
<thead>
<tr>
<th>nsúlí</th>
<th>zakisimáná</th>
<th>‘red cloth’ [lit. ‘cloth which is red’]</th>
</tr>
</thead>
<tbody>
<tr>
<td>jidá</td>
<td>lyákuká</td>
<td>‘stale food’ [lit. ‘food which has become stale’]</td>
</tr>
<tr>
<td>müssáke</td>
<td>mwéngé</td>
<td>‘intelligent/wise doctor’</td>
</tr>
<tr>
<td>ɪgyémbé</td>
<td>ikéékéčé</td>
<td>‘small hoe’</td>
</tr>
<tr>
<td>kíkkángá</td>
<td>kinéne</td>
<td>‘large family’</td>
</tr>
</tbody>
</table>

Most English adjectives are rendered by phrasal constructions employing a noun as modifier. The head noun may precede its modifier, conjoined by the connective -á, or follow the modifier, conjoined by low-toned connective -a.

<table>
<thead>
<tr>
<th>bintu byá</th>
<th>kizungu</th>
<th>‘modern things’ [lit. ‘things of European’]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ikízí</td>
<td>lyá nyúlíla</td>
<td>‘cooking stone’ [lit. ‘stone of hearth’]</td>
</tr>
<tr>
<td>nzi</td>
<td>á igyiigiyií</td>
<td>‘new baskets’ [lit. ‘baskets of newness’]</td>
</tr>
<tr>
<td>mbángílvá</td>
<td>za mukíngó</td>
<td>‘beautiful woman’ [lit. ‘beauty of a woman’]</td>
</tr>
<tr>
<td>kíkkongolo</td>
<td>kya mwána</td>
<td>‘stupid child’ [lit. ‘idiot of a child’]</td>
</tr>
<tr>
<td>mulúmi</td>
<td>wa mpéne</td>
<td>‘male goat’ [lit. ‘male of a goat’]</td>
</tr>
</tbody>
</table>

Other modifiers include various quantifiers.

<table>
<thead>
<tr>
<th>-íngí</th>
<th>‘many’</th>
</tr>
</thead>
<tbody>
<tr>
<td>-nse, -nsenyá, -nséngwá</td>
<td>‘all, whole’</td>
</tr>
<tr>
<td>-nógo</td>
<td>‘(an)other’</td>
</tr>
<tr>
<td>bingó</td>
<td>birógo</td>
</tr>
<tr>
<td>mbogó</td>
<td>zínsé</td>
</tr>
</tbody>
</table>
3.12 Numbers

3.12.1 Cardinal numbers

1 -moz j emoizj 6 murubá
2 -líli 7 múriubakamú
3 -súru išáru 8 kináaná
4 -nazj iñazj 9 múbílú
5 -ráno jíño 10 jikúmí
11 jikúmí ná -mozj 100 mmyá
12 jikúmí ná -bílí 200 mmyá jibílí
...
20 makúmí mábílí 1000 kakoka
30 makúmí másiará
...

muntu umozj ‘one person’
bimena biránj ‘five crocodiles’
masángá mmyá jibílí ‘two hundred beads’

3.12.2 Ordinal numbers

Pattern: Nšg AGR + a PL + root

exception: one only takes AGR

1st -á kwanza, -sôkí 6th -a murubá
2nd -bílí 7th -a murubakamú
3rd -súru 8th -a kináaná
4th -nazj 9th -a múbíla
5th -ráno 10th -a jikúmí
mbúla nsôkí ‘the first rains’
kíndj kyá kwanza ‘the first day’
mwána wá básáru ‘the third child’

3.13 Interrogatives

-ki, kiki, kikízj, kizj ‘what, which’
názi, ni ‘who’
-a názi ‘whose’
ka bamba ‘why’
-ngá ‘how many, how much’
bunj bu ‘how’
kíni jku ‘how far’
gáni ga, kíni ku, múni mu ‘where’
nkungá nki ‘when’

4 VERB MORPHOLOGY

The simple infinitive in Lega consists of the class 15 prefix ku-, the verb root, and final vowel -a. Verb roots are inherently either high- or low-toned, hence, ku-tíndek-a ‘to tie up with string’ and ku.kangul-a ‘to clear a field after burning’. The verb root may be inflected for person and number, tense, aspect, and mood, and negation among other
4.1 Verb roots

The canonical form of the verb root in Lega is -CVC-. Table 22.10 provides an inventory of -CV- roots, table 22.11 of some -CVCVC(VC)- roots (i.e. complex roots not obviously derived by the addition of verbal extensions).

There are several ‘defective’ verb roots that do not have an infinitival form in ku- and do not permit any verbal suffixes: -li ‘be’, -7z ‘know (how)’, -7b ‘sleep’.

4.2 Verb extensions

Verbs may change valence or voice by the addition of verb extensions, of which there are thirteen in Lega: -am- stative, -an- attributive, -am- reciprocal, -ik- efficeretive, -ik- ostensive, -il- benefactive, directional, and locational, -ilil- persistive, -uk- neuter, -ul- iterative, -ul- reversible, -w- passive, and -y- causative. Reduplication of the verb stem indicates continuation of an action, and is termed the perseverative. The role and forms of each are provided below.

- **-am-**
  - **STATIVE**: indicates an existing state or the inception of a state. It differs from the passive in not permitting an expressed agent, from the ostensive – which indicates a potential for an event to occur – in indicating a resulting state.
  
  k.ombama ‘to be dug out’ < k.omba ‘to dig’
  
  ku.kigama ‘to lie across’ < ku.kiga ‘to dam, block’

- **-an-**
  - **ATTRIBUTIVE**: the action denoted by the verb reflects a characteristic of the subject.
  
  ku.kárya ‘to be helpful’ vi < ku.kárya ‘to help’ vt
  
  ku.gambana ‘to gossip’ vi < ku.gamba ‘to slander’ vt

---

### TABLE 22.10: -C(G)V STEMS

<table>
<thead>
<tr>
<th>Stem</th>
<th>Meaning</th>
<th>Stem</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-bá</td>
<td>‘be(come)’</td>
<td>-lyá</td>
<td>‘eat’</td>
</tr>
<tr>
<td>-bwa</td>
<td>‘come’</td>
<td>-tá</td>
<td>‘throw (away)’</td>
</tr>
<tr>
<td>-gwa</td>
<td>‘fall’</td>
<td>-tá</td>
<td>‘bite’</td>
</tr>
<tr>
<td>-gwá</td>
<td>‘be well-cooked’</td>
<td>-twá</td>
<td>‘throw (away)’</td>
</tr>
<tr>
<td>-gá</td>
<td>‘burn, be burned’</td>
<td>-sa</td>
<td>‘miss a target’</td>
</tr>
<tr>
<td>-kwá</td>
<td>‘die’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 22.11: SOME -CVCVC(VC)- ROOTS

<table>
<thead>
<tr>
<th>Stem</th>
<th>Meaning</th>
<th>Stem</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-báliga</td>
<td>‘rub’</td>
<td>-kélíma</td>
<td>‘flash (as lighting)’</td>
</tr>
<tr>
<td>-gilímina</td>
<td>‘shiver’</td>
<td>-kúkúmena</td>
<td>‘rumble’</td>
</tr>
<tr>
<td>-gyágilya</td>
<td>‘sweep’</td>
<td>-pfíngà</td>
<td>‘twist’</td>
</tr>
<tr>
<td>-kísímana</td>
<td>‘become red’</td>
<td>-ralámina</td>
<td>‘look good on’</td>
</tr>
<tr>
<td>-kélóraléuka</td>
<td>‘turn one’s head’</td>
<td>-solóngola</td>
<td>‘strain/filter liquids’</td>
</tr>
</tbody>
</table>
-an-2

**RECIPROCAL:** the action denoted by the verb is done simultaneously one to another.

- ku.káramya ‘to help one another’
- ku.gambanana ‘to gossip about one another’

- -ik-1 ~ -ek-1

**OSTENSIVE:** indicates that an object is clearly apparent or conspicuous, that the potential inherent in the verb is realizable. It reduces the valency of the verb, changing a transitive verb to an intransitive; it differs from the passive in that no agent may be expressed.

- ku.gulika ‘to be sold’
- ku.móneka ‘to be visible’

- -ik-2 ~ -ek-2

**EFFICERETIVE** (from Latin *efficere* ‘effected’): indicates that an agent has brought about a new state for some object. It increases the valency of the verb by one.

- ku.sendeka ‘to put into a leaning position’
- ku.gyika ‘to cook’

- -il- ~ -el- ~ -in- ~ -en-

Traditionally termed the applicative extension, the vowel in this suffix alternates according to the preceding vowel: [e] following /e/ or /o/, [i] elsewhere. The consonant is realized as [n] following a final nasal in the stem.

- ku.réndela ‘to speak on behalf of’
- ku.kambila ‘to labor for’

- -b- ~ -b- ~ -b-

**BENEFACTIVE:** indicates that the action is carried out on behalf of someone.

- ku.me enena ‘to know deeply’
- ku.me a ‘to know’

- -uk-1 ~ -ok-1

**NEUTER:** non-passive state of being. This extension reduces the valency of the verb.

- ku.panguka ‘flap’
- ku.gondoka ‘be untied’
ITERATIVE: indicates that a semelfactive action (i.e. one that happens only once) is reiterated. It reduces the valency of the verb, the patient of the transitive verb becoming the grammatical subject of the intransitive verb.

\[
\text{ku.temuka} \quad \text{‘to drip’} \quad < \quad \text{ku.tema} \quad \text{‘to drop intentionally’}
\]

- \(-ul\)-

ITERATIVE: indicates that a semelfactive action of a transitive verb is reiterated. Valency remains unchanged.

\[
\text{ku.bangula} \quad \text{‘peck at repeatedly’} \quad < \quad \text{ku.banga} \quad \text{‘to strike with a pointed object’}
\]

- \(-ul\)-

SEPARATIVE: indicates movement out of, or reversal of the original state of an item.

\[
\text{ku.zamba} \quad \text{‘to undo a bed’} \quad < \quad \text{ku.zamba} \quad \text{‘to make a bed’}
\]

\[
\text{ku.ljamba} \quad \text{‘to uncover’ (pot)} \quad < \quad \text{ku.ljamba} \quad \text{‘to cover’ (pot)}
\]

- \(-w\) ~ \(-bw\)-

PASSIVE: requires that the recipient or goal of the action be the grammatical subject. It differs from the ostensive in that the agent may be (optionally) expressed. The form \(-bw\)- occurs following causative \(\text{j}/\).

\[
\text{ku.lungwa} \quad \text{‘to be well-seasoned’} \quad < \quad \text{ku.lunga} \quad \text{‘to season (food)’}
\]

\[
\text{ku.bábažibwa} \quad \text{‘to be hurt’} \quad < \quad \text{ku.bábažya} \quad \text{‘to hurt’ vt}
\]

- \(-y\) ~ \(-sy\)-

CAUSATIVE: increases the number of arguments of the verb by one; hence, intransitive verbs become transitive, transitive become ditransitive. The form \(-sy\)- occurs with vowel-final stems.

\[
\text{ku.gyúka} \quad \text{‘to wake s.o. up’} \quad < \quad \text{ku.gyúka} \quad \text{‘to wake up’}
\]

\[
\text{ku.zima} \quad \text{‘to extinguish’} \quad < \quad \text{ku.zima} \quad \text{‘to go out (of a fire)’}
\]

\[
\text{ku.lyá} \quad \text{‘to feed’} \quad < \quad \text{ku.lyá} \quad \text{‘to eat’}
\]

- reduplication of verb stem

PERSEVERATIVE: indicates a continuous or persevering interpretation of the action denoted by the verb.

\[
\text{ku.lukwakalukwa} \quad \text{‘to shout continuously’} \quad < \quad \text{ku.lukwa} \quad \text{‘to shout’}
\]

\[
\text{ku.réndarenda} \quad \text{‘to speak on and on’} \quad < \quad \text{ku.rénda} \quad \text{‘to speak’}
\]

4.3 Order of extensions

Extensions may co-occur. The following sequences have been noted:

\[-il\]-an1-; -an1-an2-; -an2-j-; -íl-illoc-; -il-j-; -ul-am-

The causative extension \(-j-\) occurs between the \(-il-\) and \(-e\) of the tense/aspect markers: \(-il-\)-\(j\)-\(-e\). The passive extension \(-u-\) always precedes the final vowel of the verb stem. The variant \(-bw-\) is split with the imperfective marker, hence, \(-j-b-ag-w-a\).

4.4 Verb categories

The verb in Lega comprises eight grammatical categories ordered in the following manner: (SUB) + (NEG1) + SP + (NEG2) + T/A/M + (OBJ) + ROOT + (EXT) + T/A.
4.4.1 Subordinators (SUB)

There are three primary subordinating prefixes in Beya Lega: *ga-* is used for affirmative temporal clauses with the sense of ‘if’ or ‘when’ (see also §5.8) *bu-* is used for negative temporal clauses; relative clauses take an appropriate agreement marker determined by the noun (see also §5.3). (See §4.5 for discussion of abbreviations of tense forms.)

### ga- clauses
- *ga*-SP-*na-cvcvc-á* garúnakangulá jswá ‘if we clear the field’
- *ga*-SP-*á-cvcvc-é* garwákangulé iSWá ‘when we clear the field’ (T<sub>f</sub> Fut)
- *ga*-SP-*á-cvcvc-á* garwákangulá iSWá ‘when we cleared the field’ (T<sub>c</sub> CMP)
- *ga*-SP-*á-ROOT- CVC-á* garwákangulé jswá ‘when we cleared the field’ (T<sub>p</sub>)

### bu- clauses
- *bu*-S´P-NEG-CVcvc-á* burkúntul jswá ‘we didn’t clear the field’ (T<sub>p</sub>)
- *bu*-S´P-NEG-CVC R-á* burkúntulá jswá ‘we didn’t clear the field’ (T<sub>c</sub> Pst)

4.4.1.1 Relative prefixes

In object relative clauses, the relative prefix occurs in the SUB slot. In subject relative clauses, the prefix occurs in the SP slot (see §5.3 for examples).

<table>
<thead>
<tr>
<th>Class</th>
<th>1/2</th>
<th>3/4</th>
<th>5/6</th>
<th>7/8</th>
<th>9/10</th>
<th>11/10</th>
<th>12/13</th>
<th>14/6</th>
<th>15/6</th>
<th>19/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sg.</td>
<td>u-</td>
<td>(g)u-</td>
<td>li-</td>
<td>ki-</td>
<td>zi-</td>
<td>lu-</td>
<td>ku-</td>
<td>bu-</td>
<td>ku-</td>
<td>sji-</td>
</tr>
<tr>
<td>Pl.</td>
<td>ba-/be-</td>
<td>zi-</td>
<td>ma-</td>
<td>bi-</td>
<td>zi-</td>
<td>tu-</td>
<td>ma-</td>
<td>ma-</td>
<td>tu-</td>
<td></td>
</tr>
</tbody>
</table>

4.4.2 Negative markers (NEG₁)

Two negative markers occur in this position for non-subordinate clauses: *nt-* is used for second and third person singular, *ta-* for all plural forms.

- *nt-á-kangulá iSWá* ‘s/he is not (yet) clearing the field’
- *ta-tú-ka-kangulágá iSwáléngó* ‘we are no longer clearing the field’

4.4.3 Subject prefixes (SP)

The following subject prefixes are used for the respective participants and noun classes. See table 22.4 (§3.8) for prefixes for appropriate noun class agreement.

<table>
<thead>
<tr>
<th>Person</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sg.</td>
<td>n(f)-</td>
<td>u-</td>
<td>á-/é-</td>
</tr>
<tr>
<td>Pl.</td>
<td>tu-</td>
<td>ma-</td>
<td>bá-/bé-</td>
</tr>
</tbody>
</table>

4.4.4 Negative (NEG₂)

The *NEG₂* position is used for first person singular negation, -*si-* , and for marking negation in infinitives and in relative clauses, -*ta-*.

- *n-sy-á-kangulá iSwá* ‘I did not clear the field (T<sub>f</sub> Pst)’
- *iSwá li-bá-tá-ka-kangulá* ‘the field that they won’t clear (T<sub>f</sub> Fut)’
4.4.5 Tense, aspect, and mood markers

Tense, aspect, and mood markers occur in two positions, one preceding the verb root and one at the end of the verbal complex. The affixes occurring in the prefix position are the following:

- **Mood:**
  - *na* potential marker [POT]

- **Tense:**
  - *ka* remote future [T₁ Fut] (= later time unit, e.g. ‘in two weeks’)
  - *ā* near past [T₁ Pst]/near future [T₁ Fut] (= approximal time unit)
  - *a* remote past [T₁ Pst] (= earlier time unit, e.g. ‘two months ago’)
  - *nū* sequential marker (‘and then’)

- **Aspect:**
  - *a* completive [CMP T₁] (= completed within current time unit)
  - *ku* continuous
  - *sā* inceptive

4.4.6 Object markers and reflexive (OBJ)

The following object markers are used for the respective participants and noun classes. Only one object marker at a time may be prefixed to the verbal unit.

Person: 1 2 3  
Class: 1/2 3/4 5/6 7/8 9/10 11/10 12/13 14/6 15/6 19/13
Sg. n- ku- mu- (g)ūl- li- kūl- kü- bū- kū- sī-  
Pl. tū- mú- bāl- zīl- mà- bīl- zīl- tīl- mà- mà- tī-

Reflexive -įgy- [before V-initial stems]

4.4.7 Tense, aspect

In verb final position occur the second set of tense/aspect markers. The imperfective co-occurs with all the other markers in this category except the remote past -įlē, which it replaces. Following the applicative extension -il-, the near and remote past markers – -ile and -įlē, respectively – coalesce with it to form -inde/-indy. For monosyllabic verb roots, the suffixes -ile/-įlē vary in form, e.g. [-bile] with the root -bū- ‘come’, [-nune] with the root -nū ‘drink’.

- *įlē ~ įnē* T₁ past (remote)
- *ile ~ įne* T₁ past (approximal)
- *ā* T₁ future (approximal)
- *ā* completive/continuous
- *a* inceptive/future
- *ag* imperfective

4.5 Simple TAM constructions

Simple verb constructions comprise a main verb alone, which is marked for tense/aspect. The list below provides the basic templatic patterns for a low-tone -CVCVC- verb root. A major division is that between imperfective -ag- forms and their counterparts. Tense markers loosely divide time into ‘metric’ units, pivoting on the speech event (S), which is included in the non-past. At S, aspects typically fall within the current time unit (T₁), e.g. -ku- could be used for ‘today’ or ‘this month’, -a- ‘earlier today’ or ‘this past week’.
Moving away from S, tenses typically mark an approximal time unit (Tx) and a more remote time unit (Tr), respectively. Although seemingly based on a ‘metric’ division of time, the different tenses often appear to be used subjectively.

4.6 Periphrastic constructions

Lega has many periphrastic constructions which comprise one or more auxiliary verbs plus a main verb, either conjugated or infinitival in form. Patterns and examples of these constructions with low-tone -kangula ‘clear (a field)’ are provided in the following sections.

4.6.1 Auxiliary -li ‘be’

The defective verb -li, a suppletive form of -ba ‘be’, occurs as an auxiliary in three forms: unmarked (progressive), with -ki- (persistent), and with -se- (permansive ‘already’ or inceptive). It is optional in the latter two.

(a) sp-li SP-ku-cvcvc-á tuli tukukangulá iswá
    ‘we are clearing the field (now)’
4.6.2 Auxiliary -ba ‘be’

-\(ba\) ‘be’ (\(-bez-\) before \(-ag-\)) occurs as an auxiliary verb in a large number of constructions. It may be marked in five ways, corresponding to \(T_c\), \(T_x\), \(T_r\) past and non-past tenses. Each of these forms may occur with any of three different aspectual forms of the main verb: inceptive, continuous, or completive. The potential patterns for the auxiliary and the main verb for a low-tone \(-{cvcvc}-\) verb root are listed below, followed by several illustrative examples.

<table>
<thead>
<tr>
<th>Auxiliary</th>
<th>Main verb</th>
</tr>
</thead>
</table>
| \(sp-á-bez-ag-
\) (\(T_c\) past) | \(SP-{s}c-{cvcvc}-a\) inceptive (‘start V-ing’) |
| \(sp-á-bez-ag-le\) (\(T_c\) past) | \(SP-{ku}-{cvcvc}-\) continuous (‘be V-ing’) |
| \(sp-á-bé-gá\) (\(T_r\) past) | \(SP-a-{cvcvc}-\) completive (‘V-ed’) |
| \(sp-á-bé\) (\(T_r\) future) | \(sp-la-{cvcvc}-\) potential (‘must V’) |
| \(sp-ka-bá\) (\(T_r\) future) | \(sp-la-{cvcvc}-\) negated potential (‘mustn’t V’) |

\(twábezaga\) \(tusá{kangula\} \(jswá\) ‘we had started clearing the field (today)’
\(twábezagle\) \(tukukangula\) \(jswá\) ‘we will have started clearing the field (tomorrow)’
\(twábezégá\) \(twá{kangulu}a\) \(jswá\) ‘we had cleared the field (before yesterday)’
\(twábezaga\) \(twá{kangula}\) \(jswá\) ‘we will have cleared the field (after tomorrow)’
\(twábezaga\) \(tusé\) \(twá{kangula}\) \(jswá\) ‘we had already started clearing the field’

\(sp-á\)-na-\(ba\) ‘must be’ (potentially)

<table>
<thead>
<tr>
<th>Auxiliary</th>
<th>Main verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>(sp-á)-na-(ba) (Pot)</td>
<td>(sp-{s}kú-root-a) ‘must V’</td>
</tr>
<tr>
<td>(sp-á)-root-(le)</td>
<td>(sp-{s}kú-root) ‘must have V-ed’</td>
</tr>
</tbody>
</table>

\(Móké\) \(énabá\) \(ákorwa\) ‘Moke must be tired’
\(bána\) \(bámúne\) \(máku\) ‘they must have drunk (some) beer’
\(túna\) \(táti\) \(kukangula\) \(jswá\) ‘even if we aren’t clearing the field’
\(túna\) \(tát\) \(wákangula\) \(jswá\) ‘even if we didn’t clear the field’
4.6.3 Auxiliary verb \+ infinitive

Several verbs occur in constructions in which the main verb is infinitival in form. These include -londa 'look for', -sa (from ??), -anza 'start', -tika 'come from', -ima (from ??), and -ila 'finish'. -londa and -sa differ from the others in that they always occur with the formative -sa- and may occur with auxiliary -bez- 'be'.

```
sp-á-bez-aga  (Tt past)  SP-sá-londa  INF   'about to V'
sp-á-bez-ag-ile (Tt past) SP-sá-sa   INF   'about to V'
sp-á-bêz-ágâ   (Tt past)
```

tusá-londa kukangulâ ìswà   ‘we are about to clear the field’
twâbeza-ile tusá-londa  kukangulà ìswà   ‘we were about to clear the field (yester.)’
tusá-sa kukangulà ìswà   ‘we are about to clear the field’
twâbeza-ga tusá-sa  kukangulà ìswà   ‘we were about to clear the field (today)’

-anza 'start'
```
sp-(a)-anz-ile   INF   twânzile  kukangulà ìswà   ‘we started clearing the field’ (Tt Pst)
sp-(a)-anz-ilë   INF   twânzilë  kukangulà ìswà   ‘we started clearing the field’ (Tt Pst)
sp-(a)-anza INF   tusânza kukangulà ìswà   ‘we had started clearing the field’
```

[tcontracted form of sp-se (-li) SP-anza INF]

-tika 'come from'
```
sp-a-rûkà   INF   twarûkà  kukangulà ìswà   ‘we just cleared the field (a few minutes ago)’
bâ-trûkà kutêndêkà kîjumà   ‘they just tied up the bundle (a few minutes ago)’
```

-ima
```
sp-im-ë INF   twimë  kukangulà ìswà   ‘we are able to clear the field’
sp-n(a)-im-a INF   tunimà  kukangulà ìswà   ‘we could have cleared the field’
sp-n(a)-im-ne INF   tunimine  kukangulà ìswà   ‘we are willing to clear the field’
sp-k(a)-im-a INF   tukimà  kukangulà ìswà   ‘we are able to clear the field’
```

-sila 'finish'
```
sp-a-sîl-a INF   twasilà  kukangulà ìswà   ‘we finished clearing the field’
```

4.7 Optative

The optative expresses a wish or desire on the part of the speaker.
```
sp-á-mû-root-a   mbûlû zánûlûkà è   ‘if only it would rain’
sp-á-mû-root-aga   twamûkangulûga ìswà   ‘if only we had/could have cleared the field’
```

4.8 Imperative

The imperative occurs only in second person, formed from the bare verb root in the singular, with suffix -jë in the plural. In the negative, the singular takes prefix na-, the plural ta-. Tone patterns change according to verb structure. Examples illustrate the low-tone verbs -bwa ‘come’, -gyanga ‘follow’, and -kangula ‘clear (a field)’, and the high-tone
verbs -nwá ‘drink’, -kátya ‘help’, and - Ingwilila ‘listen’. There is no negative form; rather, the negative subjunctive form is used.

4.9 Hortative

The hortative indicates a request, but is more polite than the imperative, more urgent in intent than the subjunctive. All persons may occur as subject. The only tone on the verb complex is that of the verb root. There is no negative form; rather, the negative subjunctive form is used.

4.10 Subjunctive

The subjunctive occurs with all persons as subject. It takes final -e with high tones on the initial and final vowels of the verb complex, both low-tone and high-tone verbs.

4.11 Negative subjunctive

The negative subjunctive requires a negative prefix, nt- for singular, ta- for plural, except first person singular, which requires -st- following the subject prefix. This form is used not only as the negative of the subjunctive, but also as the corresponding negative for the imperative and hortative.
### 5 SYNTAX

#### 5.1 Basic word order: S-V-IO-DO-OO

The basic word order of Lega is SVO, with indirect objects preceding direct objects. Oblique objects follow IO and DO.

<table>
<thead>
<tr>
<th>Verb Form</th>
<th>Subject</th>
<th>Object 1</th>
<th>Object 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>násinginde</td>
<td>Zuila</td>
<td>musagá</td>
<td>Zuila message</td>
</tr>
<tr>
<td>násinginde</td>
<td>message</td>
<td>17-of Zuila</td>
<td>'I sent a message for Zuila to Kikuni'</td>
</tr>
<tr>
<td>Kisanga álisíjye Lukulu byáná</td>
<td>'Kisanga fed Lukulu yams'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 5.2 Object marking

Lega permits only one object marker prefixed to the verb itself (see §3.7.2). If more than one pronominal object is referred to, the second is realized in an independent pronominal form following the verb.

- árígíkínde biswé ‘she cooked it [verb OM] for us [free pro]’
- árígíkínde lyó ‘she cooked it [meat] for us’

#### 5.3 Relative clauses

Relative clauses follow the noun they modify. In some tenses, there are differences in tone between the relative verb form and the simple indicative (see §4.4.1 for a brief discussion of relatives).

##### 5.3.1 Subject relatives

Subject relatives have no overt relative pronoun, marking of the relative status being indicated by the form of the subject prefix and/or tone of the verb construction.

- kimena ky-á-l-ílé mbwá kíñwe [cf. kimena kyállíle mbwá]
- 7.crocodile 7REL-T,PST-eat-CMP 9.dog 7.kill,CMP,PASS.FV ‘the crocodile ate the dog’
- muntu w-á-kangol-ílé iswá [cf. ákangulíle iswá]
- 1.person 1REL-T,PST-clear-CMP 5.field ‘the person who cleared the field’

---

<table>
<thead>
<tr>
<th>Plural</th>
<th>tatúmwé muri</th>
</tr>
</thead>
<tbody>
<tr>
<td>tatúbwé</td>
<td>‘(that) we should not come’</td>
</tr>
<tr>
<td>tatúkangule ġswá</td>
<td>‘(that) we should not drink the medicine’</td>
</tr>
<tr>
<td>tatúkáré bána</td>
<td>‘(that) we should not help the children’</td>
</tr>
</tbody>
</table>
5.3.2 Object relatives

Object relative constructions require two agreement prefixes, a relative prefix determined by the object noun, followed by a subject prefix determined by the agentive subject. If a subject noun occurs (following the verb), no subject agreement prefix appears.

kyumo ki-n-á-rabang-íle mokyó ki kisúga
7.town 7-1S-T_PST-visit-CMP 18.7.PRO 7.COP 7.beautiful
‘the town that I visited is beautiful’

nyama zi-bá-tá-gik-é zábólé
‘the meat that they don’t cook will spoil’

idégá li kitágalágá Syába mánzi múgyó lúbúgile
‘the pot that Syabá draws water in is broken’

tuságýika ísía àltwákangwindé
‘we are planting the field that we cleared (remote)’

lazí lbáisindemu jálángá lukúmbúsa kwá múgyú
‘the basket that she hid the money in is beside the bed’

múzínga mwákologyindé námama gü múnéné
‘the pit into which the animal fell is large’

5.4 Direct objects as subjects

Direct objects may be promoted to subject from either ostensive or passive constructions.

• from ostensives

djúmu tazikáguliká lingó kwisoku
/t_a-zí-ka-gul-ik-a/
‘oranges are not sold anymore at the market’

múzígi wáseyekile
/u-a-šes-ik-jle/
‘the string was cut’

• from passives

mukoko wágulíljve (na Muke)
/u-a-gul-il-w-e/
‘the sheep was sold (by Muke)’

muslí wálungwá busóga
/u-a-šung-w-a/
‘the sauce was well-spiced’

5.5 Coordinate and comitative constructions

Linking of multiple nouns as subjects may be achieved through the use of different coordinate or comitative constructions (for fuller discussion, see Tak and Botne 1998).

• comitative construction

Lukulu álindínde Muké na Zuúla
‘Lukulu waited for Muke with Zuula’

Nkusu éndjle kumusúmbá na mukází
‘Nkusu went to town with his wife’

wágé
• asymmetric coordination

  Amisi bibe falanga na Kibungé ‘Amisi and Kibunge stole some money’
  Nkusu bendile kumusimba ‘Nkusu and his wife went to town’
  Garisambá na mbitu wâne, ‘between me and my brother, it is I who am
gne i mulazi taller’

  bâbîndwe bôno bikalé [lit. they were told that they stay
kíma na kikandi quiet and the leader]

• symmetric coordination

  Lukulu nu Zuula bâlindinde Muké ‘Lukulu and Zuula waited for Muke’
  Nkusu nu mukâzí wâge bendile ‘Nkusu and his wife went to town’
kumusimba

5.6 Presentative constructions

In presentative constructions, the logical subject of the verb follows the verb, which itself
is marked by a preposed (á)- (probably the class 16 prefix), but shows no agreement
with the subject noun. This construction appears to be used to introduce new information
in discourse.

  gâringé myâka kinânâ na ganâbâle kwAmelîka
  ‘there will pass eight years before I come to America’
  munda mwâlucí gâbîshîndê falângá gili nzôka
  ‘under the basket where she hid the money there is a snake’

5.7 Focus: ù-

One type of focus construction places a proclitic ù- before the relevant verbal unit.

  ù wabá ‘s/he’s the one who survived’
  gôzo ù wamusâkîndê ‘he it is who cured her’
  Amisí ù wâlîngizyê nsaké ‘Amisi is the one who began (initiated) the
dispute’
  ampá gâno ù gabwâbîndê ‘indeed, right here is where it happened’
  ù bâna bîhîlé nsago zânê ‘they are the children who stole my purse’
  nne ù ukukalâ mabelâ ‘it is I who harvests the rice’
  mwîdéqá ù mubékutâgîlî mâzi ‘it is the pot into which they draw water’

5.8 Dependent clauses

• ga-clauses of time

  The verb prefix ga- introduces subordinate clauses of time, typically with the sense of
  ‘when’ or ‘whenever’.
The Bantu Languages

- **hypothesitical and counterfactual ga-/gi-clauses**

  When *ga-* co-occurs with the potential prefix *-na-* it marks hypothetical or counterfactual clauses. The form *gi-* occurs primarily in 3S constructions.

  - *gaminenda kuZai, ninabogaboga*
    - ‘if I ever happen to go to Zaire, I will be happy’
  - *gináñile, mmáge ēnabogilebogile*
    - ‘had she come (expected to, but didn’t), my mother would have been happy’

- **andi-clauses**

  The particle *andi* indicates that the proposition expressed should be assumed to be true before any evidence is provided.

  - *andi áhwa, mmáge ēbogobogé*
    - ‘if (assuming) she comes, my mother will be happy’
  - *andi mbúla záloka, ntábwe*
    - ‘if (assuming) it rains, she won’t come’
  - *andi nzóka!*
    - ‘watch it (= presumably), [it’s] a snake! (hence, behave accordingly)’

- **kungwá-clauses**

  These clauses indicate that the proposition expressed is a hypothesis and no evidence supporting it need be expressed.

  - *kungwá ánwa giño muri, ōné*
    - ‘if he drinks this medicine, he will be cured’
  - *kungwá mbúla záloka, ntábwe*
    - ‘if (supposing) it rains, he won’t come’

- **songó-clauses**

  The particle *songó* typically occurs in the apodosis of a conditional construction and indicates the consequence of an action. It may also occur in the protasis, in which case it indicates uncertainty or counterfactivity.

  - *Amisi ánábwaga, songó tinándile kumusúmbá*
    - ‘if only Amisi had come, (so that) then we could have gone to town’
  - *songó éndá ku Pangi, songó ēmóná mánganga*
    - ‘if she would go to Pangi [but she doesn’t want to], then she would see a doctor’

5.9 Evidentials

Unlike most Bantu languages, Beya Lega has two sentence level adverbial elements that indicate the speaker’s evidence for and extent of confidence in the proposition asserted in an utterance. These words are employed when the speaker feels compelled to indicate either the factuality of the assertion or doubt in the assertion (see Botne 1997).

- **ampú**: indicates that the speaker has cogent and compelling evidence supporting the assertion; hence, it expresses certainty on the speaker’s part. It may also function to emphasize or reaffirm a proposition.
ampú Zuúla nū Muké ú bekilé isaga lyá Pīla
‘(I know that) it was Zuula and Muke who took Pila’s ax’

ampú Mašudi či nzilá
‘[without a doubt] Masudi knows the way’

• āmbu: indicates that the speaker has only indirect evidence for the proposition asserted, evidence based on report, hearsay, or inference from sources other than vision.

āmbu Zuúla nū Muké ú bekilé isaga lyá Pīla
‘(it appears that) it was Zuula and Muke who took Pila’s ax’

nkungwágá (buah) āmbu bazungú bekúlyágá mirende
‘I hear (that) Westerners eat frogs [though I find that unlikely]’

ACKNOWLEDGMENT

Data for this chapter were obtained through work with Kisanga Salama-Gray and Jeanine Maluguza, whom I thank for their time, energy, and effort.

REFERENCES


FURTHER READING

Botne 1994; Burke 1940, 1956; Delhaise 1900; Malasi 1988; Meeussen 1962b; Struck 1910.
CHAPTER TWENTY-THREE

BILA (D32)

Constance Kutsch Lojenga

1 INTRODUCTION

Bila is one of the languages of the northern Bantu borderland spoken in the NE of the Democratic Republic of Congo, in the BaKwanza and the BaBombi Collectivités of the Territoire of Mambasa in the Province Orientale in and around Mambasa and Lolwa on the road between Bunia and Kisangani.

Guthrie (1970) has only one entry Bira, D32, with two dialects: ‘Plains Bira’, in the east, and ‘Forest Bira’, further to the west. However, the two appear to have only about 60 percent core vocabulary in common on a list of about 200 words (Kutsch Lojenga and Raymond 1985) and should on that basis alone be considered separate, but still related languages. A more elaborate survey done several years later comes to the same conclusion, and shows 59 percent cognates (Wit 1994:12–13).

The names of these two languages have caused some confusion. At first sight, they may give the impression of being the same; however, there is not only an r/l difference in the second consonant, but also a clear vowel difference in the first syllable: [Gera] for ‘Plains Bira’, and [Gila] for ‘Forest Bira’. This chapter concentrates on the latter.

It is not clear how many native Bila speakers there are. The Ethnologue lists 5,000 in 1987 (Boone 1993:9). If that figure was realistic at the time, the total population would not exceed 20,000 at present. However, census figures from the Mambasa Zone indicate that there were 60,000 Bila people around 1995. It is not impossible that this figure includes the entire population of Mambasa town, which means also many non-native Bila speakers (Boone 1993:16).

The results of the linguistic and sociolinguistic Bila survey (Boone 1993:13–14) show that three major speech varieties can be distinguished: Bombi, the Mambasa dialect, Nyaku, the dialect spoken in and around Lolwa, and Kaiku, to the southwest of Mambasa. A specific sound difference between Bombi and Nyaku is explained in the section on consonants. Although the people belonging to the Bombi and Nyaku dialects consider Kaiku yet another dialect, they constantly indicate that there is very little mutual intelligibility with Kaiku. The Mambasa dialect is central, with the other two varieties contiguous on either side: the Lolwa dialect to the east, and Kaiku to the southwest. The latter two are not contiguous.

Some of the differences relate to the vowel system: in Kaiku, verbs never end in the vowel -o, but always in the vowel -a, which could well indicate that Kaiku has only seven vowels. Lexically, it seems that quite a few ks have dropped out, e.g. Nyaku and Bombi: njoka ‘snake’; Kaiku: njoa; Nyaku and Bombi: mbuko ‘seed, fruit’; Kaiku: mbua. With Kaiku apparently so difficult to understand and the fact that there seems to be only around 80 percent lexical similarity, it may therefore be justified to consider Kaiku a separate language. It is therefore cited as such in the list later. I will then consider the
other two, Bombi and Nyaku, as the two main Bila speech varieties, also referred to as the Mambasa and Lolwa dialects respectively.

Bantu languages of the northern Bantu borderland in northeastern Congo are (listed in alphabetical order): Amba¹ (also called Humu), Beeke, Bali, Bira, Bhele, Bila, Budu (with two quite distinct dialects, called Koya and Neta), Kaiku, Kango,² Kompo, Lika, Mbo, Ndaka, Nyali, Vanuma. Most of them are represented on the map. Those which are mentioned in Guthrie’s classification are found in D20 and D30. However, D20 contains also several languages which are spoken much further south and which are more closely related to the languages of D40, D50, and D60, which have full noun-class systems with up to nineteen classes.

After some basic studies of several of these languages, and considering the result of linguistic and sociolinguistic surveys done in the area, two main groups of related languages can be distinguished, based on lexical similarities (Wit 1994:12–13). The grouping based on lexical similarities happens to coincide with a number of structural similarities relating among others to the vowel inventory, noun-class system, which strengthens the internal coherence of each of these two groups. Bila is special in that it seems to have borrowed some phonological features from the neighboring group, possibly from Ndaka which is spoken immediately to the west of Bila.

The first group contains those languages which have a somewhat reduced noun-class system which is still functioning in that there is agreement between the noun and the other elements of the noun phrase, and also between the noun and the inflected verb. These

MAP 23.1 BILA AND ITS NEIGHBORS
languages are: Budu, Ndaka, Mbo, Nyali, Vanuma. Most if not all of these languages have a nine-vowel system with ATR-harmony, something also found in several Central-Sudanic languages, and, in a slightly modified form, also in Mayogo. The five languages of this group show a high degree of lexical, phonological, and morphological similarity. The lowest percentages of lexical similarities between these languages is 73% (Wit 1994:13).

The second group consists of the languages Amba, Bira, Bhele, Bila, Kaiku, Kango, and Komo. These languages no longer have a functioning noun-class system, though the nouns are often preceded by recognizable but petrified noun-class prefixes. Nouns are divided into a system of animate and inanimate, and only in the former is a distinction made between singular and plural. There is no agreement between the elements of the noun phrase or between the noun and the verb phrase other than that based on animacy, and number within the set of animate nouns. Most of these languages have a system of seven vowels, with Bila having acquired a nine-vowel system. Four of these languages, geographically contiguous, seem to form a continuum: Bila–Kaiku 81% cognates, Kaiku–Bhele 82%, Bhele–Komo 80%, and Komo–Bila, non-contiguous, only 70%. All four have only 60% lexical similarity with Bira and Amba. For Kango, lexical data were collected, but have not been fully analysed. It is closest to Komo, with 78% lexical similarity, and is therefore considered to belong to this subgroup. The percentage of lexical similarities between this subgroup of Border-Bantu languages and the previous one is between 20 and 30% only (Wit 1994:12–13).

These two main groups cover most but not all of the Bantu languages spoken in the area. The genetic affiliation of the others, particularly Bali and Lika, is not yet completely clear. They may appear to be closer to some C-languages spoken further to the west, possibly the Bua group.

Since these languages are situated in the northern Bantu borderland, there are several non-Bantu languages bordering on some of these Bantu languages: Lese and Mangbetu (both Nilo-Saharan, Central-Sudanic) and Mayogo (Niger-Congo, Ubangi). From work done on both Bantu and non-Bantu languages in the area, it is clear that there has been interaction and influence on the lexicon (borrowing), in the phonology (e.g. vowel inventory, depressor consonants), and in the grammar (verbal derivational categories). This mutual influence makes the Bantu languages in this area interesting but also quite complex in certain domains.

Bila has a number of most unusual and unexpected features for a Bantu language. In this chapter, I will particularly focus on these interesting features, namely: its nine-vowel system with Advanced Tongue Root (ATR) harmony, the lack of a set of voiced stops, three contrastive tone levels and downstep, no functional noun-class system, but only petrified remnants of the prefixes, and an unusual verbal derivational category, with prefixes marking the obligatory presence of animate singular or animate plural object. These are some topics of initial study, but much remains to be studied of this Bantu language of the northern Bantu borderland.

The oldest article relating to Bila was written by Vorbichler (1966). He focused on the tonal structure of verbal infinitives and of subject prefixes in the various tense/aspect forms. In his article, the language has been transcribed with five vowels and two tones.

Kutsch Lojenga and Raymond did an initial rapid survey by short comparative word lists of a number of the Bantu languages of the northern Bantu borderland in 1985. A more in-depth linguistic and sociolinguistic survey on Bila was conducted by Boone (1993). Comparative results with other related languages are provided in Wit (1994), and word lists containing 250 words of twelve Bantu languages in the area are found in Wit and Hasselaar (1995).
This chapter contains the first results of a period of field work on the language which took place in Mambasa in 1993, where I worked with a group of Bila speakers on phonological, morphological, and syntactic structures. Day after day, the results of our linguistic research showed that Bila does not conform to the expectations when comparing it with the closely related languages Bhele and Komo, but that this Bantu language of the northern Bantu borderland has developed a number of interesting and unusual features. I first reported on the vowel system and the tone system in two conference papers (1994b and 1995). Information from these papers has been reworked for the section on the phonology of Bila, below. Some of the data in the sections on nominal morphology and verbal morphology below were briefly cited in the above-mentioned articles, but only for the purpose of exemplifying phonological or tonological features. In this chapter, a lot of new data are provided focusing on nominal and verbal morphology.

2 PHONOLOGY

2.1 Vowels

Bila has a nine-vowel system with ATR-based vowel harmony, not like Komo, Bhele, and the others in its group, but like Budu, Nyali, Ndaka, and others in the neighboring subgroup.

\[
\begin{array}{cc}
[\text{+ATR}] & i \quad u \\
[\text{-ATR}] & i \quad \text{o} \\
[\text{+ATR}] & e \quad o \\
[\text{-ATR}] & e \quad a \quad \hat{o} \\
\end{array}
\]

The verbal system shows these nine vowels most clearly. Disyllabic noun roots, however, present some interesting co-occurrence restrictions between \(V_1\) and \(V_2\), which are a clear reminder of a seven-vowel system, like the other languages in the subgroup to which Bila belongs. It seems, therefore, that Bila is in the process of exchanging its original seven-vowel system for a nine-vowel system.

In the following subsections, we will first look at the vowels in the verbal system, and subsequently treat different aspects of the vowels in the nominal system.

2.1.1 Vowels in the verbal system

The verbal system shows a clear contrast between nine vowels, with ATR-based vowel harmony. Identical systems are found in the languages of the other subgroup of Bantu languages: Budu, Nyali, Vanuma, and probably Ndaka, spoken immediately to the west of Bila.

\[
\begin{array}{cc}
[\text{-ATR}] & [\text{+ATR}] \\
\text{i} & \text{u} \\
\epsilon & \text{e} \\
\text{a} \\
\end{array}
\]

Nine-vowel qualities contrast in monosyllabic verb roots. There is no infinitive prefix, and the verb-final vowel is underlyingly -\(\hat{a}\), with -\(\hat{o}\) as its [+ATR] counterpart in this position only.

- m\(\text{u}-\hat{a}\) ‘to swallow’
- p\(\text{i}-\hat{a}\) ‘to come’
- c\(\text{h}\text{c}\text{h}-\hat{a}\) ‘to run’
- m\(\text{e}-\hat{a}\) ‘to put upright’
- t\(\text{a}-\hat{a}\) ‘to walk’
Two verbs have been found which do not fit the vowel-harmony pattern in that their root-vowel is /a/, [−ATR], whereas they take the suffix -ó, as if they were [+ATR]. In both, C₂ is a palatal(ized) consonant, which is probably causing the final vowel to be [+ATR].

- pachó ‘to close’
- layó ‘to wipe’

2.1.2 Vowels in the nominal system

Noun roots (with or without a prefix) containing two identical vowels show a contrast between seven vowels only.

The following are examples of CVCV nouns without prefix.

- hhi ‘bird, sp.’
- hèle ‘snake, sp.’
- ìbìé ‘sheath for knife’
- báhá ‘quiver for arrows’
- ìmbó ‘arm’
- dódó ‘earth’
- bůú ‘leaf, sp.’

The following are examples of CVCV nouns with the prefix e-/ê-.

- egingi ‘mortar’
- eséló ‘crown’
- ëbële ‘breast’
- ëdáka ‘tongue’
- ëbókó ‘throat’
- ëbókó ‘banana’
- ekápú ‘navel’

When looking at noun roots containing two different vowels, the following observations can be made:

1. The vowels /e/ and /o/ are mutually exclusive with /ê/ and /à/, a restriction also found in the other seven-vowel languages.

- mbétë ‘okapi’
- sòngé ‘moon’
- ngbekó ‘big brother’
- sembó ‘flour’

2. The vowels /i/ and /û/ only occur in V₁-position when V₂ is occupied by /e/, /ê/, or /à/.

If /i/ and /û/ only occurred in V₁-position before /e/ and /ê/, like in the following examples, they could be considered allophones of /ì/ and /û/.

- kité ‘leg’
- ìoté ‘cow’
- lìmyó ‘dew’
- sùbó ‘stomach’
However, since /i/ and /u/ also occur in V1-position before /a/, a nine-vowel contrast is found in that particular environment. When V2 is /a/, it appears that, in fact, there is contrast between /i/ and /u/ on the one hand, and /a/ and /u/ on the other hand in V1-position, and consequently between nine vowel qualities.

Some examples of near-minimal contrast between the two [+high] vowels in V1-position of CVCV and CVV roots are:

- [+ATR] ngimá ‘snake, sp.’
- [-ATR] njikà ‘hand’
- épà ‘father’
- kpèkà ‘tortoise’
- bâbà ‘quiver for arrows’
- njóka ‘snake’
- ngoyà ‘pig’
- pungà ‘rice’
- kàhà ‘small antelope’

It is not clear whether there is contrast between /i/ and /u/ on the one hand, and /a/ on the other hand when they appear in V2-position. When the vowel /a/ is found in V1-position, only the [+ATR] high vowels /i/ and /u/ have been found to occur as V2 so far.

- kâli ‘woman’
- kàtù ‘bird, sp.’
- pasi ‘peel, shell, bark’
- njáku ‘ant, sp.’
- tâpi ‘branch’
- pângù ‘squirrel, sp.’

The petrified noun-class prefix alternates between e- and e-, as in Komo and Bhele, which each have a seven-vowel system. However, since Bila has a nine-vowel system, the environment causing the alternation is not exactly identical. In Komo and Bhele, the prefix e- is only found when the root contains the vowels /e/ and/or /a/; in all other cases, preceding the vowels /i/, /u/, and /a/, the e-prefix is used. However, in Bila, the alternation now corresponds to the ATR-value of the root or stem, as exemplified below.

- [+ATR] roots/stems:
  - elihé ‘day’
  - etita ‘tribe’
  - elolí ‘clothes’
  - ekömhu ‘armpit’
  - enáka ‘horn of animal’
  - épínjé ‘squirrel, sp.’
  - ételà ‘evening’
  - etela ‘tree, sp.’

- [-ATR] roots/stems:
  - énjêkù ‘tree, sp.’
  - eheli ‘advice’
  - esúmbi ‘price’
  - ekûmbó ‘work’

Roots in which V1 is occupied by /a/ are treated as [+ATR] when V2 is the [+ATR] vowel /e/ (and probably also /o/; no examples available).
etále `stone’
ébéle `two’

Roots in which V₁ is /a/ are treated as [-ATR] when V₂ is the [-ATR] vowel /a/ (and probably also /e/; no examples available), but also when V₂ is /i/ or /u/, which can be considered a neutralization of the contrast of [+ATR] and [-ATR] high vowels, since /i/ and /u/ never occur in this position.

ékáko `palm of hand’
ebambu `tree, sp.’
ékáni `folktale’

2.2 Consonants

Bila does not have a very large consonant inventory.

<table>
<thead>
<tr>
<th>Implosives</th>
<th>Bilabial</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Labial-Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bila</td>
<td>b</td>
<td>d</td>
<td>ch [tʃ]</td>
<td>k</td>
<td>kp</td>
<td></td>
</tr>
<tr>
<td>Vd. stops</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Vl. fricatives</td>
<td>Φ</td>
<td>s</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td>ny [ŋ]</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Approximants</td>
<td>l</td>
<td>y</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>w</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Komo</th>
<th>Bhele</th>
<th>Bila</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>b</td>
<td>p</td>
</tr>
<tr>
<td>těbá</td>
<td>těbá</td>
<td>tépá</td>
</tr>
<tr>
<td>něbe</td>
<td>něbi</td>
<td>těpi</td>
</tr>
<tr>
<td>d</td>
<td>d</td>
<td>t</td>
</tr>
<tr>
<td>demá</td>
<td>demá</td>
<td>timá</td>
</tr>
<tr>
<td>didá</td>
<td>didá</td>
<td>titó</td>
</tr>
</tbody>
</table>
This sound shift in Bila has repercussions for the tonal system as will be seen in §2.3.

2.3 Tone

Bila being a Bantu language, one would expect to find a two-tone system with or without downstep. However, when making a first attempt at analysing nouns and verbs in isolation, it appears that a two-tone analysis, even with downstep, does not yield a satisfactory result in that it cannot account for the various surface tonal melodies found. Minimal pairs and sets like the following rule out an analysis into two tones underlyingly.

My conclusion is therefore that Bila has three underlying tones synchronically, High, Mid, and Low, which I call High (H, acute accent), Low (L, zero marking), and extra-Low (xL, grave accent) respectively, for the sake of comparison with the neighboring languages Komo and Bhele.

In addition to the three level tones, there are two rising tones: one from L to H, /Ω/, and one from xL to H, /ˇ/. These rising contours may occur on any non-final syllable in nouns, though are also found on final syllables in the verbal system. An LH rising tone can never be preceded by an xL tone, nor can an xL tone be preceded by an L tone.

In addition, Bila also has downstep of H tone, though not as a result of H-spreading and subsequent delinking of L tones, but in certain grammatical environments, the most significant of which is the boundary between Verb and Object. I suggest a floating L tone
Downstep is also frequently found within noun phrases between the head noun and certain modifiers. It seems that a number of H-toned grammatical morphemes are preceded or followed by a floating L tone, causing downstep, and that there are (derived) lexical items, nouns and verb infinitives with a tonal melody containing a downstep.

It seems plausible that Bila once had a two-tone system with downstep, like its genetically most closely related neighbors Komo and Bhele. Synchronically, Bila must be analyzed as having a three-tone system, with still ‘symptoms’ of a two-tone system present.

We also need to assume a link between the sound shift from voiced obstruents to voiceless obstruents and the development of the third tone, extra-Low, since this XL tone is very frequently attested in words with a voiceless obstruent which corresponds to a voiced obstruent in the neighboring languages. Voiced obstruents are well-known for their tone-lowering effect. However, this is not evident in Komo and Bhele, but rather in some languages spoken to the north and possibly west of Bila: Mayogo (Ubangi), a three-tone language with LM and LH rising tones as a result of depressor consonants, and both Budu and Lika, Bantu languages of different subgroups, which exhibit LH rising tones in syllables with an initial depressor consonant.

I therefore believe that the XL tone is new in the system, and has emerged as a result of a process in which depressor consonants once caused tonal depression, presumably lowered L tones, and apparently also H tones, to an XL level. Subsequently, a sound shift must have taken place, in which voiced egressive stops, the depressor consonants, became voiceless, and thus caused the XL level to become contrastive, which has resulted in the present-day three-tone system.

3 NOMINAL MORPHOLOGY

3.1 Nouns

Bila does not have a typical noun-class system as found in many other Bantu languages, with regular singular and plural class prefixes to the nouns; it only has petrified remnants of such a system. Instead, the language has a system which differentiates between animate and inanimate nouns and in which animate nouns have separate singular and plural forms, whereas inanimate nouns only have one form used for both singular and plural.
A few [+human] nouns have a syllabic nasal as singular prefix, alternating with \( \text{ba} - \) in the plural (or \( m/-\text{b} - \) before a vowel); most other [+animate] nouns have a zero/ \( \text{ba} - \) alternation.

\[
\begin{align*}
N-kpà & \quad \text{\textit{ba-}kpà} & \quad \text{‘man, person’} \\
N-fìla & \quad \text{\textit{ba-}fìla} & \quad \text{‘Bila person’} \\
N-kingi & \quad \text{\textit{ba-}kingi} & \quad \text{‘deaf and dumb person’} \\
mèkàli & \quad \text{\textit{bi-kàli}} & \quad \text{‘sister’} \\
mèlòkò & \quad \text{\textit{bi-lokò}} & \quad \text{‘brother’} \\
emà & \quad \text{\textit{bemà}} & \quad \text{‘mother’} \\
ëpà & \quad \text{\textit{bèpà}} & \quad \text{‘father’} \\
bòtè & \quad \text{\textit{ba-bòtè}} & \quad \text{‘pygmy’} \\
mwamè & \quad \text{\textit{ba-mwamè}} & \quad \text{‘king’} \\
ngèndù & \quad \text{\textit{ba-ngèndù}} & \quad \text{‘visitor’} \\
mìkì & \quad \text{\textit{ba-mìkì}} & \quad \text{‘child’} \\
lèú & \quad \text{\textit{ba-lèú}} & \quad \text{‘twins’} \\
kòtà & \quad \text{\textit{ba-kòtà}} & \quad \text{‘young person’} \\
sàlà & \quad \text{\textit{ba-sàlà}} & \quad \text{‘boy’} \\
kèlì & \quad \text{\textit{ba-kèlì}} & \quad \text{‘woman’} \\
sìka & \quad \text{\textit{ba-sìka}} & \quad \text{‘girl’} \\
mèmè & \quad \text{\textit{ba-mèmè}} & \quad \text{‘goat’} \\
njòka & \quad \text{\textit{ba-njòka}} & \quad \text{‘snake’} \\
sù & \quad \text{\textit{ba-sù}} & \quad \text{‘fish’} \\
mbongò & \quad \text{\textit{ba-mbongò}} & \quad \text{‘elephant’}
\end{align*}
\]

The following are examples of recognizable but petrified remnants of noun-class prefixes, whereby all prefixes with a vowel other than \( /a/ \) have two forms, the basic one used for roots with \([-\text{ATR}]\) and the other one for roots with \([+\text{ATR}]\) vowels.

\( /a/-, \text{am-} / (\text{with variants am- or am-} \) after coalescence with the initial \([+\text{ATR}]\) or \([-\text{ATR}]\) high vowel of a V-initial stem), and \( /a/-, \text{ap-} / \text{or ap-} \) after coalescence with the initial vowel of a V-initial stem): used predominantly for trees, plants, and small animals like birds, fishes, insects. The prefixes \( /a/-\) and \( /a/-\) are obviously related to the words \( \text{emà/bemà} \) ‘mother’ and \( \text{ëpà/bèpà} \) ‘father’. Especially the prefix \( /a/-\) occurs very frequently.

\[
\begin{align*}
\text{a\textit{bénjé}} & \quad \text{‘banana, sp.’} \\
\text{akèlè} & \quad \text{‘antelope, sp.’} \\
\text{alòmo} & \quad \text{‘fish, sp.’} \\
\text{akàlè} & \quad \text{‘vine, sp.’} \\
\text{amàh\textit{ho}} & \quad \text{‘small brown snake’} \\
\text{amàk\textit{ìsàlè}pè} & \quad \text{‘scorpion’} \\
\text{amàkòkò} & \quad \text{‘big black ant’} \\
\text{amàt\textit{ìngò}lòlò} & \quad \text{‘tree, sp.’} \\
\text{amèk\textit{ò}à} & \quad \text{‘flea’} \\
\text{amèlù} & \quad \text{‘chameleon’} \\
\text{apàdèlè} & \quad \text{‘tree, sp.’} \\
\text{apàkímò} & \quad \text{‘banana, sp.’} \\
\text{apàm\textit{ùkù}} & \quad \text{‘bird, sp.’}
\end{align*}
\]
Other recognisable but petrified prefixes are *ma-, *ki-/ki-, *bu-/bu-, and *li-/li-.

*ma- (several uncountables and liquids)

- *maká: ‘soot’
- *mákó: ‘riddle’
- *mákó: ‘blood’
- *malumga: ‘words’
- *manyé: ‘urine’
- *manyá: ‘flowers’

*ki-/ki-

- *kiká: ‘crab’
- *kidélu: ‘chin’
- *kisámo: ‘hair’
- *kitói: ‘ear’
- *kitúkpu: ‘hat’

*bu-/bu-; /bw- or b- before V (among others some abstract nouns)

- *bulambó: ‘earth, world’
- *bùsède: ‘anger’
- *bùséki: ‘desire’
- *bùtúó: ‘family’

*li-/li-

- *lmyó: ‘dew’
- *libáta: ‘duck’

In addition, many words have a recognisable but non-functional nasal prefix, resulting in prenasalization of voiced stops; words with other consonants have no prefix. These probably represent former class 9/10 words, with a variety of meanings, including animals. There are also a number of nouns derived from verbs with no prefix which fall in this category (see §3.2).

- *bòmbó: ‘arm’
- *mbongó: ‘elephant’
- *bute: ‘cow’
- *mbóka: ‘cooking pot’
- *chóóá: ‘mud’
- *mbuko: ‘seed’
- *káxá: ‘leaf’
- *mbúó: ‘rain’
- *kondó: ‘tail’
- *nnjí: ‘village’
- *kókó: ‘chicken’
- *nnja: ‘hunger’
- *kóó: ‘skin’
- *ngáká: ‘jaw’
- *kúó: ‘bone’
- *ngópó: ‘body’
- *mémé: ‘goat’
- *ngóyá: ‘pig’
- *nyama: ‘animal’
- *ngómbé: ‘clothes’
- *nyókó: ‘mouth’
- *njiká: ‘hand’
- *séngé: ‘moon, month’
- *njókí: ‘bee’
- *tápi: ‘branch’
- *njóka: ‘snake’

The prefix *e-/e- is the most frequent, and is used for things, but also for plants, trees, insects, fishes, birds, and also, in conjunction with a [+ATR] suffix -i to derive nouns from verbs (see §3.2).
There are no infinitive prefixes.

The only two nouns which might have a remote possibility of incorporation of a former class 17 prefix ku- would be:

kóma ‘place’
kápá ‘heaven’

Then, there are the following two locative adverbs, possibly derived from classes 16 and 17 respectively.

-wá ‘where?’
-kó ‘where?’
ôké / kó ôké / wá ‘where did you go?’
endá kó / endá wá ‘where is the house?’
omonti / miki kó / wá ‘where did you see the child?’

3.2 Verb – noun derivation

The following are examples of a quite productive system of verb–noun derivation by means of the prefix -/e- and a nominalizing suffix -í. This [+ATR] suffix -i changes the vowels of a [-ATR] verb stem to [+ATR], and the prefix is therefore at all times the [+ATR] variant e-.

Noun derived from a [+ATR] verb root:

eló ‘anger’ < beló ‘to be angry’

Nouns derived from [-ATR] verb roots/stems:

eló ‘advice’ < helá ‘to advise, teach’
elóti ‘insult’ < hštá ‘to insult’
elló ‘payment’ < lehá ‘to pay’
ellóti ‘vomit’ < lšká ‘to vomit’
elóti ‘dream’ < lštá ‘to dream’
ememí ‘prayer, request’ < mesmá ‘to pray, request’
esmí ‘price’ < sümhá ‘to buy’

Some nouns derived from verbs using the e-prefix, but without the -i suffix:

elóhú ‘words’ < lúhó ‘to speak’
ekábo ‘theft’ < kubó ‘to steal’

There are also examples of zero derivation, or of derivation by tonal changes only:

é ‘káná ‘agreement’ < é’káná ‘to agree’
njóko ‘game’ < njóko ‘to play’
susó ‘wind’ < susó ‘to blow (of the wind)’
3.3 Agreement

Bila shows agreement between a noun and a following adjective, numeral, or demonstrative. It is a system differentiating, once again, between inanimate, animate singular, and animate plural nouns. Modifiers to inanimate nouns may take the following prefixes á-, é-/é-, Ń-. For animate nouns in the singular, ma- or mú-/mú- are used; animate plural forms take bá- or bú-/bú-.

### Adjectives

<table>
<thead>
<tr>
<th>Num.</th>
<th>Demonstratives</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ñá-</td>
</tr>
<tr>
<td>3</td>
<td>é-/é-</td>
</tr>
<tr>
<td>5</td>
<td>mú-/mú-</td>
</tr>
</tbody>
</table>

In a noun-plus-noun associative construction, the various connectives with agreement marking which are used are á, ma, bá, as well as a lexically determined sá/só. In the pronominal possessive construction, a distinction must be made between alienable and inalienable possessive constructions according to the set of pronoun roots used. The prefixes used with the pronoun roots for the alienable possessive construction are á-, ma-, and Gá-. In the inalienable possessive construction, the prefixes used with the pronoun roots are: á-, ó-/b-, má-, bá-, and sá-, só-/s̩-.

A special marker lí may be found between the noun and the modifier in some of the constructions obligatorily, in others optionally, and in yet other constructions, it is obligatorily absent. The function of this marker is not entirely clear at present.

### 3.3.1 Adjectives

The following are some adjectives in their citation forms, with the [−animate] agreement marker á-

<table>
<thead>
<tr>
<th>[−animate]</th>
<th>[+animate, sg.]</th>
<th>[+animate, pl.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>[a-hí] 'black'</td>
<td>a-ngbó 'big'</td>
<td>a-tã 'new'</td>
</tr>
<tr>
<td>[a-pù] 'white'</td>
<td>a-sí 'big'</td>
<td>a-njá 'good'</td>
</tr>
<tr>
<td>[a-ñje] 'red'</td>
<td>a-ngbí 'short'</td>
<td>a-kpë 'old'</td>
</tr>
</tbody>
</table>

They take the concord markers á- (others take é-/é-, lexically determined by the adjective, it seems), ma- and bá-, as shown above, and follow the noun they modify. With the inanimate nouns, the marker lí obligatorily precedes the adjective. Its vowel /í/ is deleted when the following word begins with a vowel. It is always downstepped from a preceding H tone. In most cases, the adjective root is reduplicated when the noun is in the plural.

<table>
<thead>
<tr>
<th>endü 'house'</th>
<th>miki 'child'</th>
<th>bamiki 'children'</th>
</tr>
</thead>
<tbody>
<tr>
<td>endü ('l)-añá</td>
<td>miki mangbí</td>
<td>bamiki bángbí ngbí</td>
</tr>
<tr>
<td>endü ('l)-áñã</td>
<td>miki manjá</td>
<td>bamiki bánjá njá</td>
</tr>
</tbody>
</table>
3.3.2 Numerals

The numeral roots from 1–10 are presented below. Only the numerals 2, 3, and 5 have a high-toned prefix é-/é-.

- kádì ‘one’  muúbá ‘six’
- ébañé ‘two’  sofé-laó ‘seven’
- ésañé ‘three’  lanó ‘eight’
- síñé ‘four’  sofé-kómi ‘nine’
- étañé ‘five’  mákó ‘ten’

These are their default forms, used with inanimate nouns. When used with animate nouns, they take the high-toned prefix GD-/. As an idiosyncratic exception, the initial G- in Gúgalé has been lost.

The question word éngá ‘how many’ should be included in the set of numerals, since it also takes the same prefix when used with [+human] nouns:

- endú éngá ‘how many houses?’
- bakpá bingá ‘how many people?’

3.3.3 Demonstratives

The following demonstrative roots have been found:

- -ndé ‘this/these, close to speaker’
- -ndó ‘that/those, close to hearer’
- -ndohú ‘that/those, away from speaker and hearer’

The demonstratives used for animate nouns take the prefixes as shown in the table above. The prefix agreeing with inanimate nouns is a syllabic nasal, in this case preceding a prenasalized consonant.

In addition, a downstep is found at the boundary between noun and demonstrative, as is shown in the following examples:

- mbáñé lándé ‘this chair’
- miki lándó ‘that child’
- biñamiké búnåndó ‘those children’

3.3.4 Associative Construction

The following are examples of noun-plus-noun associative constructions with the connectives á (inanimate), ma (animate sg.), and bá (animate pl.). The marker li is optional.

- ngómmbé (1)-á miki ‘the clothes of the child’
- kómmbé (1)-á (bá)nyama ‘the tail(s) of the animal(s)’
3.3.5 Pronominal possession

Pronominal possession is quite complex in Bila. First of all, a distinction must be made between alienable and inalienable possessive constructions on the basis of two different possessive pronoun roots in the first person singular only. In addition to that, the connectives used as prefixes for the alienable possession are the same as those used in the associative construction; however, the ones used in the inalienable possessive construction are not the same, as is shown in the examples below.

<table>
<thead>
<tr>
<th>Possessive pronoun roots</th>
<th>alienable</th>
<th>inalienable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg.</td>
<td>-m~</td>
<td>-mí</td>
</tr>
<tr>
<td>2sg.</td>
<td>-k~</td>
<td>-k</td>
</tr>
<tr>
<td>3sg.</td>
<td>-kë</td>
<td>-ké</td>
</tr>
<tr>
<td>1pl.</td>
<td>-sú</td>
<td>-sú</td>
</tr>
<tr>
<td>2pl.</td>
<td>-nú</td>
<td>-nú</td>
</tr>
<tr>
<td>3pl.</td>
<td>-Gb</td>
<td>-Gb</td>
</tr>
</tbody>
</table>

There are three paradigms for the alienable possessive construction, differentiating between inanimate, animate singular, and animate plural nouns. Their respective prefixes are á-, ma-, and Gá-.

In addition, the marker lí is obligatorily used following [animate] nouns, and is optionally found following [+animate] nouns. The vowel of the marker lí is elided when followed by the [animate] prefix á-. Following a noun ending in H tone, lí is downstepped. When the marker lí is not present, there is no downstep between the noun and the possessive pronoun.

Paradigm for inanimate nouns:
- endú 'l-ám ~ 'my house(s)'
- endú 'l-áko 'your house(s)'
- endú 'l-ákë 'his/her house(s)'
- endú 'l-ássú 'our house(s)'
- endú 'l-ánú 'your house(s)'
- endú 'l-áál 'their house(s)'

Paradigms for animate nouns:
- mìkí ('lii) mamá~ 'my child'
- mìkí ('lii) maká 'your child'
- mìkí ('lii) makë 'his/her child'
- mìkí ('lii) masú 'our child'
- mìkí ('lii) máni 'your child'
- mìkí ('lii) máalá 'their child'
- bìmìkí ('lii) bámá~ 'my children'
- bìmìkí ('lii) bòká 'your children'
- bìmìkí ('lii) bòkë 'his/her children'
- bìmìkí ('lii) bòasú 'our children'
- bìmìkí ('lii) bòní 'your children'
- bìmìkí ('lii) bòalá 'their children'
3.3.6 Inalienable possession

In the inalienable pronominal possessive construction, the possessive pronoun immediately follows the noun; the marker *li* is not used. The series of possessive pronoun roots differs from those used in the alienable possessive construction only in the 1st person singular: *mi*. However, several series of prefixes are used for agreement. The choice of series seems unpredictable and must therefore be lexically determined. Could it be that we find remnants of a class system here? The forms with *bi*- are used for plural forms (mainly with the kinship terms).

The following series of possessive pronoun roots preceded by a prefix with connective vowel are found in the language:

- ámi/ómi  sámi/sómi  mámi  bámi
- áko/sko  sáko/skó  máko  bákó
- aké/ské  sáké/ské  máké  báké
- ású/ású  sású/sósú  mású  bású
- amú/ómu  sámú/sómu  mámu  bámu
- áló/óló  sáóló/sóló  máóló  báló

The series with *má*- follows in several instances a noun with a petrified *ma*- prefix.

- mákyo mámi  ‘my blood’
- máku mámi  ‘my knee(s)’

The series with the -ó/-o- connective vowel follow nearly exclusively [+ATR] nouns, though it must be noted that the connective takes the ATR-value of the possessive pronoun root. The series with the connective vowel -a- follow in the majority of cases [-ATR] nouns, though not exclusively. An exceptional case is e.g.:

- sisó mámi  ‘my vein(s)’
- sisó máké  ‘his vein(s)’

The semantic subset of nouns which take the forms for the inalienable possessive construction contains the traditional categories: kinship terms, body parts, and some other nouns which normally have an inherent relationship to a possessor.

- njá/sámi  ‘my hand(s)’  kitó/sómi  ‘my ear(s)’
- njá/sáké  ‘his hand(s)’  kitói/sóke  ‘his ear(s)’
- muyá/sámi  ‘my sister-in-law’  amá/sómi  ‘my sister-in-law’
- muyá/sáké  ‘his sister-in-law’  amá/sóke  ‘her sister-in-law’
- mná/ámí  ‘my head’  endélu/ómi  ‘my beard’
- mná/áké  ‘his head’  endélu/óke  ‘his beard’
- kóla/ámí  ‘my paternal aunt’  kió/ómi  ‘my brother-in-law’
- kóla/áké  ‘his paternal aunt’  kió/óke  ‘his brother-in-law’
- bákóla/bámi  ‘my paternal aunts’  bákóla/báké  ‘his paternal aunts’

4 VERBAL MORPHOLOGY

The first subsection presents infinitives, the basis for the following subsections on inflection and derivation. Only a limited number of different verb paradigms are available for the present study. More paradigms will undoubtedly come to light with further study.
Interpretations of the structure and meaning of these paradigms are provided, but may need to be adapted when further data are available.

4.1 Infinitives

Infinitives are formed by the verb stem followed by a verb-final suffix -á or -ó following a [-ATR] or a [+ATR] stem respectively.

<table>
<thead>
<tr>
<th>Stem</th>
<th>Meaning</th>
<th>Stem</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>hälá</td>
<td>‘to rot’</td>
<td>hikó</td>
<td>‘to build’</td>
</tr>
<tr>
<td>boulá</td>
<td>‘to pull’</td>
<td>pikó</td>
<td>‘to come’</td>
</tr>
<tr>
<td>bétáná</td>
<td>‘to be beaten’</td>
<td>bongísó</td>
<td>‘to repair’</td>
</tr>
</tbody>
</table>

There is a three-way lexical tone contrast between H, L, and xL, realized on the first stem vowel.

- H  bıkó ‘to be many’
- L  hikó ‘to build’
- xL pikó ‘to come’

Examples of lexical minimal pairs:

- bólá ‘to lack’  kshá ‘to be silent’
- bólá ‘to pull’  kshá ‘to finish’

Originally, there must have been a two-way lexical tone contrast in the verbal system. The three-way lexical tone contrast is due to an historical process, namely the development of the xL tone through tonal depression of voiced obstruents in C₁ position and the subsequent sound shift from voiced to voiceless obstruents. Syllables with voiceless obstruents which are not historically derived from voiced obstruents may, of course, carry H and L tones.

All verbs with an initial xL tone followed by the verb-final H-toned suffix -á or -ó have an initial voiceless obstruent.

- pédá ‘to take’
- témá ‘to cultivate’
- sósá ‘to be boiling, hot’
- kshá ‘to finish’
- kpédó ‘to be deep’

When C₂ was an original depressor consonant, now a voiceless obstruent, the H tone of the verb-final suffix has become xL. If it concerns an underlying H-tone verb, the resultant tonal pattern of the verb is H.xL; if it concerns an underlyingly L-tone verb, the L has assimilated to the xL of the second syllable, and the result is an xL.xL tone pattern.

H-tone verbs:  
- bıká ‘to smoke’
- témá ‘to laugh’
- kpédó ‘to tarry’

L-tone verbs:  
- lsáká ‘to bewitch’
- méká ‘to shine’
- tıkó ‘to shake’

Some verbs have a CV-radical, followed by the verb-final -á or -ó. All three lexical tone classes are represented. The following are some tonal minimal pairs.

<table>
<thead>
<tr>
<th>Stem</th>
<th>Meaning</th>
<th>Stem</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kúó</td>
<td>‘to die’</td>
<td>tóá</td>
<td>‘to pierce’</td>
</tr>
<tr>
<td>kúó</td>
<td>‘to fall’</td>
<td>tóá</td>
<td>‘to pound’</td>
</tr>
<tr>
<td>bódó</td>
<td>‘to tie loosely’</td>
<td>bódó</td>
<td>‘to take (from the hand)’</td>
</tr>
</tbody>
</table>
There are several monosyllabic verbs, also with a three-way lexical tone contrast. Each of these verbs has its inherent lexical tone, followed by the H tone of the verb-final suffix (which has merged with the vowel of the verb root), resulting in H, LH, and xLH melodies on the monosyllabic verbs. All verbs with xLH have an initial voiceless obstruent, which, once again, shows the historical process of tone lowering through a voiced obstruent and subsequent sound shift from voiced to voiceless.

A number of infinitives have an initial prefix é/-é-, in many cases followed by downstep. The semantics of such verbs show that this morpheme represents an incorporated reflexive pronoun, or in other cases the incorporation of an inanimate object pronoun to mark transitivity with an inanimate object.

<table>
<thead>
<tr>
<th>H</th>
<th>L</th>
<th>xL</th>
</tr>
</thead>
<tbody>
<tr>
<td>bá</td>
<td>‘to be’</td>
<td></td>
</tr>
<tr>
<td>pá</td>
<td>‘to give’</td>
<td></td>
</tr>
<tr>
<td>má</td>
<td>‘to get up’</td>
<td></td>
</tr>
<tr>
<td>ká</td>
<td>‘to go’</td>
<td></td>
</tr>
<tr>
<td>sá</td>
<td>‘to do’</td>
<td></td>
</tr>
<tr>
<td>kpá</td>
<td>‘to carry away’</td>
<td></td>
</tr>
</tbody>
</table>

The following table shows both the independent pronouns as well as the subject prefixes.

<table>
<thead>
<tr>
<th>Pronouns</th>
<th>Subject prefixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg.</td>
<td>ime</td>
</tr>
<tr>
<td>2sg.</td>
<td>uwe (~e/-é-)</td>
</tr>
<tr>
<td>3sg.</td>
<td>éyé</td>
</tr>
<tr>
<td>1pl.</td>
<td>bésu</td>
</tr>
<tr>
<td>2pl.</td>
<td>bému (~be/-be-)</td>
</tr>
<tr>
<td>3pl.</td>
<td>êbê</td>
</tr>
</tbody>
</table>

In 2sg. and 2pl., there is individual variation between the back vowels ~-o- and ~bo- on the one hand, and the front vowels ~-e- and ~be- on the other hand. In the paradigms below, the forms with the back vowels are used.
The choice between the [−ATR] and the [+ATR] variants is determined by the ATR-value of the following vowel.

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Perfect, 3sg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[−ATR]</td>
<td></td>
</tr>
<tr>
<td>mid-á</td>
<td>a-mid-í</td>
</tr>
<tr>
<td>chéch-á</td>
<td>a-chéch-í</td>
</tr>
<tr>
<td>tám-b-á</td>
<td>a-tám-b-í</td>
</tr>
<tr>
<td>hít-á</td>
<td>a-hít-í</td>
</tr>
<tr>
<td>ból-á</td>
<td>a-ból-í</td>
</tr>
<tr>
<td>[+ATR]</td>
<td></td>
</tr>
<tr>
<td>pík-ó</td>
<td>a-pík-í</td>
</tr>
<tr>
<td>més-ó</td>
<td>a-més-í</td>
</tr>
<tr>
<td>pach-ó</td>
<td>a-pach-í</td>
</tr>
<tr>
<td>njük-ó</td>
<td>a-njük-í</td>
</tr>
<tr>
<td>kúmb-ó</td>
<td>a-kúmb-í</td>
</tr>
</tbody>
</table>

In the case of verbs which have an xL tone on the final syllable, the final H tone of the -í suffix causes an xLH contour tone.

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Perfect, 3sg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>bóká</td>
<td>a-bóká</td>
</tr>
<tr>
<td>kápá</td>
<td>a-kápá</td>
</tr>
</tbody>
</table>

All subject prefixes except 3pl. have inherently an L tone. However, when any of the L-tone prefixes is found preceding a verb stem beginning with an xL tone, the prefix assimilates and surfaces as xL. The 3pl. prefix bá- has an H tone.

The following are some examples of verb forms with the 3sg. L-tone pronoun -í:

- a-chéchí ‘he has run’
- bá-chéchí ‘they have run’
- a-buli ‘he has pulled’
- bá-buli ‘they have pulled’
- a-píkí ‘he has come’
- bá-píkí ‘they have come’

4.2.2 Perfect

The Perfect is marked by a [+ATR] suffix -í. Since [+ATR] is dominant, it changes the vowels of [−ATR] roots as well as any [−ATR] vowels of the subject prefixes into [+ATR]. The vowel /a/ in the root does not change, and the subject prefix preceding such verbs remains [−ATR].

With verbs of action, this paradigm marks a completed action in the recent past, with emphasis on the present relevance. The most common translation for verbs of action is: ‘he has …’: a-tám-b-í ‘he has walked’. With verbs of state, the Perfect marks the result of a process getting to the present state: é-ní ‘he sees’ (< é-ná ‘to see’).
With the monosyllabic verbs, the -í coalesces with the vowel /a/ of the verb, and is always realised as [+ATR] /i/, carrying the respective H, LH, or xLH tone patterns.

\[
\begin{align*}
yá & \quad \text{‘to hate’} & a-yé & \quad \text{‘he has hated’} \\
\text{má} & \quad \text{‘to destroy’} & a-mē & \quad \text{‘he has destroyed’} \\
\text{sá} & \quad \text{‘to do’} & á-sē & \quad \text{‘he has done’} \\
\text{ká} & \quad \text{‘to go’} & á-kē & \quad \text{‘he has gone’}
\end{align*}
\]

The particle do may be added to this paradigm as an affirmative marker.

\[
\begin{align*}
\text{Perfect} & \quad 3\text{sg.} & a-chéchí (do) & \quad \text{‘he has run’} \\
& \quad 3\text{sg.} & a-mídí (do) & \quad \text{‘he has swallowed’}
\end{align*}
\]

To express the Remote Past, the suffix vowel -i is lengthened to -íí, then obligatory followed by the particle do.

\[
\begin{align*}
\text{Remote Past} & \quad 3\text{sg.} & a-chéchíí do & \quad \text{‘he has run (a long time ago)’} \\
& \quad 3\text{sg.} & a-mídíí do & \quad \text{‘he has swallowed (a long time ago)’}
\end{align*}
\]

4.2.3 Negation

The negative marker consists of a prefix ká-, which precedes the subject prefix. The vowel /a/ of this negative prefix assimilates to the vowel of the subject prefixes singular, and may freely vary with the vowel of the subject prefixes plural. The underlying tone of the subject prefixes 1–3sg. and 1 and 2pl. assimilates to the H tone of the negative prefix.

\[
\begin{align*}
\text{ká} + \text{mi} & \rightarrow \text{kámi} \sim \text{kim-} \\
\text{ká} + \text{s/a} & \rightarrow \text{k3-ikò-} \\
\text{ká} + \text{a} & \rightarrow \text{ká-} \\
\text{ká} + \text{bi} & \rightarrow \text{kábi} \sim \text{kiibi-} \\
\text{ká} + \text{bo} & \rightarrow \text{k3b3-ikbò} \sim \text{k3b3-ikbò-} \\
\text{ká} + \text{bá} & \rightarrow \text{kábá-}
\end{align*}
\]

Negative paradigms corresponding to the Perfect cited above take the negative prefix ká- and retain the final [±ATR] -í suffix. In the Remote Past, the final vowel -i is lengthened, as in the affirmative paradigm. The particle do is no longer present.

\[
\begin{align*}
\text{Perfect} & \quad \text{Remote past} \\
\text{bétá} & \quad \text{‘to hit’} & \text{kim-bétí} & \quad \text{‘I did not hit’} & \text{kiin-bétii} & \quad \text{‘I did not hit (long ago)’} \\
\text{kò-bétí} & \quad \text{‘you have not hit’} & \text{kó-bétíí} & \quad \text{‘you did not hit’} \\
\text{ká-bétí} & \quad \text{‘he has not hit’} & \text{ká-bétíí} & \quad \text{‘he did not hit’} \\
\text{kimí-bétí} & \quad \text{‘we have not hit’} & \text{kimí-bétíí} & \quad \text{‘we did not hit’} \\
\text{kòbò-bétí} & \quad \text{‘you have not hit’} & \text{kòbò-bétíí} & \quad \text{‘you did not hit’} \\
\text{kábá-bétí} & \quad \text{‘they have not hit’} & \text{kábá-bétíí} & \quad \text{‘they did not hit’} \\
\text{tábá} & \quad \text{‘to walk’} & \text{kim-tábí} & \quad \text{‘I have not walked’} & \text{kiin-tábíí} & \quad \text{‘I did not walk’} & \text{kiin-tábíí} & \quad \text{‘I did not walk (long ago)’} \\
\text{k3-tábí} & \quad \text{‘you have not walked’} & \text{k3-tábíí} & \quad \text{‘you did not walk’} \\
\text{ká-tábí} & \quad \text{‘he has not walked’} & \text{ká-tábíí} & \quad \text{‘he did not walk’} \\
\text{kábi-tábí} & \quad \text{‘we have not walked’} & \text{kábi-tábíí} & \quad \text{‘we did not walk’} \\
\text{k3b3-tábí} & \quad \text{‘you have not walked’} & \text{k3b3-tábíí} & \quad \text{‘you did not walk’} \\
\text{kábá-tábí} & \quad \text{‘they have not walked’} & \text{kábá-tábíí} & \quad \text{‘they did not walk’}
\end{align*}
\]
4.2.4 Present Continuous

The Present Continuous is formed by the verbal prefix -á- followed by the infinitive form of the verb. The vowel of the subject prefix does not merge with this verbal prefix, but each vowel retains its vowel quality and its tone. A downstep is inserted between the H-tone -á- and H-tone verbs.

- ma-á-čhéchá ‘I am running’
- ɛ-á-čhéchá ‘you are running’
- a-á-čhéchá ‘he is running’
- bi-á-čhéchá ‘we are running’
- bɛ-á-čhéchá ‘you are running’
- bá-á-čhéchá ‘they are running’

- ma-á-mdá ‘I am swallowing’
- ɛ-á-mdá ‘you are swallowing’
- a-á-mdá ‘he is swallowing’
- bi-á-mdá ‘we are swallowing’
- bɛ-á-mdá ‘you are swallowing’
- bá-á-mdá ‘they are swallowing’

- ma-á-pikó ‘I am coming’
- ɛ-á-pikó ‘you are coming’
- a-á-pikó ‘he is coming’
- bi-á-pikó ‘we are coming’
- bɛ-á-pikó ‘you are coming’
- bá-á-pikó ‘they are coming’

4.2.5 Future

The Future is formed by a verbal suffix -anɔ or -onɔ, following [-ATR] and [+ATR] verb stems respectively. In fact, it is only the first vowel of this suffix which changes according to the regular vowel-harmony rules. The syllable -nɔ is invariable. The L tone of the first syllable of the suffix is realized as XL following an XL tone in the verb stem.

- mésɔ ‘to put upright’
- mdá ‘to swallow’
- pikó ‘to come’

- m-més-onɔ ‘m-mdal-afɔ’
- m-mdal-afɔ
- m-pik-ɔnɔ
- o-més-onɔ ‘ɔ-mdal-afɔ’
- ɔ-mdal-afɔ
- ɔ-pik-ɔnɔ
- a-més-onɔ ‘a-mdal-afɔ’
- a-mdal-afɔ
- a-pik-ɔnɔ
- bi-més-onɔ ‘bi-mdal-afɔ’
- bi-mdal-afɔ
- bi-pik-ɔnɔ
- bo-més-onɔ ‘bo-mdal-afɔ’
- bo-mdal-afɔ
- bo-pik-ɔnɔ
- bá-més-onɔ ‘bá-mdal-afɔ’
- bá-mdal-afɔ
- bá-pik-ɔnɔ
The corresponding negative paradigms are formed with the negative prefix ká- preceding the affirmative paradigms, including the morphophonological changes as presented earlier. The verbal suffix is -enó, for both [-ATR] and [+ATR] verbs.

\[
\begin{array}{ll}
\text{Fut. aff.} & \text{Fut. neg.} \\
\text{3sg.} & \text{3sg.} \\
\text{mélá} & \text{ká-mél-enó} \\
\text{‘to swallow’} & \text{‘to come’} \\
\text{[-ATR]} & \text{[-ATR]} \\
\text{pikó} & \text{á-pik-ónó} \\
\end{array}
\]

4.3 Derivation

Bila has several more or less productive derivational categories which are recognizably Bantu. The causative derivation is very productive. Next is a reciprocal extension, though often without a base verb. There are some examples of what may have been an applicative extension. No passive extension as such has been attested. However, there are a few examples of passive meaning expressed by a non-productive combination of an -ik- + -an- extension.

Quite unusual is the formation of infinitives which take a prefix marking singular or plural animate object. It is obvious that the prefixes relate to the 3sg. and 3pl. concord prefixes seen elsewhere; however, here they are incorporated in the verb stem. Object prefixes are used in addition to these verbal prefixes creating new infinitives.

4.3.1 Causative derivation

The most productive derivation is a causative, marked by the verbal extension -ís- [+ATR], which changes any [-ATR] vowels of the verb root to its left into [+ATR]. The verb-final vowel is therefore the [+ATR] -ó. Examples are given of base verbs with [+ATR] roots, and with [-ATR] roots.

\[
\begin{array}{ll}
\text{[-ATR] roots} & \text{[+ATR] roots} \\
\text{beló} & \text{biátá} \quad \text{‘to be angry’} \\
\text{‘to make angry’} & \text{biútó} \quad \text{‘to hurt (somebody)’} \\
\text{bíngó} & \text{súmbá} \quad \text{‘to be lost’} \\
\text{‘to lose’} & \text{súmbisó} \quad \text{‘to buy’} \\
\text{simó} & \text{éñá} \quad \text{‘to go down’} \\
\text{‘to put down’} & \text{éñísó} \quad \text{‘to show’} \\
\text{sísíkó} & \text{élóská} \quad \text{‘to get up’} \\
\text{‘to lift, wake’} & \text{élóskisó} \quad \text{‘to be healed, saved’} \\
\text{túmó} & \text{kákálá} \quad \text{‘to be filled’} \\
\text{‘to fill’} & \text{kákálísó} \quad \text{‘to dry, intr.’} \\
\text{éñá} & \text{méní-tiko} \quad \text{‘I see the field’} \\
\text{éñísó} & \text{ménísí-tiko} \quad \text{‘I have shown the field’}
\end{array}
\]

4.3.2 Reciprocal derivation

The reciprocal derivation takes the extension -án-, or -án- in the [+ATR] environment. The use of the reciprocal extension implies that at least two people are involved in a reciprocal action: talking, agreeing, fighting, following, embracing. Some of these verbs can exclusively take a plural subject prefix. In some cases, there is a base verb and a derived verb; when the semantics require it, no base verb may exist for some meanings, since the action inherently requires more than one person.
4.3.3 Applicative derivation

The semi-vowel -ly- or the extension -ly/ly- following the verb root may be the remnant of an applicative derivation. This extension can hardly be called productive, since there are very few pairs of verbs without and with the extension. The meanings of the verbs which have no underived counterpart are such that it is plausible that they take a benefactive or locative complement or that such a complement is implied.

\begin{itemize}
  \item \textit{mem-á} ‘to ask, beg, pray’ + D.O.
  \item \textit{mem-ly-á} ‘to ask, beg, pray’ + I.O.
  \item \textit{mmemi ebóko} ‘I asked (for) a banana’
  \item \textit{mimemili námá ámi} ‘I prayed for my brothers’
  \item \textit{péd-á} ‘to take’
  \item \textit{péd-ly-á} ‘to work’
  \item \textit{dó-á} ‘to leave’
  \item \textit{dó-ly-á} ‘to leave behind’
\end{itemize}

Other verbs, without underived counterpart, which may be interpreted as original applicatives:

\begin{itemize}
  \item \textit{bésyá} ‘to accept’
  \item \textit{bílyá} ‘to follow’
  \item \textit{kebyá} ‘to send’
  \item \textit{ngudýá} ‘to tell, explain’
\end{itemize}

4.3.4 Passive derivation

Two pairs of active/passive verbs have been found. The passive meaning is expressed by a non-productive combination of an \textit{-ik-} + \textit{-an-} extension and some morphophonological changes, resulting in the following forms:

\begin{itemize}
  \item \textit{béstá} ‘to beat’
  \item \textit{béstkána} ‘to be beaten’
  \item \textit{bıkstitá} ‘to give birth’
  \item \textit{bıkstitáná} ‘to be born’
\end{itemize}

4.3.5 Object animacy and plurality

Bila has an unusual verbal derivational category for a Bantu language, namely infinitives which mark whether the object is animate or inanimate, and if animate, whether it is
singular or plural. This process is quite productive, and there are a lot of verbs which have two or even three different forms.

The prefixes used are:

- é- for the inanimate object
- mu- for the animate object, sg.
- bō- for the animate object, pl.

Morphophonological changes between the prefix and the verb-initial vowel surface as follows:

\[
\begin{align*}
\varepsilon + \varepsilon &> \varepsilon & \varepsilon + e &> e & \varepsilon + a &> \varepsilon \\
\text{mu} + \varepsilon &> \text{m} & \text{mu} + e &> \text{m} & \text{mu} + a &> \text{m} & \text{mwa} \\
\text{bō} + \varepsilon &> \text{b} & \text{bō} + e &> \text{b} & \text{bō} + a &> \text{b} & \text{bwa}
\end{align*}
\]

The following are examples of verbs which have three separate infinitives:

- éná ‘to see’ (inanimate object)  
  mëná ‘I see the notebook’
- mbá ‘to see’ (animate object, sg.)  
  bō ‘I see the chicken, sg.’
- bō ‘to see’ (animate object, pl.)  
  bō ‘I see the chicken, pl.’
- épí ‘to look at’ (inanimate object)  
  mpí ‘I know my clothes’
- mbí ‘to look at’ (animate object, sg.)  
  mmbí ‘I know my cow’
- bmbí ‘to look at’ (animate object, pl.)  
  bmbí ‘I know my cows’
- épí ‘to look at’ (inanimate object)  
  mpí ‘I have washed the corpse’
- mbí ‘to look at’ (animate object, sg.)  
  mbí ‘I have washed the child’
- bmbí ‘to look at’ (animate object, pl.)  
  bmbí ‘I have washed the children’

Other sets are the following:

- endá ‘to look at’ (inanimate object)  
- mundá ‘to look at’ (animate object, sg.)
- bändá ‘to look at’ (animate object, pl.)
- éká ‘to hear’ (inanimate object)
- msí ‘to hear’ (animate object, sg.)
- bśí ‘to hear’ (animate object, pl.)

5 SUMMARY

This chapter has given an initial view of phonological and some morphological and syntactic structures of Bila. The language appears to be of interest, especially because of a number of features which are unusual for a Bantu language: nine vowels, ATR vowel harmony, three tones and downstep, lack of a series of voiced stops, verbal tense/aspect forms marked by suffixes, and a verbal derivational category implying singular and plural animate objects.

Work is still in progress. Further studies will need to concentrate on the presence of downstep in morphological and syntactic environments, more details of inflectional paradigms, and the complexity of morphophonological changes in the combinations of subject and object prefixes in the various tense/aspect paradigms.
ACKNOWLEDGMENT

I would like to thank D. W. Boone, T. R. Raymond, and J. P. Thomas for their willingness to read through the draft of this chapter and provide helpful comments against the background of their experience with closely related languages and survey done in the area.

NOTES

1. This is the only language which is spoken not only in Congo (in the northern foothills of the Ruwenzori mountains), but also across the border in Uganda.

2. This language called Kango is spoken by a group of pygmies, and links the Bali and Komo areas (J. Paul Thomas, pers. comm.).

3. Our reason for including Ndaka and Mbo in this group is based on lexical data and personal reporting from speakers; phonological and morphological information is not yet available.

4. The collaboration with Telamboli Ngbami on detailed checking of the vowels and tones deserves a special word of appreciation.

5. Special thanks to my colleagues J. Paul Thomas and Timothy R. Raymond for providing the Komo and Bhele data respectively.

6. This also holds true for the other languages of this subgroup of Bantu languages of the northern Bantu borderland: Amba, Bira, Bhele, and Komo.

7. Note that Bila does not use the general Bantu root *\(\text{tu}\) for the word ‘person’. However, it does use this root in a system of productive compound constructions which are the equivalent of agentive nouns:

\[
\text{tu à 'tambá 'traveller (person of travelling), pl. batu à 'tambá}
\]

\[
\text{tu é kábo 'thief (person of stealing), pl. batu é kábo}
\]

The neighboring language Kaiku, however, does use n\(\text{to/bato}\) for ‘person/people’.

8. Upon checking these inalienable possessive constructions with Poyo Ngbami (in 2001), it appears that the different lexically determined sets are probably only used by the older generation. The younger generation still recognizes these forms, but they are simplifying the system into only using the first paradigm, \(\text{ámi, ákz, áke}\), etc. for all inalienable possessive constructions.

REFERENCES

CHAPTER TWENTY-FOUR

KILIMANJARO BANTU
(E60 AND E74)

Gérard Philippson and Marie-Laure Montlahuc

1 GENERAL

1.1 Introduction

The name ‘Kilimanjaro Bantu’ (henceforth KB) is here used as a cover term for the languages known as Chaga and Taita, spoken in Tanzania and Kenya respectively. Ethnic labels as well as Guthrie’s classification are particularly misleading here: the numerous tongues (the term is used here purposefully) spoken on Mt Kilimanjaro by the Chaga people form a close linguistic unit with Rwa (known in Tanzania as ‘Meru’) spoken on Mt Meru to the west, as well as Gweno, spoken in the Pare Mountains to the east – speakers of Gweno being subsumed under the ethnic label ‘Pare’ together with their more numerous Asu-speaking neighbors (G22). It should thus be clear from the outset that there is no single ‘Chaga’ language: diversity is greater than for example among the E50 (Central Kenya) languages, in spite of the fact that each of these languages is known under a different ethnic label – Kikuyu, Kamba, Embu, etc. A glance at Nurse (1979b:393) or Philippson (1982) will discover the massive phonological discrepancies among ‘Chaga dialects’ which prevent intercomprehension.

As for Taita, it covers two sharply differing languages: Dawida [D.] (E74a) and Saghala [Sa.] (E74b). In spite of the proximity implied by Guthrie’s numbering, D. and Sa. are by no means closely related to each other – only the former is part of ‘Kilimanjaro Bantu’ in any meaningful sense, and Sa. will be left out of the following discussion.

There are about 1,000,000 speakers for Chaga proper (Grimes 2000), with about 300,000 for D. and 90,000 for Rwa (= ‘Meru’). The number of Gweno speakers is indeterminate but is likely to be rather small.

None of the Kilimanjaro Bantu languages enjoy official status, although several of them have been used for missionary purposes (mostly Rwa, Mashami, Mochi and D.) and parts of the Bible are available for some of them.

1.2 Classification

Guthrie’s subclassification of his E60 group, following administrative boundaries, is of little value. As argued and defined in Nurse (1979b) and Philippson (1984), a more realistic classification is as follows (Guthrie’s numbers indicated in parentheses):

- West Kilimanjaro [W.K.]: Siha [S.], Rwa [Rw.] (E61), Mashami [M.] (E62a), Kiwoso [K.]
- Central Kilimanjaro [C.K.]: Uru [Ur.], Mochi [Mo.] (E62a), Wunjo [W.] (E62b), Kahe [Ka.] (E64)

Gweno [G.] (E65)

Following Winter (1980), Okuma (Guthrie’s ‘Rusha’ E63) should probably be added to C.K., since it appears quite close to Ka.

1.3 Literature

Chaga was among the first languages in East Africa to receive extensive coverage, mostly from missionaries, during the German colonial period. The Mo. dialect has been particularly well studied. A complete list of earlier references can be found in the bibliography of Moore and Puritt (1977). Particularly noteworthy is Raum (1909), a remarkable achievement, still quite useful today (although tones are not recorded). Müller (1947), the only dictionary for a KB dialect, though late in publication, also belongs to that period. Apart from Sharp (1954), it would seem that nothing more was published on the language during the thirty-odd years following the Second World War. A renewal of interest took place in the 1970s and 1980s with Nurse and Philippson (1977), Nurse (1979b) and Philippson (1982, 1984). J. W. G. Möhlig and J. C. Winter undertook, at about the same time, an ambitious Linguistic Atlas of Kilimanjaro, which seems never to have seen the light of day, although part of the findings are reported in Winter (1980). More synchronic studies have dealt almost exclusively with the W. dialect and include McHugh’s (1990) path-breaking studies of the tonal system and several syntactic articles (Dalgish 1979, Bresnan and Moshi 1993, Moshi 1994, 1998). There is only one substantial descriptive article on G. by Philippson and Nurse (in Kahigi et al. 2000). Practically nothing has ever been published on several dialects (including Rw., K., U. and the whole of R. – as well as D. if one excepts Woodward 1913–14, and Ryabova 1984, 1987, in Russian). G. being covered in a substantial sketch will not be treated in detail here.

1.4 Own names

The term Chaga is of doubtful origin (the best guess might be a form of the name given by the G. to the Chaga language: kyàyà, the people themselves being mwàyà (sg.)/bà(à)ête (pl.)); the Chaga did not traditionally have a general name for themselves, but used chieftdom or clan names instead, or referred to themselves as (Mo.) wà ndòngà ‘people in the banana gardens’. Nowadays, the Swahili loan bàndìkà or bàndìka is generally accepted (tones not marked since they appear to vary from dialect to dialect). The G. call themselves bà gàntì; the D. call themselves bà dàbtò (and are called bà ndìhrà by the G.), whereas they seem to have called the Chaga bà kërimà.

2 SEGMENTAL PHONOLOGY

2.1 Vowels

All K.B. languages have a balanced five-vowel system /a, e, i, o, u/ with some contextual effects on realization, e.g. in many dialects /a/ preceding /u/ is noticeably backed and rounded; indeed in most C.K. dialects /ua/ has merged with /uo/.

(1) M., S.R., G., D. mbùà ‘nose’ vs. Mo. mbùò ‘id.’

1 In this section tones, when given, are underlying.
The passive ending /u/ surprisingly has the same effect in some dialects that otherwise do not experience the merger, so:

   In most C.K. dialects and D. /u/ merges with /o/:

The question of length is complicated and cannot be dealt with in detail here. First of all, the occurrence of identical vowel sequences in the penultimate and the final is not

4. Mo. ≠ làà ‘lie down’ ≠ lâ-i-à ‘appl.’, ≠ lâ-r-à ‘caus.’ cf. D. ≠ lâl-à

Such processes do not apply to noun stems, but there is no reason not to analyze them in a similar fashion, especially since interdialectal comparison often testifies to the former presence of a consonant:

5. M., Mo. i ≠ ìje ‘breast’ vs. S.R., G. i ≠ ìjë ‘id.’
6. M. taa ‘heifer’ vs. W. tâ(y)ô

In other stem positions, some dialects (particularly Mo., G. and D.) do not exhibit any length contrasts, although this might well be a recent development in Mo. since Raum (1909) indicates length in his transcriptions. Other dialects have long vowels contrasting in three cases (although genuine pairs are hard to come by):

- unpredictably at the junction between prefix and stem: W. mîjî<)/m(ù)≠ ìjû ‘thief’, pl. ìjêjû<)/là≠ ìjî; but W. mânà<)/m(ù)≠ ìnà/ ‘child’, M. mûrù<)/m(ù)≠ ìrù/ ‘fire’, W. mòjô<)/m(ù)≠ ìwò/ ‘id.’, M. mose<)/m(a)≠ ìwë/ ‘boils, swellings’, W. mose<)/m(a)≠ ìwë/ ‘id.’; in W. length is particularly frequent when this context combines with the following.

- often when preceding a nasal cluster: M., W. kî≠ maaṇðe ‘red (earth)’; M. mûndi<)/m(ù)≠ ìndû/ ‘feeding-tray’ vs. W. moondî<)/m(ù)≠ ìndû/ ‘id.’; M. mwàndû ‘dispute, case’ vs. W. mûndû<)/m(ù)≠ ìndû/ ‘id.’; M. mwàntô ‘door’ vs. W. mwàntô ‘id.’

- in the first stem syllable of a number of (mostly non-Bantu) lexical items, although there are often differences among dialects in this respect:

   (7) S., Rw., M. kî≠ ìdëþlà ‘wooden plate’
   (8) Rw., M., W. ≠ kàwà ‘find, meet’ vs. R. ≠ kàwà ‘id.’
   (9) M. ≠ booka ‘be thin’, W. ≠ pòòkà ‘id.’

2.2 Consonants (table 24.1)

Comments

- Where W. has /p/ along with C.K. and partly Rw./M., most other dialects have /b/ instead; only G. and D. have both; indeed D. also contrasts /b/ and /p/, the only K.B. language to do so;

- /pl/ is present only in C.K. and G.; it has merged with /l/ elsewhere (but apparently /p/ in Ka.);

- /mv/ is found only in C.K. and G.; it is rare even there (one notes occasionally a realization [mpf], e.g. Mo. [mvuo ~ mpfuo] ‘rain’);
pre-nasalized stops are denasalized in S. apart from /\˘–/; W.K. also has /n[d]n/ contrasting with /nd/;

/G/ is realized [L] in all dialects when followed by the front vowels /i/ and /e/; it is barely audible before /u/; before /a/ and /o/, it is [w] in C.K. and K., [\β] elsewhere;

/z/ is only found in D. (it will be noted that D., alone in KB, has a contrast between [\β] and [\β] continuants, i.e. /v/ and /z/ have not merged with their voiceless counterparts);

\r/ in M. alone is realized as a uvular approximant [\γ] (sometimes velar [\γ ~ x]), even when prenasalized; elsewhere it is a strongly vibrated trill, sharply differentiated (except in G. and D. where \r/ is not found) from the lateral flap /l/ (realized [\r] in M.). In northern dialects of D. /l/ is realized as a voiced lateral fricative [\ɋ];

NB. Although Davey et al. (1982) show the /l/ segment to be a post-alveolar lateral flap, we choose to transcribe it with a rhotic symbol, since it is ‘felt’ by the speakers to be a sort of ‘r’ and transcribed by them as such, and because it is either replaced by the trill, as in M. or is not distinct from it, as in D. and G. (according to Ladefoged and Maddieson 1996: 243, ‘[…] rhotics and laterals […] have a member in common – the lateral flap’);

Table 24.1: Consonant Chart for KB Languages

<table>
<thead>
<tr>
<th></th>
<th>labial</th>
<th>cor [+ant]</th>
<th>cor [+ant]</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>[−cont]</td>
<td>p</td>
<td>t</td>
<td>d5</td>
<td>k</td>
</tr>
<tr>
<td>[−voi]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+cont]</td>
<td>b</td>
<td>d</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>[+voi]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>impos.</td>
<td>\β</td>
<td>\d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>affricate</td>
<td>pf</td>
<td>ts</td>
<td>t\d</td>
<td></td>
</tr>
<tr>
<td>prenasalized</td>
<td>mv</td>
<td>ndz</td>
<td>nd5</td>
<td></td>
</tr>
<tr>
<td>[+cont]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prenasalized</td>
<td>mb</td>
<td>nd</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>[−cont]</td>
<td>\β</td>
<td>j</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>[+voi]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[+str]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[−voi]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>liquid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nasal</td>
<td>m</td>
<td>n</td>
<td>\p</td>
<td>η</td>
</tr>
<tr>
<td>glide</td>
<td>w</td>
<td>y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• /dʒ/ is only found in D. and G. (it is quite rare in the latter); northern D speakers replace it with the fricative [ʒ];
• /tʃ/ is found in C.K., G., K., S.R. and D.; it is not distinct from [ʃ] elsewhere; /ndʒ/ is found in C.K., G. and parts of N.R.; it has merged with /tʃ/ in K. and D.; it is /ʃ/ everywhere else, except that some (younger?) speakers of N.R. have /ŋʃ/ – a most infrequent combination in Bantu languages overall, and particularly in Chaga, which has no voiceless pre-nasals otherwise…;
• /s/ (a retroflex approximant similar to British English /r/) is only present in W. where it corresponds variously to /dʃ/ (Mo., K., D.), /h/ (S.), retroflex /tʃ/ (N.R.), and either /dʃ/ (before [+high] vowels) or /tʃ/ (before [−high]) in S.R.; in Rw., M. and G. it is not distinct from trilled /r/;
• /g/ only occurs in D. and G. where it is rather rare and in S.R. where it has been noted in two words only /-gwa/ ‘to fall’ and /gwe/ ‘above’;
• /x/ occurs in the speech of a number of W. speakers and in G. and D.; in Mo. it has merged with /h/; elsewhere it is replaced by glides according to the phonetic environment.

[NB. In order better to preserve the variety in realizations among dialects, transcriptions in the rest of this chapter are rather of a (broad) phonetic nature than strictly phonemic.]

3 TONE

3.1 Introduction

The tone systems of several KB dialects rank among the most intricate to be found among Bantu languages. Apart from four brief articles (Sharp (1954) on M., Nurse and Philippson (1977), Salomé (1980) and Winter (1987) on Mo.), the only detailed description of any KB tone system is McHugh (1990) on W.

Apart from D., whose system is of a different type (for which see below), and from G. (described in McHugh and Nurse (2000)), KB languages are characterized both by ‘tone shift’ – where the tone underlyingly associated with one syllable is realized on the syllable immediately to the right, and by the presence of a three-way tonal contrast at utterance-level (Super-High (SH), High (H) and Low (L), plus Rising and Falling tones), although lexically syllables can be defined as simply H vs. L (or toneless).

Tonal data are not of equal quality for all dialects (and some of those are completely unknown tonally), but at least M., Mo., W. and S.R., while in no way identical, definitely exhibit both features mentioned above, and S., Rw. and K. probably do so. On the other hand, research by Montlahuc on R. dialects has shown that the Ma. variety of N.R. does not have tone shift, although the three-way tonal contrast is very much in evidence. Thus (abstracting away from some end-of-utterance intonational effects) we have the realizations in table 24.2 before pause.

<table>
<thead>
<tr>
<th>TABLE 24.2: MA. AND W. LEXICAL TONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mashati</td>
</tr>
<tr>
<td>goat (HL)</td>
</tr>
<tr>
<td>chicken (HH)</td>
</tr>
<tr>
<td>house (LH)</td>
</tr>
<tr>
<td>meat (LL)</td>
</tr>
</tbody>
</table>

Copyright Material – Provided by Taylor & Francis
(NB. W. forms are quoted as when preceded by a word underlyingly ending in a L tone (e.g. ˘–eléú#à ‘I bought’), since, due to tone-shift, any tone realized on their initial syllable must have its source one syllable to the left; on the other hand, the – underlyingly all L, or toneless – word jama ‘meat’ appears in this position with an HF contour due to a rule assigning H tone (and accent, in McHugh’s analysis) to toneless nouns which are final in their phonological phrase; see McHugh 1990).

3.2 SH tones

The arising of SH tones can be seen most clearly in Ma., since it is not obscured there by tone shift. SH are found:

- on the prefix syllable of many declarative affirmative verb forms, where there is evidence in at least part of the paradigm of the presence of the focus marker, p(i) (see below). This is one of the surest clues in distinguishing positive from negative verb forms:

(10) ˘–í /HS11005 kú/HS11005 ndí /HS11005‰ /HS11005B èv/HS11005 ¯fó,
˘–e /HS11005 kú/HS11005 ndí /HS11005w /HS11005B é /HS110051sg /HS11005want cl3 /HS11005tree demCL3 cl3 /HS11005small NEG, (FOC)1sg /HS11005want demCL3 cl3 /HS11005big/
‘I don’t want the small tree, I want the big one.’

- on many lexical items, when final in their p-group, but not utterance-final. This is seen clearly on nominals in certain syntactic positions, most often when followed by a demonstrative, whether they be subject or object. Taking as reference the nominals given in table 24.2, one would have (table 24.3):

<table>
<thead>
<tr>
<th>Isolation</th>
<th>N + DEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL</td>
<td>mbúrú</td>
</tr>
<tr>
<td>HH</td>
<td>ɲúbú</td>
</tr>
<tr>
<td>LH</td>
<td>mbúmá</td>
</tr>
<tr>
<td>LL</td>
<td>ɲúmá</td>
</tr>
</tbody>
</table>

NB. The rising tone on the first syllable of mburu rises from L to SH. What happens can be seen more clearly if we select noun stems preceded by a syllabic prefix (table 24.4)

What seems to happen is that a SH tone associates leftwards up to – and including – the first H syllable that it meets; if there is no such syllable it keeps on spreading leftwards and would in fact spread through the L syllables of a preceding word, e.g.:

(11) …˘–í /HS11005lólyá /HS11005n /HS11005ndú sòso… (#lólyá)
/HS11005cl5-Objcl1 see cl1 #person demCL1/
‘…to see that person…’

<table>
<thead>
<tr>
<th>Isolation</th>
<th>N + DEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘women (HL)’</td>
<td>˘–fødë</td>
</tr>
<tr>
<td>‘legs (HH)’</td>
<td>˘–fødë</td>
</tr>
<tr>
<td>‘men (LH)’</td>
<td>˘–fødë</td>
</tr>
<tr>
<td>‘beds (LL)’</td>
<td>˘–fødë</td>
</tr>
</tbody>
</table>
In spite of the absence of tone shift, the system appears similar to, although not identical with, the W. system as described in McHugh (1990), to which the reader is referred.

### 3.3 Tone dissimilation

Although tone assimilation is much in evidence in Chaga, tone dissimilation does seem to play a role, although apparently not in W. In the closely related Mo. dialect however, a dissimilatory process, akin to ‘Meeussen’s Rule’ (cf. Kisseberth and Odden this volume, Philippson 1998) can be seen to operate. Data from speakers of both the Mbokomu and Mowo varieties show that an H tone always dissimilates a following H at the junction between two morphemes, both within and across words; this process does not operate within stems, however:

(13) ...mbùrù ndʒi#iwù ‘black goat(s)’ vs. ...ŋùkú ndʒi#iwù ‘black chicken(s)’

(contrast is maintained between mbùrù and ŋùkú)

But:

(14) ndʒi-lé#hùrù mbùrù (#hùrù)

/(FOC)1sg-PAST#buy cl9goat/

‘I bought a goat’

vs.

(14 bis) ndʒi-lé#wónà mbùrù (#wónà)

/(FOC)1sg-PAST#see cl9goat/

‘I saw a goat’

Taking into account the effect of tone shift, we see that an H originates on the PAST marker -le- and associates to the verb radical; however, the second stem syllable is L in both cases, although we would expect an H in the case of #wona ‘see’. That this is in no way an effect linked to this tense in general is shown when we insert another morpheme, the Object Prefix, between the tense marker and the radical:

(15) ndʒi-lé-kà#wónà

/(FOC)1sg-PAST-2sg#see/

‘I saw you’

The H originating on the tense marker associates to the next syllable, which is now the (L) OP; as the verb radical is not immediately preceded by an underlying H it is not subject to dissimilation and associates as expected to the final stem syllable.

Several other morphemes are affected by this dissimilation process, which does not exist in W. (according to McHugh’s data). Its extent in other dialects is not known.

### 3.4 Dawida

D. tones work along different principles. D. does have tone-shift but it is mostly characterized by a regressive dissimilation principle (‘anti-Meeussen’), whereby only the last of a series of H surfaces on the (L) OP; as the verb radical is not immediately preceded by an underlying H it is not subject to dissimilation and associates as expected to the final stem syllable.

Several other morphemes are affected by this dissimilation process, which does not exist in W. (according to McHugh’s data). Its extent in other dialects is not known.
This process is also active within stems, so there is no contrast in D. between HH and LH stems. To a large extent (although this might vary among dialects and even speakers) there is no contrast with LL as well: most disyllabic stems realized LL in isolation tend to take an H on the initial syllable of the following word; in many cases this will be attributable to the fact of the LL stem being followed underlyingly by a floating H (i.e. stems etymologically LH/HH) due to the effect of tone shift, but the same initial H appears when preceded by a word whose underlying pattern is undoubtedly LL; this is fairly easy to evidence for those stems whose semantics makes them compatible with a locative suffix: this has the shape -i
i, and although its initial vowel coalesces with the final vowel of the stem to which it is suffixed, it still acts as if disyllabic. Now when it is suffixed to an underlying LL (etymologically *LL) stem no H will appear; on the other hand an H (mostly realized as rising before pause), will appear if the previous stem is underlyingly followed by a floating H (*LH and *(H)H stems); e.g. (Josa dialect):

(17) tfi
i ‘path’ (underlying LL) > tfi
i ‘in the path, on the way’, as in:

(18) 乒乓 yi
i ‘the lion is standing in the path’

(19) tumbi ‘house’ (underlying LH) > tumbi ‘in the house, at home’ as in:

(20) 乒乓 w-
ù symbi ‘father usually spends the day at home’

Although the distinction seems consistently maintained with the locative suffix, it is less significant in other contexts. For instance, while the forms tfi
i ‘my path’ vs. tumbi ‘my house’, do show the expected distinction, it is also possible to find tfi
i ‘my path’ and tumbi ‘my house’ with the same meanings. In most noun phrases, the presence or absence of an H on the initial syllable of a determiner does not seem to be attributable to the lexical tone of the noun any more but to play pragmatic functions which still await detailed description. As far as is known this is not the case with verbs, where the presence of a floating H is a characteristic of some tenses/aspects. In both following examples, the tone on the first syllable of the complement is not subject to variation:

(21) gù
a má
u ‘buy bananas!’

(22) dσ-
ù
a gù
a má
u ‘(and) we bought bananas’

4 NOUN MORPHOLOGY

4.1 Independent nominal prefixes (table 24.5)

The class system of K.B. does not exhibit any strong deviation from the ordinary pattern found in eastern Bantu. A few points are nevertheless worthy of mention.

4.1.1

In all W.K. dialects, the independent prefixes (IP) of classes 1 and 3 are realized as a syllabic nasal homorganic to the first stem consonant; in M. this assimilation process extends to denasalization before /-l-/, e.g. (M.):

(23) n#ndi<m#ndi ‘person’

m#fongó ‘irrigation channel’

n#tori<m#tori ‘forest’

If the stem is vowel-initial, W.K. and R. realize the prefixes as [mw-] (but [m-] in front of /-u-/) and /-o-/. In Mo. and W. however the prefixes are always [m-] with various degrees of coalescence with the next vowel (table 24.6).
The underlying form of the prefix could thus be posited as /mu-/, which would explain the forms found in W. where /u/ and /u/ both > [o]. But the Mo. form for ‘moon’ is not so easily explained and ‘child’ would be an exception in both dialects.

4.1.2

In D., a rather large number of nouns (mostly, but not exclusively animates), take in the sg. a variety of IPs including zero; in the pl. the IP does not change but an extra ‘prefix’ /leke-/ is added; a large subgroup has in the sg. another extra- ‘prefix’ /mwá-/, in the pl. they add /leke-/. In all cases the concords are those of cl. 1/2 respectively; e.g. (tones not indicated):

(24) aba/leke-aba ‘father(s)’
kifondo/leke-kifondo ‘one-eyed person(s)’
mwa/leke-mwa ‘banana cultivar(s)’

These could be called cl. 1a/2a.

TABLE 24.5: INDEPENDENT NOMINAL PREFIXES

<table>
<thead>
<tr>
<th></th>
<th>S.</th>
<th>M.</th>
<th>Mo.</th>
<th>S.R.</th>
<th>N.R.</th>
<th>D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>m-</td>
<td>m-</td>
<td>m-</td>
<td>m-</td>
<td>m-</td>
<td>m-</td>
</tr>
<tr>
<td>2</td>
<td>ßa-</td>
<td>ßa-</td>
<td>ßa-</td>
<td>ßa-</td>
<td>ßa-</td>
<td>ßa-</td>
</tr>
<tr>
<td>3</td>
<td>m-</td>
<td>m-</td>
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<td>m-</td>
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<tr>
<td>4</td>
<td>ßi-</td>
<td>ßi-</td>
<td>ßi-</td>
<td>ßi-</td>
<td>ßi-</td>
<td>ßi-</td>
</tr>
<tr>
<td>5</td>
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<tr>
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<td>N-</td>
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<td>N-</td>
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<td>ßyay-</td>
<td>ßyay-</td>
<td>ßyay-</td>
<td>ßyay-</td>
<td>ßyay-</td>
</tr>
<tr>
<td>11</td>
<td>(o-)</td>
<td>u-</td>
<td>o-</td>
<td>u-</td>
<td>u-</td>
<td>u-</td>
</tr>
<tr>
<td>12</td>
<td>?</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
</tr>
<tr>
<td>13</td>
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</tr>
<tr>
<td>14</td>
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<td>ßa-</td>
<td>ßa-</td>
<td>ßa-</td>
</tr>
<tr>
<td>15</td>
<td>(ka-)</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
</tr>
<tr>
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<td>a-</td>
<td>a-</td>
<td>a-</td>
<td>a-</td>
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<td>17</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
<td>ka-</td>
</tr>
</tbody>
</table>

TABLE 24.6: CLASSES 1 AND 3 IPs IN KB

<table>
<thead>
<tr>
<th>Gloss</th>
<th>Mashami</th>
<th>Mochi</th>
<th>Wujo</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘child’ (cl. 1)</td>
<td>mw ŋǎná</td>
<td>m ŋǎná</td>
<td>m ŋǎná</td>
</tr>
<tr>
<td>‘fire’ (cl. 3)</td>
<td>míań</td>
<td>m ŋǎń</td>
<td>m ŋǎń</td>
</tr>
<tr>
<td>‘moon’ (cl. 3)</td>
<td>mw ŋáń</td>
<td>m ŋéń</td>
<td>m ŋéń</td>
</tr>
<tr>
<td>‘girl’ (cl. 1)</td>
<td>mw ŋáń</td>
<td>m ŋáń</td>
<td>m ŋáń</td>
</tr>
</tbody>
</table>
4.1.3

Cl. 3 and 4 IPs are identical in C.K. and R.; only their concords differentiate them (for which see §4.2).

4.1.4

The cl. 5 IP appears occasionally as /Ø-/ (mostly in C.K.), e.g.:

(26) (Mo.) i#řúhú ~ řúhú ‘banana’; i#šúmú ~ šúmú ‘spear’ (W.) i#šimú ~ šimú ‘liver’; i#šumú ~šumú ‘mountain’

This, however, does not apply across the board. On the other hand, some C.K. items seem never to take /i-/, e.g.:

(27) W. risó ‘eye’ vs. M. i#kisó

4.1.5

In accordance with the canonical Bantu pattern, cl. 9 and 10 have as their IPs a nasal, generally realized as homorganic to the first stem consonant (details are too varied to be presented here); only the concords allow sg. and pl. to be disambiguated.

4.1.6

Cl. 10a is found in most dialects (but apparently not in R.). It takes exactly the same concords as cl. 10 (the only difference being thus in the IP) and forms the plural of many (but not all) cl. 11 nouns, e.g. (D.):

(28) làmi/tìmì ‘tongue(s)’ lìmbò/tìmbò ‘song(s)’
   là#šìyì/tì#šìyì ‘vessel(s)’ lì#šìyì/tì#šìyì ‘goshawk(s)’
   lw#ákà/tìw#ákà ‘voice(s)’ lw#ákà/tìw#ákà ‘flat rock(s)’

Note however:

(29) lw#èmbè/mbèmè ‘horn(s)’ là#kàŋgè/ŋànggè ‘bead(s)’
   là#šàrù/mbàrù ‘rib(s)’

The situation is much the same in other dialects. In R., however, cl. 11 forms its plural either in ordinary cl. 10, or (increasingly?), by keeping the cl. 11 prefix (but still using cl. 10 concords), e.g. (Ma.):

(30) ü#limi w#ájá ‘long tongue’ ü#limi ~ ndìmi ŋgá ‘long tongues’

4.1.7

Cl. 11: although a number of nominals appear in S. with an IP /o-/ they take the cl. 5 concords, and should be numbered as 5a and not 11, e.g. (tones not known):

(31) ili ni o#rika lakwa ‘this is my country’, cf. ili ni i#ebe lakwa ‘this is my hoe’

4.1.8

Cl. 12/13 are the classes of diminutives, sg. and pl. respectively; their IPs are generally added to and do not replace the IP of the original class of the noun concerned; in the plural two strategies are found, exemplified below:

(32) (N.R.) kà-mw#áñà ‘small child’, pl. ò-mw#áñà
In the first case, the original cl. 1 IP is retained even in the plural; in the second the original pl. 2 IP vacuously replaces the cl. 1 IP (note that in both cases, the concords will only be those of cl. 12 and 13; the original prefixes do not fulfil any function any more).

In C.K. dialects cl. 13 has entirely disappeared, and 12 does not act as a diminutive class (its role has been taken over by cl. 7). There remain however a very few words in cl. 12 (e.g. in Mo. kà#ndô ‘food’).

4.1.9

Apart from D., cl. 15 is found with three stems only, namely those for ‘ear’, ‘leg’ and ‘arm’. (In all KB languages, minus D., verbo-nominal forms – infinitives – do not belong to this class, but to cl. 5.) Probably due to this low functional load, cl. 15 has partially or totally disappeared from several dialects:

(a) only W., N.R. and G. have kept all three original stems in cl. 15, with a plural in 6, e.g. (Ma.):

(34) kà#tiù/mà#tí ‘ear(s)’; kà#ìòkò/mà#ìòkè ‘arm(s)’; kà#ìèndé/mà#ìèndé ‘leg(s)’

The same applies to D., save that the word for ‘leg’ is kà≠yù (it has disappeared from the southern dialects altogether and been replaced by a cl. 3 item: mw≠indì).

(b) the W.K. dialects have put ‘leg’ and ‘arm’ into cl. 11, with a change of IP (in S., as indicated above, cl. 11 is not distinct from 5 as far as concords are concerned); for ‘ear’ however, the situation varies: Rw. would seem to have retained a cl. 15 for this one word (?), S. and K. have put the word in 7 (K. has strangely altered the IP in /ka-/), while M. has it in 5 (with change of IP). In all those cases, the plurals are invariably in 6., e.g. (M.):

(35) yààrrwi/mààrrwi ‘ear(s)’; w≠ìòkò/màìòkè ‘arm(s)’; u≠ìèndé/mà≠ìèndé ‘leg(s)’

Mo. vacillates between the W. and W.K. patterns: ò≠wòkò ~ kà≠wòkò ‘arm’, etc.

(c) S.R. has put the three stems in 7, which is understandable in view of the fact that all S.R. varieties have a phonetic process of syncopation: all high vowels fall between /k/ and another obstruent, like in [kù]<kù ‘knife’ or [iksà]<ì-kù ‘saw’ ‘think’; so that there could not be any difference in realization between /ku-í/ and /ki-í/, e.g.

(36) k≠dù/mà≠dù ‘ear(s)’; kòòkò/mà≠wòkò ‘arm(s)’; k≠ìèndé/mà≠ìèndé ‘leg(s)’

4.1.10

Cl. 16 and 17 only contain one item each (the stem being the same in both classes, both meaning ‘place’), i.e. (h)à≠ndì ~ (h)à#ndò and kà≠ndù ~ kà≠ndò, respectively. A tendency is sometimes noticeable (e.g. in R.) to treat cl. 17 as the pl. of 16.

4.2 Concords

KB languages differentiate between two types of dependent prefixes (DP): one for adjectives (DP I) and one for other determiners (DP II) to which should be added verbal subject (SP) and object prefixes (OP).
4.2.1
As regards DP I, those of cl. 1, 2, 5, 6, 7, 8 and, where present, 12 to 17 are everywhere identical to the respective IP, except that a tendency appears in W.K., and D. for using the cl. 17 concords even with the cl. 16 noun (h)andù(h)andò.

Differences are seen in the following cases:

4.2.1.1
Cl. 9 and 10 have the same form (an homorganic nasal) for DP I as for IP in D. only; W. dialects have /fi-/; C. dialects and R. have /ŋi-/ (/ndʒi-/ in Mo.), e.g.:

(37) (D.) njumbà ndìɛfù<ŋ#/läfù ‘tall house(s)’
(38) (M.) mbù hàídù<fi#/afù ‘id.’
(39) (W.) mbùrù ŋgi#/nòrù ‘fat goat(s)’

4.2.1.2
Cl. 14 in D. has the same series of concords (including DP I) as cl. 3; this is also found at least optionally in S.R. (this is also the Swahili pattern, and language contact might be at work here; furthermore in S.R. cl. 11 and 14 have collapsed into one class, just as in Swahili); in N.R., it is rather cl. 3 which tends to take the cl. 14 prefix, e.g.:

(40) (D.) fiù#ì mì#läfù ‘long bed’, cf. mù#di# mì#läfù ‘tall tree’
(41) (M.) ù#liò ù#afù ‘long bed’, cf. mì#ti# ù#afù ‘tall tree’

Similarly cl. 4 in N.R. tends to take cl. 10 concords (the normal pl. for cl. 11); the same is true to some extent of C.K. dialects.

4.2.1.3
Finally there is a tendency to use DP II concords instead of DP I, especially for those classes where the DP I series does not differentiate between sg. and pl. (mostly 9/10, and in C.K. 3/4); in that case DP II concords are underlingly low-toned, e.g. (Mo.):

(42) mì#dìò mì#lëfì ~ fiù#lëfì ‘long head’
(43) njumbà ndìzì#tùtù ~ tsì#tùtù ‘small houses’

4.3 DP II (table 24.7)
DP II are used with various qualifiers: demonstratives, connectives, possessives, ‘other’, ‘all’ (in M. ‘all’ takes DP I, although a younger informant did use DP II in most cases, possibly under Swahili influence; how far this applies to other W.K. dialects is not known – limited evidence for Rw. seems to indicate DP II are used) and ‘which’ (for numerals see below). The underlying tones, when known, as in Mo., are H for all classes, except 1, 4 and 9.

4.3.1
‘Other’ is /-ŋù/, in all dialects save D., with the first stem vowel assimilating to the prefix vowel (a+>e, u+>u) with no lengthening, even in those dialects which generally lengthen (including Mo. in Raum’s description); this is in contrast with the
adjectival stem /-í(:)˘–ì/, whose vowel coalesces in the same way, but where length is always retained (in the dialects concerned), e.g.:

(44) (M.) fi˘–ndó fi˘–ngì ‘other things’ fi˘–ndó fi˘–ngì ‘many things’

Ma. is apparently an exception to this statement since it lengthens the coalesced prefixes in both cases, with only the tones being different (recall that Ma. is the only KB dialect not to have tone shift), e.g.:

(45) (Ma.) fi˘–ndó fi˘–ngì ‘other things’ fi˘–ndó fi˘–ngì ‘many things’

In D., -˘–ì (with no trace of an initial vowel) means ‘whatever’, and takes DP II; ‘other’ is rendered by -mù (etymologically ‘one’) taking DP II as well, or else by the adjective -zìmà (with DP I).

4.3.2 ‘All’ is -˘–ò:è in most dialects (-˘–ò:è in G., in R. also -˘–ò:è); the first vowel coalesces and then normally lengthens in dialects with phonemic length. In several (all?) dialects, the stem is also used with 1st and 2nd person plural verbal prefixes, with the meaning ‘we all’, ‘you all’.

4.3.3 ‘Which (of several)’ is in most dialects a stem -ŋgà-, with the class concord appearing both as a prefix and a suffix (in G. only as a prefix), e.g. (S.R., tones not known):

          mmbà i˘–ŋgà˘–i˘– ‘which house?’ pl. mmbà ñi˘–ŋgà˘–ñi

In C.K. the stem is -hà (in Raum 1909, the Mo. form is given as -hya; no palatal is audible with contemporary Mo. speakers):

(47) (Mo.) mw˘–ànà ù˘–hà˘–ù ‘which child?’ pl. wànà wà˘–hà

In D. the stem is -ao (tones doubtful), which takes verbal concords (for which see below).
4.3.4 Demonstratives

There are three degrees of demonstratives in K.B.: ‘Near’, ‘Far’ and ‘Referential’.

4.3.4.1

The simplest is the ‘Far’ demonstrative which is everywhere expressed by a stem /-lyá/ (-la [tone?] in Rw. and S., -džā ~ -džé in D., mostly -yá in G.), preceded by a concord belonging to the DP II series presented above (in D. if the concord begins with a consonant it is itself preceded by a vowel identical to that of the concord), e.g.:

(48) (Mo.) m#ndù ù#lyá ‘that person’, ki#ndò ki#lyá ‘that thing’
(49) (D.) i-džá ndáyá ‘that knife’, but pl. i-ri-džám ndáyá ‘those knives’

4.3.4.2

The ‘Near’ demonstrative consists of the class concord itself, which may be (according to dialect and/or context) preceded by a vowel; furthermore, the concords for cl. 1 and 4 are sometimes different from those in the general DP II series, as a few examples will illustrate:

- In M. the concords are always preceded by (y)e:- (1) (y)e-u; (2) (y)e-fla; (3) (y)e-u; (4) (y)e-i; etc. the concord being in all cases identical to the DP II series (NB. cl. 6 and 16: yaa<ye-a), e.g.:

(50) (Mo.) n#ndú yeú ‘this person’; bá#ndú yèỳá ‘these people’; ù#ndú yáà ‘this place’
- In M. the concords are preceded by i- when the demonstrative is used pronominally; otherwise the concords are just criticized to the noun; the cl. 1 concord is tfú, otherwise the others are from the DP II series. When clitic, cl. 16 and 17 concords appear as /-ha/ and /-ku/ respectively, as expected, but the pronominal form for cl. 16 is /aa/ rather than /iha/, and for cl. 17 the expected /#iku/ is replaced by /kunü/:

(51) (Mo.) m#sorò-tfú ‘this man’ wá#soró-wá ‘these men’
(52) i-tfú ji m#sorò ‘this is a man’ i-wá ji wá#soró ‘these are men’
- In S.R. the situation is basically the same as in Mo. (the concords for both cl. 1 and 3 being -fu) but one frequently finds a (non-clitic) reduplicated form of the demonstrative, with -a- acting as link vowel: (1) -fu ~ fwaafö (<fu-a-fu); (2) -fla ~ fla-a-fla; (9) -i ~ yaay i (<i-a-i); (10) -si ~ saas i; etc.

4.3.4.3

The ‘Referential’ demonstrative is the same as the ‘Near’ demonstrative, but suffixes -o to the concord, e.g.:

(53) (M.) bá#ndú é-tó (<e-wa-o) ‘those people’ – already referred to; n#ndú é-tó (<e-tu-o), but *etu is not otherwise attested ‘that person’
(54) (Mo.) m#sorò-tfó (<-tfú-o), pl. wá#soró-wá ‘that man/those men’, etc.
(55) (S.R.) 1. -fo ~ fwaafö, 2. -fla ~ flafla, etc.

4.3.5 Connective and possessives

The connective (or ‘genitive particle’, or ‘extra-dependent prefix’ for Guthrie) consists in all KB dialects of a vowel /-/a/ preceded by the same concords as used for the ‘Near’
demonstrative. The syllable thus formed serves as prefix for the possessive, the basic shapes of which are indicated in table 24.8 for cl. 1 and 2.

In N.R. the human pl. possessors are based on a form with a /μ/- prefix (μωτι is presumably from /με-τι/, although the /ε-ω/ assimilation, common in other dialects is normally unattested in N.R.); this is reminiscent of a cl. 18 locative concord, otherwise unknown in KB, so that those forms would mean literally: ‘of at our/your/their place’ (?).

For the other classes, the original system had as possessors the ‘referential’ demonstratives, so for instance (N.R.):

\[(56) \text{mà-} \text{éndé} \text{ ‘his legs’ (cl. 1 poss.)} \]  
\[(56) \text{mà-} \text{éndé} \text{ ayó ‘its legs’ (cl. 7 poss.)} \]  
\[(56) \text{mà-} \text{éndé} \text{ ayó ‘its legs’ (cl. 9 poss.)} \]

Nowadays there is a tendency to use the cl. 1 possessor for all non-human classes, after the Swahili fashion. In D. the only universal (non-human) possessor stem is the cl. 10 possessor form -aro.

4.3.6 Numerals (and ‘how many’)

Some numeral qualifiers are nouns with their own IP and never enter into agreement. Other numerals take as prefix the concord agreeing with the class of the head noun. Table 24.9 presents the basic shapes of numerals for ‘1’ to ‘6’, plus the stem for ‘how many’ which behaves like the variable numerals (where given, tones are underlying).

Several points deserve mention here:

4.3.6.1 The concords used with these stems are similar to the DP II series, with the exception of cl. 10, the concord of which is /í-/ in most dialects (but Mo. has /tsí-, with /tsí- as variant before ‘four’ only); furthermore, several numeral stems have rather different shapes when they take the cl. 10 concord:

<table>
<thead>
<tr>
<th>TABLE 24.8: POSSESSIVE STEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posessor S. M. Mo. S.R. N.R. D.</td>
</tr>
<tr>
<td>1st sg. -akwa -akwa -ako -akwa -akwa -apo</td>
</tr>
<tr>
<td>2nd sg. -afo -afo -afo -afo -afo -ako</td>
</tr>
<tr>
<td>cl. 1 -amwi -akwe -ake -ake -ake -akwe</td>
</tr>
<tr>
<td>1st pl. -ehu -eru -e -u- e -u -amuo -e</td>
</tr>
<tr>
<td>2nd pl. -anu -en -en -a mwanu -en</td>
</tr>
<tr>
<td>cl. 2 -año -año -awo -año -año -mwa -año</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 24.9: NUMERAL STEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Mo. S.R. N.R. D.</td>
</tr>
<tr>
<td>‘one’ #mwi #mú #mu ~mí #mvèrì</td>
</tr>
<tr>
<td>‘two’ #dí #dí #dílí #dílí #dí</td>
</tr>
<tr>
<td>‘three’ #sína #càrù #ràdu #αtu #dàdù</td>
</tr>
<tr>
<td>‘four’ ~ná ~ná ~ná ~ná ~ná</td>
</tr>
<tr>
<td>‘five’ ~mù μá ~tsína ~tsímu ~tsímu</td>
</tr>
<tr>
<td>‘six’ #wàndàru #wàndàru #wàndàru</td>
</tr>
<tr>
<td>‘how many’ #ìgà #ìggà (i)gà #ìggà #ìggà</td>
</tr>
</tbody>
</table>
This pattern seems widespread in W.K. and in G. The R. dialects have -sá:ù and /-sá:ù/ in S.R. and N.R. respectively, for ‘three’ in cl. 10; they also have, like C.K. and D., /i#:nà/ for /#:nà/ in cl. 10. Furthermore in D. the cl. 2 concord is /bá:/ before /#:nà/.

4.3.6.2

The length sign in front of the stem for ‘four’ indicates a lengthening of the prefix vowel in those dialects having a length contrast. However, even in Mo. where such contrasts are not synchronically present this ‘lengthening’ has an effect on the prefix H which does not shift to the stem; e.g. (the downstep indicated by the raised exclamation mark is due to the final L of the previous stem, which is prevented from shifting by the H blocked on the prefix):

(58) (Mo.) wà:nà ‘four children’ (<#/á:wà#:nà/)

4.3.6.3

Although a stem /#:tànù/ is present in R. for ‘five’, it is most likely a loan (as suggested by the dental /t/; the original word is the one for ‘hand’: kòkò (S.R.) and kò(w)òkò (Ma.); similarly ‘six’ is ‘hand+1’, ‘seven’ is ‘hand+2’ and so on up to ten which is an independent nominal /i#:kùmì/.

4.3.6.4

The other dialects have independent nominals for the numbers from 7 to 10, given in table 24.10 (tones underlying).

<table>
<thead>
<tr>
<th>M.</th>
<th>Mo.</th>
<th>D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘seven’</td>
<td>m#:fìgùgàré</td>
<td>m#:fìgùgàré</td>
</tr>
<tr>
<td>‘eight’</td>
<td>pì:jà</td>
<td>pì:jà</td>
</tr>
<tr>
<td>‘nine’</td>
<td>kë:nà</td>
<td>kë:nà</td>
</tr>
<tr>
<td>‘ten’</td>
<td>i#:kùmì</td>
<td>i#:kùmì</td>
</tr>
</tbody>
</table>

5 VERB MORPHOLOGY

As in most Bantu languages (cf. Nurse this volume), the structure of verb forms in KB comprises a number of slots corresponding to various morpheme paradigms. In KB, the canonical form can be represented thus:

(59) COP-SP- Neg-TAM-OP-Base-Suffix

Not all those slots need be filled in any one form and some items are mutually exclusive. Abbreviations will be explained as we deal with each position in turn.

5.1 Copula (COP)

In all KB dialects apart from D., the COP /pì/ can be prefixed to certain affirmative main verb forms, the effect being one of focusing the verb phrase as a whole, as in

(60) (Mo.) pàlèwà:nà mì:sòrò < /nì-à-lé#:wò:n-à/  ‘he saw a man (that’s what he did)’ /cop-sp- Past2-Base-Suf/
as opposed to:

(61) (Mo.) *ni mísörò áléwónà  ‘it’s a man he saw (not a woman)’

As can be seen, the COP stands directly before the focused element. When proclitic to the verb, the COP appears under various allomorphs: most of the time [p-] before vowels, and either a nasal or zero before consonants (the details are too intricate to be presented here). The tone of the SP will in all cases indicate whether the COP is present or not (cf. Ma., in (10)).

Even in those dialects that use it most, some verb forms do not normally take the COP; in C.K. this is the case with the P1 perfect in declarative sentences:

(62) (Mo.) àmè=˘hùrâ márùñà ‘he has bought bananas’
/à-á-mè=˘hùr-á/
/SP-Past1-Perf-Base-Suf/

but:

(63) (Mo.) *nàmè=˘hùrâ márùñà? ‘has he bought bananas?’

An entirely satisfactory account of the uses of the COP in this focalizing function hasn’t yet been presented for any dialect (in spite of some attempts in Raum 1909, which do not seem to account well for contemporary Mo.; see, however, Dalgish 1979 and Moshi 1988 for W.).

In G. the COP appears in one tense only (cf. Philipsson and Nurse 2000); in D. it doesn’t exist and verb focus is expressed in different ways.

5.2 Subject Prefixes (SP) (table 24.11)

The most striking difference here is between D. and all the other dialects. As the table shows, D. has substituted /i/ for /a/ in all its SP (note particularly cl. 7 tji- and 12 ki-!). Cl. 1 /u-/ is not rare in neighboring Bantu languages but is unknown in the rest of K.B. Note also once again that the concords of cl. 16 and 17 have partially collapsed in D.

In the consecutive tense whose formative is /-ka-/, the prefixes in some dialects are slightly different, e.g. in Mo. 1st sg. is ŋga- instead of the expected *ndži-ka-, 2nd sg. is ko- for *u-ka- and cl. 1 ka- for *a-ka. Other prefixes are unaffected.

In Mo. 2nd sg. is nowadays o- (Mowo variety) or u- (Mbokom variety), but ku- is found in some dependent forms.

For SP in negative forms, cf. below.

5.3 Neg.

Neg. refers here to the secondary negative prefix, for which see the special section on Negatives below.

5.4 TAM

TAM refers to the Tense–Aspect markers which are rather diverse in the various dialects and will be treated in the section on the Tense–Aspect (TA) system below.

5.5 OP

Object Prefixes (OP) are identical to SP, except for the following cases:

- The 2nd sg. OP is /-kù/- even in those dialects with a different SP.
The 2nd pl. OP in R. is not attested; speakers of both S.R. and N.R. use the Swahili pattern i.e. 2nd sg. OP /-kù-/ plus a suffix /-ènì/ added to the verb base, thus:

(64) (Mo.) lòmèëùwònlù</lù-amù-mù= wòm-àì ‘we have seen you’

(65) (Ma.) òmë-mì-kù= lòly-ènì ‘we have seen you’

- The 2nd pl. OP in R. is not attested; speakers of both S.R. and N.R. use the Swahili pattern i.e. 2nd sg. OP /-kù-/ plus a suffix /-ènì/ added to the verb base, thus:

- The cl. 1 OP is /-mù-/ everywhere; it is mostly realized as a syllabic nasal, and in W.K. it assimilates to the following consonant in the same way as the IP for cl. 1 and 3 (see §4.1.1).

One should add to the list of OP the reflexive /-kù-/ tonally distinct from 2nd sg., e.g.:

(66) (Mo.) ŋìlì-lù-kù= wòm-àì ‘I saw you’ Ëgílùkù= wòm-àì ‘I saw myself.’

Many KB dialects (not D.) permit several OP to be present simultaneously; the case of W. is well documented by Moshi (1998).

For comparison, the independent personal pronouns are given in table 24.12.

### 5.6 Base

By base is meant any combination of radical (RAD) and extensions (EXT).

#### 5.6.1

RAD are of various segmental shapes, as in most eastern Bantu languages. Whatever their syllabic make-up, they can only be H or L, e.g.
5.6.2 EXT

For a survey of EXT in Bantu as a whole, see Schadeberg (this volume). EXT in KB are by and large the same as in other eastern Bantu languages. However, the (dissymmetrical) vowel harmony discussed by Hyman (this volume) appears in KB in a rather restricted form.

- The situation is at its clearest with the stative /-ik-/: apart from G. and D., this extension does not harmonize in any KB dialect; in G. and D., on the other hand vowel harmony applies, so /-ik-/ /H11022/-ek- after mid-vowels, e.g.:

(70) (D.) #búr- ‘break, split’ stat. #búr-ik-
    #vis- ‘hide’ stat. #vis-ik-
    #künd- ‘want, love’ stat. #künd-ik-

Harmonizing:

#búrn- ‘see’ stat. #búrn-ek-
#dék- ‘cook’ stat. #dék-ek-

vs.

(71) (M.) #óm- ‘see’ stat. #óm-ik-
    #túrén- ‘pray’ stat. #túrén-ik-

- Things are much the same with the stative-reversive /-uk-/; it normally harmonizes to /-ok-/ after /-o-/ in G. and D. but not in the other dialects.
- Not so with the causative. This EXT is often realized as a modification of the final stem consonant with no vowel appearing; the question of harmony thus does not
arise, e.g.:

(72) (D.) #dʒɔk- ‘go up’ caus. #dʒɔs-

#ỳɛnd- ‘go’ caus. #ỳɛndʒ- ‘bring’

etc.

The most frequent consonant alternation is /k/ /h11022/ /ts/ (CK) ~ /t/ (WK) ~ /l/ (G.) and /s/ (elsewhere). Also, with vowel-final bases, the causative is mostly formed by inserting /i/ (M., G. and D. /r/).

Otherwise, the most frequent allomorph of the causative extension is /-is-/ which doesn’t seem to harmonize (but D. has /-iʃ-/ which does harmonize – this might be due to the influence of Swahili or other harmonizing languages).

- There exists another EXT whose relation to the causative is not too clear (it might appear as being a causative of the applicative …) and which often has an intensive meaning. Its most basic shape is /-i-/ and in Mo. at least, it does harmonize, e.g.:

(73) (Mo.) #fńɡ- ‘tie’ #fńɡ-ir-i- ‘arrest s.o.’

#dɛts- ‘lose’ #dɛts-er-i- ‘erase’

- Most revealing is the case of the applicative. In all KB languages, this appears as /-i-/ (in R. and G. /-li-/ after a vowel-final base) and it never harmonizes, with the notable exception of the Useri sub-dialect of N.R., e.g.:

(74) (D.) #yɛnd- ‘go’ appl. #yɛnd-i-

#ỳɔr- ‘say’ appl. #ỳɔr-i-

(75) (Mo.) #ɓɛɗ- ‘wait’ appl. #ɓɛɗ-i-

#olok- ‘fall’ appl. #olok-i-

but

(76) (U.) #nɔ- ‘sharpen’ appl. #nɔ-le-

#ɓɛt- ‘wait’ appl. #ɓɛt-e-

In D., however, when this extension is followed by the passive /-w-/ it appears as /-iʃw-/ (/-l-/ is diachronically part of the extension but is manifested in that context only) which does harmonize:

(77) (D.) #rɔm-i- ‘jump’ (appl.) pass. #rɔm-il-w-

#ɔr-i- ‘appease spirits’ pass. #ɔr-el-w-

There are thus enough cases of harmony, closely paralleling what is found in other Bantu languages, to lead to the conclusion that this phenomenon was once prevalent also in KB. The source of the ‘de-harmonizing’ innovation is probably to be sought in W.K., since the clearest evidence for harmony still appears in the eastern part of KB.

- The other extensions found in KB are: /-w-/ (passive) (NB. In some dialects, e.g. M., passive /-w- irregularly coalesces with the default suffix /-a/ to give /-a/; in other dialects, this coalescence is regular, cf. 2.1), /-an-/ (reciprocal), and attested in D. only /-a/- (comitative), as in:

(78) (D.) #sarıy- ‘play’ comit. #sarıy-aŋ- ‘play with s.o.’

#gàl- ‘return’ comit. #gàl-aŋ- ‘return with s.o.’
5.7 Suffixes

These are five in KB and are found in combination with pre-Stem TAM markers. They are:
/-a/ the default suffix, /-a(\gamma)u/, /-ie/, /-e/, and the somewhat marginal /-i/. Found only in D. is the curious /-ie\- suffix, which would appear to be a combination of /-a(\gamma)u/ and /-ie/.

- /-a/ is by far the most frequent cross-dialectally and is found with a variety of TAM.
- /-ie/ is universally found but normally only with a few subordinate forms in each dialect (especially the subjunctive or general dependent form).
- /-ie/ has either a past or anterior meaning (or both) according to the dialect and the particular TAM preceding it.
- /-a(\gamma)u/ seems to exist only in WK, G. and D.; it generally carries some sort of imperfective meaning.
- /-i/ appears in many dialects, but generally with a very few verbs, mostly those without an aspectual contrast between perfective and imperfective. The best example is with the verb ‘see’. In practically all KB dialects, this verb takes an /-i/ suffix when a present punctual meaning has to be expressed (as against /-a/ for most other verbs). Thus:

(79) (Mo.) ndʒi\-woni ‘I see’ vs. ndʒi\-\-\-\- ‘I am working’

Although there would seem to be some overlapping with /-ie/ (in M. in particular, /-i/ is an allomorph, sometimes in free variation, of /-ie/ for those verbs whose base ends in a nasal), the relationship between the two is by no means clear and this is an area where more research is needed.

5.8 Tense (T) and aspect (A)

We shall take Nurse’s recent survey (Nurse forthcoming) as our guideline. Basing himself on Moshi’s analysis of TA in W., Nurse proposes for KB as a whole (although he does not deal with D.) a system of five basic aspects: Simple, Progressive, Habitual, Retrospective and Perfect (which we prefer to call Anterior), intersecting with five basic tenses: Past 2, Past 1, Present, Future 1 and Future 2. Not all aspects are to be found with all tenses, however. (NB We omit G, for which see Philippson and Nurse 2000; D. being quite different from the rest, we will deal with it in a separate section.)

There is a major dividing line cutting across KB between WK and the rest: WK has an imperfective suffix -aa (Common Bantu *-aga) marking Habitual and Future, e.g. in M. (perhaps also Progressive in K.); CK and R. have no such forms. Furthermore, although all use some form of the copula as formative for the Progressive, WK uses -kee- (probably originally a Retrospective form of -kaa ‘dwell, remain’), whereas the latter two groups have different forms. Finally W.K. has three degrees of Past, whereas the rest have only two.

On the other hand, all groups have -le- for Before-Today Past, some form of -(a)me- for Anterior and a suffix -ie for Retrospective.

We will sketch the complete T/A of one representative WK dialect, namely M.; for an example of the system found in other dialects, the reader is referred to Moshi (1994).

5.8.1 The T/A system of M.

M. has three degrees of Past in the Simple Aspect, namely Past 3 (Remote) /-è- -à/, Past 2 (Intermediate) /-le- -à/, Past 1 (Today) /-à- -à/. However, in the other aspects, only one
Past form is attested, the marker being normally /-è-/, thus Retrospective /-è- -iè/, (Past) /-è- -ìè/; Progressive /-kèè- -ài/, (Past) /-èkèè- -ài/; Habitual /-àiè- -àài/, (Past) /-è- -àài/; an exception is apparently to be found in the Anterior, where the unmarked (Present) form is /-àmèè- -ài/ and where both Intermediate /-lèmèè- -ài/ and Remote /-ëmèè- -ài/ are attested.

The labels Progressive and Habitual are transparent enough not to need any detailed discussion. The difference between Retrospective and Anterior is that the former refers to a state entered upon at some indeterminate previous period, the process having led to it being considered as unimportant. With the Anterior, the process is of the essence: attention is directed to a change. Thus /pùù pììì/ means ‘he is dead, i.e. he was alive formerly, but is nowadays dead’, whereas /àmèè àpùù/ means ‘he has died (recently), he contracted some disease, etc., and so is now dead’.

In the Future M. appears to have only two forms, a Near Future /-àài/ (differing minimally in tone from the unmarked Habitual) and a Far Future /-fèè -àài/.

5.8.2 Negatives in main clauses

Contrary to the situation in many Bantu languages, KB (D. not included) does not have specific negative pre-stem markers; generally positive and negative verb forms are identical, with the exception of the focus marker being absent, and the underlying tone of the Subject prefix being H in the negative (however in M. – perhaps also in K. – the focus marker seems to be present, although without its accompanying SH tone !); cf.:

\[(80) (M.) pà-fì-à-kùå-käb-àà ‘I shall hit you’ vs. pà-fì-kàu-à-kùå-àà fò ‘neg.’\]

The negative forms are always followed by a postposed end of phrase clitic, generally /pò/ in CK and /ò/ elsewhere, but there are exceptions, e.g. Rw. /ndì/ and S.R. /ku/; /pi/ also occasionally appears in CK. The situation is made clearer by G. (for which see Philippson and Nurse 2000, where it is shown that the clitic in fact varies according to the class or person of the subject; other dialects – at least those with /(p)fò/ – have reduced the original system).

There exist however two dialects which seem to exhibit pre-stem negative markers. In S. a morpheme /-ta/- is found immediately after the Subject Prefix, as in (tones unknown):

\[(81) (S.) ti-li-ua ma# kùå ‘we are buying bananas’ vs. neg. ti-ta-li-ua ma# kùå (fò)\]

As seen below (§5.8.3) this morpheme is the one used in several dialects (including S.) for dependent negatives.

In the U. variety of N.R. on the other hand, the morpheme /tè-/ precedes the prefix, as in:

\[(82) (U.) tè-li-lè-#idiim-à i#àmbà… ‘it (the hyena) couldn’t say…’\]

The closely related Ma. variety has an independent element /kwètò/ which optionally occurs before the verb, the clitic /fò/ being present in all cases:

\[(83) (Ma.) kwètò- njè-li-#tèmà mè#tèmè 0 wàkwa fò … ‘I’m not cultivating my field…’\]

(This word resembles the stem /#ètè ‘have’, but the relationship is not clear.) It might well be that the U. form results from cliticization of the last syllable of /kwètò/ to give the negative marker seen above. This is only a hypothesis however.
5.8.3
Besides the main forms mentioned above, all KB dialects have several forms found only in subordinate contexts. A detailed analysis cannot be given here; we will just mention a few of the most common:

- /-ø-/-: usually called ‘Subjunctive’ by Bantuists. It is found in commands and as a complement to verbs such as ‘want’, ‘tell’, etc.
- /-à-/-: the ‘Consecutive’ or ‘Narrative’. It is the form most commonly found in a narrative or when a succession of actions is reported; it also serves as a potential.
- /-eki-/- (tones unknown). This form is usually found in ‘when’ clauses in the past.

Relative constructions in KB are generally simple: there is no overt morphology on the verb in positive forms and the focus marker is never found immediately before the verb; in negative forms on the other hand, a pre-stem marker (/-/ in M., K. and CK, /-ta-/ in N.R. and S.R. respectively, and /-ta-/ in Rw. and S.) is inserted, and the phrasal clitic (/pfd/, etc.) is not found; e.g. (Mo.):

(84) jì kyôkì ô≠hûrà (≤u-a≠) [Today Past]? ‘What is it you have bought?’
(85) mbôdê nimbè i-lê≠jû à [Far Past] mâ≠hûtjê hâ≠βî ‘I have a cow that gave birth to two calves’
(86) nimbà i t-o≠jûwô wâ≠wîŋò ndîj-lâ-wâ≠kûndî [Retrospective] ‘This house is full of people I don’t like’

This same negative is used in dependent verb forms, e.g. negative subjunctive.

5.8.4 The T/A system of Davida
In this section, for the sake of simplicity, only H tones are indicated.

As mentioned in 5.7, D. has 5 suffixes. Leaving aside /-ø- (Subjunctive), the other suffixes combine with a variety of pre-stem markers (including /-ø-). It would be tempting to consider the suffixes as primarily aspectual and the pre-stem markers as temporal, but this is not entirely true. Grouping the various forms by suffix, we encounter the following:

5.8.4.1 -ieye
This has the general meaning of Simple Past. Since D. recognizes three degrees of Past, the suffix will have to combine with specific tense markers to express these distinctions: -ere- -ieye means Remote Past, -e- -ieye, Intermediate and /-a- -ieye, Recent (whereas the first two forms can be used in both main and relative clauses, this is not the case for the last one, which has a special relative form /-o- -ieye, with final H which shifts to the next syllable, cf. §3.4.), e.g.:

- -ere- -ieye
  (87) m≠yeŋt ore≠ser-ieye [<- u+ere-] tîfî kî≠fungî mw≠âkâ yu≠a≠sir-ie ‘Did the guest sit on this chair last year?’
- -e- -ieye
  (88) mw≠anâ ko-ni≠bômèr-ieye iguo ni m≠kîng ‘The child you showed me yesterday is sick’
5.8.4.2 -aya

This is clearly Imperfective (i.e. both Habitual and Progressive). It combines with both -ere- and -e- to yield more or less the expected meanings. However in combination with -a-, its meaning is Present Habitual (and not ‘Immediate Past Imperfective’, which would be rather meaningless anyway; note that the meaning Present Habitual is as frequently rendered by another form, mentioned below); similarly, the form -ø- -aya is not specifically relative, but is rather a general Present Imperfective as well as Near Future, e.g.:

-ere- -aya

(91)  kīla ygélọ ore#yendy-aya ma#dʒala ki#dʒáleŋi ‘she used always to bring rubbish to the rubbish-pit’

-ø- -aya

(92)  ...idzi e#bítŋy-aya [<-i-e-] aʃadʒá bìaná ... ‘... as it [the dog] was chasing those children …’

(NB. Examples in our data base are either relative or have a hypothetical meaning. This is a case where the ‘Intermediate Past’ meaning is difficult to exemplify.)

-ø- -ie

(93)  aba w-á#sind-áyá numbéŋi ‘Father spends the day at home’

(NB. We have no relative uses of this form, which might be an accidental gap.)

-ø- -ie

In main clauses, the Near Future meaning is almost the only one attested:

(94)  di-ø#dúm-áyá mw#aná sōkŋi ‘We’ll send the child to the market’

In relative clauses however, the Present meaning is frequent (here too, the suffix has a final H, realized on the next syllable); e.g.:

(95)  oho ni kazi ki i-ø-ku#boi-aya kú#bọŋá? ‘Which work do you like doing?’

(lit. you, it is which work which pleases you to do?)

5.8.4.3

-ie is Retrospective, but is found in only two forms -a- -ie in main clauses and -ø- -iē in relatives (note the tone again!). It does not seem to have any temporal meaning but derives it from the context, e.g.:

-ø- -ie

(96)  ma#embe yá#bọ-řie ‘the mangoes are rotten’

-ø- -iē

(97)  u-ka#dwa ki#kápu tfi-ø-šũ-e [<<tʃu-ie] mà#tfiiŋwa ‘he picked up a basket (which was/is…) filled with oranges’
5.8.4.4

From the large number of forms with -a, we present just a few here:

- **-tʃa-a** is Remote Future (from tomorrow onwards), e.g.:
  (98)  \( βi-ká#bog-á \, βi\-tʃa\#pat-a \, sāre \, i\#bo-ic \) ‘if they do thus, they will get a good name’

- **-ɑ́fe-** is Present Progressive, e.g.:
  (99)  \( βa\#limi \, βa\#vimb-á \) ‘the farmers are thatching their houses’

- **-a\#da-** is Present Habitual, e.g.:
  (100)  \( ñgelö \, ra \, sümësu \, m\#ruke \, ñw-a\#tu-fu-a \, n\#ruʃá \, ñgá\#kal-á \, [<\,dʒí-ia] \) ‘during the hot season, heat increases and the sun gets fierce’

The difference in meaning between this and the -a- -a tense is at present not clear to us. For instance, the following sentence was produced by the same informant as an equivalent of example (93):

(101)  \( aba \, w-a\#sind-á \, ñumbëngi \) ‘Father spends the day at home’

- **-e-a-** is Anterior and also Immediate Past; it differs from the Retrospective in that a process is involved; it can be found in both main and relative clauses – in the latter case the suffix has a H tone, e.g.:
  (102)  \( ma#tʃí \, ṣ-a\#ho-á \) ‘the water has cooled down’
  (103)  \( ñgelö \, w-a\#méri-a \, ká-βi\#nëká \, ma\#lemba \) ‘when he had finished giving them grass …’

In combination with the Remote Past of -koye ‘be’, it has Remote Past Anterior meaning:

(104)  \( õr-c\#koye \, w-a\#βi\#zer-á \, β\#aná \, βlake \, aŋgú-á \) ‘he had told his children that …’ (lit. he was he has told …)

5.8.4.5

In addition to all the Past forms described above, there exists in D. a General Past: -(e)dención-a (there does not seem to be any difference in meaning between -e\-d- and -e\-; our main informant used the latter much more often). Since there exists such a wealth of Past forms with various shades of temporal and aspectual meanings, it appears strange at first glance to encounter a form which is neuter in relationship to all the rest. Although we are not absolutely clear about the uses of this form, there is a strong presumption that it puts the verb under the dependence of some other element in the sentence, whether it be a circumstantial clause, an adverb, a locative, etc. The verb appears somehow out of focus – it is probably significant that this form never appears in the negative, nor in relative clauses, e.g.:

- locative
  (105)  \( mae \, u\#dë\#βik-á \, kí\#kusfu \, mëzëngi \) ‘(their) mother put the bag on the table’

- temporal
  (106)  \( ìmbirí \, ya \, m\#ka \, u\#se\#mër-ic \, kú\#deká, \, βi\#dë\#vik-a \) ‘before the woman had finished cooking, they arrived’

- instrument
  (107)  \( mw\#aná \, u\#rë\#bar-a \, nuggestu \) ‘the child broke the pot with a stone’
• various circumstances
(108) β-edéβisg-á húli eri aβladzá β-aná βi-se-non-e [Subjunctive] vi-lámbo
‘they used to do this so that the children do not spoil things’
(109) aggú o-né-eyé ku=yosia m=yongo yw=ake yodéy=yoyom-ék-a [<yú-edé]
‘because he started to get old his back had become bent’

5.8.4.6
Main clause negatives are different in D. from the other KB languages, and more reminiscent of other languages, particularly Central Kenya Bantu. A negative marker nde- is put before the Subject Prefix for all person and classes except 1st sg. where expected *nde-ni- is replaced by si-. Otherwise the range of meaning covered by each negative form is roughly similar to the respective affirmative.

Subordinate negatives insert a Pre-stem marker -se- after the affirmative Subject Prefix (see (108)).

5.8.4.7
Subordinate verb forms are at least as numerous as in other KB languages (cf. §5.8.3.). We cannot deal with them here (G. Philippson is preparing a complete survey of the D. verbal system).

6 CONCLUSION
As is often the case with Bantu languages, it is hard to find characteristics defining KB as a whole vs. its neighbors. Most diagnostic, since it includes D., is probably the restricted working of the harmony process in extensions (§5.6. above). The other characteristics all exclude D.:
• devoicing of most obstruents
• negative clitics
• infinitives in cl. 5 (of which some traces do appear even in D.)

Other criteria are less diagnostic but are shared mostly with Central Kenya (E50) languages, such as the intricate relationship of tone and syntax (not present in G. or D.) and the widespread use of the copula in main verb forms (again largely absent from G. and D.).

Also, KB (including D.) has a very distinctive vocabulary, much of it borrowed from non-Bantu sources (see Nurse 1979b and Philippson 1984).

REFERENCES
CHAPTER TWENTY-FIVE

THE INTERLACUSTRINE ZONE (ZONE J)

Yvonne Bastin

CONVENTIONS

Examples are written in the spelling of the authors except for the notation of the seven standardized vowels /i e a o u/. Also, in the examples, high and low tones are marked in order to avoid any confusion due to the absence of tonal notation.

*[aaa] regional protoform or form not allowed
*Naaa Proto-Bantu reconstruction
*N nasal
*C consonant
*S semi-vowel
*V vowel
*P prefix (NP: nominal prefix, VP: verbal prefix, OP: object prefix, PP: pronominal prefix, LP: locative prefix)
[
] phonetic notation

Documented sources (monographs and regional studies) for the languages involved are:

Gungu Schoenbrun 1990; SIL (not consulted).
Bwari Ankei 1979.
JD60 Coupez 1960; Gerds and Whaley 1991; Kimenyi 1980; Meeussen 1959; Nakagawa 1992; Rodegem 1967; Van Sambeek n.d.
JE10 Chanda 1975; Cullen 1999 (not consulted); Maddox 1938; Musamba 1975; Paluku 1996; Taylor 1985; Wung’a Lomami 1973.
JE25 Botne 1989; Downing 1996a,b; Sillery 1932.
1 INTRODUCTION

The Interlacustrine zone lies at the sources of the White Nile and includes many of the languages classified in Zones D and E by Guthrie, combined as Zone J by Meeussen. To clarify the connection between these two classifications, they are here labelled JD and JE.

The map below offers a global view of the languages in this region, but does not always differentiate language and dialectal variety since dialects have generally been omitted. The languages of Rwanda and Burundi belong exclusively to the zone, which occupies the southern region of Uganda, the northwest fringes of Tanzania, and the southwest fringes of Kenya. In the Democratic Republic of Congo (DRC), some languages, several of which are spoken in more than one country, form the western boundary in contact with Zone D languages. In the south, adjacent languages belong to Zone F. An arc is formed from the northwest to the southeast by the Nilo-Saharan languages which, at their western end, split the northeast Bantu area, barring direct contact between languages in Zone E and those in the Interlacustrine zone.

Because of its geographic location, the Interlacustrine zone is characterized by mutual influence between Bantu and Nilo-Saharan languages or, to a smaller extent, Cushitic (Afro-Asiatic) languages, whose impact is mediated indirectly through other Bantu languages. The influences are usually noticed in borrowings, but can also induce language change. Thus, one group of Hima speaks Lendu (Nilo-Saharan, Sudanese), one group speaks a Bantu language, Hima-Nkore, in Uganda, and another group speaks a clearly distinct variety, Hema, in the DRC. The impact of borders, both natural and political, on linguistic differentiation is predictable since borders limit contact between speakers of the same language. This is evident in the differences that separate Talinga (JE102) from its dialectal variety Bwisi or from other JD40 languages, spoken on both sides of the border between the DRC and Uganda.

In Bantu, lateral influence and diachronic inheritance overlap. This explains the difficulty of identifying specific, exclusive features that can distinguish the languages of one zone from the rest of Bantu. This is also true of Interlacustrine. However, the isogloss bundle that outlines this grouping is more compact than any interior bundle. What follows highlights some characteristic elements within the zone without covering it entirely. We deal fairly fully with augmentatives and diminutives formed by a change of prefix, which, however, is not limited to Zone J.

The synthesis of classification studies – which do not involve the same languages or include all speakers – suggests the following schematic representation.
MAP 25.1 THE INTERLACUSTRINE LANGUAGES
For the nomenclature of languages from each group, refer to map 25.1. Bwari, for which there is little documentation, is included in J by Schoenbrun (1990), but a possible association with Zone D has not yet been completely discounted. Schoenbrun also suggests Gungu as an isolated branch; its geographic location at the northeastern end of Lake Rwitanzige suggests that differences are at least partly due to influences outside Bantu. The data collected by SIL on this language, not used here, support this hypothesis. The belated reclassification of Luhya (JE30) with J might also reflect external influences rather than its true genealogical position. Furthermore, it is with Guthrie’s Group E40 and particularly with Kuria, that JE25 shows the most affinity, which suggests the inclusion of these languages (JE40) in the Interlacustrine area, with the exception of E46 Sonjo, which Nurse and Rottland (1991–2) have shown to belong to E50. We will not therefore claim that these branchings reflect historical affiliations. We attach no time scale to them.

The characteristics shared with Bantu are dealt with in the general chapters of this book and are only discussed briefly here. In what follows, we will concentrate on:

- specific shared features of part or all of the Interlacustrine zone, which does not exclude their presence elsewhere in Bantu;
- the facts we found interesting due to the originality of some of their developments.

2 PHONOLOGY

2.1 Vowels

Most Interlacustrine languages have five phonological vowels /i e a o u/, with exceptions in the northeastern extremities (Talinga-Bwisi, Nande-Konzo) and in the southeast, where some speakers of Luhyva (Idakho, Isuxa, Tiriaki, Logooli) have, as in JE40, seven vowels, for which we have adopted a unique transcription /i e a ɔ o u/. Gungu, according to SIL documents, has five, seven, or even nine vowels depending on regional or idiolectal variants. In addition to systematic lengthening before NC or after CS (except word-finally), Interlacustrine languages contrast long and short vowels, which occur in lexemes or are linked with rules of contact between vowels of different morphemes:

(1) Fuliiru kāhānā ‘to give’ kāhān ‘to punish’
Rundi kābānā (kā-bā-ānā) ‘to be together’

This is not the case in:

- Talinga, Nande-Konzo, and Hunde, where length is limited to the penultimate vowel at the end of an utterance or elicitation forms:

(2) Hunde ibálé…; #ibā:lë ‘stone’

- Nande-Konzo, Hunde and Tembo, where two identical vowels can follow one another, but do not create a long vowel:

(3) Nande ɛrɛhɛkā ‘to carry’
    hɛkā ‘carry!’ (imperative) cf. Shi siniŋkag ‘push twice!’

Hunde bānā (bā-ānā) ‘children’
    ndānō ‘promise’ cf. Shi éěndagagaŋō
    mbā̃ndā ‘I will leave one day’ cf. njēndé ‘that I leave’
Word-finally, only Shi and, to some extent, Logooli allow long vowels. These are usually underlying, at least in Ganda:

(4) Ganda yályá=kó ‘he ate a little’
yályá kyó ‘he ate it’ (class 7) cf. kúlábá=kó ‘to see a little’
Shi óókúbá ‘to be, exist, live’ cf. Rundi kúbá (kú-bá-á)

Expressive lengthening, especially in interjections or demonstratives, is frequent:

(5) Ganda kizító ‘heavy’
kizítóó ‘very heavy’

Only open vowels (e/ë, o/ø, a) can occur word-initially except in two areas formed by JD60 and JD50 Hunde and part of JE40/JE30. In the second group, the distribution is surprising because if the southern JE30 varieties adjoin JE40, certain varieties of northern Masaaba form an isolate. This can be explained with examples from JD60 Fuliiru that differentiate between spontaneous and more fixed speech:

(6) Haya òmúti ‘tree’
Rundi ñiòti ‘tree’, ñumúti ‘medicine’
Saamia omundu Logooli onondo ‘person’
Bukusu òmú:nìdu Masaaba Lusoba umundu
Fuliiru ò-mú-hindùùkò ‘circle’
ù-mú-ndì átinądàwá áyífágà yènènè
‘one doesn’t respect a man, he respects himself’

Vowel height is not absolute. Exceptions can be either grammatically determined or connected with the ancient alternation i/e, which explains why class 5 is often involved.

In JE40, vowel height in prefixes is determined by the thematic vowel:

(7) Gusii oko-goro ‘leg’
oko-biko ‘arm’

2.1.1 Semi-vowels (S)
The semi-vowels w and y are attested everywhere in the sequences (C)/(NC)SV. Three facts in particular should be mentioned:

- Talinga and Nande-Konzo distinguish two degrees of height for both semi-vowels, which is evident in the application of vowel assimilation rules:

(8) Talinga kúfúyádlà ‘to give birth’ cf. kúsimbà ‘to raise’ kúsembà ‘to dig’
Nande ñmúyakólo ‘old person’ ñmósìyá ‘plain’

- In Rwanda-Rundi (JD60), semi-vowels often induce a co-articulated consonant so that b+w → bg and p+w → pk, something official orthography does not reflect:

(9) Rwanda úbúshí [úwúkwí] ‘summit’ syú [syá] ‘grind!’

- The opposition between ny and /ø/ is highlighted by linguists as occurring in a continuous area formed by Talinga, Nande-Konzo, Hunde, Fuliiru, and Rwanda-Rundi with a continuation in Nyankore-Kiga where the sequence nyV: seems to be limited to a few words:

(10) Rundi yáramènë [yáramènè] ‘he knew’
yáramènnyë [yáramènnyè] ‘he broke’
2.1.2 Consonants

Consonant systems are diversified and partially related to the five- or seven-vowel system. Palatalization of stops, often pronounced, before front vowels is frequent:

(11) Kisa -kendo 11/10 [oluːː፡ndo, tsiːɲeː፡ndo] ‘journey’
    Tembo -sǐnd- ‘to finish’ kā-sǐnd-ǐː-á kāːsǐnʤǐːrā ‘to finish, limit to’
    Rwanda -kē ‘little’ [ɡ'ik'yē] 7

Outside JD60 (see §2.1.1), only Talinga has the co-articulated stops gb and kp:

(12) Talinga gbàtēsā ‘to enlarge’

An isogloss distinguishes vu/(fu) and ju/(zu), clearly isolating the Rutara (JE20, JE11–14) group, which lacks labiodental fricatives:

(13) Nyankore enjura
    Haya enjūlə; cf. Saamia efula, Fuliiru mvūlā ‘rain’

JE25, 30 and 40 are characterized by the absence of voiced fricatives word-initially and intervocalically (with the exception of b). Two languages of group JD50, Tembo and Hunde, should also be included. They are situated in the D43 Nyanga extension.

2.2 Facts of interest

The following are chosen for their originality or particular development in the Interlacustrine zone.

2.2.1 Syllabic consonants and long consonants

Syllabic nasals are often word-initial in Bantu, usually as predicative morphemes or as realizations of the prefix mu-. However, the syllabic consonants in Logooli are isolated:

(14) Logooli ri-diʃi ɨdʒiʃi 5 ‘mud, earth’
    ri-rahe ɨlahe 5 ‘pretty’
    cf. kerahe 7, rikudu 5 ‘turtle’

Kisa has a similar reduction, which produces a [VC] syllable. Sample (1976) shows how this phenomenon is linked to the presence of an initial vowel:

(15) Kisa eli-loka elloka 5 ‘canine tooth’
    cf. elixutu ‘tortoise’

The reduction of ru/ro to w before rV (a-ro-rito uwrito class 11 ‘heavy’) in Kuria reflects the same tendency even though the process is different.
Ganda has isolated occurrences of long consonants corresponding to Meinhof’s Law (see below) or to the deletion of a close front vowel preceded by another vowel – as long as it derives historically from *(high) i:

(16) Ganda ettabi, amatabi ‘branch’
    olukko, enziko ‘long valley’
but ekijiko ‘spoon’

This process combines with the gemination or strengthening of consonants or semi-vowels:

(17) eddume, amalume ‘male’, ejjiba amayiba ‘dove’, eggwanga, amawanga ‘nation’
When pvV is not preceded by a nasal, it is realized ggyV (amaggya 6, empya 9 ‘new’).

2.2.2 The g/gg opposition

/gg/ is attested throughout Interlacustrine, and the occurrence of a velar nasal is limited to the pre-consonantal context in Rutara, JD40, and JD50. Other groups attest g/gg, but with variable status:

- In groups JE15, 30, and 40 the velar nasal often results from the application of Meinhof’s Law (see below), but also appears in other contexts:

(18) Ganda ku-ŋoolá ‘despise, sneer at’ èggo ‘banana bud’
    Kisa olugala, tse:galá ‘leech’
    Idakho loŋaló ‘frog’
    Syan ekinás ‘ground hornbill’
    Bukusu ɲáli ‘truly’
    Kuria okopáta ‘to be about to’

- The following examples show the relationship between p/mp and the velar nasal:

(19) Nyole -yulíra ‘hear’ pulíra (n-ŋ → p) ‘I hear’
    cf. Nande èré-hólékérërá ‘listen attentively’
    Gusii ɲa ‘give me’ ejiti ‘hyena’
    cf. Rundi impa, Logooli embiti (m-p → mb)

- In Jita [ŋ] is a free variant of /ŋk/:

(20) Jita i:ŋkókóra/i:ŋkókóra ‘knee’

- In JD60 [ŋ] is related to the following (semi-) vowel, which appears in several JE30 varieties:

(21) Rwanda -nyà [-ŋwà]
    Idakho xopwa
    cf. Bukusu xàːnyà ‘to drink’
    Logooli ompraami o-mo-ami, Rundi ìmwaːmí [ùmŋjáːmí]
    cf. Saamia umwaami ‘leader’
    Logooli ompraana o-mo-ana, Rundi ìmwaːnà [ùmŋjúːnà] ‘child’
This relationship with a back vowel manifests itself differently in Masaaba and Luhugu. Brown (1972) claims that, in Luhugu, [ŋ] is an allophone of [n] before a front vowel when the palatal nasal is not subject to Meinhof’s Law:

(22) Luhugu ku-ŋila [kũnila] ‘to wince’ cf. βu-ŋolo [βunjo:lo] ‘frogspawn’

Despite some realizations that highlight phonetic tendencies, the isogloss [ŋ, ŋɡ/ŋɡ] clearly separates JE15, 30 and 40 from the rest of Interlacustrine, although Ganda patterns with the western areas in other cases.

2.2.3 Dentals and alveolars, trills and taps

The relationship between dental/alveolar stops and trill/tap approximants is complex. Complementary distribution plays a role but is not without exceptions. Preceding nasals, Dahl’s Law, and dialect interference are all involved. Some distributions can be explained diachronically; others appear to be random. Thus, the voiceless stop /t/ is attested everywhere and is aspirated in Rwanda-Rundi and Shi /ɾ/. Note:

- Nande contrasts a dental stop and a voiceless apico-alveolar stop, the former resulting at least partially from loanwords:

(23) Nande ǎkáitěrá ‘striped rat, edible’
    ākáitěndé ‘small bottle’

- In JD50 the stop /t/ has a reduced function:

In Havu, /t/ only occurs in some loanwords, as in Shi, which contrasts tu and rhu, depending on whether u derives from *u or *o. In Shi, therefore, /t/ generally corresponds to a fricative and, more rarely, to an affricate, in the other five-vowel languages:

(24) Shi ītu ‘spear’  okoãrũmà ‘to send’

In Shi and Havu, /rh/ (voiceless trill) generally corresponds to /t/, but in Tembo, only [ta] is attested, and [ts] is heard before a back vowel, [c] before a front vowel.

The /t/ of Logooli, Nyole, Luhugu, and some Masaaba varieties corresponds to /ɾ/ in most Luhy languages, including other Masaaba dialects and Lusoba:

(25) Nyole Logooli Kisa Luhugu Lusoba Bukusu
    to kill yita oxwi:ra kũwi:ta xuxwi:ra xũxwi:rà
    NP13 .otu- to- oru-
    ear oxùtwa kukutu xuxuru l:ɾìa

The voiceless stop is attested beside /ɾ/, but corresponds to /d/. The appearance of stops is predictable when they result from the application of Dahl’s Law or in postnasal position, but a certain number of unconditioned occurrences are observable, at least synchronically. The alternations /ɾ/t/d are similar enough to /β/p/b so that we will not deal with these here.

(26) fingernail three
    Nyole cidete ĺičere
    draw (water) oxudaja
    beer indali
    small beer kadali
    to kill xatali
    Luhugu xuxuru
As in JE30, occurrences of /dr/ – common in Talinga, Shi, Havu, Fuliiru, partial in Nande and Ganda, marginal in Nyambo and Jita – do not occur within the contexts of Dahl’s Law or of NC.

(27) Fuliiru ₐ₇₁₆₆₇ ‘to mix’ ₐ₇₁₆₇₇ ‘to fish’  
Ganda ₐ₇₁₆₇₆ ‘embroider’ ₐ₇₁₆₇₇ ‘dash to the ground’

In some cases, the explanation is historical. Thus, in Shi, *du is the reflex of *ₐ₇₁₆₇, whereas in Havu and Fuliiru, *du and *ₐ₇₁₆₇ are attested as being in free variation or lexically determined:

(28) Shi ₐ₇₁₆₇₆ ‘stir flour when cooking’  
Fuliiru ₐ₇₁₆₇₆ ‘cook porridge’  
Havu -ₐ₇₁₆₇₆- ‘prepare porridge’  
Shi ₐ₇₁₆₇₆ ‘be numerous’  
Fuliiru ₐ₇₁₆₇₇ ‘abound’

However, outside this context, except in certain long vowel stems such as -ₐ₇₁₆₇₆- ‘draw water’ (*ₐ₇₁₆₇₆-) in Havu, numerous l or r/d alternations do not correspond to any known condition, diachronic or synchronic, even if the relationship between l/r and d is only visible through their production after a nasal.

This brings us to the l/r alternation. Lateral l/r is attested in most JE30 varieties (except Nyole) and Haya (JE20). It corresponds to /r/ in Gusii and Kuria in the southeast and in Nyambo and Nyankore-Kiga in the northwest. Talinga, Ziba and Kerebe l/r are described as ‘free variants’.

In other languages, l/r are at least partially in complementary distribution. In Jita, use seems to be linked to position in the word: l in prelexical morphemes and word-initially, otherwise r, whereas in Logooli r→l in the context rV-r. In JE10 (Hema, Nyoro), 15, 35, JD40, 50 and 60, occurrences are largely conditioned: l after a, o, u and initially; r after a front vowel. Furthermore, a following front (semi-)vowel can change its articulation, often to a lateral retroflex. This double conditioning disrupts the system, as elsewhere, causing the loss of alternations following the substitution of prefixes for which the criteria are based on statistical frequency and not on absolute conditioning.

(29) Nande ₐ₇₁₆₇₆ ‘smoke meat’ but also ₐ₇₁₆₇₆ ‘to force’  
Fuliiru ₐ₇₁₆₇₅ ‘den, lair’  
mulu ‘sorcerer’  
kiligi ‘well’ but also kilili ‘bitter’  
kikara ‘chest’

Ganda patterns with the western group in terms of conditioned segments, which makes the distribution interesting even if based on somewhat superficial phenomena like the impact of vowels on the articulation of certain consonants. The same consonants (l/r/d) reflect quite different systems, Shi and Havu being the only ones to contrast voiced/voiceless trills.

2.2.4 NC sequences

Ignoring the application of Meinhof’s Law and the common phenomenon of movement towards a homorganic nasal or a stop, where r, l → d, h → p, b → b, and present everywhere
as the deletion of a nasal in front of another nasal, realizations of NC fall into three main groups:

- Voiced/voiceless stops and fricatives are attested without restriction after a nasal in JE10, 15, 20, 25, JD60, and Shi and Havu (JD50). JE40 (Gusii, Kuria) may figure in this group, but with the total absence of voiced fricatives intervocalically, word-initi-

ally, and after a nasal.

In JE15 (Ganda, Soga, Syan), JE20 (Nyambo, Haya, Kerebe), and, it seems, only in Nyankore of group JE10, the apical feature persists when adjacent to labiodental f(nf):

\[ (30) \text{Nyankore} \quad \text{enfu} \quad \text{‘large mud-fish’} \quad \text{but,} \\
\quad \text{Nyoro} \quad \text{emfubaso} \quad \text{‘bead necklace’} \]

In Shi and Nyankore, there is a slight connection with JD50 Hunde/Tembo in the following:

\[ (31) \text{Shi} \quad [ë:f][ë:mf] \quad \text{‘fishes’} \\
\quad \text{Nyankore} \quad \text{énfu} \quad \text{‘large mud-fish’} \]

In Jita, ˘k may be realized as ˘j, and we also find Vmp/Vns and V:p/V:s, similar to the real-

\[ (32) \text{Hunde/Tembo} \quad ndúmwa/ndúmwà 9 \quad \text{‘messenger’} \\
\quad -tùm/-tsùm- \\
\quad ncirà 9\text{njírá} 9, \quad \text{‘path’} \\
\quad káciìrá 12 \quad \text{‘dim. path’} \\
\quad \text{Hunde} \quad xúkì 9 \quad \text{‘fly’} \\
\quad \text{Tembo} \quad éfí 9 \quad \text{‘fish’} \\
\quad éhúnyí 9 \quad \text{‘shame’} \]

- Luhya varieties are more distinct and progressively different from north to south. Nyole and Luhugu Masaaba have kept nasals before voiced consonants, but deleted them before voiceless consonants, with compensatory lengthening of the preceding vowel at least in Masaaba. In the south, we observe increased voicing of voiceless stops. For instance, in Kisa n-č and n-ts → nj and nz. However, the nasal deletes before other voiceless consonants; in Logooli, n-s → s, but n-f → nf, keeping the nasal, a feature which connects the language with JE40.
These different realizations are standard, the remarkable feature here being the disparity which has persisted in JD50 and JE30 varieties.

2.2.5 The Ganda Law or Meinhof’s Law

Most Interlacustrine languages are not distinct from the rest of Bantu where different nouns of variable number are subject to Meinhof’s Law. Their distribution often occupies a compact area, and numerous alternants $\eta/nz, nj$ in class 9/10 can be explained by Meinhof’s Law.

(33) Hunde $\text{lubanc, manca} \ 11/10$ ‘discussion’
    cf. Haya $\text{ebanja} \ 5$ ‘debt’
    Rwanda/Rundi $\text{irubiaanza, imanz} 11/10$ ‘debt, lawsuit’

The rule is most productive in Ganda where it stops at the stage of double assimilation, maintaining a sequence of two nasals:

(34) Ganda $\text{kubamb, mumba} \ ‘mould’ \ ‘mould’$
    $\text{gymb, gum} \ ‘drum’ \ cf. $\text{gymbob, ‘shield’}$

It is equally productive in Havu and Shi, though $\eta g$ is retained. The rule applies systematically to $N-b/d/j$ in front of $N$-voiced $C$. Before a simple nasal, the rule seems to be limited to $N-j$.

(35) Havu $\text{olubanda, emand} 11/10$ ‘valley’ $\text{enyama} ‘behind’$
    cf. $\text{njou} ‘elephant’$
    Shi $\text{oliubanja, emanja, imanja} 11/6$ or 10 ‘court case’
    $\text{oloondza, loonz} ‘look for’ \ $\text{loonz} ‘look for’$
    $\text{mooonz, ‘look for me!’}$

In Shi, there is a word-initial occurrence of a two-nasal sequence where the first nasal is syllabic.

In the east, in Luhya varieties, the productivity of Meinhof’s Law seems to diminish progressively towards the south. Common in Nyole, the rule has only occasional applications in Logooli.

(36) Nyole $\text{nanga} \ ‘I call’ \ $\text{olanga} ‘you call’$
    $\text{olubanga, (e)manga} ‘rock’$

A characteristic of the Luhya varieties is linked to the combination of two phenomena, the ‘Luhya Rule’ (Mould 1976) and the voicing of consonants after a nasal. This creates a phonological system where the application of Meinhof’s Law only corresponds very slightly to the environment. The rule does not apply when a voiced consonant is the result of the voicing of a voiceless consonant after a nasal, or when it corresponds to a voiceless consonant in other varieties. This is seen by comparing the internal variation between two Masaaba varieties:

(37) Lusoba Lufumbu
    $\text{xutamba, indamba} $\text{kudamba, indamba} ‘to lack, I lack’
    $\text{xuwamba, imbamba} $\text{xuhamba, impamba} ‘to hold, I hold’
    but $\text{xuflona, imona} $\text{kuflona, imona} ‘to see, I see’
This situation supports Sample’s (1976) claim that Meinhof’s Law applies to the sequence \( n-l \) and optionally to \( n-(z) \).

(38) Kisa \( oxu\text{tema} \) ‘try’ \( e:\text{ndema} \) ‘I try’ (without Meinhof’s Law)

 \( oxulima \) ‘cultivate’ \( e:\text{nima} \) ‘I cultivate’

 \( oxwi:mba \) ‘to sing’ \( e:\text{ni:mba/e:\text{ni:mba} } \) ‘I sing’

Velar consonants are more complex. Historically \( *g \) went to \( k \), except in some peripheral varieties like Logooli. \( /g/ \) is not part of the phonological system of Luhya varieties except in a few cases produced by Dahl’s Law, which we discuss later, and in the \( yg \) sequence \( n-k \rightarrow yg \). In the following examples, the non-application of Meinhof’s Law might also be supported by the fact that \( yg \) and \( nj \) are linked to the voicing of a voiceless consonant after a nasal.

(39) Bukusu \( æ\text{gg}:\text{ygà }-k\text{à:ggà} \) 9 ‘profit’

Nevertheless, in most Luhya varieties, realizations follow Meinhof’s Law:

(40) Bukusu \( æ\text{g}:\text{omà} \) ‘drum’, cf. Haya \( æ\text{g}:\text{oma} \)

\text{Saamia} \( æ\text{g}:\text{oombe} \) ‘cow’

The stems attesting velar nasals in class 9/10 as the result of the application of Meinhof’s Law are often part of the Proto-Bantu stock and occur among the stems where this rule is widely attested, for instance Gusii \( æ\text{g}:\text{ombe} \) ‘cow’ and Kuria \( æ\text{g}:\text{ombe} \) ‘crocodile’, where the application of the rule is erratic. These frozen examples explain the difference in treatment, confirmed by diminutives where the velar nasal is maintained, whereas normally prefixes are replaced:

(41) Kisa \( æ\text{g}:\text{omo} \) 9 ‘drum’ \( kaæ\text{g}:\text{omo} \) 12 ‘small drum’

\text{cf.} \( æ\text{g}:\text{fona} \) ‘see’ \( æ\text{g}:\text{oni} \) 9 ‘eye’

\( æ\text{g}:\text{oni} \) 12 ‘small eye’

It is therefore difficult to understand the realizations without resorting to historical explanations. The split distribution of the area of productive application is surprising. Indeed, if JE30 is contiguous with JE15, Havu and Shi (JD50) must be isolated from both JE15 and the interior of their group. Outside Interlacustrine only Gikuyu (E51), isolated by the Nilo-Saharan languages, is known for its regular application of Meinhof’s Law.

2.2.6 Dahl’s Law

This consonant dissimulation rule has diverse manifestations across parts of eastern Bantu. In the Interlacustrine zone, from a comparative standpoint, manifestations occur initially or, more rarely, within nominal or verbal stems. Their frequency diminishes progressively towards the boundaries of the phenomenon, which occur in northern Ganda and correspond to the boundaries of Zone J in the west. The stems affected by the process, as with Meinhof’s Law, usually have a compact regional distribution in a variable area.

(42) Nande \( æ\text{ry}:\text{gùà} \)

\text{Jita} \( ë\text{kwi:giùà} \)

\text{Shi} \( ö\text{kwïyìgùrhà} \)

\text{cf.} \( ganda \) \( kà-k\text{kùùà} \) \( *-j\text{kot-} \) ‘be full, satiated’
Synchronically, Dahl’s Law applies in JD60, Havu (JD50) and JE40. This distribution is unusual even though the details of the consonants and morphemes involved differ somewhat. As such, the rule applies to all cases of t and k in pre-root morphemes in Rwanda-Rundi, while in Gusii the negative morpheme ti- is not affected. It is induced by /h/ in Rundi, but not in Kuria.

(43) Gusii ege-tunwa ‘hill’ cf. eke-rongo ‘stool’

Rundi tigikari aaria ‘it is not over there’ tkiri ‘it is not here’

Rwanda dihëtë ‘we fold’ tigihëtë ‘we fold it’

Rundi nibó badghá bá-tú-há-á ‘those who do not give’

Kuria oyokáma ‘to milk’ okohá ‘to give’

Rundi-Rwanda also exhibits the consonant alternations /d/ and /g/ at the end of certain verbal roots in relation to the voiceless or voiced feature of the suffix:

(44) Rundi -bád-ik- ‘to transplant’ -bád-ūk- ‘grow well’

-bát-ūr- ‘uproot’

-shyig-ik-ir- ‘hold up’ -shyik-am- ‘hold firm’

-zir-ik- ‘tie’ -zit-ūr- ‘untie’

The last example attests /r/ instead of the /d/ expected by Dahl’s Law.

In Havu, /rh/ voices prefixes, but does not itself change in contexts where the rule applies:

(45) Havu égirhákamwá ‘unmilkable animal’, óqórhi ‘ear’

égirhákôlwá/égiráhólwá ‘that which cannot be done’

When not in stem initial position, this consonant is affected, as the following examples show:

(46) ómúdó:róh ‘young man’ (reduplicated stem) cf. ékédákâmwa ‘bracelet, sp.’

These examples demonstrate that the rule applies from right to left. We can therefore deduce that it will achieve its maximum development in Havu, where the preceding word can be affected:

(47) égi rhwá shóndó ‘what we are looking for’ cf. ékí

gá káno rhúdérérè ‘as we just said’ cf. nká

In Shi, next to Havu, movement from k to g and from c to j is not observed in deliberate speech, but is clearly heard in spontaneous language. Anomalies in JE30 correspondences reflect Dahl’s Law, as consonants do not reflect the expected voicing criteria, but must be explained historically.

(48) Nyole enbeño ‘cold’ (m-ŋ → p)

cf. Ganda empèwò ‘draught, cold, wind’

-daŋ ‘draw water’

cf. Shi ooókudährh ‘dip into grain’ Isuwa-taha

engoxo (n-s → k) kuba ‘I beat’, -xuba ‘beat’

Kisa axaxoxo ‘little chicken’ i:mgoxo ‘chicken’

It is difficult to treat the applications of this rule only synchronically because the diachronic change from voiceless to voiced sometimes disrupts its application. From another viewpoint, based on the behavior of nasal clusters and using JE50 as an example, distributional analyzes show that, in the stem, certain consonants such as /d/ in
Nyindu (but excepting /du/ in Havu and Shi) require a following voiceless consonant. Conversely, in these same languages, /p/ or /h/ frequently occur before voiceless consonants, which suggests that they are less affected by the dissimilation. Ha, located at the southwest border of the eastern region where Dahl’s Law applies, has two dialects, Giha and Kiha, which are distinguishable by whether or not the NP is subject to the rule.

2.3 Tonality

Tonality in Interlacustrine languages has been the subject of an in-depth study so we will limit our discussion here to a few typological observations that exclude undocumented languages. Most of the languages contrast H and L. Where these come together on a (long) vowel, they create a contour tone, although these are rare or nonexistent in some languages:

- Ganda: /mùsù:iː nòǒmwà:nà/ ‘the man and the child’
- Hunde: /mìi-ànà/ → /mìwà:nà/ ‘the child …’

Some languages contrast type 1 with the other three, while Gusii seems to join 1/4 and 2/3. These languages form a transition towards Kuria where all four are non-distinct.

In the east, accentual languages are more evident; thus Bukusu contrasts type 1 entirely low, at least in certain contexts, except in Tembo, Shi, Havu, and Fuliiru (JD50):

- Nyankore: /kùːgùːrù/ ‘leg’
- Hunde: /kùːlù/kùːlù/ ‘back foot’
- Ganda: /kùːgùːlù/ ‘leg’, /kùːgùːlù/ ‘leg of a sheep’
- but Tembo: /kùːlù/ ‘leg’

Identical contextual realizations may exist in languages of different groups. Consider the following elicitation form:

- Nande: /kùːgùːlù/ ‘the leg alone’
- /kùːgùːlù/ ‘the leg itself’
- and in Fuliiru: /kùːgùːlù/ ‘the leg alone’, /màːgùːlù/
Some languages tend to anticipate a tone (Nande, Hunde, Rwanda-Rundi), others to postpose (Jita) or spread a tone. This last phenomenon, especially when it is not limited to the word, induces diverse realizations. For example:

(54) Bukusu #kùmùkìlò# 'fire'
    kùmùlò nkùwò kùmò 'the fire which ..., this fire'
    kùmùkìlò kàmùbò:ù 'the (big) fire'
    nè:kùmùlò kùmùbò:ù 'with the big fire'

The syntactic impact of tonal realizations varies from language to language, but is practically nonexistent in JD60.

2.4 Syllable structure

The syllable structure of Interlacustrine languages is -CV- (-SV-, -CSV-, -NC(S)V-), and vowels occur short and long in the majority of languages. -V- occurs word-initially, but, in other positions, syllables without onsets are less frequent, except in some languages of JD40 and JD50 (see §2.1). Syan, marked by non-Bantu influences, only attests syllables of the form -CVC-. The problem of diphthongs or heavy syllables other than CSV remains since few linguists have explicitly distinguished sequences of two (or more) different vowels or diphthongs.

Kisa (JE32) also attests a few syllabic consonants and syllables of the type #VI (see §2.2.1).

3 MORPHOLOGY

3.1 Class markers and class systems

For the 15 non-locative classes, the class and gender system is quite typical. Class 13 (NP *tò-) is not found in two small areas, one formed by Syan/Masaaba, including Bukusu, the other by Gusii/Kuria. In Bantu languages, nominal stems in 12/13 are rare since this gender occurs mainly in the formation of diminutives – discussed below – but class 12 (NP *kà-) is attested everywhere.

The class 19 prefix in JD40 and 50 languages forms part of the eastern border of the area in which the prefix is well attested. The other part of the southeast border is separated by JD60, found in Zone F and in Kuria (JE40). Again, the attested facts from both sides of JD60 are similar.

3.1.1 Augments and nominal prefixes

Structure

Augments can occur before nominal or pronominal prefixes but are excluded, by definition, before verbal prefixes. Structurally, joining the augment and NP in classes 5 and 10 creates particular problems, which are discussed later. Excluding these two classes, the augment consists of a long vowel in Shi (JD50), and a short vowel elsewhere (cf. §2.1), with the exception of Masaaba (JE31). In Masaaba varieties, augments have the structure CV- except in classes 1 and 9, and, alone in Bantu, a NP consonant may delete when identical to that of the augment:

(55) Bukusu kùmùlò 3 'fire' 1 i:kòsi, kàmùkòsi 5/6 'neck'
    li:kànò 11 'tall' (but) lùlw:à:ndà 11 'rock'
Augments take the unique form á- (similar to that of Nyanga (D43)) in Hunde (ámúlúmè ‘the male’, múlúmè ‘male’), and é- in the Bunyakiri dialect of Tembo (émwánà ébànà ‘child, children’).

**Function**

As the preceding examples demonstrate, definiteness – for which the range is language-specific – is marked by an augment before a noun in part of JD50 (Hunde, Tembo, Fuliru), in Talinga, and perhaps in some southern Luhya varieties like Logooli. Elsewhere, situations vary, and augments mostly appear as relatively fixed morphemes before nouns (or adjectives). Certain conditionings widespread in Bantu operate, such as the absence of an augment after a negative verb. Generally, the contrast between definite and indefinite relates to the presence or absence of an augment, but the definite form (with augment) tends to become non-marked whereas that of the indefinite occurs in restricted contexts and varies to some extent with the language:

(56) Haya òmúsháìjí ‘a tall young man came’
    òmwánà wàngè/mwánà wàngè ‘my child/it’s my child’

(57) Nyankore érihuri, amahuri ‘egg’ ériino ‘tooth’
    Shi urchákà ‘bush’ éeilínó, áámínó ‘tooth’

The initial vowel alternates with Ô in some languages and has the status of an augment:

(58) Talinga ëblà, ámáblà ‘shoulder(s)’ ëlínà, ámánà ‘tooth/teeth’
    ëpà ‘wing’ ëlínà ‘tooth’

In Hunde and Nande, the process is different. The augment á-/é- is always followed by ëc-/ôc- before a consonant, and i- therefore has the status of NP:

(59) Hunde ísindà, másindà/ácsindà ‘grave’
    élínà, míno má-inó/álinó ‘tooth’

(60) Logooli elidàko ‘buttock’
    elíímu ‘tooth’

Particular cases: augments and NPs in classes 5 and 9/10. In class 5, there is a split between two language groups:

- Those which attest the alternation V(V)/V(V)CV- according to whether the stem initial is a consonant or vowel:

(56) Haya òmúsháìjí ‘a tall young man came’
    òmwánà wàngè/mwánà wàngè ‘my child/it’s my child’

- Those which only attest (V)CV-: these occupy a compact area in the east: JE25, JE40, and JE30 (except Nyole (JE35) and Saamia (JE34) in Mould, 1976):
Context also plays a role in most of these languages, but variably:

(61) Jita ̀linàjì, àmànàjì ‘coconut palm’ èlì:so ‘eye’
      Bukusu ̀li:kówì, kàmákòsi ‘neck’
      àlì:nò, kàmè:nò ‘tooth’

The distribution clearly splits east and west; JE25 patterns with the eastern group whereas Nyole (JE35) rejoins the western group. The split, however, is partial because the realizations pattern together in specific ‘definite’ forms or where the stem has a vocalic initial.

In classes 9 and 10, prefixed elements are diverse in form and cannot always be related to NC contact (see §2.2.4) or to a specific realization p- or ny- of class markers of type N before V-. Class 10 frequently attests a CV- structure. Based on this, typological classification permits the identification of two groups – taking the form with an augment where it is not fixed.

- First, there is perfect similarity between classes 9/10, whether class 10 is the plural of 9 or 11 (JE10/20, JE15, JD50 – except Hunde – and JD60):
  (62) Nyankore èmćeba 9/10 ‘dog’
        èfìrìmće 11/10 ‘tongue’

- Second, class 9 is (e)N- and class 10 CV(-)N- (JE25, JE30, JE40 and JD42 Nande which joins with JD50 Hunde):
  (63) Bukusu èkà:gbó:ci: èkà:gbó 9/10 ‘clothing’
        ìlì:békà:ci:mbékà 11/10 ‘side’

Some languages attest a split in one or both classes where, for instance, independently from specific realizations of N-C in which a nasal is deleted, they may possess a class 9a:

(64) Rwanda èkè:nè 9a/10a ‘goat’, but èrùhù, èmìpù 11/10 ‘skin’
    Rundi èmpènè/èkè:nè

Class 9 concords determine its membership, but the prefixed element is identical to that of class 5, and pairing with class 6 is quite frequent. Moreover, certain nouns reflect both class concords:

(65) Rundi èsàmbì rìyì mú kwàhà ‘swelling of the armpit’ (5 concord)
    èsàmbì yà gùswùi ‘shameless’ (lit. swelling of the ear) (9 concord)

Kuria (JE43) is different because the absence of a nasal rather suggests its loan status, which does not necessarily exclude a relationship with class 5:

(66) Kuria èfìlata, èçìfìlata 9a/10a ‘ducks’
    cf. èeèmbé:yò, èçìèmbe:yò 9/10 ‘seed(s)’
    èrisà:yà, èmasà:yà 5/6 ‘cave’

In Nande, the situation is somewhat similar, but more complex, since the variations are of three types, similar to those of the augment:

Type 1: èmće: 9/10 ‘a goat(s)’ èmbće: ìyìnì: èmbće: 9/10 ‘the goat(s)’
This construction is canonical, also occurring in Konzo class 10, a free variation similar to Hunde:

(67) Konzo èndà 9 ‘the belly’ èsyâ:ndà, èsyâ:ndà 10
Hunde ângôkò … ‘the hen’ âsângôkò#10

Type 2: vâhâ/èvâhâ ngâlé 9 ‘dog(s)/the mean wild dog’

(68) èké:ngâ#/èsyê:ngâ# 9/10 ‘the bicycle(s)’

Loanwords often integrate into this subgroup, which is comparable to 9a/10a in Kuria.

Type 3: èséndâ 9/10 ‘grave(s)’ éyèséndâ/èsèndâ 9/10 ‘the grave(s)’

(69) èsó:kè#/èsé:ó:kè# 9/10 ‘the fly/the flies’
   cf. éyéndé néré 9 ‘the other path’
èsséndé ngêknò 10 ‘the other hen’

Definite nouns act as pronouns, and, curiously, the majority of their stems have an initial fricative s. For indefinite forms, the prefixed element is identical to NP 5, as in JD60, but the similarity between singular and plural does not permit such a clear picture of interference between classes. Some of the stems in this series, however, e.g. isiку́ ‘hoe’, are found in class 9a/6 in Rwanda or Rundi or in 5/6, cf. -sindá 5/6 ‘grave’ in Hunde.

The three series of class 10 realizations also occur in 11/10:

(70) lökèmbà, ngèmbà ‘clothing’ lóbêlê, bôlê ‘change’ lósákò, isâkò ‘tattoo’

In Tembo, the plural of class 11 is distinguished, with a few exceptions, from the plural of class 9:

(71) mbâó 9,10 ‘buffalo’ lûkândá, nyîkândá 11,10 ‘cave’

This split is similar to class 10b of Chaga (E60) or Dawida (E74a), but also to Zone B. In Nande, the same alternation n-/nye- is used as a variant in order to avoid a consonant change after a nasal or its deletion in adjective concord prefixes, the differentiation here affecting grammatical category:

(72) Nande sór’sùbê/nyêvi/nbî ‘a bad leopard’
   isîkù nyékñù/ñì ‘a small hoe’
mbîlà nyênìnè/ñènè ‘a big rain’

In Konzo, the process extends to -CV type adjectives in class 9, which are generalized in class 10:

(73) Konzo ènzêrá nyé:bê/ñù:hi/mbî:yâ ‘bad/short/nice path’
   èsyànzêrá nyé:bê/nyékñù:hi/nyèbô:yâ ‘bad/short/nice paths’

In Ganda, nnyi- results from Meinhof’s Law and therefore does not reflect the same process:

(74) nnyongera ‘I add to’ -ongera cf. ngâba ‘I divide’
   olunnyo ennyinyo 11/10 ‘stretcher’ cf. olûzi enzû ‘well’

### 3.1.2 Augmentatives and diminutives

Throughout the Interlacustrine area, augmentatives and diminutives are formed by the substitution of prefixes. This creates problems for homophonous stems and for those that
have already integrated into the classes concerned, which explains the existence of several autonomous classes.

- **Augmentatives.** Examples from Nande (JD40) are representative:

  (75) Nande
  
  - *mu-hámmba* 3/4 ‘knife’
  - *ki-hámmba* ‘big knife’
  - *ki-sándo* 7/8 ‘foot’
  - *kusandó* ‘long or big foot’
  - *kusándo* ‘big foot’
  - *mu-kálj* 1/2 ‘woman’
  - *i-kálj* ‘big woman’

  In the plural, pairings are irregular with a double choice that reflects the classes that might be considered most primary in the formation of augmentatives. Moreover, 7/8 is the most attested gender with this function in all of Bantu.

  Apart from the constraints linked with primary noun classes, the choice might be based on the distinction between ‘large’ and ‘long’, or may approach a system of derivation involving class switching to reflect pejorative or laudative nuances:

  (76) Nyankore
  
  - *omushájja* 1/2 ‘man’
  - *ekishájja* 7/8 ‘huge man’
  - *orushájja* 11 ‘very tall man’
  - *eishájja* 5 ‘aggressive attitude’

  The Nande example manifests all the augmentative classes attested in the Interlacustrine area with the exception of class 20, which only occurs in the compact area of the eastern region from Ganda-Soga to Kuria, passing through Luhya varieties, but nevertheless excluding Gusii (JE40).

  This class prefix (de Blois: 3a) is identical to the PP 3 and pairs with *mi*- NP 4 in the plural. It coincides with *ma*- NP 6 in Kuria, *ma-* in Ganda, and *gu-* in Soga. Its use, optional or not in a form similar to PP 6, shows the same interference between the two categories of prefixes in the singular and plural. These class 6 plurals coincide with the presence of a second augmentative 5/6 in these languages, which, although expressed differently, is reminiscent of the double plural of Nande, suggesting that 5/6 is more archaic in these languages:

  (77) Ganda
  
  - *misájja* 1 ‘man’
  - *óqisájja, áqásájja* 20/6 ‘giant’
  - *ssájja, gásájja/misájja* 5/6 ‘big, hefty or fat man’

  Kuria
  
  - *tríléyó* 5/6 ‘large seed’
  - *óyosááyga* 20/4 or 6 ‘large bead’

  This is a real gender since it triggers specific adjectival concord, as this Kisa example shows:

  (78) Kisa
  
  - *okuho:*do okúči:ši káno kwa:*je ‘this huge unripe pumpkin of mine’
  - *emiho:*do emíči:ši cíno čyá:*je ‘these huge unripe pumpkins of mine’

- **Diminutives.** Gender 12/13, the most attested Bantu diminutive, is present in JE25, JE30, JD60, and JD50. In this last group, however, the situation is complex and clearly demonstrates the disparity that exists.

- Besides 19/13 in Nyindu, Tembo and Shi, this last language also attests a diminutive 7/8.
Nyindu and Hunde attest both pre-prefixation and substitution for 12/13 in partially distinct uses.

In Nyindu, the pre-prefixation seems to associate diminutive and pejorative meanings:

(79) Nyindu  
ká-lú-kóbá, tú-má-kóbá  ‘small rope’  (not solid)  
hy-a:ná, tw-a:ná  ‘very small child’  
ká-kírá, tú-kírá  ‘small tail’

cf.  

In Hunde, the distinction is more original—and also exists for augmentative 7/8—although in a relatively unstable manner:

– Pre-prefixation (inserting an augment before the second prefix) marks only the diminutive/augmentative:

(80) Hunde  
kámbé:nè, twámbé:nè  ‘small goat’  kyámbé:nè, byámbé:nè  ‘big goat’

Prefix substitution can play the same role, or can designate ‘small’ in classes 12/13.

Classes 7/8 can mark the augmentative of a diminutive or convey pejorative meaning.

(81) Hunde  
hí:nè  ‘kid’  kátwi  ‘tiny ear’
khé:nè  ‘large kid’  kítwi  ‘deafness’

The class 19 prefix can also occupy these two positions and signifies ‘a little bit of’ or a plural with a pejorative nuance:

(82) Hunde  
hyúndú  ‘a bit of porridge’  hikátsí  ‘frail females’
hyábá:nà  ‘thin children’

This plural use of class 19 is found in Nande, in variation with 13 for some nouns that belong primarily to classes 12/13 or 12/19, and in Kuria, where class 19 (beside 8 and 14) can be used as the plural for the diminutive classes 12, 7 and 11.

(83) ihísíya  ‘small seeds’  ayaanto  ‘small person, small thing’

The use of class 11 to mark diminutives appears isolated, but, phonetically, class 11 of Kuria oro- is identical in Luhya varieties to class 13, which is absent in Kuria.

Examples in Hunde parallel the uses observed for class 13, which most often marks the plural of 12 but whose use is limited to ‘a little bit of’ in some languages, where the plural of the class 12 diminutive is therefore class 14. This situation exists in Rutara, in JE15 and Nyole, which is geographically close to Ganda. The specification ‘a little bit of’ sometimes appears in class 13 without class 12, attesting a double pairing:

(84) Nyindu  
híbë:má  ‘small peanut’  tíbë:má  ‘a few peanuts’
Ganda  otúzi  ‘drop of water’  otte:gó  ‘a speck of butter’
Haya  otujúta  ‘a little fat’  aka:na/obwana  ‘little child/children’
Kerebe  tu-zúta  ‘a little butter’  ka-bale/bu-bale  ‘little stone(s)’
Nyole  otújandi  ‘a few groundnuts’  oxágingi/oba:gingi  ‘little hill(s)’

In JD40, only 12/14 is attested for Nande, while in Konzo, 12/14 and 12/13 coexist without apparent semantic difference. Havu (JD50) has 12/13 and 19/14 and is therefore the only language in group JD50 to use the NP 14 in its formation of the diminutive. Recall that Havu is the only language in group JD50 where Meinhof’s Law functions as in Ganda. Also interesting is the use of this class 14 in the eastern extremity of the area, in Kuria.
where Cammenga (1994) notes the possibilities 7, 12, 11/14, 19 or 8 without specifying the criteria which determine the choice of one class or other. We also note a curious distribution in which Kuria is isolated, showing a phenomenon that brackets JE25, wedged between Kerebe, Kuria and JD60.

Class 8 is paired with ka- 12 in Bukusu and in Gusii, which does not attest class 13. In Kwaya (JE25), the normal plural of 12 is 8, but 13 is equally used:

(85) Gusii akajena, ebiqena ‘small stones’
Kwaya akamula, otumula ‘small boy(s)’

3.1.3 Locative classes

The three locative morphemes *pa- *ku- *mu- occur in pre-prefix position, only rarely occurring in prefix position (locative nouns), all across Interlacustrine. Yet there are important geographical differences. In J10/J20, e.g. the locative prefix (LP) 17 is rare if not nonexistent:

(86) Haya àhàkyàlò ‘in the village’ òmùkyàlò ‘in the village’
There is also a tendency to reduce concords. Class 16 agreement tends to replace those of classes 17 and 18 in JD60 and in Rutara, and the prefix involved may be repeated as a suffix:

(87) Rwanda kùmù–óyòbà háràkóñjá ‘at night, it is cold’
Nyankore oµunjù eg yö hùrinu abantu ‘in this house, there are people’
Haya òmùkyàlò hákàbà hálí hálíngi ‘in the village was good’

The choice of concord is determined either by the category of the dependent word or by syntactic and semantic criteria:

(88) Haya òmùkyàlò kyàngé ‘in my village’
òmùlùbajù lvènju ‘beside the house’
òmùkyàlò ìwìngè ‘in my village is mine’
The previous example demonstrates that concord 18 is attested in Haya alongside concord 16. The principal characteristic of Zone J is the LP 25, best developed in the western groups JD40, 50 and 60. Its use is limited to proper nouns of place and to ‘restrictive locatives’:

(89) Ganda elugala ‘at Lugala’
Lubya emusanda ‘at Musanda’
Shi écëùshi i écëùq ã écëntööndò ‘in Bushi, there are many mountains’

This LP, which occurs in northwest Bantu and Zone S, isolates Interlacustrine from Zones D and E, but spills over into Zone F, where it is present in Sumbwa. Sumbwa shares several features with Zone J that are absent from other F languages, which suggests the effects of contact [Sumbwa is most likely an original member of J: editors]. It is therefore the absence of LP 25 in JE25 and 40 that prevents it from being considered a characteristic element of the Interlacustrine area.

The semantics and syntax of locatives are complex. Semantic variations associated with the applicative suffix offer valuable indications as to their function and status:

(90) Rwanda ibùyì rígù-yé mù:nùrà ‘the stone fell on the path’
ùmùngóby yàjwúríyé mù:nùrà ‘the man fell on his way’
Haya ụkàbònà kàt’ominjù ‘I saw Kato (while he was) in the house’
ụkàbonèlà kàt’ominjù ‘I saw Kato (while I was) in the house’
3.2 The verbal system

3.2.1 Survey of conjugations

The verbal systems of Interlacustrine languages are rich and complex. Exhaustive descriptions being rare, comparison is often random insofar as the criteria for divisions in moods and tenses differ in the literature. As such, in Rundi, Meeussen distinguishes adhortative and optative moods which other linguists do not distinguish or join as 'subjunctive'. The structure of conjugated forms is ‘typically’ Bantu for most moods, tenses and aspects. Possible constituent morphemes are ordered: pre-initial (negative morpheme, focus marker), initial (VP), post-initial (negative), formatives (tense, aspect), infix(es), root, suffix(es), pre-final, final (tense, aspect), post-final. The following example includes most of these morphemes:

(91) Rundi nti-ba-zoo-tu-hit-ir-á-mwó ‘they won’t choose for us in that’
   not-they-future-us-choose-for-future affirmative-substitutive locative
cl.18

The pre-initial and post-initial are defined in relation to the VP considered as an initial morpheme and do not designate the OP or tense/aspect morphemes which can also occur after the VP. The negative can occur in either position depending on mood or tense, which explains why these positions are rarely jointly occupied:

(92) Rundi optative
   nímúkábùrè īhibòòndó ‘may you not lack in offspring’
   immediate conjunctive imperfective
   ... tükárákúbiárá ... ‘...without us sewing it...’

The following examples demonstrate the affirmative, particularly for finals:

(93) Shi: indicative absolutive narrative
   áábalúmë bá-á-bón-á ‘the men saw’
   far past perfect
   n-á-súnis-iré (-súnik-) ‘I pushed’
Rundi: subjunctive
   túbárìrè ‘let us sew’
   tü-zì-bárìrè ‘let us sew them’

subsecutive, conjoint … tükábáriirà împíùdzù ‘(and) we sewed the clothes’
Hunde: conditional, irrealis; conditional, simple resultative
   tw-à-ngá-ìenqà-iré njé tü-à-l-iré kwēbúndì ìkù
   ‘if we had disobeyed, then we wouldn’t eat this gruel’

The condition, as the action which depends on it, is classified in the conditional mood in Hunde.

Relatives are characterized by prefixes that are identical to those of pronouns and which differ, at least partially, from absolutive VPs. Furthermore, in the relative subjunctive, class 1/2 concord often occurs after a participant antecedent:

(94) Shi óómúkázi wásákâwiirè ‘the woman who pounded’ (relative, remote
   past)
   cf. óómúkázi ááshákâwiirè ‘the woman pounded’
Kísa ifwe áñårula kâkaâme ga ‘we who come from Kakamega’ (afba-cl. 2)

Relatives allow augments, like infinitives, which simultaneously carry verbal and nominal features, specifically at the syntactic level:

(95) Nande ɔmòndò ɔyòlërè ‘the man who is sick’
   cf. ɔmòndò alòlërè ‘the man is sick’
   ɔmòndò olòlërè ‘a man who is sick’
Across Interlacustrine, the class 15 NP characterizes the infinitive except in Nande (JD40) and Hunde (JD50) which have NP 5, likening them to the northwest where this class is more frequent. The significance of this isogloss must be kept in proportion since several languages attest class 5 forms, which Meeussen (1959) defines as verbal nouns in Rundi, beside the class 15 infinitive:

(96) … máiwbôonyê ñprûkà … ‘… who saw them going out’

In the literature, only Rwanda and Rundi are described as contrasting conjunctive and disjunctive:

(97) Rundi tùbàrììrà ‘we will sew’ (disjunctive, immediate)
    tùbàríìrà ìmpûzù ‘we are sewing clothing’ (conjunctive, immediate)

For details of conjugation, refer to Ch. 6. Here, we look at the details of certain morphemes.

3.2.2 Conjugational morphemes

vps

The second person singular and plural vps, u-/o- and mu-, have a wide distribution. However, in the first person plural, vpr īte-, frequent in Bantu, is replaced by xu-/ku- in JE30:

(98) Tsotso: xwaluma ‘we bit’

JE25 (Kwaya, Jita, Ruri) is alone in having the first person plural vpr ki-/ci-:

(99) Kwaya: kikole ‘that we do’

As across Bantu, in the first person singular, besides contextual variations already mentioned for NP 9, most languages attest specific forms whose occurrences are contextually unpredictable:

(100) Kwaya ni-li-kola ‘I did (a long time ago)’ n-da-kole ‘I will do’
    Luhya nd-a-khola ‘I have done’ cf. mw-a-khola ‘you (pl.) have done’
    ndi-li-khola ‘I will do’ cf. mu-li-khola ‘you (pl.) will do’ (far future)

The vpr en-/in- is curious. In the present progressive, the initial vowel is limited to the first person singular in JE30, whereas in JE25, all vps throughout the paradigm have it – with the exception of class 1 where the vpr ka-, to be discussed later, is replaced by the canonical vpr a-:

(101) Kisa e:nde:ma ‘I try’
    Luhya endeema ‘I am trying’ cf. muteema ‘you are trying’
    Masaaba Lusoba t:tsowa ‘I pound’
    Lufumbu indzowa
    Luhugu inzowa
The initial vowel is reminiscent of the augment whose use may characterize the relative – notably when the antecedent is defined or not expressed:

(102) **Nyankore**

- *abantu abakora* | ‘the men who work’
- *cf. abantu bakora* | ‘the men work’
- *Haya* | ‘those who help’
- *Kisa* | ‘a person who comes from Kisumu…’
- *omu:nda u-rul-a ešísumo…* | ‘the person who comes from Kisumu…’

This similarity suggests that relatives express the present continuous in JE25, which may be accounted for semantically as the result of focusing. However, the presence of the VP *ka-*-, since the relative generally attests the PP *u-* in class 1, casts doubt on this hypothesis.

The variation *y(a)-*/y-* unites the entire Interlacustrine area with the exception of the western (JD40, Talinga, JD50) and southeastern borders (JE25, JE40). It is attested for the class 1 *y* and conditioned by the presence of a formative *-a- (or of a following vocalic morpheme?), and, in certain languages by an OP of the shape *n-* in the first person singular:

(103) **Ganda** | *y-a-lab-a* ‘he saw’
- *Nyankore* | *kagoro ya:gar embuzi*
- *cf. katare ajen:nda aba:nage:nde* | ‘Katate wants the children to leave’
- *Haya* | *ényámi eyó kató y-ô-shäl-á*
- *cf. ömikutzy ‘á-ká-címb’ ébitóókè* | ‘the meat that Kato has cut’
- *Tsotso* | *yalasa ‘he stung’*
- *ya:ndamaanga (a-n-ram-ang-a)* | ‘the woman cooked the bananas’
- *Kisa* | *ya:xupa (a-n-xupa)* | ‘he beats me’
- *cf. axupa ‘he beats’
- *afínile* | ‘he blew his nose’
- **Rundi** | *yáábíímhwiiyê (á-áá-hí-m-bwür-yê)* | ‘he told me it’
- *Bukusu* | *ká:búlãl ‘ó:mvwán ‘ó:k:ú:nî* | ‘and he took another child’
- *cf. ámbílé…* | ‘she had survived…’

However, with formative *-a-:

(104) **Shi** | *áásiníře/řhváisíníře* ‘he/we pushed’
- **Jita** | *á:ció:téře* ‘he dreamed of us’
- *cf. básířéré (ci- ‘we’) ‘we named them’

Bukusu attests *ka-* as in the ‘present continuous’ in JE25. Yet, *k* and *g* in JE25 correspond to *x,k* in JE30, and notably in Bukusu:

(105) **Jita** | *ómú-gi:mbá* ‘barren woman’
- *Bukusu* | *ómú-ki:mbá* | ‘to buy’

This intriguing similarity reflects the impact of language contact.
The attested VP variations share the intrusion of a segment, which doesn’t occur in the western area or JE40. The very particular facts attested in JE25 also turn up in JE30 and illustrate the processes of diffusion in both directions.

Formatives

The most widespread formatives in the Interlacustrine area, -a-, -ki-, -ka-, -dá-/dáa- (da-a?), -na-, are common throughout Bantu. Several may follow one another in a single structure or demonstrate different tonalities, which alters their semantic value (tense and/or aspect).

The formative -ma-, on the other hand, is less common and especially characterizes the northwest. Its presence in Nande, Konzo, Hunde, Shi and Havu is situated in the extension of the area of distribution. This formative is also present in Jita and Ruri (JE25), isolated in the east. It is remarkable that -ma- is associated with the classic formative -a- on both sides of the area to mark the past, although it marks the immediate past on one side, the recent past on the other:

(106) Konzo
námági:lá ≠ ‘I have just bought’
ámikátsi amębútirá āmwámi 'the woman just bore a child for the king’
tú-á-mé-king-úl-á łútsi ‘we just opened a door’
-me- possibly -ma-i/e-;
'today we will return anyway’
(R) ni-á-má-á-súümik-á ‘I tied’ (intermediate past)
i-á-súümik-á ‘I tied’ (near past)

However, -ma- also occurs further east, e.g. in Chaga (E60), which changes the problem: most Interlacustrine varieties lack a morphological feature present on the east and west and beyond.

Suffixes, extensions and prefinals

For extensions see Chapter 5 in this book. All are present in Interlacustrine languages, but -at-, -am- and especially -at- are not very productive. Unlike -ik- ‘neuter’, -ik- ‘impositive, transitive’ is not attested as an extension, but can be recognized in some verbal stems.

Reduplicated extensions are accompanied by either semantic change or additional meaning (-il- ‘applicative’, -ilil- ‘intensive’ or ‘applicative intensive’; -ul- ‘reversive’, -ulul- ‘repetitive reversive’ in Tembo). The reduction of certain sequences such as -ul-il- to -wil- or -il-il- to -il- is well known. However, the contrast between the extensions -VC-, -VVC- and -VCVC-, attested in Rwanda and Rundi (JD60), and Havu and Shi (JD50), appears to be an isolated process. These extensions are not in free variation even though it is difficult to suggest a semantic and/or syntactic value to explain the choice of one over the other:

(107) Shi
óókúyóók-éér-á ‘to set fire to the bush’
óókúyóók-é-r-á ‘to grill for’
óókúlólé-éér-á ‘to look at something too much’
óókúlólá ‘to look at’
óókúsimik-irir-á ‘to persevere’
óókúsimiká ‘to endeavour’

The prefinal -ag- replaces -ang- in some parts of JE30. The prefinal is incompatible with the perfect final [except in Luhya: editors] and marks habitual except in Tembo.
and Hunde where it is associated with an ‘aspect momentané terminatif’. Furthermore, these two languages, as well as Talinga and Nande, contrast suffixal -ang- with prefinal -ag-. This suffix is defined as ‘durative’ in Talinga and Tembo, ‘iterative and frequenta-
tive’ in Nande and Hunde:

(108) Talinga  kalimàngà  ‘to be biting;  kalimà  ‘to bite’
fúlù fyuòù ñà ñé ñà ñèhùyà  ‘every day, he went hunting’ (far past
imperfective habitual)
Nande  -lòm-àgg-  ‘nibble at’  -lòm-  ‘to bite’
Hunde  i-fakà  ‘tattoo’  i-fak-àng-à  ‘tattoo a lot’
tw-à-nà-hing-ir-àg-à  mëndù  ‘nevertheless we cultivated for someone’ (hesternal concessive)
Tembo  nàtèmìgà  ‘I have just cleared’  nàtèmìgà  ‘I had cleared’

This situation suggests interference between two morphemes of different status, -ag- and
-ang-, and can be related to the presence of a suffix of type -agud- ‘repetitive’ in JD60,
and in Shi and Havu. It is, moreover, remarkable that in Haya, -ang-/an- are men-
tioned as reciprocal suffixes: -ang- is the current form, -an- is associated with the final
-ile. This distribution may be explained either in reference to syllabic structure, or in a
more comparative manner by linking it to the incompatibility between the perfect pre-
final and final.

Finals: -a, -e, and -ile

These finals carry different tones depending on the TAM category where they occur. The
final -e characterizes the subjunctive and the imperative as an infix, with the exceptions
of the presence of an OP in the first person singular, and occasionally in the future:

(109) Hunde  tùlùmìlé  ncerà  ‘that we follow a path’
Rundi  bàriàg  ‘sew’  mbàriàrìg  ‘sew for me’ m- or 1sg.
mubàriàrìg  ‘sew for him’ mì or cl. 1
Ganda  kì-wë  ‘give it’  m-pà  ‘give me’
but
Bukusu  mbë  fìyàxèñàyà  ‘give me food’

The final -a, which may be considered unmarked, is also associated with the imperfec-
tive, whereas -ide, -ire, -ye characterize the perfect:

(110) Hunde  tàhimìbìrè  hàlè  ‘we built far away’

When combined with suffixes, this final is realized with imbrication:

(111) Kisa  oxumàqìsa  ‘to become known’  amàqì: x ñà ñ-è  ‘he became
known’
oxukàlìla  ‘to buy for’  akàlì:le  ‘he bought for’

Apart from modifications linked to imbrication, verbal finals are of the type -VCV,
except in Rwanda, Rundi, and Ha (JD60) where the final is -ye and where Vr-ye → Vr:ye.
As shown in the examples, the semi-vowel is absorbed by certain fricativized consonants:

(112) Rundi  dìkùbihìyì  ìrùgò  ‘we just swept the yard’
cf.  dìkùbihìürì  ìrùgò  ‘we are sweeping the yard’
àràdiùçè  ì-rà-dìì-dàñ-è  ‘he swept’
This same final is attested in Talinga, although we are not sure it is the only one. It alternates with -ile, -ire in Ganda (JE15), in Kwaya, Jita, Ruri (JE25), and in Kuria (JE40):

(113) Talinga  tátwaændié  ‘we did not leave’
Ganda  twalimye  ‘we cultivated’
    tubadde (tu-ba-ide) tukola  ‘we have been working’
    -gend- ‘to go’ -genze  -buulira  ‘to tell’ -buulidde

In Ganda, -ye occurs after a root -CVC-. However, in the south -ye occurs after a root of type CV- and in realizations which imply a suffix of type -Vl/-Vr-:

(114) Jita  à:lëlìrë  ‘he has already followed’
    à:ləmì:yë (-ləm-ər-)  ‘he has already decided’
    à:li:yë  ‘he has already eaten’
    cf. à:mályë  ‘he ate’
Ruri  ni:sùrùmìuyë -surumur-
    ni:sùmikë -sumik-  ‘I untied it’
Kuria  m-ba-karànègyë  ‘I have fried for them’
    n-ga-tërkëryë  ‘I have brewed’

The similarity of the realizations of finals occurring after a root shape -CV- and in contact with the applicative is frequent in Bantu, whatever the form of the final. This is also the case in JE15, 25 and 40. The final -ye has a fragmented geographical distribution and a range of phonetic contexts. Note the following Kisa example, associated with a monosyllabic causative extension:

(115) Kisa  -sumya  ‘to extinguish’
    alo:njele (oxulo:nga)  ‘he created’
    -fwa  ‘to die’

The final -ete is only frequent in Gusii, connecting it with Zone E where it is better represented. However, it is attested as a specific final for certain verbs in many J (and other) languages:

(116) ábàànà mbàänëtë ébìnt(ò) ébìyìà  ‘children like new things’

Another feature that isolates Gusii from other Interlacustrine languages is the presence of a specific final -i in certain negative forms:

(117) titùmàñëtì àś(ò) àmënyëtë  ‘we do not know where he lives’

4 CONCLUSIONS

Despite its limited scope, this chapter outlines succinctly some details of Interlacustrine phonology and morphology. However, it does not deal with important domains like those of pronouns, syntax or the lexicon. Also, the data for certain languages are lacking or fragmentary.

Overall, Interlacustrine languages are typically Bantu and their essential features are described in the general chapters. The general impression is one of unity even if this is not transparent in this chapter since we have chosen to address the details, sometimes unique and for which the distribution only rarely coincides with that of another or several other groups. The restricted distribution of certain facts is intriguing (cf. §3.2.3: the VP first person plural ‘ku- or the verbal formative -ma-). We also observe that seven vowel
languages are situated at the northwest and southeast fringes, where they only occupy a part of the perimeter. This suggests that the central languages spread by absorbing certain varieties or by pushing them towards the east. If the distribution of the final -ye turns out to be relevant, we can suppose that JE15 and JD60 were in contact before being separated by JE10/20, which indirectly confirms certain shared features by Ganda and all or part of JD50, moreover quite similar to JD60.

The boundary of Zone J is clear to the west even if the fringe languages of Zone D have a definite impact on JD50. To the southeast, the boundary is less clear since Gusii is often isolated. Furthermore, despite certain affinities with Kuria, JE25 varieties have intriguing similarities with languages in Zone G (notably G10), so that the VP *ki-* (first person plural) reflects *ci-* in Gogo and Kaguru where *k* → *c*/–i, (cf. *ki-* in Zigula (G31)), and the class 1 VP *ka-* is also attested in Gogo. This very partial study leaves open numerous questions which deserve further study.

REFERENCES

CHAPTER TWENTY-SIX

RUFIJI-RUVUMA (N10, P10–20)

David Odden

1 INTRODUCTION

This chapter presents structural basics of the languages of zones P10–20. With Ndendeuli, Ngoni, Matengo and Mpoto (N10), the P10–20 languages comprise the Rufiji-Ruaha group of Nurse (1999). Proceeding southwards in Tanzania from Dar-es-Salaam, Rufiji (P10) is composed of Ndengereko (110,000 speakers, according to Grimes 2000), Rufiji (200,000), Matuumbi (72,000) south of the Rufiji river, and Ngindo (220,000) around Liwale. Spoken inland around Ifakara, Mbunga (29,000) is also assigned to P10 by Guthrie. Nurse (1988:36–40) discusses the hypothesis that Mbunga was historically a P language much influenced by G50, or the opposite, and concludes that it probably started life as a P language. P20 is composed of Mwera (400,000) in Lindi region south of Ngindo, Machinga (36,000), Yao (1,597,000) spoken from the Makonde Plateau to Tunduru and south into Malawi and northwestern Mozambique, and Makonde (1,260,000) in the southeast corner of Tanzania and northeastern Mozambique. Yao and Mwera are very closely related, and might be treated as dialects: their similarity is comparable to that of the Makonde dialects. Makonde is no closer to Yao and Mwera than P10.

This chapter focuses on Matuumbi as a representative of P10, Yao (primarily the Tunduru dialect and Mozambican Yao from Ngunga 1997), and Makonde, focusing on the Shimakoonde dialect of Mozambique (Mak.), with additional data from Chimaraba (Mar.) and Chimahuta (Mah.) of Tanzania. Additional information will be added from Mwera, Ngindo and Ndengereko based on my own field notes, and Ngonyani (1999) on Ndendeuli (apparently a Rufiji language). Sources of further information on these languages are as follows. Kimatuumbi: Odden 1996; Mwera: Harries 1950; Yao: Ngunga 1997, Sanderson 1922, Whiteley 1966; Makonde: Guerreiro 1963, Liphola 2001, Odden 1990a, 1990b, Yukawa 1986b.

2 PHONOLOGY

2.1 Vowels

The Rufiji languages maintain seven vowels [j, e, a, o, u, l], but P20 has [i, e, a, o, u], cf. Matuumbi iimb-a ‘swell’, mulik-a ‘burn’, bliing-a ‘chase’, lam-a ‘bite’, belek-a ‘give birth’, lol-a ‘look at’, baamb-a ‘stretch’; Yao iimb-a, mulik-a, ving-a, lam-a, velek-a, lool-a, vaamb-a; Makonde viimb-a, mulik-a, ving-a, luaum-a, velek-a, lool-a, vaam-a. Vowel length is preserved in Rufiji (except Ndendeuli) and Yao-Mwera, but is lost in Makonde, where length is reintroduced by penultimate lengthening and fusion of V–V sequences: word-penult vowels would be short phrase-medially in the Makonde examples.

(1) Matuumbi  
Yao  
Makonde

tjl-a  til-a  til-a  ‘flee’
in-a  vin-a  viin-a  ‘dance’
Ndengereko, Ngindo and Ndendeuli have nasal vowels, cf. Ndengereko ba-të-hëbëk-ya-‘they came out for me’, ba-të-bëbëk- ‘they came out’; Ngindo jëk-ilë ‘I came’, a-hëk-ilë ‘he came’; Ndendeuli mëhë ‘well’. Nasalization arises by prefixing the 1s prefix to vowel-initial verbs in Ndengereko, by progressive nasalization (skipping $h$) in Ndendeuli (ba-ki-$t$hëh-â ← ba-ki-mu-hëh-â ‘they hid him’) which persists even if the nasal deletes before $h$ (hâbi ‘witch’ ← mu-hâbi, ba-ki-hëh-â ← ba-k i-N-hëh-â ‘they hid me’), and in Ngindo also by vocalization of /mu/ before /$h$/ (ëhëëmb-e ‘you should dig’, cf. nëchëëng-e ‘you should build’).


Unusual in Bantu, Makonde optionally reduces unstressed (pre-penult) mid vowels to a, resulting in alternations such as këtë-tëkë-l-a ~ këtë-tëkë-l-a ‘to give up’, va-nda-tët-ël-a ~ va-nda-tët-ël-a ‘they will sew for’.

Vowel sequences are avoided to varying degrees. Matumbi has the greatest tolerance for vowel hiatus. High vowels desyllabify prevoically; myëhööto ← mëhööto ‘fires’ (mëhööto ‘large fires’), kyëhëlë ← këhëlë ‘frog’ (këhëlë ‘small frog’), lwëhëtë ← luëtë ‘banana hand’ (atë ‘banana hands’). Glide Formation lengthens the following vowel: initial length is contrastive, so see also mwëëëla ← mwëëla ‘in money’ (ëlu ‘money’), luêëke ← luëëke ‘storage structure’ (muëëke ‘storage structures’), with an invariant long vowel. Combinations of $a$ plus a high prefixal vowel optionally coalesce, thus a-ëtëlilë ← æëtëlilë ‘he cooked them’, pëtiëkëtë-ë ← pëtiëkëtë ‘when you cut’, naëkëtëpë ← nooëkëtëpë ‘with dirt’, but not between prefix and stem vowel, cf. a-tëëte (‘eeeute’) ‘he danced’, except in a very few lexically marked nouns and adjectives (mëool ← mëool ‘tears’ (lyëool ‘tear’), bëtëpë ← bëtëpë ‘light (class 2)’). There is fusion of $a+a$ when the first $a$ is in the subject prefix (aändëjë ← aändëjë ‘he wrote (recent)’) but not

In Makonde, hiatus is eliminated within the word and phrasally. High vowels become glides before another vowel (which lengthens), cf. myódaaka ← miókaaka ‘years’, kwíáaadáula ← kúáiáadá-ul-á ‘to destroy’, lyééce ← lúúéce ‘fruit’, kwéóáolóota ← kúáióolóöt-a ‘to point’. The vowel a merges with a following vowel, giving a long mid vowel as in mčémbe ← matóčèmbé ‘mangos’, mčkě ← matókí ‘stumps’, moomgááno ← maλtungááno ‘unity’. Phrasally, non-low vowels undergo glide formation without compensatory lengthening, cf. dinýgalóshy amééna ← dinýgalóoshi amééna ‘cashews, eat them!’, lúúétély éépa ← lúúétáčélé éépa ‘cucumber, harvest it!’

Preceding a deletes, as in lúmboondá ukaánga ← lúmboónnda ukaáanga ‘pumpkin, wash it!’

Some vowel hiatus remains in the Chimaraba and Shimakonde dialects, cf. lu-míábaáu ‘rib’, siilééáu ‘beard’, siiýíyáai ‘broom’. The consonant h found in Mahuta is deleted in Maraba and Shimakonde, creating new vowel hiatus. This hiatus remains if the result is a falling diphthong, as in (Mahuta) máthíiúíita, (Shimakonde) mátiúúita ‘oil’, (Mahuta) lííkááhi, (Shimakonde) lííkáái ‘bark’, (Mahuta) n’ááhu (Shimakonde), ín ááu ‘body dirt’. If the first vowel is high, glide formation applies too, as in (Mahuta) lu-hííimu, (Shimakonde) lííimu ‘song’;

(Mahuta) lííhiúúándí, (Shimakonde) lííündí ‘cloud’ (cf. máthímúndí ‘clouds’).

Avoidance of hiatus is most strict in Yao (and Mwera), which have no V-V sequences within the word. Vowel fusion and glide formation are the rule within the word, with coalescence of a + V: giving a mid-vowel: cf. Yao méeéso ← matíso ‘eyes’ (lííso ‘eye’); moomngu ← maλtungu ‘pumpkins’ (lyííangu ← líííangu ‘pumpkin’), myííéésí ← miííésí ‘moons’, mwiísí ← mwiísí ‘pestle’ (míísi ‘pestles’).

Matuumbi shortens vowels which are too far to the left in an utterance. At the word level, stem vowels are generally shortened before the antepenultimate mora, thus âánd-ik-a ‘write’, âándj-ij-a ‘make write’; tyáýaak-jy-ýa ‘plaster’, tyáýajak-ýý-ýw-a ‘be plastered’, kâát-a ‘cut’, kâat-ýk-a ‘be cuttable’. With two long vowels, the first is shortened (lúóíang-a ‘request’, lúóng-ýél-ý ‘speak’; tîl-a ‘run’, tîl-ýiýáng-a ‘run (pl.)’, tîw-k ‘break off’, tîw-aan-a ‘break pointlessly’).

Similar word level shortening affects reduplicative stems. A long vowel in the penultimate syllable of a reduplicant (the second stem copy) is not shortened, cf. kâát-a → kâát-kaat-a ‘cut’; yíyúut-a → yíyúut-a-yóuyúut-a ‘whisper’ (the first stem is shortened by positional limits on long vowels). A long vowel before the penult shortens, cf. kâát-an-a → kâát-an-a-kat-an-a ‘cut each other’. At the phrasal level, long stem vowels are shortened in a word which is the syntactic head of the phrase, followed by a modifier in the phrase, cf. the alternations kjikulóombo ‘cleaning shell’, kjikulóombo chíaángu ‘my cleaning shell’; n-aa-nîkáálan-ýele li ‘I fried for him’, n-aa-nîkáálan-ýele li ‘I didn’t fry for him’.

Mwera allows only a single long vowel in the stem, so when two long vowels would be present, only the rightmost remains long, thus jw-aa-ngóiîkláang-a ‘he (jr.) didn’t fry’, v-aaangóîkîláng-áang-a ‘they didn’t fry’; n-aa-ñseeγe-j ‘I counted’, vaañseeγe-ñe-j ‘they counted’.

In Yao-Mwera, vowels are lengthened before NC sequences (Hyman and Ngunga 1997), within and between words, thus /ku-nápáta/ → kau-míiháta ‘to get me’, /chílo míbit-ilé/ → chíloó míbit-ilé ‘at night I got’. Yao and Mwera also have a contrastive syllabic nasal deriving from reduction of /mu/, which is phonetically tone-bearing, and which does not cause lengthening of a preceding vowel, as in /ku-mu#pát-á/ → [ku-ɲ#pát-á] ‘to get you pl.’. This nasal shortens a preceding long vowel, as in
/chi-á-muhtéléch-el-é/ → ch-á-áhtéléch-el-é ‘he will cook for you’ (cf. /chi-á-tutéléchele/ → ch-á-áttéléch-el-é ‘he will cook for us’ with lengthening of /u/ from glide formation).

In Mozambican Yao, there are a few non-syllabic, non-moraic nasals which cause no lengthening but are otherwise identical to the nasal which triggers lengthening, viz. kuñjánda ‘to be tough’.

Makonde having lost vowel length, there is no lengthening before NC. Matuumbi lost pre-NC lengthening, so there is no automatic lengthening there (cf. pañjánda ‘to agree on things’, n-tindí ‘buttermilk’, pañindó ‘where there is a bucket’). Within a morpheme, there are few short vowels before NC clusters, cases like áándá-ka ‘to write’, ándloónga ‘family’, bëend-á ‘to shout’, bëundal-á ‘to get blunt’, chëeng-á ‘to build’ being more typical. Across morphemes, vowels do not lengthen, cf. ku-nilipáala ~ ku-míbháala ‘to want me’, nga nídimíni ‘it is a warthog’.

2.2 Consonants

The consonants of the three main P zone languages are as follows; rare phonemes are listed in parentheses:

(2) Matuumbi  Yao  Makonde

<table>
<thead>
<tr>
<th>Matuumbi/Ngindo</th>
<th>Yao/Mwera</th>
<th>Makonde</th>
</tr>
</thead>
<tbody>
<tr>
<td>p t ch k (s)</td>
<td>p t ch k s (f)</td>
<td>p t ch k s (sh)</td>
</tr>
<tr>
<td>b d j g</td>
<td>b d j g</td>
<td>b d j g</td>
</tr>
<tr>
<td>m n Ñ n’</td>
<td>m n ny n’</td>
<td>m n ny n’</td>
</tr>
<tr>
<td>w l y</td>
<td>v w l y</td>
<td>v w l y h</td>
</tr>
</tbody>
</table>

where <ch> and <sh> are phonetic [č] and [š]; <n’> is phonetic [ŋ]; also, <v> in Yao (and Mwera) is bilabial [β] but labiodental [v] in Makonde. The palatal nasal is indicated as <ŋ> in most languages since it does not contrast with a sequence of n + y, but in Matuumbi the two do contrast so the palatal nasal is indicated as <ñ>.

The Mwera equivalent of Yao /w/ is [s], but [ɛ] after nasals; in Makonde the phonetic value of /w/ is [ɛ] in Mahuta, Maraba but [s] ~ [s] in Shimakonde, except when preceded by a nasal where it is [č]. In Matuumbi, [s] is a rare phoneme marginally contrasting with [č]. Ndengereko has [s] and [z] where Matuumbi has [č], [ʃ]. Ngindo and Ndengereko also have h (Ngindo kañhin-a ‘to dance’, Ndengereko kuñhák-a ‘to hunt’). Harries reports ‘latent h’ in Mwera careful speech, but speakers I worked with (two generations later) have no trace of [h].

Voiced stops are generally found after nasals. In Matuumbi b, g are found everywhere, and j is found root-initially before j; [d] and [j] are otherwise rare. In Yao, independent [b] and [d] not preceded by a nasal are rare, except Mozambican Yao changes /w/ into [d] before [i]. Other than in postnasal position, the voiced stops in Mwera and all of Rufiji are implosives.

Sequences of nasal plus consonant are modified, depending on the underlying nature of the consonant and the nasal. Two kinds of nasals must be distinguished. One, the N-type nasal, acts as a nonsyllabic consonant, and is represented by the verbal 1 sg subject and object prefixes and the class 9–10 noun prefix. The other is a syllabic consonant, from reduction of /mu/ to [m], as represented by the noun prefixes for class 1, 3, locative mu- (which sometimes does not reduce), and the verbal prefix for class 1 object and 2 pl. subject and object. The treatment of postnasal voiced consonants is particularly complex in this group.
Consonant changes in Matuumbi NC sequences follow.

(3) p,t,ch,k b,l,j,g w,y m,n,ñ,n'
   N mb,nd,nj,ng mb,nd,nj,ng ngw,ng m,n,ñ,n'

Nasals agree in place of articulation with the following consonant, so orthographic <nk> is [kn] and <nn'> is [ŋŋ].

Voiced consonants nasalize after the syllabic nasal (n̩n̩wáawá ← mu̩n̩wáawá ‘woman’, m̩m̩̱m̩áanda ← m̩u̩m̩áanda ‘slave’, n̩n̩wáachí ← m̩u̩wáachí ‘thinker’), and the nasal assimilates in place of articulation following nasals and voiceless consonants (m̩m̩m̩áti ← m̩u̩m̩m̩áti ‘plasterer’, k̩u̩-n̩t̩u̩l̩e̩k̩-y-a ← ku̩-mu̩t̩u̩l̩e̩k̩-y-a ‘to cook for him’). After nonsyllabic N, obstruents are voiced (n̩d̩l̩á ← N̩d̩l̩á ‘road’, n̩d̩l̩íjíké ~ n̩j̩l̩íjíké ‘I cooked (recent)’, m̩̱b̩̱lá̱á̱í ← N̩p̩̱lá̱á̱í ‘bald heads’), glides harden to voiced stops (m̩j̩í̱m̩í̱a ← N̩y̱í̱m̩í̱a ‘poles’) and nasals degeminate (m̩m̩áänd̩w-á ← N̩m̩m̩áánd̩w-á ‘nailed up (class 9)’).

The treatment of voiceless consonants after nasals is the same in Ngindo, Ndengereko and Ndendeuli as in Matuumbi, but the languages differ in the treatment of postnasal voiced consonants in verbs. In Ngindo, voiced consonants nasalize after both types of nasal: nyéé-ítê ← N̩y̱j̱éé-ítê ‘I went’, neéé-ítê ← N̩y̱léé-ítê ‘I brought’, mutwíjké ← N̩ḇu̱ṯwíjké ‘I ran’, m̩-ú̱-n̩p̱-é ← n̩-ú̱-ḻí̱pe ‘you should pay me’ = m̩-ú̱̱-n̩-p̱-é ← n̩-ú̱-ḻí̱p̱-é ‘you should pay him’, m̩-ú̱ḏm̩a̱ḻi̱a̱ŋ̱-é ‘you should count me~him’. However, there is no nasalization in nouns after N, cf. m̩ḇ̱ú̱ų̱ ‘goat’ (PB *m̩ḇ̱ú̱ḏų̱), N̩g̱̱̱̱j̱g̱̱ ‘ropes’ (lu̱-g̱̱j̱g̱ ‘rope’). In Ndengereko, nasalization after /mu/ is optional (though most frequent) in verbs, so one finds ni̱-n̩-ŋ̱̱̱̱j̱n̩̱ḏa̱m̱u̱m̱w̱i̱j̱y̱e ~ ni̱̱-ŋ̱̱̱̱j̱n̩̱-̱̱ḏa̱m̱u̱m̱w̱i̱j̱y̱e ‘I scared him’, ni̱-m̱̱ḇ̱ú̱ų̱g̱̱ ‘I killed him’. Ndengereko also has Ganda Law where /l/ is deleted in the context Ṉ-VN, seen in the alternations a-n̩daḻw̱i̱j̱y̱e ← a-Ṉdaḻw̱i̱j̱y̱e ‘he asked me’, a-n̩ḇ̱é-í ← a-Ṉḇ̱é-í ‘he left me’, ḇu̱a̱-m̱̱ḇ̱ú̱ų̱g̱̱ ‘he greeted me’, a-n̩̱a̱ṉ̱m̱u̱m̱w̱i̱j̱y̱e ← a-Ṉ̱a̱ṉ̱m̱u̱m̱w̱i̱j̱y̱e ‘he greeted me’. In Ndendeuli voiced consonants fuse with N into a nasal consonant (a-ki-Á̱ṈṈḻe̱ṯ-a → a-ki̱-Á̱ṈṈle̱ṯ-a ‘she brought me’, a-ki̱-Ṉ̱g̱̱̱̱g̱̱-a → a-ki̱-Á̱ṈṈg̱̱̱̱-g̱̱-a ‘she carried me’), but the nasal of mu- just assimilates to a following voiced consonant (a-ki-m̱̱ḇ̱óṉ-a → a-ki-m̱̱ḇ̱ó̱ṉ-a ‘she saw him’, m̱̱u̱-ḻu̱m̱a̱ → ṉ-ḻu̱m̱a̱ ‘hunter’).

The phonology of NC sequences in Yao is spelled out below.

(4) p,t,ch,k b,l,j,g d m,n,ñ,n'
   N mb,nd,nj,ng mb,nd,nj,ng ngw,ng m,n,ñ,n'
   (9–10 noun N) mb,mb,nd,nj,ng mb,mb,nd,nj,ng nn nn,nn,nn,nn,n'

The reduced prefix /mu/ is realized on the surface as a syllabic nasal, and assimilates in place of articulation to the following consonant, as in chi-n̩ḏp̱aṯ-e ‘you (pl.) will get’, chi-ṉ̱-ṯ̱u̱̱ḻe̱-e ‘you (pl.) will cook’. Voiceless consonants become voiced after N- (chi-ṉ̱ḏe̱ḻe̱-e ← chi-ṉ̱-ṯ̱u̱̱ḻe̱-e ‘I will cook’, ṉ̱g̱̱i̱m̱̱á̱ḻé ← ṉ̱ḵ̱á̱m̱̱i̱ḻé ‘I milked’).

The disposition of voiced consonants after nasals is more complex. After N-, voiced consonants generally nasalize and degeminate, so Ṉ-y̱ → m̱, Ṉ-ḻ → ṉ, Ṉ-g̱ → ṉ, (j̱u̱-ṉ̱ḏm̱á̱cẖi̱-le̱ ← j̱u̱-Ṉ̱ḇ̱ẖ̱v̱̱a̱ḵ̱ṯ̱i̱-le̱ ‘she built for me’, ḵ̱u̱̱ṉ̱á̱p̱̱a ← ku̱̱-Ṉ̱ḻ̱á̱p̱̱a ‘to curse me’, cẖ̱u̱̱ṉ̱-oṉ-e ← chi-Ṉ̱g̱̱̱̱ṉ̱g̱̱-e ‘I will sleep’). In Mozambican Yao, /ã/ nasalizes (j̱u̱-ṉ̱ḏm̱a̱ḏu̱ḏi̱-le̱ ← j̱u̱-Ṉ̱ḇ̱ẖ̱u̱ḏ̱u̱ḏi̱-le̱ ‘she broke off for me’), but [d] does not (j̱u̱-ṉ̱ḏḏé̱le̱ ← j̱u̱-Ṉ̱ḏḏé̱le̱ ‘s/he underestimated me’). In other dialects, there is variation between hardening and nasalization, so Sanderson reports ti-ṉ̱ḏḏoḻ-e ← ti-Ṉ̱ḻ̱̱̱̱ḻ̱oḻ-e ‘I will look’,
n$gon-e ← ti-n$gon-e ‘I will sleep’. Whiteley reports free variation n$dol-e ~ nol-e ← ti-N$hol-e ‘let me look’ in Masasi, and the dialectal variants chii’n’-on-e (Tunduru), ti-n$gon-e (Masasi) ‘I will sleep’. I have found hardening of l in Tunduru n$dim-îlé ‘I cultivated’, chi-n$dy-e ‘I eat’, but nasalization of other voiced consonants (mal$ââs-île ← N$ââlaas-île ‘I counted’, ny$i$jele ← Nh$i$jele ‘I took’, n’um$ngville ← Nh$guangville ‘I harvested’); I also find the variation n$dim-îlé ~ nim-îlé (also limîlé, with deletion) in Masasi. Nasalization is the most common pattern, and is the general rule in Mwera, viz. nim-îlé ← n$lim-île, shi$mââlaangany-e ← shi-N$hââlaangany-e ‘I will count’, n’w$île ← Nh$gviile ‘I fell’, though Harries gives ku-mâ$bulag-a ~ kâ$mulag-a ‘to kill me’.

Another rule involving NC in Mozambican Yao is Ganda Law, which deletes /d/ after a nasal when followed by an NC sequence, as nh$âandawiile ← N$-âandawiile ‘I lamented’, muu-n$tiimbiile ← mu-N$tiimbile ‘you insisted on me’. The Yao version of Ganda Law specifically requires a following sequence NC, so a simple nasal does not trigger the rule (n$dim-îlé ← Nh$dim-îlé ‘I cultivated’), which contrasts with Ganda Law in Ndengereko, where a simple nasal triggers the rule (cf. Ndengereko aa$mâ$$mâyu ← aa-N$â$mâyu ‘he will greet me’).

After /mu/, voiced consonants generally harden to stops in Yao, cf. nga-ni-n$hoog-a ‘you haven’t bathed’, nga-n$gon-a ‘you won’t sleep’, chi-n$dy-e ← chi-m$ulye ‘you will eat’. However, /n/ nasalizes, as in nga-n$malââng-a ‘you won’t count’. In Mozambican Yao, on the other hand, labials appear as stops (tu-n$âbâtîâkhe ← tu-m$âbâtîâkhe ‘we stuck on you’, tu-n$âbâmîile ← tu-m$âbâmîile ‘we built for him’) and l appears as a nasal (ka-n$mâpâ ← ka-m$âlapa) ‘to curse (2pl.)’.

Nouns follow slightly different principles; voiced consonants after N- undergo hardening, not nasalization, thus n$hâtè ‘salt’ (ka$hôtè ‘dim.’) n$âongo ‘sleep (pl.)’ (lu$âongo (sg.)). Most nouns appearing in class 9–10 which historically had an initial voiced consonant have been reanalysed as having an underlying voiceless consonant, viz. Proto-Bantu *mi$bâ ‘goat’, Yao n$âbâsi which is synchronically analyzed as Nh$âpâsi, cf. diminutive ka$hîpâsi.

Makonde also distinguishes the segmental effects of N- and mu. Voiceless consonants are unaffected after /mu/ as in kâ-n$tiimny-a ‘to pinch him’, kâ-n$talak-câl-a ‘to cook for him’, save for affrication of /s/ to [ch] (kâ-n$chom-ced-y-a ← kâ-n$om-ced-y-a ‘to read for him’); voiceless consonants nasalize after N- (kâ-n$tiimny-a ‘to pinch me’, kâ-n$talak-câl-a ‘to cook for me’, kâ-n$nymom-ced-y-a ‘to read for me’). After N-, voiced consonants harden (kâ-n$hyââ-a ‘to kill me’, kâ-n$baââng-a ‘to count me’, kâ-n$doâl-a ‘to look at me’). After /mu/, voiced continuants (l,v) nasalize (kâ-n$maââng-a ← kâ-n$maââng-a ‘to count him’, kâ-n$noâl-a ← kâ-n$loâl-a ‘to look at him’), but voiced stops are unchanged (kâ-n$beâb-a ‘to hold him’, kâ-n$doâl-a ‘to eat him’).

2.3 Tone

All P-zone languages are tonal (though Ndengereko is losing distinctive prosody under Swahili influence). In terms of tonal inventory, all languages restrict contour tones to heavy syllables, long vowels, and VN sequences in Yao and Mwera. Makonde has the richest system of contours, allowing a 5-way contrast on the (automatically long) penult between LL (nin’îndî ‘top’), HH (li’hââla ‘live coal’), HL (li’hââna ‘wound’), LH (li’hâ$$nda ‘hole’) and LHL (li’hâ$$dî ‘shoulder’); Matumbi allows LL (ch’âândîukî ‘taste sour’), LH (m$$bî$$po ‘machete’) and HL (îmîb ‘swell’), but generally avoids HH. Tonal processes found in this area include Tone Doubling in Makonde (va-n$$dî$$lîk$$-an-il$$a ← va-n$$dî$$lîk$$-an-il$$a) ‘they cooked for e.o.’ and Yao
(kūtīpīlikan-il-a ← kūtīpīlikan-il-a ‘to listen’), but not in the Rufiji languages. Unbounded spreading is found in Makonde (pā-tū-siîtālāk-an-il-a ← pā-tū-siîtālāk-an-il-a ‘when we cooked for e.o.’). There is attraction of final H to a long penult in Matuumbi (m̩boópo ← m̩boó pó ‘machete’) and Yao (n-aaltīpā姆āmbuwiile ← n-aaltīpā姆āmbuwiile ‘I uncovered’). Lastly, prepositional H is strongly avoided in Makonde, so only one tense (the subjunctive) allows a final H.

The most noteworthy feature of tone in zone P is the system of predictable verbal tones. Unlike most Bantu languages, there are no lexical contrasts in verb roots. Instead, surface tones are assigned to various positions, depending on tense-aspect. In Yao, H is assigned to V1 in the infinitive and distal subjunctive (kūtīpīlikēëne ‘we listened (recent)’, nga-ni-tūpīlikān-a ‘we didn’t listen (remote)’, tu-kātīpīlikān-ag-a ‘if we don’t listen’), V1 and V2 in the suggestive negative (nga-sī-tūpīlikān-a ‘let’s not listen’), and the final vowel in the remote past (tu-aatīlim-īlé ‘we cultivated (remote)’). The stem is toneless in the future and subjunctive (chi-tūpīlikan-e ‘we will listen’, tuūpīlikan-e ‘we should listen’).

In Matuumbi, H is assigned to V1 in most main clause tenses, cf. k̩aāt-a ‘to cut’, b-aatītlek-e ‘they will cook’, b-aa-gaamtājike ‘they cooked them (class 6) (rem.)’, eend-a-nōo̍̄tītelek-a ‘he is even cooking’. In some verb-focal tenses, H appears on the final vowel as in n̩t̩j̩balaan̩-ā ‘I counted (rec)’, eend-ā̃x̩aat-ā ‘he’s cutting’. H appears in V3 in the subjunctive (bātītem-ē ‘they should chop’, n̩tītelek-ē ‘you (pl.) should cook’, u̩n̩dīnl̩-ē ‘you should guard’, ī̃ insult ‘it should shine’, ī̃b̩ỹaun̩dīỹ-e ‘you should blurt’, u̩n̩k̩̃eenĝ̬̂m̩-e ‘you should dig’). When-clauses assign H to V2, as in pa-bā̃kān̩-ū-kun-a ‘when they grate’, pa-n̩ãax̩aat-a ‘when I cut’, pa-u̩n̩dīn̩-a ‘when you guard’, pa-ā̃k̩̃ĩn̩dīn̩-a ‘when he guards it (class 7)’; in recent past when-clauses, H appears on V2 and the final vowel (pa-aat̩īx̩aat-īj̩-ē ‘when he cut’, pa-aat̩̃keenĝ̬̂m̩-ē ‘when he dug up’), and in remote past when clauses, H is on the final vowel (pa-n-aat̩̃ĩtem-īj̩-ē ‘when I chopped’).

Tense-determined tone assignment in Makonde verbs focuses on the type of tone on the penult (where nearly all words have H), so one finds rise in the recent past and future (tu-ndītītalāc̩-ē ‘we cooked’, tu-n̩d̩̃atītalāc̩-ē ‘we will cook’), level H with spreading from the stem initial in the infinitive (k̩̃talāc̩-ē ‘to cook’), rise-fall in the remote past and conditional (tu-ndītītalāc̩-ē ‘we cooked (rem.)’, tu-kaatītalāc̩-ē ‘if we cook’), level H in the negative past progressive (a-tū-siîtālāc̩-ē ‘we weren’t cooking’).

3 Morphology

3.1 Noun classes

The core Bantu noun classes are well represented in zone P, but the system of agreement has undergone restructuring. The class morphemes of Matuumbi are listed below. Distinctions are made between prefixes on nouns, nominally-inflected adjectives (adj(n)), quasi-verbally-inflected adjectives (adj(v)), the numeral ‘1’, other agreeing numerals and determiners such as possessive pronouns and demonstratives.

<table>
<thead>
<tr>
<th>(5) Class</th>
<th>noun</th>
<th>adj(n)</th>
<th>adj(v)</th>
<th>obj</th>
<th>l</th>
<th>2+</th>
<th>det</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mu</td>
<td>mu</td>
<td>yu</td>
<td>mu</td>
<td>yu</td>
<td>yu</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(b)a</td>
<td>(b)a</td>
<td>ba</td>
<td>ba</td>
<td>a</td>
<td>ba</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>mu</td>
<td>mu</td>
<td>u</td>
<td>u</td>
<td>gu</td>
<td>gu</td>
<td></td>
</tr>
</tbody>
</table>
There is a lexical split among adjectives where some stems (-kálu ‘big’: muñándu, ndikálu ‘big person’, ndó ngakulá ‘big bucket’) select adj(n) and some stems, especially deverbial ones (-ndañogá ‘good’ ← nóg-a ‘be good’: muñándu yì-ndañogá ‘good person’, ndó i-ndañogá ‘good bucket’) select adj(v), sometimes with the associative -a following the agreement prefix as in ndó y-a-ndañimá ‘many buckets’.

The class pairings in Matuumbi are typical of Bantu, viz. 1–2, 3–4, 5–6, 7–8. An innovation in Matuumbi is that most nouns in class 9 select a plural in class 6, viz. miñáwá ‘dog’, ma-pwá ‘dogs’. Some class 9 nouns are invariant in the plural (ndo ‘bucket(s)’), and could be assigned to 9–10, though there is no synchronic reason to distinguish historical classes 9 and 10. Exemplars of singular-plural pairings are as follows. 1–2 muñáána ← muñáána ← ba ána ‘child’; 3–4 ndikánu-ndo ← miñá-ndo, miñá-ndo ‘sieve’; 5–6 liñkánu-nda, mañkánu-nda ‘filtered beer’; 7–8 káñgómá, káñgómá ‘cassava’; 9–6 miñáwá, mañpáwá ‘dog’; 11–9 luñgójá, ngój ‘rope’; 12–13 kañlaalá, tulaalá ‘bamboo (dim.)’; 14 bwa-káñgómá, ku-káñgómá, mu-káñgómá ‘at/to/in the cassava’.

The differences between noun prefixes and nominal adjective prefixes reduce to two complications in agreement pattern, that nouns in class 8 induce agreement in class 9 and nouns in class 14 agree in class 3. The difference between the verbal object prefix and adj(v) agreement is the class 1 form mu for the OP and yu for adjectives. Adj(v) prefixes also differ from subject marking on verbs only in the form of the class 1 prefix, a- for verbs, yu- for adjectives. The difference between the determiner morphemes and most other forms of agreement lies in the height of non-low vowels: higher in determiners, super-high otherwise.

The stems for possessive and independent pronouns are seen in (6), using class 1 agreement for possessives.

(6) yw-áängó ‘mine’ yw-áako ‘yours (sg.)’ yw-aaké ‘his/her’
yw-íjtu ‘our’ yw-íjnu ‘your (pl.)’ yw-aabé ‘their’
n-ééná ‘I’ w-ééná ‘you (sg.)’ yw-éémbe ‘he/she’
tw-éénga ‘we’ mu-ééná ‘you (pl.)’ b-éémbe ‘they’

Certain animate nouns trigger class 1–2 agreement. In Matuumbi, class 1 agreement is used if the noun is singular, thus n’ombe yákalá ‘large (class 1) cow (class 9)’, n’ombe aèwàjíle ‘the cow (class 9) is dead (class 1)’. In the plural, grammatically based agreement is used, as in n’ombe ngakulá ngakulá ‘large (class 9) cows’, n’ombe jìwàjíle ‘the cows are dead (class 9)’. When an animate noun is in class 7–8, agreement in class 1 is optional in the singular (kyíñjíla jìwàjíle ~ kyíñjíla aèwàjíle ‘the frog is dead’), but not in the plural (kyíñjíla jìwàjíle ~ kyíñjíla baèwàjíle ‘the frogs are dead’).
A special plural prefix k7- can be added to animate nouns, so alongside n’oó mbe ‘cows’ and naá nkwakwa ‘lizards’, one can have k7-n’anbe ‘cows’ and k7-naá nkwakwa ‘lizards’. Such plurals always induce class 2 agreement, viz. k7-n’anbe a#kúlu a#kúlu ‘large cows’, n-aa-ba#bwé n’j7- naá nkwakwa ‘I saw the lizards’. This same prefix is also added to personal names to indicate ‘the family of so-and-so’, i.e. k7-Libulule ‘the Libulules’.

The class morphemes of Makonde are as follows: the rubric ‘det’ includes the agreement for possessive pronouns and the associative marker, demonstratives of various sorts, and long-form adjectives (-ambone ‘good’, vis n’hkóngwé w-ámboöne ‘good woman’) which comprise the bulk of adjectives in the language (in contrast to short-form adjectives as in n’hkóngwé n’hkúmeene ‘big woman’ inflected with the ‘adj’ series of prefixes).

Object prefixes other than class 1–2 mu ~ va do not exist in Mozambican Shimakonde; in Tanzanian dialects they have the same form as the determiner series. The class 6 determiner agreement is la in Chimahuta, ya in Chimaraba, and a in Shimakonde.

As in Matuumbi, animate nouns take their agreement in class 1–2 under certain circumstances. Animate nouns in class 9 without the prefix i- induce class 1 agreement (n’úkú va-ku#núúna ‘fat chicken’), but with the prefix i-, agreement is in class 9 (i#n’úkú yá-ku#núúna). The plural in class 10 also conditions agreement in class 10 (d#n’úkú dyá-ku#núúna ‘fat chickens’), but an alternative is to pluralize animate class 9 nouns in class 2 (vá#n’úkú vá-ku#núúna). In other classes, animate nouns optionally condition class 1 agreement in the singular but not in the plural (li#túúnu li#túmo ~ li#túúnu ju#túmo ‘one hyena’, máttúúnu ma#túáátu ‘three hyenas’; sh#i#mo ju#túmo ~ sh#i#mo sh#i#mo ‘one bird’; vy#i#túúnu vi#túáátu ‘three birds’).

The class system of Yao is much simpler. There is one series of prefixes for nouns, and one set of morphemes for all agreement (with the sole exception that the class 1 subject prefix is a- and the object prefix is -a-: however, in Mozambican Yao, the subject prefix is ju-).

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**Table (7)**

<table>
<thead>
<tr>
<th>noun</th>
<th>adj</th>
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<th>2,3</th>
<th>det</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>ju</td>
<td>u</td>
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<td>2</td>
<td>va</td>
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<td>va</td>
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<td>6</td>
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<td>vi</td>
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<tr>
<td>9</td>
<td>iN</td>
<td>iN</td>
<td>i</td>
<td>i</td>
<td>i</td>
</tr>
<tr>
<td>10</td>
<td>d#N</td>
<td>d#N</td>
<td>N</td>
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<tr>
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<td>14</td>
<td>u</td>
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<td>u</td>
<td>u</td>
<td>u</td>
</tr>
</tbody>
</table>

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All agreement is strictly according to formal class, thus chi'ljanu chi'i'ido 'one bird', liti'ijnani limo 'one baboon', ma'ljanjani gavili 'two baboons', n'i'gukka j'ka'anguu 'my bird'.

The set of determiners is quite rich, maximally so in Kimatuumbi, which has numerous demonstratives involving morphological templates and modifications via lengthening and reduplication. There are four basic demonstratives, class 1 examples ordered in terms of proximity to speaker being yu-no 'this (nearest to speaker)', a-yu 'this (further from speaker)', a-yw-o 'that (even further from speaker)' and yu-lu 'that (farthest from speaker)'. There are phonological variants of this last series, involving the prefix -a- after the class agreement or y after l, viz. ywalu ~ ywalu ~ yulu. Reduplication of the article morpheme is also possible, giving yuwyano, ayuwyu, aywoowywo, and yuwyulu (~yuwyalw ~ yuwyalw ~ yuwyulu); iconic prosodic modifications indicating extreme distance are common viz. yúu-lýuá, ya'llýuá 'that (quite distant)', yúûlýuó 'that (distant, pointing)'. A number of determiners translate as definite articles, such as ywé, yweéne, ywa 'the'. Finally, combinations of articles and demonstratives are frequent, such as yulu ywa, ywé ywa, yweéne ywa, and yweéne ywaaywa.

The Yao determiners are exemplified in class 1 by a-ju 'this', a-ju-o 'that (near)', a-ju-no 'that', a-ju-lu 'that (remote)', juw-e, juw-e-le 'specific', and reduplicated variants ajuyu, jwéjwé. Liberal combinations of definitizers and demonstratives are allowed, such as jw-e ju-la 'that', jwéjwé ajju 'this'. The Makonde demonstratives vary between dialects, and one can find (in class 1) júu-no 'this' in Maraba and Mahuta but not Shimakonde, á-nee-ju 'this' and á-nee-jo 'that remote' in Mahuta, a-jwu-lá 'that further' in all dialects, jwée-yúá 'that' in Maraba and Mahuta, and aawo 'that (near listener)', aaw-ju 'this' in all dialects.

### 3.2 Verb extensions

The productive extensions of Kimatuumbi are passive -(j)lw- (piim-ilw-a 'be bought'), applied -(j)l- (piim-y-a 'buy for'), reciprocal -(j)l- (piim-an-a 'buy each other'), stative -(j)k- (piim-ik-a 'be buyable'), causative -(j)y- (piim-iy-a 'sell') and plural -(j)ang- (piim-aang-a 'buy (pl.) objects'). Extensions are added in the order causative > applied > passive, reciprocal, plural, hence piim-iy-an-a 'sell e.o.', piim-y-an-a 'buy for e.o.', piim-iy-aang-a 'cause pl. people to buy', piim-ik-iy-an-a 'sell to e.o.'.

The causative suffix, which also has an intensive interpretation (kaatiya 'cause to cut; cut intensively') has an allomorph where -y replaces stem final k, l, as in tiumbuk-a 'fall', tiiumbuk-y-a 'cause to fall', bol-a 'be rotten' bó-y-a 'make rot'. It also combines with y to give -(j)kiy-as in root final y (bá-y-a 'say', bá-kiy-a 'make say'), applied y (káat-y-a 'cut for', káat-kiy-a 'make cut for'), or when the causative affix combines with itself to yield a causative-intensive meaning as in kín'ùund-iy-a 'be well filtered', kín'ùund-kiy-a 'be really well filtered'.

Besides the usual reciprocal meaning, the usual reciprocal suffix has the meaning 'do pointlessly', as in tikw-a 'break off', tikw-aam-a 'break off and discard'. The plural suffix generally refers to plural objects with transitive verbs (bilaq-a 'kill', bilaq-aang-a 'kill pl. things') and plural subjects with intrasitive verbs (tııl-a 'run', tııl-aang-a 'run (pl. subj)').

The very complex grammar of extensions in Yao is studied in Ngunga (1997), who demonstrates the existence of 14 extensions including applied -il-, three causatives
Extensions combine to give impressive morpheme combinations, for example jikal-a ‘take’ yields jikal-ich-is-y-aasy-a-ana ‘cause e.o. to make take for’. Extension combinations are subject to numerous rules. Combination of applied plus causative results in the replacement of the final consonant by ch (cf. the parallel replacement in Matuumbi) as shown by won-a ‘see’, won-epo-a ‘make see’, won-ech-esy-a ‘make see for’; pol-a ‘be cool’, pol-asaya-a ‘cool (tr.)’, pol-aach-isy-a ‘cool (tr.) for’. These examples also illustrate different orderings of causative and applied suffixes. The example pol-aach-isy-a from pol-aac-ii-y-a also illustrates the common phenomenon in Bantu where the glide -y- of the causative may be separated from the rest of the causative by another suffix.

One of the morphotactic and syntactic restrictions in Yao extension combinations is that valence-decreasing affixes (reciprocal, stative or passive) cannot immediately follow valence-decreasing affixes, but two such suffixes are possible if a valence-increasing suffix such as the causative intervenes. Thus puut-a ‘hit’ forms puut-igw-a ‘be hit’, puut-igw-asy-aan-a ‘cause e.o. to be hit’ but not *puut-igw-aan-a with adjacent passive and reciprocal; puut-ik-a ‘be hittable’ and puut-ik-asy-aan-a ‘cause e.o. to be hittable’ are possible, but *puut-ik-aan-a with adjacent stative and reciprocal is blocked. Phonotactic factors also affect morpheme combination, so chap-a ‘wash’ forms chap-isy-a ‘wash well’; chap-xaan-il-a ‘wash well e.o. for’ but *chap-isy-il-a which should mean ‘wash well for’ is blocked by a phonotactic constraint against *Cy.

In Makonde, there are a few lexicalized passives such as lombw-a ‘be married (of woman)’ with -w-; otherwise, the productive passive suffix is -igw- (talak-eegw-a ‘be cooked’), lim-igw-a ‘be cultivated’). There are three causative suffixes with subtle semantic differences: -y- (lim-y-a ‘make directly cultivate because of’), -isy- (lim-isy-a ‘make directly cultivate’) and the indirect causative -iisyo- (lim-isyo-a ‘make indirectly cultivate’); in addition, -isiyo- forms an intensive causative (lim-iisyo-a ‘make cultivate intensively’). The language also has a productive pluactional suffix -aang-, which indicates either plural subjects acting, plural objects being acted on, or repeated or constant action, as in tutaa-aang-a ‘for many people to run, run many places, run repeatedly’; lim-aang-a ‘for many people to cultivate, cultivate a lot of fields’. The applied suffix is -il-, cf. lim-il-a ‘cultivate for’, and besides the benefactive meaning also indicates instrumental, comitative and locative objects (ly-el-a i#nyáama ‘eat with meat’, lim-il-a li#jeémba ‘cultivate with a hoe’, tal-il-a li#káande ‘sleep on the mat’, tutuila/mi#méedi ‘run into water’). The reciprocal is -an- (put-aan-a ‘beat each other’), which precedes the applied (-talak-an-il-a ‘cook for each other”).

### 3.3 Verb inflection

The verbal subject and object prefixes for first and second person and class 1–2 in the three languages are listed in (9).

<table>
<thead>
<tr>
<th>(9)</th>
<th>Matuumbi</th>
<th>Yao</th>
<th>Makonde</th>
</tr>
</thead>
<tbody>
<tr>
<td>subject</td>
<td>object</td>
<td>subject</td>
<td>object</td>
</tr>
<tr>
<td>ni</td>
<td>ni</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>u</td>
<td>ku</td>
<td>(u)/mu</td>
<td>mu</td>
</tr>
</tbody>
</table>
Mwera distinguishes second and third person prefixes in terms of whether the referent is adult. The junior prefixes are $u$- (2 subject), $k$- (2 object), $a$- (3 subject), $m$- (3 object), and the adult prefixes are $m$- (2 subject, object), $v$- (3 subject), $a$- (3 object). The historical Bantu singular prefixes are used for junior referents and the original plural prefixes are used for adults. Plural subjects and objects are not distinguished by prefix, but rather by the plural suffix -$aang$-. Similarly, in Yao, the 2s subject prefix $u$- and the 3s object -$m$- are used only referring to young children, and $u$- is used only rarely. Singular/plural distinctions are not generally made for second and third person, but in some dialects can be made by the verbal suffix -$aang$-. There does not appear to be any junior/adult distinction in the form of the second person object or the third person subject prefixes.

The form of the 1 sg. subject prefix in Makonde is determined by complex tense-dependent rules. In some tenses both $ngu$ and $ni$ are allowed, e.g. habitual ($ngu-talek-a \sim ni-nga#talek-a$ ‘I cook’), future ($ngu-na#talek-a, ni-nda#talek-a$ ‘I will cook’), negative habitual ($a-nga-na#talek-a \sim a-ni-na#talek-a$ ‘I don’t cook’). In some tenses, only $ni$- is possible, such as in the recent past ($ni-nda#talek-a$ ‘I cooked’), conditional ($ni-ka#talek-a$ ‘if I cook’) and negative future ($a-ni#talek-a$ ‘I won’t cook’). In other tenses, such as the subjunctive ($nga#talek-e$ ‘I should cook’), recent past relative ($p-a-nga#talek-e$ ‘when I cooked’) and negative past ($a-nga#talek-e$ ‘I didn’t cook’), only $nga$- is possible.

Matuumbi has the simplest tense-aspect system. Except for two subordinate clause forms, there is no distinction between affirmative and negative verbs, negation being marked with the post-verbal particle $lil$-$lil$. There is a well-developed set of focal distinctions conveyed through verb tenses which marks neutral focus, focus on the postverbal noun, or focus on the verb. Preceding the subject prefix may be used for adults. Plural subjects and objects are not distinguished by prefix, but the original plural prefixes are used for junior referents and the historical Bantu singular prefixes are used for second and third person. Singular/plural distinctions are not generally made for second and third person, but in some dialects can be made by the verbal suffix -$aang$-. There does not appear to be any junior/adult distinction in the form of the second person object or the third person subject prefixes.

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In addition, verb focus forms may include the prefix -n̩o-, such as in ni-ti-n̩o#lila ‘I am even crying (vf)’.

Relative clause verbs have a demonstrative prefix agreeing with the head noun on an inflected verb, thus yw-a#lil-#tè ‘who cried (recent)’, yw-a#lil-#tè ‘who cried (remote)’, yw-a#lil-#tè ‘who is crying’, yw-a#lil-#tè ‘who was crying’, yw-a#lil-#tè ‘who will cry’ and yw-a#lil-#tè ‘who will go cry’. Because of conflicting focus requirements, verb focus forms cannot be used in relative forms.

The tense-aspect systems of Ngindo and Ndengereko are similar to that of Matuumbi.

In Ngindo, the progressive is marked with -teenda- in the past tense (na-teenda#lìma ‘we were cultivating’), -ndaage- in the past (ba-nda-gèe#lim-a ‘they were cultivating’). The past clitic -e of Matuumbi appears as -ge in Ndengereko (tu#lim-a-ge ‘we were cultivating’) and in Ngindo where it marks habituals (ba#lim-a-ge ‘they cultivate’). The form corresponding to the Matumbi conditional with the prefix -ka- functions as a persistive in Ndengereko (a#ka-bëleka ‘he is still cooking’). The prefix ka- in Ngindo appears in negative imperatives (ka-këma ji ‘don’t yell’), and, combined with -ge, forms participial (tu-ka#lim-a-ge ‘us cultivating’).

Yao has a richer set of tense-aspect forms, since polarity (affirmative vs. negative clauses) are marked on the verb by distinct inflections. The main tenses of Yao are listed below:

(11) future chi-sp#S-e chitùlìlí ‘we will cry’
future distal chi-sp-kà#S-e chitùkalíle ‘we will go cry’
neg future nga-sp#S-a ngatùlìlí ‘we won’t cry’
future ti-sp-chì#S-a tautùlìlí ‘we will cry’
present sp-kù#S-a tukùlìlá ‘we cry’
habitual sp-kù#S-ag-a tukùlìlágà ‘we usually cry’
neg present nga-sp-ka#S-a ngatùkalílí ‘we are not crying’
habitual sp-ka-saa#S-a tükùsaalìlì ‘we usually cry’
rec past sp/#S + pfv tulìmile ‘we cried (rec)’
rem past sp-a#S + pfv twaalìlìlé ‘we cried (rem)’
past prog sp-a#S-ag-a twaalìlágà ‘we were crying’
neg rec past nga-ni-sp#S-a nganìtùlìlí ‘we didn’t cry (rec)’
neg rem past nga-ni-sp#S-a nganìtùlìlì ‘we didn’t cry (rem)’
neg partici dem-ngà#S-a ungàlìlì ‘not crying’
conditional sp-ka#S-ag-a takùlìlágà ‘if we don’t cry’
Relative clause verbs are formed by prefixing demonstrative head agreement (without the associative -a), as in muandu ju-vá#wiile ‘person who died’.

The tense-aspect categories of Makonde are listed in (12).

(12) affirmative negative

<table>
<thead>
<tr>
<th>tense</th>
<th>active form</th>
<th>passive form</th>
</tr>
</thead>
<tbody>
<tr>
<td>rec. past</td>
<td>tu-náitáleček-a</td>
<td>a-túitáleke</td>
</tr>
<tr>
<td>rem. past</td>
<td>tu-náitáleček-a</td>
<td>a-túitáleke</td>
</tr>
<tr>
<td>pres prog</td>
<td>tu-n-káitáleček-a</td>
<td>a-tu-náitáleček-a</td>
</tr>
<tr>
<td>hab pres</td>
<td>tu-n(d)áitáleček-a</td>
<td></td>
</tr>
<tr>
<td>future</td>
<td>tu-ndáitáleček-a</td>
<td>a-túitálecke</td>
</tr>
<tr>
<td>past prog</td>
<td>tu-sí-ndáitáleček-a</td>
<td>a-tu-síitáleček-a</td>
</tr>
<tr>
<td>condit</td>
<td>tu-káitáleček-a</td>
<td>tu-káitálecke</td>
</tr>
<tr>
<td>subjunct</td>
<td>tuítáleček-a</td>
<td>a-tu-náitáleke</td>
</tr>
<tr>
<td>participial</td>
<td>taitáleek-a</td>
<td></td>
</tr>
<tr>
<td>suggestive</td>
<td>tú-ká-náitáleček-a</td>
<td>á-tú-náitáleček-a</td>
</tr>
<tr>
<td>imprf</td>
<td>pá-tú-síitáleček-a</td>
<td>pá-tú-ká-síitáleček-a</td>
</tr>
<tr>
<td>past prog</td>
<td>pá-tú-náitáleček-a</td>
<td>pá-tú-ká-náitáleček-a</td>
</tr>
<tr>
<td>rem past</td>
<td>pátuítálecke</td>
<td>pátu-káitálecke</td>
</tr>
<tr>
<td>subj past</td>
<td>pa-túitálecke</td>
<td>pátu-káitálecke</td>
</tr>
</tbody>
</table>

The shape of the perfective stem in Matuumbi is determined primarily by prosodic properties of the basic stem. When the base is of the form CV(V)C, or if the last stem vowel is long, the suffix -ite (-she in Ndengereko) is chosen, as in njîchól-ite (chól-a) ‘I drew’, njîkàat-ite (kât-a) ‘I cut’, njîbalàang-ite (bàlàang-a) ‘I counted’. When the final vowel of a polysyllabic stem is short, ñ is infixed, as in njîkàndjike (áandj-k-a) ‘I wrote’, njîbéljike (bél-ek-a) ‘I gave birth’, njîsàhjite (sàbat-a) ‘I beat’, njîbáljítjite (bùl-ut-a) ‘I dragged’. Stems ending in a glide add -ile, as in njîkàb-ile (kàb-y-a) ‘I found’, njîbòyw-ile (bòyw-a) ‘I caught’. This is due to infixation of ñ into underlying stems /kúb/ and /bóy/ plus an independent rule of l- insertion. Monosyllabic stems select -ile (cf. njîlîle (lyà) ‘I ate’). A few lexically marked stems optionally or obligatorily select the reduced perfective, -j, along with vocalic irregularities, as in jỳ-ból-ite ~ j-bój- ‘it rotated’, njîbèwèn-í (bon-a) ‘I saw’, njîmàan-í ~ njîmàn-íte (main-a) ‘I knew’, and a few stems have irregular consonant alternations, such as njîlwèët (waal-a) ‘I dressed’, njîtéënd-íte ~ njîlwëët (teend-a) ‘I did’, njîlwëët ~ njîlwëët-ile (tool-a) ‘I took’.

Formation of the perfective stem in Yao is similar. With a CV(V)C stem the suffix -ile is added, as in twîtav-ile (tav-a) ‘we built’, twîsùam-ile (sùam-a) ‘we bought’. Stems ending in -j- select -isse as in twîkàанisinsey (kaany-a) ‘we prohibited’, twîosinissey (-øosyy-a) ‘we gave a bath’; if the stem ends in surface ch (from /ky/), the affix has the shape -iche (twîochitchie (ooch-a) ‘we roasted’). Monosyllabic stems select -ile or -eile (tuîl-ile (ly-a) ‘we ate’, tuîn ‘w-eile (-n w-a) ‘we drank’, tuîgy-wile (-gw-a) ‘we fell’). Polysyllabic stems whose last vowel is short infixed ñ, as in tuîtleëge (ulag-a) ‘we killed’, tuîpiikëene (-pipan-a) ‘we heard’, tuîgaangáleeme (-gaangalam-a) ‘we are big’, tuîtéléëke (-telek-a) ‘we cooked’, tuîchamwil-ile (chamul-a) ‘we combed’, tuîlokweët-ile (-lokot-a) ‘we picked up’. If the final vowel is long, the suffix -ile is added, cf. tuîkwalàkwaàd-ile (kwalàkwaat-a) ‘we scraped’, tuîkàlàanj-ile (kalaang-a) ‘we fried’. There are...
a few lexically irregular perfective stems, such as tu#weén-i (-won-a) ‘we saw’, tu#piit-e (-pit-a) ‘we passed’, tu#yiich-e (-yik-a) ‘we arrived’. Mwera differs from Yao in that infixation is found with all polysyllabic stems, even those with a final long vowel (valaang-a ‘count’, mêlêenje ‘I counted’), it is unknown whether this extends to long vowels not followed by NC. When a stem ends in a series of [a]’s, each harmonizes to the following vowel (contrast Yao tu#gaangaleeme ‘we are big’).

In Makonde, CVC perfective stems select -ite ~ -ile. Generally the suffix -ile is used, e.g. -vik-iile ‘put’, -pat-ile ‘get’, -lip-ile ‘pay’, but some stems take -ite e.g. -many-ite ‘know’, -aj-ite ‘return’. There is dialectal and speaker variation, so one may find -div-ile or -div-ite ‘cover a hole’: the choice of perfective forms requires deeper investigation. The suffix -ile causes final /l/ to become [d], cf. -pad-ile ← pel-ile ‘finish’. CV stems all take -ile (-ly-ile ‘eat’, -gw-ile ‘fall down’). If a CVC stem ends with a glide, the perfective affix is -idyé: lody-à → lody-idyé ‘show’, tot-ey-à → tot-ey-idyé ‘make sew’, -ungw-à → ungw-idyé ‘hear’. Polysyllabic roots infix the vowel i, as in tukuta → tukwite ‘run’, taleka → taleeke ‘cook’, kalamola → kalamweele ‘cough’, valanga → valeenge ‘count’.

4 SYNTAX

Sentential word order is very free, especially in Matuumbi, and in that language all permutations of subject, object and verb are possible, viz. SVO muishndu a#kat-ite kaamba (‘the person cut the rope’) ~ OSV kaamba muishndu a#kat-ite ~ VSO a#kat-ite muishndu kaamba ~ VOS a#kat-ite kaamba muishndu ~ OVS kaamba a#kat-ite muishndu. While such variations in word order are frequent, the basic word order is SVO, found most often in pragmatically neutral contexts lacking specific emphasis on any word. An essential property governing word order is focus, expressed through the system of verbal inflection which distinguishes focally neutral tenses from tenses that require focus on the following element and tenses that require focus on the verb.

The present progressive of the form SP + stem is a noun-focusing tense. When followed by an NP, that NP receives focus, viz. njik#kat-a kaamba ‘I’m cutting rope (not something else)’. Such verbs cannot stand at the end of the phrase, thus *njik#kat-a, since there is no following phrase which receives focus, and they cannot be followed by ti ‘only’ (*njik#kata ti) which assign focus to the preceding word. Consequently, postposing of the subject NP becomes obligatory with intransitive verbs in this tense, e.g. *mvaána abutu#kae → abutu#kae mvaána ‘the child was running’. As a corollary, leftward preposing of an object, which is generally allowed regardless of tense (cf. a#kat-ite kaamba ~ kaamba a#k#kat-ite ‘he cut the rope’), is blocked in a noun-focal tense when only a single object is present, viz. a#kalang-a k#njáamba → *k#njáamba a#kalang-a ‘he is frying cassava leaves’. Leftward preposing of the object is allowed if there is a second object which receives the focus (a#kalang-y-a baati#ndu k#njáamba ~ k#njáamba a#kalang-y-a b#ndu ‘he’s frying cassava leaves for the people’), or if the subject is postposed (muishndu a#kalang-a k#njáamba → k#njáamba a#kalang-a muishndu ‘the person is frying cassava’).

In contrast, the verb focus tenses disallow focused material after the verb, and prefer to be clause-final. Thus preposing of an object is preferred (n-aa-ti#bulak-à n#gùku → n#gùku n-aa-ti#bulak-à ‘I killed a chicken’), and postposing of the subject is impossible (*n#vaáwa a#ti#b#tuk-à → *a#ti#b#tuk-à *n#vaáwa ‘the woman ran’), since postposing the subject places focus on the object. Verb-focus forms also cannot be followed
by wh-phrases (‘aa-ti-kw-m#m#n-aa náj ‘who did he see?’), *b-eend-eé#cheeng-á ma-ymba gá#linga ‘how many houses were they building?’), but can be followed by
focus-assigning tu ‘only’ (b-aa-tí#balaang-á ti ‘they were only counting’).

Verbs may contain one OP, thus naa-ba-telekijile ‘I cooked for them’, *naa-ba-
ki#telekijile, *naa-ki-ba#telekijile (‘I cooked it for them’). An OP can co-occur with a
coreferential NP within the VP, indicating greater definiteness, thus ni-nolya baandu
yiimbe ‘I’m sharpening knives for people’, ni-ba#nolya baandu yiimbe ‘I’m sharpening
knives for the people’. Unlike analogous structures in Chichewa, the coreferential
object is fully integrated into the VP, so it can appear right after the verb, satisfies the focal
requirement of noun-focal tenses, and phrases phonologically with the verb. The verb
‘see’ has the further syntactic requirement (shared with Makonde and Yao) that the verb
must have an OP agreeing with the object, thus naa-mi#mwa#né mwaína ‘I saw the ~ a child’.

Relative clauses follow the nominal head, and are separated from the head by the
determiner-series possessive prefix added to the verb, viz. mwi#ndu yw-aa-teliike
‘person who cooked’, mwi#ndu ywa-náa#puutu ‘person who I beat’. The lower subject
NP cannot intervene between the verb and the preceding clausal head, so in the lower
clause, a full NP subject must be moved by passivization (ky#imbé cha-ki-toliíwé na
Libulule ‘knife that was taken by Libulule’). Alternatively the subject may be directly
demoted (ky#imbé cha-ki-twet Libulule ‘knife that Libulule took’, literally ‘knife that
took Libulule’), in which case the subject marking of the relative clause verb agrees with
the lower object ‘knife’. Such structures are potentially ambiguous, so tend to be used
only when subject and objects roles can be reasonably inferred from context.

As in many Bantu languages, if the NP immediately preceding the verb is a wh-phrase,
the sentence is rendered as a relative clause with the head topicalized. Thus compare
mwa#ána aa#kém-íte ‘a child yelled’ and mwa#ána yw#auku yw-aa#kem-íte ‘which
child yelled?’, literally ‘which child is it who yelled?’. This strategy holds for objects as
well as subjects, cf. ky#imbé ganj cha-aa#paal-a ‘which knife do they want’. The
wh-phrase must stand immediately before the verb in order to condition relativization
(cf. ky#imbé ganj baalíndí b-aa#twéetí ‘which knife did the people take?’).

The syntax of determiners in the P zone languages is different from that of typical
Bantu language. Because of additional articles, a noun phrase can and frequently does
contain multiple determiners, thus in Matuumbi ki#teléko cheéne chulu ‘that pot’. The core
determiners (chulu, chino, achi, acho) can also appear before the noun head, viz. achi
ki#teléko ‘this pot’. In Yao and Mweru, demonstratives are usually placed before the
head noun; quite frequently a noun phrase will contain both a pre-head and a post-head
determiner.

5 SUMMARY

The Rufiji-Ruvuma languages present features of interest to the general linguist and the
Bantuist alike. Noteworthy phonological features include the system of morphosyntacti-
cally predictable tone in verbs, limits on long vowels, and issues relating to nasality such
as N + C alternations, the fact that two kinds of N must be distinguished segmentally and
prosodically, plus emerging vowel nasalization. Noun class agreement is particularly
complex, and the languages have a rich system of determiners. This study has only
touched on the highlights: deeper investigation of these and other grammatical features
in the languages of the area must await descriptive work of a number of still undescribed
languages.
ACKNOWLEDGMENT

I would like to thank Marcelino Liphola for his extensive assistance in describing Makonde, Deo Ngonyani for providing information on Ndendeuli, and Larry Hyman for helping on Mozambican Yao. Research leading to this chapter was supported by NSF, the Fulbright Foundation, and NSF grant SBR-9421362.

REFERENCES

CHAPTER TWENTY-SEVEN

MAKHUWA (P30)

Charles Kisseberth

1 ZONE P30

Under Zone P30, Guthrie lists the following ‘languages’: Makhuwa, Lomwe, Ngulu, and Chuabo. This characterization of the zone is problematic in several ways.

Although speakers of some speech varieties may identify their language as ‘Elomwe’ and others may identify their language as ‘Emakhuwa’, we know of no evidence that this self-differentiation is linguistically based. The study of Makhuwa dialectology is not sufficiently advanced to determine whether a classification of dialects based on linguistic features would result in any bifurcation along a Makhuwa/Lomwe dimension. Specifically, it is unclear whether there are linguistic properties whose distribution coincides with either self-identified Lomwe speech varieties or self-identified Makhuwa speech varieties. For example, in the (sparse) literature, it is said that Lomwe uses the affricates $c\, [t']$ and $ch\, [t'h]$ in place of the characteristic Makhuwa post-alveolar stops $tt$ and $tth$. However, I have studied three dialects in Malawi (Emihavani, Emunyamwelo, and Ekokholani) whose speakers consider their language Lomwe but who use the stops $tt$ and $tth$ rather than the corresponding affricates. Given the uncertainty of a reliable Lomwe/Makhuwa distinction, I shall use the term ‘Makhuwa’ to include ‘Lomwe’ whenever the distinction between the two is not of immediate relevance.

Guthrie’s reference to ‘Ngulu’ is also problematic. This term has been used in the non-linguistic literature to refer to Lomwe-speaking immigrants to Malawi, and it does occur among the list of terms speakers use to refer to different varieties of Lomwe in Malawi (which, besides the dialects already mentioned, includes also Emarenje, Emeetto, Emikukhu, Etakhwani, Emaratha among others). While we have not actually worked with anyone who identifies his speech as Ngulu, it is extremely doubtful that it represents a language distinct from Lomwe/Makhuwa.

I am not aware of any linguistically sophisticated work on the grammatical structure of Guthrie’s last P30 language, Chuabo; however, there is a fairly substantial dictionary (Festi and Valler 1995). My brief exposure to the language and a cursory examination of written texts and the dictionary make it clear that this is a language distinct from Makhuwa. Spoken in and around the coastal city of Quelimane (in Zambezia province in Mozambique), Chuabo rests at the extreme southern edge of the Makhuwa-speaking territory. There is a strong possibility that Chuabo is not actually a ‘sister’ language to Makhuwa in the ‘family-tree’ model of language development, but rather a product of extensive language contact between a Makhuwa speech variety and some language of the central region of Mozambique such as Sena. Careful documentation of Chuabo remains a research desideratum. Of particular interest is the fact that initial work on the language suggests that there is a lexical tone contrast in verb stems, unlike Makhuwa and other Zone P languages, as well as in nominals.

Makhuwa has strong links to two languages not cited by Guthrie. Koti, spoken on the Mozambique coast in Angoche (Nampula province), clearly represents a ‘mixed’ language
in that it has a largely Makhuwa morphology and tone structure and a Swahili-like lexicon. Koti has recently been the subject of linguistic research by Schadeberg, Odden, and myself, all in collaboration with Francisco Ussene Mucanheia, a bilingual Makhuwa/Koti speaker from Mulai in Angoche district. Sangaji (indigenous name: Enaatthempo), a coastal language spoken not far from Koti, shows a similar mixture of language elements. It has been reported to me that there is another mixed language, further to the south, based on Chuabo. If so, I know of no linguistic work that examines it.

In my view, then, Makhuwa/Lomwe is the only clearly ‘unmixed’ language in Zone P30 and it is the only language that I will discuss in this chapter. Throughout the chapter I rely principally on my own field research. The unpublished M.Phil. thesis written by Katupha at SOAS has, however, been very useful to me in gathering material on the verbal system. I have attempted to follow the orthography recommended by NELIMO (Núcleo de Estudo de Línguas Moçambicanas) in their publication *I Seminário sobre Padronização da Ortografia de Línguas Moçambicanas* (Maputo, 1989).

## 2 MAKHUWA: GEOGRAPHICAL DISTRIBUTION AND DIALECT DIFFERENTIATION

There are perhaps as many as 8 million speakers of Makhuwa, distributed principally in the north of Mozambique (Cabo Delgado, Nampula, Niassa, Zambézia provinces), in southern Tanzania (particularly in Masasi and Tunduru districts), and in Malawi (particularly in the Mulanje and Thyolo areas). There are additional communities further afield; e.g. in Madagascar (unpublished research conducted by Katupha), the Comoros Islands (though it is unknown whether the language has been maintained there), and the ‘Zanzibaris’ in Chatsworth outside Durban in South Africa (where the language has been maintained, though is increasingly threatened by English).

Some varieties of Makhuwa have labels that speakers use instead of (or in addition to) the more generic terms ‘Makhuwa’ or ‘Lomwe’. Examples are: Ikorovere (Tunduru district in Tanzania), Imithupi (Masasi district in Tanzania), Imeetto (Tanzania and Cabo Delgado and Niassa provinces in Mozambique), Enahara (Mozambique Isle and neighboring areas in Nampula province), Esaaka (coastal regions of Cabo Delgado and Nampula provinces), Eerati (coastal Nampula), Enlai (Angoche in Nampula), Ekokhola(ni) (in Malawi), Emihavani (in Malawi), etc. Speakers of other varieties failed to suggest any alternative to Makhuwa (e.g. speakers from Iapala, Nampula city, and Mogovolas).

Since there is no standard form of spoken (or written) Makhuwa, there is no extralinguistic motivation for using a particular dialect to serve as the basis for illustrating general points about the language. There are, however, numerous differences in pronunciation and morphology that make it impossible to give examples without reflecting some dialect. Given this dilemma, I have resolved the problem as follows. Whenever I am discussing some point that is not directly connected to dialectal differences, I cite data from the two dialects that I know best (Ikorovere and Imithupi, both spoken north of the Ruvuma river in southern Tanzania) without further identification. I use a tonal transcription that removes the systematic phonetic tonal differences between these two dialects. When a form is not phonologically identical in both dialects, then I add a label [K] or [Mi] to identify the dialect. Whenever some point is being made that has to do with dialect differences, I shall explicitly indicate the source of the examples.

Makhuwa represents perhaps the least studied of the major Bantu languages. Most of the literature on the language falls into the category of ‘missionary’ linguistics. This missionary tradition has led to some notable contributions in the area of lexicon (see particularly
Prata 1973, 1990). In other areas of linguistic research, the results are much less substantial (Prata 1960 delivers significantly less than its title promises, and in any case represents a very ‘traditional’ account of the language that disregards critical aspects of the phonology and morphology). Besides the research that I have been involved with (largely unpublished as yet, but see Cassimjee and Kisseberth 1999a,b, Cheng and Kisseberth 1979, 1980, 1981), and Stucky (1979, 1980), the only work on Makhuwa in a modern linguistic framework is that of Katupha. While his Ph.D. thesis on verbal extensions has not been available to me, his M.Phil. (1983) thesis provides an excellent overview of the morphological structure of the Esaaka dialect.

3 MAKHUWA PHONOLOGY

3.1 Vowels

My initial research on Makhuwa (focusing on the ‘Ruvuma’ dialects, Ikorovere and Imhitupi), as well as the previous literature, indicated a typical Bantu five-vowel system, including monomoraic and bimoraic versions of each vowel: \(i\ e\ a\ o\ u\) and \(ii\ ee\ aa\ oo\ uu\). The bimoraic vowels may be underlying, or derived as a result of the juxtaposition of vowels. Some examples are given in (1). Note that the acute mark over a vowel indicates high tone, while the absence of a mark indicates low tone. Underlined vowels are ones that are specified as H in the input to the phonology; H-toned vowels that are not underlined receive their H tone by virtue of a rule referred to as High Tone Doubling.

(1)  
\[i: \ u-\text{li}ma \ ‘to cultivate’, \ mw-\text{ji}ri ‘tree’, \ u-\text{vichage} ‘to hide’, \ i-\text{vijli} ‘puff adder’ \]
\[ii: \ u-\text{wijia} ‘to bring’, \ w-\text{itudana} ‘to call’, \ n-\text{tijli} ‘ash used in making snuff’ \]
\[e: \ u-\text{pajnya} ‘to be clever’, \ n-\text{ligno} ‘guest’, \ n-\text{gigue} ‘cobra’, \ ki-\text{thawe}[\text{K}] ‘that I run’ \]
\[ee: \ u-\text{ti}gesa[\text{Mi}] ‘to lift’, \ u-\text{vichage} ‘to belittle’, \ i-\text{thigigale} ‘anthill’, \ u-\text{hig-etta} ‘to not walk’ \]
\[a: \ u-\text{mal}a ‘to finish’, \ u-\text{lya} ‘to eat’, \ n-\text{lipa} ‘baobab tree’, \ i-\text{kharra} ‘headpad’ \]
\[aa: \ u-\text{nolola ‘to be quiet’, w-\text{apaha} ‘to whisper’, \ pa\text{khatta} ‘cat’, u-\text{hwea ‘to bewitch’} \]
\[o: \ u-\text{pajnya ‘to oooze, leak’, i-\text{kima} ‘drum’, i-\text{higa} ‘fish’, n-\text{pito} ‘supporting pole for roof’} \]
\[oo: \ u-\text{higa ‘[K] annoy’, u-\text{higola ‘to precede’, i-\text{poitini ‘bottle’, ki-\text{ho-apa ‘I have beaten}} \]
\[u: \ u-\text{higa ‘to buy’, u-\text{kigima ‘to growl’ (of stomach)}, ni-\text{hiku ‘day’, i-\text{kilawe ‘pig}} \]
\[ur: \ u-\text{rthu ‘to take out of water’, u-\text{hqi-apuvela ‘to not remember}}, \ i-\text{tigii ‘ululation}} \]

This vowel system is clearly correct for a range of other Makhuwa speech varieties: Imietto, Esaaka, Enlai (to mention dialects I have studied in some detail). However, in the course of our work in Mozambique, Odden and I discovered that there are varieties of Makhuwa which have minimal pairs that establish seven rather than five vowels. It appears that where the aforementioned dialects have just two high vowels, \(i\) and \(u\), some dialects distinguish between advanced and retracted tongue root varieties of these high vowels. I have observed the contrast in the Lomwe of Mucuba district in Zambézia province, as well as the Makhuwa of Nampula city, Mogovolas, and Iuluti in Nampula
province. This aspect of Makhuwa phonology requires detailed study; the contrast is difficult to hear and easily missed. It is unclear as yet whether it is a pervasive feature of the lexicon or of more limited distribution.

3.2 Consonants

When one considers the consonant system of Makhuwa, there are three features that are quite striking. One is the absence, in many of the Mozambican dialects, of voiced prenasalized stops. Comparison of lexical items in Makhuwa with other languages immediately indicates that prenasalized voiced stops have been replaced by voiceless stops. For example, Swahili nyumba ‘house’ and mbuzi ‘goat’ correspond to Makhuwa inúpa and ipúri. The second feature is the absence of a contrast between voiced and voiceless stops, but the presence of a contrast between unaspirated and aspirated voiceless stops. The third feature is the existence of a contrast between dental (unaspirated and aspirated) stops and the corresponding (post-)alveolar stops.

In the discussion that follows, we set aside complexities associated with the fact that the replacement of prenasalized voiced stops is not fully carried out in all dialects: e.g. e-húpa ‘fish’ in Esaka and many other dialects, but e-húmba in Malawi dialects; ceémba ‘type of cricket’ in [K] but ceém in [Mi]. We also set aside the expanded inventory that derives from the borrowing of words. We focus instead on the consonants that either occur uniformly throughout Makhuwa or show systematic cross-dialectal correspondences.

All Makhuwa varieties known to us contrast voiceless plain stops and voiceless aspirated stops. The most usual contrasts found are p/ph, t/th, tt/tth, and k/kh (where orthographic tt represents a post-alveolar, sometimes clearly retroflexed, in contrast to the dental t).

However, in some Lomwe varieties, the stops tt/tth have been replaced by affricates, which we write as c and ch. Thus i-mátta ‘field’ corresponds to c-máca in these varieties of Lomwe.

<table>
<thead>
<tr>
<th>TABLE 27.1: RUVMU MAKHUWA CONSONANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labial</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Unaspirated plosive</td>
</tr>
<tr>
<td>Aspirated plosive</td>
</tr>
<tr>
<td>Prenasalized</td>
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<tr>
<td>Voiceless fricative</td>
</tr>
<tr>
<td>Voiced fricative</td>
</tr>
<tr>
<td>Nasal</td>
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<tr>
<td>Glides</td>
</tr>
</tbody>
</table>

Notes: * ‘s’ in Ikorovere is ‘x’ (i.e. [f]) in Imithupi; ** ‘h’ and ‘w’ both require a preceding moraic nasal to assimilate to a velar.
An affricate c does occur in varieties other than Lomwe, but with no corresponding aspirated sound. In the Ruvuma dialects we find examples like *u-pwáca ‘to sweep’, *n-piyáwa ‘sun’, *i-paço ‘axe’. This affricate c corresponds to s in more central dialects in Nampula: *u-pwása ‘to sweep’, *n-píwa ‘sun’, e-pasó ‘axe’. In yet other dialects, we find either dh[=ð] or z corresponding to the Ruvuma c. For example ‘axe’ in Enlai is epagdó and among the ‘Zanzibaris’ in Durban is e-pázo.

The labial-dental fricative v and the glottal fricative h are attested across all Makhuwa varieties known to us; e.g. *u-váha ‘to give’, w-íva [Mi] ‘to kill’, *u-háva ‘to try to do’, havána ‘leopard’. There is some complexity with respect to the sibilants s and x [ʃ]. We have already seen that there is the following sound correspondence c/ʃ/dh/z across the Makhuwa dialect spectrum. Let us refer to this sound as the ‘unstable coronal’. In Central Makhuwa, which uses s for the unstable coronal, we find many words containing the sound x. Let us call this the ‘stable coronal’ (although this term is a bit misleading). Among those dialects that do not use s for the unstable coronal, there is variation as to whether they use s or x for the stable coronal. Thus although the Ruvuma dialects are largely similar in their structure, Imithupi uses *x: i-síma [Mi]/i-xíma [K] ‘stiff porridge’, *n-xépa [Mi]/n-xépa [K] ‘valley’, *síva [Mi]/sí-xa [K] ‘to dawn’. In Imeetto, one finds both s-subdialects and x-subdialects.

The remaining core sounds: w, y, l, r, m, n, ny, and ñ, are little discussed. The glides w and y sometimes derive from the adjustment of sequences of unlike vowels (see below). The velar nasal [ŋ] is fairly marginal in terms of its lexical dispersion.

Stems in Makhuwa display two significant limitations on the co-occurrence of consonants. Although the language contrasts aspirated and unaspirated voiceless stops, a stem may contain at most one aspirated stop (cf. Schadeberg 1999). Thus we may have stems with one or more unaspirated stops (ma-vátta ‘twins’, u-kúkúatuwa ‘to be stunted’, n-táta ‘hand’, n-túguwáta ‘rag’), or one aspirated stop and any number of unaspirated stops (u-khúgura ‘to chew’, u-thúgùa ‘to tie’, i-phútta ‘zebra’, i-khořápa ‘snail’), but there are no stems with two aspirated stops (*u-khope, *a-thamakhaka, etc.). As noted above, Makhuwa also contrasts dental and post-alveolar voiceless stops. However, within a stem, if there is more than one voiceless coronal stop, they must be either all dental or all post-alveolar. Thus we find stems like n-síga ‘hand’, u-síghóla ‘to hatch’, t-útthá ‘soften by oiling’, t-ítúto ‘ridge’, etc., but not *u-tátta, *n-titíto, etc.

The preceding restrictions in stem shape do not lead to any morphophonemic alternation (since they function only as constraints on the shape of monomorphemic stems). Aspirated stops (at least in some dialects) seem to display a tendency to deaspirate in causative formations. Thus we find *u-thúma ‘to buy’ but u-túmiha ‘to sell’. However,
this pattern is not uniformly imposed; we find, e.g. that *u-khó'tta* ‘to refuse’ retains its aspiration in *u-kgó'tthiha* ‘to cause to refuse’.

The most important morphophonemic principle affecting consonants is nasal assimilation. In the Ruvuma dialects (as well as in Imeetto and some coastal Mozambican dialects), a prefix of the shape *mu* elides its vowel in front of a consonant. As a result of this elision, the *m* is juxtaposed to a consonant and it assimilates the point of articulation of that consonant (with *h* and *w* inducing a velar nasal in front of them). The noun class prefix *ni* (in all dialects) elides its vowel in front of coronal consonants, and the *n* will then assimilate to the following coronal. The so-called imbricated form of the perfect stem (see below) results in a pre-consonantal nasal, and this nasal also assimilates the point of articulation of a following consonant.


(b) *ni-puːhe* ‘heap of grass’, *ni-kóri* ‘bracelet’, *ni-húku* ‘day’, but: */ni-rámaː/ *n-ráma* [K] ‘cheek’;

(c) *kha-k-á-tpúːlaː* (non-imbricated) vs. *kha-k-á-tpúːlaː* (imbricated) ‘I did not cut’

*khá-y-á-pahʊːle* (non-imbricated) vs. *kha-y-á-pahʊːhe* [cl. 2] ‘I didn’t bathe’

3.3 Syllable structure

Setting aside for the moment the matter of nasal consonants, Makhuwa syllables are generally of the shape C(G)V(V), where C stands for a consonant and G stands for the glides *y, w*. In the Ruvuma dialects, an additional syllable type occurs: CGGVV, though this shape is marginal (all examples being the consequence of glide formation triggered by an historical process of *k* deletion). Syllables with a VV nucleus generally involve identical vowels (i.e. a long vowel), although some dialects may marginally exhibit ‘diphthong-like’ structures in the formation of derived verbs. Vowel-initial syllables are restricted to (phrase-initial) word-initial position.

Some examples of the various syllable types (a period separates syllables) are given in (5).

(5) V syllable (word-initial only)

*u.thé:la* ‘to marry (of a man)’, *i.nó:pa* ‘house’, *a.thi:wa* [K] ‘let [cl. 1] run!’

CV syllable

*a.lá:ma* ‘to bite’, *ná:ká:pe* ‘shoulderblade’, *u.mé:nyé:ká* ‘to be gluttonous’

CVV syllable

*u.ŋe:ru* ‘to be good’, *c:e.téːthi* ‘that [cl. 1] thresh’, *ní:wíːga* [Mi] ‘a kind of water weed’

CGVV syllable

*u.łuːgá* ‘to bewitch’, *u.thíːgá* ‘to laugh’, *u.pó:twéː:la* ‘to sink into’

CGV(V) syllable

*u.lá:wíːma* ‘to be tasteless’, *ú.lyá* ‘to eat’, *mweː:cáːna* ‘last year’, *myéːri* ‘months’
CGGVV syllable

u.khwyá a ‘to put leaves in water to prevent spilling’, u.pí.lú.wyá a ‘able to be turned upside down’

In all dialects, moraic nasal consonants may occur. Moraic nasal consonants occur only in position before another consonant. In word-initial position, one might wish to consider them to be a syllabic nucleus. Their status in non-initial position is more complex. In the Ruvuma dialects it appears to be the case that non-initial moraic nasals form part of the preceding syllable. Evidence for this claim comes from the fact that (a) trimoraic syllables are not generally allowed and (b) an expected long vowel will shorten in front of a moraic nasal. This shortening is explicable if the nasal counts as part of the same syllable as the preceding vowel (i.e. vowel shortening is the consequence of the absence of trimoraic syllables).

(6) word-initial moraic nasal: ní-rii-yá [(Mi) ‘chameleon’, ní-éma ‘fruit bat’,

ní-píla [(Mi) ‘sp. tree’

word-medial moraic nasal: náíró-kotstóle ‘quarrelsome person’, náíró-wa ‘kind of bean’

shortening induced by medial moraic nasal: a-ná-ó-ki-ttérokhóla ‘[cl. 2] will cook for me’ vs. a-ná-n-ó-ki-ttérokhóla ‘[cl. 2] will cook for [cl. 1]’

There are a number of complexities regarding the moricity of pre-consonantal nasals (particularly in the Ruvuma dialects but also in the Mozambique dialects), but space does not permit detailed discussion.

Since medial vowel-initial syllables are disfavored and since VV syllables must involve two identical vowels, there are significant morphophonemic problems created by the juxtaposition of unlike vowels across morphemes and across word boundaries. Space does not permit detailed discussion of morpheme-specific complexities or of dialect variation. We will simply highlight some general patterns that hold in the Ruvuma dialects.

Inside words, the juxtaposition of two vowels results in a long vowel: e.g. /u-hj-apa/ ‘to not whisper’ yields [uhgapa]. If the first vowel in the sequence is one of the following morphemes +i+, +u+, or +mu+, that vowel glides and compensatorily lengthens the following vowel: /u-étta/ ‘to walk’ yields w-étté. In all other cases, the first vowel assimilates the quality of the second vowel, but if the first vowel is non-high it will first induce a lowering of the second vowel. For example, in /ki-hó-ijána/ ‘I have called’, the o first lowers a following i to e and then assimilates to that e, yielding ki-he-éghána. In other dialects, the first vowel in a sequence simply assimilates the following vowel (without any lowering effect if it happens to be non-high).

If more than two vowels are juxtaposed across morpheme boundaries inside a word, they must be reduced to a single bimoraic syllable or organized into two separate syllables (each of which is maximally bimoraic). In the Ruvuma dialects, one can easily assemble sequences of three, four, even five moras in a row. Their resolution involves the same phenomena as mentioned in the discussion of two vowel sequences: the gliding of high vowels, lowering induced by a non-high vowel on a following high vowel, and the assimilation of a preceding vowel to a following vowel. In addition, the object prefix +u+; may induce lowering and assimilation on a preceding vowel, even if it itself glides.

(7) provides some examples. Note that the forms enclosed by slash marks assume that certain morpheme-specific adjustments have already been made, even if they happen to be historically connected to the issue at hand (specifically, adjustments in the shape of the subject marking prefix).
Across words, the juxtaposition of two vowels results in a single mora in the output. In Ruvuma dialects, the adjustments made are similar to those within words, except that gliding has a wider role. Without being exhaustive, we can simply note that word-final non-low vowels glide in front of a non-high vowel (e.g. *ntthu* *eeyrí* … becomes *ntthw *eeyírä* …) and a final *a* elides but first lowers a following vowel (e.g. *ulímmá* *ímítta* ‘to cultivate the field’ yields *ulímm émítta*).

### 3.4 Tone

Makhuwa dialects are very similar in the way that tone ‘works’; they differ more substantially in the realization of the tones. We shall begin by describing the broad similarities and then provide some details in the way that the dialects vary.

There is no variety of Makhuwa known to us where there is anything resembling a fully articulated system of lexical tone contrasts. Verb stems exhibit no lexical contrasts whatsoever. High tone is assigned to a particular mora or moras in the stem on the basis of the morphology in which the stem is inserted. Assignment of H tone may be to the first, second, third, or last stem mora, and in some cases to both the first and the third. Complexities arise depending on whether there are sufficient moras in the stem to accommodate the H tone and whether or not there is an object prefix contained in the stem. In addition to the morphologically determined stem tone, some prefixes have a H tone associated with them in specific morphological constructions. Furthermore, the verbal enclitic element *ni* (signalling a second person respect form) requires the placement of a H tone on the mora in front of it.

Nominals (in non-focal contexts) must have at least one (underlying) H tone. In almost all dialects, this H tone must – at least in principle – be on one of the stem moras. Stems with two (underlying) H tones are restricted to stems with four or more moras. The location of a H tone in the stem is largely predictable on the basis of the noun class in which the stem appears. For example, in most dialects, trimoraic and longer nominal stems in Class 1a, like *havárá* ‘leopard’ and *kharámu* ‘lion’, always have a H tone on their second mora; Class 5 and 6 nominal stems always have a H tone on the first stem mora (e.g. *nlúto* ‘knot’ and *ní-víka* ‘spear’). Marginal exceptions to such general principles do exist (e.g. in loanwords – cf. *ní-guruúmu* ‘wheel’).

One significant set of lexical contrasts is found in some central dialects (as well as in Lomwe) where bimoraic stems in class 7(9)/8(10) may have either a penultimate or an ultimate H tone. The following data from the lapala region illustrate this:

(8) e-phoc ‘sp. rat’ e-hopá ‘fish’ e-phalá ‘sp. rat’
    vs.
    e-nári ‘buffalo’ e-tthépo ‘elephant’ e-píri ‘goat’

Bimoraic stems in other noun classes do not seem to display this contrast. It should be noted that in the dialects that do not have the contrasts in (8) (e.g. the Ruvuma dialects, Imeetto, Esaaka, Eerati), the final H pattern is impossible due to a general ban on word-final (underlying) H tones.
The Imitthupi dialect has the most extensive set of contrasting patterns known to me; in this dialect, some – but not all – High tones appear one mora to the left of their location in other dialects. The underlining indicates a mora that bears an underlying H tone.

(9) Imitthupi Ikorovere

<table>
<thead>
<tr>
<th>Imitthupi</th>
<th>Ikorovere</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-g-aru</td>
<td>ma-aru</td>
</tr>
<tr>
<td>n-khêri</td>
<td>n-khêri</td>
</tr>
<tr>
<td>i-wêri</td>
<td>i-wêri</td>
</tr>
<tr>
<td>n-thêyana</td>
<td>n-thêyana</td>
</tr>
</tbody>
</table>

but:

<table>
<thead>
<tr>
<th>Imitthupi</th>
<th>Ikorovere</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-lômwe</td>
<td>a-lômwe</td>
</tr>
<tr>
<td>i-hêpa</td>
<td>i-hêpa</td>
</tr>
<tr>
<td>n-hêye</td>
<td>n-hêye</td>
</tr>
<tr>
<td>i-thêyâya</td>
<td>i-thêyâya</td>
</tr>
</tbody>
</table>

We do not know the historical explanation for the Imitthupi contrast (though there appears to be a possible connection with lexical tone contrasts found in nominal and verbal forms in Chuabo).

High tones that are assigned to moras on the basis of either lexical or morphological considerations will be referred to as primary H tones (their status is indicated throughout by underlining). In the more ‘central’ varieties of Makhuwa (inland Nampula province) and in Lomwe varieties, primary High tones simply surface wherever they occur, without further ado. However, in many other dialects there is a systematic phenomenon of tone doubling.

(10) u-lípûla ‘to try s.t. new’   u-cûkhûla ‘regurgitate’
     n-hûkâlo ‘sifting basket’  ni-hûlâwe ‘anvil’
     k-aô-nô-lûpáṭtha ‘I was hunting’   y-aô-m-ô-ômolâniha ‘was chasing’

Tone doubling, however, is typically blocked in certain environments. One of these environments is phrase-final position. Thus u-hîyâ ... ‘to leave (behind), stop’ has a doubled H on the final vowel in medial position, but not phrase-finally: u-hîya. A second environment where doubling fails to occur is on the second mora of a bimoraic syllable that is penult in the phrase. As a consequence of this restriction, we find alternations between (medial) u-máála ... ‘to be quiet’ and (phrase-final) u-mâala. It should be noted that unlike many other languages, Makhuwa does not bar doubling onto a mora that is followed by a H tone both on the first mora and the third mora (if the stem is long enough), we get surface sequences of H tones like the following: u-myáámíháca ‘to chop into small pieces’.

Although doubling is entirely overt in Ikorovere, in other dialects there are complexities. In Imitthupi, e.g. the primary H tone is realized at a mid pitch when (a) its double follows, (b) there is no preceding H tone, and (c) it is not initial in a bimoraic syllable. In the examples in (11), the umlaut symbol indicates mid pitch. Furthermore, the doubled H has falling pitch when it is on a phrase-penult monomoraic syllable.

(11) primary H tone realized as mid:

<table>
<thead>
<tr>
<th>Imitthupi</th>
<th>Ikorovere</th>
</tr>
</thead>
<tbody>
<tr>
<td>î-wêri</td>
<td>î-wêri</td>
</tr>
<tr>
<td>n-hêpa</td>
<td>n-hêpa</td>
</tr>
<tr>
<td>î-hêce</td>
<td>î-hêce</td>
</tr>
</tbody>
</table>

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primary H tone alternating between mid and H due to presence or absence of a following double:

\[ i\text{-máñá} \quad \text{vs.} \quad i\text{-máñta} \quad \text{‘field’} \]
\[ ki\text{-ho-úpa} \quad \text{vs.} \quad ki\text{-ho-úpa} \quad \text{‘I have beaten’} \]

primary H tone alternating between mid and H due to absence or presence of a preceding H tone:

\[ ki\text{-ho-kávíha} \quad \text{‘I have helped’} \quad \text{vs.} \quad k\text{-á-ho-kávíha} \quad \text{‘I helped’} \]
\[ hávi̯á \quad \text{‘leopard’} \quad \text{vs.} \quad á-hávi̯á \quad \text{‘leopards’} \]

primary H tone always retained on first mora of a bimoraic syllable:

\[ u\text{-máñá} \quad \text{‘to be quiet’} \quad \text{u-hólo} \quad \text{‘to go in front’} \]

In the Eerati dialect in Nampula, a primary High tone is fully low-pitched under exactly the same conditions as a primary H tone is mid-pitched in Inimthupi (and also exhibits the phenomenon where a phrase-penult double has a falling character). In Enlai (spoken near the city of Angoche in Nampula), the primary H tone is fully low as in Eerati. However, Enlai differs from most Makhuwa doubling dialects in that it doubles into phrase-final position and onto the second mora of a bimoraic phrase-penult syllable.

In the Esaaka dialect, there is no general doubling, as in Ikorovere, Inimthupi, Eerati, and Enlai (thus we find ki-ho-lávóla ... ‘I have transported ...’ and not ki-ho-lávóla ... as in Ikorovere). However, doubling does affect the second mora of a bimoraic syllable (thereby avoiding a falling tone), provided that syllable is neither phrase-penult nor phrase-final: u-máñá ... (but: u-máñla phrase-finally), o-ká-upówéla ‘to remember me’ and not *o-ká-upówéla. Doubling in Esaaka also affects a mora that is in turn followed by a H tone (thus avoiding a H0H sequence). We find examples like ki-ho-řúkůna ... ‘I have turned over’ rather than *ki-ho-řúkůná ... á-hávi̯á ‘leopards’ rather than *ą-hávi̯á.

4 THE VERBAL SYSTEM

The verb system, as in most Bantu languages, is complex. We shall not dwell on matters that are characteristic of most Bantu languages. The core of the verbal word is the root, which is typically CVC in shape (e.g. /thum/ ‘buy’, /vah/ ‘give’) but may be VC (e.g. /ly/ ‘eat’, /wi/ ‘come’, /ny/ ‘defecate’, /s/ or /xi/ ‘dawn’). While non-derived polysyllabic stems do occur (e.g. /lokóthi/ ‘pick up’, /kurum/ ‘rumble, make noise’, /rakal/ ‘be injured’), most longer stems involve the affixation of one or more verbal extensions. The following extensions occur in Makhuwa.

(13) applied: -el- (sometimes r occurs instead of l; this r appears to be partially conditioned by a preceding consonant and partially lexicalized); benefactive, instrumental, locational meanings

\[ u\text{-khává} \quad \text{‘to strip off bark’} \quad \text{vs.} \quad u\text{-kháy-él-a} \quad \text{‘to strip off bark for’} \]
\[ u\text{-háma} \quad \text{‘to trim the hair’} \quad \text{vs.} \quad u\text{-hám-él-a} \quad \text{‘to use to cut the hair’} \]
causative: -ih-; besides causative-related interpretations, this extension conveys notion ‘do very well’

u-láka ‘to be well-arranged, beautiful’ vs. u-lák-ih-a ‘to arrange s.t., beautify’
u-mára ‘to fall, drop down’ vs. u-má-r-ih-a ‘to drop s.t.’
u-hám-a ‘to cut the hair’ vs. u-hám-ih-a ‘to cut the hair very well’

transitivizer: -Vx/-Vs- according to dialect

u-láp-úx-a [K], u-láp-úx-a [Mi] ‘to ferry, cause to cross’ (cf. u-láp-úw-a ‘to cross’)
u-híhím-úx-a [K], u-híhím-úx-a [Mi] ‘to bring back to life’ (cf. u-híhím-m-ú-a ‘to revive (intr.)’)

transitivizer: -VI- (sometimes -Vr-):

u-mány-ól-a ‘to take a chip or lump out of s.t.’
u-húram-úl-a ‘to cause to expand, be wide open’
u-tém-úl-a ‘to drill for water’
u-rúm-úl-a ‘to break off’

intransitivizer: -VO- where Ø was historically k (which has elided in Makhuwa);
in Ruvuma, a preceding o glides while a preceding u triggers an epenthetic glide (however, an expected sequence um-úw-V surfaces as umm-w-V, where the first m is moraic)

u-láp-ú(w)-a ‘to cross water’
u-mány-w-úa ‘to come off in a lump’
u-húramm-úm-w-a ‘to expand (as of s.t. inflated), be wide open’
u-témm-úm-w-a ‘to have a hole, holes’
u-rúmm-úm-w-a ‘to be broken off’

reciprocal: -an-

u-hám-án-a ‘to trim one another’s hair’
u-páth-án-a ‘to get one another’

plurality: -ac- (consonant varies across dialect as discussed above)

u-khúy-ác-a ‘to strip off bark in several places’
u-húk-ác-a ‘to smear’

habitual: -ex- (consonant varies with s across dialects)

u-máy-ác-a [K] ‘to usually fall’
u-khúy-ís-a [Mi] ‘to usually skin off’

passive: -iy- (some dialects: -iw-) but absent from the ‘perfect’ stem

u-lúm-iy-a ‘to be bitten’
u-wíh-iy-a ‘to be brought’

potential: -e- (which in some dialects glides to y and compensatorily lengthens following vowel, while in other dialects is separated from a following vowel by an epenthetic glide); the -e- developed historically from /ek/ (cf. u-hom-ey-áa in some dialects)

húm-y-áa ‘able to be pierced’ (cf. u-hom-ey-a in some dialects)
u-háh-ý-áa ‘to be capable of being trimmed’ (cf. u-hom-iy-a in some dialects)
Some of these extensions may occur in bimoraic variants whose usage has not been explored.

(14) \(u\-kẖg\-é̱h\-a\) ‘to skin off bark properly (cf. also with the same rough meaning: \(u\-kẖg\-ih\-a\))
    \(u\-pẖt\-é̱h\-a\) ‘to get a lot of s.t.’

Examples of combinations of verbal extensions are given in (15).

(15) \(u\-ẖm\-án\-é̱f\-a\) ‘to use s.t. to cut one another’s hair’
    \(u\-m̱r\-ih\-é̱l\-a\) ‘to pour a little at a time, drop s.t. at a certain point’
    \(u\-ḻp\-úw\-é̱l\-a\) ‘to use for crossing, to cross over to (a place)’
    \(u\-kẖg\-é̱x\-ḻh\-a\) [K] ‘to make sure s.t. is really skinned’
    \(u\-wi\̱h\-é̱r\-án\-a\) ‘to bring to one another’

The combination \(an\-ih\) is particularly extensive in its use:

(16) \(-an\-ih\-:
    \(u\-hi\̱y\-án\-é̱h\-a\) ‘to cause to separate’
    \(u\-ẖḵ öl\-y\-g̱án\-ih\-a\) [K], \(u\-ẖḵ öl\-y\-aan\-é̱h\-a\) [Mi] ‘to go and come back on the same day’
    \(u\-kẖyp\-án\-ih\-a\) ‘to heap up’
    \(u\-lígm\-án\-ih\-a\) ‘to clench the teeth’

Two other extensions are grammatical in nature rather than derivational: /ak/ and the ‘perfect’ stem-formative /al/ (in some dialects /il/) alternating with an infixed nasal element. The former does not exhibit much morphophonemic complexity, though it does alternate with /ek/ depending on the following vowel, e.g. \(y\-a\-k\-thumel\-á̱k\-a\) ‘if [cl. 2] buys for me’ but \(n\-k\-ṯil\-ḻar\-ek\-e\) ‘follow me!’ The perfect formative will be examined below.

It should be noted that there are hundreds of verbal stems that are systematically related to ideophones. A few examples follow.

(17) \(u\-cùcumá\) ‘to squat’ (cf. cucumá)
    \(u\-pùrukìtùl\-a\) ‘to chew s.t. hard’
    (cf. purukuttì)
    \(u\-ẖèk\-a\) ‘to slash’ (cf. hèkì)
    \(u\-pùcèr\-a\) ‘to receive (with the hands)’ (cf. pocee)

So far we have confined our discussion to what may be referred to as the verb stem proper. In many Bantu languages, object prefixes cohere together with the verb stem to form what may be called a macrostem. This is the case in Makhuwa. One major argument for this position comes from tone assignment. For instance, infinitive verbs involve the assignment of a H tone to the first stem mora (\(u\-mà̱n\-a\) ‘to beat’, \(u\-ḵyì\-h\) ‘to help’); however, when an object prefix is included, it is the object prefix that takes the H tone (\(u\-k\-màn\-a\) ‘to beat me’, \(u\-k\-ḵá\-h\) ‘to help me’). A notable aspect of Makhuwa structure is that while there are object prefixes for first (\(k\-i\), \(k\-i\-hi\) pl.) and second person (\(u\), which by itself indicates the absence of ‘respect’ but in combination with an enclitic \(n\) indicates respect), and reflexive (in Ikorovere: \(i\) before consonant-initial stems, but \(i\)c plus compensatory lengthening in front of vowel-initial stems; in Imitthupi: \(i\) before all stems) notions, the only noun classes that have a corresponding object prefix are Class 1 and 1a (\(mu\)) and Class 2 and 2a (\(a\)). A diminutive prefix \(xi\-si\) occurs in the object prefix ‘slot’, but differs in that it co-occurs with an object prefix (while an object prefix may not co-occur with another object prefix). There is variation in the relative order of the diminutive prefix and the object prefix (e.g. \(u\-xi\-i\-thumela\) or \(w\-i\-xi\-thumela\) ‘to buy a little for oneself’).
Turning to aspects of the tense/aspect/mood system, I shall confine my remarks to a few selected topics that are particularly characteristic of Makhuwa. Affirmative, finite, main-clause verb forms fall into two essential types in most varieties of Makhuwa: focal forms and non-focal forms. Focal forms require that the verb appear with a complement; furthermore, the initial H tone specification of the complement is deleted. (In a doubling dialect, this means that neither the first primary H tone nor the double will appear.) In some dialects, if the result of deletion would be a toneless word, then the final vowel of the nominal may be raised in pitch. Here are some examples of focal vs. non-focal tenses:

(18) non-focal present/future: ki-n-gó-lím’ é-máttá ‘I am cultivating/will cultivate the field’
    focal present: ki-n-lím’ é-máttá ‘I am cultivating the field’
    non-focal perfect: ki-ho-lím’ é-máttá ‘I have cultivated the field’
    focal perfect: ki-lím’alé-máttá ‘I have cultivated the field’
    non-focal past: k-á-ho-lím’ é-máttá ‘I cultivated the field’
    focal past: k-aa-lím’alé-máttá ‘I was cultivating the field’
    non-focal past continuous: k-aá-n-ólím’ é-máttá ‘I was cultivating the field’
    focal past continuous: k-aa-lím’alé-máttá ‘I was cultivating the field’

If a verb with the same morphological structure as a focal verb form appears either without a complement or with a complement that has not undergone deletion of its initial primary H tone, then that verb will be interpreted as a non-main clause verb – specifically, a relative verb. For example, n-thú aa-thum-lím’úttuka is understood as ‘the person who bought a car’ whereas n-thú aa-thum’é-uttuka is understood as ‘the person bought a car’.

Another complexity involving the tense/aspect/mood system in Makhuwa is the existence of two distinct negative formatives: kha, which is located initially in the verb before the subject prefix, and hi, which is located after the subject prefix. (19) gives examples of different verb tenses using these negative formatives. The list is not exhaustive.

(19) kha (main clauses)
    kha-n-á-pí-lale ‘we did not cut’
    kha-n-a-rapí ‘we have not bathed’
    kha-ni-n(o)-líma ‘we are not cultivating’
    kha-n-aa-tířékha ‘we were not cooking’

    hi (subordinate clauses)
    u-hí-thíma ‘to not buy’
    u-hí-thíhe ‘that you (non-respect) should not tie’
    ki-hí-líkottaníhacaka ‘me not picking things up’
    k-á-n-hí-líkottaníha=ru ‘although I was not picking up pl.’ (contracted form of k-á-n-ó-hí-líkottaníha=ru)
    ki-hí-límeke ‘if I don’t cultivate’
    a-hí-káa-ramúšile ‘if [cl. 2] had not greeted’
    ki-hí-nú-á-púputhe ‘even if I do not wash’
    n-thíhí-líliy=óayo ‘the person who hasn’t eaten’

There are a number of verbal constructions that have little morphophonemic complexity (other than the usual ones resulting from the creation of potential sequences of vowels) and rather stable across all Makhuwa varieties. Some of these are listed in (20).
(20) infinitive (positive and negative): u-líma ‘to cultivate’, u-hí-líma ‘to not cultivate’

subjunctive (positive and negative): u-ittupíláníhe ‘you should cut to pieces’,

n-hí-thükule ‘don’t untie!’

participle (positive and negative): ni-pupúthákka ‘we washing’, ki-(hí-)pángaka ‘me not working’

negative present: kha-ni-n(o)-líma ‘we are not cultivating’

focal continuous: k-aa-lúpáatha... ‘I was hunting’

Other morphological structures show considerable morphophonemic complexity as well as cross-dialectal variation. An example of this is provided by the non-focal positive perfect and non-focal positive past. In the Ruvuma dialects, these two tenses have the following canonical patterns: SP-ho-verb stem (perfect) and SP-á-hó-verb stem (past). The latter structure has a tonal variant of the shape SP-a-há-verb stem that we shall not discuss.

In the Ruvuma dialects, while these transparent forms exist (e.g. ki-hó-líma ‘I have cultivated’ and k-á-hó-líma ‘I cultivated’), a ‘contracted’ form is available in many situations. The contracted form involves the elision of h from ho and adjustments to the resulting vowel sequence.

Consider the perfect form first. The contracted form of ki-ho-líma is ko-o-líma. The h elides and the vowel in the subject prefix assimilates to the following o. This elision of h is not possible, however, when ho is followed by a vowel-initial element, whether the verb stem or an object prefix (h cannot elide from ki-he-áta ‘I have walked’ e.g. nor from ki-há-áva ‘I have given’ [cl. 2] s.t.’). The h also may not elide if there is no overt subject prefix (e.g. ho-thükka ‘[cl. 1] has tied’ cannot become *o-thükka).

The h may also elide in the past tense form, but now the following o vowel assimilates to the vocal of its left. Thus k-á-hó-líma contracts to k-á-á-líma. Elision continues to be impossible before a vowel-initial stem (k-á-hé-áta ‘I walked’ has no form where the h is missing).

When we examine non-Ruvuma dialects, we find often that the complete set of full and contracted forms are not available. As an example, consider the Makhuwa spoken in Lapala in Nampula. The non-focal positive affirmative has the following shape when a consonant-initial stem is used: k-o-o-kéxa ‘I lifted’. This form looks just like the contracted form of this tense in Ruvuma dialects. But in the Lapala dialect, there is no uncontracted form in use. However, when the stem is vowel-initial, we find examples like ki-hí-lípa ‘I sang’, ki-he-áta ‘I walked’, ki-hú-ápuwéga ‘I remembered’; the h from original ho appears in this context and the vowel of ho assimilates completely to the following vowel (as is the norm in this dialect).

In many non-Ruvuma dialects, a quite different non-focal positive past form has developed: namely, one where a bimoraic aa invariably appears followed by hi (which has a primary H tone). Thus these dialects have past forms like k-aa-hí-líma ‘I cultivated’ (setting aside differences in tone realization). The historical explanation for the use of hi here rather than ho is not clear.

Another area of morphophonemic complexity and dialectal differentiation involves the non-focal positive non-past form of the verb. In the Ruvuma dialects, the non-focal non-past form involves the bimoraic prefix nág. The shape nág is found in front of consonant-initial stems. When the stem is vowel-initial, we find that the first mora of nág remains intact, but the vowel occupying the second mora glides to w and there is an accompanying compensatory lengthening of the stem-initial vowel.

(21) ki-nág-túpúra ‘I’ll hoe deeply, I am hoeing deeply’

vs.

ki-náw-égmésa ‘I’ll prop it up, I am propping it up’
In a number of other dialects, the prefix \textit{nag} occurs in front of consonant-initial stems, whereas in front of vowel-initial stems we find \textit{nav} plus compensatory lengthening of the following vowel. The following examples from Esaaka illustrate.

\begin{align*}
\text{(22) } & \text{ki-nā-pa-lyta} & \text{‘I am eating’} \\
& \text{ki-nā-lyma} & \text{‘I am cultivating, I will cultivate’} \\
& \text{ki-nā-līyola} & \text{‘I am transporting’} \\
\end{align*}

\begin{align*}
\text{vs.} \\
& \text{ki-nāw-ōgna} & \text{‘I see’} \\
& \text{ki-nāw-īpa} & \text{‘I am singing’} \\
& \text{ki-nāw-ēgta} & \text{‘I am walking, going’} \\
\end{align*}

It appears that the origin of the construction must have been a sequence of vowels $a + u$ (the $u$ possibly representing the infinitive). The usual assimilation pattern in Ruvuma dialects predicts that this sequence will surface as $oo$ when no other vowel follows, but as $ow$ plus compensatory lengthening when a vowel follows. In other dialects, however, what has happened is that the $u$ assimilated to the preceding $a$ when pre-consonantal; otherwise it glided and compensatorily lengthened the following vowel.

A final case of dialect variation in the verb morphology has to do with the ‘perfect’ stem (which is used in focal affirmative formations, negative formations, and relative formations). All dialects agree that a stem of the shape -C- or -CC- must have an uncontracted pre-final suffix, either $/al/$ (most common) or $/il/$. Stems that contain at least one vowel may, at least in some dialects, have both an uncontracted and a contracted pre-final suffix. The contracted suffix appears as a homorganic, moraic nasal located in front of the last consonant of the stem. Thus a stem like /rap/ ‘bathe’ will have either an uncontracted form -\textit{rapile}/-\textit{rapile} or a contracted form -\textit{rapine}. Some dialects may avoid the contracted form altogether, but in my experience a contracted form is usually available (but with certain stem-final consonants favoring it more than others). Detailed research is required.

5 THE NOMINAL SYSTEM

The inventory of noun classes in Makhuwa is considerably reduced in comparison to most Bantu languages. Specifically, original class 7 and class 9 have fallen together, as have original classes 8 and 10. In addition, class 11 and the diminutive classes 12 and 13 are entirely absent. In (23) we give examples of each noun class (the assumed underlying representation of the prefix appears inside slant marks). The Proto-Bantu distinction between pre-prefix and prefix is entirely absent (at least synchronically speaking).

\begin{align*}
(23) & \text{Class 1} /\text{mu}/: n-thi̱yāna ‘woman’, n-cēga ‘a Yao person’, n-ğīto ‘guest’, mw-ağna ‘child’ \\
& \text{Class 2} /\text{w}/: a-thi̱yāna ‘women’, a-cēwa ‘Yao’, a-ğīto ‘guests’, \\
& \text{Class 1a} /\text{Ø}/: kharānu [K] ‘lion’, rj̱īthe ‘elephant shrew’, nakhūwo ‘maize’, \\
& hąpa ‘liver’ \\
& \text{Class 2a} /\text{̱}/: ġ̱-khārānu ‘lions’, ġ̱-rj̱īthe ‘elephant shrews’, ġ̱-hąpa ‘livers’ \\
& \text{Class 3} /\text{mu}/: n-hēgna [K] ‘unripe maize cob’, m-oğjoko ‘river’, mw-įri ‘tree’ \\
& \text{Class 4} /\text{mu}/: m-i-hēgnya [K] ‘unripe maize cobs’, m-oğjoko ‘rivers’, m-įri ‘trees’ \\
& \text{Class 5} /\text{n}/: ni-khūja [K] ‘shoulder’, n-ğiku ‘stone’, ni-ğjaka ‘spear’, n-rāpala ‘hide’ \\
& \text{Class 6} /\text{ma}/: ma-khūja [K] ‘shoulders’, ma-ğiku ‘stones’, ma-ğjaka ‘spears’, \\
& ma-rāpala ‘hides’
\end{align*}
Class 7,9 /i/: i-núto 'hammer', i-phíro 'road', i-kónya 'crocodile', i-léma 'deformity'  
Class 8,10 /i/: i-núto 'hammers', i-phíro 'roads', i-kónya 'crocodiles', i-léma 'deformities'  
Class 14 /u/ (in the Ruvuma dialects and Imeetto): u-théka 'beer', ú-lóko [Mi] 'potting clay'  
Class 15 /u/ (in the Ruvuma dialects and Imeetto): u-váhá 'to give', w-aápa 'to whisper'  
Class 16 /á/ va-culu 'at the top', va-tetho 'on the sides, margin'  
Class 17 /ú/ u-culu 'on top, the upper side, high up, upstream', u-tetho 'at the sides, margin'  
Class 18 /mu/: n-culu 'in the top of s.t.', n-tetho 'on the edge'

All Makhuwa dialects exhibit the same basic nominal system, with only phonological differences. The /u/ prefix in class 14 and 15 is /o/ in non-Ruvuma dialects. The class 7, 9 /i/ prefix is /e/ in non-Ruvuma dialects. The class 8, 10 prefix is not uniform in the non-Ruvuma dialects. In some varieties it is also /e/; in other varieties it is /i/, thereby showing a contrast between singular and plural forms. As a result, i-phíro 'road' in some dialects is either singular or plural, in other dialects it does not exist, and in yet other dialects it is only plural. The form e-phíro does not exist in Ruvuma dialects, while in other dialects it may either be both singular and plural or only singular.

There are also some morphophonemic differences in the prefixes with /mu/. In many dialects, the /mu/ prefixes retain their vowel in all preconsonantal environments except when a labial follows, whereas in other dialects the /u/ elides pre-consonantly and the /m/ assimilates the point of articulation of the following consonant (note that before /h/ and /w/ the nasal is velar, although we do not indicate this in our transcription). In all dialects, the class 5 prefix ni elides its vowel in front of a coronal consonant but not in other pre-consonantal positions (see (23) e.g.).

Some brief comments on the morphological structure of nominal stems are in order. Class 1a/2a nominals show indications of complex morphological origins in some cases. For instance, the following class 1a/2a formations seem to be built on a stem that (at least from an historical point of view) already contains a class prefix: specifically, /mu/, in one of its morphophonemic variants: mpéta (á-mpéta) ‘bamboo flute’, nkũnya (á-nkũnya) [K] ‘European’ (cf. n-kũnya (a-kũnya [Mi]), nthhũ (á-nthhũ) [Mi] ‘banded mongoose (Mungos mungo)’.

Class 1a/2a nominal stems show a recurring element na in initial position in the stem: nac̐̄r̐̄ ‘Natal duiker (Cephalophus natalensis)’, nac̐̂j̐̂n̐̂ (Imeetto) ‘a kind of witch doctor’ (derived ultimately from the Arabic djinn), nam̐̂g̐̂r̐̂a ‘a kind of bean’, nam̐̂g̐̂m̐̂e ‘barn owl’. Sometimes this na is followed by the /mu/ element mentioned above: nam̐̂pạ̣̀phi ‘leaves of a type of bean plant’, nam̐̂hạ̣́k̐̂w̐̂a ‘simsim’, nág̐̂r̐̂w̐̂a ‘a type of bean’.

The system of kinship terminology is fairly complex in its morphological patterning. It does, however, provide instances of other recurring morphological elements. Specifically, since a class 2/2a kinship term is used to indicate respect rather than plurality, a device is needed to yield the concept of plurality. This is achieved by attaching /manyà/ either directly to the stem or to the class 2a prefixed form. Some examples from Imifithupi.

(24) n-hạ̣́n̐̄ ‘wife’  
á-hạ̣́n̐̄ ‘chief’s wife’  
manyà-hạ̣́n̐̄ or manyà-á-hạ̣́n̐̄ ‘chief’s wives’

nạ̣k̐̂ ‘sponsor of an initiate’  
á-nạ̣k̐̂, the class 2a form  
manyà-nạ̣́k̐̂, plural form
á-tííthi ‘(my) father’  
manyá-tííthi or manyá-á-tííthi ‘father and his brothers’

In addition to many/ one also finds /ŋga/ forming plurals (examples again from Imitthupi): e.g. á-tááátha ‘maternal uncle’, manyá-á-tááátha/manyá-á-tááátha ‘(my) maternal uncles’, but also á-nggi-á-tááátha (the tone shape here is irregular, but consistent across this particular construction); ál-mááányi ‘(my) mother’, manyá-mááányi/manyá-á-mááányi ‘my mother and her sisters, etc.’, but also á-nggi-á-mááányi.

There are several morphologically productive processes that create complex nominal stems. One of these involves the formation of diminutive nominals. A diminutive singular is formed by the morpheme sequence mw-á- being prefixed to a (singular) nominal. In most cases the nominal retains its original prefix if it has one; however, in classes 7 and 9 there is some variation as to whether the prefix is retained or not. The following data are from Imitthupi.

(25) nominal diminutive form
kapááthi ‘gun’    mw-á-kapááthi
á-tháá ‘net’     mw-á-á-tháávi
í-káárhíkho ‘cooking pot’  mw-á-káárhíkho

The diminutive plural is formed by prefixing the morpheme sequence a-sí- (a-xí- in some dialects). The original class prefix is maintained, e.g. when the noun class prefix has an initial consonant. When the noun class prefix is i, it typically elides. When the nominal is originally class 2/2a, the inherent prefix regularly elides.

(26) nominal diminutive form
má-á-tháávi ‘nets’    a-xí-má-tháávi
í-pááátho ‘tool for pounding floor’ a-xí-mí-pááátho
í-níka ‘bananas’ a-xí-níka
í-káárhíkho ‘cooking pots’ a-xí-káárhíkho
á-káárhíkho ‘mirrors’ a-xí-káárhíroorv

The reader may observe from the examples in (25) and (26) that there are tonal alternations associated with these two formations. Discussion is beyond the scope of this chapter.

There are not many stems that belong inherently to the locative noun classes. However, the formation of derived locatives is productive. There are two aspects to the derivation of locatives: the prefixation of one of the three locative prefixes (u, va, mu) and the encliticization of ni. Some examples from Imitthupi:

(27) ú-ráávo ‘honey’    nakótó ‘bark cloth’
wa-ú-ráávo=ni ‘to the honey’    u-nakótó=ni ‘to the bark cloth’
vo-ú-ráávo=ni ‘by the honey’    va-nakótó=ni ‘near the bark cloth’
mu-ú-ráávo=ni ‘in the honey’    n-nakótó=ni ‘in the bark cloth’

The tonal complexities found in locative formation are beyond the scope of this chapter.

There is one productive element that occurs encliticized to the nominal: =ene. The following examples are from Ikorovere (notice incidentally that in most cases there is no overt agreement between the noun stem and =ene).

(28) n-tháápi ‘rooster’    n-tháápi=éene ‘a fairly big rooster’
mí-tháápi ‘roosters’    mi-tháápi=éene ‘fairly big roosters’
mw-á-á-tháápi ‘dim. rooster’    mw-á-á-n-tháápi=éene ‘fairly big little rooster’
a-xí-mí-tháápi ‘dim. roosters’ a-xí-mí-tháápi=c-ene ‘fairly big little roosters’
Finally, I should note that lexically reduplicated stems occur (i.e. stems for which a corresponding non-reduplicated does not exist):

(29) ni-móró ‘a drop of s.t.’ ma-lijójo ‘any exudate’
mi-hihi [K] ‘greedy behavior’ n-córóco ‘waterfall’

I have no data that suggests that there is productive reduplication of nominals (but I also have not explored the matter specifically).

Nominals control a system of agreement on other elements in the nominal phrase (e.g. demonstratives, possessive enclitics, adjectives, associative phrases) as well as on the verb. The following chart illustrates the agreement pattern. Space does not permit discussion of phonological differences across dialects. We should note that in the case of possessive and associative agreement, when I write the null symbol, I indicate that there is no overt agreement. There could be covert agreement, but if so, one would need to be able to argue that independently needed phonological rules would account for the absence of the agreement element. I have grouped the infinitives with class 17 since wherever pertinent (e.g. demonstratives), the infinitive aligns with it rather than with class 14.

(30)

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<th>Class</th>
<th>Subject prefix</th>
<th>Adjective agreement</th>
<th>Possessive agreement</th>
<th>Associative agreement</th>
<th>Demonstratives</th>
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<td>14</td>
<td>u</td>
<td>u</td>
<td>w</td>
<td>w</td>
<td>úla, úyo, úle</td>
</tr>
<tr>
<td>15, 17</td>
<td>u</td>
<td>u</td>
<td>w</td>
<td>w</td>
<td>wáu, wyle</td>
</tr>
<tr>
<td>16</td>
<td>va</td>
<td>va</td>
<td>v</td>
<td>v</td>
<td>váu, vále</td>
</tr>
<tr>
<td>18</td>
<td>mu</td>
<td>mu</td>
<td>mw</td>
<td>mw</td>
<td>máu, mále</td>
</tr>
</tbody>
</table>
initial vowel in a demonstrative will coalesce with the final vowel of the nominal. There is dialectal variation as to whether the combination of a nominal stem and an enclitic demonstrative yields a monomoraic or a bimoraic initial vowel. (The demonstrative elides its H tone when in enclitic position, depending on the tonal context.)

(31) áľ ā-miřaːw⁰ áľa [Mi] ‘these young men’ (from: /áľ a-miřaw ţaľa/)  
áľa mw-ɑːn⁰ ɒola [K] ‘this child’ (from: /áľ mw-ɑːnna ţula/)

An interesting use of the demonstrative involves relative clause formation. A demonstrative (agreeing with the head) is encliticized to a relative verb when that verb is clause-final. Some examples:

(32) a-n-ttiːpuraː=ayɔ [K] ‘the [cl. 2] who is hoeing’  
mw-汩i u-wadiːwidi=åole [K] ‘the tree [cl. 3] that has fallen’

i-tqwa h y-a-a-hitiːyɛ=eyɔ [K] ‘the chicken [cl. 9] that was slaughtered’

When another word follows the verb in the clause, the demonstrative occurs encliticized to the clause-final word and not the verb: no-Wâ meŋâw=ayɔ [K] (from: /no-Wâ meŋlo=ayɔ/) ‘the [cl. 1] who is coming tomorrow’.

The following possessive stems occur in Makuwu.


Across all Makuwu varieties known to me, the initial vowel of the possessive stems surfaces as bimoraic when it is coalesced with a preceding vowel: i-hîpa ‘hoe’, i-hîpâŋka ‘my hoe’, i-hîpëŋyũ ‘your hoe’, etc.

The use of the possessive stems is not particularly remarkable except in one case. When the head of a relative verb (whether explicit or implicit) is not the subject of that verb, a possessive enclitic agreeing in person with the subject is encliticized to the verb. This results in a double marking of the subject on the verb if the verb is clause-final. Some examples:

(34) k-aa-púŋnūthaː=aka ‘when/where I was washing’ (with a null head of the relative verb)  
n-ko-wi k-aa-thuŋkî=âakî=oyɔ [K] ‘the rope that I tied’

kapwîŋyũ k-aa-thuŋkî=âakî=oyɔ [K] ‘the gun which I bought’

mw-汩i k-aa-wuŋkî=âakî=oyɔ [K] ‘the tree that I felled’

As in most Bantu languages, adjectival stems are not numerous, and there is nothing particularly remarkable about this structure in Makuwu. The associative construction is a very significant aspect of the system, but also not strikingly different in any respect from other Bantu languages. Perhaps the most noticeable difference is in the phonology. Although the usual a associative particle is in evidence in a limited range of examples (e.g. i-hîpâ y-a-cë jõni ‘John’s hoe’), it usually appears as o in [Mi] and as oo in [K].

(35) n-ûŋ p’oo-thâŋpo [K] ‘an elephant hunter’  
m-ûŋ p w-o-hîpa [K] vs. m-ûŋ p w-o-hîpa [Mi] ‘handle of a hoe’

n-tiŋwî n-o-nqîhîwɔ [K] ‘a ridge, mound of maize’

vs.

n-xâŋtti n-o nqâŋga [Mi] ‘a shirt made of the khaanga cloth’
6 SYNTAX

There is little published work available on Makhuwa syntax, and my own research has hardly touched on syntactic matters. Stucky (1980) demonstrates that while word order is relatively fixed inside the nominal phrase, there is considerable variation in word order with respect to the verb and its arguments. It is unknown whether the severely reduced set of object prefixes in the language has had a significant impact in the realms of argument structure or anaphora. The relative verb is complex in its morphological and syntactic structure. The tense system in relatives is dramatically different from the tense system in main verbs. Examination of the texts in Katupha (1983) reveals an extensive system of demonstratives with considerable complexity in their usage. Ideophones are a rich aspect of Makhuwa traditional discourse and merit careful study.

REFERENCES

CHAPTER TWENTY-EIGHT

WESTERN SAVANNA (K, R)

Gabriele Sommer

1 DEMOGRAPHY AND CLASSIFICATION

According to Guthrie Western Savanna consists of eight groupings, namely Chokwe-Luchazi (K10, Zaire, Angola, Zambia), Lozi (K20, Zambia, Namibia), Luyana (K30, Angola, Zambia, Namibia, Botswana) and Subiya (K40, Zambia, Namibia, Botswana) on the one hand as well as UMbundu and Ndonga (R10, 20, Angola, Namibia), Herero and Yeyi (R30, 40, Namibia, Botswana) on the other. Languages considered here comprise UMbundu (R11, Schadeberg 1990), Ndonga (R22, Fivaz 1986) as one of several Wambo languages, and Yeyi (R41, Gowlett 1992, Sommer 1995; for Herero, R31, see Ch 29). Furthermore, data on Mbukushu (K43, Fisch 1977), Gciriku (K38b, Möhlig 1967), Kwangari (K33, Dammann 1957), Lucazi (K13, Fleisch 2000), Layana (K31, Givön 1970b) and Luvale (K14, Horton 1949) are also taken into account.

As far as the genealogical subclassification of Western (R, K) Savanna is concerned, internal relationships within the Wambo cluster, among members of the complex Luyana group as well as the general position of Yeyi within the wider Southern Bantu context have been dealt with to some extent (Haacke and Elderkin 1997). But until now several languages of Southern Angola, Southwestern Zambia and a number of Caprivian languages still await adequate linguistic description. In general, there are a number of features currently characterizing Western Savanna languages which seem to be due to the effects of language contact and shift situations. Both phenomena must have had a considerable impact on lexical, phonological and grammatical structures and sometimes to such an extent that genealogical links are nearly obscured. This is particularly true for those languages whose current distribution seems to be the result of complex migrational histories and which can today be found in linguistically diverse regions such as the Namibian Caprivi and Kavango areas and in the northwestern part of Botswana (Ngamiland). Yeyi, for instance, has in the past been influenced not only by neighboring Bantu but also Khoisan languages (see §2). While its speakers in Ngamiland are currently undergoing language shift towards the national language Tswana (S31, Ch 31), Eastern Caprivi Yeyi are at least bilingual in their own language and Lozi, the major lingua franca of this area. Lozi, however, exhibits structural influences from zones K and S, and despite its Eastern Savanna affiliation it has often been classified as a member of the Western Savanna group. Similarly, Gciriku ‘shows typological and genetic resemblances with the languages of Guthrie’s zones R and K’ (Möhlig 1967, English summary). Today the language is mutually intelligible with Shambyu, but only some decades ago Gciriku speakers still remembered words in their former language. Manyo, which had been abandoned when most Gciriku men were killed by Tswana warriors shortly after 1900 and relations with neighboring Kavango groups were later intensified.
<table>
<thead>
<tr>
<th>Language</th>
<th>Dialects</th>
<th>Distribution</th>
<th>Number of speakers</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Umbundu (R11)</td>
<td>?</td>
<td>Bié, Huambo and Benguela provinces of Southern Angola</td>
<td>2 million (Schadeberg 1990)</td>
<td>?</td>
</tr>
<tr>
<td>Oshindonga</td>
<td>Dialects: South-Eastern division of Wambo group (see Baucom 1972)</td>
<td>Northern Namibia</td>
<td>280,000 (Fivaz 1986)</td>
<td>Namibian national language, like Kwantama (R21) used in the media, administration and in education up to university level</td>
</tr>
<tr>
<td>Herero (R31)</td>
<td>Dialects: Central Herero, Kaokoland varieties, ‘Hereroland West’</td>
<td>Northern, Central Namibia, Northwestern Botswana</td>
<td>113,000 (Maho 1998), 15,000 (Vossen 1991–2)</td>
<td>Namibian national language, Central Herero is norm variety (‘standard’), used in the media, administration and education</td>
</tr>
<tr>
<td>YEYi (R41)</td>
<td>Dialects: Caprivii and Ngamiland varieties (see Donnelly 1990, Gowlett 1997, Sommer and Vossen 1995)</td>
<td>(1) Eastern Caprivi, Namibia, (2) Northwestern Botswana</td>
<td>(1) 5,200 (Maho 1998), (2) 20,000 (Vossen 1988)</td>
<td>minority language in Botswana, no official use</td>
</tr>
<tr>
<td>Subiya (K42)</td>
<td>Dialects: ?</td>
<td>(1) Eastern Caprivi, Namibia, (2) Northwestern Botswana</td>
<td>(1) 24,500 (Maho 1998), (2) 3,500 (Vossen 1991–2)</td>
<td>minority language in Botswana, no official use</td>
</tr>
<tr>
<td>MBUkushu (K43)</td>
<td>Dialects: Member of the Kavango group (Möhlig 1997)</td>
<td>Southern Kavango, Namibia, Northwestern Botswana</td>
<td>(1) 8,200 (Fisch 1977), (2) 14,000 (Vossen 1991–2)</td>
<td>Namibian national language, some use in the media, in administration and education</td>
</tr>
<tr>
<td>GCIriku (K38b)</td>
<td>Dialects: Member of the Kavango group, mutually intelligible with Shambyu</td>
<td>(1) Kavango area, Namibia, (2) Northwestern Botswana</td>
<td>(1) 29,400 (Maho 1998), (2) 3,500 (Vossen 1991–2)</td>
<td>Namibian national language (see MBUkushu)</td>
</tr>
<tr>
<td>KWAngari (K33)</td>
<td>Dialects: Member of the Kavango group, for M bunza see Dammann (1957)</td>
<td>Kavango area, Namibia</td>
<td>Number of speakers: 77,000 (Maho 1998)</td>
<td>Namibian national language, also lingua franca in the Kavango area</td>
</tr>
<tr>
<td>LUYana (K31)</td>
<td>Dialects: Related to Kwangwa, K wandi and Mbowe</td>
<td>Western Province, Zambia</td>
<td>Number of speakers: Only a few elder speakers (Givón 1970a)</td>
<td>Luyana was still used as a ritual language in the 1970s</td>
</tr>
<tr>
<td>LUVale (K14)</td>
<td>Dialects: ?</td>
<td>Northeast Angola; Zambezi and Kabompo districts, Zambia</td>
<td>Number of speakers: 500,000, see Horton (1949), 90,000 in Zambia according to Ohannessian and Kashoki (1978)</td>
<td>Official language in Zambia, also lingua franca</td>
</tr>
</tbody>
</table>
2 PHONOLOGY, MORPHOPHONOLOGY AND TONE

Most Western Savanna languages have a five-vowel system comprising the short vowels i, e, a, o, u which are realized as [i, e, a, o, u] in Gciriku and Kwangari, for instance. Reduced inventories of this kind are reconstructable for proto-stages of Wambo (Baemont 1972:48) and Yeyi (Gowlett 1997:242). Synchronically, only Luvalle and possibly Mbukushu (Mohlig 1997:221) make an additional distinction between the mid vowel pairs /e/ and /o/; and /i/ and /u/, respectively. In Luyana, reflexes of Proto-Bantu super-closed vowels *i and *u are said to be still present in underlying phonemic forms (Givon 1970a:89). UMbundu also shows a set of nasalized vowels as do some Caprivi Yeyi varieties (Donnelly 1990:27). Vowel length does not seem to be a prominent feature in Western Savanna. While long vowels in Ndonga are interpreted as sequences of identical vowels, there is a general tendency towards shortening of VV sequences in Luyana (Givon 1970a:89f). Vowel length is not phonologically distinctive in Gciriku (Mohlig 1997:218) whereas it is in Luvalle where minimal pairs like mu-s pocojí ‘small mud-fish’ and mu-sóiji ‘gravy, soup’ can be found (see Horton 1949:3, where length is symbolized by a macron above the vowel). In his reconstruction of proto-Yeyi phonology, Gowlett (1997:242) provides evidence for positing two phonemically long vowels, namely ií and eë, whereas Caprivi Yeyi today exhibits an extended set of four long vowels (ií, ee, aa, uu), whereas

Consonant inventories excluding clicks in Western Savanna are outlined in table 28.2.

The ad- or inter-dental voiceless plosive occurs in Mbukushu and Gciriku [t], the voiceless palatal [c] is only found in UMbundu, Yeyi and Luyana. The latter two languages have a voiced counterpart [j], see Sommer (1995:365). Abbreviations: Nasal.

TABLE 28.2: CONSONANT INVENTORIES (EXCLUDING CLICK CONSONANTS)

<table>
<thead>
<tr>
<th></th>
<th>UMB</th>
<th>NDO</th>
<th>YEY</th>
<th>MBU</th>
<th>KWA</th>
<th>LUY</th>
<th>LUV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosive</td>
<td>p,t,c,k</td>
<td>p,t,k,?</td>
<td>p,t,c,k</td>
<td>p,t,k,?</td>
<td>p,t,c,k</td>
<td>p,t,k,?</td>
<td>p,t,k,?</td>
</tr>
<tr>
<td>Fricative</td>
<td>f,s,h,</td>
<td>f,s,h,</td>
<td>f,s,h,</td>
<td>f,s,h,</td>
<td>f,s,h,</td>
<td>f,s,h,</td>
<td>f,s,h,</td>
</tr>
<tr>
<td>Affricate</td>
<td>ts</td>
<td>(ts)</td>
<td>tf</td>
<td>(ts)</td>
<td>tf</td>
<td>tf</td>
<td>tf</td>
</tr>
<tr>
<td>Trill</td>
<td>l</td>
<td>l</td>
<td>l**</td>
<td>l</td>
<td>l</td>
<td>l</td>
<td>l</td>
</tr>
<tr>
<td>Lateral</td>
<td>w,y</td>
<td>w,y</td>
<td>w,y</td>
<td>w,y</td>
<td>w,y</td>
<td>w,y</td>
<td>w,y</td>
</tr>
<tr>
<td>Nasal Plosives</td>
<td>m.n.p.y</td>
<td>m.n.p.y</td>
<td>m.n.p.y</td>
<td>m.n.p.y</td>
<td>m.n.p.y</td>
<td>m.n.p.y</td>
<td>m.n.p.y</td>
</tr>
<tr>
<td>Nasal Fricatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal Affricates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palatal Ejectives</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Labial Ejectives</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Notes: Except (y = [j]), phonemes are here represented in IPA symbols; for orthographic conventions followed in the primary sources see entries in italics in the text. * according to Mohlig (1997) MBU; KWA have prenasals rather than nasal compounds. ** the contrasts [b], [bb] and [l], [r] are not found in Ngamiland Yeyi where [r] further has the allophone [i]. see Sommer (1995:365). Abbreviations: Nasal. = nasalized; Palatal. = palatalized; Labial. = labialized.
considered here. In descriptions of Kavango languages, on the other hand, c is rather used for the representation of dental clicks [\].

Fricatives form the most varied and complex group of consonants in Western Savanna. Voiceless and voiced interdentals [θ, ð] occur in Ndonga and Mbukushu (\(\theta h, \theta h\)). A voiceless (alveo)palatal fricative [ʃ] occurs in Ndonga, Yeyi and Luyana (all sh) as well as in Mbukushu, Gciriku (both ŋ) and in Luvale (x). Ndonga and Yeyi also have a voiced alveopalatal (zh), whereas the corresponding sound in Luvale (j) is described as a palato-alveolar fricative in Horton (1949:8). Ndonga has a pair of velar fricatives [x, ʔx] which are written as h and g (Fivaz 1986) whereas the velar plosive (also g) only occurs in nasal compounds. The voiced velar fricative is not only found in Ndonga, but also in Mbukushu and Gciriku (gh). Ndonga has a voiceless affricate (ts) while Yeyi exhibits a dentisibilant pair [ts, dz]. Kwangari, Gciriku and Luvale, however, have alveolar-palatal affricates [tʃ, dʃ] which are written as tj, dj, respectively. Nearly all Western Savanna languages have a voiced lateral [ɭ], while the opposition between lateral and trill [r] is phonologically distinctive in some Yeyi varieties and in two Kavango languages only. With the exception of Ndonga, Western Savanna finally distinguishes at least four nasal consonants. In Kavango, bilabial and labiodental places of articulation [m, n] are distinguished, although both are orthographically represented as m. Most languages have a palatal nasal [n] which is either written as nh in UMBundu or as ny elsewhere. UMBundu, Yeyi, Mbukushu, Luyana and Luvale have a velar nasal phoneme /ŋ/ represented orthographically as ng’ in UMBundu and Yeyi, as ng in Luvale and as ŋ in Mbukushu.

Kavango languages and Yeyi have incorporated a number of click consonants into their phoneme inventories. While influxes in the former group are restricted to the voiced and voiceless dental click (c, gc) which may occur with prenasalized and/or aspirated effluxes (Möhlig 1997), Ngamiland Yeyi exhibits a total of twenty-seven different click phonemes (Sommer and Vossen 1992). As illustrated in table 28.3, the dental, alveolar, palatal and lateral clicks in Yeyi may be combined with a number of effluxes which further elaborates the complex consonant system of this particular Western Savanna language.

Vowel assimilation is a common phenomenon in Western Savanna. In Ndonga, prefix vowels are assimilated when they occur before vowel commencing-stems like in oṣhéélö (class 7, < o-shi-elo) ‘doorway’ and in ošíílí (class 12, < o-ka-uli) ‘small pot’. Similar phenomena are to be found in Caprivi Yeyi. Gowlett (n.d.) observes that the high front vowel i of the class 7 prefix shi, for instance, is backed to u in certain environments, i.e. when preceding a segment which is [+obstruent], [+back]. This rule also applies to stem-internal contexts as in rúámbó ‘song’ (< ru-imb-ó, cf. -yim-b-á ‘sing’) where the first

<table>
<thead>
<tr>
<th>TABLE 28.3: CLICK CONSONANTS IN NGAMILAND YEYI (R41)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dental</strong></td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>Voiceless (vl.)</td>
</tr>
<tr>
<td>Voiced</td>
</tr>
<tr>
<td>Nasal</td>
</tr>
<tr>
<td>Nasal-emphatic</td>
</tr>
<tr>
<td>Palatal fricative</td>
</tr>
<tr>
<td>Ejective-uvular</td>
</tr>
<tr>
<td>Aspirated</td>
</tr>
<tr>
<td>Glottal</td>
</tr>
<tr>
<td>Ejective-nasal</td>
</tr>
</tbody>
</table>

*Note: * The symbol + will here be used for the notation of palatal clicks.
stem vowel i is assimilated to the preceding vowel u of the class 11 prefix ru. Donnelly (1990:31f.) also mentions the assimilation of prefix or stem vowels in Caprivi Yeyi such as in class 7 shi-p∧ndi ‘brat’ (< shi-p∧ndi, < class 1 mi-p∧ndi ‘child’) and class 9 inj∧njo ‘grave’ (< in-jinjo).

Grégoire (1979) has further analyzed final vowel alternations in verbal forms where the final vowel -a is assimilated to the vowel quality of the respective root vowel in underived verb forms. These vowel alternations widely occur in Western Savanna including languages such as Herero and Kwanjama (zone R) as well as Kwezo, Pende and Chokwe (zone K). Full vowel assimilation, often referred to as vowel harmony, can also be found in Ndonga where pre- and post-root assimilation processes occur such as in ótέéndέ (< a-ta-aiend-V, cf. -end-a ‘to go’) and ótakóoló (< a-ta-katól-V, cf. -ol-a ‘to become rotten’). The subject concord (SC) ta- and the tense morphemes -a- and -ka- are here assimilated completely to the immediately following root vowels e and o, respectively. In Luvale, alternations of the final vowel can be observed in the context of anterior verb forms which have the structure SC-na-VB-V (VB = verbal base). In this case the final vowel -a may change to -e, -i, -o or -u as in tunέéce ‘we have let go’ (< -ec-a), tunέmbi ‘we have sung’ (< -imb-a), tunόnjo ‘we have become dry’ (< -am-a) (Horton 1949:120).

In UMbundu, Ndonga and probably also in Yeyi, Luyana and Luvale high and low tones are lexically and grammatically distinctive. UMbundu, has high and low tones, which can

<table>
<thead>
<tr>
<th>TABLE 28.4: VOWEL ALTERNATIONS IN VERBAL CONTEXTS</th>
<th>Language</th>
<th>Tense, aspect, mood context</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ndonga (R22)</td>
<td>Present progressive and habitual, far future, past imperfective (see table 28.12)</td>
<td>o-tá-ndi-yi=hdí-ó</td>
<td>AFF-PROG-SC-OC-thin out-V 'I am thinning it out' (-hola ‘to thin out’)</td>
</tr>
<tr>
<td>Yeyi (R41)</td>
<td>Factual mode, anterior</td>
<td>Nd-óhómn-ó</td>
<td>SC-INST-see-V 'I have seen' (-mwái ‘to see’)</td>
</tr>
<tr>
<td>Mbukushu (K43)</td>
<td>Immediate and far future, (today) past and historical past</td>
<td>(ni-)ná=ruk-u</td>
<td>(SC)-INST-plait-V 'I plaited (today)' (-ruka ‘to plait’)</td>
</tr>
<tr>
<td>Geirika (K38b)</td>
<td>Anterior (heutiges Perfekt), definite (yesterday) past</td>
<td>tu-ná=ting-í</td>
<td>SC-INST-inherit-V 'We inherited (today)' (-pinga ‘to inherit’)</td>
</tr>
<tr>
<td>Kwangari (K33)</td>
<td>General and habitual present, definite past (determiniertes Präteritum), habitual, progressive -</td>
<td>a-ní=man-ó</td>
<td>HAB-SC-see-V 'I used to see' (-mona ‘to see’)</td>
</tr>
<tr>
<td>Luyana (K31)</td>
<td>Past and non-terminated past, progressive and habitual present in the negative (see table 28.12)</td>
<td>(nj)-ná=tík-í</td>
<td>SC-INST-come to-V 'I have come to' (-kέa ‘to come to’)</td>
</tr>
<tr>
<td>Luvale (K14)</td>
<td>Obsolete present ?, anterior ('perfect')</td>
<td>tu-ná=tíng-í</td>
<td>SC-INST-do-V 'We have done' (-linga ‘to do’)</td>
</tr>
</tbody>
</table>

Abbreviations: AFF = positive predicator; PROG = progressive; SC = subject concord; OC = object concord; V = alternating final vowel; HAB = habitual.
occur either lexically associated or floating. Verb roots in UMbundu have their own tonal patterns (lândá ‘to buy’, kwátá ‘to take’). These may change, e.g. in the imperative singular where the final vowel invariably carries a high tone (lândá ‘buy!’, kwátá ‘take!’). On the other hand, the so-called augment marked on nominals by a prefix-initial vowel o- before consonants (see §3), may be either high or low depending on the syntactic function of the noun. It thus appears as ò-njó ‘house’, for instance, when it is the first object of an affirmative verb in a main clause, while it exhibits the form ò-njó with the same meaning in all other contexts. In Ndonga, a high or low tone on the past marker -a- in postinitial position distinguishes between the non-completive and completive meaning of a state or action encoded by the respective verbal root (cf. o-nd-à=lând-élé ‘I finished buying and will not buy again’ vs. o-nd-à=länd-élé ‘I finished buying and may buy again’). Lexical tone has sometimes been mentioned in the context of Kavango languages such as Kwangari (ndi ‘fly’, ndi ‘or’) and Mbuquushu (di-na ‘house’, di-na ‘name’). Others, however, opine that tone as such is not distinctive within the Kavango group. In Geiriku, for instance, tone intervals seem to interact with other prosodic features such as stress, accent and vowel length as in presentative constructions like gi-dirà ‘it is a taboo’ which contrasts with gi-dirà ‘it is a bird’. While in the first case the descending interval spreads over two subsequent syllables and the high-tuned syllable bears an additional respiratory stress and has a short vowel, the second distinctive prosodeme is also marked by a descending interval; in this case it spreads over the first syllable only and is accompanied by lengthening of the respective vowel segment (Möhlig 1997:220).

3 MORPHOLOGY AND SYNTAX

Nominal prefixes and their allomorphs in Western Savanna are listed in table 28.5 (for pre-prefix forms see tinted entries and discussion below). Included in this overview are nominal prefixes of the locative classes 16 to 18, i.e. pa/ba/ha, ku and vu/mu. Locative prefixes in UMbundu, for instance, lose their own vowel when prefixed to the inherent nominal prefix of a noun such as in pûlví ‘on, at, near the trap’ (class 3 ülví ‘trap’), kôbí ‘at, to, from the river’ (class 11 ôlví ‘river’) and visó ‘in the eye’ (class 5 òso ‘eye’) (Scheadeberg 1990:11). In Yeyi, high-toned locative prefixes precede nominals as in pû-li-wé ‘on the stone’ (class 5 liwé ‘stone’), kw-in-k’ãmû ‘to the right’ (class 9 ink’ãmû ‘right hand’) and mú-shi-g/ãnã ‘in the well’ (class 7 shig/ãnã ‘well’).

However, locatives may also function as independent nouns and thus as sentential subjects or objects in which case they are marked with their own subject concords on the verb (Donnelly 1990:90ff.). In Luyana, locative prefixes do not themselves take an initial vowel and preclude the taking of the initial pre-prefix vowel by the original noun prefix. Furthermore, locatives never seem to control verbal subject concords of a predicate in surface forms, although they do control concords of relative modifiers, for example. When a sentence like i-na-ku+ingena mu-ndo ‘I got into the house’ is used as a relative construction, agreement may either be marked by a class 9 concord element iit or the class 18 locative marker umu (cf. mu-ndo iit i-na-ku+ingena [~ umu i-na-ku+ingena] ti-na-ku+hya ‘The house which/[into which] I entered burned’, Givón 1970a:22).

Pre-prefix forms in Western Savanna occur in UMbundu, Ndonga, Yeyi and Luyana while they are missing in the Kavango languages and in Luvale. As is already indicated in table 28.5, particular pre-prefix forms are wide-spread in languages of Guthrie’s zone R. Among these languages are also Nyaneka (R13), Nkumbi (R14), Kwanyama (R21), and Herero (R31) (de Blois 1970). Like UMbundu and Ndonga these languages exhibit an invariable vocalic pre-prefix o- before consonants. When the noun prefix consists of
a single vowel as in some classes in UMbundu, the pre-prefix may be represented by a floating tone only (Schadeberg 1990:12). In Yeyi (R41) and Luyana (K14), on the other hand, the pre-prefix is vocalic but not invariable since in these languages it takes the quality of the prefix vowels in the corresponding classes. The pre-prefix is thus realized as i- before prefixes of classes 4, (5), 7, 8, (9, 10), as a- in classes 2, 6, 12 and as u- in the remaining ones. The occurrence of pre-prefix vowels in Luyana is described as being optional (Givón 1970a:5). In Yeyi they are retained for a small number of nouns and in some classes only, e.g. 1/2 ūmūṭu, ūmūṭ ‘person’, 3/4 ūmūỵa, ūmūỵ ‘thorn’, 5/6 ūriṇo, ūmēṇo ‘tooth’, 7/8 ūciṭo, ūciṭ ‘thing’, 13 ūtuṛ ‘sleep’, 14/6 ūwoṭo, ūmäṭo ‘dugout’, 3/15 ūmvezı̣, ūkwezı̣ ‘moon, month’ (Gowlett 1992b).

As indicated in table 28.6, nouns in Western Savanna may be recategorized to other classes and such derivational processes are linked to particular meanings. UMbundu, for instance, lacks a distinct class 14 where mass and abstract nouns are typically assigned to. The replacive use of the class 3 prefix is thus employed to express qualitative meaning (ūsoṃa ‘royalty’ < ūsoṃa ‘king’, Schadeberg 1990:28). In Luyana, the class 11 prefix lu- may be used as replacive prefix with the meaning of thinness as in lu-kondo ‘thin leg’ (<li-kondo ‘leg’, Givón 1970a:80). Further common nominal derivations in Western Savanna comprise the augmentative function of classes 5/6, the pejorative meaning of classes 7/8 and the widespread use of classes 12/13 to express diminutive
meaning as in Mbukushu class 5 di-yoka ‘big snake’ (<thi-yoka), class 7 thi-nhwere ‘cripple’ and class 13 tu-nhwe ‘a little bit of milk’ (<ma-nhwe) (Fisch 1977:27ff.). Diminutive meaning may also be formed by suffixing the elements -ona/ena and -ana in Gciriku and Luyana, respectively. In Gciriku, the class 1/2 noun mu-rúti-ona means ‘curate’ (Möhlig 1967:139f.). In Luyana, ndyana ‘little fish’ is derived from the class 9 noun n-di ‘fish’ (Givón 1970a:79). In the Kavango languages a suffixed stem -k-di ‘female’ may also be used as derivational element as in Gciriku mu-óli-k-di ‘first/main wife’.

All Western Savanna languages further exhibit deverbatives, i.e. nouns derived from verbal bases by adding a nominalizing suffix and/or a particular nominal prefix (see table 28.6). In UMbundu, agent nouns are derived by adding the suffix -i as in -pip-a ‘to fish’, Schadeberg 1990:26). In Yeyi, MbuKushu, Gciriku and Luyana the combination of a class 6 prefix ma- and the suffix -o is employed to express ‘place of action’. In Luyana this kind of nominalization is regularly derived from the applied form of the verb (Givón 1970b:74). Similarly, nominalized Yeyi forms such as mà-tând-ìr-ó ‘place to hunt’ or mà-imb-ìr-ó ‘slaughtering place’ are derived from applied forms of the verbs -tândì ‘to hunt’ and -ìmbà ‘to stab, pierce’, respectively (see table 28.13 for verbal extensions).

Besides nominal prefixes (see table 28.5) and independent pronominal forms (see table 28.10), Western Savanna languages further exhibit different sets of concordial elements whose segmental structure is identical with or derived from pronominal prefix (PP) forms (e.g. see tables 28.7–8). In some classes these forms differ from nominal prefixes and they agree in class with the noun to which they refer or which they depend on. For UM bundu, for instance, Schadeberg (1990) differentiates between pronominal forms of numerals (see e.g. table 28.7), adjectives and determiners. Concordial elements like substantives or personal pronouns, however, do not only exist for all classes but also for participants (see table 28.9).

---

**TABLE 28.6: NOMINAL DERIVATION**

<table>
<thead>
<tr>
<th>Noun-to-noun</th>
<th>UMB</th>
<th>NDO</th>
<th>YEY</th>
<th>MBU</th>
<th>GCI</th>
<th>KWA</th>
<th>LUY</th>
<th>LUV</th>
</tr>
</thead>
<tbody>
<tr>
<td>cl. 3 QUAL</td>
<td>AUG</td>
<td>AUG</td>
<td>AUG</td>
<td>AUG</td>
<td>AUG</td>
<td>AUG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl. 5/6 AUG</td>
<td>PEJO</td>
<td>PEJO</td>
<td>PEJO</td>
<td>PEJO</td>
<td>PEJO</td>
<td>PEJO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl. 7/8 AUG</td>
<td>PEJO</td>
<td>PEJO</td>
<td>PEJO</td>
<td>PEJO</td>
<td>AUG</td>
<td>PEJO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl. 11 DIM</td>
<td>DIM</td>
<td>DIM</td>
<td>DIM</td>
<td>DIM</td>
<td>DIM</td>
<td>DIM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cl. 12/13 DIM</td>
<td>DIM</td>
<td>DIM</td>
<td>DIM</td>
<td>DIM</td>
<td>DIM</td>
<td>DIM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verb-to-noun</td>
<td>-i</td>
<td>AGENT</td>
<td>AGENT</td>
<td>AGENT</td>
<td>AGENT</td>
<td>AGENT</td>
<td>AGENT</td>
<td>AGENT</td>
</tr>
<tr>
<td>-o RESULT INSTR</td>
<td>+</td>
<td>ABSTR</td>
<td>+</td>
<td>ABSTR</td>
<td>+</td>
<td>ABSTR</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>-a PLACE PLACE PLACE PLACE</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-e + + + + + + + + +</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Abbreviations: QUAL = qualitative; AUG = augmentative; PEJO = pejorative; DIM = diminutive; THIN = thinness; AGENT = agent nouns; INSTR = instrumental nouns; ABSTR = abstract nouns; +: this derivation is present in the respective language but has no clearly defined or consistent meaning (see e.g. Schadeberg 1990:26).
### TABLE 28.7: PRONOMINAL CONCORDS (NUMERALS, POSSESSIVES) IN THREE SAMPLE LANGUAGES

<table>
<thead>
<tr>
<th>Class</th>
<th>UMB</th>
<th>POSS</th>
<th>YEY (Ngamiland)</th>
<th>LUY</th>
<th>NUM</th>
<th>POSS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PP</td>
<td>PP-o</td>
<td>PP/NP</td>
<td>PP-o</td>
<td>NUM</td>
<td>POSS</td>
</tr>
<tr>
<td>1</td>
<td>u-</td>
<td>-ke</td>
<td>mu-</td>
<td>-ke</td>
<td>u-</td>
<td>-ay</td>
</tr>
<tr>
<td>2</td>
<td>va-</td>
<td>-yo</td>
<td>wa-</td>
<td>-wo</td>
<td>a-</td>
<td>-ao</td>
</tr>
<tr>
<td>3</td>
<td>u-</td>
<td>-wo</td>
<td>mu-</td>
<td>-wo</td>
<td>u-</td>
<td>-oo</td>
</tr>
<tr>
<td>4</td>
<td>vi-</td>
<td>-yo</td>
<td>(y)ji</td>
<td>-yo</td>
<td>i-</td>
<td>-ayo/ato</td>
</tr>
<tr>
<td>5</td>
<td>li-</td>
<td>-lyo</td>
<td>ri-</td>
<td>-rio</td>
<td>li-</td>
<td>-alyo</td>
</tr>
<tr>
<td>6</td>
<td>(y)ja-</td>
<td>o</td>
<td>a-</td>
<td>-wo</td>
<td>a-</td>
<td>-ao</td>
</tr>
<tr>
<td>7</td>
<td>ci-</td>
<td>-co</td>
<td>shi-</td>
<td>-sho</td>
<td>si-</td>
<td>-aso</td>
</tr>
<tr>
<td>8</td>
<td>–</td>
<td>–</td>
<td>z-</td>
<td>-zo</td>
<td>i-</td>
<td>-ayo</td>
</tr>
<tr>
<td>9</td>
<td>(y)ji-</td>
<td>-yo</td>
<td>i(N)-</td>
<td>-yo</td>
<td>ti-</td>
<td>-ato</td>
</tr>
<tr>
<td>10</td>
<td>–</td>
<td>–</td>
<td>z(N)-</td>
<td>-zo</td>
<td>ti-</td>
<td>-ato</td>
</tr>
<tr>
<td>11</td>
<td>ka-</td>
<td>-kwo</td>
<td>ra-</td>
<td>-ro</td>
<td>la-</td>
<td>-lao</td>
</tr>
<tr>
<td>12</td>
<td>ku-</td>
<td>-ko</td>
<td>ka-</td>
<td>-ko</td>
<td>ka-</td>
<td>-ako</td>
</tr>
<tr>
<td>13</td>
<td>tu-</td>
<td>-(w)yo</td>
<td>tu-</td>
<td>-(w)yo</td>
<td>tu-</td>
<td>-ato</td>
</tr>
<tr>
<td>14</td>
<td>–</td>
<td>–</td>
<td>(w)ja-</td>
<td>-wo</td>
<td>u-</td>
<td>-ao</td>
</tr>
<tr>
<td>15</td>
<td>ku-</td>
<td>-k(w)yo</td>
<td>ku-</td>
<td>-ko</td>
<td>ka-</td>
<td>-ako</td>
</tr>
</tbody>
</table>

### TABLE 28.8: CONCORDIAL ELEMENTS ON DEMONSTRATIVES IN NGAMILAND YEYI AND IN LUYANA

<table>
<thead>
<tr>
<th>Class</th>
<th>YEY</th>
<th>LUY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DEM 1</td>
<td>DEM 2</td>
</tr>
<tr>
<td></td>
<td>PP-(\text{ni}^\text{i})</td>
<td>PP-(\text{o}^\text{o})</td>
</tr>
<tr>
<td>1</td>
<td>yini’i</td>
<td>yo’o</td>
</tr>
<tr>
<td>2</td>
<td>wani’i</td>
<td>wa’a</td>
</tr>
<tr>
<td>3</td>
<td>wuni’i</td>
<td>wo’o</td>
</tr>
<tr>
<td>4</td>
<td>yini’i</td>
<td>yo o</td>
</tr>
<tr>
<td>5</td>
<td>rim’i</td>
<td>rion’o</td>
</tr>
<tr>
<td>6</td>
<td>ngani’i</td>
<td>nga’a</td>
</tr>
<tr>
<td>7</td>
<td>cini’i</td>
<td>co’o</td>
</tr>
<tr>
<td>8</td>
<td>zini’i</td>
<td>zo’o</td>
</tr>
<tr>
<td>9</td>
<td>yini’i</td>
<td>yo’o</td>
</tr>
<tr>
<td>10</td>
<td>zini’i</td>
<td>zo’o</td>
</tr>
<tr>
<td>11</td>
<td>runi’i</td>
<td>ro’o</td>
</tr>
<tr>
<td>12</td>
<td>kani’i</td>
<td>ka’a</td>
</tr>
<tr>
<td>13</td>
<td>tuni’i</td>
<td>to o</td>
</tr>
<tr>
<td>14</td>
<td>wani’i</td>
<td>wo’o</td>
</tr>
<tr>
<td>15</td>
<td>kuni’i</td>
<td>ko’o</td>
</tr>
<tr>
<td>16</td>
<td>(po)pani’i</td>
<td>pa’a</td>
</tr>
<tr>
<td>17</td>
<td>kuni’i</td>
<td>ko’o</td>
</tr>
<tr>
<td>18</td>
<td>(ti)moni’i</td>
<td>mo’o</td>
</tr>
</tbody>
</table>

**Note:** For different forms of demonstratives in Caprivi Yeyi see Baumbach (1997).
With the exception of Mbukushu, numerals in Western Savanna are generally marked by pronominal prefixes. Attributive adjectives, however, seldom take simple pronominal prefixes as they do in Umbridu. In Ndonga and Luyana they are marked by nominal prefixes. In the remaining languages concordial elements on adjectives typically consist of complex forms.

These concords are based on a combination of PP, or PP-derived, and NP forms. Examples of such complex concordial elements would be mù-púndì ya-mù-ré ‘the tall child (class 1)’ in Yey and ma-remo go-ma-zera ‘white clouds (class 6)’ in Kwangari. Pronominal and nominal possessives in Western Savanna are finally marked by pronominal prefix forms followed by a final -o and -a element, respectively (see table 28.7 e.g. of pronominal possessives). As far as nominal possessives or connective forms are concerned, the one exception from the typical PP-a structure in Western Savanna is Ngamiland Yeyi where connectives are formed by complex concords. Furthermore, the final vowel of the second element alternates according to the vowel quality of the prefix vowel of an immediately following nominal form as in class 5 riángá tì-tì múnyána vs. riángá tì-tì wànyána ‘the spear of the man/men’.

With the exception of Ndonga and Yeyi, demonstratives in Western Savanna typically distinguish four grades and sometimes also have additional sets of emphatic forms. While

| TABLE 28.9: SUBJECT (SC) AND OBJECT (OC) CONCORD ELEMENTS |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| UMB  | NDO  | YEY  | MBU  | GCI  | KWA  | LUY  | LUY' |
| SC*  | OC   | SC   | OC   | SC   | SC   | SC   | SC   | SC   | SC   | SC   | SC   | SC   | SC   |
| sg. 1 | n̄dī, n̄dī | n̄dī | n̄dī | nde | nde | nde | n̄dī | n̄dī | Ø   | n̄dī | n̄dī | n̄dī | n̄dī |
| 2    | ɔ̣ ḳ u | u ḳ u | ḳ u | g̣ u | g̣ u | g̣ u | ḳ u | ḳ u | ọ ḳ u | u ḳ u | u ḳ u | u ḳ u | u ḳ u |
| pl. 1 | ṭu | ṭu | ṭu | ṭu | ṭu | ṭu | ṭu | ṭu | ṭu |
| 2    | (y)̣ j̣ u | mu | ni | mu | mu | mu | mu | mu | mu |
| cl. 1 | ɔ̣ u | Ø | mi | mu | g̣ ḥ a | mu | a | mu | a | mu | a | mu | a | mu |
| 2    | ṿa | a | ỵ a | ẉa | ẉa | ḅa | ṿa | a | a | a |
| 3    | ụ g̣ u | u | ẉu | g̣ ḥ u | u | g̣ u | u | u | u |
| 4    | ṿi | ḍi | i | ỵ i | ḍi | ḍi | (g̣)̣ i | ỵ i |
| 5    | ḷi | ḷi | ṛi | ḍi | ḷi | ḷi | ḷi | ḷi |
| 6    | (y)̣ j̣ a | g̣ a | nga | ng̣ a | g̣ a | ga | a | wa, a |
| 7    | ci | ṣḥ i | ṣhi | ṭḥ i | g̣ ṣi | ṣi | ṣi | ṣi |
| 8    | – | ỵi | ẓi | ỵi | ḅ(g̣)̣ i | ỵi | vi |
| 9    | (y)j̣ i | ỵi | ṭi | g̣ ḥ a | mu | j̣ i | ẓi | (g̣)̣ i | ỵi |
| 10   | – | ḍi | ẓi | ḍi | ḍi | ḍi | ṭi | j̣i |
| 11   | ḷa | ḷu | ṛu | ri | ṛu | ṛu | ṛu | lu |
| 12   | ḳa | ḳa | ḳa | ḳa | ḳa | ḳa | ḳa | ḳa |
| 13   | ṭu | – | ṭu | ṭi | ṭu | ṭa | ṭu | ṭa |
| 14   | – | ụ | ẉu | g̣ḥ u | u | u | u | u |
| 15   | ḳa | ḳa | ḳa | ḳa | ḳa | ḳa | ḳa | ḳa |

Note: * if not indicated otherwise SC/OC forms are segmentally identical; sg./pl. = singular/plural; cl. = class.

With the exception of Mbukushu, numerals in Western Savanna are generally marked by pronominal prefixes. Attributive adjectives, however, seldom take simple pronominal prefixes as they do in Umbridu. In Ndonga and Luyana they are marked by nominal prefixes. In the remaining languages concordial elements on adjectives typically consist of complex forms.

These concords are based on a combination of PP, or PP-derived, and NP forms. Examples of such complex concordial elements would be mi-pùndì yì-mù-ré ‘the tall child (class 1)’ in Yey and ma-remo go-ma-zera ‘white clouds (class 6)’ in Kwangari. Pronominal and nominal possessives in Western Savanna are finally marked by pronominal prefix forms followed by a final -o and -a element, respectively (see table 28.7 e.g. of pronominal possessives). As far as nominal possessives or connective forms are concerned, the one exception from the typical PP-a structure in Western Savanna is Ngamiland Yeyi where connectives are formed by complex concords. Furthermore, the final vowel of the second element alternates according to the vowel quality of the prefix vowel of an immediately following nominal form as in class 5 riàngá tì-tì múnyána vs. riàngá tì-tì wànyána ‘the spear of the man/men’.

With the exception of Ndonga and Yeyi, demonstratives in Western Savanna typically distinguish four grades and sometimes also have additional sets of emphatic forms. While
in Ngamiland Yeyi DEM 1 indicates ‘here’, DEM 2 refers to ‘there’ and DEM 3 to ‘over there’, DEM 1 in Luyana implies ‘close to both hearer and speaker’, DEM 2 is ‘close to hearer’ and DEM 3 is ‘close to speaker’, while DEM 4 indicates remoteness (Givón 1970a:18).

Ndonga again only distinguishes three locational positions of simple demonstratives. Here these forms indicate (1) relative nearness to the speaker or a reference point in space/time, (2) relative distance from these and (3) remoteness from the reference point (Fivaz 1986:63). Shortest forms of the three positions only refer to referents which are visible if these are concrete nouns.

In Gciriku, subject relatives are marked by the occurrence of a DEM 2 form while the predicate in the relative clause is further characterized by the occurrence of a morpheme -o in final position (Mohlig 1967:251). In Umbundu and Luvale, relative verb forms are not overtly marked but exhibit specific tonal characteristics.

However, demonstratives in Western Savanna have yet another function. In Ndonga, Mbukushu, Gciriku, Kwangari and Luyana ‘relative embedding is marked by the replacement of the identical noun in the relative sentence by a demonstrative, the latter functioning as a kind of “relative pronoun”’ (Fivaz 1986:125). In Ndonga, relative verb forms differ from main verbs in the omission of a so-called positive predicator o- which occurs in affirmative verb forms and preinitial position (see table 28.12).

In Luyana, all four demonstratives may be used in relative contexts whereby their use in some cases is optional: (1) mu-nu ì-nákáitiänd-à (1-man SCI-PAST-work-FV) ‘The man worked’, (2) mu-nu [oyo] ì-nákáitiänd-à (1-man [DEM 2] SCI-PAST-work-FV) ‘The man [that] who worked’ (Givón 1970a:52); when used in object relative contexts, their use is obligatory.

Tables 28.12 and 28.13 are meant to illustrate the degree of variation which exists between tense, aspect and mood systems in Western Savanna. Non-compound affirmative and negative indicative verb forms may be morphologically complex, but they minimally
<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-ka#lánd-a ‘to buy’ (Fivaz 1986)</td>
<td>ka#kél-a ‘to come to’ (Givón 1970a)</td>
</tr>
</tbody>
</table>

### TABLE 28.12: TENSE, ASPECT AND MOOD IN N DomingA (R22) AND Luyana (K31) |

#### PAST
(affirmative and negative forms)

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-SC-a-VB-ile/</td>
<td>ka-SC-Ø-VB-ile</td>
</tr>
<tr>
<td>o-nd-a#lánd-êlê</td>
<td>ka-ndi#lánd-êlê</td>
</tr>
<tr>
<td>‘I finished buying’</td>
<td>‘I bought’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-SC-Ç-a-VB-ile</td>
<td>ka-SC-Ç-a-si-VB-a</td>
</tr>
<tr>
<td>o-nd-a#lánd-êlê</td>
<td>ka-ndi#lánd-êlê</td>
</tr>
<tr>
<td>‘I finished buying’</td>
<td>‘I bought’</td>
</tr>
</tbody>
</table>

#### 2 Past, imperfective

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-SC-Ç-a-VB-V</td>
<td>ka-SC-Ç-a-si-VB-a</td>
</tr>
<tr>
<td>o-nd-a#lánd-êlê</td>
<td>ka-ndi#lánd-êlê</td>
</tr>
<tr>
<td>‘I bought’</td>
<td>‘I bought’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-na-SC-Ø-VB-a</td>
<td>ka-SC-Ç-a-si-VB-a</td>
</tr>
<tr>
<td>i-na-ndü#länd-a</td>
<td>ka-SC-Ç-a-si-VB-a</td>
</tr>
<tr>
<td>‘I bought (and again)’</td>
<td>‘I bought (and again)’</td>
</tr>
</tbody>
</table>

#### 3 Past, perfective

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-SC-Ç-a-VB-a</td>
<td>ka-SC-Ç-aa-VB-a</td>
</tr>
<tr>
<td>o-nd-a#länd-êlê</td>
<td>naa-SC-Ç-na-VB-a</td>
</tr>
<tr>
<td>‘I bought’</td>
<td>‘I have/had arrived’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-na-SC-Ø-VB-a</td>
<td>ka-SC-Ç-aa-VB-a</td>
</tr>
<tr>
<td>i-na-ndü#länd-a</td>
<td>ka-SC-Ç-aa-VB-a</td>
</tr>
<tr>
<td>‘I bought (and again)’</td>
<td>‘I have/had arrived’</td>
</tr>
</tbody>
</table>

#### NON-PAST
(affirmative and negative forms)

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-ta-SC-Ø-VB-V</td>
<td>ka-SC-Ç-Ø-VB-V</td>
</tr>
<tr>
<td>o-ta-ndü#länd-a</td>
<td>ka-SC-Ç-Ø-VB-V</td>
</tr>
<tr>
<td>‘I am buying’</td>
<td>‘I am buying’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-ta-SC-Ø-VB-V</td>
<td>ka-SC-Ç-Ø-VB-V</td>
</tr>
<tr>
<td>i-ta-ndü#länd-a</td>
<td>ka-SC-Ç-Ø-VB-V</td>
</tr>
<tr>
<td>‘I am buying’</td>
<td>‘I am buying’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-ha-SC-Ø-VB-V</td>
<td>ka-SC-ku-VB-a</td>
</tr>
<tr>
<td>o-ha-ndü#länd-a</td>
<td>ka-SC-ku-VB-a</td>
</tr>
<tr>
<td>‘I am always buying’</td>
<td>‘I am always buying’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-ha-SC-Ø-VB-V</td>
<td>ka-SC-ku-VB-a</td>
</tr>
<tr>
<td>i-ha-ndü#länd-a</td>
<td>ka-SC-ku-VB-a</td>
</tr>
<tr>
<td>‘I am always buying’</td>
<td>‘I am always buying’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-ta-SC-ku-VB-a</td>
<td>ka-SC-ku-vB-a</td>
</tr>
<tr>
<td>o-ta-ndü#kà#länd-a</td>
<td>ka-SC-ku-vB-a</td>
</tr>
<tr>
<td>‘I will buy’</td>
<td>‘I will buy’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-ta-SC-ku-VB-a</td>
<td>ka-SC-ku-vB-a</td>
</tr>
<tr>
<td>i-ta-ndü#kà#länd-a</td>
<td>ka-SC-ku-vB-a</td>
</tr>
<tr>
<td>‘I will buy’</td>
<td>‘I will buy’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-na-SC-Ø-VB-V</td>
<td>see Fivaz (1986:97)</td>
</tr>
<tr>
<td>see Fivaz (1986:97)</td>
<td>mba#SC-Ø-VB-a</td>
</tr>
<tr>
<td>excluding 1sg:</td>
<td>‘I will come’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ndonga</th>
<th>Luyana</th>
</tr>
</thead>
<tbody>
<tr>
<td>ka-SC-Ø-VB-V</td>
<td>ka-SC-Ø-VB-V</td>
</tr>
<tr>
<td>excluding 1sg:</td>
<td>‘I will come’</td>
</tr>
</tbody>
</table>
consistent of a subject concord, the verbal base and a final vowel. The verbal base in turn may be extended by one or more derivational elements. Among the most frequently occurring verbal extensions in Western Savanna are applicative (APPL, UMBundu, ó-ka#tim-nil-á ‘to work for’), causative (CAUS, Ndongo, o-ka#tim-im-ik-á ‘to make whirl’) and neuter forms (NEUT, Y eyi, ndj-en-ik-á ‘to cover’). The widespread and productive passive extension -w- is no longer used in the Kavango languages and in Luvale (see tinted entries, table 28.13). But it regularly occurs in zone R languages and in Luyana where the verb -ba ‘to give’, for instance, may be extended to -biwa ‘to be given’. In Gciriku, passive meanings are expressed by constructions like lona na-ši-tikí-ká ‘He was beaten with a taproot’ (Möhlig 1967:230).

The element -ang- in the prefinal position can be found in Ndongo, Yeyi, Mbukushu, Gciriku and Luvale. While this form is used to express habitual or continuous meaning, it is employed as a TAM morpheme in Luvale. Here it is, Mødlin Gciriku and Mbukushu (cf. Gciriku Gciriku and Luvale. While this form is used to express habitual or continuous meaning (REV, Mbukushu, -fik-a ‘to cover’, -fik-en-ik-á ‘to uncover’), reciprocal (REC, Gciriku, -rw-a ‘to fight’, -rw-an-a ‘to fight each other’) and positional extensions (POS, Kwangari, -sik-a ‘to arrive’, -sik-en-ik-a ‘to stand’). The widespread and productive passive extension -w- is no longer used in the Kavango languages and in Luvale (see tinted entries, table 28.13).

The element -ang- in the prefinal position can be found in Ndongo, Yeyi, Mbukushu, Gciriku and Luvale. While this form is used to express habitual or continuous meaning, it is employed as a TAM morpheme in Luvale. Here it is used to denote recent past (three to four days ago) or, more generally, it implies ‘a short lapse of time’ as is illustrated in the following example: varmusaulaka, ka ha na-fundu-muka ‘They insulted him, and he has gone off in a huff’ (Horton 1949:124). In general, finite verb forms in Western Savanna comprise a wealth of tense, aspect and mood markers which occur in preinitial, postinitial and final position. In some contexts, the final vowel may alternate (see table 28.5). In other contexts, it changes from -a to -e.

The latter applies, e.g., to negative optatives in UMBundu which have the structure ka-SC-ka-(OC)-VB-e (cf. hú-ka#fitáng-e ‘don’t read’). Schadeberg 1990:40).

The negative marker ka- and its free variant ha- precede the subject concord, whereby the sequence ka-SC- always has a low–high tone pattern and subject concords for participants and class I are shaped by special contractions (singular: (1) si-, (2) ká = hú-, (3) ká-; plural (1) ka-ti-, (2) ka-u, (3) ka-vá-; cf. Luyana negatives, table 28.12). In UMBundu, the final vowel may also be replaced by a postfinal plural marker -i which is used in conjunction with a second person singular or plural subject or object concord to mark the addressee as plural (see table 28.11).
With the exception of Yeyi, where this form is no longer productive, all Western Savanna languages employ a final element -ile or -ire which together with the postinitial morpheme -a is used to mark remote or indefinite past (Maho 1998:90ff.). In conjunction with the final vowel -a, however, the former morpheme expresses near past or anterior. UMbundu, for instance, has two past forms, namely tw-a#land-èle and tw-a#land-à ‘we bought’, whereby the former denotes remote and the latter near past (Schadeberg 1990:37). In Geiriku, postinitial -à and final -ire (or -ine when preceded by a nasal) are employed to express indefinite past, e.g. n-åís-ire ‘I washed (a long time ago)’, while postinitial -à plus final -a are used to denote indefinite past actions or events with present effects as in n-åís-à ‘I have washed (sometime)’ (Mohlig 1967:195, 191). In Ngamiland Yeyi, a similar distinction exists between verb forms expressing past and those with anterior meanings. Anterior verb forms in Yeyi have the structure SC-a-VB-V as in t-á#món-à i-zí-tú (SC1pl-PAST-see-FV AUG-8-thing) ‘we have seen things’, whereas past forms employ a postinitial marker -ata- and the invariable final vowel -a, as is illustrated in the following example: á-mú-tú y-ó’ò m-á#házw-à k-ò’ò (AUG-1-person 1-DEM 2 SC1-PAST-come-from-FV 17-DEM 2) ‘That man (as the story goes) came from there’. Past tense in the Kavango languages, on the other hand, is further marked by a preinitial element ka- which occurs in Geiriku and Kwangari. In Geiriku, preinitial ká- denotes definite past as in ká-níí#x-à ‘I washed (yesterday)’ (ka-SC-Ø-VB-a, Mohlig 1967:193). In Kwangari, the same morpheme may be used to either express definite or indefinite past, depending on whether this marker is used together with an alternating final vowel (ka-SC-VB-V) or with the morpheme -ire (or -ere, -ene). Kwangari verb forms with preinitial ka- are used to denote actions or events that took place in the immediate past, e.g. ka-tu#mon-à ‘we saw (during the same day)’, while forms like ka-tu#mwene (ka-SC-VB-ile) ‘we saw’ refer to actions or events that took place sometime further in the past (Dammann 1957:57).

Excluding the Kavango language group, affixal negation marking prevails in Western Savanna. In Luyana, negation of finite verb forms in the indicative is indicated by two bound morphemes, namely ka- and -si- which appear in pre- and postinitial position, respectively (see table 28.12). In UMbundu, preinitial ka- is used to negate the imperative, optative as well as indicative verb forms in the present, past and future tenses (Schadeberg 1990:41ff.). Luvale indicative verb forms are negated by preinitial ka- and a verb-final enclitic -ko (NEG-SC1-PAST-OC7-do-PAST-FV-NEG) ‘we did not do it’ (Horton 1949:127). In Yeyi, different ways of marking sentential negation are employed, whereby only some of these comprise affixal negation strategies. In non-declarative sentences in Caprivi Yeyi and in non-indicative contexts in the Ngamiland Yeyi variety, negation is expressed by means of a peri-phrastic construction consisting of a finite form of the inherently negative verb kũísíy-à ‘to leave’, which is followed by the lexical verb of the affirmative sentence in the infinitive as in nũíí#y-è kwũííh-à mà-sííkú (SC2pl-leave-FV 15-go-FV 6-night ‘You (pl) should not go at night!’). In the indicative mood, sentential negation can be expressed by adding a sentence or verb form-initial negation word yũíí# (also yũíí)èmvá ‘never, no’ to the affirmative sentence as in yũíí# ná-ãũííh-à mà-würsízó ná#míí# (NEG SC1sg-FUT/PROG-go-FV 6-market ADVERB) ‘I will not go/am not going to the market today’.

The preinitial marker ka-, however, may be used to mark negation in non-declarative and declarative sentences. It appears as a double prefix kaka-, for instance, in the imperative singular and as a discontinuous marker in pre- and postinitial position in the person-inflected plural, cf. yá! ‘come (sg)!’, ká#há#yá! ‘don’t come (sg)’!; nĩí#-é! ‘you (pl) should come!’, ká-ní-ká+á! ‘You (pl) shouldn’t come = don’t come (pl)’! The
bound negative morpheme ka- in preinitial position may further be affixed to a finite form of the inherently negative verb kà+ciré ‘not to be able to’. In this case, the finite verb is followed by the lexical verb of the affirmative sentence in the infinitive, and it exclusively occurs with anterior verb forms, e.g. kà-ndìciré kùrim-à (NEG-SC1sg-not be able to 15-cultivate) ‘I have not cultivated (this morning)’. Ngamiland Y eyi again has a compound negative form. The first part of this negative construction consists of a subject concord, optionally a TAM-marker, a class 1 or 2 nominal prefix and an invariable click-containing negative element -!hu (/H11021 kù-!hú ‘nothing’). This latter form is always followed by the lexical verb of the affirmative sentence in the infinitive, e.g. ‘á’á, ndì-mì-!hú kùshàngàn-à ná yiù-mwè (NEG, SC1sg-1-nothing 15-meet with PPl-some) ‘No, no, I did not see/meet with anyone (yesterday)’. In Mbukushu, Kwangari and Gciriku, non-indicative and indicative finite verb forms are negated by the additive use of negation words. In Mbukushu, finite verbs in the main clause exhibit a verb-initial form mbadi, badi or kadi, while the respective negation word is followed by the finite verb form of the affirmative sentence (Fisch 1977:130). In the remaining Kavango languages, sentential negation is expressed by the use of a verb form-initial negation word kapi as in Kwangari kapi tu-na#mon-o (NEG SC1pl-P AST-see-FV) ‘we did not see’ and kapi nga-tu#mon-a (NEG FUT -SC1pl-see-FV) ‘we will not see’ (Dammann 1957:67).

In Gciriku, an invariable negation word kapi is used to negate finite verbs, whereas the negation of copulas and infinitives is achieved by the use of an equally invariable form kapišá (including the defective verb -šá ‘to say’). This negative marker precedes the element to be negated as in amé kapišá kušímb-a (AP1sg NEG 15-sing-FV) ‘I am not a singer’ (Möhlig 1967:216). In Kwangari, negation is expressed by double marking as in no kušìyang-a sì ‘not to speak’. Similarly, UMbundu marks the negative in sentences with non-verbal predication by a negative index ha- which precedes the predicative noun while it is followed by an enclitic -kö (Schadeberg 1990:53f.). When the subject is a participant the nominal predicate in UMbundu is preceded by a negated verbal prefix and followed by the enclitic -kö as in ha-tú-vi-mbandà-kö (NEG-SC1pl-4-doctor-NEG) ‘we are not doctors’. In Y eyi, negation in sentences with a non-verbal predicate is marked by the negation word yemua as in zi-kayi ziza-po ri-iro ri-i-njuwo yemua inz-anga (8-skin SREL8-LOC16 5-top CONNS5-9-house NEG 8-POSS1sg) ‘The skins which are (lying) on top of the house are not mine’ (example adapted from Schapera and van der Merwe 1942:39).

REFERENCES

CHAPTER TWENTY-NINE

HERERO (R31)

Edward D. Elderkin

1 INTRODUCTION

Herero has come to be used as a cover term for a number of language varieties. It is not known if an adequate linguistic demarcation between Wambo languages (R20) and Herero languages (R31) is possible at all points of their border. Equally the northward extension of Herero languages into Angola is known, but little documented.

The Herero variety spoken in Namibia south of the Etosha Pan seems fairly uniform, though there is some geographical lexical variation. It is this variety which is standard Herero; in it *j is realized as /e/ (except in some nasal environments) and *y as /u/. There are two relevant traditional political alignments, the Herero and the Mbanderu; their language is one. Recent pressure to acknowledge a distinct Mbanderu language in education is based on no convincing linguistic evidence. The variety which Dempwolff (Kavari and Ohly n.d.) recorded in 1904–5 as Mbanderu is clearly merely a Herero with a marked Tswana-like phonology and should not be taken as representative of a Mbanderu dialect at any time in the past without weighty corroborative evidence.

I do not know to what extent the Herero-related varieties north of the Etosha Pan have been influenced by tonal systems similar to those of Ndonga (R22) and Kwanyama (R21), in which high tone seems to have moved to the right and a tonal accent system may be developing; the tonal system described here relates to the southern (standard) variety.

It seems possible that Nkumbi (R14), and language varieties closely related to it, the Wambo dialects (R20), and Herero (R31), all form a unit, both areal and genetic; the nearest language is UMbundu (R11); I keep an open mind on the position of Kwangali (K33), which some scholars place within this grouping.

Superficially, lexical influence from Khoekhoe, German and Afrikaans is evident. More basic influence of Khoisan, in stem formation strategies, has been suggested (Güldemann 1999c), and perhaps more will be uncovered by careful historical investigation. Such work is hindered by the extinction of descendants of probable donor languages.

The number of speakers of Herero is probably approaching a fifth of a million (extrapolating from Grimes 2000). Many seem not to value the language too highly, except in traditional contexts, believing in the educational and economic advantages of now English, but formerly Afrikaans; the ideal of initial primary education in the language is usually bypassed and only two secondary schools offer it as a full subject in the curriculum. No language other than English has any official status in the Namibian constitution.

1.1 Sources

The major sources consulted are Hahn (1857), Volschenk (1968), Booysen (1982), and for vocabulary, Viljoen and Kamupingene (1983), whose glosses I have sometimes used without checking. Much of my field work was done with the help of Ms Jejamaije Mujoro, whom I thank.
1.2 Terminology

A ‘root’ is a presumed morpheme which is not found used as a stem in its own right. So, despite the existence of -sèkàm-vst ‘become standing’ and -sèkà-vst 3 ‘height’, there is no known verb stem *-sèk-. A ‘stem’ may consist of one or more morphemes: thus in òmìndù ‘person’, -ndù is the stem; in òmìvêrànđù, -vêrànđù is the stem, which consists of three morphemes (-vêr- vst ‘be ill’, -a ‘default vowel’, and -ndù).

Prefixes showing class have been grouped into two systems, ‘Nominal Prefixes’ and ‘General Prefixes’. A ‘nominal’ is a word which shows a class by using a nominal prefix. An ‘adnominal’ is a word which shows a class by using a general prefix.

1.3 Orthographies and representation

Two orthographies are in use, the official orthography, Orthography No. 3 (Departement van Nasionale Opvoeding 1983), sanctioned by the educational authorities and therefore imposed in schools, and the orthography used in the New Era, a government newspaper which appears twice a week; this latter orthography continues earlier traditions, not using the letter w and using j for y.

Orthography No. 3 is disjunctive, but inconsistently so, and is inconsistent in the spelling of some nominal prefixes. The New Era orthography however uses correct word division (derived from linguistic intuition), except in a few cases often related to an unwillingness to use capital letters within words: o Namibia becomes two orthographic words. For example, the New Era has:

(1) kumavevanga

‗where they want‘

The official orthography, in its eurocentric way, wishes this to be three words, ku (where), mave (they), vanga (want). (For analysis see (27).)

A majority of Herero speakers prefer a traditional (New Era) orthography to the official one; each orthography could be developed to form the basis of a coherent writing system.

The representation of Herero used here is neither of these orthographies, nor a phonological transcription (because it uses letters of an alphabet and not phonetic symbols used phonologically), although it is in a consistent relationship with a phonological transcription. The correlation between the letters and letter groups of the representation used here and their usual phonetic realization, in terms of IPA symbols, is set out in table 29.1.

<table>
<thead>
<tr>
<th>IPA</th>
<th>This representation, based on Orthography No. 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>[θ] h</td>
<td></td>
</tr>
<tr>
<td>[p t c k]</td>
<td></td>
</tr>
<tr>
<td>[ŋ mb n]</td>
<td></td>
</tr>
<tr>
<td>[m]</td>
<td></td>
</tr>
<tr>
<td>[v z r]</td>
<td></td>
</tr>
<tr>
<td>[w y]</td>
<td></td>
</tr>
</tbody>
</table>

In the north of the Herero-speaking area, the main realization of tj is [tc]; where, elsewhere, the realization of tj is now [c], the realization of ty and ndy is likely to be [tc] and [dz] respectively. The vowels e and o are nearer to close-mid than to open-mid. In some speakers, the alveolar column seems to have a slightly retroflex articulation.
2 PHONOLOGY

2.1 Segmentals

Syllable structure is:

\((C_1)(C_2)V\)

### TABLE 29.2: SYLLABLE STRUCTURE OF HERERO

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>(C_1)</td>
<td>voiceless fricatives</td>
<td>s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>h</td>
</tr>
<tr>
<td></td>
<td>voiceless plosives</td>
<td>p</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td></td>
<td>prenasalized plosives</td>
<td>mb</td>
<td>ndl</td>
<td>nd</td>
<td>ndlj</td>
<td>ng</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nasals</td>
<td>m</td>
<td>n</td>
<td>n</td>
<td>ny</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>fricatives/tap</td>
<td>v</td>
<td>z</td>
<td>r</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(C_2)</td>
<td>semi-vowels</td>
<td>y</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>close</td>
<td>i</td>
<td>u</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>mid close</td>
<td>e</td>
<td>o</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>open</td>
<td>a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.1.1 Restrictions

\(y\) is only found after those \(C_1\) in table 29.2, columns I, III and VII (but \(sy\), 
\([0j]\), occurs, so \(s\) is placed in column III above); however, the sequence \(n + y\) does not occur (\(ny\) is one unit). \(w\) does not follow those \(C_1\) in column II (though this restriction is in the process of being broken down, partly because of -w- passive).

2.1.2 Elision

In normal use of the language, where one word ends in a vowel (as it must), and the following word begins with a vowel, the word final vowel is elided and only the vowel initial in the following word is heard.

(2) tw-a-mun-u o-ngombo

twamunongombo

‘we saw a goat’

In this way, an utterance will have fewer syllables than the total of syllables in its component words in isolation.

Elided vowels are here written subscript.

(3) twamun \(_o\) ongombo

Although the vowel is elided, the tone of the elided vowel is retained wherever possible.
In the morphophonology, underlying y and w are frequently lost in the environment a–a, and always where the distinction between the presence and absence of w or y is not made phonologically (between vowels: for w, adjacent to a close back vowel, and for y, adjacent to a close front vowel).

(4)  o-kà-àtù 12/14 'small bag'  Stem: -yàtù  ó-n-djàtù 9/10 'bag'

### 2.2 Tone

There are two tonal values, High, ' , and Low, `. Each syllable is associated with either a H or a L, or a sequence of H and L; a syllable is never found associated with the sequence LH, although the sequence H1H (which gives a phonetically rising tone, as would LH) can be heard. (The prefixed superscript numbers relate to tone keys, described next.)

#### 2.2.1 Tone keys (Elderkin 1999)

The tones of certain sequences of syllables are heard as realized either in a higher or a lower pitch range. Sequences of syllables in the higher pitch range are said to be in Key 1; parts of the utterance in the lower pitch range are in Key 2. The following example illustrates this. Superscript figures indicate the key of the following syllables.

(5)  2ò-mù-hònà 1w-è-ńđjì-ńmù-à
   'the chief saw me'

A low tone in Key 1 has the same phonetic pitch as a high tone in Key 2 when the former is between two highs in Key 1, or when it immediately follows a high in Key 2. Otherwise a low tone in Key 1 has the same pitch as a low tone in Key 2.

A sequence of syllables which is heard in Key 1 often corresponds to a word, plus the beginning of the following word. However, there are words in which the key changes.

(6)  1mà-tù-2ńmù-à
   'we see'

When a word finishes in Key 1 and another word which ‘should’ be in Key 2 follows, there are two possibilities.

The first possibility is that there is a temporary maintenance of Key 1 at the beginning of the following word which manifests itself in the raising of one, or if high tone spread is allowed, two low tone syllables to the pitch level of Key 1 high, often with a pitch fall on the last of these.

(7)  1v-à-ńmù-1 (H11O212) o-ńđjì-ńmù-à
   ‘they saw the cows’

   1v-à-ńmù-1 (H11O212) o-ńgòmbè
   ‘they saw the cow’

   1v-à-ńmù-1 (H11O212) o-ńđjàrà
   ‘they felt hunger’

   -ńgòmbè 9/10 cow

   -ńdjàrà 9/10 hunger
The verb which causes this effect may be Ø segmentally, being merely a specification of a low tone in Key 1. The segmentally Ø verb is a present copula. This form is also used as the citation form for nominals.

\[ \text{Ø} \]

\[ 1^{1}\text{H}(<2)\text{o-zó-ngómbé} \]

‘it’s cows’

The second possibility is that there is no such temporary maintenance of Key 1, but an immediate drop to Key 2.

\[ \text{Ø} \]

\[ 1^v\text{-}\text{a-}2\text{o-ndjårà} \]

‘they died of hunger’

Imperative verbs are subject to such an absence of key maintenance.

As has been illustrated, the verb of a main clause is heard in Key 1. Where the verb itself contains a change of key, and therefore does not finish in Key 1, key maintenance in the next constituent is not heard.

\[ \text{Ø} \]

\[ 1^m\text{á-}2\text{mú-}3\text{o-zó-ngómbé} \]

‘they see the cows’

2.2.2 Downstep

Within sequences, both in Key 1 and in Key 2, a H may appear downstepped.

\[ \text{Ø} \]

\[ 1^v\text{-}\text{a-}2\text{p-á} \]

‘they killed’

\[ 1^v\text{-}\text{a-}zé^2\text{o-}3\text{o-zó-ngómbé} \]

‘they killed cows’

Key maintenance in the second example demonstrates that the \(^{1}\text{pá}\) cannot be analysed as \(^{2}\text{pá}\), that is, in Key 2.

2.2.3 Transposition

Where a verb finishing in Key 1 is transposed to Key 2, the phenomenon of key maintenance is retained in the transposition.
3 INFLECTIONAL MORPHOLOGY

Word categories are defined by the structure of Herero and not by reference to similarly named categories in other languages.

3.1 Proper nouns

Proper nouns consist of a stem only, which may be complex. A pluralizing morpheme, øò-, may precede the stem; the whole refers to a group of like individuals, of which the referent of the stem is one. It is the fact of the possibility of this øò- that allows the morphological categorization of proper nouns. (Agreement for proper nouns is identical to that for nouns of Gender 1/2, irrespective of human/non-human status, although there may be doubt in a speaker’s mind where there is an incorporated nominal prefix and no animate reference, as with the second example in (13).)

(13) øò-inà ‘his/her mother and the others with her’
    kàriönà ‘little finger’

Place names are not proper nouns; they are nominals, and may have a plural form to indicate ‘the general area of …’:

(14) ø-vi-nénè ‘the general area of Otjinene’

3.2 Nominals

A nominal shows class by using a nominal prefix. The structure of a nominal is:

(Initial Vowel) + Nominal Prefix + Nominal Stem

(15) ø-mu-tímnà
     iv-3-heart
     ‘heart’

There are two possibilities for the initial vowel. In the first, and usual, it has the form o, except when the following nominal prefix is the θ of class 5, when it is e.
The second possibility is that the initial vowel is i-. Where the initial vowel is i-, the nominal prefix for class 5 is ri-, but otherwise the nominal prefix has its basic form. Forms with i- as the initial vowel are used in exclamations, both as such and as questioning, but are less frequent than is implied by Hahn (1857); forms with o- seem to be replacing them.

(16) i-ngéàmà
   IV-lion
   ‘It’s a lion!’

The initial vowel is usually present. It is absent in a locative nominal, that is a nominal which is the first word in the structure:

Nominal Prefix (Locative) + NP

A nominal prefix (locative) is of class 16, 17 or 18, for example:

(17) mômeà ̂ à omàkòtò
    mu-o-ma-yà
    18-IV-6-water IV-6-deep
    ‘in deep water’

Other places where an Initial Vowel is absent are detailed in §5.1.

The basic forms of the nominal prefix are:

$$
\begin{array}{cccccccccccc}
1 & 3 & 5 & 7 & 9 & 11 & 12 & 15 & 16 & 17 & 18 \\
mu & mu & Ø & tj & ru & ka & ku & pa & ku & mu \\
2 & 4 & 6 & 8 & 10 & 13 & 14 \\
va & mi & ma & vi & zô & tu & u \\
\end{array}
$$

* in Gender 9/10 is used as the representation for a nasal homorganic to a following consonant. (An underlying segment * appears also in the demonstrative morpheme and in an allomorph of the general prefix (oblique), 1Sg (-ndji-), used in a pleading sense.) It is deleted before a following morpheme with an underlying initial voiceless fricative (i.e. s and h, not tj), an initial nasal, or an initial prenasalized plosive. In all other positions it appears as a short nasal segment, homorganic to the following consonant and together with it forming one phonological unit, (except * + w, where mbw is two phonological units).

| voiceless  | p | t | tj | k |
| voiced  fricatives/tap/semivowels | v | z | r | y | g | w |
| voiced  prenasalized plosives | mb | ndj | nd | ndj | ng | mbw |

(18) òmbwà
    ò-ù-wà Âst
    ‘good (9)’

òmbò
    ò-ù-pè Âst
    ‘new (9)’

Nominal stems are of two types, noun stems and adjective stems.

Noun stems are associated with an intrinsic gender, which determines the choice of nominal prefixes showing singular and plural. Genders are here referred to by the
numbers of the nominal prefixes, in the sequence singular/plural; (e.g. -ndù 1/2 ‘person’; -tá 14/14 ‘bow’). Some noun stems do not allow the singular/plural choice (e.g. -ýá /6 ‘water’). The following genders have been noted.

1/2, 3/4, 5/6, 7/8, 9/10, 11/10, 11/13, 12/14, 14/14, 15/6

The nominal prefix of the singular is sometimes found incorporated into the stem used in the plural (see §4.1.1).

Noun stems and proper nouns may be used as stems in non-intrinsic genders; in principle, the prefixes of the intrinsic gender are not used, and are replaced by the prefixes of the non-intrinsic gender. When so used, there is an additional element of meaning, which can be pejorative, as follows:

(19) 5/6 ó-ndù ‘large’
    7/8 ó-tji-ndù ‘large’
    12/14 ó-kà-ndù ‘small’
    11/13 ó-rù-ndù ‘thin and long’

Adjective stems are not associated with a gender, and may therefore in principle be found preceded by a Nominal prefix of any class.

(20) óndé
    ó-n dé
    ‘long (9)’
    ó-và-wà
    ‘good (1)’

Some nominal forms always occur without initial vowel; many of these have sentence functions which are not typically nominal: múvyú ‘nine’, rükùrí ‘earlier’, tjiñènè ‘a lot’.

3.3 Adnominals

Adnominals use a general prefix to show class. The forms of the general prefix are:

<table>
<thead>
<tr>
<th>Class</th>
<th>Basic</th>
<th>Usual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>gu</td>
<td>u</td>
</tr>
<tr>
<td>2</td>
<td>va</td>
<td>ve</td>
</tr>
<tr>
<td>3</td>
<td>vu</td>
<td>i</td>
</tr>
<tr>
<td>4</td>
<td>ri</td>
<td>ke</td>
</tr>
<tr>
<td>5</td>
<td>tji</td>
<td>ku</td>
</tr>
<tr>
<td>6</td>
<td>yi</td>
<td>pe</td>
</tr>
<tr>
<td>7</td>
<td>ru</td>
<td>ku</td>
</tr>
<tr>
<td>8</td>
<td>ka</td>
<td>mu</td>
</tr>
<tr>
<td>9</td>
<td>pa</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>ya</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>ku</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>mu</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The basic forms are only found in demonstratives; elsewhere, general prefixes with a have instead e. Class 6 usually has ye, but forms with an initial w are found. (However, -ne ‘four’ takes w- and ya- in classes 2 and 6.) Verbs are not here classified as adnominals, but as a separate word category.

The overall structure for an adnominal is:

(Initial Vowel) + General Prefix + Adnominal Stem

3.3.1 Simple adnominal stems

Relatively few adnominal stems are of a single morpheme, e.g.: -íní ‘self, owner’; -íngi ‘many’; -né ‘who?, what?’; -ngapi ‘how many?’. A nominal prefix is used instead of the general prefix, with -íní in classes 1 and 3, and with -íngi in class 6.
3.3.2 Numerals

Numerals have the following structure:

General Prefix + Numeral Stem

except that there is no general prefix in class 10, where the nominal prefix of class 9 is incorporated into the stem.

(22) ò-và-hônà vê-vàri
    ‘two chiefs’
ò-zò-ngórà mbârì
    ‘two whips’

Only the numbers one to five are morphologically numerals.

3.3.3. -hè ‘all’

The stem -hè ‘all’ is used with an extra vowel, à-, before the general prefix. This is, however, not an initial vowel. With -hè, first and second person plural general prefix forms are available:

(23) à-vê-hè
    ‘all of them (2)’
à-tü-hè
    ‘all of us (1Pl)’

Also used with the extra vowel before the general prefix is the derived stem:

Low Tone + Numeral Stem

(24) ò-và-ndû àvë-vârì
    à-vê-’-vârì
    à-2-all-two
    ‘both the people (2)’
àzêndâtû
    à-zê-’-
    ‘all the three (10)’

The low tone in the stem could be taken as an allomorph of -hè ‘all’.

3.3.4 Demonstratives

Demonstratives are characterized by the morpheme à appearing immediately before the general prefix.

(Initial Vowel) + à + General Prefix + Demonstrative Stem
Demonstrative stems are:

-í ‘this’
-íná ‘that’
-íní ‘that there’
-ó ‘the’

and the compound:

-ínó- -í ‘this here now’

With demonstratives, the initial vowel is í-, which carries the high tone underlyingly associated with í. Demonstratives may appear seemingly cliticized to nominal and adnominal categories; in this use they do not have an initial vowel. When a monosyllabic demonstrative is so used, the high tone of the í is heard on the preceding syllable, and a low tone on this preceding syllable is reassigned to the previous syllable. (This does not apply to í used with relatives.)

The forms given for demonstrative stems are underlying forms and rules of a non-general nature apply to produce the surface forms; the same is true of forms with -ú- which appear with relatives (see §3.3.5).

It is only in demonstratives, after í, that the consonant in the general prefixes gu, vu, ga and yi is realized; otherwise it is zero.

(25) ò-mú-ndú-n-gw-i
ò-mú-ndú- í-gu-i
	‘this person’

îngwi
iv í-gu-i
	‘this one (1)’

àžèhènglâ
à-10(zé)-hè-í-10(zá)
	‘all those (10)’

móméá òmkótô mwbíná
í-18-iná
	‘in the deep water there’

móméá òmkótô ñgélná
í-ó(ga)-iná
	‘in that deep water’

ndinòndí
í-5-inó-í-5-i
	‘today’

3.3.5 Relative words

The presence of í + general prefix shows that the relative word is morphologically a subclass of the demonstrative. There are two possibilities.

Where a verb begins with a general prefix which agrees with the antecedent noun, the following formula constitutes a relative word:

í + Verb
For example,

(26) ngwéérè wéérè
   s/he came’ Ø < ~i- vst ‘come’

The second possibility is:

(27) kúmávévángá mávévángá
   s/-ku-ú-má-vé-váng-à ‘they(vé) want’
   ‘where they want’

As ù is followed by a clause, it looks like a complementizer; I find no other evidence for this interpretation. Other uses of this ù are the following structures, where the material after ù could be considered a reduced clause:

(28) púnávé
    ~pa-ú-ná-̀yé
    ‘with her/him’

and

(29) pùyé ‘than, at her/him’
    ~pa-ú-yé

3.4 Pronouns

3.4.1 Free standing

A pronoun contains no other information except a class, or a person and number. Those containing only person and number information are monomorphemic. When, in predication, they are required to be prefixed by an initial vowel, o- is used.

Sg. Pl.
1Pers āmi ēgē
2Pers òvé ēnē

(30) āmi òmē-ká-̀rōr-à 1-ò-āmī
    ‘I went and tried(-rōr-)’ ‘it’s me’

Those containing information as to class have the structure:

Initial Vowel + General Prefix + ò

In all classes the initial vowel is o- except in class 1 where it is e-; in class 1 also, the sequence General Prefix + o is realized as yé. When these pronouns follow a verb, they are enclitic, and do not take an initial vowel:

(31) éyé
    ‘s/he’
1-w-á-térék-é- 2-r-ó
1-TAM-cook-FV-11-ó
's/he cooked it'

3.4.2 Genitive

Where a pronoun constitutes the NP in a genitive construction (cf. §5.2), it is not a word, but is bound. Where the genitive preposition in the form -i- is not separately quoted in the tables following, it is one formative with the pronoun:

<table>
<thead>
<tr>
<th>Sg.</th>
<th>Pl.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Pers</td>
<td>-á-ndjè -ẹ́tù</td>
</tr>
<tr>
<td>2Pers</td>
<td>-òè  -ẹ̀nù</td>
</tr>
</tbody>
</table>

Otherwise, the forms are the usual general prefix + o; the forms for class 1 and class 2 are:

1
3Pers -é  -á-ò
(32) è-nà r-é
‘his/her name’
ò-zò-ndjùà z-á-ò
‘their houses’

3.5 Verbs

The morphology of the verb is treated in three subsections. First, the segmental structure of the core of the affirmative indicative verb is described. Second, formatives within the verbal word but outside the core are treated. A third section deals cursorily with forms other than affirmative indicative. The derivational morphology of the verb stem is covered in §4.2.3.

3.5.1 The verb core

3.5.1.1 Segmental morphology

The verb core contains a verb stem and consists of maximally the following structure in terms of formative classes in sequence:

<table>
<thead>
<tr>
<th>General Prefix</th>
<th>Pre-stem (Subject)</th>
<th>General Prefix (Oblique)</th>
<th>Verb Stem</th>
<th>Post-stem (Oblique)</th>
<th>Passive</th>
<th>Final Vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefix Marker</td>
<td>tjì</td>
<td>kà</td>
<td>TA</td>
<td>Pre-stem Marker</td>
<td>Post-stem Marker</td>
<td></td>
</tr>
</tbody>
</table>

In verbs, the general prefix series has the following forms for persons and gender 1/2:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Oblique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sg./1</td>
<td>Pl./2</td>
</tr>
<tr>
<td>1Pers</td>
<td>-mbì-</td>
</tr>
<tr>
<td>2Pers</td>
<td>-ù-</td>
</tr>
<tr>
<td>3Pers</td>
<td>-ù-</td>
</tr>
</tbody>
</table>

The general prefix (oblique) series has the extra member -ri-, reflexive.
-tjí- indicates that referent of the verb happens before something else, -kà- that it happens after a move or an interval.

In order to keep the verb stem integral, passive (-w-) is best considered to be an inflectional category, and not an extension.

The TA markers contain data relevant to tense and aspect. As pre-stem TAM marker, -á- and -à- are found; there is only one post-stem TAM marker, and that is -er-: it occurs in the affirmative only if a pre-stem TAM marker is also present. The passive -w- appears between this -er- and the final vowel -e, which is determined by -er-. The basic segmental form of the post-stem TA marker is -er-. But where the immediately preceding vowel is i or u, this suffix has the vowel i and not e; where the immediately preceding consonant is a nasal, this suffix has the consonant n and not r.

(33) twámúíné
tu-á-mún-er-e
‘we saw’

Only the verb stem is an obligatory constituent of a verb, but the final vowel is not required only in a small number of verbs, and that only in forms which seem, in analysis, as if they should have no suffix after the stem and are here referred to as bare forms. But only verb stems of the form -CV- actually have no suffix.

(34) w-à-티ú
‘s/he died’

Many other verb stems suffix a vowel of the same quality as the last vowel in the stem, called here a harmonic vowel (hv).

(35) 1mé-2tó-n-á
‘I hit’

Some harmonic vowels are exceptional, most frequently examples of i when e is the last vowel in the stem, or vice versa.

(36) 1mb-é-miù-tik-à
‘I accompanied her’

Most other verb stems are incapable of taking a harmonic vowel or of appearing without a final vowel; they therefore use the default vowel.

(37) 1mé-2ząng-à
‘I mix’

Where the last vowel in the stem is -à-, either -à- or -â-, tonal phenomena can be used to establish whether the following -à is the default vowel or the harmonic vowel; I did not find a way of making this distinction with stems with -à-.

The choices at final vowel for affirmative indicative verbs are

- e (demanded by the presence of the post-stem TA marker)
- lv harmonic vowel (see above)
- à default vowel (dv)
- zero

(38) mb-à-pãmik-à
1Sg.-TAM-hatch-FV
‘I’ve hatched out’
w-à-kùp-ír-w-é
1-TAM-marry-TAM-passive-FV
’she was married (and is no longer married)’

3.5.1.2 Paradigms

The three following choices:

(i) Post-stem TA marker: present absent
(ii) Pre-stem TA marker: present absent
(iii) Pre-stem TA marker: high toned low toned

and/or final vowel: bare form default vowel
determine the paradigmatic structure of verb morphology, illustrated below with the verb stem -mùn- vst ‘see’, with 1Pl tu- as the general prefix (subject).

<table>
<thead>
<tr>
<th>No Post-stem TA marker</th>
<th>Post-stem TA marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-stem TA marker</td>
<td>No pre-stem TA marker</td>
</tr>
<tr>
<td>High-toned ‘á- &amp;/or bare form</td>
<td>twámunu -tumunu twámunine -tumunine</td>
</tr>
<tr>
<td>Low-toned ‘à- &amp;/or default vowel</td>
<td>twámuna tumuna twámunine -tumunine</td>
</tr>
</tbody>
</table>

The semantic correlations of the paradigms have not been adequately worked out. ‘-à’ seems to involve a more remote past, and can indicate both the initiation and the progress of the referent to an end, whereas ‘-á’ seems to be more related to a commencement, rather than a progression and an ending. It is not yet clear whether a full tonal analysis should prefer to take ‘-á’ as the underlying form of both ‘-á’ and ‘-à’, the latter being the result of the association of an unassociated low tone, or if automatic generation of a H is required after an underlying L. The post-stem TA marker seems to relate to the fact that something is finished, with ‘-à’, the whole event, beginning, middle and end, but with ‘-á’, it seems to relate to the fact that the beginning of the event has finished.

(39) w-à-pòtìpàr-ér-è
’s/he was blind (but is now no longer blind)’

w-à-pòtìpàr-ér-è
’s/he has become blind (but the degree of future permanency of this situation is not indicated)’

3.5.2 Peripherals of the verb word

The hyphen in front of three of the forms quoted in the table of verb paradigms above indicates that those forms cannot appear as words without additional matter (bound adverbials, negative), preceding the general prefix (subject). With the paradigm -tumunu several bound adverbials are possible:

má- present
máà- probable future
âmá- simultaneous
âá- past, but applies no longer
â- consecutive/narrative

With the first three, there is a transposition to Key 2 after the bound adverbial, (as in (6)); with the others, there is no such transposition.

(40) 1â-vé-̣-undj-ú
badv-2-wait-FV
‘and they waited’
1ââtûnyândâ
badv-2Pl-play-FV
‘we played, (but don’t now)’

Some pronominal and interrogative forms (e.g. -pi ‘which?’) which appear after the verb core are enclitic (see (31)).

3.5.3 Other forms

The general prefix (subject) series used in the subjunctive has an innovation for class 1, ma-. This is presumably by analogy and back formation from the bound adverbial used for the present, má-. Subjunctive forms have -e as final vowel, which is not compatible with either of the TSN markers (see (77)).

The imperative has the default vowel in the singular, and in the plural -éyé; the negative imperative uses a bound adverbial (â-) and the bare form.

(41) tûn-à
‘hit!’
1kâmbür-èè
‘catch hold! (Pl.)’
1à-2tíit-i (ò < à + ü 2Sg.)
‘don’t do’ (colloquially: ‘you don’t say!’)

The negative morpheme is ka-, initial in the verb, or -ha-, preceding the general prefix (oblique), if present, according to paradigm.

(42) 1ká-máá-2tí-ká-nyánd-à
NEG-badv-1P-ká-play-FV
‘we won’t go and play’
2n-gü-há-tjìv-à 2è-râkà
‘who does not know (-há-tjìw-) the language’
1a-ùi-há-pìnd-ù
badv-1Pl-NEG-dance-FV
‘and we didn’t dance’

Hortative type forms use an initial nga-.

(43) nga-ùi-hông-è
‘let’s teach’
The post-stem TA marker only appears without a pre-stem TA marker in negative forms; the two forms differ tonally. Space has not allowed any treatment of verbal tone here. However, it can be noted that under certain conditions, high tone spreads: the stem of the first example in (40) is -\textit{ündj-} vst ‘wait’ and of the third example in (42) is -\textit{pun-} vst ‘dance’.

The question of Herero verb forms has not yet been adequately handled. Different authorities give different inventories of forms, as noted in Fleisch (1995), and confusion is compounded when constructions with class 15 nominalizations of verb stems to the right of a finite verb, identified as an auxiliary, have been taken as tense/aspect/mood paradigms. The treatment of the verb core in §3.5.1 above is a minimal statement, the degree to which bound adverbials are integrated into a system will depend on the orientation and prejudices of the grammarian.

4 LEXICON

4.1 Simple stems

4.1.1 Noun stems

With nominal stems with two syllables, all sequences of H and L occur.

\begin{verbatim}
(44) -gömbo ‘goat’
    -hündju ‘fish’
    -bangu ‘hyena’
    -ngömbe ‘cow’
\end{verbatim}

But stems with HL (of which there are few), fall into two classes. In one, the L always remains L; in the other, the L may be raised to H, e.g. when H in Key 1 follows.

\begin{verbatim}
(45) 2-øndjékë 1-y-á-tëk-á ‘the jack is broken’  
     2-ø-mw-átjë 1-w-á-i ‘the child went’  
\end{verbatim}

The majority of noun stems begin with a vowel or with an acceptable syllable initial consonant or consonant cluster. A few must be analyzed as beginning with a tonal specification followed by an acceptable syllable initial consonant or consonant cluster (no example of a tonal specification followed by a vowel has yet been found). A few noun stems have a non-predictable allomorphy for singular and plural forms.

\begin{verbatim}
(46) -kà -’hò 5/6 ‘eye’
     -átjë -nàtjë 1/2 ‘child’
\end{verbatim}

A few, including -’hò above, show -me- and not -ma- as the nominal prefix of class 6.

\begin{verbatim}
(47) -’yà /6 ‘water’ (iméät)
\end{verbatim}

Noun stems used in an non intrinsic gender have prefixes other than those of the intrinsic gender of the noun stem.

\begin{verbatim}
(48) 0-n-tänà 0-’à-tänà ‘calf’ (-tànà 9/10)
     0-và-nàtjë 0-’à-nàtjë ‘child’
\end{verbatim}

It happens that with some genders, the singular prefix of the intrinsic gender is incorporated into the stem of a noun in a non-intrinsic gender. Nouns intrinsically in gender
11/13 have in these forms a number-sensitive allomorphy in the stem, the prefix of class 11 is incorporated in the singular and that of class 13 in the plural.

\[(49) \quad \text{ò-ká-úmítá} \quad \text{ò-ú-mítá} \quad \text{‘small heart’} \quad (-\text{ítá} 3/4)
\]
\[(49) \quad \text{ò-tji-rúúō} \quad \text{ò-ví-túúō} \quad \text{‘large spoon’} \quad (-\text{tó} 11/13)\]

Nouns intrinsically in gender 9/10 also show uncertainty as to the form of the stem. Although the usual analysis, and the historically appropriate analysis, is to consider the prenasalization, \(\text{št}\), (part of) the prefix, the falling together of voiceless prenasalized plosives and voiced prenasalized plosives has obliterated the knowledge of the voicing of the historically correct stem-initial consonant. As stems with initial underlying fricatives and nasals delete the underlying prefix, the tendency is to generalize a zero prefix and to consider that the stem begins with a prenasalized consonant. For example, if a class 12 non intrinsic form of \(\text{òn}/\text{ùkwá}\) ‘churning calabash’ is required, a speaker is likely to produce \(\text{òká-zúkwá}\) and then wonder if \(\text{òká-úkwá}\) were more appropriate. The form \(\text{*ókáštúkwá}\) does not come to mind, although the historically underlying form is derived from \(-\text{štú}\text{-VSt}\) ‘swing backwards and forwards’. Stem forms with an initial prenasalized consonant exist in other intrinsic genders; this reanalysis of the nasal in the prefix for class 9 and class 10 has produced many stems with an initial prenasalized consonant in the competence of many speakers. Usually only forms with the voiced non-prenasalized consonant or the voiced prenasalized consonant exist, but many nouns do retain the original situation, \(\text{ókátáú ‘call’; see (48)}.\)

\[(50) \quad \text{òndjáú ‘bag’} \quad \text{ò-ká-úštú ōr ó-ká-údštú}
\]
\[(50) \quad \text{ómbvá ‘dog’} \quad \text{ò-ká-úwá ōr ó-ká-úmbvá}\]

The fact that \(\text{zo-}\) is used before adjective stems, which do not show incorporation of the nominal prefix into the stem, disallows the analysis of \(\text{št}\) as an incorporated prefix in adjective stems.

In the derivation of stems, an earlier situation, without incorporation of \(\text{št}\), is occasionally noted.

\[(51) \quad -\text{ndúómbé 9/10 ‘ox’} \quad \text{cf. -twéú ōst ‘male, big’}
\]
\[(51) \quad -\text{kéámá 9/10 ‘lion’} \quad -\text{ké ōst ‘what kind of’}
\]
\[(51) \quad -\text{gómbe 9/10 ‘cow’} \quad \text{now: -ngómbe}
\]
\[(51) \quad -\text{yámá 9/10 ‘animal’} \quad \text{now: -nyámá 9/10 ‘meat’}\]

4.1.2 Verb stems

With verb stems having one vowel and a final consonant, there are three underlying tonal possibilities.

\[(52) \quad \text{-tóm-} \quad \text{vst ‘hit’}
\]
\[(52) \quad \text{-mún-} \quad \text{vst ‘see’}
\]
\[(52) \quad \text{-vér-} \quad \text{vst ‘be ill’}\]

The diacritic \(\hat{\text{}}\) indicates a high tone associated with the vowel, but which does not spread onto the following syllable. So the nominalizations of the above forms are: \(\text{okutóñá, okúmtímá and okúvtérá}.\) A similar distinction is found with longer verb stems.

Pronouns suffixed to verbs are best analyzed as clitics, i.e. they are part of the morphological word. However, they are phonologically the bearers of the maintained key.
(53)  
1mb-á-vátér-éyé  ‘I helped him’
1mb-á-vátér-éyé 2tjì-néné  ‘I helped him a lot’

(Key 1 has not been maintained on tjì-néné)

In some verbs, where the verb stem and the suffixed locative pronoun together can be considered to form one lexical item, there has been a reanalysis of the stem when the post-stem TA marker has to be added.

(54)  
-váž-  ‘arrive’
-váž-mo  ‘find’
1tw-é-tji-váž-á-2mó  ‘we’ve found it (7)’
1tw-é-tji-váž-ám-én-é  ‘we found it’
tu-á-tji-vážám-ér-e

4.2 Derivation

Many lexical items consist of stems with more than one morpheme, and some include word boundaries. Some methods of derivation listed below can be considered to be productive and not applicable to restricted instances only; not all the stem formations listed in Haacke (1985) are acceptable to all informants.

4.2.1 Proper nouns

No statement can be made about the form of proper noun stems, except that anything goes. In addition to surnames and Christian names, personal names can be sentences, e.g. ñàmähöö 1yémàáíë 1kàenómábèrò ‘what’s the use of tears, they don’t help’, and the owner may use one or other of the words or parts of words of a longer name as a shorter name. So yeamaie (Jejamaie) or, with the usual reanalysis by speakers of the preposition nà- as a verb, giving the ‘words’ kaenà ombaterò, and then segmenting it after the a has been elided, kaeno (Kambo). Common nouns without the initial vowel can be used as proper nouns, (e.g. mítìrí ‘Teacher’; kàvàndjë ‘Mr Jackal’). And there is a number of unanalyzable stems, often address forms for relations, which belong to this category, e.g. inà ‘his/her mother’.

4.2.2 Noun stems

A few monomorphemic stems might be considered historically to be derived by reanalysis. If the stem of ombépò 9/10 ‘wind’ is considered to be derived by suffixation from the verb stem -pèp- vst ‘blow’, then -vèpò 3/4 ‘wind’ is a back-formation. òndjúpà, which has a historical stem *-cúpà, similarly gives ókàyúpà ‘pear’. In these examples, the synchronic analysis should give -vèpò and -yúpà as the stems.

However, there are many ways of forming nominal stems, of which the more important are listed below.

(a) Without Verb Stem

(i) Adjective Stem + Noun Stem

(55)  
òtjìwàróngò (place name)  -wà xst ‘good’  -rònqò 7/8 ‘place’
omúngìngàndù ‘lucky person’  -yìngà xst ‘lucky’  -ndù 1/2 ‘person’
omùkèndù ‘what sort of person?’  -kè xst ‘what kind of’  -ndù 1/2 ‘person’
There are doubtless noun stems of more than one morpheme whose components are unretrievable, and there are those which are only recognized by the linguist as such and not by the speaker. One such is:

(63) -syòì 9/10 ‘kidney’

This form is partly explained by comparing cognate forms from the Wambo dialect, for example, *oshitishanathigo*. The expected form for ‘kidney’, -syò, is only found in kòzòsyó ‘on all sides’.
(b) Containing a Verb Stem

‘Verb stem’ here can include general prefix (oblique), and passive.

(i) Verb Stem + e

(64) -kúrpú øst ‘old’ -kúrp- øst ‘become old’

-nyón 1/2 ‘destroyer’ -nyón øst ‘waste, destroy’

-njábú 9/10 ‘wounded person’ -jáb- øst ‘shoot’

-hingú 1/2 ‘driver’ -hing- øst ‘drive’

With incorporation of general prefix (oblique), giving:

(65) -rikúhú 7/8 ‘sponge, soap’ -kúh- øst ‘wash’

Verbs stem + -i seems to be an alloform of the preceding morph(s), usually after a dental nasal:

(66) -túni 14/1 ‘victory’ -tú- øst ‘be victorious’

Two suffixes are involved, and lexicalization and high tone spread have often obliterated the difference, but occasionally a distinction is kept:

(67) -rámbúkú øst ‘becoming thin’

-rámbúkú øst ‘thin’

(ii) Verb Stem + o

(68) -tjángéró 7/8 ‘blackboard’ -tjáng- øst ‘write’

-ráró 7/8 ‘sleeping mat’ -rár- øst ‘sleep’

With general prefix (oblique):

(69) -rivéréró /6 ‘self regret’ -vér- ‘punish’

(iii) Verb Stem + u

There seems to be a form -ú suffixed to verb stems and roots; usually a stem form with the suffix -ur- or -uk- is also found. -ú forms a nominal stem. There are unresolved tonal problems with this suffix.

(70) -húngú 1/2 ‘critic’ -húngúr- øst ‘criticize, find fault’

-hándú 5/6 ‘naughtiness’ -hándúk- øst ‘be naughty’

-nýéngú 6/6 ‘scorn’ -nýéngúr- øst ‘underestimate’

The stem -pàrv- seems to derive from general prefix 16 pa- + -rw- ‘in another place’ but still allows a back formation,

(71) -pàrú 5/6 ‘wild shooting’ -pàrwís- øst ‘err, miss’

and the first syllable of the verb stem has been reinterpreted as a nominal prefix in:

(72) -kítú 12/14 ‘sweat’ -kítútur- øst ‘sweat’

(iv) Verb Stem + dv (+N)

The unmarked nominalization of a verb stem is effected by this construction in class 15.

(73) -ndjórá 9 ‘laughter’ -yór- øst ‘laugh’

-pérwá 7/8 ‘the luck of being given’ -p- øst ‘give’
In verb stem + dv + N the interpreted relation of the N to the verb stem varies, subject, object or other oblique.

(74) Subject
-ryángáává 3/4 ‘euclea divinorum’ -ří vst ‘eat’ -ngává 9/10 ‘rhinos’

Object
-kohátjinyó 3/4 ‘bluebush’ -kóh- vst ‘wash’ -nyó 7/8 ‘mouth’
-nwámááërë 12 ‘evening star’ -nú vst ‘drink’ -ërë /6 ‘sour milk’

Other
-pósándjômbo 12/14 ‘large frog’ -pós- vst ‘make a noise’ -ndjômbo 9/10 ‘well’
-řáhõgi 12/14 ‘hedgehog’ -řú vst ‘die’ -hõgi 9/ ‘shyness’
-tarákókùrë 7/8 ‘binoculars’ -tär- vst ‘watch’ -řé ast ‘far’

Some nominal stems show verb stem + dv + noun stem; there may be a connection between the intrinsic gender of the noun stem and that of the whole derived noun stem.

(75) -vérrándú ast ‘ill’ -véř- vst ‘be ill’ -ndú 1/2 ‘person’
-zëmbámá 3/4 ‘forgetfulness’ -zëmb- vst ‘forget’ -timá 3/4 ‘heart’

há + verb stem + dv gives a negative adjectival stem:

(76) -hámínìkà ast ‘invisible’ -mín- vst ‘see’
-hävéřikà ast ‘incurable’ -věř- vst ‘be ill’
-háníþändà ast ‘serious’ -ńyánd- vst ‘play’

4.2.3 Verb stems

(a) Extensions

Only three extensions are at all productive. They are:

(i) -er- Applied

The underlying form of this extension is -er-; it submits to the same morphophonological rules as the post-stem TAM. The applied form is used mainly in two contexts: as a benefactive and where a locative follows (see (105)). The instrumental use is rare.

(77) … ṡérítárré
má-ří-tär-ér-é
1-reflexive-see-APPLIED-SUBJUNCTIVE
‘… so he may see for himself’

1 má-ka-²end-ér-à ²k-ôjiti
BAdv + 1-ká-go-APPLIED-dv 17-stick
‘he walks using a stick’

(ii) -is- Causative

Use of the causative form does not necessarily imply that the subject of the equivalent non-causative sentence is the object of the causative form; the situation is complex.
The reciprocal form is not restricted to a strictly reciprocal use. It also indicates simultaneity or togetherness. Two others, which often form a pair, have sometimes been referred to as semi-productive; they are fairly common, but neither use nor form can be predicted. An o is found rather than a u where the last vowel of the stem is itself o.

(iv) -uk- Stative

(80) -sēriuk- vst 'become smoothed'
-ḵōtōk- vst 'come back'
-zēmbiuriuk- vst 'remember' (cf -zēmb- 'forget')

(v) -ur- Causative, often in relation to (iv)

(81) -sēriur- vst 'smooth out something'
-ḵōtor- vst 'bring back'
-peiŋur- vst 'ignore' (no form in -uk-)

The same form often has separative meaning:

(82) -tātār- vst 'peel off'

A large number of verbs can be interpreted as containing fossilized extensions, either by internal evidence, historical evidence or analogy from both of these. The three most frequent are:

(vi) -ar-

(83) -ōngār- vst ‘assemble’ -ōng- vst ‘collect, gather’
-zāvār- vst ‘become known, heard’ -zāv-(ziū) vst ‘hear’

(vii) -am-

(84) -hēndām- vst ‘lean, not to be straight’ –hēndi ‘askew’
-tūtām- vst ‘urinate’ -tūtā /6 ‘urine’

(viii) -ek-

(85) -pāndēk- vst ‘tie, to put bonds on’ -pāndik- vst ‘give birth (humans)’
-pōrēk- vst ‘calm s.o. down’ -pōr- vst ‘get cold’

-ek- seems to be causative. Some examples of -ik- also seem causative:

(86) -tūrīk- vst ‘load, hang up’ -tūrūr- vst ‘take down’

But other examples of -ik- seem stative.

(87) -hāŋik- vst ‘be scattered, separate’ -hāŋ- vst ‘divide, to differentiate’
(ix) Some other fossilized extensions can be seen in:

(88)  
-ryát- vst ‘step, tread’  
-ryó 7/8 ‘leg, hoof, paw’  
-hóliz- vst ‘walk about, visit’  
-hól- vst ‘lose interest’  
-áp- vst ‘stop speaking to a person, to throw something down’

The only stem with two vowels which has come to my attention and does not seem to be historically polymorphemic is -jókúţ- vst ‘bubble up (e.g. of boiling water)’ which might seem onomatopoeic.

(b) By derivation

(i) Adjective Stem + -p-

But few examples:

(89)  
-kúrú- vst ‘become old’  
-kúrú ASt ‘old’

(90)  
-ńtingadú- vst ‘become happy’  
-ńting ñadu 14/ ‘happiness’

5 PHRASES

5.1 Noun phrases

The preferred position of a noun in an NP is at the beginning. There is more freedom about the sequence of other constituents; although nominals tend to precede adnominals, demonstratives may follow either.

A nominal in an NP is used with an initial vowel in all but the following two cases.

(i) When it is the first, or only, constituent in a vocative NP

(91)  
1vá-ndi 2-ó-vá-wá  
‘good people!’

(ii) When it is the first constituent in a negated NP used predicatively

(92)  
1ká-2mbó  
‘it’s not an ostrich’

1ó-2mbó  
iv-ostrich  
‘it’s an ostrich’

(Also, within derivation of noun stems, an initial vowel is not used; see, (58).)

Adnominals will usually appear without an initial vowel when they follow a nominal, or are used without a nominal:

(93)  
2z-á-ndjé 1z-á-pándjár-á  
10-PREP-1Sg 10-TAM-be lost-FV  
‘mine are lost’
However, a genitive may appear with an initial vowel following a nominal with a suffixed demonstrative.

\[(94) \quad \text{ò-zó-ngómbé-n-á} \quad \text{ò-z-á-ndjè} \quad \text{1-z-á-pándjár-á}
\]

‘those cows of mine are lost’

or when a demonstrative is suffixed:

\[(95) \quad \text{ò-z-á-ndjè-n-dá} \quad \text{1-z-á-pándjár-á}
\]

‘those of mine are lost’

Where an NP is used in affirmative predication after a segmentally zero verb, an initial vowel must be present. A constituent which is initial in such an NP and which does not already have an initial vowel therefore must prefix one.

\[(96) \quad \text{á-vé-hè}
\]

‘them all’

\[(97) \quad \text{á-á-á-2-vé-hè}
\]

‘that’s all of them’

The question of the status of initial vowels (see §3.2) with nominals is interesting. Although there seems to have been a normalization process by which educated speakers believe that the initial vowel should be present, occasional examples of its absence are heard. Too few examples have been recorded to allow any statement of distribution. (In the construction illustrated in (109), its presence is optional.)

### 5.2 Preposition phrases

A preposition phrase (PP) has the structure

\[
\text{Preposition + NP}
\]

Prepositions are proclitics in Herero, and form one word with the first word of the NP.

There are three prepositions in Herero: all need comment.

The genitive preposition, ‘-á’, only occurs in the genitive construction, which has the structure

\[
\text{General Prefix + Genitive Preposition + NP}
\]

that is

\[
\text{General Prefix + PP}
\]

The segmental part of genitive preposition is often elided, for example in \(\text{yóngómbé}\) in the following example, in which \(\text{óngómbé yándjè}\) is the NP within the PP.

\[(97) \quad \text{ò-séngó yóngómbé} \quad \text{y-á-ndjè}
\]

\(\text{4-n-neck yi-á-á-2-ngómbé}\)

\(\text{9-PREP-IV-cow of cow}\)

‘my cow’s neck’

For forms when the NP within the PP is pronominal, see §3.4.2.

As the general prefix is obligatory in this construction, the genitive preposition never occurs initially in a word.
\( nà́ \) ‘with’ is used as a preposition, and if the following NP is a pronoun, the pronoun has the structure general prefix \( + ò \)

\[ (98) \quad n-ò-ká-tì \]

‘with a stick’

\[ nà-k-ò \]

‘with it (12)’

\( i \) seems to be copular in origin, and sometimes still in use; it shows the agent of a passive, although the agent can be expressed by a bare NP.

\[ (99) \quad ¹v-à-tó’n-w-à ¹i-²váyà \]

‘they were hit by Vaja’

\[ 1-ò-várèk-w-à ²a-vá-nātj-ò ²o-vá-zândû \]

badv-choose-passive-dv children boys

’she was chosen (by) boys’

Prepositions all have similar tonal properties, exemplified here using the genitive preposition \( -à́ \).

Where the syllable following the eliding vowel is associated with a low tone, that syllable will take the high.

\[ (100) \quad ò-ngóbè yómuhônà \]

cow (9) \( yá-ömuhônà \)

9-prep-chief(1)

‘the chief’s cow’

Where the following syllable is high, or the first syllable of a proper noun (the tones on which may not perturbed), the preposition takes the high tone and, where possible, the low appears on the previous syllable.

\[ (101) \quad ò-zó-ngómbó zíváyà \]

ze-á’-Vaja

10-prep-Vaja

‘Vaja’s goats’

In this construction, falling tones may not be produced, therefore the low tone is sometimes lost.

\[ (102) \quad ò-mì-tì vy-á-váyà \]

‘Vaja’s trees’

6 SENTENCES

6.1 Sequence

The basic sequence of constituents is subject verb oblique.

\[ (103) \quad ²táté ¹w-è-ndjì-tón-ò ¹n-ò-ká-²tì \]

‘my father hit me with a stick’

A relative clause is, in principle, introduced by the demonstrative morpheme \( ë \); as this morpheme is the first in a word (see §3.3.5) which includes the subject agreement, any
overt NP which is the subject of the verb within the relative clause precedes the $\hat{s}$, that is, the subject appears extrapoosed to the relative clause strictly defined, but maintaining SVO sequence.

(104) \(\hat{\text{okáti}}\) \(\text{tátē} \) \(\text{kéndjítónô} \) \(\text{nákó} \)
\(\hat{o\text{-ká-}}\hat{\text{tít}} \) \(\text{tátē} \) \(\hat{\text{ká\text{-}i\text{-}u\text{-}á\text{-}ndjít\text{-}ón\text{-}o} \) \(\text{ná\text{'}\text{-}ka\text{-}ó} \)
\(\text{IV\text{-}12\text{-}tree} \) my father \(\hat{\text{i\text{-}12\text{-}i\text{-}1\text{-}TAM\text{-}1Sg\text{-}hit\text{\text{-}FV}} \) \(\text{PREP\text{-}12\text{-}ó} \)
‘the stick father hit me with’

6.2 Grammatical relations

Subject is defined by agreement in a fixed position in the verb. Considering those NPs standing to the right of the verb, it is superficially not easy to define their grammatical relations: tests for object status for example do not yield unambiguous results.

For some speakers, locative NPs to the right of the verb demand a verb in the applied form. Such speakers consider that outside influence causes others to fail to use the applied form of the verb.

What are locative oblique NPs in a basic sentence pattern may appear as subjects in related sentences without any extra marking in the verb, but a passive is also possible.

(105) \(\hat{\text{m\text{-}á\text{-}rú\text{-}tjándjá}}\) \(\hat{\text{1\text{-}mw\text{-}á\text{-}nyándér\text{-}w\text{\text{-}a}}\) \(\hat{\text{1\text{-}o\text{-}vá\text{-}ná\text{tjé}}} \)
\(\text{on the pitch played children} \)
‘children were playing on the pitch’
\(\hat{\text{m\text{-}á\text{-}rú\text{-}tjándjá}}\) \(\hat{\text{1\text{-}mw\text{-}á\text{-}nyándér\text{-}w\text{\text{-}a}}\) \(\hat{\text{1\text{-}o\text{-}vá\text{-}ná\text{tjé}}} \)
\(\text{on the pitch was played children} \)
‘children were playing on the pitch’

The general prefix (oblique) within the verb is not restricted to what might narrowly be defined as an object. For example, with the benefactive use of the applied form, it may agree with either the ‘retained object’ or with the new NP introduced by the applied form. However, if a general prefix (oblique) is present, the NP with which it agrees must be absent. Herero only allows one general prefix (oblique), (unlike Ndonga, which allows two).

6.3 Copular

According to their behavior in the present, three uses of copular sentences can be distinguished: description, possession and location. The copular verb is \(-\hat{\text{rí}}\), which cannot take a final vowel.

In descriptive use in the present, the segmental verb is deleted, leaving the specification of a high tone in Key 1, which is maintained at the beginning of the predication.

(106) \(\hat{\text{1\text{-}ómú\text{\text{-}hóná}}} \)
‘he’s king’
\(\hat{\text{1\text{-}á\text{\text{-}věhê}}} \)
‘that’s all of them’

A \(\hat{\text{re}}\) with the preposition \(\text{ná\text{'}}\) is used as complement in a copular sentence showing possession. Most educated speakers of the language believe that \(\text{ná\text{'}}\) is a verb and equivalent to ‘to have’. There seems no evidence for this in Herero (unlike Ndonga and Kwanyama, where it has to be considered a defective verb and can be found with an applied extension). For the present reference, all that remains of the copular verb is the
general prefix (subject) and the specification of Key 1 for it. This general prefix forms one morphological word with what is otherwise the first morphological word of the PP.

\[(107) \text{tjí-n-ò-mw-ànò \text{tjí-nà'-òmwnò}}\]
\[
\text{RELATIVE CLAUSE}
\]
\[
\text{‘it (Herero)’s got a method (by) which it is taught’}
\]

With a locative, with present reference, the verb has the form: General Prefix + -ri

\[(108) \text{tù-rí \text{tù-rí}}\]
\[
\text{2PL.-be}
\]
\[
\text{‘we’re in difficulty’}
\]

6.4 Negatives

As well as negatives with ka- or -ha-, (see §3.5.3), a common negative for the present uses a copular plus PP. Negative forms can also be used with assertive and exclamatory affirmative interpretation.

\[(109) \text{kà-tú-nà-kí-tjíw-à}\]
\[
\text{NEG-1Pl.-nà-15-tjíw-FV}
\]
\[
\text{‘we don’t know’}
\]

6.5 Questions

A general slight raising of pitch with a fall on the final syllable yields a question from a statement.

\[(110) \text{éé-ngwí \text{éé-ngwí}}\]
\[
\text{PRONOUN DEMONSTRATIVE who-was-with-diarrhoea}
\]
\[
\text{‘is he the one who had diarrhoea?’}
\]

Interrogative morphemes include -pí ‘where’, -ví ‘how’ and -qe ‘who’.

\[(111) \text{i-n-gá \text{kè-²-pí}}\]
\[
\text{DEMONSTRATIVE 12-pí}
\]
\[
\text{‘this one? where is it?’}
\]

A favourite question formation is by focusing.

\[(112) \text{o-ú-²-né \text{n-gú-má-kánd-ò-o-ngômbé}}\]
\[
\text{IV-1-qé RELATIVE CLAUSE}
\]
\[
\text{‘who is the one who’s milking the cow?’}
\]

6.6 Focus

This last question device involves focus. In statements it is not always necessary that a relative verb should follow this focusing device. The morphemes tjí, which can also be equivalent to ‘if, when’, when introducing a subordinate clause, and ku class 17, are so used.
name her Katjoruoru

‘her name, she was Katjoruoru’

REFERENCES

CHAPTER THIRTY

ZONE S

Derek Gowlett

1 GEOLINGUISTIC SITUATION

Guthrie’s Zone S languages are essentially those of Zimbabwe, Mozambique, Botswana, South Africa, Swaziland and Lesotho. To these we have added Lozi (K21), a Sotho-based language of Zambia and Namibia. For each language, or language cluster, we include its major geographical situation and an approximate number of speakers (based on the latest census figures, and those in Ethnologue).

S10 Shona Group: Zimbabwe (8,200,000); Mozambique (750,000?); Zambia
S11 Korekore: Northern Zimbabwe; Southeastern Zambia; Mozambique
S12 Zezuru: North-central Zimbabwe
S13 Manyika: Northeastern Zimbabwe; East-central Mozambique
S14 Karanga: Southern Zimbabwe
S15 Ndau: North-central Mozambique; East-central Zimbabwe
S16 Kalanga: Eastern Botswana; West-south-central Zimbabwe

Shona is an official language in Zimbabwe, with a standardized written form used in education and literature.

S20 Venda Group
S21 Venda: South Africa (Northern Province); Southern Zimbabwe: (876,500)

Venda is an official language in South Africa, used in education, and with its own written literature.

S30 Sotho-Tswana Group
S31a Central Tswana (Rolong, Hurutshe): Botswana; South Africa (Northern Province, Gauteng, Free State, Northern Cape): 3,940,000 (figures include speakers of 31b, c and d)
S31b Eastern Tswana (Kgatla, East Kwen): Botswana; South Africa
S31c Northern Tswana (Ngwato, Tawana): Botswana; Zimbabwe
S31d Qhalaxarzi: Central and southern Botswana
S31e Southern Tswana (Tlharo, Tlhaping): Southern Botswana; South Africa (Northern Cape)
S32a Northern Sotho: South Africa (Northern Province, Gauteng, Mpumalanga): 3,700,000
S32b Lovedu: South Africa (Northern province)
S33 Southern Sotho: Lesotho; South Africa (mainly Free State and Gauteng): 4,600,000
S302 Kutswe: South Africa (Mpumalanga); threatened
S303 Pai: South Africa (Mpumalanga); possibly extinct
Below, we use ‘SOTHO’ to refer to the Sotho-Tswana Group, while ‘Sotho’ refers specifically to Southern Sotho.

Tswana, an official language in Botswana and South Africa, is used in education in both countries, and has an established literature. The dialects with smaller numbers of speakers enjoy no particular status, and it is probable that they will be swamped by the more standard forms. For Northern Sotho, which is an official, educational and literary language in South Africa, it is the Pedi dialect that is generally used, and forms such as Lovedu are threatened. Lozi is recognized both in Namibia and Zambia, and is used for education and literature.

Swati is recognized as an official language, and language for education both in South Africa and Swaziland. Zulu and Xhosa (though not the Mpondo or Xesibe varieties) are official languages in South Africa, and are well catered for on radio, TV, in education and in literature. Zimbabwean Ndebele is recognized in Zimbabwe. Southern South African Ndebele is an official language, but in practice enjoys lesser status than Zulu or Xhosa. Sumayela Ndebele is not recognized as an official language, or for education. We have no information as to the status or health of Malawian Ngoni. Phuthi and Lala are highly threatened language varieties, and are already showing signs of ‘disease’.

Swati varieties:
S43 Swati: Swaziland; South Africa (Mpumalanga): 1,670,000
S407 Northern South African Ndebele/Sumayela Ndebele: South Africa (Northern Province): numbers unknown
S408 Southern South African Ndebele: South Africa (Northern Province, Mpumalanga, Gauteng): 590,000
S404 Phuthi (Nguni dialect with heavy Sotho influence): Mainly in southern Lesotho
S406 Lala: South Africa (KwaZulu-Natal)

Swati is recognized as an official language, and language for education both in South Africa and Swaziland. Zulu and Xhosa (though not the Mpondo or Xesibe varieties) are official languages in South Africa, and are well catered for on radio, TV, in education and in literature. Zimbabwean Ndebele is recognized in Zimbabwe. Southern South African Ndebele is an official language, but in practice enjoys lesser status than Zulu or Xhosa. Sumayela Ndebele is not recognized as an official language, or for education. We have no information as to the status or health of Malawian Ngoni. Phuthi and Lala are highly threatened language varieties, and are already showing signs of ‘disease’.

S50 Tshwa-Ronga Group
S51 Tshwa: North-central Mozambique; Southeastern Zimbabwe: 750,000
S52 Gwamba
S53 Tsonga: South-central Mozambique; South Africa (Northern Province, Gauteng, Mpumalanga): 3,250,000
S54 Ronga: Southern Mozambique: 1,000,000
Tsonga is an official language in South Africa, and is used in education. In practice it enjoys a lesser status than Xhosa, Zulu and the major Sotho languages. None of the Mozambican African languages listed here enjoys official status in Mozambique. Copi and GiTonga appear to be more marginalized than the Tsonga-Ronga-Tshwa cluster. Thonga is a threatened speech variety, but the continued existence of the other languages (with the possible exception of Gwamba about which we have no information) seems not to be threatened.

S60 Copi Group
S61 Copi: Mozambique (small coastal area south of Inhambane): 470,000
S62 GiTonga: Mozambique (Inhambane area): 320,000

2 ORTHOGRAPHY

In order to indicate the approximate pronunciation of examples we use a phonologized IPA spelling for the various languages. Thus in GiTonga, which has a phonemic flap [Ɂ], we use the symbol "Ɂ", even though "l" would do as well. On the other hand, we use "γ" for both [χ] and [j] since in GiTonga the latter is a conditioned allophone found before front vowels and [y]. For nine-vowel languages we use the symbols /i, i, e, a, o, u, u/. Exceptions to standard IPA use are "γ" for [j], and we do not raise "h" and "l" for aspiration and lateral release. Tone is indicated where it is available to us.

3 PHONOLOGY

3.1 Vowels

Except for SOTHO (excluding Lozi), Phuthi and possibly South African Ndebele, Zone S languages have a five-vowel system, with the Nguni languages splitting /e/ into [ɛ ~ i] and /o/ into [ɔ ~ o]. The raised allophone in each case is determined mainly by a following close vowel. Southern and Northern Sotho and Tswana have nine distinctive vowels, /i, i, e, a, ɔ, o, u, u/, with /u/ and /u/ having allophones [i] and [u], determined by a following superclose vowel or syllabic nasal. The two extra vowel phonemes, compared to Proto-Bantu (PB), have two initial historical sources:

(a) phonologization of raised allophones of *e and *o, due to loss of the conditioning high vowel (there has been some analogical extension, and influence by English and Afrikaans which have entrenched this phonologization):

(1) Sotho
    êts ‘do, make’ < *gêd-i-a ‘try, measure’

(b) the merger of PB sequences *ai and *oi to produce /e/ and /we/:

(2) Sotho
    -lélé ‘long, tall’ < *dái
    kwéñá ‘crocodile’ < *ngóíñá

Traditionally, Sotho-Tswana vowels have been treated using a multivalued or graded height feature. The features [Tense] or [ATR] have been used to differentiate /e/ and /ɔ/ from /e/ and /o/, and /i/ and /u/ from /i/ and /u/. Without experimental data to back up the...
choice of either [ATR] or [Tense], however, we believe that a graded height system is preferable, since height is in any case an articulatory fact.

Qhalaxarzi has seven phonemic vowels, /i, e, a, ə, o, u/, with apparent dialectal substitution of [ı] / [ʊ] for [e] / [o]. Where the other Sotho languages have /ɨ/ and /ʉ/, Qhalaxarzi has /e/ and /o/.

3.2 Vowel juxtaposition

The Nguni languages have a phonotactic constraint against vowel juxtaposition, and there are various strategies for its avoidance. These include:

(a) Vowel deletion

3. Zulu

i̞/hēkū lákhānǐ? ‘What is the old man building?’ < *i̞/heku li-akh-a-ni

(b) ‘Coalescence’ (alternatively: vowel assimilation + deletion)

4. Zulu

a + i > e nēnkū ‘and a house’ < *na-i-n-kū
a + a > a namānkā ‘and strength’ < *na-a-ma-nkā
a + u > o gōmin’tā ‘and a person’ < *na-u-mu-n’tā

(c) Consonantalization

5. Zulu

wēnzaṇi? ‘What are you doing?’ < u-enza-ni?

3.3 Vowel harmony

Southern Sotho, Northern Sotho and Tswana have a right-to-left vowel harmony system whereby /e/ and /o/ do not co-occur with any higher vowel to their immediate right in a word stem. In such cases they are replaced by /e/ and /o/. (As already mentioned above, there is also vowel-raising, but at the allophonic level, when /ɨ/ and /ʉ/ are followed by a higher vowel, or by a syllabic nasal.)

6. Sotho

mū ≠ rēk’-i ‘buyer’ < rēk’-ā ‘buy’
hō-si ≠ lēlēk’-i ‘not to expel’ < hō ≠ lēlēk’-ā ‘to expel’
bōf-ūw-ā ‘be tied’ < bōf-ā ‘tie’

There is also left-to-right harmony whereby /e/ in a verb root may not be followed by a suffix of the form -e or -ə, these being replaced by -e and -o, respectively.

7. Sotho

i ≠ tfw’ēts’-ē! ‘Tell yourself!’ < i ≠ tfw’ēts’-ā ‘tell oneself’
cf. i ≠ tshēp’-ē! ‘Trust yourself!’ < i ≠ tshēp’-ā ‘trust oneself’
k’ēts’-ə ‘act, action’ < ēts’-ā ‘do’
cf. k’ēp’-ə ‘digging’ < ēp’-ā ‘dig’

This left-to-right harmony does not apply in the case of back vowels, where it is the stem vowel that assimilates to the suffix, i.e. right-to-left:

8. Sotho

phēs’-ə ‘mistake’ < phēs-ā ‘make a mistake’
kxhēts’-ə ‘peace, security’ < kxhōts’-ə ‘take refuge’
Qhalaxarzi has regressive vowel height harmony whereby non-high vowels other than a, are raised one degree when followed by /i/ or /u/. This rule, in non-deliberate speech, spreads beyond the immediately preceding vowel, until there is some opaque element. An interesting difference in this system from that of the other Sotho languages is that the vowel-raising occurs only before /i/ and /u/, so that /e/ and /o/ are not raised before /e/ or /o/, as is the case in the three main languages.

(9) Qhalaxarzi

\[
\begin{align*}
& bá ≠ rëq-ì ‘buyers’ < rëq-à ‘buy’ \\
& bá ≠ bôn-ì ‘seers’ < bôn-à ‘see’ \\
& lí ≠ phijn-à ‘He (5) stabs’ \\
& cf. lí ≠ ròq-à ‘He (5) sews’ \\
& xù ≠ phijn-à ‘to stab’ \\
& cf. xô ≠ ròq-à ‘to sew’
\end{align*}
\]

The Nguni language, Phuthi, has been heavily influenced by Southern Sotho and has borrowed the superclose vowels [i] and [u], and has developed two interesting vowel harmony innovations, one right-to-left and one left-to-right. Phuthi has the phonemic vowels listed in table 30.1.

‘Edge-based mid-vowel harmony’ has stems as its domain, and some prefixes (see after (c) below). There are three rules (Donnelly 1996):

(a) Mid vowels (Grade 3 and 4) at the right edge of a word are of Grade 4:

(10) Phuthi

\[
\begin{align*}
& bá ≠ kháb-ê ‘They should go’ \\
& bá ≠ bít-ê ‘They should call’ \\
& í ≠ vùm-ê ‘harvest’ \\
& lá ≠ yè ‘and him’
\end{align*}
\]

(b) Mid vowels that are word-medial and in an uninterrupted sequence of mid vowels up to the right edge are also of Grade 4. In other words, the rule is regressive, being stopped only by any intervening non-mid vowel, /i, u, i, u, a/, i.e. superclose, high or low vowels can interrupt this sequence.

(11) Phuthi

\[
\begin{align*}
& bá ≠ sèl-ê ‘They should drink’ \\
& bá ≠ sèl-lê ‘They should drink for’ \\
& bá ≠ bôn-él-ên-ê ‘they saw for each other’ \\
& í ≠ wè’élì ‘drowsiness’
\end{align*}
\]

(c) ‘Word-medial low-mid vowels that are not in sequence with the right edge’ are Grade 3:

(12) Phuthi

\[
\begin{align*}
& ká ≠ bôn-à ‘to see’ \\
& yè-nà ‘him/her’
\end{align*}
\]

<table>
<thead>
<tr>
<th></th>
<th>i</th>
<th>u</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>3</td>
<td>e</td>
<td>o</td>
</tr>
<tr>
<td>4</td>
<td>e</td>
<td>o</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>a</td>
</tr>
</tbody>
</table>
‘Root-based Grade 1 vowel harmony’ states that high vowel suffixes have Grade 1 vowels with roots having Grade 1 vowels, and Grade 2 vowels with roots having vowels lower than Grade 1. It has as its domain: (a) noun stems + locative suffix; (b) verbal radicals + Causative/Intensive/Passive/Reversive extensions; (c) verbal radicals + Present negative suffix or Anterior suffix. We thus find the following alternations:

(13) Phuthi
Locative suffix: -mi ~ -ini
Present neg. suffix: -i ~ -i
Anterior suffix: -ye ~ -ye
Causative extension: -is- ~ -is-
Intensive extension: -isis- ~ -isis-
Passive extension: -iw- ~ -uw-
Reversive extension: -ull- ~ ull-

(14) k’ò ≠ lim-ì-à ‘to help cultivate’ < k’ò ≠ lim-à ‘to cultivate’
k’ò ≠ bùn-ì-à ‘to show’ < k’ò ≠ bùn-à ‘to see’
k’ò ≠ hálh-ì-à ‘to pull to pieces’ < k’ò ≠ hálh-à ‘to pull apart’
cf. k’ò ≠ bìtìs-à ‘to help call’ < k’ò ≠ bìtì-à ‘to call’
k’ò ≠ tháyìs-à ‘to shoot’ < k’ò ≠ tháyì-à ‘to shoot’

3.4 Consonants
Zone S languages have large consonant inventories (Lozi with its Luyana-influenced phonology is an exception). Typically, there is a three-way distinction between stops and affricates: voiceless unaspirated (often ejective), voiceless aspirated and voiced. Voiced implosive stops occur in some languages. Lateral stops, affricates and fricatives, though not found in GiTonga or many dialects of Shona, are typical of Zone S languages. Qhalaxarzi has a phonemic distinction between velar and uvular voiceless stops. Heterorganic affricates are a feature of several languages in this Zone.

Breathy-voiced or murmured consonants are a feature of Copi, Tsonga and Nguni, and it is usually held that the murmur is also manifest on the following vowel. Instrumental phonetic research on the so-called breathy-voiced (oral) stops of Swati and Zulu, however, reveal that these are not murmured and are voiceless (Traill et al. 1987, Traill 1990). Murmured fricatives and nasals do exist, though in the case of Zulu murmured fricatives, the following vowel is not breathy. It is likely that the putative murmured non-click stops of Xhosa are also not murmured or even voiced.

All Zone S languages have a parallel set of ‘labiovelarized’ consonants though there are frequently co-occurrence restrictions. We use the term ‘labiovelarized’ in preference to the traditional ‘labialized’, since the w element carries both labialization in the form of lip-rounding, and velarization in the raising of the velum. It is the velar-raising that is responsible for the co-occurrence restrictions, usually on labials, though sometimes elsewhere. The velar element causes assimilation of various sorts in the ‘host’ consonant. This may take the form of complete assimilation whereby the host consonant becomes
velar (e.g. [mw > ηw]); partial assimilation in that the host is backed to some position
closer to velar (e.g. [mw > ηw]); or partial assimilation in that some intervening velar
element comes between the host and w, e.g. [pw > pxw].

Exemplifying the richness of Zone S consonant systems, we give consonant charts
of Copi and Xhosa, and partial charts for Tsonga, Venda and Zulu. They are assigned
to columns on a phonological basis. Foreign sounds are given in parentheses. Peripheral
sounds, such as those found only in a few interjectives, or in one or two items, are
excluded.

In addition to the consonants in table 30.2, Copi, like other Zone S languages, has a
parallel set of labiovelarized consonants (though Nguni, Shona and SOTHO (with the
exception of Lozi) do not permit labiovelarized bilabials, and in some cases labiovelar-
ized dentilabials). Copi, atypically, also has a parallel set of palatalized consonants.

**TABLE 30.2: COPI**

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Labiovelar</th>
<th>Alveolar</th>
<th>Alveopalatal</th>
<th>Velar</th>
<th>Alveo-velar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voiceless</td>
<td>p</td>
<td>pf</td>
<td>ts</td>
<td>(tl)</td>
<td>t</td>
<td>f</td>
</tr>
<tr>
<td>Aspirated</td>
<td>ph</td>
<td>p(h)</td>
<td>th</td>
<td>(thi)</td>
<td>ti</td>
<td>f</td>
</tr>
<tr>
<td>Breathy-voiced</td>
<td>b</td>
<td>b(v)</td>
<td>d</td>
<td>(di)</td>
<td>d</td>
<td>g</td>
</tr>
<tr>
<td>Vd implosive</td>
<td>f</td>
<td>f</td>
<td>s</td>
<td>(j)</td>
<td>j</td>
<td>g</td>
</tr>
<tr>
<td>Fricative</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td>η</td>
<td></td>
<td>η</td>
</tr>
<tr>
<td></td>
<td>mb</td>
<td>mbv</td>
<td>mbz</td>
<td>(ndl)</td>
<td>nz</td>
<td>ng</td>
</tr>
</tbody>
</table>

*Note: 1 /f/ is a breathy-voiced trill, while /h/ is a breathy-voiced glottal fricative.*

**TABLE 30.3: XHOSA**

<table>
<thead>
<tr>
<th></th>
<th>p'</th>
<th>ts'</th>
<th>tf'</th>
<th>c'</th>
<th>k'</th>
<th>ks'</th>
<th>/</th>
<th>]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ph</td>
<td>th</td>
<td>tsh</td>
<td>(thi)</td>
<td>chy</td>
<td>kh</td>
<td>khsh</td>
<td>/h</td>
<td>/h</td>
<td>/h</td>
</tr>
<tr>
<td>b</td>
<td>d</td>
<td>dz</td>
<td>dz</td>
<td>g</td>
<td>g</td>
<td>g</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>f</td>
<td>t</td>
<td>s</td>
<td>f</td>
<td>h</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v</td>
<td>b</td>
<td>z</td>
<td>f'</td>
<td>f</td>
<td>y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m</td>
<td>n</td>
<td>η</td>
<td>η</td>
<td>η</td>
<td>η</td>
<td>η</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mb</td>
<td>mbv</td>
<td>mbz</td>
<td>nd</td>
<td>(ndl)</td>
<td>nz</td>
<td>ndz</td>
<td>ng</td>
<td>ng</td>
<td>ng</td>
</tr>
<tr>
<td>mfp'</td>
<td>mby</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

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As shown in the Tsonga partial chart (table 30.4), Tsonga has a phonological distinction between breathy and non-breathy stops and continuants.

The Venda partial chart (table 30.5) reveals that Venda regularly distinguishes bilabial from dentilabial positions, as well as dental from alveolar.

The stop series of Zulu (table 30.6) is most unusual in that the basic opposition is between three types of voiceless stop – radical, ejective, and aspirated – and prenasalized voiceless and voiced stops. The velar-lateral [kl’] occurs only as ejective and prenasalized ejective. In the bilabial and velar positions there is a further contrast with voiced stops. The bilabial one is usually said to be implosive, though there is evidence that some speakers use an egressive airstream instead.

3.4.1 Clicks

Ndebele, Zulu, Xhosa (see Xhosa chart (table 30.3)) and Phuthi have borrowed extensively from the Khoesan click system. Southern Sotho, Swati and Copi, which have only the alveolar click, have done so to a lesser extent, and some other languages, such as Tsonga, have very few words with clicks. The clicks found in Ndebele, Phuthi, Xhosa and Zulu are the dental [], the alveolar ['!] and the alveolarlateral [\] (written c, q and x), which may occur as voiceless, voiceless aspirated, breathy-voiced, nasalized, breathy-voiced nasalized and in Xhosa, also voiceless nasalized ejective.
3.5 Syllabic system

The canonical syllable structure of these languages is CV. Syllabic consonants have developed in several languages through vowel-deletion. For example, the Nguni C1.1 and 3 prefixes, mu-, have become m-, except that Zulu retains the vowel before mono-syllabic stems. There is a drift whereby other instances of mu and also mi become µ. In Xhosa the first person singular Absolute Pronoun is ná, compared with the Zulu mi(ná). In both Xhosa and Zulu final mu and mi are often m, even where written mu or mi. One of the sources of syllabic nasals in SOTHO is the soundshift *NV/N provided that the vowel is a vowel of Degree 1. Southern Sotho and certain Tswana dialects reduce lVl to l, with the first l being syllabic: lì ‘cry’ < *lil-á, bìílì ‘untie’ < *bìílìlì-á, ráp álì ‘lie down (when ill), slant down’ < *rápáálì-á.

There also appears to be a drift for the vowel of the basic noun prefix to fall away in other classes as well. Thus, in Zulu, úGù, ‘night’ and úGù ‘to buy’ are commonly heard as úGù and úGù ‘to buy’. Likewise in Southern Sotho, one hears si ‘tree’ and li ‘sand’ pronounced as sì and lì.

3.6 Accent/stress

With the exception of Lozi, Zone S languages have a penultimate length-stress feature which signals the end of a phrase or sentence in declarative sentences. This accent is not used in interrogative and exclamatory sentences.

3.7 Tone

Zone S languages have a two-tone system, or a system in which some syllables are accented (by a High tone) while other syllables are unaccented. High tones may spread rightwards to unaccented (Low-toned) syllables under certain circumstances.

In general each syllable carries only one tone (High or Low), but some syllables are bimoric – they bear High-High, Low-Low, Rising (Low-High) or Falling (High-Low) tones.

Probably all Zone S languages, with the exception of Lozi, have tonal downstep (indicated in examples by ‘↓’) – an unpredictable, and thus tonemic, lowering of a High tone after a preceding High tone.

A feature of the Nguni tonal systems is the so-called depressor consonants. These are consonants that have the effect of lowering a following High tone. In Zulu, at least, this lowering effect lowers the onset of a High to a point lower than an ordinary Low tone, from which point there is a rapid rise. A depressor may also cause a High tone to ‘jump’ to the following syllable (with concomitant lengthening) as seen in (15) where the presence of the depressor z in the plural prefix results in a different tonal pattern.

(15) Zulu

íshálo ‘chair’ ñ izálató ‘chairs’ LHLL > LLHLL

In Zulu, and possibly also in the other Nguni languages, there is no common feature to these consonants, which include breathy-voiced fricatives and breathy-voiced nasals, voiceless radical stops, and voiceless fricatives. Diachronically they may all have had the feature [murmur], but synchronically, it appears that they should be assigned an ad hoc feature [depressor].
In Copi, murmured consonants act as depressors, lowering the onset of a following High. Tsonga also has depressors but their nature and effects are in our view uncertain.

3.8 Functions of tone

Tone commonly has the following functions:

(a) marking lexical differences

(16) Copi
  ndọngá ‘tin’
  ndọngá ‘stick’
  ñāl-à ‘boil’
  ñāl-à ‘peel’

(b) marking TAM differences

(17) Sotho
  … bātshēhā ‘and laughed’ (Past Narrative)
  … bātshēhā ‘laughing’ (Present Simultaneous)

(c) marking different form classes

(18) Sotho
  d’ywāj ‘grass’ (noun)
  d’ywā? ‘how?’ (adverb)
  lik’ā? ‘Where are they?’ (locative base)
  lik’ā? ‘How many are there?’ (adjective base)
  d’ywǎlā bōò ‘this beer’ (1st position demonstrative)
  d’ywǎlā bōò ‘that beer’ (2nd position demonstrative)
  t’ābā ēgywì ‘another matter’ (adjective)
  t’ābā ēgywì ‘one matter’ (relative based on enumerative)
  hō mōrēnà ‘There is a chief’ (identifying copulative)
  hōmōrēnà ‘to the chief’ (locative)

(d) distinguishing first and second person subjects from third person ones

(19) GiTonga
  ūngāhōngōrā ‘You go’
  ūngāhōngōrā ‘He goes’

(20) Zulu
  siyāyēnà ‘We agree’
  siyāyēnà ‘She (7) agrees’

(e) marking phrase structure

(21) Sotho
  AdvP + AdvP AdvP
  Adv Adv Adv Adv
  hāhōlū bōsiū hāhōlū bōsiū
  ‘a lot … at night’ ‘especially at night’

(f) marking questions

(22) Zulu
  ūñgiyēnà ‘It is her’
  ūñgiyēnà? ‘Is it her?’
3.9 Word-structure constraint

Zone S languages in general have an apparent constraint on the occurrence of monosyllabic words other than as interjectives or ideophones. Where normal grammatical rules would result in monosyllabic words, an extra syllable, known as a ‘stabilizer’, is prefixed or suffixed in order to make the word well-formed. (In certain cases, which differ from language to language, this ‘aversion’ to monosyllabicity holds also for stems.) Examples include the following:

The SOTHO noun prefix of Cl. 9 is θ- before polysyllabic stems, but N- (a syllabic nasal, before monosyllabic stems.)

(23) Sotho

θ#kxhɔ ‘water-pot’

η#phi ‘army’

θ#kxhûbû ‘chicken’

θ#phûrî ‘hyena’

In Copi, GiTonga, and Tsonga the noun prefix of Cl. 9 is θ- before polysyllabic stems and yi- (yi-N- for Tsonga) before monosyllabic stems. Shona has the same distinction, but with i- in place of yi-:

(24) GiTonga

yi#tshwa ‘kidney’

θ#tshahe ‘spark’

Note that in the locative of ‘kidney’, the prefix is deleted, since the locative suffix functions as a stabilizer:

(25) yi#tshwa ‘kidney’ > tshwa-ni ‘in the kidney’

Similarly in GiTonga, among older people, in Cl. 1 and 3 the prefix is θ- before consonant-commencing polysyllabic stems, but mu- before monosyllabic ones (younger speakers tend to use mu- throughout):

(26) GiTonga

mu#thû ‘person (1)’

θ#Tonga ‘Tonga person (1)’

mu#ro ‘gravy (3)’

θ#roto ‘beak (3)’

Common to all Zone S languages in our data, with the exception of Lozi, is the use of a stabilizer in the imperative, positive, without object concord. The stabilizer does not occur when there is an object concord or negative prefix, since these prefixes have the additional function of providing a second syllable to the word. Though the pluralizing suffix also provides a second syllable to monosyllabic forms, it does not result in the deletion of the stabilizer.

(27) Basic form Stabilized form

<table>
<thead>
<tr>
<th>Language</th>
<th>Basic form</th>
<th>Stabilized form</th>
</tr>
</thead>
<tbody>
<tr>
<td>GiTonga</td>
<td>θ-a</td>
<td>θ-a-yi</td>
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<tr>
<td>Southern Sotho</td>
<td>θ-a</td>
<td>i-R-à ~ R-à-à</td>
</tr>
<tr>
<td>Zulu</td>
<td>θ-a</td>
<td>(y)i-R-à ~ R-à-nà</td>
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</table>
4 NOUN CLASSES

The Zone S noun class system is outlined morphophonemically as follows (table 30.7):

4.1 Noun prefix structure

Zone S languages generally have a monomorphemic noun prefix with canonical CV shape, except for Cl. 10, which has the historical augment *li- (Shona excluded). Shona has a latent initial vowel that is manifest under certain conditions. Zunda Nguni languages have an initial vowel as augment except for the locative classes 16 and 17. The

<table>
<thead>
<tr>
<th>Noun class</th>
<th>Zunda Nguni</th>
<th>South Sotho</th>
<th>Shona</th>
<th>Venda</th>
<th>Tsonga-Ronga-Tsawu</th>
<th>Copi</th>
<th>GiTonga</th>
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<td>φ̱</td>
<td>–</td>
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<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Notes:
1 The Cl. 5 ‘prefix’ is generally manifest as a series of morphophonemic changes to the initial consonant of the stem. For examples, see below.
2 Malawian Ngoni only.
3 Lozi and Qhalaxarzi only in SOTHO.
4 Cl. 8x is an innovation found in Nguni (excluding Malawian Ngoni), and in SOTHO (excluding Pai and Qhalaxarzi). It is presumably formed by analogy with the Cl. 10 augment with which it is homophonous. The various forms of the Cl. 8x prefix are not reflexes of PB *bi-, but of *li-.
5 In SOTHO, Cl. 11 has all but disappeared, having merged with Cl. 5 in Southern and Northern Sotho, as well as Qhalaxarzi. It occurs in Lozi, probably as an adoption from Luyana. In Tswana it has completely disappeared from some dialects, and is obsolete in others. GiTonga has also merged Cl. 11 with Cl. 5.
6 Found only in Malawian Ngoni.
7 In SOTHO, Cl. 12 and 13 are found only in Lozi, as an adoption from Luyana.
8 Found mainly in the Mhari dialect of Karanga.
9 Found in Kalanga only.
augment takes the form a-, e-, o-, depending upon the vowel of the prefix. Tekela Nguni is inconsistent with respect to the presence or absence of an augment:

(a) Phuthi has an initial vowel e- only for Cl. 2 and 6, i.e. where the basic noun prefix has the vowel a.
(b) Lala has a peculiar distribution of the augment in that it occurs in Cl. 1 and 3 with CV* stems, in Cl. 2 with C-commencing stems, and with all stems in Cl. 9. There are a few nouns of Cl. 11 with an initial vowel i-, for which there is no apparent explanation.

(28) Lala

Cl. 1: u#fat'i ‘woman’ (CV/CV stem)
mu#nu ‘person’ (CV stem) cf.: u#nwana ‘child’
m#on-i ‘sinner’ (V-commencing stem)
Cl. 2: a-ba#nu ‘people’
a-ba#fat'i ‘women’
bi#on-i ‘sinners’
Cl. 9: i-m#but'i ‘goat’
i#fene ‘baboon’

(c) S. Ndebele has no augment.
(d) Swati has an augment when the basic noun prefix begins with a nasal; u- in Cl. 1 and 3, i- in Cl. 4 and 9, and e- in Cl. 6. In Cl. 1a a few noun stems have an obligatory augment u-, while for the majority the augment is optional. In Cl. 2, the augment e- occurs optionally, but is not common. (Note the dissimilation in Cl. 2 and 6.)

(29) Swati

Cl. 1: u-m#f-ánà ‘boy’
Cl. 2: (é-bá#f-ánà ‘boys’
Cl. 1a: u-th#yiák ‘your father’ (obligatory)
(ó-y)#biábé ‘my/our father’
Cl. 4: i-mi #fúl ‘rivers’
Cl. 6: é-má#si ‘sour milk’
Cl. 9: i-n#hóyú ‘elephant’

The occurrence of the augment in Nguni is determined by a fairly disparate variety of syntactic rules. Some, but not all of these, suggest that it has the significance of an article.

4.2 Class 5 morphophonemics

With the exception of Copi, Nguni and SOTHO (in Tswana only, there is an obsolescent remnant of this phenomenon), Zone S manifests a series of morphophonemic changes associated with the Cl. 5 noun prefix. We illustrate some of these below:

(30) Zezuru (essentially a process of voicing)

\[
\begin{align*}
p & > b & bádzá & ‘hoe’ & pl. mápádzá \\
t & > d & dámá & ‘cheek’ & mátámá \\
pf & > bv & bvéní & ‘baboon’ & mápféñí \\
\end{align*}
\]

(31) Venda

\[
\begin{align*}
r & > f & fúmbó & ‘bone’ & pl. màrùmbó \\
rh & > f & fúyú & ‘wild fig’ & máhyú \\
β & > v & vóhó & ‘animal’s foreleg’ & máñóhó \\
\end{align*}
\]
The other changes involve voicing and/or plosivization:

\[
\begin{align*}
l &> dz & dzémbé & 'hoe' & pl. & márémbé \\
 k &> g & göré & 'cloud' & - & mákôré \\
tsh &> dz & dyôlô & 'big tail' & cf. & mûfôlô & 'tail' \\
f &> dz & dyôôfôrô & 'place of refuge' & < & ôôôfôrô & 'flee from' \\
\end{align*}
\]

(32) GiTonga

\[
\begin{align*}
\emptyset &> t & itiyo & 'country' & pl. & maïyo \\
\end{align*}
\]

\[
\begin{align*}
\emptyset &> t & itundu & 'leg' & maundu
\end{align*}
\]

4.3 Pairings/genders

Zone S languages have the typical singular/plural pairings. In the few languages that have Cl. 21, the pairing is 21/6. Some exceptional pairings are:

1/6 Nguni, SOTHO, Shona
1/4 Zulu, SOTHO
9/6 Nguni, SOTHO
11/6 Shona
11/8 Lozi
12/14 Korekore

4.4 Concordance

The concordial system in Zone S is exemplified by Southern Sotho, GiTonga, Tsonga and Venda (tables 30.8, 30.9, 30.10, 30.11). For each language, there are three subject markers (SM). SM1 is the canonical, most widespread form; SM2 is found before certain TAM

<table>
<thead>
<tr>
<th>TABLE 30.8: SOUTHERN SOTHO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM1</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>1st p. sg.</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>ki</td>
</tr>
</tbody>
</table>

Note:
1 This prefix is found before the experiential auxiliary k-à, and the conditional prefixes -ka- and -ke-.
prefixes with shape V, including the Past Narrative prefix -a-. SM3 is generally found in negatives, in the Subjunctive and Conditional moods, and in the Simultaneous aspect. Nguni generally has a special SM that occurs in the Simultaneous aspect. Unless specifically listed, it can be assumed that SM3 is segmentally identical to SM1. Similarly, unless otherwise indicated, the object marker (OM) is segmentally identical to SM1.

### TABLE 30.9: GITONGA

<table>
<thead>
<tr>
<th></th>
<th>SM1</th>
<th>SM2</th>
<th>SM3</th>
<th>OM</th>
<th>Adj</th>
<th>Gen</th>
<th>Quant</th>
</tr>
</thead>
<tbody>
<tr>
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### TABLE 30.10: TSONGA

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<td>-ku-</td>
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TABLE 30.11: VENDA

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<th>Quant</th>
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<tr>
<td>21</td>
<td>Uses Cl. 5 SM2</td>
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</tbody>
</table>

A partial table of genitive concords for Zulu and Tswana is illustrated in table 30.12. The (A) columns are the normal forms, while the (B) columns are those used with bases of Cl. 1a.

4.5 Reflexive prefix

TABLE 30.13: REFLEXIVE PREFIXES

<table>
<thead>
<tr>
<th>Zunda Nguni</th>
<th>SOTHO</th>
<th>Shona</th>
<th>Venda</th>
<th>Tsonga</th>
<th>GriTonga</th>
</tr>
</thead>
<tbody>
<tr>
<td>zi-</td>
<td>i-</td>
<td>ziwi-</td>
<td>ßi-</td>
<td>ti-</td>
<td>dzi-</td>
</tr>
</tbody>
</table>

5 ASPECTS OF NOMINAL DERIVATION

5.1 Diminutives

The suffixes **-ana and **-juna are widely used in Zone S for the derivation of diminutives (‘small’, ‘small quantity’) of nouns and adjectives. The significance, depending
upon context, may also be pejorative or may indicate endearment, and in the case of colour adjectives, the suffix 
**-ana, though not **-Aana, denotes ‘feminine’. These suffixes may co-occur with placement of the noun in a diminutive class in languages which have this feature.

(33) Copi
tfindônganâ ‘small tree’ < ndôngâ
tfindêvoynâ ‘small ear’ < ndêve

(34) GiTonga
parýąna ‘small buffalo’ < nari
tripjiuwaña ‘a little air’ < triphufo

(35) Sotho
kshômû éshêlâ ‘a yellow head of cattle’
kshômû éshêlânâ ‘a yellow cow’
kshômû éshêlânâ ‘a yellowish head of cattle’

5.2 Feminine/augmentative suffix

The suffix **-(k)ali signifies either ‘female’ or ‘augmentative’ depending on the base noun and the context.

(36) Lala
iyomat’i ‘cow’ < iyomo ‘head of cattle’
imbwa’at’i ‘bitch’ < imbwa ‘dog’
umat’ikat’i ‘colossal woman’ < umat’i ‘woman’

5.3 Pronouns

The pronouns called absolute (or emphatic) have forms for 1st and 2nd persons as well as for all the classes. Frequently there are discrete possessive forms for the 1st and 2nd persons and Cl. 1. In table 30.14 (possessives are labelled gen).

<table>
<thead>
<tr>
<th>TABLE 30.14: ABSOLUTE (OR EMPHATIC) PRONOUNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st p. sg.</td>
</tr>
<tr>
<td>base gen</td>
</tr>
<tr>
<td>Copi</td>
</tr>
<tr>
<td>N. Sotho</td>
</tr>
<tr>
<td>Shona</td>
</tr>
<tr>
<td>GiTonga</td>
</tr>
<tr>
<td>Tshwa</td>
</tr>
<tr>
<td>Venda</td>
</tr>
<tr>
<td>Zulu4</td>
</tr>
</tbody>
</table>

Notes:
1 These indicate ownership at the family level.
2 These forms are almost obsolete, being found only in folklore, and restricted phrases.
3 The form yênî occurs as an alternative with genitives.
4 The stabilizer -nu is generally deleted when a prefix is added.
6 QUALIFICATIVES

6.1 Genitives

The genitive construction has a wide range of significances, of which we illustrate the main ones:

(37) Sotho
(a) possession/ownership:

mbòì ık’árá yáháì ‘her cars’

(b) social relationship:

 gàk’á yák’à ‘my doctor’

(c) function/use/purpose:

lìbáì lámdázhò ‘a racecourse (open area for races)’

thélèì’è yábaìsk’ıp’ò ‘money for the cinema’

k’ánìorè yáhùdýèlà ‘dining room’ < hùdýà ‘to eat’

(d) type or characteristic, including ethnicity and sex:

 gàk’á yáháìnà ‘paediatrician (doctor of children)’

k’òbh’à yáSísäthò ‘a Sotho blanket’

sìpèhí sàmìràlì ‘a woman chef’

(e) material constituency:

nl’ù yádýwà ‘a grass house’

málàáù sàlìlk’à ‘silk blouses’

(f) contents:

ksháláì sàlíbisì ‘a glass of milk’

(g) order (ordinal numbers):

mùùhùì wáhù/làlì ‘the first student’

mùnáìk’ò wàbùùrù ‘the third door(way)’

(h) fractions:

bùùrù bát’lìsí ‘a third of the class’

(i) placing of qualified item in time or space, including habitat (with locative bases):

lìnòñàá ts’ànók’èj ‘riverine birds’

mìnín’wàsìdýwàlèdýwàlè/wàsìdýwàlèdýwàlè ‘contemporary music’

Genitive constructions have the order qualified–qualifier almost always with a genitive marker (which agrees with the qualified) linking the two. As seen above, in Zone S this genitive marker normally has the shape **C-à-, where C is the typical prevocalic class consonant in the non-nasal classes, and a glide in the nasal classes, or Ø- in Cl. 6.

Nguni and Tswana have a different genitive marker that occurs before nouns of Cl. 1a. This has the form SM-á-SM-ì in Tswana, (SM-)k’a- in Xhosa and (SM-)ga-in Zulu. The element SM does not occur with bases of the nasal classes (1, 3, 4, 6 and 9).

(38) Tswana

lì#p’òål ts’-à-khà⁻rré ‘my father’s goats’

(39) Zulu

ùáá#sò bi-gá#báá ‘my father’s face’
Tswana has a discrete set of genitive concords of shape SM-oo- used to denote communal possession by a family or larger social unit:

(40) Tswana
\[ gw\#ànà wò\#Thàbò \] ‘child of Thabo’s family’
\[ li\#fàsiñhù lòò\#Thàpù ì\#j ì\#j \] ‘territory of the Thaping people’

GiTonga has two possible genitive constructions. The structure *qualified pa- qualifier*, is used only for so-called ‘descriptive possessives’, i.e. those with a descriptive, non-possessive, function.

(41) GiTonga
\[ ri\#dúŋùqúñra ṭayàbëρì \] ‘the second book’
\[ si\#wòndiri pa\#a\#šàfì\#cì \] ‘stones at the bottom’
\[ pf\#hùmrù \#j\#nùmø \] ‘enemy chief’

As base to the *pa* constructions, nouns and pronouns often suffix -i, with the following changes:

(42) GiTonga
\[ simbo \#j\#nùŋqùk\\#x\#we \] ‘coconut palm’ \(<\) ngoko
\[ p\#mbo \#j\#nùyùr\#rø \] ‘the third house’ \(<\) ŋu\#rø

Infinitives suffix -i, and either lose the infinitive prefix, or some form of contraction occurs:

(43) GiTonga
\[ b\#ãt\#hù \#j\#yà\#fè \] ‘the dead’ \(<\) yúfa ‘to die’
\[ m\#\#ù\#thù \#j\#s\#h\#mà\#bì\#gè \] ‘worthy person’ \(<\) y\#t\#sh\#mà\#bì\#gè ‘to have become worthy’
\[ m\#\#ù\#ñ\#m\#b\#t\#s\#h\#m\#b\#mæ \] ‘worthless person’ \(<\) y\#m\#b\#t\#s\#h\#m\#b\#mæ ‘not to be worthy’

6.2 Numerals and numeration

Numerals as qualifiers occur with various types of qualificative concord. The stem denoting ‘one’, **-mùi** (only Venda does not make use of a reflex of this stem), shows considerable diversity in its behavior:

Shona has the stem -mwé, used with enumerative concords.

(44) Shona
\[ m\#ì\#ñhù \#m\#ì\#m\#wë \] ‘one person’

(45) Sotho
(There are two alternative ways to express ‘one’.)
\[ m\#ù\#thù \#j\#f\#ù\#yà\#d\#f\#- \] mû- \(-j \) ‘one person’
\[ SM-SIMUL \] copula-SIMUL ‘be’
\[ m\#ù\#thù \#j\#f\#ù\#yà\#d\#f\#- \] mû- \(-j \) ‘one person’
\[ Rel \] Enum one
\[ m\#ù\#thù \#j\#f\#ù\#yà\#d\#f\#- \] mû- \(-j \) ‘one person’
\[ l\#ì \] Enum one
\[ cf. m\#ù\#thù \#e\#m\#ù\#í\# – j \] ‘some/another person’ with Adj Conc émù-

GiTonga and Copi have the construction *Adj Conc-mo-2nd pos Dem Pron*:

(46) GiTonga
\[ m\#ù\#thù \#j\#m\#o\#yø \] \(<\) m-mo-uyø ‘one person’ (1)
\[ r\#i\#t\#s\#h\#f\#f\#urù \#j\#m\#wë\#dø \] \(<\) rü-mo-idø ‘one day’ (5)
Tsonga has the stem -\textdaggerhy we used with the enumerative concord:

(47) Tsonga
\[ f\# åndlä fi \# ywè 'one hand' \]

In Xhosa the stem -\textdaggerhy occurs with the Adjectival concord, and follows the qualified item:

(48) Xhosa
\[ i \# làngà è-li \# pè 'one day' \]
\[ c.f. èlpè ilàngà 'some day (Adj.)' \]

In Zulu -\textdaggerhy occurs with the enumerative concord:

(49) Zulu
\[ mù \# nt \# mù \# pè 'one person' \]
\[ c.f. ó-mù \# n \# â-mù \# nt \# ù 'some person (Adj.)' \]

The above form appears to be obsolescent, and the more common construction is:

\textit{Rel Conc-Quant Marker-twa}

(50) Zulu
\[ ù-mù \# nt \# ó-yè \# twà 'one person' \]
\[ ìlì \# fù è-li-l-ò \# twà 'one cloud' \]

Venda uses the adjectival stem -\textdaggerhy hi:

(51) Venda
\[ mù \# tikà mù \# thìhi 'one youth' \]

In all Zone S languages, the stems for 2 and 3, and except for the Mozambican languages, also 4 and 5, are adjectival (though 4 is adjectival in Gitonga):

(52) GiTonga
\[ ëà \# thu ëà \# ëíí 'two people' \]
\[ dzi \# buru dzi \# tharu 'three donkeys' \]
\[ si \# rengo si \# na 'four animals' \]

Other stems may be relative or genitive.

The stems for 1 to 5 (and in some languages 6), 10 and 100 are primitive stems. For 6–9, some languages have derivative stems: 6 = ‘thumb’, ‘cross over’; 7 = ‘point’; 8 = ‘break two (fingers)’, etc. In the Mozambican languages 6 to 9 assume the forms 5 and 1, 5 and 2, which is also what occurs in all languages for 11 to 19.

6.3 Ordinal numbers

In Nguni and Shona, ordinal numbers are in Cl. 7:

(53) Shona
\[ mù \# ëà wè-fì \# tànhàti 'the sixth village' \]

In South Ndebele ordinal numbers for 2–5 are in Cl. 14, the others are based on Cl. 15 or Cl. 5 nouns. In Copi, Ronga, Tsonga and the Sotho languages, they are in Cl. 14.

(54) Tsonga
\[ yin \# ëlù yà-vù \# nkòmbò 'the seventh house' \]
6.4 Demonstratives

Zone S languages generally distinguish at least three of the typical Bantu demonstrative positions – those signifying ‘relatively near the speaker’, ‘relatively near the addressee’ and ‘relatively distant from both speaker and addressee’. Shona has only two basic positions, while Venda has four, adding a set meaning ‘very close to the speaker’. One or other of these positions are used for temporal reference or for previous referents. Examples of demonstratives for five classes in GiTonga, Tsonga and Venda are presented in table 30.15.

6.5 Presentative demonstratives

Presentative demonstratives are special copulative forms of demonstratives. SOTHO lacks this separate formal category, since the normal identifying copulative prefix occurs before demonstratives. Venda, Shona and the Nguni languages, however, have special forms distinct from other copulatives. The older Zulu forms (table 30.16) under (A)

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In GiTonga they are in Cl. 15 or 17:

(55) GiTonga

\[ \text{gi} \neq \text{dangapi}ga \text{ ma-yu} \neq \text{b} \text{iti} \ ‘\text{the second book}’ \]

**TABLE 30.15: DEMONSTRATIVES**

<table>
<thead>
<tr>
<th>GiTonga</th>
<th>Tsonga</th>
<th>Venda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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</tr>
<tr>
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<tr>
<td>10</td>
<td>nyi</td>
<td>nampə</td>
</tr>
</tbody>
</table>

**TABLE 30.16: ZULU**

<table>
<thead>
<tr>
<th>1st pos.</th>
<th>2nd pos.</th>
<th>3rd pos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>(B)</td>
<td>(A)</td>
</tr>
<tr>
<td>1</td>
<td>nangəu</td>
<td>nangəu</td>
</tr>
<tr>
<td>2</td>
<td>nampə</td>
<td>nampə</td>
</tr>
<tr>
<td>3</td>
<td>nənkəu</td>
<td>nənkəu</td>
</tr>
<tr>
<td>4</td>
<td>nənsi</td>
<td>nənsi</td>
</tr>
<tr>
<td>5</td>
<td>nənti</td>
<td>nənti</td>
</tr>
<tr>
<td>6</td>
<td>nənkəu</td>
<td>nənkəu</td>
</tr>
<tr>
<td>7</td>
<td>nəsi</td>
<td>nəsi</td>
</tr>
<tr>
<td>8</td>
<td>nəzi</td>
<td>nəzi</td>
</tr>
<tr>
<td>9</td>
<td>nənsi</td>
<td>nənsi</td>
</tr>
<tr>
<td>10</td>
<td>nəzi</td>
<td>nəzi</td>
</tr>
<tr>
<td>11</td>
<td>nənti</td>
<td>nənti</td>
</tr>
<tr>
<td>12</td>
<td>nənkəu</td>
<td>nənkəu</td>
</tr>
<tr>
<td>13</td>
<td>nəsi</td>
<td>nəsi</td>
</tr>
<tr>
<td>14</td>
<td>nəzi</td>
<td>nəzi</td>
</tr>
<tr>
<td>15</td>
<td>nənkəu</td>
<td>nənkəu</td>
</tr>
<tr>
<td>16</td>
<td>nəsi</td>
<td>nəsi</td>
</tr>
<tr>
<td>17</td>
<td>nəzi</td>
<td>nəzi</td>
</tr>
</tbody>
</table>

**Note:**

1 We give (B) forms only for 1st position.
below are morphologically opaque, and this may be the reason that younger speakers use the more readily analyzable forms under (B).

6.6 Locatives

Lozi and Shona make use of Cl. 16, 17 and 18 prefixes to denote location, as do Tswana and GiTonga, though in conjunction with a locative suffix. All languages make use of a locative prefix with nouns of Cl. 1a, 2a/2b, and depending upon the individual language and the semantics or syntax, also with personal nouns. Otherwise, use is made of a locative suffix with protoform *-inI. In Nguni and some Tsonga dialects there is concomitant use of a locative prefix **e-.

(56) Sotho
möri ti-î ‘in, to, from the shade’ < möri i

(57) GiTonga
hungo-ni ‘in, on, to the head’ < hungo
jumba-ni ‘to/from/in the house’ < jumba

(58) Zulu
ěnthánzi in, to, from the shade’ < ūnthänzi

GiTonga also has a locative suffix -tunu with a more general significance ‘at’, ‘in the vicinity of’:

(59) GiTonga
hungo-tunu ‘around the head’
jumba-tunu ‘at the house’

7 VERBAL RADICAL STRUCTURE

7.1 Denominative and deideophonic derivation

All Zone S languages show denominative (including de-adjectival) derivations, using some reflex of the PB verbalizer *-p-, and often including the stative extension *-ad-.

(60) Sotho
swěí-f ē-l ē ‘become white’ < -swěí ‘white’
ě-thó-f ē-l ē ‘become personified’ < mö = thó ‘person’

cf. k’áphiliyănà ‘I am sort of OK’
cf. k’áphíla ‘I am well’
lídzó liábilànà ‘The food is simmering’
cf. liáblá ‘It is boiling’

7.2 Diminutive

Southern Sotho has extended the use of the nominal diminutive suffix to verbs:

(61) Sotho
k’áphiliyănà ‘I am sort of OK’
lídzó liábilànà ‘The food is simmering’
cf. liáblá ‘It is boiling’
7.3 Extensions

Zone S languages have a typical range of productive and non-productive extensions, with standard significances and syntactic functions. They all have the following as productive extensions: applicative, causative (with suffix **-is-), passive, neuter, reciprocal. The intensive (**-isis-) and perfective (**-elel-) are also productive in most of them. In addition SOTHO has the reversive, neuter reversive and extensive (-ak-) as productive elements.

8 VERBAL INFLECTION

8.1 TAM

8.1.1 Tense

Typically, Zone S makes a basic distinction in absolute tenses between past, present and future, with Nguni, GiTonga and Tsonga distinguishing a far past from a near past (in GiTonga the far past refers to actions that occurred prior to the day before yesterday). Shona has discrete hodiernal and general pasts in the positive, and Southern Sotho distinguishes far, near and general past, though specification of far or near past seems to depend more on the speaker and on style, than purely on normal tense considerations. Nguni and Southern Sotho distinguish near future from far future, albeit not rigorously. The anterior (generally called the perfect tense) is best treated as aspect (see below), but it sometimes seems to function as a tense, and one could consider it as a ‘tensepect’, a form having elements of both tense and aspect.

(62) Shona (Zezuru)
- Non-Hodiernal Past: pos. SM⁴-a-ka-R-a
  Nd-à-ká # téng-à  ‘I bought’
- Hodiernal Past: pos. SM⁴-a-R-a
  Nd-à # mük-à mängwănânì ánò ‘I got up this morning’

(63) Sotho
- Near Past:  SM-sá-ts'w’à ≠ R-a
  Li-sá-ts’w’à ≠ fìlà  ‘They (10) have just arrived’
- Past:  SM-ëlë SM⁴-a ≠ R-a
  Li{lë ts’áfìlà kshwélíy ýëfìt’lëjë  ‘They arrived last month’
- Far Past:  SM-në SM-R-i
  Linë lëfìlà ksháìë  ‘They arrived long ago’

Relative tenses have as their point of focus either some point of time in the past or in the future, which, according to language, may be either far or near, and the situation in question may be specified as anterior, co-extensive or posterior to that point.

(64) Zulu
- The auxiliary hë– (generally reduced to a pre-prefix in past tenses) characterizes relative tenses, both future and recent past:
  - Past Present: béng(ghi)y(h)ãki  ‘I wasn’t eating’
  - Past Anterior: béng(ghi)y(h)ãlë ‘I had not had enough to eat’
  - Past Past: béng(ghi)y(h)ãn(y)ã ‘I hadn’t eaten’
Past Near Future: bèn(g)ìì(g)èzìgùhà ‘I wasn’t about to eat’
Past Far Future: bèn(g)ìì(g)èyìgùhà ‘I wasn’t going to eat (at some fairly distant time)’

(65) Zulu

We illustrate two far past relative tenses:
Far Past Present: njììnjììnjììnjìì ‘I wasn’t eating (long ago)’
Far Past Far Future: njììnjììnjììnjìì ‘I was not (long ago) going (in the distant future) to eat’

(66) Zulu

Some near future relative tenses:
Near Future Present: njììnjììnjììnjìì ‘I shall not be eating’
Near Future Past: njììnjììnjììnjìì ‘I shall not have eaten’
Near Future Far Future: njììnjììnjììnjìì ‘I shall not be going (in the remote future) to eat’

(67) Zulu

A future relative tense may be situated within a past relative tense:
Far Past Near Future Present: njììnjììnjììnjìì ‘I was (long ago) going to be eating/I would have been eating (not too long after that time)’
Near Past Near Future Near Future: njììnjììnjììnjìì ‘I was going to be going to eat/I would have been going to eat’
Far Past Far Future Past: njììnjììnjììnjìì ‘I was going to have had slept/I would have had had slept’

8.1.2 Mood

The basic modal distinctions in Zone S are: infinitive; imperative; indicative; subjunctive; and conditional/potential.

The infinitive and imperative moods have their usual significances. Most languages have negative infinitives, and some permit inflection for tense, mood and aspect in the infinitive:

(68) GiTonga

yu-mba ≠ dwana ‘not to fight’
yu ≠ won-ìfe ‘to have seen (Anterior)’
yu-ta ≠ thum-a ‘to come and work (Venitive)’
yu-ya ≠ man-a ‘to go and get (Andative)’

(69) Tswana

χù-k’á ≠ rëk’-á ‘to be able to buy (Potential mood)’
χù-sà ≠ rëk’-á ‘to still buy (Progressive aspect)’
χù-sà ≠ b’ìnà ‘not to have bought (Anterior, neg.)’
χù-t’l’á ≠ rëk’-á ‘to be going to buy (Future)’

In Zone S languages factivity, with various subdivisions, is a modal category.

FACTIVE: Indicative Definite Potential Conditional Approximate
The indicative mood expresses a situation that the speaker asserts as factual, including deliberate false assertion. It includes interrogatives, in which the speaker asks for information as to the factuality of a situation. The definite mood is a more emphatic statement of factuality. The potential mood indicates the speaker’s belief that a certain situation might arise, or has the potentiality of arising. The conditional mood indicates the speaker’s belief that a certain situation may obtain should certain conditions be fulfilled. The conditional mood includes instances of unfulfilled past condition – ‘I would have gone out if it had not rained’. (Not all Zone S languages distinguish potential and conditional moods.) The approximate mood indicates the speaker’s belief that a certain event nearly took place, or that a certain situation almost pertains.

Other types of factivity would include counter-intuitive or contradictive factivity.

(70) Swati
   Indicative:  háátl ’ She isn’t coming’
   Definite:  ófēlā ásātl ’á ‘She has really not come’
   Potential:  àk’áxātl ’ ‘She might not come’
   Conditional:  ák’ábē ásātl ’i, hōdzā lásk’ék lámpō tʃʰēlēt ’é ‘She wouldn’t be coming if you hadn’t given her money’
   Approximate:  óbātt’lē ásātl ’ ‘She almost didn’t come’
   Contradictive:  óāk’ulā; ómp’á átl ’afēlā ‘She is sick; she is nevertheless coming’

An unusual distinction that should probably be considered modal, is that signifying an action that occurs opportune.

(71) Sotho
   òmba átl ’á ‘She is coming at the right time’
   òmbilek’á átl ’á ‘It’s just as well she didn’t come’

The following are also best considered modal.

(72) Sotho
   ómēlā hōtl ’á áti ts’ihē ‘She just manages to come on the way’
   ótsw útsw ’lē átl ’á ‘She came in vain’
   ìtsw útsw ’à lkw’ál ‘You’re getting angry for nothing’

(73) Lala
    naphuta kufika ‘You were dilatory in coming’

(74) Swati
    Umang alale ‘He simply sleeps’
    Umang uyangihupha ‘He is worrying me for no reason’

(75) Sotho
    ák’áshōhā átl ’á ‘She might unexpectedly come’
    áshōhilek’áilinā ‘She suddenly fainted’
    … k’áshōhā sifônî sivá ‘… and suddenly the plane crashed (I suddenly the plane crashed)’

(76) Swati
    Wetuka imluma ‘It suddenly bit him (He suddenly it bit him)’

In the last two examples, there are different subjects to the auxiliary and its complement. The auxiliary is a grammaticalization of verbs meaning ‘get a fright’.
Various grammars posit other moods, such as Participial/Situational and Temporal, but these are best treated as aspect.

8.1.3 Aspect

Aspect may be indicated: (a) by a special auxiliary verb; (b) by a post-subject-concord prefix; (c) more rarely, by suffix.

Zone S languages (Shona being an exception) generally distinguish anterior (distinct from any past tenses and from the present tense) and perfective aspects. The perfective aspect is the ‘default’ aspect, and is generally unmarked. The anterior aspect has a common form **SM-R-ile. The desinence ** ile may take a variety of forms in the various languages. The Sotho languages, for example, display remnants of vowel harmony, and other complexities:

(77) South Sotho

<table>
<thead>
<tr>
<th>VERB</th>
<th>ILE FORM</th>
</tr>
</thead>
<tbody>
<tr>
<td>alim-á ‘borrow’</td>
<td>alimme</td>
</tr>
<tr>
<td>hán-á ‘refuse’</td>
<td>hanne</td>
</tr>
<tr>
<td>ṣent-á ‘sulk’</td>
<td>ṣentse</td>
</tr>
<tr>
<td>tshwár-á ‘catch’</td>
<td>tshwêri</td>
</tr>
<tr>
<td>bôfôl-á ‘untie’</td>
<td>bôfôleš’si</td>
</tr>
<tr>
<td>bôk’ôll-á ‘scream’</td>
<td>bôk’ôleš’si</td>
</tr>
<tr>
<td>sîr-á ‘spoil’</td>
<td>sînts’e</td>
</tr>
</tbody>
</table>

(78) Tswana

<table>
<thead>
<tr>
<th>VERB</th>
<th>ILE FORM</th>
</tr>
</thead>
<tbody>
<tr>
<td>f-á ‘give’</td>
<td>file</td>
</tr>
<tr>
<td>dê-á ‘eat’</td>
<td>dêle</td>
</tr>
<tr>
<td>nw-á ‘drink’</td>
<td>nule</td>
</tr>
<tr>
<td>fê-á ‘die’</td>
<td>fule</td>
</tr>
</tbody>
</table>

Southern Sotho illustrates the rich variety of aspectual distinctions found in Zone S languages. Probably more than other languages though, it may combine several aspects in one verb phrase.

(79) Sotho

Perfective: òlê áròbálá ‘He slept’

òlê áts’âmáyâ ‘He went (but may have returned meanwhile)’

Anterior: óròbêts’i ‘He’s asleep’

òts’âmáilet ‘He has gone (and is still away)’

Completive: óse âithù’á ‘He is studying now/He is already studying’

óse âithù’ilè ‘He has already studied’

óse âl’âithù’á ‘He will soon study’

Simultaneous: ömâmêlà mminô áîthù’á ‘She listens to music while studying’

Continuative: öm’ts’e âîthù’t’a ‘He continues to study’

Durateive: öhînê áîthù’t’a ‘He keeps on studying’

Consecutive (not to be confused with the narrative):

Past: k’dêle k’ânt’âno göîthù’t’a ‘I ate and then studied’

Fut: k’il’âdêk’k’în’ânîthù’á ‘I shall eat and then study’

Immediate: ôî’t’îlthê áîthù’t’e ‘She will study at once’

Interim: ôî’t’îsw’á áîthù’t’a ‘She will study in the meantime’

Persistive: ôsaîthù’t’a ‘He is still studying’

Permanent: ôlôts’i áròbêts’i ‘He has been asleep the whole time’
‘He will never again speak’

Frequentative: Dát’`isà h K`ithút’à ‘He often studies’

Occasional: Dk`è à ... other suffix.

(81) Sotho

Of interest is that many auxiliary verbs require complements in a particular mood or aspect. Thus in the above sentences we find the following:

‘He keeps on not studying’

8.1.4 Deixis: venitive and andative

Nguni, SOTHO and GiTonga have venitive and andative forms of the verb through grammaticalization of verbs meaning ’come’ and ’go to’. Venitive and andative markers come before the radical, after any pre-radical TAM markers.

(82) Zulu

ng( gj)z`ölìmà ‘I am coming to cultivate’

(83) Sotho

k’yölmà ‘I am going to cultivate’

Venitive and andative forms ’remember’ that the historical complement to the verbs meaning ’come’ and ’go to’ was an infinitive with TAM suffix -a, and this suffix is retained even in constructions which would otherwise require some other suffix.

(84) Zulu

ágìnji’sì ‘He is not coming to help’

cf. agásì ‘He is not helping’
8.1.5 Negation

Negation in Zone S takes two main forms: (a) the use of a preconcordial negative marker, with or without simultaneous suffixal marking; (b) the use of a post-concordial negative marker, with or without simultaneous suffixal marking. In both cases, there is generally also a tonal change in the verb stem, and sometimes also in the subject concords, particularly those of the first and second persons.

9 SYNTAX

The most basic syntactic patterns are the following:

(a) SVO

This order applies to words as such, but the SOV order holds for concordial elements within the verb:

(86) Shona

v électrique va- nō = tfhér- á mvārā ‘The girls draw water’
girls SM-TAM-draw- TAM water
v électrique va- nō- i = tfhér- á ‘The girls draw it’
girls SM-TAM-OM # draw- TAM

In Xhosa and Zulu the subject is postponed in questions:

(87) Zulu

bayakula abantu’ana? ‘Are the children sick?’
cf. abantu’ana bayakula ‘The children are sick’

The standard grammars of Zulu and Xhosa give the impression that the basic word order is SVO, yet sentences such as the following seem to be the norm, and it is clear that further research is needed on the syntax of these languages:

(88) Zulu

bā- yā- lū = phuż- ā ū ≠ bisi ’a-bā ≠ ntw’ -ānā
they-disjunctive-it (11)-drink -TAM (11)-milk (2)- person- Dimin
‘The children drink milk’

The object concord in most Zone S languages is used pronominally (i.e. in place of a noun) or emphatically (i.e. together with a noun, in order to emphasize it):

(89) Sotho

k’i ≠ dżā láp ‘I eat fish/I am eating fish’
k’i-a-i ≠ dżā ‘I eat it/I am eating it’
k’i-a-i ≠ dżā láp ‘As for fish, I eat it’
In Xhosa and Zulu however, the use of the object concord is different, in that it serves to distinguish present continuous from simple present:

(90) Xhosa

Nd`ic`á ínl’ánžì ‘I am eating fish’
Nd`iyáyic`á ínl’ánžì ‘I eat fish’

Our evidence is that only Tswana permits two, or even three, OMs in the verb:

(91) Tswana

K’-tl’á-kw’ál-él-él-á yw á ná á bá á ts’áli lú á kw’áló
I- Fut-#write-Dative-Dative-TAM ⟨1⟩ # child ⟨2⟩ # parent ⟨11⟩ # letter
‘I shall write a letter to the parents for the child’
K’-tl’á-lù- bá- mù á kw’ál-él- él- á
I- Fut-OM(11)-OM(2)-OM(1) # write-Dative-Dative-TAM
‘I shall write it to them for him’

(b) Qualified–qualifier

The above order holds in almost every instance. Exceptions include:

(92) Zulu (Quantitatives with stem -nk’è usually precede any noun qualified.
Adjectives with stem -njè ‘some, other’ normally precede a noun qualified.)

bónk’i’dúságá ‘the whole winter’
ámagn’amatòtá ‘some men’

(c) Verb–modifier

Though time and place adverbs may occur sentence-initially for focus, manner adverbs follow the verb.

(d) Noun–pronoun/pronoun–noun

Nguni and Sotho languages generally have the order noun–pronoun in subjectival position and the order pronoun–noun is obligatory in objectival position:

(93) Zulu

ábúntw’áná bóná bábàngá ímsíndó ‘As for the children, they are making a noise’
áŋgíthándí bóná ábúntw’áná ‘I don’t like children’

Louwrens (1991) states that in Northern Sotho the different orders in subject position have different significances: pronoun–noun particularizes the subject, while noun–pronoun contrasts the subject.

(94) N. Sotho

yáñá kw’éná tát’ifá xosílóáyá báthò ‘Particularly the crocodile is increasingly killing people’
úsáílí bák’ísibé xáñá, félá fíánná bóná bálat’ík’íyáná mó ‘The women will not be present, but the men, by contrast, will meet here’

REFERENCES

FURTHER READING

CHAPTER THIRTY-ONE

A CLASSIFICATION OF
THE BANTU LANGUAGES:
AN UPDATE OF GUTHRIE’S
REFERENTIAL SYSTEM

Jouni Maho

1 INTRODUCTION: WHAT, WHY AND HOW

This is an update of Malcolm Guthrie’s classification of the Bantu languages, the latest version of which can be found in the second volume of his Comparative Bantu (Guthrie 1971). Guthrie’s list of languages and the code numbers that he has assigned them are well-known and widely used in academic literature. The main aim here is to keep Guthrie’s original list as it is, and add missing languages to that. This also means that the present update is referential, not genetic. There are good reasons for this choice. For better or for worse, Guthrie’s reference numbers have stuck, while the renumberings aimed at being genetically more valid have not, mainly because these latter offerings tend to be revised with new insights. Add to this the fact that individual researchers are likely to reclassify specific languages or language groups as they see fit. Besides, our current state of knowledge about the internal subgrouping of the Bantu language group is still rather fragmentary. Thus any proposed genetic classification is likely to be subject to more dramatic future revisions than would a referential one, since there are (at least ideally) fewer problems involved in establishing a referential classification.

The starting point, then, has been Guthrie’s ‘Inventory of Bantu languages’ (1971:28–64). To this, some 200 new languages/dialects have been added. Adding new languages to Guthrie’s list means that they have to be assigned codes compatible with his original coding system. However, it should be clear from the codes themselves that they are not originally Guthrie’s, but additions made by someone else. For this purpose, the principles adopted here for creating new codes are essentially identical to those used by Lowe and Schadeberg (1997) in their Bantu MapMaker program. Briefly, all new codes are distinguished from Guthrie’s original codes by containing either three digits (as in A801, C161, K333, etc.) or two digits followed by an upper-case letter (e.g. A32C, S31E, etc.). The general rule has been to classify any new language/dialect within the group where it lies, or at least within any immediately adjacent group. (Groups are the ones with codes ending in zeroes, e.g. A10, A20, etc.) A new language code has then been created in accordance with one of the following four principles:

Principle 1: A third digit is added to an already existing language code, if the new language/dialect is closely affiliated to one of the languages already classified by Guthrie within the group. For instance, Ngoro and Bima have been coded A111 and A112,
respectively, since they are closest to Londo (A11) within the A10 group. Note thus that A11, A111 and A112 refer to coordinate entities. A111 and A112 are not sub-entities of A11.

Principle 2: A third digit is added to the group code, if the closest affinity within the group is uncertain or impossible to decide. Thus Phalaborwa, Kutswe, Pai and Pulana have been coded S301, S302, S303 and S304, respectively, since they cannot be (safely) linked to any single language of those already classified/coded in the S30 group.

Principle 3: An upper-case letter is added to an already existing language code, if the addition can be considered to be a sub-entity of the latter or when the addition completes a series of languages/dialects already letter-coded by Guthrie. Thus the E72-dialects Jibana, Kambe and Ribe have been added as E72F, E72G and E72H, respectively, so as to complete Guthrie's incomplete list of E72 dialects.

Principle 4: Add an upper-case letter to the group code, if the new language is a pidgin, creole or mixed language. (These are listed separately at the end of the updated list.) The group code is chosen so as to be suggestive of the typological (and genetic?) affiliation of the language in question. Thus Kituba has been coded H10A, Mono kutuba H10B, and so on. (Note that this last principle is not used in the Bantu MapMaker program.)

Some codes in zones D and E have been amended with the letter J, in parentheses, as a recognition of the so-called J-zone established by the Tervuren scholars (see Bastin, this volume). Unfortunately, the J codes used in the literature vary to some extent. The main source used for the J codes here derive from the most recent lexicostatistical study by Bastin et al. (1999). Their list of languages is not complete, however, so any lacunas have been filled with information derived mainly from the Ethnologue (Grimes 2000), or else via personal contacts with other scholars (see below).

Guthrie's original spellings have not always been retained. For instance, obsolete and idiosyncratic spellings have been avoided as far as possible. Thus ‘Kgalagadi’ is used here instead of Guthrie’s ‘Kxhalaxadi’. Moreover, all symbols unique to particular transcription systems as well as all diacritics have been either changed or omitted. The characters used here are the ones included in the so-called ASCII set. Thus all name forms have been adapted for use in computerized information storage and retrieval systems.

Most lines below contain more than one name. Often they are simply variant spellings of the same name, both or all of which are commonly used in the literature (e.g. Cuka, Chuka). Some languages are commonly referred to with different names in different countries (e.g. Bomwali, Sanghasangha), in which case both/all names are listed. Sometimes a single code has been used to designate several (very) closely related varieties (see, for instance, the G40 group). The name forms adopted here are generally without prefixes; cf. Bailey (1995:34–5) for good arguments why prefixless names are to be preferred. Occasionally, however, a prefixed name has been added for clarifying purposes. It is worth emphasizing that it is not the purpose of the present enterprise to prescribe the use of any particular name, form or spelling. The ones given here are the ones commonly found in the (English) literature. However, clearly incorrect, derogative and obsolete names have been either omitted or marked as such.

There would seem to be no end to adding missing names to Guthrie's original list. Instead, the difficulty has been to decide which ones not to add. Even though the main aim has been to list languages, not dialects, it has not been possible to adhere to any consistent policy in this respect, partly because in many cases it has simply not been possible to decide safely what to regard as languages or dialects, but also because Guthrie's original list is itself unsystematic on this issue. Where Guthrie lists dialects, these have
been kept. Occasionally additions have been made. One unavoidable consequence of this has been that some groups contain more details than do others. Nonetheless, the general policy adopted here is a restrictive one. Doubtless many more names could have been added, but available data are still too scanty for many parts of the Bantu area. The list should therefore not be seen as the final version, but more like an interim report to which future additions are likely to be made.

Information about which languages to add or not to add, how to classify them and what to call them derive mainly from printed sources (see References section at the end). Where these have been non-informative, incoherent or generally inconsistent with each other (or themselves!), I have sought help (largely via email) from various scholars, especially the editors, Derek Nurse and Gérard Philipson, as well as Douglas Boone, Robert Botne, Derek F. Gowlett, Tore Janson, Lynn Kisembe, Myles Leitch, Connie Kutsch Lojenga, Balla Masele, Thilo Schaderberg, Gabi Sommer and Paul Thomas. I have smoothed out inconsistencies as I have seen fit, often with the invaluable advice of the just-mentioned people. Where I have failed to follow their recommendations is where future revisions are likely to occur.

2 THE NEW UPDATED GUTHRIE LIST

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The table above lists various language groups and clusters within the Bantu language family, providing a classification of the Bantu languages.
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<td>Old Mfengu</td>
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Copyright Material – Provided by Taylor & Francis
S402 Bhaca
S403 Hlubi
S404 Phuthi
S405 Nhlangwini
S406 Lala
S407 Ndebele (South Africa)
S408 Sumayela Ndebele

S50 Tswana-Ronga Group

S51 Tshwa

S511 Hlengwe

S52 Gwamba

S53 Tsonga, Changana

S54 Ronga

S60 Inhambane Group

S61 Copi

S611 Lenge

S62 Tonga, Shengwe

NOTES TO THE LIST

C60 – Hulstaert (1993) provides an authoritative listing of Mongo-Nkundo languages/dialects. Guthrie has scattered these over several groups in zone C.

D30 – Guthrie (1971) gives Mbuba as a D33 language/dialect, but it has been omitted here since it is a Nilohararian language.

D60 – Apparently ‘Sinja’, given by Guthrie (1971:44), cannot be used as a variant for Shubi (Balla Masele, pc).

E10 – Guthrie (1971:44) gives Gungu in parentheses as a E11 variant/variety. It has here been broken out and given a code of its own (E101). He also gives Hima as a variant or variety of E13. If anything, it is either a dialect of Nyankole or it ‘may be a separate language’ (Grimes 1996:427). Many names could probably have been added in the E10 group, most of which seem best treated as dialects of languages already listed. See, for instance, Ladefoged et al. (1972:68–74) for information on various Ganda dialects.

E40 – See Kihore (2000) for some data on various E40 languages/dialects.

E60 – The Chaga varieties listed by Guthrie (1971:46) show a very arbitrary choice of names. The only correcting exercise here is the omission of the name ‘Moshi’. See Nurse (1979b) and Philippson and Montlahuc (this volume) for more details.

F20 – Guthrie (1971:48) gives the name ‘Gwe’ as a variant for Sukuma, but it cannot apparently be used as such (Balla Masele, pc), so it has been dropped.

G10 – Botne (1989/90) has suggested a J-coding for Gogo.

G40 – Guthrie’s Swahili Group makes little sense from a geographical as well as genetic viewpoint (Derek Nurse, pc). Thus it has been difficult to update this group in order to arrive at a comfortable consistency (which is true for many sections in Guthrie’s classification). As a slight compensation for Guthrie’s botch, some of the already existing codes in the G42 series have been amended with a few new names. See Nurse and Hinnebusch (1993:5–15) for information on language varieties within the G40 group. On Soqotra Swahili, see Whiteley (1969:77).

N20 – The Tumbuka dialects have been coded following Guthrie (1948:81). Hence the lower-case letters.
P30 – On Koti, see Schadeberg and Mucanheia (2000).
R20 – On the classification of Ambo dialects/languages, see Baucom (1975). His northern cluster include R21 and the ones coded R211 through R218 here. The rest belong to his southern cluster.
S30 – The Tswana dialects originally listed by Guthrie (1971) are far from complete; see Cole (1975:xvi–xix) for a more detailed discussion on these. Guthrie’s S31a, S31b and S31c correspond roughly to the Central (incl. Rolong), Eastern (incl. Kgatla) and Northern (incl. Ngwato) dialect clusters, respectively. Consequently, Guthrie’s original codes have been adapted to accommodate this classification. To these, a Southern dialect cluster has been added as S31E. Guthrie’s S31d Kgalagadi should really have been assigned a code of its own (Tore Janson, pc), but since it is there it has to remain. As for the S30X additions (Pai, Phalaborwa, etc.), see Doke (1954).
S40 – See Doke (1954) for details about the S40 additions (Old Mfengu, Bhaca, etc.).
S50 – It is worth noting that what Guthrie gives as S52 (Gwamba) is in reality a dialect of his S53 (Tsonga).

Pidgin, creole and/or mixed languages – Most of the languages listed here derive from Heine (1970) and Holm (1989); further references can be found in their bibliographies.

REFERENCES

Many valuable (though sometimes conflicting) data on the distribution and classification of the Bantu languages as well as data on individual languages/dialects have been published; see especially the contributions to this volume. The main sources consulted for this appendix include Bailey 1995; Bastin et al. 1983, 1999; Baucom 1975; Botne 1989/90; Cole 1975; Cope 1971; Dalby 2000; Doke 1945, 1954; Grimes 2000; Guthrie 1948, 1953, 1971; Linguistic Survey of the Northern Bantu Borderland 1956; Heine 1970; Holm 1989; Hulstaert 1993; Kahigi et al. 2000; Kihore 2000; Ladefoged et al. 1972; Lowe and Schadeberg 1997; Mould 1981; Nurse 1979b; Nurse and Hinnebusch 1993; Nurse and Philippson 1980; Ohannessian and Kashoki 1978; Piron 1997; Polomé and Hill 1980; Schadeberg and Mucanheia 2000; Whiteley 1969, 1974.
BIBLIOGRAPHY

ABBREVIATIONS

AAP Afrikanistische Arbeitspapiere
AL Africana Linguistica
ALS African Language Studies
AS African Studies
AU Afrika und Übersee
BLS Berkeley Linguistic Society
BSOAS Bulletin of the School of Oriental and African Studies
CLS Chicago Linguistic Society
CNRS Centre National de la Recherche Scientifique
CNWS Centre for non-Western Studies (Leiden)
CLSL Center for the Study of Language and Information
CUP Cambridge University Press
EALB East African Literature Bureau
IAI International African Institute (London)
IJAL International Journal of American Linguistics
ILCAI Institute for the Languages and Cultures of Asia and Africa
INALCO Institut National des Langues et Civilisations Orientales
JAH Journal of African History
JAL Journal of African Languages
JALL Journal of African Languages and Linguistics
JWAL Journal of West African Languages
LA Linguistica Africana
MIT Massachusetts Institute of Technology
MRAC Musée Royal de l’Afrique Centrale (Tervuren)
MSOS Mitteilungen des Seminars für Orientalische Sprachen
OUP Oxford University Press
SAAJAL South African Journal of African Languages
SAL Studies in African Linguistics
SCOPIL Southern California Occasional Papers in Linguistics
SELAF Société d’Etudes Linguistiques et Anthropologiques de France
SIL Summer Institute of Linguistics
SLS Studies in the Linguistic Sciences
SUGIA Sprache und Geschichte in Afrika
UCLA University of California at Los Angeles
UCP University of California Press
ZDMG Zeitschrift der Deutschen Morgenländischen Gesellschaft

—— and Osinde, K. (1997) Sheng and Engsh: development of mixed codes among the urban youth


—— (ed.) (1991) Tone in five languages of Cameroon, Dallas: SIL.


Ankei, Y. (1979) Notes Bwari. MS.


——— (1989a) El prefijo locativo de la clase 18 y la expresión del progresivo presente en Bantu (1), *Estudios Africanos* 4.6: 35–55. (A French version of this and the next is available from the author.)


Biton, A. (1907) Dictionnaire français-nduma et nduma-français, précédé d’éléments de grammaire, Franceville.
—— (1987b) Les classes 9, 10 et 11 dans le groupe bantou (B40), Pholia 2: 5–22.
Kinshasa: Université Lovanium.


BIBLIOGRAPHY 659


——— (1975) *Bukusu generative phonology and aspects of Bantu structure*, Tervuren: MRAC.


Doke, C. M. (1926) Zulu phonetics, Johannesburg: University of the Witwatersrand Press.


—— (1931b) A comprehensive study in Shona phonetics, Johannesburg: University of Witwatersrand Press.


——— (n.d.) Suggestions regarding a possible set of pronouns characterizing Bantu within Niger-Congo. MS.

Festi, L. and Valler, V. (n.d.) Diccionario etxuwabo-portugués, n. l.
Gérard, R. P. (1924) La langue lebeo, grammaire et vocabulaire, Brussels: Bibliothèque Congo XIII, Vromant & CO.


—— (1975b) Serial verbs and syntactic change; Niger-Congo, in Li (ed.) 47–112.


—— (1992b) Yeyi reflexes of Proto-Bantu, in Gowlett (ed.).


—— (n.d.) *Vowel Harmony in Yeyi*. MS.


—— (forth) Present progressive vis-à-vis predication focus in Bantu: a verbal category between semantics and pragmatics. Studies in Language.

—— (1953) *The Bantu languages of Western Equatorial Africa*, London: IAI.
Hagendorens, J. (1943) *Dictionnaire français-otetela, suivi de quelques notions pratiques de la grammaire otetela*, Tshumbe Ste Marie: Imprimerie de la Mission catholique.
—— (1977) Notes on Ngie phonology, Santa Barbara: University of California. MS.
—— (1979) Bibliography of the Grassfields (Cameroon), Leiden: University of Leiden. MS.
Jacobs J. (1964) Tetela-grammatica (Kasayi, Kongo), Gent: Orientalia Gandensia.
— (1978) Le Gabon, in Barretaud (ed.).
—— (1986) Eléments de phonologie et de morphologie historique du basaá (bantou A43a), AL 10: 147–211.


Johnston, Harry. H. (1919)


Kabuyaya, K. P. (n.d.) Esquisse de la langue pere, Tervuren: MRAC. MS.


Kavari, J. U. and Ohly, R. (n.d.) The question of Herero dialects. MS.


Linguistic Survey of the Northern Bantu Borderland (1956) [supervisors Malcolm Guthrie and A. N. Tucker], Vol 1. London: Oxford University Press for IAI.
http://www.linguistics.berkeley.edu
—— (1999) Ikalanga phonetics and phonology; a synchronic and diachronic study, Stanford: CSLI.
McCawley, J. (1970) Some tonal systems that come close to being pitch accent systems but don’t quite make it, CLS 6: 526–32.


Champaign.
—— (1981) Le bamileke-ghomala’ (parler de Bandjoun, Cameroun), Paris: SELAF.
—— (1979b) Classification of the Chaga dialects: language and history on Kilimanjaro, the Taiga Hills and the Pare Mountains, Hamburg: Helmut Buske Verlag.
—— (forthcoming) Tense and aspect in Chaga, in *Festschrift for Prof. C. Winter*.
—— (1990) Dictionario Macua-Portugues, Lisbon: Instituto de Investigacao Cientifica Tropical.
—— (n.d.) Dictionnaire gotso-go-français. MS.


—— (1993) Dschang and Ebrie as Akan-type total downstep languages, in van der Hulst and Snider (eds) 185–244.


—— (1999) Nasal vowel creation without nasal consonant deletion and the eventual loss of nasal vowels thus created, in Hombert and Hyman (eds) 207–33.


Torrend, J. (1887) *Outline of Xosa-Kafir grammar, with a few dialogues and a Kafir tale*, Grahamstown: T. and G. Sheffield.


—— (1997) The 0 tense marker in the decline of the Swahili auxiliary focus system, *AAP* 51: 55–82.
—— (1980) Notes on Ngie. UCLA and SIL. MS.
Whitehead, J. (1899) *Grammar and dictionary of the Bobangi language, as spoken over a part of the Upper Congo (West Central Africa)*. London: Kegan P. and Trench, Trübner & Co.


—— (1989a) Studies in Tanzanian and Zaïrean languages (vol. 2), Tokyo: ILCAA.


This index lists all African languages mentioned in the text (languages of European origin are not indexed; neither is Arabic). For individual languages, language family is indicated in square brackets; in the case of Bantu languages the reference number to Guthrie’s referential classification, as completed by Maho (see chapter above), is given. Synonyms are cross-referenced.

N.B. We have eliminated all class prefixes in Bantu language names, except for the rare cases where confusion might arise: so we distinguish Tonga (M64) and GiTonga (S62), and Mbundu (H21) and UMBundu (R11). We also retain the prefix in language names where there is no genuine correspondence with any ethnic groups, as Lingala (instead of *Ngala). Finally, where we are unsure of the exact value of the initial syllable, as is the case with many of the smaller Zone C languages, we follow the author’s conventions.

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