The handle http://hdl.handle.net/1887/36066 holds various files of this Leiden University dissertation.

Author: Wit, Gerrit de
Title: Liko phonology and grammar : a Bantu language of the Democratic Republic of the Congo
Issue Date: 2015-11-05
1 Introduction

1.1 Language and speakers

Liko is the name of one of the languages in the Oriental Province in the northeastern part of the Democratic Republic of the Congo. Liko is spoken in the Balika-Toriko Chiefdom in the Wamba Territory within the Haut-Uélé District. The Balika-Toriko Chiefdom\(^1\) is 1.149 km\(^2\) large, and is geographically located between 2.34 and 1.94 latitude north and between 27.42 and 27.84 longitude\(^2\).

Travelling by road going south, the Liko-speaking area is about 80 km away from the town of Isiro. The Liko area is adjacent to the approximate west boundary of the Ituri rainforest. The *Ethnologue* has 60,000 Liko speakers. This figure is based on census data from 1988 which is reported by Boone (1989): 56,911 Liko in the Wamba Territory and several thousand to the north in the Rungu Territory. Local government statistics of 2006 have 68,212 inhabitants of the Balika-Toriko Chiefdom (Ndagba 2008).

The language has been called Lika by the (colonial) administration and most researchers, including some Liko authors. The *Ethnologue* has Lika, with Liko as one of the alternative names. Liko speakers themselves call their language *llikó*, which consists of the class 5 prefix *l*- and the [+ATR] root *likó*. This name, without the prefix, has been adopted in this book to refer to the language. Liko speakers in the Wamba Territory refer to themselves as *Bolikó ko Toliko* 'the Liko of Toliko', their forefather.

---

\(^1\) A Chiefdom, "Chefferie" in French, is part of the administrative hierarchy of political subdivisions in rural areas in the Democratic Republic of the Congo (DRC), which contains, from the largest to the smallest unit (using the DRC names): District, Territoire, Chefferie, Groupement, Village.

\(^2\) In a straight line, the greatest distances across the Liko area, from north to south and from west to east, are approximately 45 km and 47 km.
The Liko people occur in Moeller's research on migrations of Bantu people in Congo in the section on populations of the Uélé (Moeller calls them "Malika"), together with the Bua people (called "Ababua") and the Bali people (called "Babali"): "La tradition veut que les Malika se soient séparés des Ababua dans la région de Bambili."(...) "Ils se reticèrent vers l'Est, dans la région de Poko." "Les Toriko descendent le Nepoko, (...) s'installèrent à l'embouchure de la Maika et du Nepoko." Ndagba (2008:4) says: "Les sources orales racontent que Boa et Likangwe étaient des frères germain et vivaint à Bambili." Ndagba has recorded the story told by an old man, Ngandopey, about the separation of two brothers (Ndagba 2008:4): ^4

"Boa had two sons: Lika and Boa. Lika was an outstanding farmer and was the owner of a big banana plantation. When he felt threatened by repeated stealing of bunches of bananas from this field, his father advised him to keep watch over the plantation so that he would find out who the prowler was. That same night, Lika saw the thief and shot a poisoned arrow at close range at him. But he was horrified when he noticed that the victim was his own nephew, the son of Boa, his brother. His father Boa asked him (Lika) to flee, because he was afraid of the uncles of the deceased. Lika took with him Bukimi, his wife, and three brothers: Nyakpa, Bali and Yenga. With others who joined him he went eastwards to explore new suitable areas for agriculture."

In what is presently the Wamba Territory, the "Bolikó ko Toliko" managed to resist the attacks by the Mangbetu (Moeller 1936:262). The Liko stopped the migration of the Budu in this area (Moeller 1936:35), or invaded part of Budu and Ndaka territories, which they lost again when the Zanzibari raiders and traders arrived (Van Geluwe 1960:13), in the second half of the 19th century (Vansina 1990:240). The pocket of Liko speakers who presently live in the Rungu Territory

---

^3 Geographical location of Bambili: lat: 3.653, long: 26.125, Poko lat: 3.136, long: 26.8969, Isiro lat: 2.7722, long: 27.6083, Bafwabaka at the Nepoko river: lat: 2.117, long: 27.667. In a straight line, the distances are: Bambili - Poko: 103 km, Poko - Isiro: 89 km, Isiro - Bafwabaka: 73 km.

^4 Interview with NGANDOPEY, September 19, 2007, à Obongoni; my translation to English.
Introduction

are mentioned in Moeller (1936:262) as "Les Malika du Nord, battus et desorganisés par les Madjo, sollicitent l'alliance des Mangbetu."

The Liko area consists of a rainforest-derived mosaic of dry, swamp, and secondary forest, with cultivated fields. Most Liko are farmers living in villages with some husbandry, mainly goats and chickens, some raise pigs (adopted from Budu, with whom the Liko have a lot of shared culture and intermarriage). Some men go hunting to supplement the staple menu of plantains, rice, beans and maize; women and children gather insects and condiments. Palm oil is produced for cooking and other usages. Villagers along the rivers practise fishery.

Production of goods is limited to small-scale crafts and enterprises like carpentry, the making of hunting material, tailoring, the weaving of hats, nets, mats, etc., pottery, smithy, the making of traditional soap bars, the making of thumb pianos, etc. With the arrival of bicycles and motorbikes, some people have specialized in repair jobs. There are a few small rice-hulling machines. People build their own rectangular houses facing the road. Some men have specialized in producing wooden tiles or placing them on roofs. Paid professions are limited to primary and secondary school teachers, medical staff, civil servants and some clergy in churches.

Most traders in the Liko area come from outside, some (often Nande) carry their stock on bicycles all the way from towns in the east of the country, like Beni or Butembo. Babonde, one of the major villages in the Liko area, has a big market every week. Gold has been found in the southwest of the Balika-Toriko Chiefdom. The village of Bole-bole has become the centre of gold-digging activity, which has attracted many non-Liko speakers. The impact on the Liko language to date is limited, in part due to the (lack of good) infrastructure. The Liko live in the Ituri rainforest; there are no paved roads in the Balika-Toriko Chiefdom nor major transit roads. In a period of four weeks in the Liko area in 2010, the only car I saw

---

5 Also referred to as Medje, a Mangbetu dialect.

was at the Catholic Parish of Babonde. About half of the population is Christian (the majority being Catholic). Many practise traditional religion as well.

The Liko people in the Balika-Toriko Chiefdom consist of twenty clans. The present Chief comes from the 'Balamasyé clan'. The residence of the Chief is in Likásí, the main centre of the Bovopiyé clan. Table 1 in 1.3 lists the clans, with the main centre and their Liko varieties.

1.2 Linguistic context

Languages of three language families are spoken in the Oriental Province of the Democratic Republic of the Congo: Bantu, Adamawa-Ubangi and Nilo-Saharan. Liko is one of the Bantu languages in this Province. Liko is part of the so-called Bantu borderland Languages. To the north, east and part of the south, it borders to Budu, another Bantu borderland language, to the west and part of the south to Mangbetu, a Nilo-Saharan language. All of these languages are spoken in the Wamba Territory. Budu speakers are reported to represent about 72% of the population in this territory, Liko speakers about 25%, the rest (the Mangbele and Mabyeru clans) are speakers of Mangbetu (Edema 2004, p.c.). Liko speakers express that their language has more linguistic affinity to Bali and Bua, languages spoken further to the south and west respectively, than to Budu.


---

7 All clan names have initial implosive /ɓ/.  
9 Liko does not appear in Guthrie's classification.
Toriko parlent une langue très approchante de celle des Ababua ou pré-Ababua" (1936:260) and that the Bali "sont communément considérés comme étroitement apparentés aux Ababua." (1936:262).

Figures published by Boone and Olson after a survey of Bua languages in 1994 show 57% lexical similarity between Liko and Bua, 52% between Liko and Bali, 49% between Liko and Komo (D.23) and 28% between Liko and Budu (1995:69). For Kango (C.403)\(^\text{12}\), a language spoken in the Bas-Uélé district, along the river banks of the Uélé river, Boone and Olson report a lexical similarity with both Bua and Liko of 65\% (\textit{ibid}.:73). Liko and Bua share the presence of noun-class enclitics, "a distinctive of Bua bloc languages" (\textit{ibid}.:9). The question with which

\(\text{Figure 1: Language map of the Liko language area.}^{\text{10}}\)\(^{\text{11}}\)

\(\text{11}\) In this map, the name of the Bua language is Bwa.
\(\text{12}\) Not to be mistaken for the Kango spoken to the north of the Bali area in the Bafwasende Territory.
\(\text{13}\) Liko has noun-class enclitics in classes 7, 13, 15 and 19 (and some isolated cases in classes 3, 5, 6, 8 and 9). Motingea reports noun suffixes for Bua in classes 1, 2, 3, 4, 5, 6
languages Liko would be best grouped together remains unresolved. The language has developed a number of interesting and unusual features. Boone and Olson conclude that: "At present, Lika and Bali cannot confidently be attached either to the "Bua Group", or the "Komo Group", nor to a new group on their own." (ibid.: 7). Engama is currently working on a comparative study on Liko, Bali and Bua.

His and other future research is needed to gain more insight into the linguistic relationship between these three languages.

1.3 Dialects

Liko has three dialects in the Balika-Toriko Chiefdom with a very high degree of lexical similarity, i.e. more than 95% between any of them. Liko speakers refer to the dialects with the word used to express 'water', ìɓó, ìɓó and ìɓá respectively. The Liko community considers the ìɓó variety to be the main dialect, because it is most widely spoken and it is geographically central in the Liko language area. The Liko language committee has chosen the ìɓó variety as the one in which language development, e.g. the making of an orthography, the production of literacy material and the translation of the Bible should take place. The ìɓó variety is the dialect described in this book.

The ìɓó variety is spoken in the east and southeast of the Liko language area (as far as the Nepoko river). The main difference between ìɓó and ìɓó is phonological and concerns the systematic absence of the [l] and [s] sound of the noun-class 5 prefix ɓ- and noun-class 7 prefix s- in the ìɓó dialect, e.g. ìɓó ɓ-t consolidate '5-heel' vs. ìɓó j- consolidate. Intervocalic /l/ in ìɓó often is absent in ìɓó, e.g. ìɓó ɓ-kaa '5-ember' vs. ìɓó v-kaa and ìɓó ma-lii '6-food' vs. ìɓó ma-ii. The ìɓá variety is spoken to the northwest of the Balika-Toriko Chiefdom and by Liko of the Balika-Kpongo clan, with Nduka as the main village, who live in the Mongomasi Chiefdom, Rungu Territory, surrounded by Mangbetu speakers. The ìɓá dialect has more

---

14 The subject of his masters thesis was also a comparison of the Liko and Bua languages (Engama 1991).

15 I would like to thank Gabriël Engama Magbangbau for these examples.

16 There is still a lot of contact between the Liko in the Chiefdoms Baliko-Toriko and
Introduction

lexical items that differ from líɓó than îɓó, but still relatively few.17 A phonological difference is that in many words líɓó has /o/ where líɓá has /a/, which is the case with, for instance, the final vowel of [+ATR] verbs in líɓó.18

Table 1 lists the Liko clans in the Balika-Toriko Chiefdom with their dialect and their geographical neighbours.

Table 1 Liko clans and dialects and geographical neighbours

<table>
<thead>
<tr>
<th>Clan</th>
<th>Main centre19</th>
<th>Located in the Chiefdom</th>
<th>Neighbours speaking other languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>líɓó dialect:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ᄃバリョş</td>
<td>Gibaegbae</td>
<td>central</td>
<td>20</td>
</tr>
<tr>
<td>ᄃバリュンディ</td>
<td>Babonde</td>
<td>north</td>
<td>21</td>
</tr>
<tr>
<td>ᄃボポピョ</td>
<td>Likasi</td>
<td>north</td>
<td>Budu 22</td>
</tr>
<tr>
<td>ᄃボボンビリ</td>
<td>Bovombili</td>
<td>north</td>
<td>23</td>
</tr>
<tr>
<td>ᄃバリペlé</td>
<td>Bakpele</td>
<td>north</td>
<td>Mangbetu 24</td>
</tr>
<tr>
<td>ᄃバリpe</td>
<td>Gatoa</td>
<td>west</td>
<td>Mangbetu 25</td>
</tr>
</tbody>
</table>

Mongomasi, for instance with circumcision rituals and marriages.
17 Boone (1989:1) reports that during the 1989 survey, a speaker from the Mongomasi Collectivity was present and that it appeared that his dialect was essentially no different from one of those spoken in the main Liko area.
18 I suspect that the îɓá vowel system differs from the líɓó dialect with respect to the [ATR] mid vowels, e.g. líɓó mukwé ‘salt’ and ngbíngó ‘1.a.time’ vs. líɓá mukwa and ngbíngó.
19 The main centres are written with their official names. The {b} and {d} are implosive, except the one in Obongoni.
20 Liko neighbours: ᄃバリュンディ, ᄃボポピョ, ᄃバリpe, ᄃベヴェンディナム, ᄃベヴェグゥ, ᄃボボンビリ, ᄃバリペlé, ᄃバリサンマ, ᄃバリギャ_gbaka.
21 Liko neighbours: ᄃバリョş, ᄃボポピョ, ᄃバリペlé.
22 And Liko neighbours: ᄃバリソ_yé, ᄃバリュンディ, ᄃベヴェシィメディ, ᄃボフォンドィ._ni.
23 Liko neighbours: ᄃバリュンディ, ᄃベヴェンディナム, ᄃバリpe, ᄃバリョş, ᄃバリサンマ, ᄃバリギャ_gbaza.
24 And Liko neighbours: ᄃボポピョ, ᄃバリュンディ, ᄃバリョş.
25 And Liko neighbours: ᄃバリョş, ᄃボィ_yó, ᄃバリンディká.
## Clan

<table>
<thead>
<tr>
<th>Clan</th>
<th>Main centre</th>
<th>Located in the Chiefdom</th>
<th>Neighbours speaking other languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bobiyó</td>
<td>Bobiyo</td>
<td>west</td>
<td>26</td>
</tr>
<tr>
<td>Bavabazwa</td>
<td>Yambenda</td>
<td>west</td>
<td>27</td>
</tr>
<tr>
<td>Bevendéname</td>
<td>Fungula</td>
<td>west</td>
<td>28</td>
</tr>
<tr>
<td>Bevegukú</td>
<td>Beveguku</td>
<td>west</td>
<td>29</td>
</tr>
<tr>
<td>Bovotukusyangwe</td>
<td>Bovotukusyangwe</td>
<td>west</td>
<td>Budu 30</td>
</tr>
<tr>
<td>Badidiká</td>
<td>Badidika</td>
<td>southwest</td>
<td>Mangbetu 31</td>
</tr>
<tr>
<td>Bangómbo</td>
<td>Gbonzunzu</td>
<td>south</td>
<td>Budu 32</td>
</tr>
</tbody>
</table>

### Ɓɓó dialect:

<table>
<thead>
<tr>
<th>Clan</th>
<th>Main centre</th>
<th>Located in the Chiefdom</th>
<th>Neighbours speaking other languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bavasamba</td>
<td>Obongoni</td>
<td>east</td>
<td>Budu 33</td>
</tr>
<tr>
<td>Bevesyéni</td>
<td>Mabende</td>
<td>east</td>
<td>Budu 34</td>
</tr>
<tr>
<td>Bavágbaka</td>
<td>Bafwabaka</td>
<td>southeast</td>
<td>35</td>
</tr>
<tr>
<td>Bavadangbá</td>
<td>Bavadangba</td>
<td>south</td>
<td>Budu 36</td>
</tr>
<tr>
<td>Bevegénì</td>
<td>Bevengeni</td>
<td>west</td>
<td>towards Bali 37</td>
</tr>
</tbody>
</table>

### Ɓɓá dialect:

<table>
<thead>
<tr>
<th>Clan</th>
<th>Main centre</th>
<th>Located in the Chiefdom</th>
<th>Neighbours speaking other languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bovofoondóní</td>
<td>Bovobondoni</td>
<td>north</td>
<td>Budu, Mangbetu 38</td>
</tr>
<tr>
<td>Bamaká</td>
<td>Bamoka</td>
<td>north</td>
<td>Budu, Mangbetu 39</td>
</tr>
</tbody>
</table>

---

26 Liko neighbours: Ɓapé, Bangómbo, Bevegénì.
27 Liko neighbours: Ɓovofoondóní, Ɓapé, Bobiyó, Badidiká.
28 Liko neighbours: Bangómbo, Bavamasyé, Bovombili, Bobiyó.
29 Liko neighbours: Bavamasyé, Bevendéname, Bovotukusyangwe, Bovágbaka.
30 And Liko neighbours: Bevegukú, Bavágbaka, Bangómbo, Bevendéname.
31 And Liko neighbours: Ɓapé, Bevegénì.
32 And Liko neighbours: Bevegénì, Bovotukusyangwe, Bevendéname.
33 And Liko neighbours: Bavamasyé, Bavágbaka, Bavadangbá, Bevesyéni.
34 And Liko neighbours: Bavasamba, Bovopiyé.
35 Liko neighbours: Bavamasyé, Bavasamba, Bavadangbá, Bovotukusyangwe.
36 And Liko neighbours: Bavágbaka, Bavasamba.
37 Liko neighbours: Bobiyó, Bangómbo.
38 And Liko neighbours: Bovopiyé, Bamoká.
39 And Liko neighbours: Bovofoondóní, Badidiká, Bovopiyé.
1.4 Language use and attitudes

Liko is used at home and in meetings where only Liko speakers are present. Wives from neighbouring languages are expected to learn Liko and many do. Liko people are proud of their language. In 1989 representatives of all religious denominations in the Baliko-Toriko Chiefdom produced a document stressing the importance of the language and the need to develop and use it in more domains through the normalization of the orthography, the creation of literacy and teaching materials and the translation of the Bible. Young people are said to speak Liko well, even though the ones who have contacts outside the Liko are (through education or travel) introducing more loanwords in their speech than older people. A reading proficiency contest involving Liko secondary school students in Gbaegbae showed that these students were able to read texts in Liko well, without prior literacy classes in Liko orthography. On the other hand, young people know less specific flora and fauna terms than the older generation.

Swahili is the language used predominantly by the government in the area, in medical clinics and in courts. Chiefs, medical staff and judges repeat in Liko if the interlocutor does not understand Swahili well enough. Chiefs of smaller entities ("groupements" and villages) usually speak Liko. In church services Swahili and Liko are the main languages which are used. Scripture reading is in Swahili (the Bible is not yet available in Liko), sermons and prayers are partly in Swahili and partly in Liko, singing is in Liko, Swahili, Lingala (or the Eastern-Congo variety Bangala) and sometimes in the neighbouring Bantu languages Budu or Bali. Announcements are often in Liko. Most clergy in the Protestant churches is Liko. In the Catholic church lower clergy is mostly Liko, the majority of the priests come from outside and they generally do not learn Liko.

At the market and in shops, a combination of Liko and Swahili is used when both the vendor and the buyer are Liko. Products that are not produced locally are usually referred to by Swahili words. Counting is in Swahili, except for numbers under ten.

40 A number of villages.
French is the language of instruction in secondary schools and in primary schools from the third year (both have a curriculum of six years). In the first two years of primary school, teaching is in Swahili. Liko is occasionally used in the first years to give explanation, because the majority of the children do not speak (a Congolese variety of) Swahili when they first go to school. There are no institutions of higher education in the Liko area. Two Liko teachers have just finished their studies in Education at University of Kisangani. The objective is that they will develop teaching materials in the Liko language for use in primary schools.

Bilingualism in Liko and Swahili is higher among men than among women, due to the high drop-out rate of girls in primary school. Proficiency in French, the official language in the Democratic Republic of the Congo, is generally limited to people who have had at least four years of secondary education.

1.5 Research context

In 1989, the Eastern Congo Group of SIL International conducted an entrance survey for the Liko language. Participants were Douglas Boone and Bettina Gottschlich41 (SIL) and the members of the Lika language committee at the time as well as two observers42. In 1995, the "Projet de la Traduction de la Bible et d'Alphabétisation en langue lika" was started. Translation of the Bible began in 2004 and literacy booklets have been published since 2006. A few years ago, a Congolese organization, "Centre Interconfessionnel de la Traduction de la Bible et d'Alphabétisation" took over the responsibility for and management of this project from SIL. The present study is a contribution to the literacy and translation objectives of this project.

41 Now Modibale-Gottschlich.
42 Listed in Boone (1989:15) are: Tinda Nangaa (president), Banagabwa Gbaoli (vice-president), Embobo (secretary), Abakwedu, Alowa, Asebeangwe, Bambama, Bavalengo, Bondomiso, Bulodanga, Dupo, Engama, Gili, Iguku, Ingwabundo, Kakome, Kesena, Kokyakake, Mangbukele, Mombito and Opumo; as observers Babiti and Bakunguo.
1.6 Previous studies

Four Liko speakers wrote a "travail de fin d'études" about their language as part of college graduation requirements (the three year "graduat" level at an "Institut Supérieur Pédagogique" or university):


In 1989, at the time that Boone and Gottschlich did a Liko entrance survey for SIL, the last three works were presented to them while they were in the village of Djuba in the Liko area. Unfortunately, only the work by Edema was available to me. In 2007, Edema suddenly passed away.

None of these authors, Edema, Asebeangwe and Engama, mention complex consonants that involve a nasal: prenasalized /mb, nd, ng, nz, ny, mgb/, except Edema who claimed that /ng/ is a contrastive consonant.

All list seven vowels representing four vowel heights. Edema, however, states in his conclusion (1979:24):

"Nous avons simplifié le vocalisme. Il existe des i et u plus ouverts que les i et u mais qui sont plus fermés que e et o. Ce qui peut laisser croire que le liliko présente 9 voyelles. Mais comme ils n'entrent pas dans une opposition phonologique, nous les avons simplement classés sous i et u."

---

43 Also Edema, Atibakwa Baboya.

44 I would like to thank Constance Kutsch Lojenga for scanning her copy and sending it to me.
Boone (1989:6) believes that Edema had reason to believe that Liko has nine vowels. Kutsch Lojenga (1999) presents evidence for a nine-vowel system in Liko. Chapter 2 in this book gives support for this analysis by giving more examples of phonological contrast between /i/ vs. /ɪ/ and /u/ vs. /ʊ/.

With respect to tone, Edema (1979:21-22) has posited two level underlyingly contrastive tones (High and Low) and one complex tone (rising). Asebeangwe has five surface tones: three level tones, plus rising and falling (1988:22-23, in Boone 1989:6). Asebeangwe's third level surface tone may be his interpretation of non-automatic downstepped High. Surface falling tones on one syllable have not been attested in the language. Kutsch Lojenga (2000) showed that certain rising surface tones are the result of a preceding voiced consonant, a so-called "depressor" consonant.

Kutsch Lojenga worked with Embobo and Engama for several weeks in 1999 with the aim of setting up a provisional orthography. From 2000 until 2002, De Wit and Engama worked on an initial corpus of about 2,000 items. In 2002 Engama wrote a morphology of the Liko language (12 pp), treating nominal and verbal morphology. He lists the following noun classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 14, 15 and 19, pairing as 1/2, 3/4, 5/6, 7/8, 9/2 and 15/6. His class 7 has noun-class prefix ɩ- and class 19 has ɩɡ-. A slightly modified analysis of the Liko noun-class system is presented in 5.1.1. De Wit, Engama and Nederveen wrote a first phonology of the language in 2002 as a basis for the Liko orthography guide (both in French). In 2008, Williams and Beattie made a Liko-French picture dictionary with a lot of cultural information. A trial edition of a Liko-French/French-Liko dictionary (de Wit, 2010b) was printed for the Liko community.

With a corpus of recordings of about 1550 Liko lexical items, mainly nouns and verbs, recorded by Augustin and phonetically transcribed by Augustin, De Wit and Kutsch Lojenga, Casali (2004) prepared A Phonology Sketch of Liko in the context

---

45 He comments: "It is probable that since Lika is a Bantu language, the students were not expecting to find ±ATR distinctions (characteristic of Sudanic languages), nor more than the seven vowels more normally found in Bantu languages."
of the SIL Bantu Initiative project. His phonetic analysis of the consonants and vowels has inspired further research into the phonological structure of the language and vowel harmony. Areas of interest mentioned were among others the status of palatal plosives and fricatives, the glottal fricative, labialization and palatalization, labialized labial-velar stops, [ATR] vowel harmony and the tone system. I made an updated and enlarged version of the 2002 *Phonologie de la langue Lika* available to French-speaking students and linguists, through the *Lika phonologie* in the SIL Electronic Working Paper series (de Wit 2010a).

Kutsch Lojenga (2009) addressed [ATR] vowel harmony in Liko in 'Nine vowels and ATR vowel harmony in Lika, a Bantu language in D.R. Congo', published in *Africana Linguistica*. Earlier she presented a paper on the vowel /a/ in a [+ATR] environment (Kutsch Lojenga 2002) and a paper on ATR vowel harmony in the northern Bantu borderland with data of Budu and Liko (Kutsch Lojenga 2005). In the 2009 article, Kutsch Lojenga discussed the nine-vowel system, unusual for Bantu languages, which Liko shares with Bali, Budu, Bila, Nyali and Vanuma (2009:65). Kutsch Lojenga analysed the ATR vowel harmony system in Liko as [+ATR] dominant, bidirectional and the vowel /a/ as being transparent. She posited the [-ATR] noun-class enclitics as an idiosyncratic case of dominance reversal, extending one syllable to the left. The analyses in this article have been helpful in researching ATR vowel harmony in Liko again with more language data, see 3.2.

In 2010, Augustin submitted her MA thesis *Selected features of syntax and information structure in Lika (Bantu D.20)*, a sketch of Liko morphology and syntax as well as a description of the syntactic means to indicate topic and focus. The sketch of morphology and syntax is based on the *Phonology Sketch of Lika* and the *Lika phonologie* mentioned above, and on my fieldwork notes (2006) shared with Augustin, as well as on Augustin's own analysis of an existing collection of Liko texts. The analysis of topic and focus follows the framework of Lambrecht (1994). Unfortunately, tone marking is generally absent in the examples. The choice to research one element of a largely undocumented language from a particular theoretical framework has led to the identification of type I

---

46 Also published by SIL in 2012 as eBook 36.
demonstrative *nɔ̌* (which agrees with noun class 1) as the focus particle. A different analysis of information structure in Liko is presented in Chapter 8.

Liko data featured regularly in presentations at a Colloquium of African Languages and Linguistics, University of Leiden. Between 1999 and 2014, the following papers were presented: 'The Vowel System of Lika: first impressions' (Kutsch Lojenga 1999) in which she also showed ATR vowel harmony in the language, 'Adjectives in Lika' (de Wit 2004), 'Noun class suffixes in Lika' (Nederveen 2004), 'ATR vowel harmony effects in writing' (de Wit 2006), 'High tone noun prefixes in Lika' (de Wit 2009), 'The behaviour of Lika depressor consonants' (de Wit 2010c) and 'Word Order and Information Structure in LIKO' (de Wit 2014).

1.7 This book

A Phonology and Grammar of Liko presents a detailed description of a language which is until now largely undocumented. The first three chapters treat the phonological structure, the main phonological processes, and tone and tone rules. The morphology of nouns, adjectives, nominal modifiers, and of minor word classes is presented in the following two chapters. A separate chapter is devoted to the verb, the structure of the verb form, its morphology, the semantics of verbal conjugations and verbal derivation. The final chapter describes a selection of syntactic topics, including information structure. A collection of ten texts is offered in the first Appendix and verb paradigms can be found in the second. I have taken examples from non-elicited natural speech as much as possible. They serve to support the descriptive nature of this work and to provide language material for future research of specific topics.

The first visit to the Liko people was in 1995, when my wife and I made a two-week bicycle tour in the area with members of the Liko language committee, staying at a different village almost every night. The initial corpus of rough language data was collected using a 2,000 item French wordlist provided by me to Engama. These data were checked for phonetic segments and tone during sessions of three weeks in Nairobi in 2001 and 2002; in 2001 with the Liko consultants Bodokobuni and Engama, in 2002 with Banotanea, Engama and Ndagba. I stayed in the Bavamasyé village of Gbaegbae [ɡbaɛɡbaɛ] in 2004, 2005, 2007, 2008 and
2010. These fieldwork trips lasted for three to four weeks at a time. Liko consultants were Asumani, Bakaato, Banotanea, Bodokobuni, Engama, Kamenabake, Ndagba and Ndimo. During each visit, parts of the phonology, tone system or grammar analysed earlier were presented to the Liko consultants in the form of training sessions with the aim of improving the quality and depth of their reflection on their language. In 2013, I worked with Liko consultants in Isiro for four weeks.

Apart from data checking during these visits, a final check of all Liko data in this book has been done with Liko consultants Kamenabake, Ndagba and Ndimo from February until December 2014 by means of data files of 15 to 20 pages A4 each. The Liko consultants received a financial contribution for their work. Each file deliberately contained about ten known segmental, supra-sessional as well as orthographical and French translation errors to ascertain the quality of the corrections. In most files, all these errors were corrected, including cases of non-automatic downstep.

The main Liko consultants I worked with in the period from 2000 to 2015 are:

- Dominique Banotanea Bapokanzo (ɓbô)
- Gabriël Engama Magbangbau (ɓbô)
- Jean-Pierre Kamenabake Ndukoni (ɓbô)
- André Ndagba Ambinende (ɓbô)
- Rigobert Ndimo Natambise (ɓbô)

Other main Liko consultants between 2000 and 2009 are:

- Thérèse Asumani Ingbou (ɓbô)
- Edouard Bakaato Bogyonokoli (ɓbô)
- Lazare Bodokobuni Bosisi (ɓbô)

The data used for this book consist of 3,500 main lexical items and over 1,000 subentries, 86 texts, most of which are printed and used as literacy material, the translation of part of the Bible in Liko (Genesis and the New Testament), as well

---

47 The names of the Liko consultants are given as they write them. In most cases, the "B" is implosive.
as recordings of texts and wordlists, field notes and material collected through elicitation.

Liko is a Bantu language with several characteristics which made it interesting to do research and to describe it. In Chapter 2, "Phonological Structure", the nine-vowel system is presented, as well as complex consonants like labial-velar plosives, which are followed in some words by a bilabial trill.

The pervasive ATR Vowel-Harmony system and the widespread occurrence of Vowel Sandhi are described in Chapter 3, "Vowel Harmony and Phonological Processes". The vowel harmony system is [ + ATR] dominant, but there are several verbal and noun-class [ − ATR] enclitics in the language which have impact on preceding non-high vowels.

Liko is a tone language with two underlyingly contrastive tones: High and Low and both lexical and grammatical tone contrasts. Certain voiced obstruents (so-called "depressor consonants") have influenced and to some extent may still influence the realization of a following H tone. Liko has automatic as well as non-automatic downstep. The tone system, depressor consonants and the tone rules are described in Chapter 4. Being familiar with the content of Chapter 3 and 4 will help the reader to read the subsequent chapters.

The Liko noun-class system contains 14 noun classes; classes 1 and 9 have several subclasses. Apart from nominal agreement, the language has concord sets for adjectives, numerals and associative constructions including a specific set of nominal modifiers. Nouns, adjectives, nominal modifiers and numerals (including pictures of counting) are presented in Chapter 5. This chapter also contains the derivations from nouns, adjectives and nominal modifiers to nouns or other word classes.

48 In Stewart's terminology (1983). Automatic downstep is also referred to as 'downdrift'. 'Downstep' is often used for non-automatic downstep.
In Chapter 6, "Other Pronominal Forms and Invariables", two other agreement systems are presented, for pronominal substitutives and demonstratives. Genitival constructions, different from associative constructions in which a nominal modifier, a noun or a quantifier is used attributively, use a single prefix, only subject to ATR vowel harmony when it occurs within the domain of [+ATR] spreading. Also of interest in this chapter are ideophones.

Verbal agreement with the noun-class system is very limited in Liko. To encode tense/aspect/mood, the language uses time adverbials as well as segmental morphemes and tone melodies. They are described in Chapter 7, "Verbs". The seven productive extensions are exemplified: Causative, Applicative, Benefactive, Resultative, Neuter, Associative and Pluractional. This chapter also presents the possibilities to derive nouns, adjectives and adverbs from verbal bases.

Chapter 8, "Topics in Syntax", pays attention to verb valency and object agreement, word order, relative clauses, information structure, comparison and complex sentences, including the use of Infinitives. Liko is a language with strict SVO word order. Focus, for instance, is not expressed by putting the element in focus at the beginning the clause. Relativization and left-dislocation reveal a syntactic means to differentiate between objects and adjuncts in this language.

The collection of texts in Appendix 1 includes: oral stories, history (former circumcision rites), technical and moral instruction and a new story, written for literacy classes.

The following word classes are distinguished in this book: noun, verb, adjective, nominal modifier, numeral, quantifier, substitutive, participant pronoun, possessive pronoun, demonstrative, preposition, interrogative question word, adverbial, complementizer, conjunction, ideophone, interjection and exclamation.

Nouns in Liko consist of a noun-class prefix, a stem and - for a number of nouns - a noun-class enclitic. Each noun is assigned to a class. A class is determined by the noun-class prefix and the concords with adjectives, nominal modifiers, numerals and demonstratives. Nouns function as head of noun phrases and as complement of prepositional phrases. Noun phrases function as subject and object of clauses.
Verbs consist of a stem preceded by bound morphemes. Morphemes preceding the
verb stem are the subject prefix, the negative prefix, the Conditional and aspect
prefixes and the object prefix. A verb stem includes the verbal base and a final
vowel. The verbal base may be simple, consisting only of a verb root, or extended,
consisting of a verb root followed by one or more extensions. By means of a
combination of tone and segmental morphemes, a verb can be inflected for tense,
aspect and mood.

Adjectives in Liko are a closed class of eight adjectival stems. Adjectives take an
adjectival prefix, which agrees with the noun on which they syntactically depend or
to which they refer.

A large group of words occurs as part of a noun phrase and modifies the head
noun. They do not take a nominal or adjective prefix, but take an associative
prefix, which agrees with the class of their head noun. They are referred to as
"nominal modifiers".

The numeral stems for 'one' to 'four' take enumerative prefixes, which agree with
the head of the noun phrase in which they occur. Other numerals are invariable.
Ordinals and quantifiers are not preceded by an enumerative prefix. They occur in
associative constructions.

Pronominal substitutives are forms which agree with the class of the noun they
refer to. Substitutives and participant pronouns function to fill the position of a
noun phrase in a clause. Liko has three types of demonstratives different in form
and semantic properties. Demonstratives agree with the noun on which they
syntactically depend or to which they refer. Possessive pronouns consist of the
genitive prefix ka- and (part of) a participant pronoun or substitutive.

Prepositions are a closed set of three invariable stems. They precede a noun and
are the head of a prepositional phrase. Liko has question words belonging to the
word class of nouns and invariable question words. Adverbials in Liko are a
heterogeneous group comprising invariable free or bound morphemes referring to
time, location or manner, words specifying the action of the verb, particles in
information structure, and other elements. Many adverbials referring to manner or
specifying the action of the verb are bound morphemes, preceded by the general modifier prefix ɓɛ̀. The complementizer ɓɛ̀ and conjunctions are invariable and function to relate two clauses.

Ideophones are invariably free or bound morphemes with specific phonetic characteristics. Bound ideophones are preceded by the general modifier prefix ɓɩ́-. The characteristics found in ideophones also are attested in interjections and exclamations.

1.8 Conventions

The segmental representation of consonants and vowels in this book is given in 2.2.1 (consonants) and 2.3.1 (vowels). Prenasalized consonants are represented as /mb/, /nd/, /ng/, /ngb/, /nv/ and /nz/. The representation of the palatal nasal sonorant [ɲ] is /ny/. The representation of the palatal oral sonorant [j] is /y/. Glides resulting from desyllabification are represented as /y/ or /w/. In this book, [i] is used instead of [ɪ] because it is easier for the reader to distinguish [i] from [ɪ] when the vowel bears tone marking.

Surface High tone (H tone) is indicated by means of an acute accent on any tone-bearing unit (TBU). A combined LowHigh surface tone (LH) is represented as an inverted circumflex on a TBU. Surface Low tone (L tone) is represented by the absence of a diacritic. In the chapter on Tone and in phonetic representations, surface L tone is marked by means of a grave accent. Non-automatic downstep is represented as a superscript arrow facing downwards. A floating tone is indicated by a raised o preceding the tone symbol, e.g. ³L.

With respect to glosses, a number represents a noun class or a person. A number in a gloss of a noun-class, adjective, enumerative or associative prefix, in an object prefix, or in a gloss of a substitutive or demonstrative form indicates the noun class. Roman I, II or III represent the type of demonstrative. A number in a gloss of a subject prefix indicates person (1SG, 2SG, 1PL, 2PL) or noun class. Subject prefixes do not agree with noun classes, except for class 2. In the case of a plural subject that does not belong to class 2, the subject prefix is glossed with 3SG/3PL. Otherwise, the gloss of the subject prefix is simply 3SG. The gloss of the time-
reference adverbials represents Past or Future and the relative distance from the
deictic centre, e.g. F₁ represents a point in time in the future, later today, and P₁ indicates a point in time in the past, earlier than about a week ago. Verb forms for Past and Future are distinguished only by means of a difference in tone on the TBU of the subject prefix: Past is marked with a H tone. In the gloss, this is represented by means of a raised P, e.g. 1SG²-throw-FV. To indicate that the time reference is specifically to the past, a H tone is associated with the final vowel (FV) of a verb form. I will refer to it as "Past (specific)". Past (specific) is represented by a raised P following the FV, e.g. 1SG²-throw-FV².

The verb-final vowel in combination with a tonal melody indicates negation or certain kinds of aspect and mood. If this is the case and if other glosses of the verb form do not represent it, the gloss of the final vowel is extended, e.g. FV.NEG for negation, FV.ANT for Anterior aspect or FV.SUBJ for Subjunctive mood.