AKA AS A CONTACT LANGUAGE: SOCIOLINGUISTIC AND GRAMMATICAL EVIDENCE

The members of the Committee approve the masters thesis of Daniel Joseph Duke

Donald A. Burquest _____
Supervising Professor

Thomas N. Headland _____

Carol V. McKinney _____

To the Bayaka people and their friends

may our circle be unbroken

AKA AS A CONTACT LANGUAGE: SOCIOLINGUISTIC AND GRAMMATICAL EVIDENCE

by

DANIEL JOSEPH DUKE

Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

MASTER OF ARTS IN LINGUISTICS

THE UNIVERSITY OF TEXAS AT ARLINGTON

August 2001

ACKNOWLEDGMENTS

The road to finishing this thesis has been a long one, and many people helped me keep going to the end. Some special people helped carry the burden, and some nearly had to carry me. I want to thank everyone who had a part in seeing the work through. Thanks to family and friends who supported and encouraged me. There are some special friends who were very directly involved with the writing of the thesis, and who I'd like to thank particularly.

My committee consisted of Dr. Donald A. Burquest, Dr. Thomas N. Headland, and Dr. Carol V. McKinney. Each member put in a tremendous amount of time and effort into the redaction of the text, and each one contributed greatly from his or her specialization: Dr. Burquest in linguistics and African languages, Dr. McKinney in anthropology and African languages, and Dr. Headland in anthropology and hunter-gatherers. The thesis could not have been as ambitious as it was without the dedicated work and wide area or expertise these scholars brought into it. It was an honor for me to work with them.

My colleagues in Central Africa deserve special mention here, because this thesis grew out of our work together. Thanks to my survey partners Mikael Bister and Elysée Moehama. Thanks especially to the members of the Beka project: Dominique Kosseké, Saint-Jérôme Sitamon, François Ndinga, and Bartélémy Kombo, along with our linguistic consultant Constance Kutsch Lojenga. Thanks to our administrators Juerg Stalder and Dr. Mark Karan. And on that line, thanks to the Cameroon branch of SIL International for sending me on loan me to CAR in the first place, and for giving me extra time to work on the thesis.

A special thanks to the people who helped developed the ideas which led to the thesis. My professors at UT Arlington deserve much thanks: Dr. David Silva for teaching me phonology, and Dr. Susan Herring for teaching me Functional/Typological Grammar. They will recognize many of my earlier attempts at analysis in this thesis. A special “thank you” goes to Dr. Mary Morgan, who helped me develop the original ideas for the sociolinguistic analysis. Thank you to the Indiana University Linguistics Department for getting me started originally in linguistics, and for the years of encouragement since then.

Many friends have put themselves out to help me write this thesis. Thanks to Charlyn Teddar for her work in translating some texts for me. Thanks to Jana Keilholtz for proofreading the thesis and offering many helpful changes. Thanks to Dick Johnson, Dave Irwin, and Kris Roth for their encouragement. Any faults remaining in the thesis are the sole responsibility of the author, who is very much indebted to everyone who made this work possible.

April 5, 2001

ABSTRACT

AKA AS A CONTACT LANGUAGE: SOCIOLINGUISTIC AND GRAMMATICAL EVIDENCE

Publication No. _____

Daniel Joseph Duke, M.A.

The University of Texas at Arlington, 2001

Supervising Professor: Donald A. Burquest

This thesis presents a discussion of the typological classification and origins of the languages spoken by Central African Pygmies. It focuses on Aka, the language of the Bayaka Pygmies in Central African Republic (C.A.R.) and Congo-Brazzaville. The Aka language is shown to have arisen out of language contact between pygmy hunter-gatherers and the village agriculturalists with whom they trade. Typologically, Aka is a mixed language, with a Bantu structure but having a significant lexical and grammatical substratum that appears to be the remnant of an ancient pygmy language. The current language use patterns of the Bayaka and their villager patrons in the Lobaye region of C.A.R. are documented in detail. These patterns are analyzed and the analysis is applied to shed light on what language contact situation would have given rise to Aka.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

The following abbreviations are used throughout this thesis:

1s	first person singular	perf	perfective aspect
1p	first person plural	pl	plural
2s	second person singular	prog	progressive aspect
2p	second person plural	pstn	past-near
3s	third person singular	pstf	past-far
3p	third person plural	Qwd	question word
asp	aspect marker	rel	relativizer
C	consonant	RTT	Recorded Text Test
C.A.R.	Central African Republic	s	singular
c1, c2	noun-class 1, noun-class 2	SELAF	Société d'Études Linguistiques et Anthropologiques de France
dem	demonstrative	SIL	SIL International
D.R.C	Democratic Republic of Congo (former Zaire)	sp	species, kind of
FSI	Foreign Service Institute	SRT	Sentence Repetition Test
ideo	ideophone	sub	subjunctive
imp	imperative	TAM	Tense-Aspect-Mood
LWC	language of wider communication	V	verb or vowel, according to context
N	noun	voc	vocative
part	discourse particle		

CHAPTER 1
INTRODUCTION

1 Introduction

The Aka language is spoken by the Bayaka Pygmies of Central African Republic (C.A.R). and Congo-Brazzaville. The purpose of this thesis is to present Aka as a *contact language*. The definition of contact language is taken from Thomason:

> A *contact language* is a language that arises as a direct result of language contact and that comprises linguistic material which cannot be traced back primarily to a single source language. (Thomason 1997a:3, italics added)

The language contact in question is the interaction between the Bayaka hunter-gatherers and Bantu farmers and the bilingualism that resulted from it. The linguistic material in question consists of elements of Aka lexicon, phonology, and grammar which cannot be traced back to a Bantu origin.

1.1 Hypothesis

Aka is the language of the Bayaka hunter-gatherers of the Central African Republic and the Congo-Brazzaville. The Bayaka are one of the "Pygmy" groups in Africa, so called because of their physical traits and small stature. Since the time of the Ancient Greeks, the idea of small people living deep in Africa has captivated the imagination of Europeans.[1]

Although the Bayaka people have a lifestyle and cultural identity in common with other Pygmy groups throughout Central Africa, their language is clearly mostly borrowed from the villager communities around them. In structure and vocabulary, the Aka language is Bantu, part of the group called Bantu C10 (Bahuchet 1989:54). This presents an interesting

[1]See Bahuchet 1993c for an overview of Europe's fascination with Pygmies.

case: the people are clearly *not* Bantu, either in genetics, culture, or identity. However, they speak a Bantu language, albeit with 30% non-Bantu words in it (Thomas 1979:159), and many non-Bantu elements in the grammar (Thomas 1979:157). These non-Bantu words are shared by other Pygmy groups as well, for example the Baka of Cameroon who speak a Ubangian language. This fact has led Bahuchet (1993a:67) to hypothesize that the ancestors of the Bayaka once spoke a different, non-Bantu language, remnants of which remain as a substratum.

The Aka language is thus an excellent potential case of a *mixed language*. Hypothetically, the ancestors of the Bayaka would have been influenced by a Bantu language to the point that their own language borrowed not only Bantu vocabulary but also Bantu structure, until it eventually evolved into a Bantu language itself. Enough remnants of the old, non-Bantu language remained so that the Aka language is distinct from the Bantu language that occasioned its change. The ancestors of the Bayaka, then, would have experienced not a simple language shift, but the transformation of their language. Elements of the Bantu language, previously spoken as a second language, would have been incorporated into Aka, in a process of "integration" (Haugen 1956:40).

The concept of a "mixed" or hybrid language is very controversial. Sasse, in a discussion of a proposed "hybrid" language in Greece, noted:

> The Africanist is reminded of Ma'a, the most widely discussed "mixed language", which is composed of Cushitic vocabulary and a Bantu morphology. A few more of such languages have been reported in the literature, but *no plausible theory of their origin is as yet in sight*, especially due to the fact that we know very little about the actual history of the hybrid languages involved. (Sasse 1992:23, italics added)

A theory of origin for hybrids would presumably deal with both the social situation and the linguistic processes involved. The present study does not go so far as to offer a new theory of

hybrid origins, but does offer new observations on both the social situation and the linguistic process of origin for one proposed hybrid language, Aka.

The purpose of this work is to present the Aka language as a contact language. Specifically, it is a *mixed language*,[2] the result of contact between the language of the ancestors of the Bayaka and one or more Bantu languages. Two issues will be brought into focus: (1) what is the current language use situation of the Bayaka and their villager neighbors? and (2) what remnants of the earlier (non-Bantu) language remain in Aka today?

The language use patterns give clues as to how the integration might have came about historically. Diebold argued for the need for sociolinguistic data to be brought in alongside of linguistic data in the study of borrowing:

> My experience in dealing with bilingualism among the American Indian groups in Mexico suggests to me that a description of the linguistic phenomena alone, while perhaps instructive in enriching a typology of linguistic borrowing, is an idle exercise if left without sociological analysis. (Diebold 1961:97)

The analysis of the present language structure illuminates the results of the integration in Aka as presently spoken. Some of this analysis has already been done by Bahuchet and Thomas (Thomas 1979:157). In particular, they have found "interference" of an earlier (proto-Aka) language in the areas of the lexicon, the phonology, and the morphology. The present study confirms these insights, and adds additional instances from the phonology, morphology, grammar, and pragmatics. The goal is not to be exhaustive, but simply to demonstrate the explanatory power of viewing Aka from the diachronic point of view, as a hybrid language.

The discussion will be based on data from original research undertaken by the author, supplemented by previously published research from various disciplines.

---

[2]There are three kinds of contact languages: pidgins, creoles, and mixed languages (Thomason 1997b:75). See section 2.5.3, The “mixed language” controversy, for a discussion of the differences between the types of contact languages.

1.2 African Pygmies

No study of the Bayaka could be complete without understanding their unique position as "African Pygmies." Throughout Central Africa, wherever there are (or were until recently) rain forests, there have been hunter-gatherers who are distinct from villager populations, both in physical traits and in cultural identity.

These forest foragers speak various languages,[3] and have various ethnic identities. The Bayaka are one Pygmy group which has its own language. The Baka in Cameroon are another. The Bayaka are aware of the Baka and consider them "Bayaka who speak a different language." Many other African Pygmy groups exist: as many as 15 throughout Central Africa (Bahuchet and Thomas 1986:76). Only the Baka and the Bayaka have been documented conclusively so far as having their own unique language distinct from the language of the villagers with whom they relate. Figure 1.1 shows the placement of African Pygmies throughout Africa. The black spots are Pygmy groups who are said not to speak languages related to the Aka language,[4] while the two checkered ones include the Bayaka and the groups[5] related to them linguistically (Cavalli-Sforza 1986:24).

[3]It is often said that most if not all Pygmies speak *only* the language of the villagers with whom they trade. This is not true. This question will be addressed directly in chapter 4, Sociolinguistic Evidence.

[4]See section 1.4, History, for details about genetic relationships as shown through DNA testing.

[5]There are two Pygmy groups, the Baka in Cameroon and the Mbuti in eastern D.R.C., who are related to the Bayaka, both linguistically and genetically.

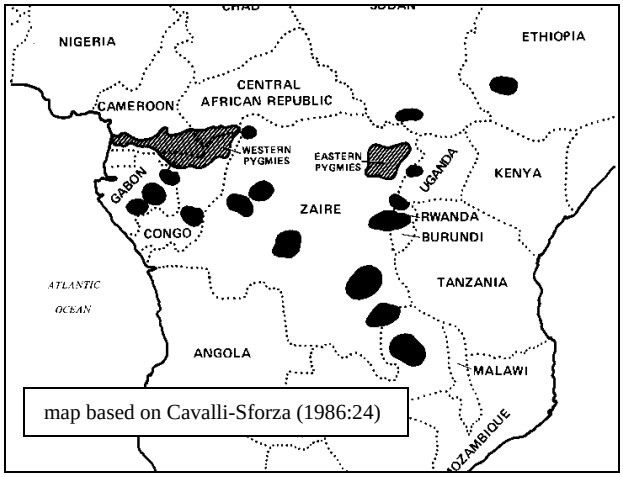


Figure 1.1. Distribution of African Pygmies.

The term *Pygmy* is used to group all of these various populations together. Homer mentions Pygmies in the *Iliad*. The Greek word *pygmaios* referred to a "one the size of a cubit (45 cm)" (Bahuchet 1993c). When Europeans found small-statured hunter-gatherers in the African rain forest, they immediately connected them with the mythical pygmies of the ancients. The name has remained in use in both the popular and scholarly literature to this day. For a detailed background of the term *pygmy* throughout history, see Bahuchet (1993c). Other general terms used in Africa for Pygmies are the pejorative *bambenga* (Sango and Lingala: possibly “spear-thrower” or “big-headed”)[6] and the more positive *citoyen* (French: “citizen,” for “first citizen”). Some people have objected to the use of the term *pygmy* (Kisliuk 1998:6), but no other denotation has been widely accepted by the scholarly community. In this work, *Pygmy* will be used when generalization is needed–otherwise, the specific ethnonyms of the groups involved will be used (Bayaka, Baka, Mbuti, etc.). Figure 1.2 gives the location of some of the groups of African pygmies (Bahuchet 1993a:74).

[6] Sango and Lingala are languages of wider communication (LWCs) in Central Africa.

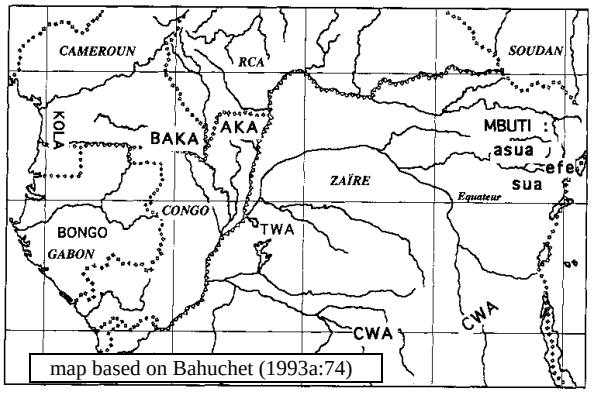


Figure 1.2. African Pygmy groups.

Researchers have noted that the African pygmies live in symbiosis with villager populations. Some cultural anthropologists have even claimed that tropical forest hunter-gatherers could not live without relationships with villagers (Headland 1987, Bailey et al. 1989, Headland and Bailey 1991, McKey 1996). Recent ethnographic studies of the Efe pygmies and the Lese villagers have emphasized the necessity of studying them both together as symbiotic subgroups of a single wider community (Grinker 1994:xii). Bahuchet and Thomas recognized the need to study the neighboring villager languages (spoken by non-Pygmies) in order to properly analyze the Aka language (Bahuchet and Thomas 1986:95).

1.3 Demography

The generally accepted population figure for the Bayaka people is around 30,000 (Bahuchet and Thomas 1986:81, Bahuchet 1993b:81, Grimes 2000). It is very difficult to determine the exact size of the Bayaka population due to their mobile hunter-gatherer lifestyle. The Central African government census of 1990 registered about 9,400 Bayaka in C.A.R (Recensement RCA 1988). Previously, Cavalli-Sforza had attempted a limited survey of the Bayaka of the Lobaye. He noted that only the Bayaka who happened to be near a

village at the time of the census would be counted (1986:26). This same restriction would certainly hold true for the 1990 government census.

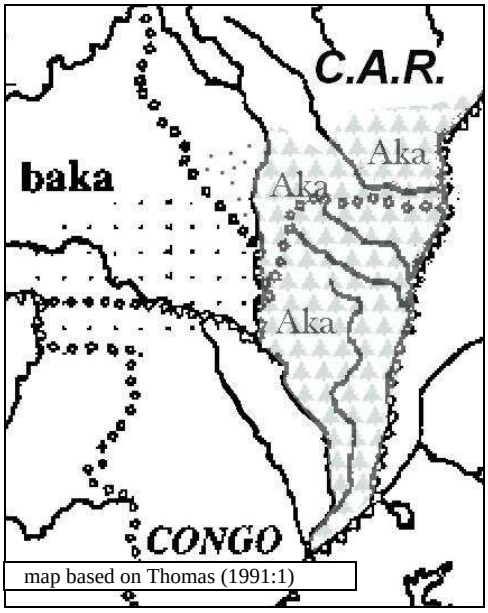


Figure 1.3. Bayaka region.

The area inhabited by the Bayaka is easier to determine: the rain forest of Central African Republic and Congo-Brazzaville, between the Sangha and the Ubangi Rivers (Bahuchet and Thomas 1986:81). More precisely, the Bayaka territory reflects the land that was covered by the forest before deforestation: another 30–70 kilometers beyond the current borders of the forest (personal observation). Figure 1.3 gives the location of the Bayaka (Thomas 1991:1).

It is possible that part of the Bayaka population lives across the Ubangi River in the western Democratic Republic of Congo (former Zaire). There are Pygmies living in that region, but research still needs to be done as to their language and ethnic identity (Margaret

Hill, personal communication 1997). There are also pygmies living in Gabon, who are referred to in the literature as *Babongo* (Mayer 1987:118).

1.4 History

The medical anthropologist Cavalli-Sforza conducted DNA testing in the 1980s on several Pygmy groups in Zaire, C.A.R., and Cameroon. He found that the Bayaka are most closely related in their DNA to the Baka of Cameroon and to the Mbuti of Eastern D.R.C. (Cavalli-Sforza 1986). Linguistically, Bahuchet (1993b:48) has demonstrated the presence of a large lexical substratum shared between the languages of the Bayaka and the Baka of Cameroon, which he posits to be further proof of their historical connection. The current theory, proposed by Bahuchet and Thomas (1986:90) and elaborated in Bahuchet (1993b:49) would have the ancestors of the Baka and Bayaka migrating from Eastern D.R.C., perhaps at the same time that the Ubangian and Bantu peoples were migrating around A.D. 1000.[7]

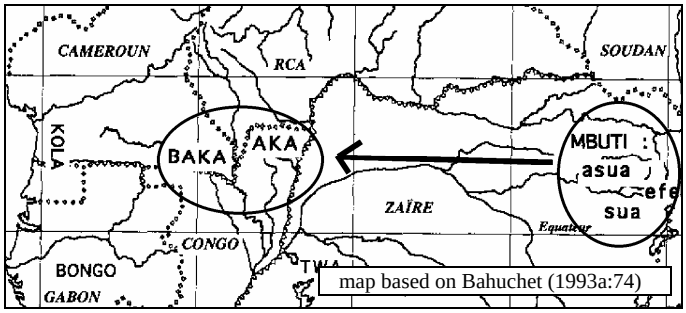


Figure 1.4. Hypothetical migration from Eastern D.R.C.

[7]These migrations from eastern D.R.C. to C.A.R. may have been occasioned by the Nilotic push south around A.D. 1000 (Thomas 1979:147).

The twentieth century brought many changes to the Bayaka. They were sheltered by their villager patrons from the traumas of the colonial period (Bahuchet 1979). However, the increased pressures to produce forest goods such as ivory, rubber, and hides put their relationships with their patrons under great stress (Hauser 1953:165). Many broke off their alliances with their traditional villager patrons and moved deep into the forest during the tumultuous period of colonialism (François Ndinga,[8] personal communication 1998).

The twenty-first century promises to bring the most far-reaching and devastating changes yet. Some estimate that the rain forest of the Bayaka, still covering a vast area of 70,000 square kilometers (Bahuchet 1993b:81), will be completely deforested within 20 years. Most Bayaka have kept their traditional way of life as hunter-gatherers until this present day, although they are now under great pressure from deforestation. As many as 10% have become permanent plantation-workers or farmers with no seasonal migration. Those who remain in the forest or on its edges have a smaller and smaller area in which to migrate and hunt. This, combined with the pressure to hunt to provide wild meat for export to the capital, has led to less and less game, and more hunger.

1.5 Language identification

1.5.1 Designation

The Bayaka and their language have been referred to by various names in the literature and by the surrounding populations. Some of these names are listed in table 1.1. In this work, the people are referred to as *Bayaka* and the language is referred to as *Aka*.

[8] François Ndinga one of the author's Bayaka colleagues living in Londo village, C.A.R.

Table 1.1. Variant names for the Bayaka people and their language

Name for People:	**Language:**	**Where used:**
Bayaka, Baaka, Aka	Aka	used by Bayaka themselves
Biaka	Diaka	used in Bagandu region
Bayaka	Yaka	used by SIL researchers
Ba-Benjellé	Aka	used in Sangha river region
Pygmée de Lobaye, Mongoumba, etc.	pygmée	used by early researchers
Bambenga, Babenga, Benga	Beka	used in LWCs Sango & Lingala

The Bayaka in the Lobaye region call themselves *Bayaka* or *Baaka* and call their language *Yaka* or *Diaka* (in the Bagandu area only). All of these are based on the root *aka*, which means "pygmy" in both the Aka and Baka languages. The /y/ found in *Bayaka* and *Yaka* is due to a phonological rule which inserts a glide where there is no consonant onset to a syllable. SIL researchers Kosseke, Kutsch Lojenga and Sitamon (1998) refer to the language as *Yaka*. There is, however, a different well-known Bantu (H31) language of D.R.C. which is called in the literature *Yaka* (Guthrie 1967). Other researchers have used the term *Aka* extensively for both the language and the people. This thesis follows that convention by referring to the language simply as *Aka*, but departs from that convention by referring to the people as *Bayaka*.

Whether the Bayaka population extends into Gabon is as of yet unknown. The Bakola Pygmies of Gabon are generally considered to be related to the Bangeilli of Cameroon (Bahuchet 1993b:44). Mayer found some of the Bakola speaking the Bantu language of the villagers close to them (Mayer 1987:117). Mayer reports that another Pygmy group, called the *Babongo,* are speaking a Bantu language which is distinct from all the languages surrounding it. Could this group, located in the province of Ngounié, be speaking Aka or a

language very near it? The 10-word wordlist given is insufficient to answer this query (Mayer 1987:118).

1.5.2 Classification

The Aka language has been classified as Bantu C10 by Bahuchet (1989:54). This classification is based on the strong similarities which Aka has with other Bantu languages such as Mbati and Bagandu, which had previously been classified as belonging to C10 of Guthrie's classification (Guthrie 1967). The *Atlas Linguistique de L'Afrique Centrale* (ALAC 1984) presents a classification of Bantu as presented in table 1.2.

Table 1.2. Classification of Aka

phylum:		niger-kordofan	
sub-phylum:		niger-congo	
family:		benoue-congo	
branch:		bantoid	
sub-branch:		bantou	
group:	Bantu A	Bantu C	Bantu D
language:		Ngando	
		Mbati	
		Mbomitaba	
		Pande	
		Ngondi	
		Aka	
		Bobangi	

Although Aka and the surrounding Bantu languages share much structural similarity and an estimated 35–45% of their vocabulary,[9] Aka is not mutually intelligible with the other

[9]This is to say, Aka has about 40% of its vocabulary in common with neighboring Bantu languages (the C10 group). The rest of the vocabulary is divided between 30% *non-Bantu* vocabulary and 30% vocabulary

languages of the Bantu C10 group (Bahuchet and Thomas 1986:80). Although the Bayaka speak a Bantu language, they are not Bantu themselves, but are very distinct phenotypically and culturally. In fact they group rather with other African Pygmy groups. Based on the linguistic substratum which Aka shares with Baka (a Ubangian language of the pygmies in Cameroon), and perhaps other Pygmy groups, they *must have* once spoken their own language. This language would be a proto-language which Bahuchet has dubbed **Baaka*. Bahuchet compared the 4,000-word *Petit Dictionnaire Baka* (Brisson and Boursier 1979) with his 10,000 word Aka lexical database and found 673 words which were shared by Baka and Aka, and not attributable to Bantu or Ubangian languages (Bahuchet 1993b:39). These words were particularly cultural and forest terms which belong to the hunter-gatherer way of life. The present author has confirmed this finding generally by comparing Aka texts with Baka texts published by Brisson (1980). Details will be brought out in chapter 3, Linguistic Evidence.

Are these findings likely to change the classification of the language? If Aka is a contact language, it does not fit into the usual family tree classifications, because it has more than one parent language (Thomason and Kaufman 1988:3). Most languages have developed by one parent language diversifying over time into several offshoot languages. For example, Latin was the parent to romance languages such as French, Spanish, and Italian. However, Aka is different from most languages. It belongs to a special typological category of languages called contact languages, which originate from more than one parent language in a particular historic language contact situation. It is true that Aka is clearly predominantly Bantu, both in structure and in vocabulary. However, this thesis argues that scholars must also recognize the existence of a significant substratum from an earlier language, a language

---

from various sources, including various Bantu languages not of the C10 group, and unknown sources, possibly Bantu (Bahuchet 1993b:39; Thomas 1979:159).

which does not figure currently in any of the African language families. That earlier language, preserved only as a substratum in Aka and Baka, may eventually be found to belong to an "original pygmy language" group.[10]

1.6 Research and data

The present study is based on the author's fieldwork in C.A.R. from May 1995 to December 1998, along with additional data generously supplied by his colleagues Dominique Kosseke and Saint-Jérôme Sitamon, who have been working among the Bayaka since 1993. The scope of this study includes both language structure (chapter 3) and language use (chapter 4). The data involved for each will be introduced in summary here, and described in detail at the beginning of the relevant chapters.

1.6.1 Language use data

The language use data consist of: (1) questionnaires about language use; (2) bilingualism testing; (3) intercomprehension testing, and (4) informal observation and discussion over time (participant observation and informal interviews).

1.6.1.1 Questionnaires about language use

The questionnaire data cover both villager populations and Bayaka populations, in the area of the Lobaye, Mbaiki and Nola prefectures of C.A.R. The questionnaires form part of a rapid appraisal technique developed by SIL called *Rapid Appraisal* sociolinguistic surveys (Stalder 1993). Rapid Appraisal is conducted to document demographics of various languages and dialects, and also to learn about language vitality and language use patterns, with language development planning as the key focus.

[10]See chapter 2, *Literature Review*, for a discussion of the "original pygmy language" controversy.

The questionnaire data for the Bayaka come from a series of survey trips taken by Kosseke and Sitamon in 1993. A total of 13 camps and villages were visited on four trips, as shown in table 1.3.

Table 1.3. Bayaka villages visited by Kosseke and Sitamon

1. SCIPLAC town
2. Near Moungoumba town:
Gonga, Ikoumba, Bombolo, Lessé, Moungoumba, Mossaguila
3. Near Londo village:
Moalé, Mbomolé, Baï, Birao forêt
4. Near Bambio town:
Woolo, Mambélé

The questionnaire data for the villagers come from Rapid Appraisal surveys of two villager groups of the Lobaye region who are traditional patrons of the Bayaka: the Ngbaka Mabo and the Mbati . The Ngbaka Mabo survey was undertaken by researchers Bister, Duke, Moehama, and Stalder in May of 1995 (Duke 1995). The team visited the villages of Loko and Karawa. The Mbati survey was undertaken by researchers Bister, Duke, Moehama, and Guerembendje in June of 1995 (Bister 1995). The team visited the villages of Belou II and

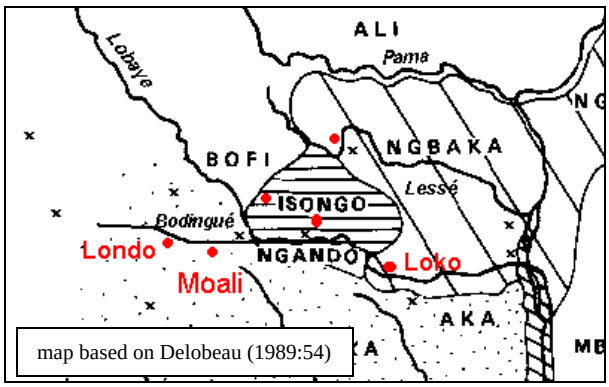


Figure 1.5. Places of research.
(**x** = 1993, ● = 1995)

Bonzio. In all cases, people of the village or camp are gathered together for a group interview done in the Sango language, covering about 50 questions and usually taking 2–3 hours. Often a topic was discussed among the interviewees at length, and the researchers attempt to take notes on all that is said. The surveys indicated that both the Ngbaka Mabo and the Mbati peoples were beginning to experience language shift to Sango, the language of wider communcation (LWC) of C.A.R.

1.6.1.2 Bilingualism testing

When more empirical data are needed to clarify an issue, testing is often done by the team of researchers. SIL has developed a test of linguistic competence called the *Sentence Repetition Test* (SRT). Participants listen to a sentence and must repeat it (Radloff 1990). A researcher marks any mistakes they make in their repetition performance of ten sentences, and gives them a score which correlates with the Foreign Service Institute (FSI) levels of linguistic competence (Wilds 1975). This test has been adapted to Sango (Karan 1993) and French (Stalder and Bagwell 1993), and researchers associated with SIL have used it to test around 2,000 people throughout C.A.R. The test in Sango was applied to the Bayaka of Londo village and Moali camp in 1994 with interesting results. Basically, the forest Bayaka have a higher level of Sango ability than would be expected. Their ability varies by age, gender, and contact with outsiders.

1.6.1.3 Intercomprehension testing

Intercomprehension testing is done to assess the level of intercomprehension between dialects or related languages. The assessment tool used by SIL researchers is the *Recorded Text Test* (RTT). Basically, the participant listens to a story and then is asked a series of questions which assess his ability to understand it (Casad 1987). For the RTT method, unlike the SRT method for bilingualism testing, the participants being tested are not required to

produce the language in focus. It is their passive comprehension rather than speaking ability which is being investigated. In the case of the present research, an informal version of RTT was used to verify that the Aka spoken in Londo was understood in other areas of the Bayaka region. One survey had the Bayaka of Bayanga, near the border of Cameroon, listen to recorded texts and meet one of the Bayaka who work as research assistants in Londo. In addition, the testing has been done in several places in Northern Congo-Brazzaville, and these tests confirmed that the Bayaka in the most southern part of the forest understand Aka as spoken in the northern part (Buchanan, 1996). However, there were Sango loanwords which the Congolese Bayaka did not understand, as they take most of their loanwords from Lingala or a local Bantu language.

1.6.1.4 Participant observation

The most relevant insights and data about language use came from participant observation. The Bayaka are very mobile and often trek long distances, and there were always visitors coming and going, passing through the village of Londo, where the author lived from 1996 through 1998. Around the campfire, or during the hunt, or during a trek–all of these times conversation often turned to the changes in the world of the Bayaka. Changing patterns of language use are part of the changes which concern them, and which they talk about. For example: "The Bayaka of Dzanga have broken away from their Bangandu masters, and have made a camp along the trail to Moali." "Some Bofi pygmies have returned to the forest and started trade with the Ngoundi fishermen. We cannot speak with them–they don't know a word of Aka, and very little Sango!" So the talk went, seasoned with the saying in Sango: *Gigi ti fadeso ayeke ngangu mingi.* "Life today is very hard!" To which all present would reply: *Ngangu!* "Hard!" (author’s field notes 1998).

1.6.2 Language data

Thomas (1991a) and the other SELAF researchers base their publications on elicited material, following the discovery procedures of Bouquiaux and Thomas (1976). In order to complement the findings of Thomas and others, the linguistic data used in this study will be based on texts. In particular, three folktales will be the source of most of the analysis, with additional examples added from other texts and (occasionally) elicited sentences. All texts were recorded and transcribed and glossed by Sitamon and later parsed by Duke. The three texts used as primary sources of language data are introduced in table 1.4. One of the texts, *Bakope Babaye,* is presented with interlinear glosses and translation in appendix B.

Table 1.4. Source texts for Aka language data

Name:	Modality:	Type:	Length: (words/lines)
Matina ya Baaka (How the ancestors lost their forges)	Oral; middle-aged Bayaka woman	Narrative	424 / 54
Sumbu akia bo alonga moito (Chimpanzee tries to find a wife)	Oral; narrator unknown	Narrative	402 / 46
Bakope Babaye (Two Sons-in-Law)	Oral; narrator unknown	Hortatory	467 / 66

The texts were studied from the point of view of Functional and Typological Grammar (Givon 1984, 1990) and Discourse Grammar (Longacre 1996). Only some of the language data, those which are illustrative of the non-Bantu substratum, will be presented in this thesis. For a general overview of Aka grammar see Thomas 1991. The goal of the text analysis carried out is not a comprehensive account of all instances of language structure related to an

earlier substratum, nor a complete explanation of those instances presented. Rather, the goal is to illustrate some instances of elements of the substratum in various parts of the language: lexicon, phonology, morphology, and grammar.

1.7 Conclusion

The Aka language is now introduced in its context, as spoken by Bayaka pygmies living in symbiosis with villager populations. Chapter 2, Literature review, will give the theoretical background to support Aka as a contact language. Chapter 3, Linguistic Evidence, will present some linguistic data, along with implications for the interaction between the proto-Aka substratum and the Bantu superstratum. Chapter 4, Sociolinguistic Evidence, will present sociolinguistic data with their implications as to the nature of the language contact situation. Chapter 5, Conclusions, will synthesize the arguments and bring up some issues for further research.

CHAPTER 2
LITERATURE REVIEW

2.1 General Works

There has been a vast amount of research done about African Pygmies, especially the Bayaka. Already in 1970 one bibliography counted 328 documents about "Pygmies" (Plisnier-Ladame 1970). Most of these are traveler's accounts and other popular texts that give just passing reference to the "Pygmies." The earliest explorer to sojourn among the Pygmies and write about it was Paul Du Chaillu in 1864. His stay of a few weeks among the "dwarfs" called *Obongos* in Gabon became the thrilling best-seller *The Country of the Dwarfs* (Du Chaillu 1872). Other adventurers followed his lead by the dozens over the years, until the "pygmy adventure novel" has become a genre in its own right (Kisliuk 1998:169). On the scholarly side, cultural anthropologists, ethnomusicologists, ethnobotanists, and medical anthropologists have published hundreds of books and articles about the Pygmies, including dozens about the Bayaka alone. Sometimes the scholars' works have obtained a widespread audience. The anthropologist Colin Turnbull brought the Mbuti Pygmies to the popular American consciousness with his enormously successful book *The Forest People* (1962). Taken together, these works give a rich background to the Pygmies and their neighboring villager populations. Table 2.1 gives a summary of some prominent researchers in their perspective fields.

Table 2.1. Some non-linguistic research on African Pygmies

field:	*researchers:*	*groups researched:*	*association:*
anthropology	Bahuchet	Bayaka, Baka	SELAF
	Demesse	Bayaka	SELAF
	Guillaume	Bayaka	SELAF
	Delobeau	Bayaka, Monzombo	
	Kitanshi	Bayaka of Congo-Brazzaville	
	Hewlett	Bayaka, various	
	Schebesta	Mbuti	
	Turnbull	Mbuti	
	Bailey	Mbuti	Ituri Project
	Hart	Mbuti	Ituri Project
	Grinker	Mbuti	Ituri Project
	Ichikawa	Mbuti	
	Tereshima	Mbuti	
ethnomusicology	Arom	Bayaka	SELAF
	Sarno	Bayaka	
	Kisliuk	Bayaka	
ethnobotany	Letouzey	Bayaka, various	SELAF
	Motte	Bayaka	SELAF
	de Garine	Mbuti	
physical anthropology	Cavalli-Sforza	Bayaka, various	

Many of these publications (popular as well as academic) contain some examples of vocabulary, and passing references about which languages are used among the various populations. This fact is especially true of works about the Bayaka, partially because it is known that they have their own language (in contrast to many other pygmy populations in Africa). Although it is beyond the scope of this present work to discuss all these documents, extracts of language and language use data from them will be brought to bear in the discussion as appropriate.

2.2 Anthropological research

Cultural anthropologists in particular have taken a great interest in the Bayaka. In 1946 the anthropologist Baillif began ethnographic research on the "pygmées Babenga du Moyen Congo" (Baillif 1954). Soon after, the sociologist Hauser (1953) began studying them. There has followed an almost continuous stream of ethnographic research since then. Demesse (1958), Hewlett (1977), Bahuchet (1979), Guillaume (Bahuchet and Guillaume 1982), and Kitanshi (1996) are among the notable researchers who have continued to publish ethnographic work about the Bayaka.

The greatest amount of research about African Pygmies in general concerns their food-gathering activities and diet (for the Bayaka, see Kitanshi 1996). Another major area of anthropological research has been the relationship between the Pygmies and the villagers (for the Bayaka, see Bahuchet 1993a, Bahuchet and Guillaume 1982, and Delobeau 1989).

The two concerns come together in the vast debate about the *wild yam hypothesis*. The claim is that tropical hunter-gatherers could not physically support themselves independently in the rain forest without a symbiotic relationship to villagers. This is because there are said to be insufficient sources of wild carbohydrates, such as wild yams, within the tropical rain forest environment (Headland 1987, Bailey et al. 1989, Headland and Bailey 1991, McKey 1996). While this present work does not directly address the "wild yam" controversy, the discussion of pygmy-villager relationships engendered by the controversy is a resource for insight into the sociolinguistic situation described in this thesis. The present work seeks to describe the relationship between the Bayaka and the villagers, a relationship which led to language contact in the past. This language contact was the historical context for the origin of the Aka language as it is spoken today. The ethnographic works discussing the relationship between Pygmies and villagers often give clues about this process.

The anthropologist Grinker, describing the relationship between the Efe Pygmies of the DRC and the Lese villagers, insisted that the two groups make up a single community, characterized by institutional inequality. In the view of the Lese, the larger community is like a household: the Lese are the "men" of the house, and the Efe are the "women" of the house (Grinker 1994). This insight may be extended to describe the relationship between the Bayaka and their villager patrons. The two groups must be studied together if Aka is indeed a contact language, a form of speech which developed in a villager/pygmy community. If a community, it was a community comprised of two very different ethnic groups, each of which kept its own distinct identity and language. The relationship between the two groups must have been close and long-lasting if indeed the word "community" could be applied to the conglomerate.

The question of Bayaka/villager relations will be returned to in detail in the discussion of language use (chapter 4). While it is beyond the scope this work to discuss all the various ethnographic sources, the insights they contain will often enlighten the discussion, especially in chapter 4, Sociolinguistic Evidence.

2.3 Ethnomusicology

The field of ethnomusicology deserves special mention because of the large number of recordings made of the music of various Pygmy groups throughout Africa. Often, even if there are no other scholarly works about a particular group, there are still some recordings of their music available. This is true of the Bongo of Gabon and some others. Books and articles written by ethnomusicologists often give introductions to the traditional song genres, oral literature, and culture of the people.

In terms of music, the similarities in musical style among the various groups of African Pygmies are remarkable. Music and dance seem to be a highly conservative part of

their culture, where very ancient traditions are still kept alive. A great deal of specialized musical and cultural vocabulary is shared by the Bayaka and the Baka, and much of it can be found in musical recordings. Ethnomusicologists who have published on the Bayaka musical style include Arom (1994), Sarno (1996), and Kisliuk (1998). In addition, SIL ethnomusicologists Graham James and Dan Fitzgerald are in the process of researching Bayaka and Baka musical styles respectively. Taken together, this research is a good source of data for linguistic and cultural comparison between the various African Pygmy groups.

2.4 Linguistic Research

Literature about the Bayaka language itself serves as the background and foundation for the present thesis. In fact, the current work adds additional evidence towards a theory already proposed by earlier researchers (Bahuchet 1992). The goal is to complement and not re-do earlier research. For example, in chapter 3, Linguistic Evidence, less discussion will be given to lexical evidence since this kind of evidence has been well documented by Bahuchet (1993b). The linguistic literature about Aka is very important, then, as both a starting-point and a guide for the presentation.

2.4.1 SELAF fieldwork

Aka has been the target of extensive research by linguists associated with SELAF (*Société d'Études Linguistiques et Anthropologiques de France*). The SELAF team consisted of researchers from several disciplines who studied not only the Bayaka foragers but the village farmers (Ngbaka Mabo, Mbati, Monzombo) in the Lobaye region of C.A.R. The goal was a complete description of the ecology of the rain forest, and the societies and languages of those who lived in it. This review will emphasize the SELAF publications pertaining to the Aka language particularly.

The first major linguistic publication of the SELAF team was a phonology (Cloarec-Heiss and Thomas 1978). Soon after was a volume of various articles giving the background of the language (Bahuchet 1979). These works represent a very early stage of their fieldwork. For example, in the phonology a large number of the glosses are incorrect (Cloarec-Heiss and Thomas 1978:32). The work of the SELAF team has continued since those early beginnings.

The ambitious project of an "encyclopedia of the Aka language and people" has slowly been coming together. Book one of the *Encyclopédie Aka* (Bahuchet and Thomas 1991) has been published. The fourth volume of book one, *La Langue* (Thomas 1991), is a grammatical overview of the Aka language from a structuralist perspective. It follows the grammatical models of Martinet, Haudricourt, and Benveniste (Bouquiaux and Thomas 1976:21). It is the only published grammar of Aka to date (2001), and one of the most complete examples of the SELAF descriptive method applied (see Bouquiaux and Thomas 1976; English translation: Bouquiaux and Thomas 1992). Well-done and expansive, it gives an analysis from the morpheme to the sentence, using data elicited from the Bayaka of the Mongoumba and Bagandu regions. Book two of the *Encyclopédie* is to be an ethnographic dictionary of Aka: three volumes out of a planned eleven volumes have been published (Bahuchet and Thomas 1981, Thomas, Bahuchet and Epelboin 1992a, 1992b). Although only the volumes containing the words whose roots start with (**p**, **b**, **mb**, **m**, or **v**) have come out so far,[1] the dictionary promises to make available a wealth of ethnographic and lexical data.

In addition to these monographs, many articles have been published by the SELAF team, especially about the history of Aka (Bahuchet and Thomas 1986, Bahuchet 1993b) and the Aka noun-class system (Thomas 1980). Most recently, much of the data gathered by

[1]This is the situation as of the year 2001, to the author's knowledge.

SELAF, including 300 articles from the *Encyclopédie*, has been made available on multimedia CD-ROM format (Arom et al. 1998).

Serge Bahuchet, anthropologist with the SELAF team, has compared the Bayaka of C.A.R. with the Baka Pygmies of Cameroon. He discovered that these two languages share a large lexicon, which could not be attributed to the languages of the villagers. This led him to propose a common origin for the Bayaka and the Baka. This thesis elaborates Bahuchet's hypothesis and gives additional evidence for it.

2.4.2 SIL fieldwork

In 1993 SIL International (henceforth SIL) began fieldwork on Aka with the goal of language development for literacy and literature production in the Aka language. Practical concerns of language development have led to phonological, grammatical, and sociolinguistic studies. An unpublished phonology of Aka (Kosseke and Sitamon 1998) is in preparation, and an orthography statement (Sitamon, to appear) is being developed. The phonological work of the SIL team (Kosseke and Sitamon 1998, Roberts 1993) has posited additional phonemes beyond those which are mentioned in Cloarec-Heiss and Thomas (1978). The grammatical research of the SIL team so far remains unpublished (Duke, Kosseke, and Sitamon 1998). The sociolinguistic research done by the SIL team has been considerable, because language use and language planning are key considerations to SIL goals of language development. Questionnaires on language use, testing of comprehension and production have been used in sociolinguistic research among the Bayaka and their villager neighbors by SIL since 1993 (Kosseke and Sitamon 1993, Moehama 1994, Duke 1995, Bister 1995). The author was part of the SIL research team among the Bayaka from 1996 through 1998, and this study is based on the original research carried out in conjunction with project coordinators Dominique Kosseke and Saint-Jérôme Sitamon, and Bayaka

colleagues Bartélemy Kombo and François Ndinga. The linguistic output of the project owes a tremendous amount to visits by the linguistic consultant Constance Kutsch Lojenga, who has guided and encouraged the project for many years.

Table 2.2. Linguistic research on Aka in C.A.R.

field:	*publication:*	*association:*
Comparative/historical:	Bahuchet 1979, 1993b	SELAF
	Bahuchet and Thomas 1986	SELAF
Grammar:	Thomas 1991	SELAF
Phonology:	Cloarec-Heiss & Thomas 1978	SELAF
	Kosseke and Sitamon 1998, unpublished manuscript	SIL
Sociolinguistics:	none published, but see anthropological works such as Bahuchet 1993a	

2.4.3 Research among the Bayaka of Congo

The linguistic research mentioned so far has been done among the Bayaka in C.A.R. Much less is known about the Bayaka in Congo-Brazzaville. Some sociolinguistic surveys have been done by SIL in northern Congo-Brazzaville, and they mention the Bayaka and other Pygmy groups. Gardner (1990) gives an overview of the languages spoken in the Epena district of Congo, and he includes two 150-word lists in Aka. Buchanan (1996) used questionnaires and recorded text testing to confirm that the Bayaka of Northern Congo understood Aka as spoken in C.A.R.

2.4.4 Fieldwork among other Pygmy groups

Much less is known about the languages spoken by other Pygmy groups in Africa. Baka of Cameroon is the best-documented. An excellent four-volume anthology of Baka folktales, transcribed with interlinear glosses and translation, was produced by Brisson (1980). There is also a dictionary of Baka by Brisson and Boursier (1979). These are the

sources of the Baka data which are used in this thesis. Very little research has appeared so afr about the Pygmy groups of Gabon. Mayer (1987) makes a brief attempt to identify some of them. The Bakola Pygmies are the major group Mayer mentions, and they may be related to the Baka of Cameroon. The Babongo Pygmies of Mbigou (Ngounié Province) speak "a mixed Bantu language which is neither Sangu, nor Kele, nor Nzèbi, but seems to be made up of various loans" (Mayer 1987:118, author's translation). Very little is known about the languages spoken by the Pygmies in the D.R.C. (Congo-Kinshasha).[2] It is generally thought that the Pygmies of eastern D.R.C. simply speak the languages of their villager patrons. More research may reveal that they, like the Bayaka and Baka, speak language varieties which retain a substratum from an earlier language unique to Central African Pygmies. Schebesta (1949) attempted to show similarities in the way that the various Mbuti Pygmy groups spoke the villager languages, but without much success. Demolin's recent fieldwork (Bruce Colin, personal communication 2000) seems to confirm that some Efe Pygmies speak the Lese language without any great difference from the way that the Lese villagers themselves speak it. However, Harvey (1997) used lexicostatistics to show some similarity between the languages of two subgroups of Mbuti Pygmies: the Kango and Bila-Mbuti groups. She used a 200-item wordlist based on the classic Swadesh list of non-cultural items. She presents statistics for the lexical similarities among several languages. The languages of the Kango Pygmies and the Bila-Mbuti Pygmies showed a 73% lexical similarity, even though the two groups are separated by some distance geographically. To Harvey, this may indicate that both pygmy languages borrowed extensively from the same source. Perhaps also the Kango and

[2]Kinshasha is the capital of the *Congo* which was formerly known as Zaire, whereas Brazzaville is the capital of the *Congo* which is also sometimes called the People's Republic of Congo. The capitals are often used to differentiate the two countries which now share the same name. In this thesis, they are referred to as D.R.C. and Congo-Brazzaville respectively.

Bila-Mbuti also had a common origin, although this is not a claim that she makes.[3] Harvey's analysis also revealed that the language of the Kango Pygmies had only 60% lexical similarity with the language of their current patrons (the Bali), but it had 86% lexical similarity with villager languages in another part of the Ituri forest (Komo and Bila) (Harvey 1997:72). From this she posits that the Kango Pygmies historically had a symbiotic relationship with the Komo (Harvey 1997:61). The two-hundred word wordlist used by Harvey is standard for initial lexical comparison of languages, but it is based on non-cultural items. Bahuchet found that most of the words shared by Baka and Aka were cultural items specific to the pygmy way of life and shared culture. The everyday words for non-cultural items were for the most part borrowed from the villager languages (Bahuchet 1993a:34). This kind of lexical research then is very useful for understanding the past borrowings in the languages spoken by Pygmies, but it probably would not uncover the lexical substratum which is not shared by any villager languages.

2.4.5 Conclusion

The Bayaka people and their language have been the object of a great deal of interest from the academic world for some time. The present work then is not starting from ground zero. It is meant to complement what has already been done by focusing on Aka as a *contact language* and illuminating the language contact situation which was the origin of the language. By synthesizing the various references made to it in many sources, and bringing to bear original fieldwork on both the language and language use patterns, the author hopes to add to the understanding of the Aka language situation.

[3]For the difficulties of using the method of lexicostatistics to make claims about genetic relationships between languages, see Dixon (1997:35–7).

2.5 Theoretical Background

This section discusses issues within linguistic theory which are essential background for the claims presented in this thesis.

2.5.1 Introduction

Before arguments toward the hypothesis of Aka as a contact language are to be presented, a word about the controversies involved is in order. Two potentially controversial claims are implied in the hypothesis: (1) that at least some African Pygmy groups at one time had distinct languages, and the remnants of one of them still survive in Aka and Baka and (2) Aka is a "mixed" language, consisting of Bantu structure and vocabulary over a proto-Aka substratum. Both of these claims are highly controversial among Africanist linguists, but readily accepted in the field of "pidgin & creole linguistics." For example, Holm in his introduction to *Pidgins and Creoles* summarized the place of “mixed languages”:

> Finally there are mixed languages that are none of the above, both in the trivial sense that all languages are mixed to some degree by contact with other languages, and also in a miscellaneous category of very mixed languages whose genesis had to be quite different from that of pidgins or creoles. For example there is the strange case of Mbugu or Ma’a in Tanzania, a Cushitic language that acquired Bantu grammar, apparently under duress (Goodman 1971, Thomason 1983). Then there is Anglo-Romani: basically English syntax, phonology and grammar holding together Romani or Gypsy lexical items, used principally between English-speaking Gypsies in the presence of English-speaking non-Gypsies in order to maintain secrecy. (Hancock 1984)

Both hypotheses are controversial mostly because the early proponents of them made claims without data or overextended the ideas beyond their usefulness. Unfortunately, even though more data are now available, the cloud of controversy remains.

2.5.2 The "original pygmy language" controversy

From the beginning, the Pygmies won over the imagination not just of armchair travelers, but armchair linguists as well. Without any data, many of them put forward

hypotheses about the Pygmies speaking an "original" language (see Bahuchet 1993c). In the early 1900s, data were hard to come by, and this kind of speculation continued for years. Imagine the shock when the reports came in that the Pygmies spoke only the languages of the villagers around them, and had no language of their own. The report given by Le Roy in 1897 described the confused language situation of the Pygmies:

> Nous ne pouvons guère tirer de renseignements de la langue, car tous les Négrilles observés jusqu'ici parlent un mélange d'idiomes empruntés aux tribus parmi lesquelles ils ont auparavant séjourné, et qui, pour n'être pas connu de celle où ils sont pour le moment, passe souvent pour leur appartenir en propre.[4] (Le Roy 1929, first appeared 1897)

The disillusion brought about a general rejection of the "original pygmy language" hypothesis, especially among Africanist scholars. This quote by Gregerson represents the general skepticism:

> At present all African Pigmies speak the languages of their neighbors. Thus, some Pigmy groups speak Bantu languages; others, other Niger-Kordofanian languages or Nilo-Saharan; e.g. the Mbuti and Twa speak Bantu; the Efe, Central Sudanic. No independent Pigmy language exists nor is there any evidence that one has ever existed. Nevertheless, a great many scholars have assumed that an original Pigmy language has now been lost. (Gregersen 1977:131)

The arguments for and against the hypothesis were largely phenotypical: if the Pygmies are a separate phenotype, they must have once had their own language. These arguments led to the conclusion that all small hunter-gatherers around the world once spoke the same language:

> In the traditional view, Pigmies represent a race and they should, therefore, be associated with a distinct language or languages as well. And presumably African Pigmy language(s) should be related to those spoken by Pigmies elsewhere, such as the Andaman Islanders, and the Semang of Malaya. (Gregersen 1977:131)

---

[4]"We can hardly get any information about the language, for all the Négrilles observed so far speak a mixture of speech borrowed from the tribes among whom they formerly sojourned, and which, since it is not understood by those near whom they are living now, is considered as their own" (author's translation).

Gregersen rejects this (extreme) view on its own grounds:

> The traditional view is shaky on many points but very largely because it is questionable that Pigmies represent a race. They may well be short because of dietary and other factors. (Gregersen 1977:131)

In fact if the argument is about hypothetical languages in the past, it is linguistic data which are key, and not phenotypical or genetic concerns. Genetic data can collaborate the theory that ethnic groups are related, but not languages. Linguistic and cultural data may confirm relationships between people. Welmers rightfully cautions against assuming that ethnicity or phenotype implies language use:

> Many people of ethnically Arabic origin speak a Bantu language, Swahili, as their first language. . . . Through the largely untraceable history of the indigenous languages of Africa, there have undoubtedly been many cases of language substitution, on the part of sizable groups of people as well as countless individuals. (Welmers 1973:9)

There may in addition be evidence to prove that languages are related as well, if there is also linguistic and cultural data to do so. In the case of the Bayaka, there is strong DNA evidence that links them with the Baka of Cameroon and the Mbuti of Eastern D.R.C. (Cavalli-Sforza 1986; see chapter 1). However, if there were not also linguistic data, very little could be said about the prehistoric language use of their common ancestors. An "original pygmy language" can only be argued on the basis of what might remain of it in current or recently recorded speech.

Indeed, at the present time, the only known remant of what might have been a "pygmy language" is the lexical substratum shared by Baka and Aka, as presented in Bahuchet (1993b), and elaborated in chapter 3 in this thesis. No claims can be made that the earlier language represented by the substratum was once spoken by all the ancestors to all the African Pygmies, much less all the small hunter-gatherers around the world. In fact, on the basis of DNA studies of pygmy populations by Cavalli-Sforza (1986), Bahuchet (1993b:49)

proposes two distinct origins for the various African Pygmy groups. If phenotypical and genetic concerns were key to language history, then at least two "original pygmy languages" would be indicated in Bahuchet's view. However, more linguistic data are needed. Particularly, does the lexicon shared by Baka and Aka appear in the languages spoken by the Mbuti and Efe of eastern D.R.C.? By all accounts, the Mbuti Pygmies do not have their own language, but speak dialects of the Bira and Lese villagers' languages. Perhaps in the dialects spoken by the Mbuti some remnants of an earlier language remain. If so, would that language have been the same as the one spoken by the ancestors of the Baka and Bayaka Pygmies? Bahuchet notes some preliminary data:

> Preliminary comparison between the Aka and Baka Pygmies and the Mbuti Pygmies from Ituri (despite the diversity of the last group, Demolin and Bahuchet, 1990) produced promising results. Four mammal names were found to be common to all three groups (Bahuchet 1989:159–160), and two words directly related to very specific and important Pygmy activities. Western and Eastern Pygmies indeed shared the term for the leader of the elephant hunt (**tuma*) and the name of a honey container (**bemba*; Bahuchet 1989:608). (Bahuchet 1993b:44)

There is, then, the beginnings of some linguistic data towards an early "pygmy" language, spoken by the ancestors of the Baka (Cameroon), Bayaka (C.A.R.), and Mbuti (Eastern D.R.C.). Without attempting to make the fantastic claims of the earlier "original pygmy language" hypotheses, this work attempts to add to the knowledge about this ancient, "lost" language, as found in the non-Bantu substratum of Aka.

2.5.3 The "mixed language" controversy

Before discussing mixed languages, a note about terminology is in order. The term "mixed language" is sometimes used as a general term equivalent to *contact language*,[5] thus referring to any pidgin, creole, or other contact language. In this thesis, the term "mixed

[5] To be defined in section 2.5.3.2.

language” is used to refer to a very specific kind of contact language. This kind of contact language is neither a pidgin nor a creole, but something different. Other terms which are used in the literature for “mixed languages” in this sense are: *bilingual mixed languages*, *hybrids*, and *hybrid languages*. Terms for the process of forming a mixed language are: *language mixture*, *language intertwining*, and *hybridization*. These various terms are interchangeable, and each scholar tends to prefer a particular one and use it regularly. Throughout this thesis, the term “mixed language” will be used primarily, but the other terms will be referred to when necessary to discuss the ideas of a given scholar.

2.5.3.1 Mixed languages and linguistics

The "mixed language" controversy has been raging among Africanist scholars and other linguists for a very long time, as Welmers notes:

> Carl Meinhof (1911: 164) brought the "Mischsprache" concept more specifically into the picture by his suggestion that "Bantu is a mixed language, so to speak, descended from a Hamitic father and a Negro mother." (Welmers 1973:2)

The concept of a language having two or more equally-contributing "parent languages" allowed for comparison of languages across language families. Often what are now considered as "areal features" were explained in terms of language mixing. This led to very complicated mixes. For example, Jaquot and Richard used the term to describe similarities between the Mbo cluster and various other Cameroonian languages:

> Mbo languages show vocabulary affinities with Ewondo, Bulu, N. Mbene, and Duala; phonetically their relationship tends toward Bamileke; grammatically they seem to linked specially to Ewondo, Bulu, and N. Mbene. (Jaquot and Richardson 1956:22)

Not only was the concept used to facilitate comparison, but it was also used to challenge conventions about genetic relationships:

> E.O.J. Westphal (1957) specifically contends that a given language may be most closely related to one language phonologically, to another morphologically, and to

> still another lexically. In speaking of "genetic" relationships, he warns against assuming that, for any one language there is only one "parent" language. (Welmers 1973:3)

This kind of analysis challenges the venerated system of language genealogy, which had been successfully used to reconstruct Indo-European language relationships. It remains an axiom to historical linguists that each language has only one parent on the family tree (Dixon 1997:11). Pidgins and creoles have always posed a challenge to this axiom. As a result, they have been set apart traditionally as “contact languages.” These languages are so obviously different from other languages that there has been very little resistance to keeping them separate typologically as languages which do not fit the usual pattern. The controversy arose only when languages which were not pidgins or creoles were claimed to have more than one parent language. The “mixed language controversy” is simply the claim that some “ordinary” languages originally arose out of situations of language contact, and should be viewed historically as having more than one source (or parent) language. If this is true, these languages are in fact "mixed languages" and should be grouped with pidgins and creoles in the sub-discipline of *contact linguistics*.

Thomason (1997b:75) specifically proposes a universal typology of contact languages, which includes three types: pidgins, creoles, and bilingual mixed languages. It is because they defy normal classification that mixed languages find themselves together with pidgins and creoles:

> In fact, the only significant feature in which bilingual mixed languages resemble pidgins and creoles is their nongenetic development: in these languages too the extent of the mixture makes it impossible to establish genetic links with other languages, because the various subsystems cannot be accounted for in terms of descent with modification from a single parent language. (Thomason 1997b:80)

Within contact linguistics, the concept of mixed languages is not controversial, but well established and supported by a small but growing body of literature.

Outside of the sub-discipline of contact linguistics, however, some linguists are very wary of the term "mixed language." This is partly because it was too widely applied before within Africanist linguistics:

> To an extent unparalleled in the study of languages anywhere else in the world, African language classification has been beset by persistent hypotheses of language mixture, intermediate or transitional languages, substrata, pervasive language influence far in excess of what is usually recognized as normal, and innovative exuberance unmatched in recorded language history. (Welmers 1973:2)

> There is every hope that hypotheses of language mixture, secondary affiliations, and contamination will be seen for what they are–*sheer speculation.* (Welmers 1973:19, italics added)

Early discussion of language mixture in Africa was indeed often based on speculation. However, today more data are available, and the resulting discussions are at an empirical level, and no longer speculation.

Within the literature of contact linguistics in particular, so far only one African language in Africa has been documented as being a mixed language. It is a language spoken in Tanzania called *Ma'a* or *Mbugu*, which is claimed to have a Bantu grammar and a Cushitic vocabulary (Tucker and Bryan 1966: 592). The early view of mixed languages was very component-oriented, and it was thought that each component of the language was autonomous. Therefore, it was thought that mixed languages usually took their grammar from one source or “parent” language, while the vocabulary was derived from another source. In this view, it is thought that Ma’a was once a Cushitic language. The entire syntax of Ma'a is said to have been replaced by Bantu syntax, while leaving a large part of the original Cushitic vocabulary relatively intact (argued for in Thomason 1983). Alternative explanations would have it to have started as a Bantu language, and then borrowed large amounts of Cushitic vocabulary (rejected in Thomason 1983). Another view is that both

happened: that two languages (one Bantu, one Cushitic) influenced each other until they were very similar, then converged into one language (Goodman 1971).

Recently scholars have proposed that the two names–Ma'a and Mbugu–represent two different language varieties. Mbugu would be the general name for the language. It is claimed that are two registers[6] of Mbugu: one which is completely Bantu and is spoken as the everyday language, and a second register which is used as a "secret language." This secret language is called *Ma'a*. It contains a large Cushitic vocabulary, but is otherwise the same as regular Mbugu (a "normal" Bantu language). If Ma'a is a secret language, it follows a pattern noticed by Sasse in his studies of Mediterranean secret languages:

> However, cases have been reported where after the extinction of normal communication the resulting special language forms a hybrid whose morphosyntactic matrix comes from the T[arget][7] language, but whose vocabulary (at least in part) is a residue of A[bandoned Language].[8] These cases deserve special attention because they raise the question of how and at which point during the extinction process such mixtures can arise. A case in point is Kronika, a secret language used by masons on the Peloponnese in an area where formerly Arvanitika was spoken. The morphosyntactic basis of this language is Modern Greek, but most of the secret vocabulary is Arvanitika. The Africanist is reminded of Ma'a . . . . (Sasse 1992:23)

These secret languages could be seen as a special register which is much more conservative in vocabulary than the rest of the language, and which has thus kept a great deal of the vocabulary of a language which was previously spoken by the community. As a secret language, it serves the purpose of exclusion of outsiders and of giving special additional cohesiveness to *part of the larger community*.

---

[6]*Register* is used here for a speech variety which is used in particular social situations. For example, many languages have formal and informal registers. In some languages, the different registers are very distinct and practically unintelligible; yet they are considered to be varieties of the same language.

[7]The *target language* is the dominant language which is continued (Sasse 1992:18).

[8]The *abandoned language* is the language which is dying out (Sasse 1992:18).

This observation could also be applied to the Aka language. If the Bayaka are part of a larger community with the villagers, then their own language serves a similar purpose as would those secret languages. However, in contrast to some secret languages, Aka is clearly an everyday language in its own right, and not only used for occasions of secrecy. It is closely related to the Bantu languages of the villagers, but not mutually intelligible with them (Thomas 1991:1). Thus it can be used to exclude the villager patrons, and often is, as will be demonstrated in chapter 4, Sociolinguistic evidence.

2.5.3.2 Mixed languages and contact linguistics

This section attempts to clarify the specific claims made in this thesis. Aka is claimed to be a contact language, and specifically a mixed language. Two questions arise: (1) what is the difference between contact languages and other languages? and (2) what is the difference between mixed languages and other kinds of contact languages such as pidgins and creoles?

All languages have borrowings from other languages. Are they all contact languages then? No, the claim that a language is a contact language is a specific claim about its origins and its typology. It is helpful here to repeat the working definition of a contact language:

> A *contact language* is a language that arises as a direct result of language contact and that comprises linguistic material which cannot be traced back primarily to a single source language. (Thomason 1997a:3, italics added)

The phrase "a *direct result* of language contact" refers to the origin of a language. Thus a language may borrow from other languages over time, but if it did not originate in, or *result from*, a language contact situation, it is not considered a contact language. Most languages have as their origin the diversification of a language into other languages over time. Latin diversified into French, Spanish, Italian, and other languages. Contact languages have a different origin. Every contact language originated in a *multilingual* community, with input from more than one language from the very beginning. The kind of contact situation

which was at the origin of the contact language determines the kind of language it will be. Pidgins and Jargons originate in multilingual trade situations. Creoles originate in situations of closer contact, usually involving intermarriage between groups. Mixed languages result from a different set of particular sociolinguistic situations. One kind of situation which may result in a mixed language is when a group has abandoned their original language, but has kept a good amount of it (usually vocabulary) in the way they speak the newly adopted language. This is what is claimed for Aka in this thesis. The Aka language originated in a specific historical multilingual situation, as will be presented in chapter 4, Sociolinguistic Evidence.

The other key phrase in the definition of contact languages is: *linguistic material which cannot be traced back primarily to a source language*. This is a typological claim. All languages in principle have some borrowed material, but in most languages, the linguistic material is *primarily* from one source language. Contact languages have significant material from more than one source language. In addition, contact languages have particular characteristics related to their specific historical origins. This is easily seen in pidgins: simplification of grammar, reduced vocabulary, reduced morphology. Mixed languages also have particular typological characteristics. When the mixed language is the result of a past language shift situation, the grammar mostly comes from the newly adopted language, while the lexicon conserves a significant amount of words from the abandoned language.

What is the difference between a mixed language and other contact languages? The other two types of contact languages are pidgins and creoles (Thomason 1997b:75). *Pidgins* arise in situations of limited contact such as trade, often involving three or more languages and very little multilingualism (Thomason 1997b:76). They are by definition languages of wider communication (LWCs). Pidgins are characterized by a simplified grammar and a reduced lexicon. The lexicon is primarily taken from a dominant language of high prestige,

while the grammar reflects the influence of both the prestige language and various low-prestige languages. There are no mother-tongue speakers of pidgins. *Creoles* are similar to pidgins in their origin, but are used for primary communication by mother-tongue speakers and not just for trade (Thomason 1997b:79). As a result, they have a far larger vocabulary than pidgins. Unlike pidgins, creoles have "all the linguistic sources that an ordinary language has" (Thomason 1997b:79).

Mixed languages are very different from pidgins and creoles. Pidgins and creoles arise in situations where there are three or more languages present and where "no group has the need, the desire, and/or the opportunity to learn any of the other groups' languages" (Thomason 1997b:78). This lack of multilinguism explains the simplification which characterizes pidgins and creoles. Mixed languages arise in a very different context. There are generally only two languages present in the formation of a mixed language (Thomason 1997b:80). There must be a high level of bilingualism in at least one of the two speaker groups (Thomason 1997b:80). Unlike pidgins and creoles, mixed languages exhibit very little simplification of either the grammar or the lexicon. Mixed languages are always the languages of in-group communication, whereas pidgins and creoles are typically LWCs (Bakker and Muysken 1994:51). Often mixed languages are created and used by mobile populations who have the need to have a language unintelligible to outsiders, a sort of "secret language." Examples of such mobile populations are the Gypsy groups in Europe who speak languages which are mixtures of Romani and local European languages. These languages have a grammar based on a European language but a large vocabulary from Romani (Bakker and Muysken 1994:51). For example, many Gypsies in Great Britian speak a mixed language called *Anglo-Romani*. To English speakers, Anglo-Romani sounds like English, but in fact is a separate language which has English grammar but many Romani words. It is incomprehensible English speakers who do not know Anglo-Romani. Because it sounds to

bystanders like English, the Anglo-Romani-speaking Gypsies can hide the fact that they have their own language (Bakker and Muysken 1994:51).

Like Gypsies, hunter-gatherer groups are mobile groups who are likely candidates to need an in-group language. The present thesis puts forth the idea that hunter-gatherers also develop mixed languages for in-group purposes. Specifically the Aka Pygmies, who are hunter-gatherers living in patron-client alliances with villagers, have developed a mixed language. The grammar is almost entirely adopted from the Bantu language of their patrons, but there is enough vocabulary retained from an earlier (non-Bantu) language to make the Aka language incomprehensible to outsiders. To the author's knowledge, this thesis represents the first attempt to categorize a language spoken by hunter-gatherers as a "mixed language." The implications of this typological categorization are enormous. If Aka is a mixed language, perhaps many or most languages spoken by hunter-gatherers are also mixed languages. If so, many of these languages would contain a significant substratum which could be traced back to earlier languages spoken originally by hunter-gatherers but now lost.

In fact, there is some evidence of hunter-gatherer groups elsewhere in the world who have adopted the languages of their agriculturalist patrons but have kept a substratum from their original language. The linguist Lawrence Reid has attempted to do for the Philippine Negrito languages what Thomas and Bahuchet have argued for certain African Pygmy languages, which the present writer is supporting in this thesis.[9] That is, Reid has developed a model for how these so-called aborigines of the Philippines spoke non-Austronesian languages long before the first Austronesian-speaking farmers began migrating into the Philippines about 5,000 years ago, but later "lost" those languages as they adopted the languages of their new Austronesian agricultural trading partners. Like Thomas and

[9]See section 3.1.2, Previous claims of Bahuchet and Thomas.

Bahuchet, Reid is the first researcher to find evidence of a non-Austronesian substratum in some Philippine Negrito languages. He hypothesizes that the Negritos developed an early pidgin or trade language, subsequently creolized, that they used to facilitate communication with in-migrating Austronesians before the time of Christ (Reid 1987, 1994a, 1994b). While Reid has apparently never heard of Thomas and Bahuchet's model, nor they of his, the two models are strikingly similar. Readers pursuing the hypothesis of this thesis will do well to follow Reid's argument for the tropical forest hunter-gatherers on the other side of the globe from Africa.

2.6 Conclusion

This brief review of the literature puts the present work in its place as an addition to the large number of studies on African Pygmies in general and the Bayaka in particular. The hypothesis raised–*Aka as a contact language*–is the application of contact linguistics to the problem of Aka origins and typology. As such, it has widespread application for the studies of African Pygmies and hunter-gatherers in general. The crucial linguistic evidence–a non-Bantu linguistic substratum within Aka–has already been noted in previous scholarship (Thomas 1979:157, Bahuchet 1993b:39). However, new evidence, and new kinds of evidence will be brought to bear on the question of Aka as a contact language. Chapter 3 will present linguistic evidence which illustrates the “mixed” nature of Aka. Chapter 4 will present an overview of the current language use situation of the Bayaka and their villager patrons. This current situation gives clues about the past language contact situation which led to the origin of Aka. Chapter 5 will conclude the thesis with a synthesis of the arguments and a review of questions yet unanswered.

CHAPTER 3
LINGUISTIC EVIDENCE

3.1 Introduction

This chapter introduces some linguistic evidence to illustrate the nature of the Aka language as a *contact language*. In chapter 1, Introduction, a contact language was defined in part as one that "comprises linguistic material which cannot be traced back primarily to a single source language" (Thomason 1997a:3). This chapter will demonstrate that while much of the linguistic material of Aka can be traced back to a Bantu origin, there remains an important element throughout the system which is not Bantu in origin. The structure of Aka is clearly Bantu–yet it is different from other Bantu languages in two principal ways:

1. Non-Bantu elements are retained: there are many non-Bantu elements throughout the language which also appear in other languages spoken by African Pygmies, for example in Baka (Ubangian, Cameroon).

2. Bantu elements are altered: some Bantu elements were adopted incompletely or re-interpreted when introduced into Aka.

3.1.1 Relevance to hypothesis

Shared linguistic elements do not in themselves necessarily indicate a common historical origin for any two given languages (Dixon 1997:31–2). There are areal features which are shared by neighboring languages of diverse origins. These are spread by a process of diffusion. Certainly lexical items are often spread through borrowing from one language to the next. When other linguistic elements, such as sounds and particles, are spread it is often called *linguistic interference* (Dominigue 1990:531). In fact, almost any shared linguistic

element could be proposed as an areal feature, especially if the languages involved are not closely related. The necessary condition for such spreading of features is language contact (Dominigue 1990:531).

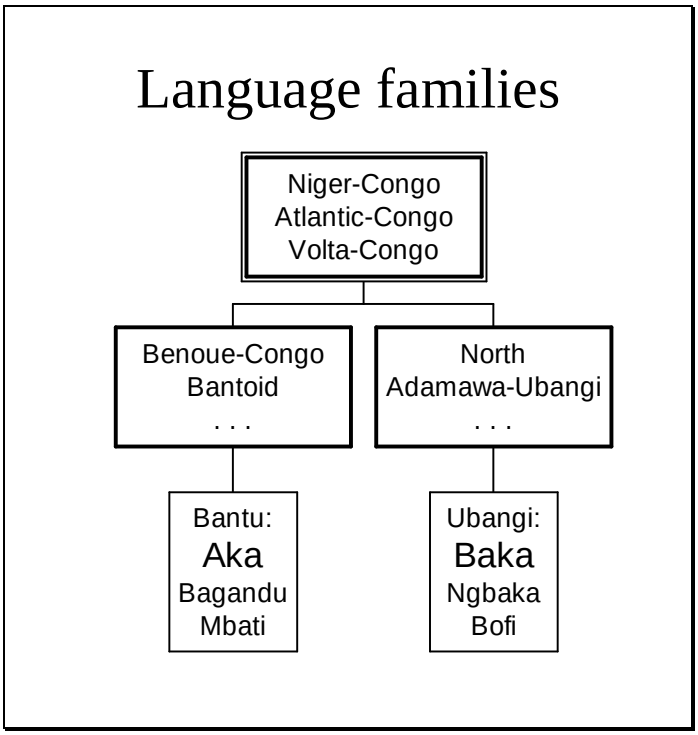


Figure 3.1. Aka and Baka linguistic relationships.

The question of language contact will be addressed in detail in chapter 4, Sociolinguistic Evidence. All of the non-Bantu elements proposed as evidence for a non-Bantu substratum in Aka are elements which are shared between Aka (Bantu C10) and Baka (Ubangian). These languages, both spoken by groups of African Pygmies, are of very different branches of the Niger-Congo language family. The linguistic family trees of the two languages are shown in figure 3.1 (Grimes 2000). Is there sufficient contact for there to have been borrowing and interference between the two languages? Thomas considers long-term

contact between the two groups to be a possibility, which "remains to be seen" (1979:159). On the other hand Bahuchet argues forcefully that the two groups have only "minimal contact" (1993b:40). He insists:

> The most plausible hypothesis is that the two Pygmy groups, Aka and Baka, originated from the same ancestral population (whose name may be reconstructed as **Baakaa*), and that their common vocabulary is a remnant of the language spoken by both groups before they borrowed Bantu and Ubangian languages respectively. (Bahuchet 1993b:41)

Bahuchet's writings devote a fair amount of time to investigating the origins of the shared vocabulary. For the most part, it cannot be traced to either Bantu or Ubangian sources (Bahuchet 1993b:41). A few words of the shared Aka/Baka vocabulary seem to have originated from Bantu, but not Bantu C10 as Aka and its neighbors are. The words come from the eastern branch of the Bantu language family, to which Bantu languages of East Africa belong (Bahuchet 1993:84). This may be another indication of their common origin in eastern D.R.C., where the Mbuti now are. The claims of this thesis are limited: various elements of Aka will be shown to be both not of Bantu origin, and also shared by Baka. These elements add additional evidence to Bahuchet's hypothesis that Aka and Baka shared a common origin and conserve elements of their original language. They also demonstrate the process of language hybridization through which Aka originated as a contact language: a Bantu language with a significant non-Bantu substratum.

3.1.2 Previous claims of Bahuchet and Thomas

Since the present work is elaborating claims already made by Bahuchet (1993b) and Thomas (1979), the goal of this chapter (chapter 3) is to add new evidence to that which they have already brought to light. Most previous work has centered on lexical cognates, and for that reason the present work will focus on other linguistic material, such as phonology and noun classes.

3.1.2.1 Lexical elements

As noted in chapter 1, Bahuchet (1993b) compared dictionaries of Aka (10,000 words) and Baka (4,000 words) and found 644 direct cognates which could not be attributed to villager languages, either Bantu or Ubanguian. He took this shared lexicon and analyzed it extensively in terms of semantic domains. It was found that 88% of the common vocabulary belonged to specialized domains such as “the forest,” “techniques,” and “society, ritual, and religion” (Bahuchet 1993b:39). The shared words deal with the shared lifestyles and similar cultures of the Bayaka and Baka peoples. The words do not deal with those activities which the Bayaka and Baka would have shared with the villagers. If this specialized vocabulary is the most conservative part of the Aka lexicon, it is an interesting exception to the principle that the “core, non-cultural vocabulary” is less likely to be borrowed (Swadesh 1951, contrario Dixon 1997:10). It is “cultural vocabulary” which has been retained, and the core vocabulary has been borrowed almost completely from villager languages (Bahuchet 1993a:137).

The retaining of specialized vocabulary is well-attested in other proposed cases of “mixed languages.” This is because a mixed language serves the purposes of in-group communication (Bakker and Muysken 1994:51), and the differentiation of a smaller group from a larger, dominant group (Bahuchet 1993:152).

3.1.2.2 Grammatical elements

If Aka and Baka have a common origin it stands to reason that some other residual elements–grammatical morphemes, for example–would be shared by the two languages. In fact, some other shared elements are briefly mentioned by Thomas (1979:157). They are listed in table 3.1.

Table 3.1. Morphemes shared by Aka and Baka

Morpheme:	French gloss:	English gloss (author's translation):
ndé	un actualisateur	referential marker (deixis)
mbɛ̂	marque verbale de "futur"	future tense marker
nɛ	demonstratif defini-proche	definite–near marker
vɔ wɔ jɔ	locatif-lointain	locative–distant marker

Thomas notes several other resemblances between Aka and Baka, many of which are features shared by Bantu and Ubangian languages generally (1979:157). These will be noted only as relevant to the specific linguistic elements discussed in this chapter.

3.1.3 Data and methodology

The discussion of linguistic evidence is very cursory and may seem insufficient without some background explanation. There are limitations in the scope of the analysis, which will be shown in section 3.1.3.1, Limitations. The choice of theoretical models will be discussed in section 3.1.3.2, Theoretical background. The orthographic representation of the data will be explained in section 3.1.3.3, Orthographic conventions.

3.1.3.1 Limitations

Much excellent work has been done in the description of Aka grammar and phonology. This thesis is not therefore working with a previously undescribed language. The discussion of linguistic phenomena does not attempt to rival (or critique) what has been published by Thomas (1991) or the works in progress by the author's colleagues Kosseke, Sitamon, and Kutsch Lojenga (in progress). The discussion is rather limited to illustrating those peculiarities of the Aka language which illustrate the fact that it is typologically a mixed language. Therefore, where description or analysis has already been published about a

particular linguistic aspect of Aka, reference will be made to the work which has already been done. Thomas (1991) has published a very excellent grammar which will often be referenced. Kosseke and Sitamon (1998) will be referenced often for the discussion of Aka phonology, and Kosseke and Kutsch Lojenga (1996) will be referenced often in the discussion of Aka grammar. Only in a few places will original analysis be presented, and that analysis will be limited to the purpose of highlighting the non-Bantu elements or the revised Bantu elements.

See section 1.6, Research and Data, for an overview of the Aka data used for original analysis. Data for the Baka language will be taken from Brisson's excellent *Contes et histoires des Pygmées Baka* (1980), with some reference to Brisson and Boursier (1979) and Kilian-Hatz (1997).

3.1.3.2 Theoretical background

The goal of this chapter is to present the linguistic material in a descriptive framework which will be accessible to readers of various theoretical backgrounds. Various grammatical models will be referred to where needed in the discussion, especially Functional/Typological Grammar (Givón 1984, 1990).

One key concept which underlies all the analysis is *grammaticalization* as used in *Emergent Grammar* (Hopper 1987:148). It is an approach which attempts to view grammar in the process of change and flux. The term *grammaticalization* usually refers to lexical items gaining grammatical function (Heine, Claudi, and Hünnemeyer 1991:3–4). In this work it will refer to the re-interpretation of grammatical items and the process of change in grammatical function. In the case of Aka, the grammatical changes are directly related to the sociolinguistic factors of past language borrowing and language intertwining. Bantu grammar was borrowed wholesale, but slightly re-interpreted in various ways. Because of language

intertwining, non-Bantu grammatical elements remain and often co-exist with Bantu structures which have similar functions. As will be seen, this process created needless synonyms and repetitious double-markings in the morphology, especially in the TAM markings of the verb and the deictic markings on nouns and verbs. In these cases, the original, non-Bantu elements seem to be in the process of developing additional distinctive pragmatic functions at the level of discourse. The result is very complex and expressive, with the Aka speaker given a wide repertoire of choices at his command. It is beyond this thesis to give a complete explanation of the complex pragmatic functions. At the present, many questions remain a mystery to the author, and cannot be explained without much additional study of many more Aka texts. However, the presence of both Bantu and non-Bantu (**Baakaa*) elements supports the hypothesis that Aka is a contact language, and particularly a mixed language.

3.1.3.3 Orthographic conventions

Linguistic data will be presented using the orthography presented in Sitamon's *Declaration d'Orthographe: Langue Aka* (to appear, 1998 draft). It follows the official guidelines for orthographies of the languages of Central African Republic. The vowels are written in the usual roman script, with the addition of the symbols /ɛ/ and /ɔ/. Tone is marked in a particular way: only the high tone is marked, and that is with a caret[1] over the vowel as in /ɛ̂/. Since tone length is not contrastive in Aka, modulating tones are shown by writing two vowels in succession. Falling tone is shown as a high followed by an unmarked low: /ɛ̂ɛ/. Rising tone is shown as an unmarked low followed by a high: /ɛɛ̂/. Voiced stops are generally implosive in Aka, so the character /ɗ/ represents the implosive [ ], and the character /ɓ/ represents the implosive [ ]. The non-implosive voiced consonants are fairly

[1] *accent circonflexe*

rare, but when they occur they are represented by digraphs: /dh/ represents [d] and /bh/ represents [b].[2] The fricatives represented by /f/ and /v/ are pronounced as the bilabial fricatives [ ] and [ ].

3.2 Bantu elements

This section demonstrates some of the Bantu elements in the Aka language. To show all Bantu elements, it would be necessary to present an entire grammar of the language. The reader is referred to Thomas (1991) for a detailed grammar of Aka. Thomas classifies it as belonging to Bantu C10, although she notes that it is unusual in many ways. Section 1.2.1 will give a very brief overview of the Bantu elements in Aka. Two specific Bantu elements will be discussed in more detail: the phonology in section 1.2.2; and the noun class system in section 1.2.3. These more detailed descriptions are meant to show how Aka has partially adopted some elements of Bantu (i.e., some sounds), and slightly re-interpreted others (i.e., the noun class system). As the overview will show, Bantu elements show up throughout the system. Indeed, it is a Bantu grammar, with some modifications, and some additional non-Bantu elements. The non-Bantu elements will be the focus of section 3.3, *Baakaa elements.

3.2.1 Overview

On the basis of resemblances, Aka appears to be a Bantu language: it has within it typical Bantu sounds, word order, noun classes, and verbal morphology such as tonal inflection and typical Bantu valency-changing morphemes. Only the sound system and noun class system will be discussed in any detail. Other elements will be only briefly mentioned in this overview.

[2]See section 3.2.2, Phonology, for a discussion of non-implosive voiced stops in Aka. The sounds appear to be imperfectly integrated into the Aka sound system.

3.2.1.1 Lexical elements

The Bantu lexical elements in Aka make up a strong percentage of the Aka lexicon:

> Lexicalement, le rattachement au Bantou commun est indéniable, mais, avec les langues du groupe C 10 (ngando, pande, mbati) parmi lesquelles ils se situe, on note une communauté vocabulaire n'excédant pas 35 à 45, où beaucoup de termes sont identique pour peu de correspondances phonétiques.[3] (Thomas 1991:19)

The fact that the cognates between Aka and the other Bantu languages near it are identical phonetically implies a strong similarity of sound systems, and perhaps a fairly recent borrowing on the part of Aka, if Aka indeed borrowed those terms. Thomas (1991:19) reasons that the Bantu elements must have been borrowed at some point, because the Aka are not ethnically Bantu themselves.

It is interesting that there are a few words in Aka that originated in Bantu, but are not found in the group C10. These words are also shared by Baka, which is not Bantu at all, but Ubangian. The words have their origin in the eastern branch of proto-Bantu, according to Bahuchet (1993:84). If so, they represent words that were borrowed long ago, when the **Baakaa* lived where the Mbuti now live, in the eastern D.R.C.

If only 45% of the words in Aka are shared with the Bantu languages around them (Thomas 1991:19), and only 22% are shared with Baka (Bahuchet 1993a:25), that leaves 33% of the Aka vocabulary unaccounted for in terms of origin. The origins of these words might either reveal: (1) previous language contact with other villager groups or (2) more remnants of **Baakaa*, if they turn out to be shared by other languages spoken by Pygmies.

[3]"Lexically, the attachment to Common Bantu is undeniable, but, with the languages of group C10 (Bagando, Pande, Mbati), there is only a 35 to 45 percent correspondence in vocabulary, with many of the cognates being identical and few phonetic sound shifts" (author's translation).

3.2.1.2 Word Order

Aka follows a very typical Bantu word order. Aka fits exactly Greenberg's type #9: II/Pr/NG/NA (1966a:109). It is thus a SVO (Subject-Verb-Object) language with prepositions in which the genitives and adjectives follow the noun. Greenberg noted that this type characterized "most languages of the Benue-Congo group, including all Bantu languages" (1966a:109). It is uniformly head-initial, corresponding to the *type A* in Heine's typology of African languages (1976:40). In the case of adjectives, Greenberg (1996a) makes the distinction between three types of qualifiers: demonstrative, numeral, and adjective. All of these follow the noun in Aka, except some demonstratives, which often go before the noun.[4]

Examples 1–10 demonstrate the basic word order of Aka. The various elements are shown to be uniformly head-initial. The object follows the verb in Aka, as shown in examples 1 and 2.

Example 1.

Bâbɛkê	ebɔdû	yâ	nyama	nê	"(They) brought the rotten meat."
3p.brought	c7.rottenness	c7.of	meat	that	

Example 2.

Levî	anyamôlâ	beênda	bêsɛ	"Levi left all (his) things."
Levi	3s.left	c2.things	c2.all	

The auxiliary precedes the verb in Aka, as shown in example 3.

Example 3.

Sumbu	âakiâ	bô	âlongɛ	moîtô "Chimpanzee tried to marry a wife."
Chimpanzee	3s.did	that	3s.marry	wife

Aka has prepositions, as shown in example 4.

[4]The demonstrative system is particularly complicated and will be discussed in section 3.3, *Baakaa elements.

Example 4.

mû	mîsɔ	“before (someone’s) eyes”	na	ndîmâ	“in the forest”
before	c6.eyes		in	forest	

Relative clauses follow the head noun, as shown in examples 5 and 6.

Example 5.

moto	mbisî	âbɔsâkânu	ebɔdû	yâ	nyama	nɛ̂	“the man who took the
c1.man	who	3s.took.rel	c7.rot	c7.of	c1.meat	dem	rotten meat”

Example 6.

Moîto	wa	bâpîâkânu	mû	mbokâ	yɛnɛ̂	“the woman they trapped
c1.woman	of	3p.trapped.rel	in	c9.field	c9.dem	in the field”

For the genitive, the possessor follows the possessed, as shown in examples 8 and 9.

Example 8.

matînâ	mâ	Baâkâ	“origin of the Aka people”
c5.root	c5.of	c2.Aka	

Example 9.

ebɔdû	yâ	nyama	“rottenness of animal, i.e. rotten meat”
c7.rot	c7.of	c1.animal	

The adjective follows the noun, as shown in example 10.

Example 10.

baîto	banyɛ	banyɛ	“very pretty women”	mɔndɔ̂	mɔnyɛ	“Good news”	
c2.women	c2.good	c2.good		c6.words	c6.good		

3.2.1.3 Verbal system

In terms of verbal morphology, Aka has both tonal inflection and typical Bantu valency-changing morphemes. It also has subject-verb agreement by way of verbal prefixes typical of Bantu languages, although it does not have any object agreement marked on the verb. The TAM system of affixes has Bantu elements which co-exist with some non-Bantu

verbal morphology. This system will be discussed in section 3.3, *Baakaa elements. The other Bantu elements in the Aka verbal system will be simply illustrated with examples in this section, without detailed discussion.

3.2.1.3.1 Tonal inflection

The tonal inflection in Aka is used to mark aspectual and mood distinctions in Aka, as it is in many Bantu languages. Thomas (1991:102) proposed TAM system based on both tonal inflection and affixation. Thomas' proposed tonal inflection system is summarized in table 3.2., Aka tonal inflection.

Table 3.2. Aka Tonal Inflection

Category	Sub-category	Tonal matrix	Example: H-tone root *dík* "leave"	Example: L-tone root *dò* "go"
Pefect	telic	H – L	**nà díká** "I left for home"	**nà dòá** "I went home"
	non-telic	H L L	**ná dìkà** "I left out"	**ná dòà** "I went round"
Imperfect	progressive	HL – HL	**nâ díkâ** "I was leaving"	**nâ dòâ** "I was going"
	ingressive	HL – L	**nâ díkà** "I began to leave"	**nâ dòà** "I began to go"
Irrealis	revolving	H – H	**nâ díkâ** "I was to leave"	**nâ dòá** "I was to go"
	virtual	H H L	**ná díkà** "I seemed to leave"	**ná dóà** "I seemed to go"
Eventual	obligative	H – HL	**ná díkâ** "I must leave"	**ná dòâ** "I must go"
	hypothetic	L – HL	**nà díkâ** "I might leave"	**nà dòâ** "I might go"
Dependent	inchoative	L H L	**nà díkà** "I started leaving"	**nà dóà** "I started going"
	conditional	L – L	**nà díkà** "then I'd leave"	**nà dòà** "then I'd go"

The /na/ in each of the examples in table 3.2 is the subject marker. It denotes a first person singular subject, and it varies in tone according to the aspect and mood. The tone on

the root also reflects the TAM distinctions. There are also verbal morphemes which attach to the root and mark TAM distinctions. These will be discussed in section 3.3.3, Verbal affixes.

3.2.1.3.2 Valency-changing morphology

Aka uses morphology typical of Bantu languages increase or decrease the valency[5] of verbs. The passive construction is most common cause of a decrease in valency. In Aka, this construction is rarely used. Rather, verbs with an impersonal third-person-singular subject marking take the place of passives. Apart from the impersonal passive, there is a derivational process which is sometimes used to turn transitive verb stems into intransitive verb stems, using the suffix /-i-/.[6] Adding this morpheme derives a stative verb from an active verb. Thomas (1991:53) calls this affix the "annulatif, passif, augmentatif." Some examples of verbal roots and their derived intransitive counterparts (from Thomas 1991:53) are found in table 3.3.

Table 3.3. Aka valency-decreasing morphology

root:	**gloss:**	**root:**	**gloss:**
lêk-	"to tire, to be tired"	lêki-	"to suffice, to exceed"
gû-	"to leave, to go"	gûi-	"to enter, to return"
bûk-	"to break, to chop"	bûki-	"be broken, chopped"
bôl-	"to break"	bôli-	"to explode"

[5]Valency here refers to the number of arguments. The causative construction adds an additional object argument, thus increasing the valency by one. The passive construction decreases the valency of an active verb to one argument only.

[6]This suffix is added to the verb stem, and so there are always additional morphemes following it.

There are other morphemes which mark a change in the valency of verb stems. The derivational extensions which augment the valency of the verb all end in the vowel /ɛ/. Those which do not augment the valency end with the vowel /a/. The causative construction is the most prototypical valency-increasing construction, and it is marked by the morpheme /-dzɛ/. The distributive construction is marked by the morpheme /-nyɛ/. Examples of valency-increasing derivation are given in table 3.4 (from Kosseke and Kutsch Lojenga 1996:4).

Table 3.4. Aka valency-increasing morphology

verb:	**gloss:**	**derived form:**	**gloss:**
fâna	pass	fânidzɛ	allow to pass
kaba	give	kabanyɛ	distribute (give, give, give)

Valency-changing morphology is not used in the case of adding an indirect object. The indirect object is simply placed in a prepositional phrase. Table 3.5 gives examples contrasting the addition of an object, an indirect object, and multiple beneficiaries to the verb *to give* (from Kosseke and Kutsch Lojenga 1996:4).

Table 3.5. Examples of "to give" in Aka

Examples:	**Gloss:**
kaba	give
kabâ betôbo	give clothes
kabâ betôbo na kɔ̂kɔ	give clothes to grandfather
kabanyɛ betôbo na bato	distribute clothes to people

As illustrated in tables 3.4 and 3.5, there are two different morphemes which increase valency in Aka: /-dzɛ/ “causative” and /-nyɛ/ “distributive”. The various semantic differences within “causative,” are all expressed by the /-dzɛ/ morpheme, as illustrated in table 3.6.

Table 3.6. Causatives in Aka

Non-augmented:	**Gloss:**	**Augmented:**	**Gloss:**
bêfa	deteriorate	bêfidzɛ	ruin
bîmba	be filled (with food)	bîmbidzɛ	fill, cause to be full
bɛla	get angry	bɛlidzɛ	make angry
difa	find	difidzɛ	cause to be discovered
dîkala	be forgotten, lost	dîkalidzɛ	forget, lose
dînga	carry, lift	dîngidzɛ	help to carry

While the causative construction increases the number of arguments by exactly one additional agent/subject, the distributive morpheme /-nyɛ/ is used to increase the valency of the verb by an indefinite number of object beneficiaries. There is also a reflexive morpheme, /-na/. These two constructions are illustrated with the verb “to hit” in table 3.7.

Table 3.7. Distributive and reflexive of "to hit"

Example:	**Gloss:**
dhuûmba	hit, run into
dhuûmbana	hit one's self against, run into
dhuûmbanyɛ	hit one thing against another

The verb illustrated in table 3.7, **dhuûmbanyɛ**, can also be used to illustrate a tri-transitive clause, as shown in example 11.

Example 11.

Tâo	amûdhuûmbânyê	mesôko	mîâ	bandala	bêî.
father	3s.perf.hit.caus.	c6.heads	c6.their	c2.nephews	his

"Father hit his nephews' heads together."

While it is true that Aka uses derivational morphology to increase and decrease the valency of its verbs, the actual morphemes it uses may not be typical of Bantu languages. The valency-increasing morpheme in most Bantu languages is /-il-/, which often appears as /-i-/ (Ngonyani 1998:249). This would correspond to the Aka valency-*decreasing* morpheme! More research is needed to determine the origins of the Aka causative and distributive morphemes.

3.2.1.3.3 Subject-verb agreement

The discussion of subject-verb agreement will follow Kosseke and Kutsch Lojenga (1996:1). The verb takes a prefix which agrees with the subject. Often in a text, when the same subject continues to be the subject of consecutive clauses, there is a null subject and the verbal prefix alone signals the identity of the subject. The subject-agreement prefixes accord with the person and number of the subject, and also the noun class of third-person subjects. Since the subject-verb concord functions as a kind of pronominal reference in the case of null

Table 3.8. Simple pronouns of Aka

Class 1			Class 2		
1s	amɛ̂	I	1pl	bûsɛ̂	we
1s & 2s	sînɔfɛ̂	we (dual) inclusive	1s & 2 pl	sînɛ̂nû	we inclusive
1s & 3s	sînâî	we (dual) exclusive	1 s & 3 pl	sînɛ̂bɔ̂	we exclusive
2s	ɔfɛ̂	you	2pl	bûnɛ	you (pl.)
3s	yɛɛ̂	he, she	3pl	bɛ̂ɛnɛ̂	they

subjects, the pronoun system will be presented along with it. Table 3.8 presents the pronouns of Aka. Note that there is an inclusive/exclusive distinction and a dual distinction. Kosseke and Kutsch Lojenga (1996:1) give an excellent discussion of the inclusive and exclusive pronouns. They show those pronouns to be composed of other pronouns, and thus make a difference between the simple pronouns and the "composite" pronouns (which mark the inclusive/exclusive distinction).

The noun class for people is class 1 for singular, class 2 for plural. This is class for first and second person reference, both in pronouns and verbal prefixes. Subject-verb concord prefixes for classes 1 and 2 are given in table 3.9.

Table 3.9. Subject-verb concord prefixes in Aka

Class 1			Class 2		
1s	na-	I did	1pl	[`]	we did
1s & 2s	î-	we (dual) inclusive	1s & 2 pl	î-	we inclusive
1s & 3s	î-	we (dual) exclusive	1 s & 3 pl	î-	we exclusive
2s	[`]	you did	2pl	[`]	you (pl) did
3s	a-	he/she did	3pl	bâ-	they did

As can be seen in table 3.9, the prefixes for second-person singular and plural, and for first person plural are all simply an added low tone on the first syllable of the verb. To disambiguate those prefixes pronouns must be added (Kosseke and Kutsch Lojenga 1996:1). The combinations between pronouns and prefixes are shown in table 3.10. The pronouns in parentheses are optional.

Table 3.10. Combinations of pronouns and prefixes in Aka

Class 1			Class 2		
1s	(amɛ̂) na-	I	1pl	bûsɛ̂ [`]	we
1s & 2s	sînɔfɛ̂ î-	we (dual) inclusive	1s & 2 pl	sînɛ̂nû î-	we inclusive
1s & 3s	sînâî î-	we (dual) exclusive	1 s & 3 pl	sînɛ̂bɔ̂ î-	we exclusive
2s	ɔfɛ̂ [`]	you	2pl	bûnɛ [`]	you (pl)
3s	(yɛɛ) a-	he/she	3pl	(bɛ̂ɛnɛ̂) bâ-	they did

Each noun class has a corresponding verbal prefix. These will be listed in section 3.2.3, Noun class system.

3.2.2 Phonology

The discussion of phonology will be limited to a brief introduction to the sound system of Aka and the discussion of the sounds which remain on the edge of the system. It

will be argued that some sounds in Aka appear mainly in the Bantu prefixes, and have not yet been completely integrated into the rest of the Aka sound system. The analysis is limited to the goal of illustrating the effect of language contact on the phonology of Aka.

3.2.2.1 Introduction

Much excellent work has already been done on the phonology of Aka (Cloarec-Heiss and Thomas 1978; Kosseke and Sitamon 1998). This section will give a brief introduction to the Aka sound system and then focus particularly on a Bantu phonemic distinction which is only partially realized in Aka: the distinction between the regular voiced stops and voiced implosive stops. Except for one example (an ideophone), non-implosive voiced stops have been found only in the noun class prefix of class 5 nouns. Because of this extremely limited distribution, there is some controversy as to whether this distinction should be considered phonemic in Aka. Cloarec-Heiss and Thomas (1978:52) consider the non-implosive voiced stops [b, d] to be allophonic variants of their implosive counterparts /ɓ, ɗ/. For stops, the only feature they propose as phonemic is [+/- voiced]. On the other hand, Kosseke and Sitamon (1998:17) propose that all those sounds are phonemic, and therefore the feature [+/- constricted glottis] is necessary. The present work argues that the non-implosive voiced stops were imperfectly adopted from Bantu by Aka when it adopted and re-interpreted the Bantu noun class system. Therefore, the distinction [+/- constricted glottis] in Aka is in the process of emerging, and is not yet completely integrated into the phonemic system.

In this section about phonology, phonetic transcription will be used, rather than the standard orthography of Aka. The transcription system is laid out in tables 3.11 to 3.13. The other sections of this chapter do need such phonetic detail, and will resume using the standard orthographic system, as introduced in section 3.1, Introduction.

3.2.2.1.1 Phonemic inventory

The phonemic inventory proposed by Kosseke and Sitamon (1998) is listed in tables 3.11 and 3.12. These are the symbols which will be used in the discussion of phonology.

Table 3.11. Consonants in Aka

		labial	alveolar	palatal	velar	labial-velar	glottal
Implosive	voiced	**ɓ**	**ɗ**				
Stop	voiceless	**p**	**t**		**k**	**kp**	
Stop	voiced	**b**	**d**		**g**	**gb**	
Stop	prenasal	**mb**	**nd**	**dʒ**	**ŋg**	**ŋmgb**	
Affricate	voiced			**dʒ**			
Fricative	voiceless	**Φ**	**s**				**h**
Fricative	voiced	**β**					
Resonant	nasal	**m**	**n**				
Resonant	liquid		**l**				
Resonant	glides			**y**		**w**	

Aka has seven vowels, the same number which Guthrie proposed for proto-Bantu (1967:11). The consonant system of Aka proposed by Kosseke and Sitamon (1998) consists of 26 consonants, as shown in table 3.11. There are gaps in the inventory: no /z/ even though there is an /s/, no /t / even though there is an /dʒ/. Note particularly the three-way distinction

Table 3.12. Vowels in Aka

i	**u**
e	**o**
ɛ	**ɔ**
a	

of voice, voiceless, and implosive stops in labial and alveolar position. As noted above, Cloarec-Heiss and Thomas (1978:50, 58) recognize only voiceless and implosive stops for Aka (see also Thomas 1991:32). They also recognize only the voiced bilabial fricative /**β**/ but not the voiceless /**Φ**/. The restricted status of the non-implosive voiced stops, as well as of the voiceless fricative, will be the focus of the present discussion of Aka phonology.

Aka has high and low tones, which combine as rising and falling tones. Representation of tone is shown in table 3.13.

Table 3.13 Tone in Aka

High	= é (H) <u>èndémà</u> ‘dance’	Falling = ê (HL) <u>fòlófòlô</u> ‘bird (sp.)’
Low	= è (L) <u>èkìtì</u> ‘footprints’	Rising = ě (LH) <u>gănɔў</u> ‘leaf (sp.)’

3.2.2.1.2 Distinctive features

If there are sounds which are on the edge of the phonemic system, it is the features of those sounds which are really are not fully contrastive.[7] Table 3.14 presents the full specification of Aka vowels (cf. Pulleyblank 1986:12).

Table 3.14. Aka vowel features

	i	e	ɛ	a	ɔ	o	u
high	+	-	-	-	-	-	+
low	-	-	-	+	-	-	-
round	-	-	-	-	+	+	+
ATR	+	+	-	-	-	+	+

[7]For an introduction to distinctive features as used in this discussion, see Kenstowicz 1996.

Table 3.15 presents the phonemically-distinctive features of Aka obstruents. The feature [constricted glottis] refers to the imploded stops /ɓ/ and /ɗ/. This feature would not be needed if in fact the non-imploded voiced stops were allophones of the imploded stops, as Cloarec-Heiss and Thomas (1978:52) proposed. The controversy reflects the incomplete integration of non-imploded sounds, as will be discussed in section 3.2.2, Voicing in Aka.

Table 3.15. Features of Aka obstruents

	labial:					coronal:					velar:		lab-vel:		G:
	ɓ	**p**	**b**	**f**	**v**	**ɗ**	**t**	**d**	**s**	**dʒ**	**k**	**g**	**kp**	**gb**	**h**
constricted glottis	+	-	-	-	-	+	-	-	-	-	-	-	-	-	-
slack vocal folds	+	-	+	-	+	+	-	+	-	+	-	+	-	+	-
continuant	-	-	-	+	+	-	-	-	+	-	-	-	-	-	+

3.2.2.1.3 Syllable structure

Kosseke and Sitamon (1998:1) claim that Aka has only open syllables, of the types V and CV. Vowel-initial syllables (V) occur only in the instances noted in table 3.16. (Kosseke and Sitamon 1998:2).

Table 3.16. Distribution of syllable-type V

	construction:	examples:	meaning:
a)	noun class 7, /e-/	**e**-ɓuku	seat
b)	locative /ó/	**ó** mbóka	at the village
c)	pronouns	**a**mɛ́	I, me (1s emphatic)
		a-	1s prefix to verb
d)	following CV within	mok**ió**	"brother-in-law" (N)
	N or V root	t**íá**ma	"to rise" (V)

Cloarec-Heiss and Thomas (1978:101) also posit V and CV types, but allow for cases of CVV and VV types as well. The examples of CVV would be analyzed by Kosseke and Sitamon as CV.V (CV followed by V), as in table 3.16, example (d). No extensive arguments are offered for this analysis (Kosseke and Sitamon 1998:2). Although Cloarec Heiss and Thomas (1978:101) proposed a VV syllable type, no examples of it were found in the data of Duke, Kosseke, and Sitamon (1998). There is a strong preference for syllables with onsets (CV), and an absolute ban on syllables with codas (*CVC). This constraint is represented in table 3.17.

Table 3.17. Syllable structure constraint

"Avoid CVC."

Various phonological processes occur in order to keep the basic syllable structure. Among these are reduction (examples 12-13) and epenthesis (example 14).

Reduction. In reduction, series of vowels other than those within roots (see table 3.6, line d) are reduced. Round vowels which precede vowels are reduced to labialization on the preceding consonant. Front vowels which precede vowels are reduced to palatalization on the preceding consonant, as shown in example 12.

Example 12.

mo	+	akâ	>	mwakâ	"hunting party"
be	+	alo	>	byalo	"container for honey"

If there is no preceding consonant, the front vowel is reduced to a glide, as example 13 demonstrates.

Example 13.

e	+	îkua	>	yîkua	"basket"

Epenthesis: one kind of epenthesis is the insertion of /y/ at the beginning of a syllable if there is no consonant onset, in order to keep a CV syllable structure. The inserted /y/ can be analyzed as the radically underspecified /i/ which has undergone reduction, as shown in example 14.

Example 14.

a + áka	>	ayáka	"the people Aka"
mo + íto	>	moyíto	"a woman"

These processes are not uncommon in African languages, but they are important to keep in mind throughout the presentation of the Aka data. Aka nouns and verbs generally occur with prefixes, and often the root has been affected by theses processes associated with strict syllable constraints.

3.2.2.2 Voicing in Aka

The controversy about voicing in Aka has been introduced in section 3.2.2.1.1, Phonemic inventory. This section presents a new analysis of the question, from the point of view of language contact and language change. Some have claimed that there is no [constricted glottis] distinction (Cloarec-Heiss and Thomas 1978), while others have claimed that there is such a distinction (Kosseke and Sitamon 1998:1). They are both right, to a degree. The Aka language has borrowed this distinction from Bantu with the Bantu noun classes, but the distinction is not yet fully integrated into the Aka sound system.

3.2.2.2.1 Distribution

The most obvious typological trait of Bantu languages is the noun class system which nearly all Bantu languages share. The noun classes are prefixes which are used for concord between the noun and elements which are in the noun phrase, such as adjectives,

prepositions, and demonstratives. Subject-verb agreement is also marked by noun classes. Every noun has a noun class category, and in a text nearly every word will take a noun class prefix. Aka uses a typical Bantu noun class system.[8] The sounds in question mostly occur in connection with noun class prefixes.

The data to be considered are found within a lexical database of 2,176 words gathered by Kosseke and Sitamon. There are 1,564 nouns and 495 verbs in the corpus. Table 3.18 classifies all of the occurrences in the data of voiced, non-implosive obstruents. The distribution among noun classes is important because occurrences of these segments in noun class 5 are directly associated with a voicing rule which occurs only with the Bantu class prefix for class 5. As will be shown below, class 5 nouns are marked by: (1) the voicing of their initial segment and (2) low tone on the first syllable.

Table 3.18. Distribution of non-implosive voiced obstruents

segment:	class 5:	other Nouns:	Verbs:	% of total in class 5:	% unaccounted:
/d/	33	14	7	61	39
/b/	21	43	8	29	71
/g/	46	10	7	73	27
/β/	21	1	1	91	09

When all the data in table 3.18 are taken together, 57% of all voiced, non-implosive obstruents can be accounted for by the class 5 prefix. However, class 5 examples aside, there are enough other examples, from both nouns and verbs, to indicate either: (1) other processes are occurring which cause non-implosive voiced obstruents or (2) phonemic non-implosive voiced obstruents exist, although they are fairly rare. The existence of voiced non-implosives

[8]For details on the Aka noun class system, see section 3.2.3, Noun class system.

would signal a three-way distinction in voicing: voiced, voiceless, and implosive voiced obstruents.

3.2.2.2.2 Noun classes and voicing

Aka nouns of class pairing 5/6 (nouns with singular in class 5, plural in class 6) exhibit voicing and tonal alternation on the nominal root, as shown in table 3.19. The singular is voiced, and the plural is not.

Table 3.19. Voicing alternation in noun class 5/6

	Cl. 5 (singular):	Cl. 6 (plural):	Root:	gloss:
b/p	bădí	màpádí	/pádí/	grain
	bìtá	màpìtá	/pìtá/	war
d/t	dăndá	màtándá	/tándá/	hand
	ɗìngò	màtìngò	/tìngò/	knot
dʒ/s	dʒăku	màsáku	/sáku/	ant (sp.)
	dʒèlé	màsèlé	/sèlé/	lizard
g/k	gànɔ̀	màkànɔ̀	/kànɔ/	story
	gìsɔ̀	màkìsɔ̀	/kìsɔ̀/	maggot
β/Φ	βàfɪ	màΦàfɪ	/Φàfɪ /	termite
	βŏkó	màΦókó	/Φókó/	hole

All class 5 nouns have a voiced initial consonant, followed by vowel with low or rising tone. Roberts (1994:93) has suggested that the class 5 morpheme in Aka is simply the floating feature of [+voice] plus low tone added to the first syllable.

One explanation which might be posited for the data in table 3.19 is that there is de-voicing in the class 6 (plural) forms. This is not the case. Intervocalic devoicing is not an expected phenomenon, and does not happen in these examples. In class 6, some root-initial

consonants are voiceless, but some *are* voiced, which shows that there is not a general de-voicing rule. Examples are shown in table 3.20.

Table 3.20. Class 5/6 examples against a de-voicing hypothesis

	Cl. 5 sing.:	**Cl. 6 plural:**	**Root:**	**gloss:**
ɓ/ɓ	ɓǎɓà	màɓáɓà	/ɓǎɓà/	tree (sp.)
ɗ/ɗ	ɗàngá	màɗàngá	/ɗàngaˊ/	water plant (sp.)
ʤ/ʤ	ʤàngá	màdʒàngá	/ʤàngaˊ/	bat (sp.)
l/l	lìbɔ̀ndɔ̀	màlìbɔ̀ndɔ̀	/lìbɔ̀ndɔ̀/	intestines

If the voicing alternation of class 5/6 roots cannot be accounted for by a de-voicing rule, perhaps a general rule could be posited which would voice all word-initial consonants. If all nouns were of class 6, perhaps this would be a valid hypothesis. However, other noun classes do not show voicing of the initial segment, as the examples from class 9/6 in table 3.21 demonstrate.

Table 3.21. Voiceless word-initial consonants in class 9/6

	Cl. 9 singular:	**Cl. 6 plural:**	**Root:**	**gloss:**
t/t	tɔ̀ŋgú	màtɔ̀ŋgú	/tɔ̀ŋgú/	navel
k/k	kùŋgá	màkùŋgá	/kùŋgá/	body hair
s/s	sɔ́pɔ́	màsɔ́pɔ́	/sɔ́pɔ́/	earth
Φ/Φ	Φúmà	màΦúmà	/Φúmà/	house

As there is not a general rule to voice word-initial consonants, then it seems there is a lexical rule of voicing which applies only to class 5, a rule which a floating [+voice] feature attaches to the initial segment of the root. What is interesting is that there are almost no class 5 roots which are voiced and non-implosive. The two exceptions are found in table 3.22.

Table 3.22. Voiced, non-implosive class 5 roots

	Cl. 5 singular:	Cl. 6 plural:	Root:	gloss:
g/g	gɔ̀àlà	màgɔ̀àlà	/gɔ̀àlà/	game of imitation
b/b	bèlèlè	màbèlèlè	/bèlèlè/	sound of a waterfall
d/d	--	--	--	--
β/β	--	--	--	--

There are no examples of class 6 roots beginning in /d/ or /β/, and only one example each of roots with /g/ and /b/. Those two examples consist of (1) an ideophone and (2) the name of a child's game, both of which are likely to be onomatopoeic. Often these kinds of words are set apart and may not follow all the regular rules of the sound system.

Still, there is some debate about the interaction of voicing and tone in the class 5. Roberts (1994:93) suggested that the class 5 morpheme is a floating feature of both [+voice] and [low tone]. Bradshaw (1999) proposed that the class 5 prefix in Aka is only [+voice], and the addition of voicing occasions low tone on the syllable.

3.2.2.3 Conclusions

The non-implosive voiced obstruents have a special place in the phonemic system of Aka. The majority of occurrences of the these sounds are produced by a voicing rule which occurs only with the Bantu class 5 prefix. If Aka is a contact language as presented in this thesis, then the Bantu noun classes were borrowed by the ancestors of the Aka at some point. In fact, the class 5 marker has been documented to occur as "voice/voiceless alternation" in Shona, a Bantu language of Southern Africa (Silver and Krause 1978). In the Shona data, only stops become voiced, and they always are realized as implosives. The voicing prefix is realized differently in Shona, perhaps because the noun class prefixes are better integrated into the Shona sound system.

Thus the non-implosive voiced obstruents are partially accounted for by the Bantu noun class system. The remaining examples of those sounds have not yet been studied carefully by the author. It is possible that only Bantu roots exhibit these sounds, or that the sounds are produced by other voicing processes. Until more work has been done, the claim cannot be supported that these sounds *only* come from Bantu and are not yet fully integrated into the Aka sound system. However, they are clearly of a special limited distribution, and the majority of cases can be attributed to the Bantu noun class system. This sort of limited distribution would be expected in cases of language contact where phonemic distinctions are in the process of integration.

3.2.3 Noun class system

The noun phrase in Aka is very Bantu, with Bantu word order, Bantu noun classes, and some Bantu demonstratives. This section gives an overview of the noun class system in Aka, and discusses some unique qualities of the Aka use of noun class prefixes.

3.2.3.1 Overview

In Aka, all nouns have a noun class, marked by a prefix (which is sometimes zero-marking). The prefixes occur on nouns, adjectives, numerals, demonstratives, prepositions and verbs.[9] The noun classes have the grammatical function of *concord*: marking subject-verb agreement, as well as agreement within the noun phrase. The elements within a noun phrase take the noun class prefix of the noun which governs them (i.e., the head noun). The verb has concord with the subject, but not with any objects. The noun class prefixes in Aka are shown in table 3.23 (Kosseke and Kutsch Lojenga 1996:3).

[9]Some demonstratives do not take prefixes: see section 3.3.2, Demonstratives.

Table 3.23. Aka noun class prefixes

	Nominal Prefixes	Pronominal Prefixes		Numeric Prefixes
	nouns, adjectives	possessives, demonstratives, adjectives	verbs	numerals
1	mo-	wu-	a-	Ø-
1a	Ø-			
2	ɓa-	ɓá-	ɓá-	ɓá-
3	mo-	wu-	wá-	wú-
4	me-	mí-	myá-	mé-
5	[voicing] [low tone] / ɗi-	ɗĭ-	dʒá-	ɗĭ-
6	ma-	má-	má-	má-
7	e-	yí-	yá-	yí-
8	ɓe-	ɓí-	ɓyá-	ɓé-
9	Ø -	yi-	ya-	Ø-
13	lo-	lú-	lwá-	ló-
14	ɓo-	ɓú-	ɓwá-	ɓú-
19	i-	í-	yá-	í-

Almost every word in any given sentence will have a noun class prefix, either its own (in the case of nouns) or for concord (in the case of other elements). Examples 15 and 16 give some typical sentences to illustrate the noun classes.

Example 15.

Bafɔ̂kɔ̂	bakɔpɛ	bâbâyê	bâduânɛ̂	na	ndîmâ.
c2.certain	c2.youth	c2.two	c2.go.asp.	to	c9.forest

“Two youths went into the forest.”

Example 16.

î	bɔsɛ	ebɔdû	yâ	ngâ	nyama	waândzo,
we	take.sub	c7.rot	c7.of	dem	c3.animal	c3.dem

“Let us take the carcass of that animal there . . .”

Example 15 shows the subject-verb agreement. Example 16 shows that the pronominal prefixes can take the place of noun class prefixes for subject-verb agreement. Example 16 also demonstrates that some demonstratives combine with prefixes, while others do not. Note

also that genitive preposition /yâ/ agrees with the first noun (the possessed) rather than the second (the possessor).

3.2.3.2 Nominal derivation

In addition to concord, noun classes have the function of derivation. The same root may combine with various noun class prefixes, each combination deriving a different lexical entry, as in table 3.24 (Thomas 1980:546).

Table 3.24. Derivations based on *lèmbà*, "sorcerer"

class	prefix	root	word	meaning
1a	mò-	-lèmbà	mòlèmbà	sorcerer
2	bà-	-lèmbà	bàlèmbà	sorcerers
3	mò-	-lèmbà	mòlèmbà	state of being a sorcerer
9	bò-	-lèmbà	bòlèmbà	kind of people: sorcerers
11	vì-	-lèmbà	vìlèmbà	little sorcerer
10	lò-	-lèmbà	lòlèmbà	multitude of sorcerers

Noun classes combine to create singular/plural sets. In section 3.2.2 (Phonology) the class set 5/6 was discussed. The singular of the nouns took the class 5 prefix, and the plural took a class 6 prefix. Aka is remarkably productive in the number of combinations it allows: 29 class sets according to Thomas (1980:544). Some of these class sets correspond to semantic categories (Thomas 1980:548).

3.2.3.3 Verbal derivation

According to Thomas (1980:547), noun class prefixes may also be added to verb roots to create nominalized forms, as in table 3.25 (Thomas 1980: 547).

Table 3.25. Derivations based on *tímídʒɛ*, “to send”

class	prefix	V root	word	meaning
9	bò-	-tím-	bòtìmí	commission (action)
6	mà-	-tím-	màtímì	sender
1a	mò-	-tím-	mòtímá	message (result)

This remarkable productivity is a striking feature of the Aka noun class system. Noun class markers are generally considered as primarily inflectional morphology, rather than derivational morphology. Verbs are generally nominalized by morphemes attached to the stem. After they become nouns, they receive a noun class prefix. However, in Aka the noun classes themselves can be used to derive nominalized verbs, without the usual derivational morphology on the stem.

3.2.3.4 Conclusions

This brief discussion has shown Aka to be unique in its appropriation of the Bantu noun class system. It is extremely productive in the derivations permitted, to the extent that verbs may be derived from nouns without the usual verbal morphology. In addition, the number of class sets allowed (29 in all) shows an extreme willingness to combine classes in an unusually high variety of ways. This productivity is not surprising if Aka has borrowed the noun class system. The system would have been slightly altered, and also made more productive as it was applied to a wide range of new words which Aka had conserved from **Baakaa*. Much more research remains to be done to see exactly how the Bayaka conception of categories compares with the Bantu villagers’ conception of them.

3.2.4 Conclusions

This section has shown that Aka has a structure which is clearly Bantu. There are, however, some unique properties to the Bantu structures that occur in Aka. The sound system is typical of Bantu, but there are some sounds which are imperfectly adopted into the system. The Bantu noun class system is fully functional in Aka, but the use of the noun classes is slightly different in Aka than in most other Bantu languages. More class sets are allowed in Aka, and there is more productive derivation of nouns and verbs. This is proposed to be potential evidence for Bantu elements having been adopted and re-interpreted.

3.3 **Baakaa* elements

This chapter will illustrate some of the original **Baakaa* proto-language which remains as a substratum in Aka. It is a complex and difficult task to isolate these elements, as Bahuchet (1993a:135) noted:

> La langue ancienne parlée par les **Baakaa* ne semble pas avoir laissée de substrat syntaxique aisé à dégager, mais ce serait là [sic.] tâche à mener en détail pour des linguistes: l'établissement de l'origine commune de l'aka et du baka autorise dorénavant un tel travail.[10] (Bahuchet 1993a:135)

Compared to the Bantu elements, the **Baakaa* elements make up a minor part of the language: about 20% of the vocabulary, some verbal affixes, some demonstrative particles, and various function words such as discourse markers and ideophones.

3.3.1 Overview

The most evident link between Aka (Bantu) and Baka (Ubangian) is their shared vocabulary. They also share a good deal of nominal and verbal morphology. Some shared grammatical morphemes were remarked earlier by Thomas (1979:157). These were listed in

[10]"The ancient language spoken by the **Baakaa* does not seem to have left a syntactic substratum which is easily separated, but that would be a task for linguists to pursue in a detailed fashion. The establishment of a common origin for Aka and Baka henceforth authorizes such a work." (author's translation).

table 3.1. These and a few additional morphemes will be discussed in this section (3.3, *Baakaa elements), with the goal of comparing Aka with Baka. Some morphemes can be shown to be not of Bantu or Ubangian origin; and these clearly can be posited as remnants of **Baakaa*. However, most of the morphemes shared between Aka and Baka cannot be traced back to a definite origin at this point in the author's research. If at least one morpheme can be shown to be *not* Bantu in origin, it illustrates that Aka contains material from more than one source language. If so, Aka meets one criterion for being a contact language.[11] It will become clear, however, that the evidence available is much more than a single morpheme.

It will be shown that Bantu morphology co-exists with morphology from another source, and the two systems interact in a complex way. In some cases, two sets of morphemes seem to have the same functions: one set is Bantu in origin, and the other seems to be a remnant of **Baakaa*. This allows for nuances and pragmatic complexity, perhaps observable as preferences at the discourse level. How these morphemes interact, and the resulting functions, is a topic of great interest for the understanding of language intertwining. However, unraveling the functions at the pragmatic level will require deep analysis of many more texts. One would expect that some choices might be simply free variation, and some pragmatic functions might not fully be grammaticalized. These questions are mostly beyond the scope of the present work.

3.3.2 Demonstratives

Aka has a demonstrative system which is primarily Bantu in origin. However, there are some elements in the system which do not seem to be Bantu. It is worthwhile to recall that Thomas (1979:157) noted four morphemes that were shared by Aka and Baka. Three of

[11]"A contact language . . . comprises linguistic material which cannot be traced back to a single source language" (Thomason 1997a:3).

the four shared morphemes are part of the demonstrative system: (1) the referential marker *ndê,* (2) the definite-near demonstrative *nɛ,* and (3) the distant locative *wɔ*.

Some Aka demonstratives follow the noun and agree with the noun by noun class prefix. The demonstrative which always follows the noun and takes a concord is *–ândzo,* as in example 16.

Example 16.

nyama	waândzo	"the animal in question, that animal"
animal	c3.dem	

The demonstrative *–ândzo* marks a definite and referential noun which is already the topic of conversation, or has already been introduced into the text. It corresponds to the proto-Bantu referential root *VCVo, as in ***edyo* (Guthrie 1970:247). The meaning in proto-Bantu was "that there by you" or "that which has been mentioned" (Guthrie 1970:247). In Aka is also has this meaning and function. This demonstrative often co-occurs with other demonstratives in Aka.

The demonstrative which usually follows the noun and sometimes takes a noun class prefix is *nɛ*. It is very variable, occurring in several positions, as noted in examples 17 and 18.

Example 17.

wɔnɛ̂	motopayê	"this man"
c1.dem	c1.man	

Example 18.

ebɔdû	yâ	nyama	nɛ̂	"that carcass"
c7.rot	c7.of	c1.animal	dem	

The morpheme *nɛ* might have originated from either or both or two possible sources. There is a *nɛ* which occurs in some Bantu languages, and there is a *nɛ* which is shared by Baka and Aka. In proto-Bantu, the root *CVCV corresponds to "this," "this here where I am," or "this here by me." It is realized in some languages as *nɛɛnɛ,* but also by other forms in various

other Bantu languages (Guthrie 1970:247). In the case of example 17, where the *nɛ* takes a noun class prefix, it seems to have the same meaning as the proto-Bantu "this." In example 18 and in many other places, it seems to simply signify the definite: "that carcass, that particular one." The morpheme *nɛ* occurs as an independent morpheme in Baka as well, as shown in example 19.

Example 19.

a	wa	nɛ̀	lɛ̀ mokɔsɛ̀	pe:	"There at the fire, the boy said:"
at	fire	dem	little.man	that:	

The morpheme *nɛ* also occurs in Aka verbal morphology as a near past tense marker.[12]

Those two morphemes, *nɛ* and *–ândzo*, make up the basic "this" and "that" distinction in Aka. Another morpheme is very common, and seems to mean "that": *nga*. This morpheme always occurs before the noun, and never takes a noun class prefix. Some occurrences of *nga* are given in examples 20 and 21.

Example 20.

ebɔdû	yâ	ngâ	nyama,	"carcass of that animal"
c7.rot	c7.of	dem	animal	

Example 21.

ebɔdû	yâ	ngâ	nyama	waândzo,	"carcass of that animal
c7.rot	c7.of	dem	c3.animal	c3.dem	under discussion"

In the texts analyzed, the *nga* morpheme seems to be interchangeable with *–ândzo*, and often co-occurs with it. However, only *nga* occurs in reported speech, never *–ândzo*. This may mean that *–ândzo* has developed a special discourse function, signifying "already mentioned." As such it would only be used in narration. The origin of the *nga* morpheme is unclear: it does not seem to occur in Baka, nor is it easily traced to Bantu. There is a *nga* morpheme in Baka, but it is a pronoun (first person singular) of Ubangian origin.

[12]See section 3.3.3, Verbal affixes.

Another demonstrative in Aka which is always free and never takes a noun class prefix is *ndê*. This morpheme also occurs in Baka. Unlike *nga*, the morpheme *ndê* always follows the noun which it modifies. Like *nɛ*, it does not seem to combine with other demonstratives. It seems to have a deictic function, as in "here," or "this here." An occurrence of *ndê* is shown in example 22.

Example 22.

ebɔdû	ndê	"that carcass"
c7.rot	dem.	

Thomas (1979:157) claimed that this morpheme also occurs in Baka as a deictic element. Brisson and Boursier (1979:315-16) define *ndê* in Baka as a function word with a variety of uses, including question marker, subordinate conjunction, and irrealis marker. There is an element of deixis in all of those functions, and so there may be a relationship between the divergent occurrences of the morpheme *ndê* in Aka and Baka.

Another deictic element shared by Aka and Baka is the locative *wu* or *wɔ* (Thomas 1979:157). This occurs in the Aka data as in examples 23 and 24.

Example 23.

na	butû	u	"(later) that night"
at	night	there	

Example 24.

molâlɛ̂	wû	"that duiker over there"
c1.duiker	there	

Like the morpheme *nɛ*, the morpheme *wu* follows the noun it modifies. It cannot take a noun class prefix. Brisson and Boursier (1979:476) consider the morpheme *wá* or *wó* to be a pronominal element (third person plural). More research is needed to confirm the locative function of *wu* or *wɔ* in Baka which was reported by Thomas (1979:157).

3.3.3 Verbal affixes

Aka has a very complex system of verbal affixes. In this section, the TAM markers in Aka will be discussed. Example sentences are taken from François Ndinga's *Conjugaisons du verbe lamba* which appears in Duke 1998. The basic system of TAM affixes in Aka is shown in table 3.26.

Table 3.26. Aka TAM system

Tense distinctions:		
present:	amɛ̂ na-lâmba yôma	"I cook food."
future:	amɛ̂ na-**mbêe**-lâmba yôma	"I will cook food."
past-near:	amɛ̂ na-lâmbâ-a**nɛ̂** yôma	"I was cooking food."
past-distant:	amɛ̂ na-lâmbâ-**nû** yôma	"I had been cooking food."
narrative-past:	amɛ̂ na-lâmb**â** yôma	"I cooked food."
Aspect distinctions:		
narrative/perfective:	amɛ̂ na-lâmb**â** yôma	"I cooked food."
(present) progressive:	amɛ̂ nâ-**a**-lâmba yôma	"I am cooking food."
habitual (fréquentatif):	amɛ̂ na-**ngâa**-lâmbâ yôma	"I used to cook food."
perfect (accompli):	amɛ̂ na-**mû**-lâmba yôma	"I have cooked food."
Realis/irrealis:		
subjunctive:	amɛ̂ nâ-lambɛ yôma	"I (may) cook food."

Tense and aspect are also marked by tone in Aka.[13] The TAM affixes combine with tonal marking as shown in table 3.27.

Table 3.27. TAM affixes and tonal inflection

	Perfective	progressive	habitual	Perfect	
Past	X (tone)	X *-anɛ̂*, *-nu*	?	X *-mû-*	
Present	X (tone)	X *-a-*	X *ngâa-*	X *-mû-*	
Future	?	X *-mbêe-*	?	?	

[13]See section 3.2.1.3.1, Tonal inflection.

Where there are question marks in table 3.27, the combination has not yet been observed in the data available. For example, the perfect aspect may combine with the future tense, but it has not yet been observed to do so in the texts available. Where there is an "X" it shows the possibility of morphological TAM marking, and where there is a "(tone)" it shows the possibility of tonal marking also co-occurring with the morphology. More analysis is necessary if all possibilities are to be known. The marker *-nɛ̂*, which marks the near past, also appears as part of the demonstrative system. This marker appears both in the noun phrase and the verb phrase, always with a deictic function. This may be a process of grammaticalization which is occurring. More studies are warranted for this phenomenon.

In Baka, the word for the future is *kɔmbɛ*. It is very possible that this is related to the Aka future morpheme *-mbêe*. The morpheme *nɛ̂* occurs also in Baka examples, as discussed in section 3.3.2, Demonstratives.

3.3.4 Conclusions

This section has illustrated some of the material shared by Aka and Baka. The discussion has been limited to demonstratives and verbal affixes. There are other elements which could have been added to the discussion. For example, Aka and Baka have many ideophones in common. Kilian-Hatz (1997) has done a great deal of work with Baka ideophones. A simple perusal of her list of Baka ideophones shows many direct cognates with Aka. For example, the ideophone *tetetete* always evokes an action of long duration, either in Aka or Baka. There are many function words which are the same in Aka and Baka. Some of these are shown in table 3.28.

Table 3.28. Some function words shared by Aka and Baka

Word:	Aka example:	Baka example:
“nothing”	polo “nothing”	kòkolo “nothing”
“real”	kolo “real, true”	ko- “real, true”
“like that”	bôonâ “like that”	bɔ̀na “like that”
“on top of”	sisoko “on top of”	sɔ̀sɔkɔ̀ “during”
“there is not”	(wo)-tê “(c.3) there is not”	wode “there is not”
“however”	kendê “however”	ndéè “however”

Future studies should reveal more correspondences. What can be said now is that very little of the grammar from the proto-language **Baakaa* remains in Aka, although there is some morphology and a significant amount of vocabulary which can be traced back to **Baakaa*. The current state of knowledge is a long way from being able to reconstruct what **Baakaa* would have been like structurally, although there are enough shared elements between Aka and Baka to suggest that some things could be known about that proto-language if further studies were pursued.

3.4 Conclusions

Much more data and analysis are needed in order to give justice to the linguistic evidence of Aka as a contact language. The beginnings are here, with the analysis of the lexicon by Bahuchet (1993a) and some analysis of the morphology by Thomas (1979:157). Although Aka is Bantu in structure, there are some elements which are unique in the system. The phonemic inventory contains some sounds of very limited distribution. These sounds may be borrowed from Bantu and imperfectly adopted into Aka. The noun class system in Aka is more productive than most Bantu noun class systems. There are deictic elements in the demonstrative system and the TAM system which are shared by both Aka and Baka. All these taken together are only a beginning, but still an encouraging beginning.

CHAPTER 4
SOCIOLINGUISTIC EVIDENCE

4.1 Introduction

The definition of a contact language is one that "arises as a direct result of language contact and that comprises linguistic material which cannot be traced back primarily to a single source language" (Thomason 1997a:3). This chapter presents the language contact situation which exists between the Aka and the Bantu and Ubangian villagers today, in order to propose what the language contact situation may have been at the time of the origin of the language. This method of historical reconstruction was suggested by Brenzinger:

> One has two means of illuminating language displacement events which have taken place in the past. First, one can try to reconstruct language history on the basis of modern language situations, and second, one can study the rare cases of "traditional" shifts which are taking place today. (Brenzinger 1997:278)

Certainly any historical claims based on current observation of language use would be tenuous because of all that is not known or documented. However, the usefulness of present-day observation for understanding the past is underlined by Ureland:

> It should, however, be remembered that all contact studies are of importance for describing language change, because it is just as relevant to know the present in order to be able to describe the past as it is to know the past in order to be able to describe the present. (Ureland 1990:486)

The evidence presented concerns the language use patterns of the Bayaka in the Lobaye district of C.A.R. and also the Bantu and Ubangian groups with whom they interact. The evidence presented in chapter 3 focused on elements of the Aka language structure which indicate that the ancestors of the Aka once spoke a non-Bantu language, some of

which still remains as a substratum in the language today. Current data was to used argue for historical events (the origin of Aka as a contact language). In this chapter, data about the current language use patterns of the Aka and their neighbors will be used to extrapolate what language contact situation may have led to language borrowing. The Bayaka seem to have borrowed Bantu vocabulary and structure wholesale, while keeping enough of their original tongue that their in-group communication remains unintelligible to the non-Aka speaking villagers.[1]

This chapter seeks to address some of the difficult questions brought up by earlier researchers. In the introduction to her grammar of Aka, Thomas notes:

> Dans la mosaique ethnique et linguistique très complexe de cette region d'Afrique Centrale, les langues parlées par les Pygmées, et notamment l'aka, posent de difficiles questions d'ordre sociolinguistiques. Les contacts séculaires entre Pygmées et Grands Noirs, et la nature de ces contacts, rôle historique d'initiateurs au milieu forestier joué par les Pygmées . . . .[2] (Thomas 1991:22)

Bahuchet and Thomas (1986:73) noted the paradox that the Bayaka borrowed a Bantu language from the villagers without adopting the villager way of life or becoming villagers themselves. Sarno also considers this a puzzle:

> How is it then, that the Bayaka -- who have neither been assimilated nor been the victims of systematic persecution – seem to have lost their language centuries ago? In most places Bayaka traditional life remains strong and vibrant. The disappearance of their language is a paradox. (Sarno 1995:8)

The contact between the Bayaka and their patrons in the past and present is a key to understanding the most basic questions about the origins of Aka. Sections 4.2 and 4.3 present data on the language use patterns of the Bayaka and their villager neighbors respectively,

---

[1]The Bantu languages spoken by the villagers are not mutually intelligible with Aka (Thomas 1991:1).

[2]"In the very complex ethnic and linguistic mosaic of that region of Central Africa, the languages spoken by the pygmies, and especially Aka, pose some difficult questions about sociolinguistics. The contacts between the pygmies and big blacks, and the nature of these contacts, the historical role of initiators to the forest environment played by the pygmies . . . ." (author's translation).

based primarily on the original research of the author and his colleagues. Section 4.4 presents a discussion of the motivations for the language use choices of both groups, taking into account anthropological and historical sources. Section 4.5 gives conclusions about language use in the various groups, and the hypothetical language contact situation which led to the origin of Aka.

4.2 Bayaka language use

This section describes the current language use patterns of the Bayaka in the Lobaye district of C.A.R. It is based on the original fieldwork of the author and his colleagues Dominique Kosseke, Saint-Jérôme Sitamon, and Elysée Moehama. Methodology included both participant observation, questionnaires, and testing. These have been briefly introduced in chapter 1, Introduction, and will be more fully explained in the discussion where relevant. Other important observations about Bayaka language use are given as background information or description in several linguistic and anthropological works (see chapter 2, Literature Review). These remarks and observations will be taken into account in the discussion as well.

4.2.1 Data

Before presenting a global view of Bayaka language use, some additional details are useful. The first key point is the situation of deforestation in the Lobaye. It will be shown in this chapter that Bayaka language use is directly related to the amount of access they have to the forest. The deforestation is expanding so rapidly that it is much farther advanced now than even in the 1970s and 1980s when most of the previous fieldwork among the Bayaka was done. It is essential then to show the state of the forest as it was in 1995-98 (when the author’s fieldwork was done).

The second elaboration necessary concerns the formal bilingualism testing among the Bayaka carried out in 1994. *Sentence Repetition Testing* measures the level of ability in speaking a given language, in this case Sango.[3] This testing was carried out in two places: one village which contained both Bayaka and villagers, and one village which only contained Bayaka. The test is important because it empirically documents bilingualism in the Bayaka community, and shows that bilingualism is affected by the close proximity of villagers.

4.2.1.1 Deforestation

The extent of deforestation of Central African rain forests was described in vivid terms by journalist Tim Judah:

> Unless logging is brought under control in Central Africa, this expanse of forest – 15,000 years in the making and second in size only to the Amazon - will be devastated, and gone by 2020. In 1990, the volume of timber exported from the countries of the Congo Basin was 200,000 cubic meters. In 1997, it was two million cubic meters. Four million hectares of African tropical forest are destroyed every year. (Judah 1990)

Figure 4.1 depicts the approximate extent of the forest in the year 1950 (Hauser 1953:153). This area corresponds to the area inhabited by the Bayaka today.

[3]Sango is the national language of C.A.R. and serves as the LWC (Language of Wider Communication) throughout the country (see Bouquiaux, Kobozo, and Diki-Kidiri 1978).

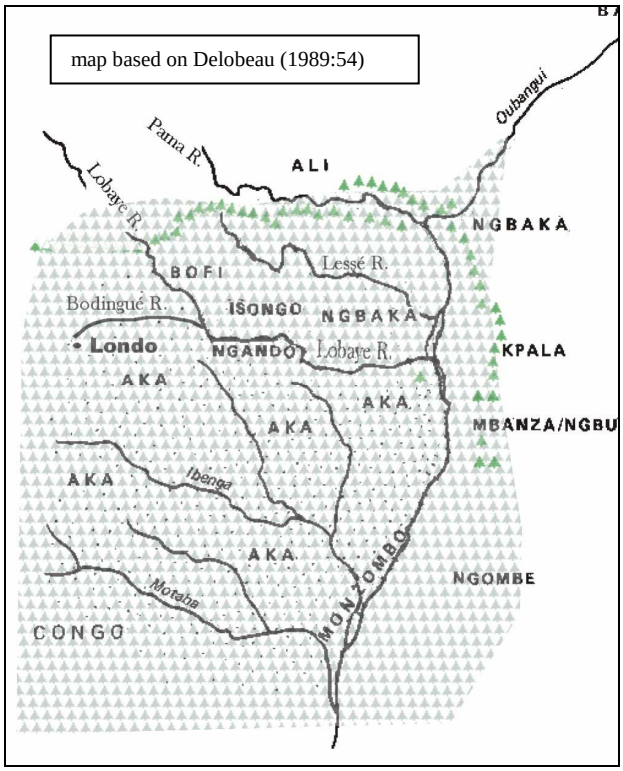


Figure 4.1. Extent of the forest as of 1950.

Until 1950, most of the economic exploitation of the forest of the Lobaye involved non-lumber items such as ivory, rubber, hides, and meat (Bahuchet 1979:69). Since 1950, and especially in the years since independence, the forest has been exploited extensively for lumber. Areas which have been extensively harvested have gone from dense tropical forest to scrub land (small trees or savannah) or cultivated land, especially coffee plantations. Figure 4.2 depicts the extent of the forest as of 1998 (personal observation).

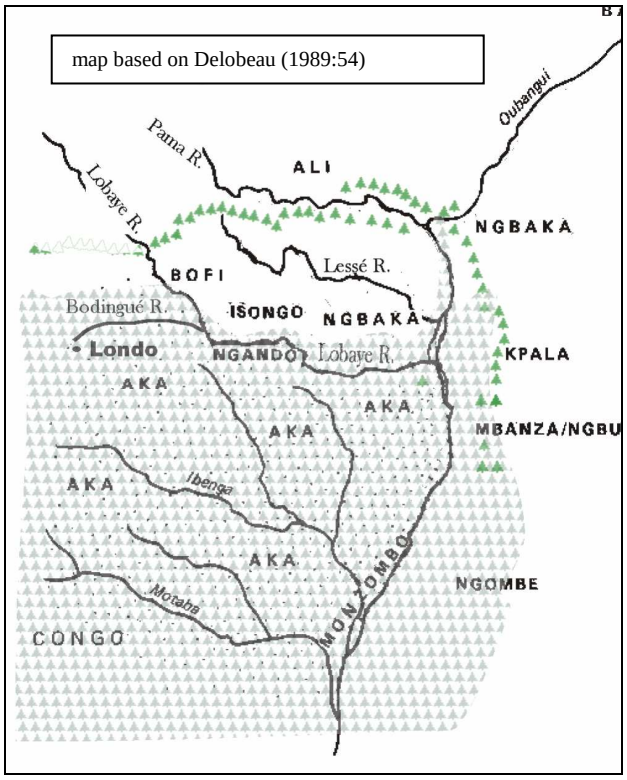


Figure 4.2. Extent of the forest as of 1998.

The practical implication of deforestation is a change in the way of life of the people who find themselves living in a changed environment. In fact, the Bayaka who remain in deforested areas have become wage laborers in large plantations belonging to the villagers. In some regions these deforested Bayaka still have access to the forest, and they return to the forest for some months of the year. In other regions, access to the forest is cut off by a river, and the Bayaka do not ever return to the forest. This is true of the Bayaka living in the deforested areas north of the Lobaye and Lessé Rivers. The Bayaka living north of these rivers have experienced language shift from Aka to villager languages, as discussed in section 4.2.2.1, Sedentary Bayaka.

4.2.1.2 Sentence Repetition Testing in Sango

The most technical language use data to be presented in this thesis comes from bilingualism testing in Sango. The method used was *Sentence Repetition Testing*[4] (SRT). In an SRT procedure, the testing subject is asked to repeat ten recorded sentences in the language to be tested (in this case, Sango[5]). The sentences become progressively more complex and lengthy, with more difficult vocabulary as well. Most speakers with a rudimentary knowledge of the language tested can succeed at the first sentence or two. Only very competent speakers usually succeed at repeating the final sentences without errors. Each sentence is worth three points, and each error takes away a point (three points maximum per sentence). The scoring has been calibrated to FSI[6] levels as used in "Oral Interview" bilingualism testing. (Stalder and Bagwell 1993, Wilds 1975).

SRT testing was conducted among the Bayaka in 1993 (Moehama 1993). Researchers Moehama and Kosseke tested 27 Bayaka and seven villagers in the villages of Londo and Moali, C.A.R. Londo is a village of about 200 people, composed of some 150 Bayaka (mostly from the Bagandu region) and some 50 Central African hunters and traders (from various places). Moali is a permanent Bayaka camp of about 75 people, with no villagers or other outsiders residing among them. The results allow a comparison between Bayaka who live in daily contact with villagers, and those who do not have daily contact. Comparison may also be made between different ages and sexes of the Bayaka. A comparison between the Bayaka and the villagers is also seen in the data, although only a few villagers were tested alongside the Bayaka. However, since SIL C.A.R has done SRT testing in Sango in towns and villages throughout C.A.R. (Duke 1996), the Bayaka test results may be compared

[4]For a thorough introduction to SRT, see Radloff 1990.

[5]For a history of adaptation of SRT into Sango, see Karan 1993.

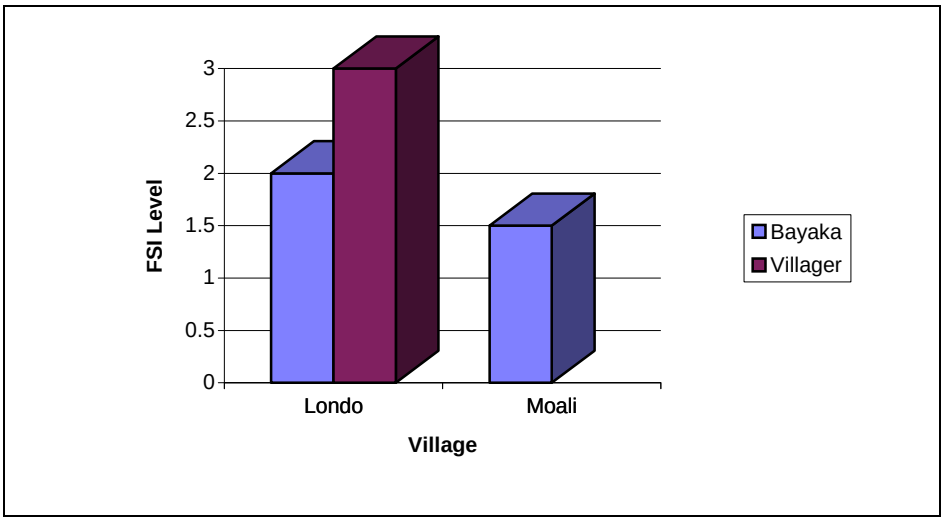
[6]FSI stands for *Foreign Service Institute*.

with the results for both urban and rural Central Africans. Each of these comparisons will be discussed in turn, starting with *Contact with villagers*.

4.2.1.2.1 Contact with villagers

Table 4.1 shows the FSI levels in Sango for three groups: the Bayaka in Londo, the villagers in Londo, and the Bayaka in Moali.

Table 4.1. Sango SRT results according to location



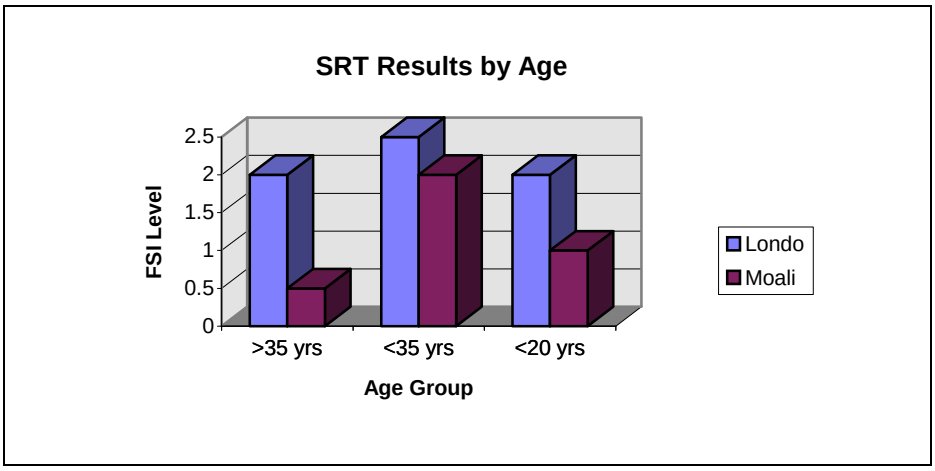
The villagers in Londo had the best mastery of Sango, with an FSI level of three. The Bayaka of Londo (who live in proximity to the villagers) scored a level two, while the Bayaka of Moali (who have much less daily contact with villagers) scored the least, a level one-plus (1.5 on the chart). This is no surprise, as Sango is the language which the Bayaka of Londo use for communicating with the outsiders who live near them. The Bayaka of Moali have less practice in Sango, and so their scores were slightly less. Even the Bayaka of Moali have some ability in Sango, because they do have contact with traders and hunters passing

through, as well as with missionaries who occasionally visit them. All of these contacts are in Sango.

4.2.1.2.2 Age

Table 4.2 compares the Bayaka of Londo and Moali focusing on the variable of age.

Table 4.2. Sango SRT results according to age



In both places, it was the young adults, between ages 20 and 35, who were the most competent in Sango. In Moali, however, the contrast was much more evident: the older people scored only a zero-plus, and the children/youth scored only a one, compared with the two scored by the young adults. In Londo, there was a difference between the ages, but it was only a half-point (two-plus for the young adults compared with only two for the elders and youth). It is the young adults who enter into the economy as workers: young men work either for the lumber industry or for commercial hunters. Both young men and young women work seasonally in the plantations and farms of the villagers. Especially in the case of the lumber industry, their work gives the Bayaka contact with a languages of wider communication:

Sango and French in CAR, Lingala and French in Congo-Brazzaville. They work alongside outsiders from throughout Central Africa,[7] and thus local villager languages are not used.

One interesting aspect is that the children and youth who live in proximity to villagers have a much higher level (level two compared with level one) than those who do not live in proximity to villagers. In fact, the children in Londo go to a school[8] which is frequented by both Bayaka and outsider children, with about a third of the children non-Bayaka. Although the school teaches in French, most of their contact with the teachers (two villagers) and the non-Bayaka children is in Sango. The children living at Moali must go to Londo (45 kilometers away) if they wish to go to school; most of them do not go to school at all. Between 1994 and 1997 Grace Brethren missionary Barbara Wooler lived in Moali from two weeks to a month at a time and taught literacy in Sango to the youth in Moali. As a result, many of the Bayaka young men in Moali and the camps nearby[9] know how to read in Sango.

4.2.1.2.3 Gender

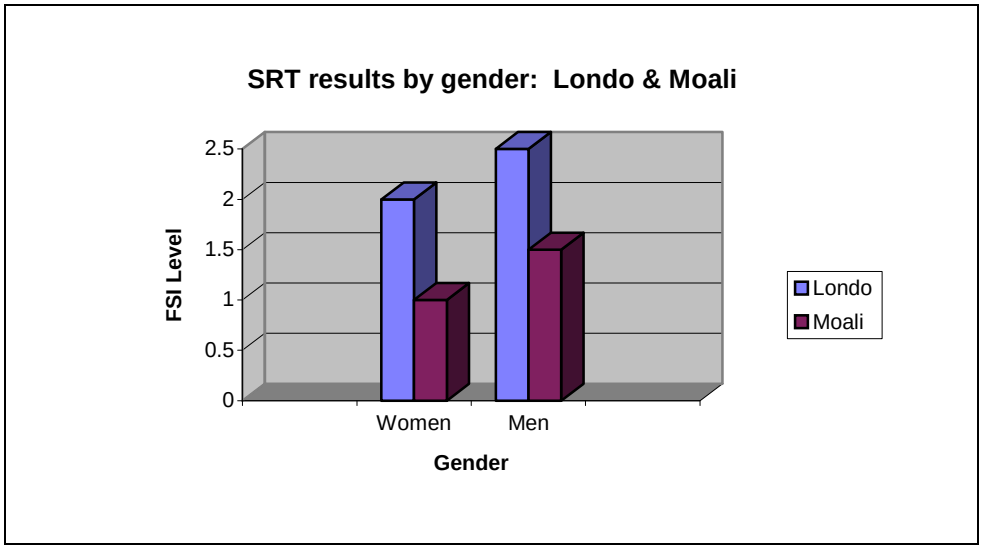
In both places, the Bayaka men scored higher FSI levels in Sango than the Bayaka women.

[7]For a detailed description of recent logging operations in Congo-Brazzaville, see Wilkie 1996.

[8]École Française de l'Église Coóperation de Londo, operating since 1994.

[9]Dzanga (between Londo and Moali) and other camps.

Table 4.3. Sango SRT results according to gender



The men were one whole level above the women. This finding is surprising in the light of Bahuchet and Thomas' claim that:

> Le bilinguisme est fréquent mais pas général dans la société pygmée, mais il touche à peu près de la même manière les deux sexes[10] (Bahuchet and Thomas 1986:88).

Certainly the findings confirm that both sexes *do* have some bilingualism in Sango, although not the same level of bilingualism.

In situations where there were both Bayaka and outsiders, such as in a church service, the men usually expressed themselves in Sango for the benefit of the outsiders, but the women usually expressed themselves in Aka only (personal observation). The women acted uniformly less comfortable with Sango, and used it only when absolutely necessary. It is the villager women who supervise the Bayaka women when they work in the plantations. Some villager women in Londo learned a little Aka in order to better communicate with the Bayaka women who worked for them seasonally. Other villager supervisors had to content

[10]"Bilingualism is frequent but not general in the pygmy society, but it touches more or less in the same manner the two sexes" (author's translation).

themselves with giving very basic and simple commands, or demonstrating the activity desired.

Both Bayaka men and women speak to their children in Aka. The very young children (before school age) have very little contact with outsiders, even when they live in close proximity to villager neighbors. These children speak only Bayaka, as spoken by their mothers. This is confirmed by Kisliuk's observation:

> Most Centrafrican parents in Bangui, as well as in large towns and sizable villages, speak to their children in Sango. Many BaAka,[11] however, are not fluent Sango speakers. BaAka women in particular are less likely to speak or understand Sango, although this varies from locale to locale. (Kisliuk 1998:9)

4.2.1.2.4 The Bayaka compared with other Central Africans

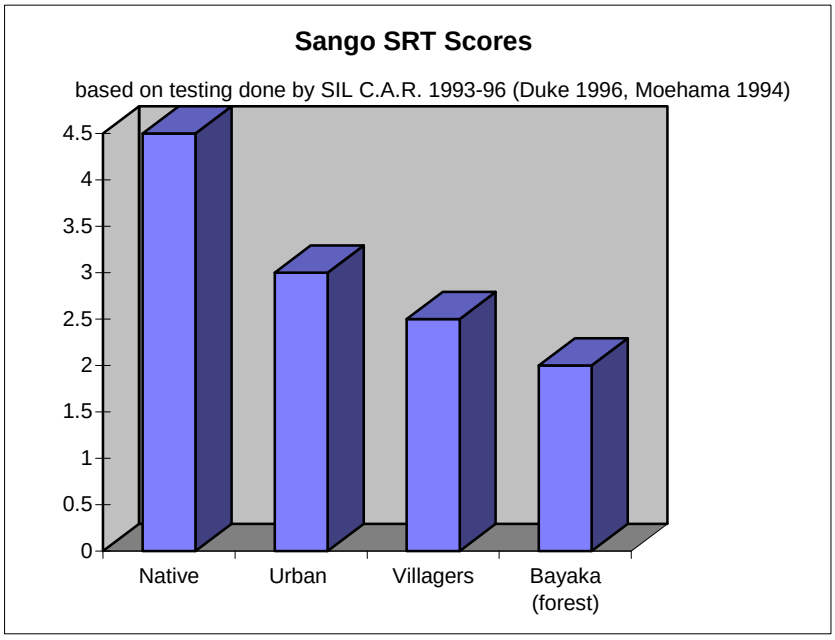
The Bayaka of Londo and Moali can be considered "forest Bayaka." Both places are located deep in the forest, with only very difficult access by forest track or river to the outside world. The Bayaka living in these places have abandoned their traditional patron/client relationships with villagers who live on the outskirts of the forest, and have moved into the forest in order to keep their independence. In Londo, outsiders from throughout C.A.R. have joined them, and sometimes employ them for seasonal labor or hunting. But those trading relationships are new and not long-term binding alliances. The forest Bayaka spend the whole year in the forest, several months in the permanent village (i.e., Londo or Moali), and several months in various temporary hunting camps even deeper in the forest. One would perhaps think that these Bayaka are more isolated from the outside world than their counterparts who live on the edge of the forest. However, the forest Bayaka, since they are not tied down with alliances with particular villagers, have a wider range of

[11]BaAka is the term Kisliuk uses for Bayaka.

contact with all sorts of outsiders, both in the lumber industry and in commercial hunting. This wide range of contact brings them access to languages of wider communication, such as Sango. Those Bayaka who still live in alliance with villager patrons often have contact only with those patrons, or a very limited number of outsiders. This limits their access to Sango, and thus also their chances to learn it well.

Table 4.4 shows the comparison of the Bayaka with the other speakers of Sango throughout C.A.R.

Table 4.4. Bayaka vs. villager Sango use



Urban speakers (those in large towns throughout C.A.R.) scored the highest with an FSI level of three. Rural Central Africans averaged a two-plus level. In table 4.1, it was shown that the Central African outsiders living in Londo averaged level three: the level of urban Central Africans. In fact most of the outsiders living in C.A.R. traveled often to the capital city of Bangui on trade, and their level of Sango reflected their regular stays in the

city. The forest Bayaka scored only a two, half a level below the average rural Central African, and a full level below the urban Central Africans. All the same, only half a level of difference between the Bayaka and the average Central African villager is a surprisingly small difference. One reason for this is the intense daily contact which the Bayaka have when they are employed alongside Central African outsiders. Another factor in the high level of Sango ability found in the Bayaka is the influence of the church. Many Bayaka of Londo and Moali are church-going, and the church services are often conducted in Sango.[12]

4.2.1.3 Conclusions

This section on data gave the necessary empirical background for a discussion of the Bayaka language situation. The current situation of deforestation has led to a major change in lifestyle among many Bayaka who no longer have access to the forest. This had led to greater contact with their villager neighbors. The bilingualism data from the SRT scores in Sango illuminated the results of daily contact with villagers. All age groups and genders showed higher levels of bilingualism in Sango when living near outsiders. Young male adults scored especially well, as they have the greatest contact with outsiders. In general, the forest Bayaka scored only slightly lower than the average rural Central Africans in Sango ability. This shows clearly that even the most independent of the Bayaka are hardly “isolated” but are part of a larger economy and societal network.

Only the Bayaka of Londo and Moali were tested for bilingualism in Sango. The results represent the Bayaka who live full time in the forest, without traditional ancestral alliances with particular villager groups (patrons). They have various degrees of contact with outsiders, which affect their bilingualism in Sango. Other Bayaka live in very different situations, and their ability in Sango is less well documented. Observations from various

[12]In the Église Cóoperation in Londo, simultaneous interpretation into Aka is often provided.

researchers, as well as first- and second-hand reports given at various times to the author, will be brought together to approximate the language use patterns of the Bayaka who still live in traditional patron-client alliances with villagers groups on the edge of the forest. Section 1.2.2, Contact Situations, presents the various situations of the Bayaka in the Lobaye region, and their language use patterns.

4.2.2 Contact Situations

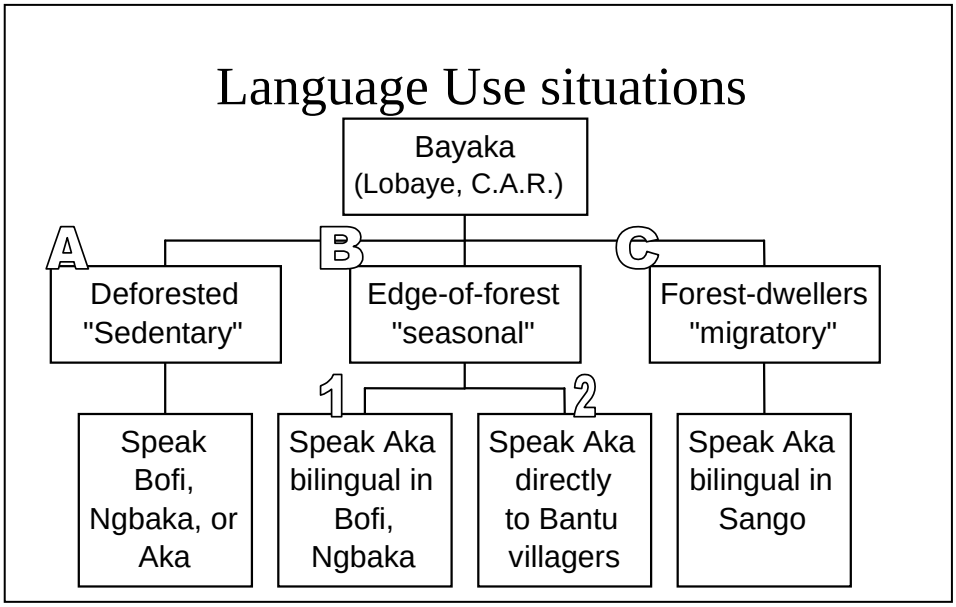
This section will describe the diverse language use patterns of the Bayaka in the Lobaye. The situation is very complex, as Thomas noted:

> Cette situation toutefois n'est, on le voit, ni stable, ni homogène. Elle varie en fonction de facteurs divers: langue de Grand Noirs, type de relations entretenues avec eux, éloignement des agglomérations, concentration ou dispersion des campements, origine de la langue véhiculaire en cause, etc.[13] (Thomas 1991:23)

In section 4.1.2 data was given on two villages of forest Bayaka. Most of the Bayaka of the Lobaye are living in camps either in the forest or near villages on the very edge of the forest. Some of them live in camps or villages in deforested areas, with only seasonal access or no access to the forest. Each of these situations leads to a different level of integration with the villager community, and a differing amount of contact with other languages. The kinds of contact with villagers lead to very different language use patterns among the Bayaka. Table 4.5 summarizes the language contact situations which will be discussed. Figure 4.3 gives a map of the Lobaye region showing where each of these language use situations can be found. Of key importance are the Lessé and Lobaye Rivers, which function as boundaries for the Bayaka.

[13]"That situation is not, you see, either stable or homogenous. It varies according to various factors: the language of the villagers, the type of relations kept between them, the distance from the groupings, the concentration or dispersion of camps, the origin of the LWC, etc." (author's translation).

Table 4.5. Bayaka Contact Situations



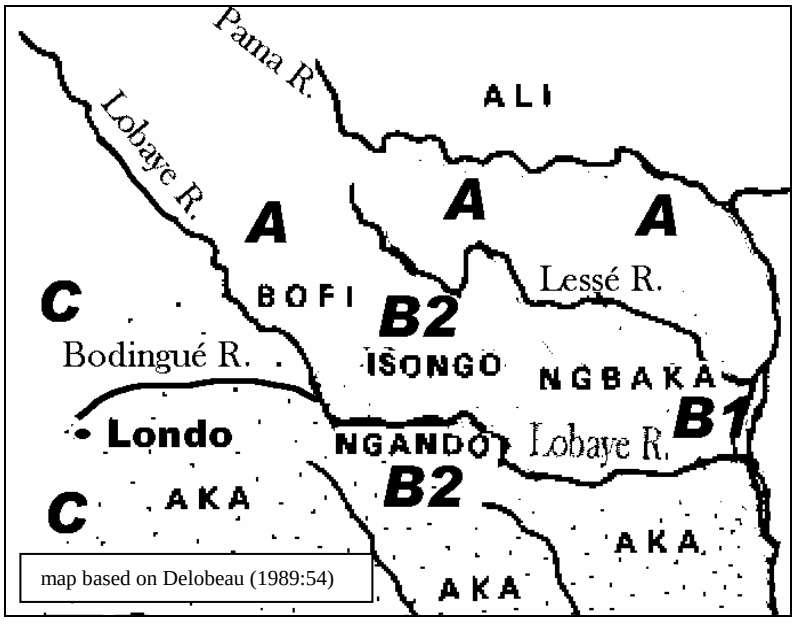


Figure 4.3. Language use situations in the Lobaye region.

Two factors in particular shape the various contact situations: (1) the *access to the forest* (from none to constant) and (2) the *language spoken by the villagers* or outsiders with whom the Bayaka have contact (Bantu, Ubangian, or an LWC[14] such as Sango). The impact of each of these factors will be shown for each of the three contact situations and their variants.

4.2.2.1 Deforested (sedentary) Bayaka

The deforested Bayaka live in the regions which had been rain forest but are now savannah, wooded savannah, or bush. They are sedentary in lifestyle, with very little contact with the forest or their traditional way of life. They live in permanent camps near villager settlements. To the north of the current forest the Bofi villagers are settled. The Bofi are a traditionally savannah-dwelling people who speak a Ubangian language. On the eastern edge of the current forest live the Bantu-speaking Mbati[15] and Bagandu. Beyond them, in deforested or nearly-deforested land, live two Ubangian-speaking groups: the Ngbaka Mabo villagers and the Monzombo fishermen. All of these groups have traditional alliances with the Bayaka which remain intact.

The Bayaka who live among the Bofi are in the sub-prefecture of Bambio (villages of Bambio, Ngoto, Girima, and others) and in the Lobaye (villages of Boganda, Yawa, and others). They number between 1,500 and 2,000 (Sitamon, personal communication 2000). They are cut off from the rain forest by the Lobaye River, which separates the Bofi area from the remaining forest. There are few bridges, and the Bayaka hesitate to cross rivers in dugout canoes. Thus, the river has become a genuine barrier which has kept the Bayaka of the Bofi area from seasonally returning to the forest as some of the deforested Bayaka do. The Bayaka

[14]Language of Wider Communication

[15]The Mbati are also called Isongo.

work for Bofi patrons in plantations and farms. According to Bahuchet, the Bofi were not originally forest-dwellers, but were brought into contact with the forest in colonial times:

> Vers 1922, des Bolèmba et des Bofi venant travailler pour la récolte du caoutchouc, s'installent près de la rivière Kumudi.[16] (Bahuchet 1977:66)

It is unclear whether the Bofi had earlier trading alliances with the Bayaka, or if the alliance began during the colonial times. At any rate, the Bayaka who live among the Bofi have abandoned the Aka language in favor of speaking Bofi. The location of the Bayaka who have experienced language shift is shown in figure 4.4.

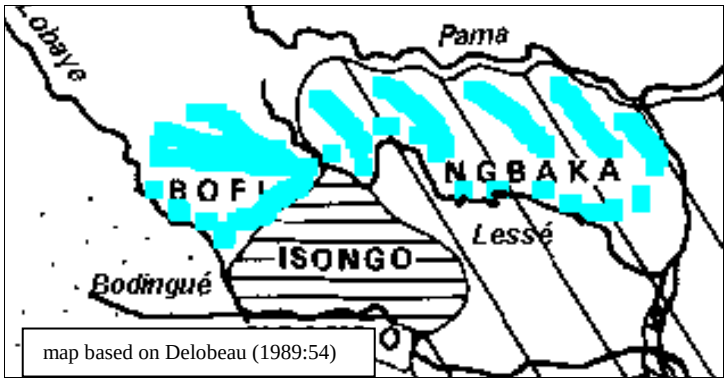


Figure 4.4. Bayaka who have experienced language shift.

Some the Bofi Bayaka are now abandoning their patrons and returning to the deep forest. The Bofi Bayaka who have settled in the camp of Mbakoro (5 miles west of Londo) have taken up trading relations with a small group of the Bantu-speaking Ngundi fishermen of Ngundi village. They speak no Aka, but Bofi among themselves and Sango with their new patrons. When they heard that there were literacy classes in the Aka language in Londo, they

[16]"Around 1922, some Bolemba and some Bofi coming for the harvest of rubber, established themselves near the Kumudi River" (author's translation).

came in hope of learning the Aka language. They feel that they should improve their skills in Sango to relate to the outsiders, and begin learning Aka to relate to the other Bayaka (Sitamon, personal communication 2000).

The deforested Bayaka who live to the east live in proximity to the Ubangian-speaking Ngbaka Mabo and Monzombo. The Monzombo live along the Ubangi River, and make their living primarily as fishermen. There are still patches of forest along the Ubangi, and the Bayaka who live along the river still have access to this small forested area. They cannot migrate long distances in these areas, but they can continue forest activities such as hunting and gathering alongside of their work for the Monzombo. These Bayaka have developed some bilingualism in Monzombo, but have also kept the Aka language. The interaction between the Bayaka and their Monzombo patrons was described by the anthropologist Delobeau:

> La langue de communication entre villages et campements est le monzombo. C'est là un cas particulier de phénomène sociolinguistique general proper aux Pygmées de la region (et vraisemblablement des autres regions d'Afrique Centrale), qui utilisent toujours dans les relations avec leurs voisins la langue de ceux-ci, alors que la langue véhiculaire est le sango, que les Pygmées connaissent mal. La langue aka d'origine Bantu est peu connue des Monzombo qui ont, rappelons-le, une langue de la famille oubanguienne. Elle l'est davantage des Mbati et surtout des Ngando qui ont une langue de la même famille que l'aka.[17] (Delobeau 1989:91)

The Bayaka who live alongside the Ngbaka Mabo may be divided neatly between those who live north of the Lessé River and those who live south of it. Like the Lobaye, the Lessé is a boundary for the Bayaka which keeps those living north of it from returning to the forest seasonally. The Bayaka living north of the Lessé River have abandoned the Aka

[17]"The language of communication between villages and camps is Monzombo. This is one case of the general sociolinguistic phenomenon pertaining to the Pygmies of this region (and apparently in other regions of Central Africa), who always use the languages of their neighbors when dealing with them, even though the trade language is Sango, which the Pygmies know poorly. The Aka language of Bantu origin is little-known among the Monzombo, who have, remember, a Ubangian language. It is more the Mbati and especially the Bagandu who have a language of the same family as Aka" (author's translation).

language and speak Ngbaka Mabo as their mother tongue. Those living south of the Lessé River still have some contact with the forest, and have kept Aka as their mother tongue while being bilingual in Ngbaka Mabo. The language shift which the Bayaka north of the Lessé River experienced must have been fairly recent. Kosseke and Sitamon interviewed an elderly man among the Bayaka who speak only Ngbaka Mabo, and he could remember when Aka was still spoken in their community, and could remember some Aka words but could not speak the language (Sitamon, personal communication 2000).

In the Lobaye region of C.A.R., it is the Bayaka who live in relationship to Ubangian-speaking villagers who have experienced language shift: either to Bofi or to Ngbaka Mabo. Both geography and language relationship with the villagers influence the situation. The geographic barriers to the forest (rivers) correspond to the places where they have experienced language shift. The situation among the Bayaka who relate to Bantu-speakers is very different, as will be shown in section 4.2.2.2, Edge-of-forest Bayaka.

4.2.2.2 Edge-of-forest Bayaka (seasonal workers)

The Bantu-speaking villagers who relate to the Bayaka live closer to the forest, on the forest edge rather than in the deforested areas. The Bantu languages of the village patrons in the Lobaye (Mbati, Bagandu) belong to the classification Bantu C10, as does Aka (Grimes 1996). Thus the Bantu languages are closely related to Aka, whereas the Ubangian languages are comparatively distant. The Bayaka who relate the Ubangian villagers have had to learn the Ubangian language of their patrons. The difference between the Bantu-speaking and Ubangian-speaking patrons is observed by Thomas:

> Les Aka vivant au contact Bantous C 10 sont souvent monolingues (du moins en ce qui concerne les femmes et les enfants), car nombreux sont ces Grands Noirs qui pratiquent la langue de leurs associés pygmées. En revanche, les Oubanguiens ne la parlent jamais et, de ce fait, les Aka que leur sont attachés sont ainsi amenés au bilinguisme, mais là aussi ce sont surtout les hommes que utilisent la langue des

> Grands Noirs (monzombo, ngbaka . . .) et uniquement dans leurs relations avec ceux-ci, que, pour le présent, ne sont pas extrêmement intimes, quoique relativement fréquentes. La connaissance de la langue oubanguienne reste donc très superficielle et cantonnée à des domaines restreints.[18] (Thomas 1991:22)

This observation by Thomas is based on observation of the Bayaka living near the edge of the forest, who are seasonal workers for their patrons. They return to the forest camps for weeks or months at various times of the year. These Bayaka have not experienced language shift. As Thomas observed, they have some bilingualism in the language of their patrons if those patrons speak Ubangian languages. Their bilingualism in the Ubangian languages appears to be limited to certain domains:

> A l'inverse [des Bantous], en milieu monzombo (langue oubanguienne), le bilinguisme est actif. Les Monzombo ne parlent pas aka mais les Aka, hommes et femmes, parlent monzombo. Cette connaissance est cependant limitée à un vocabulaire technique: compréhension des ordres et moyens d'énoncer des réclamations, il n'y a aucun discours suivi entre les deux groupes. Les contacts se limitent à des situations d'échange ou de travail, au village et dans les champs. On trouve le même situation de relation et de bilinguisme avec des villageois bantous A 80 de la Sangha (Kaka, Pomo).[19] (Bahuchet and Thomas 1986:82)

The seasonal-worker Bayaka relate to their Ubangian patrons in the villager language. However, if their patrons speak a Bantu language, the Bayaka often relate to them in Aka, rather than learning the Bantu language of their patrons. What could account for this difference?

---

[18]"The Aka living in contact with Bantus (C 10) are often monolingual (at least as regards women and children), for the villagers who learn some of the language of their Pygmy clients are numerous. On the other hand, the Ubangians never speak it, and because of this, the Aka who are attached to them are led into bilingualism, but there also it is most of all the men who use the language of the villagers (Monzombo, Ngbaka . . .), and only in their relations with them, which presently are not very intimate although frequent. The knowledge of the Ubangian language remains superficial and in limited domains" (author's translation).

[19]"In contrast [to the Bantus], in the environment of the Monzombo (Ubangian language), the bilingualism is active. The Monzombo do not speak Aka but the Aka , men and women, speak Monzombo. This knowledge is however limited to a technical vocabulary: other than understanding orders and making requests, there is no dialog between the groups. The contacts are limited to trade or work, at the village and in the fields. One finds the same situation of bilingualism and relationship with the villagers speaking Bantu A80 of the Sangha (Kaka, Pomo)" (author's translation).

The Bantu-speaking patrons may learn some Aka (as Thomas suggests), but it seems more often the case that speakers from each side speak their own language, and each side understands the other more or less. Each side stretches a little bit to understand the other, without necessarily mastering the other language. No doubt over time the Bantu patrons develop the ability to understand Aka without actually speaking it, even as the Bayaka understand the Bantu language of their patrons without speaking it. This situation is referred to as "passive bilingualism" by Bahuchet and Thomas:

> En milieu ngando (locuteurs C10) le bilinguisme est passif, chacun parle à l'autre dans sa propre langue.[20] (Bahuchet and Thomas 1986: 82).

This kind of language contact situation has also been called *incipient bilingualism* (Diebold 1961:99). It may be more common than is generally supposed. Samarin (1991:65) proposed that the Bantu populations who lived along the Congo and Ubangi Rivers in the late 1800s simply spoke to each other in their own languages, thus avoiding the need for a lingua franca. This hypothesis was supported by Knappert:

> The inhabitants of the fishermen's villages along the lower Ubangi and Giri rivers, the lower Lulonga, Mongala, Likwala, Sanga, Tumba, Ruke, and Ikelemba rivers, all speak closely related dialects, to the extent that they do not have to resort to another language when conversing together. (Knappert 1979:154)

Although Aka is in the same grouping as the Bantu languages near it (Bantu C10), the amount of shared vocabulary is not especially high: 44% between Aka and Bagandu, 36% between Aka and Mbati (Thomas 1979:154). This is not considered to be enough to indicate mutual intercomprehension, but may be enough to foster incipient bilingualism if there is contact over time. Self-reported data about people's bilingual ability may be misleading in such a case. One Bagandu of the author's acquaintance claimed to speak the Aka language,

[20] "In the environment of the Ngando [Bagandu] (speakers of C10), the bilingualism is passive, each one speaks to the other in his own language" (author's translation).

but in fact insisted on “correcting” Aka texts by imposing Bagandu grammar. In a similar way, the Bayaka who have previously lived under Bagandu patrons and are now living independently with forest Bayaka from other areas are often corrected by the other Bayaka for using Bagandu words, which they have borrowed and now consider to be Aka words.

The edge-of-forest Bayaka have various degrees of bilingualism in villager languages according to the language of their patrons. Many edge-of-forest Bayaka also have some knowledge of Sango as a LWC. However, knowledge of Sango is limited among them, as noted by Thomas:

> Jusqu'à ces quinze dernières années, la pratique du sango, langue véhiculaire de Centrafrique, était à peu près inexistante. Elle s'est un peu dévelopée pour ceux que fréquentent les centres administratifs (Mongoumba, Bangandou, Loko. . .) ou les exploitations forestières (Mbata, Loko, Ndele. . .), mais reste plutôt limitée aux échanges avecs les ethnies n'ayant pas une langue commune ou voisine (Oubanguiens: Monzombo, Ngbaka, Gbaya...). Cette connaissance du sango, bien que croissante, est cependant toujours très rudimentaire et si lacunaire qu'elle n'a jamais permis l'enquête linguistique ou ethnolinguistique par son truchement. Au Congo, l'emploi du lingala (langue véhiculaire bantoue) serait nettement plus répandu en milieu aka.[21] (Thomas 1991: 22)

The Bayaka do not traditionally speak with their villager patrons in an LWC such as Sango. Their patrons stand as intermediaries between them and the outside world, and as a result they have less contact with Sango speakers than the forest Bayaka, who learn it from traders and fellow workers in lumber operations.

[21]“Until 15 years ago, the use of Sango, LWC of C.A.R. was more or less non-existent. It has developed some in administrative centers (Mongoumba, Bangandou, Loko . . .) and where there are lumber operations (Mbata, Loko, Ndele . . .), but it remains limited to exchanges with groups which are not linguistically close [to the Bayaka] (Ubangians: Monzombo, Ngbaka, Gbaya . . .). This familiarity with Sango, while growing, is however still very rudimentary and so incomplete that it has never allowed linguistic or ethnolinguistic research to be carried out through it. In Congo, the use of Lingala (a Bantu LWC) would be more used in the Aka setting” (author’s translation).

4.2.2.3 Forest dwellers

The research for this thesis was carried out among the forest-dwelling Bayaka. Unlike the other Bayaka populations, they do not have ongoing traditional alliances with villager patrons, and they live all year in the rain forest. Although they are the most isolated Bayaka geographically, they are the Bayaka with the most contact with modern industries such as lumber, mining, hunting, and tourism. The forest Bayaka scored surprisingly high in the competence in Sango (see section 4.2.1.2., Sentence Repetition Testing in Sango). The relatively strong ability in Sango is related to the increased contact which forest Bayaka have with populations from outside the local area. The SRT results showed that young men are especially competent in Sango. These young men are the community members most likely to have worked in the lumber industry, diamond mining, and commercial hunting.

Involvement in these “industries” brings contact with co-workers from throughout Central African Republic, Congo-Brazzaville, D.R.C., and Cameroon. Direction of the work is often expatriate: French, Lebanese, Yugoslavian, etc. The borders between countries are often unclear in the forest, and the Bayaka move freely between Congo and C.A.R.. The Bayaka of Londo, for example, usually work across the border in Congo every couple of years. They help in the opening of a new sawmill and the marking out of a new part of the forest for a few months, and then they return home to C.A.R.

In contrast to the lumber industry, which nearly always involves large operations with hundreds of workers carefully coordinated, other forest industries are small-scale or even clandestine. Diamond mining and commercial hunting in Central Africa are two tightly-regulated industries which are engaged in by individual entrepreneurs with minimal technology. The mining and hunting with which the Bayaka are involved is almost always without the proper permits and therefore illegal and clandestine. In these activities, Sango is used extensively. A large percentage of the forest Bayaka men are employed in commercial

hunting from time to time, especially the young men who serve as porters to carry loads of dried meat out of the forest.

The difference in the FSI levels between the Bayaka who live in Moali (a Bayaka-only settlement) and Londo (a mixed settlement) confirm the importance of daily contact with outsiders for the development of bilingualism in Sango. In villages where both Bayaka and villagers live, such as Londo, all segments of the Bayaka population have at least some contact with the villagers. Bayaka women do occasional work in the manioc fields owned by villager women, and the villager women work side-by-side with them. In Londo village there are constant activities in which villagers and Bayaka collaborate: village meetings, church meetings and events, and community work such as clearing the weeds from the village and repairing the road.

The forest-dwelling Bayaka are also called “Free Bayaka” because they have broken their ancestral alliances, sometimes very recently. The camp of Dzanga (between Londo and Moali) broke from its Bagandu patrons and moved deep into the forest as recently as 1996. The camp of Mbakoro (on the Bodinge River five kilometers west of Londo) is comprised of Bofi-speaking Bayaka who arrived in the deep forest in the early 1990s. These Bayaka have returned to the hunter-gatherer way of life after having been plantation workers only for at least two generations. They have founded a trading relationship with the Bantu-speaking Ngundi fishermen. Communication with their new patrons is through Sango. The Bayaka of Mbakoro are now trying to learn the Aka language, as well as increase their proficiency in Sango (Sitamon, personal communication 2000).

4.2.3 Conclusion

Language use among the Bayaka varies according to the situation in which the Bayaka find themselves. Sedentary Bayaka who have lost all contact with the forest have

experienced language shift in a very short time. For example, the elderly Ngbaka-speaking Bayaka can still remember some words of Aka. The language shift is not towards the LWC (Sango in this case), but towards the language of their patrons. The edge-of-forest Bayaka do not seem to be experiencing language shift, but some may have bilingualism in the language of their patrons. The deep forest Bayaka do not relate to their traditional patrons, but to a wide variety of outsiders. This group has the most contact with LWCs such as Sango. They have a level of bilingualism in Sango which is lower than the level of the villagers, but may be higher than the level of Sango of the edge-of-forest or sedentary Bayaka.

4.3 Villager language use

This section presents a brief discussion of the language use of the villager populations in the Lobaye region who are the traditional patrons of the Bayaka. An understanding of the situation of the villagers is important for several reasons. As noted in section 1.2, African Pygmies, the villager patrons and their forager clients together form a sort of community, and are best studied together. The villager situation forms the larger context for the situation of the Bayaka. Together they form the context for the discussion of language use motivations to be presented in section 4.4.

4.3.1 Data

The data which will form the basis for the discussion of language use patterns among the villagers comes primarily from the questionnaire data collected in 1995 by the author and his colleagues associated with SIL International. In contrast to the long period of research and observation among the Bayaka, the sociolinguistic research among the villager groups of the Lobaye consisted of two separate trips of only one week each. Some details about these excursions are presented in section 1.6, Research and data. Included in that introduction are the dates, the researchers, and places, and the basic approach of the research. Full reports of

the surveys are available: see Bister (1995) for the Mbati survey and Duke (1996) for the Ngbaka Mabo survey. The actual questionnaire used is presented in Appendix A, Questionnaire form. The discussion of language use among the villager populations will be limited to language shift and motivations for language shift among the villagers.

4.3.1.1 Choice of languages and places

The research was conducted among the Mbati (Bantu) and Ngbaka Mabo (Ubangian) language groups. These groups form the majority of the population of the Mbaiki division, with the Mbati living in and around the town of Mbaiki, and the Ngbaka Mabo living to the east and south of Mbaiki and along the road towards Bangui. Two villages were chosen in each language area: one near the center and one near the periphery of the language area.

4.3.1.2 Goals

The research was conducted within the framework of SIL International goals of cataloging languages in the *Ethnologue* (Grimes 2000) and determining the need for language development. Language vitality and viability are key issues in this kind of research, as is multilinguism. How and when is the language used? How likely is it to continue being used? What other languages do the people use? On the basis of these questions, recommendations are made about which languages should be developed for eventual educational, literacy, or translation projects to serve the communities which are researched.

The Mbati and the Ngbaka Mabo happen to be two of the groups who are traditional patrons of the Bayaka. However, their relationship with the Bayaka was not the focus of the questions. For this research, the Bayaka were just one of several ethnic groups with whom they have contact and the potential for bilinguism. Both villages of the Ngbaka Mabo had camps of Bayaka clients nearby. The Mbati villages may have had Bayaka nearby, but this was not confirmed.

4.3.2 Discussion

Both the Mbati and the Ngbaka Mabo of C.A.R. are experiencing language shift towards Sango, the LWC of the area. There is low vitality as Sango is used in many domains in the village. Sango is seen as a means to economic and cultural integration for the Mbati and the Ngbaka, and they are eager to move ahead.

4.3.2.1 Indications of language shift

The most telling indication was the fact that children in Ngbaka Mabo and Mbati villages understand only Sango and only later learn the local language. According to the interviewees, Mbati children are said to begin to understand Mbati around the age of nine, and Ngbaka Mabo children do not understand the local language until they are about twelve years old! If the children do not learn the local language, or learn it only imperfectly, the viability of the language is in question. However, the younger generation eventually do seem to learn the local language, as a second language used by adults in certain contexts. Ngbaka Mabo and Mbati languages are still seen as useful for concealing discussions from children and outsiders, and for talking with the elderly. For most other uses, Sango is seen as sufficient. According to the interviewers, bilingualism in Sango is very strong among everyone in the community except the elderly, some of whom are limited in their Sango abilities.

4.3.2.2 Factors contributing to language shift

The region of Mbaiki is very closely connected to Bangui, the capital of C.A.R. There is a very good paved road between the towns, and much of the produce sold in Bangui comes to the city on this road. What once was forest has become farms and plantations which have easy access to the markets. In addition, the lumber industry is still very strong in the area, and many Mbati and Ngbaka Mabo find employment in the sawmills and lumber camps

alongside others who have come from throughout C.A.R. and Congo for employment. The situation is a mixture of ethnic groups in the sawmill towns as well as the villages. Mixed marriages are extremely common, especially between the Mbati and Ngbaka Mabo ethnic groups. In the case of mixed marriages, Sango is the home language. Spouses from other ethnic groups coming into a Mbati or Ngbaka Mabo village do not need to learn the local language, as Sango is spoken much of the time in the village anyway.

Addressing the children only in Sango is seen as a way to give them an advantage for later in life. Sango is necessary for success in employment or trade. It is also useful in the schools, which are taught in French with the help of occasional explanations in Sango (but not in the local languages).

In addition to mill, market, and schoolyard, Sango rather than a local language is heard in church. Throughout C.A.R., nearly all local churches belong to nationwide or even international denominations. Pastors typically are not assigned to preach in their own region, and rarely do pastors know the local language (although many priests of the Catholic church do learn the local language). Sango is seen as a way to unify the churches across ethnic boundaries. It allows for fellowship with believers from throughout the country, as well as with missionaries and other expatriates.

4.3.2.3 Motivations

Many domains are exclusively Sango. In fact, almost anything that has to do with the outside world is done in Sango. Ambitions which go beyond the local village require at least a good ability of Sango, if not some knowledge of French, the language of administration and education. To know only Sango is to be trapped in the village, or in a sense trapped in the past rather than the future.

If there were not opportunity for economic and cultural integration into the national culture of C.A.R., perhaps there would be less motivation for language shift. However, this is the home region of former presidents Boganda, Dacko, and Bokassa, all of whom gave priority to the development of this region. The results of these efforts are not necessarily prosperity but certainly integration. This hope of a better life through integration, however illusory, is enough to motivate the language shift to Sango.

4.3.3 Conclusion

The Nbaka Mabo and Mbati are in the process of language shift from their traditional local languages to Sango. Other villager groups who are the traditional patrons to the Bayaka may or may not be in the same pattern of language shift. However, they are all likely to have a high degree of bilingualism in Sango because they are subject to the same factors and motivations, to different degrees. For most Central Africans, knowledge of Sango and French represents opportunity, advancement, and development. In summary, it is empowerment. As patrons the villagers must be more empowered than their Bayaka clients, and language ability in Sango is part of being a step ahead in the game.

4.4 Motivation

Now the background has been given for a discussion of motivation. What is causing the Bayaka to experience multilingualism and language shift today? Why are those who are experiencing language shift shifting to villager languages and not the LWC? What could have caused the Bayaka to borrow a Bantu language in the past, while keeping remnants of their original language?

This section relies primarily on insights from historical and anthropological sources, along with personal observations by the author gathered from two years (1996-98) of living among the Bayaka.

4.4.1 Contact status: intermediaries

There are many ways of categorizing the relationship that exists between the pygmies and villagers: patron/client, ancestral alliances, communities of inequality, symbiosis, trading, or even oppression or slavery. In terms of explaining language use, the most helpful categorization is intermediaries, as proposed by Bahuchet and Thomas (1988:311). The Bayaka are specialists of the forest and intermediaries between the village and the forest world. The villagers are specialists of the outside world and are intermediaries between the forest world of the Bayaka and the outside world. This relationship is presented by Bahuchet and Thomas (1988:311) and is summarized in figure 4.5.

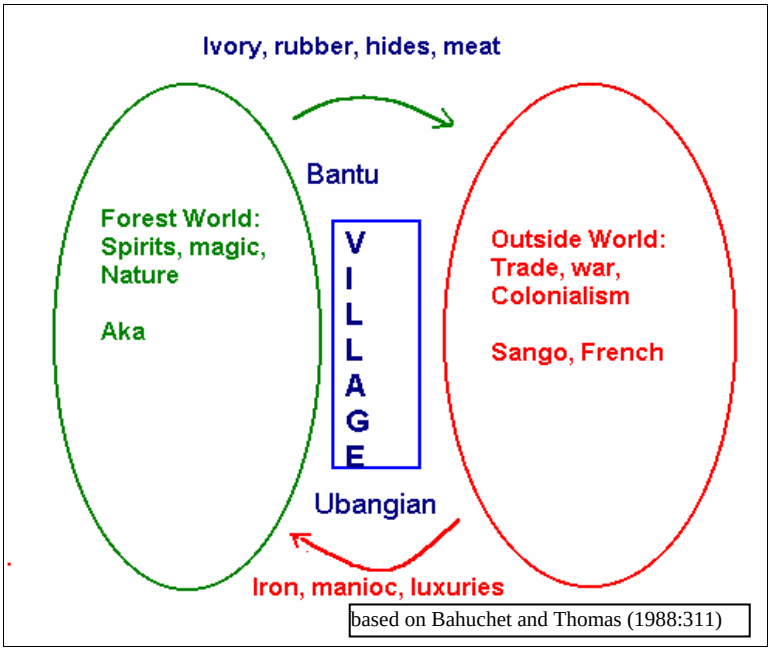


Figure 4.5. Bayaka and villagers as intermediaries.

4.4.1.1 Bayaka intermediaries to the forest world

The Bayaka are the specialists of the forest, and know it better than anyone else. In the traditional worldview of both the Bayaka and the villagers, this knowledge embraces both the physical realities (e.g., how to find honey) and the spiritual ones (e.g. how to appease forest spirits). It is the Aka language which is the vehicle for transmission of the specific cultural and scientific knowledge which the Bayaka need for dealing with the forest. It is interesting to note that the vocabulary which Bahuchet found in common between Aka and Baka was mostly cultural and forest terms (Bahuchet 1993a:34). The substratum which preserves vestiges of the proto-language **Baakaa* preserves specifically the knowledge which only the Pygmies possessed. As intermediaries to the forest world, it is in their interests to keep their specialized knowledge to themselves. The villagers must depend on them if, for example, they desire to live in the rain forest for an extended period of time. In fact, it has happened several times in recent history that villagers have been kept alive for extended periods of time hiding in the forest with their Pygmy hosts. During the time of the forced rubber collection, the village men were forced to live in the forest for extended periods without sufficient food. The Bayaka provided their villager allies with meat and thus kept them alive (Bahuchet and Guillaume 1982:201). In 1928, the Bagandu moved into camps deep in the forest during a time of rebellion and brutalities–no doubt aided by their Bayaka clients (Bahuchet 1979:67). In Eastern D.R.C. the Efe pygmies have helped their Lese villager patrons in similar ways:

> The Efe not only helped the Lese collect rubber [1910-40], but in later years would protect the Lese from hunger seasons and the violence of Zairian national political strife. (Grinker 1994:34)

Bahuchet noted that the ancestors of the Aka and the Baka (the **Baakaa*) enjoyed a certain prestige in the eyes of the villagers when it came to religion and culture:

> Au début des contacts, les *Baakaa jouirent d'une prédominance morale et religieuse. On peut certainement attribuer la persistance des traits culturels à la volonté des *Baakaa de maintenir une distance afin de conserver ce prestige social à l'égard des Grands Noirs.[22] (Bahuchet 1993:152)

This can still be seen today, as the villagers often request the help of the Bayaka for traditional cures or divination services. In fact, many Central Africans travel from the capital city of Bangui to the Lobaye region in search of magical help from the Bayaka. Usually for those who have come so far, they are in search of curses against an enemy, considered popularly to be a specialty of the pygmies. The villager's belief in the magical powers of the Bayaka is so powerful that the ethnomusicologist Kisliuk expressed concern for the Bayaka who abandoned their traditional religion: they would be more vulnerable to exploitation because villagers would no longer fear their magic (Kisliuk 1998:165).

Another motivation for the African pygmies to keep their position as intermediaries between the villagers and the forest world was mentioned by Turnbull (1985). He noted in his study of the Mbuti of Zaire (now D.R.C.):

> The return the hunters reap for the goods they bring to the villages and the services they render is that in this way, and in this way only, *they keep the villagers from expanding farther into the primary forest*, bringing their destructive (to the forest and therefore the hunters) agricultural technology with them. (Turnbull 1986: 105, italics added)

Can this observation be applied to the Bayaka? If protection of the forest is one of motivations of the Bayaka, it seems to be conflicted with other motivations. The villagers have been deep in the forest of the Lobaye region for centuries, but they have been mostly along the rivers (Bahuchet 1979:60). This allowed for fishing and transportation. The Bayaka did not keep the villagers out of the forest: the villagers engaged in hunting alongside the Bayaka, and also in the gathering of caterpillars at various times. It is true that most of the

[22]"At the start of the contacts, the *Baakaa enjoyed a moral and religious superiority. One could certainly attribute the persistence of cultural traits to the wish of the *Baakaa to keep a distance in order to conserve their prestige in the eyes of the Big Blacks" (author's translation).

hunting was left to the Bayaka if there were Bayaka clients present. Perhaps the conservation of the forest is always present as an implicit motivation. In two years of observation, often the author heard Bayaka complaining about the lack of food due to commercial hunting, but never did he hear them talking about conserving "their" forest. They did not seem to view things in those terms. They enthusiastically work for the lumber mills cutting down trees, even as they work for the commercial hunters, affecting their own future food supply. The implication of Turnbull's idea is that in the past there was a sort of balance which kept each group in its place. This may be true, or perhaps simply populations were small, and the forest was vast and largely unhunted. That is to say, there were not as many pressures from the outside world toward the forest world as there are today.

4.4.1.2 Villagers intermediaries to the outside world

Even as the Bayaka were specialists about the forest world, and still keep that place to some degree today, so the villagers are the specialists on the outside world, and still seek to keep that position today. When the French explorer Crampel came through the Ntem River region of Cameroon in 1888, he wished to meet one of the *Bayaga*[23] elephant hunters, but he had to negotiate with a villager patron to do so (Bahuchet 1993a:72). In the Lobaye region the Bayaka did not participate in rubber collection, because their villager patrons shielded them from the colonial administration (Bahuchet and Guillaume 1982:200). In the present day, relationships with the outside world are still handled by the patrons. The author and his colleagues did research among the Ngbaka Mabo in 1995, we were asked if we desired to research their Bayaka clients as well. This would have involved negotiating with the Ngbaka Mabo patrons.

[23]Probably Baka, not Bayaka in that region.

4.4.1.3 Contact status changing due to outside pressures

The symbiotic relationship is undergoing change, however. From the very distant past there has been trading of ivory hunted in the Lobaye region for metals produced in the lower Congo valley (Bahuchet 1993a:119). The villagers depended on the ancestors of the Bayaka to hunt elephants and bring ivory to exchange for metal goods, pottery, and food. The exchanges with the outside have intensified over the years, especially during the time of colonialism. The progression of forest goods needed by the outside world went from ivory to rubber during the early colonial period. As those goods diminished in the forest or were less needed, cephalope hides were in demand for a period. From 1950 until today, the outside world has demanded lumber and smoked dried meat. These demands have become full-scale industries drawing people from the outside world into the forest. The traditional villager patrons can no longer keep their role as the sole intermediaries to the Bayaka in the current exploitation of the forest. The lumber operations are controlled by international corporations. The traditional patrons still have some involvement in smoked meat trade, but most of the commercial hunters are Central Africans from outside of the Lobaye region. In fact, most of the Ngbaka Mabo, Bofi, and Mbati are either farmers or coffee-plantation owners, although some work in the sawmills or the cities. The Bayaka who remain attached to them may hunt for them, but they mostly work in their plantations and gardens.

4.4.1.3.1 Closer Contact

One overall effect of these changes has been to bring the villagers and the Bayaka into closer everyday contact. For the sedentary Bayaka, there is no place else to go: they work year-round for the villagers. These are the Bayaka who are experiencing language shift. In colonial times, at various periods the Bayaka hosted the villagers who fled into the forest (see 4.4.1.1.). Now the villagers are “hosting” Bayaka who longer have access to the forest. Both

of these circumstances lead to much closer daily contact, more bilingualism, and eventually even language shift.

A similar situation occurred in Kenya in the 1890s. The Aasáx hunter gatherers lived in symbiotic relationship with the Maasai pastoralists. When the Maasai suffered a cattle plagued which destroyed their livelihood, they moved in with the Aasáx who supported them for nearly a year. During this time the Aasáx learned the Maasai language and began a process of language shift to Maasai. In 1976, the last speaker of the Aasáx language died, all the other speakers having long since shifted completely to Maasai (Brenzinger 1997:279).

4.4.1.3.2 Deforestation

Bayaka who live on the edge of the forest spend up to nine months of the year away from their patrons, deep in the forest (Bahuchet and Guillaume 1982:206). This is quite a difference from the sedentary Bayaka who work year-round on the plantations owned by villagers. Traditionally, villagers did not produce large crops for outside markets, and so needed only occasional labor from the Bayaka during the season of clearing land for cultivation (Bahuchet and Guillaume 1982:198). With the forest gone as a resource, and the need to be part of a cash economy, it is likely that plantations will increase, and that the Bayaka will work on them. This yields a much closer contact. In fact, the Bayaka who have experienced language shift in the Lobaye region are those who have become plantation workers with no access to the forest.

4.4.2 Power issues

Why did the deforested Bayaka shift to villager languages (Ngbaka Mabo and Bofi), rather than Sango? Sango is associated with the outside world, and the intermediary relationship is designed to keep the Bayaka from contact with the outside world. Part of that

is to keep the Bayaka knowledge of Sango minimal. Language use involves power issues, as will be seen in this section.

4.4.2.1 Power to exclude

4.4.2.1.1 Excluded from the outside world

Why limit the contact which Bayaka clients have with the outside world? Associated Bayaka allies are a resource for the villagers. Economically, they provide labor, as well as forest goods which can be sold: smoked meat and occasionally ivory. In the case of trouble, Bayaka allies could serve as help either in a fight or flight.[24] Perhaps the most important value of having clients is status: the status of being a patron, having many people at your command, who depend on you (Duffy 1996:82). All these factors make traditional alliances worth keeping for the villagers, and worth guarding against potential competitors. Thus, language use choices are used to exclude the Bayaka clients from contact from the outside world.

The larger question is: Why do the Bayaka who are still clients still accept this situation, when others have opted to break their traditional ties and become independent, deep-forest dwellers? The outside world is threatening, a dangerous unknown. There have always been intermediaries, and their usefulness is obvious to the Bayaka. Even the Bayaka who have become independent are very weary of dealing too much with the government or leaving the forest. In Londo, which is a village of independent Bayaka far from the villager patrons, a Bayaka man was asked to be the mayor. He refused, saying:

> What language would I speak when in the presence of the great men? Would I need to go to Mbaiki (division center)? I will not!

[24]Grinker (1994) gives examples of the Efe defending or avenging their Lese patrons. The traditional Bayaka situation seems to have similar. See also Duffy (1996:82) for an account of the Mbuti fighting for their patrons.

As a result, a Central African from another part of the country, who had settled in the forest as a commercial hunter, remains the mayor of Londo. When some Bayaka men accompanied the author to Bangui, on the road they met up with some Bayaka who only spoke Ngbaka Mabo. They were unable to speak with them either in Aka or Sango, and were forced to ask an Ngbaka Mabo man to interpret for them. Both patrons and clients get some advantage from the intermediary system, and part of that system is for the intermediaries to the outside world (villagers) to keep the knowledge of outsider languages (Sango and French) to themselves.

4.4.2.1.2 Excluded from the forest world

Some of the patrons learn the Aka language, but many do not. Many **Baakaa* terms spread into the Ubangian villager languages, but very few appear in the Bantu languages (Bahuchet 1993a:99). Perhaps the ancestors of the Bantu-speaking villagers were already acquainted somewhat with the forest ecosystem, while the ancestors of the Ubangian-speaking villagers were introduced to the forest by the **Baakaa*. Much specific knowledge about the forest remains only in Aka, and those who do not know the language are excluded from that knowledge. According to Bahuchet (1993a:142), 36% of the specialized vocabulary of Aka is shared with Baka, and this shared vocabulary reflects a remnant of the **Baakaa* proto-language. The Bayaka who live in the forest are very mobile, and their shared language gives them instant acceptance into any Bayaka camp throughout an area of nearly 400 by 800 miles. This mobility is often used by edge-of-forest Bayaka who wish to flee from their patrons. They are given help by the other Bayaka wherever they go. The Bofi Bayaka who have returned to the forest are making the effort to learn Aka now, in order to gain this insider status.[25]

[25]See section 4.2.2.1, Deforested (sedentary) Bayaka, and section 4.2.2.3, Forest dwellers.

The other side of exclusion is inclusion: the inclusion of Aka-speakers in the community, the solidarity of Aka-speakers. When necessity arises, the Bayaka are capable of collaborated efforts, partly because of their linguistic and cultural solidarity over a large area. In the early 1900s, the Bayaka of the region west of the Lobaye (Bambio region) engaged in a large-scale rebellion against their villager patrons. Though spread out, they were able to come together in sufficient numbers to teach a lesson to the overly-harsh villagers. This shifted the balance of power a bit towards the Bayaka in that region, and especially established the fierce and magical reputation which the Bayaka still enjoy today throughout C.A.R. (Francois Ndinga, personal communication 1998).

Another example of Bayaka solidarity over a large area occurred recently. In 1997 the Bayaka of Congo experienced a revivalist movement, which spread through the forest into C.A.R. and brought together hundreds of followers from a large area. The leader called himself the "Ejingi of development" (spirit of development). He wore a large antelope-head (mask?) and spoke in Aka, but with radio static in his voice. His reported magical powers included making money and radios appear in the huts of his followers. This combination of old and new had a tremendous appeal, especially for the forward-looking Bayaka who had been considering Christianity before that point (Raymond Ndoki,[26] personal communication 1998).

4.4.2.2 Power to be included: progress

The villagers are shifting towards Sango in order to be included into the larger forest world. The Bayaka desire an increased knowledge of LWCs such as Sango and Lingala. The Bayaka living in the forest find direct access to the outside world through jobs with the lumber industry, diamond mining, commercial hunting, independent trading, and church

[26]Raymond Ndoki was a Bayaka man who lived in Londo, C.A.R.

activities. Other Bayaka do not have the same access, but all of them desire to be included in the larger world, as Bahuchet noted:

> African pygmies are conscious of being part of a cultural group that is different. But the extent to which they are considered inferior does not escape them. Therefore, the main reason, as they admit, that . . . "we want to be like the villagers," is to become full citizens. (Bahuchet 1991:12, translated in Kisliuk 1998:159)

Thus intermediary relationships between the Bayaka and their clients are being stressed and transformed in the midst of the changes of the modern world. For the sedentary Bayaka, the contact has been brought closer between the two groups, as the Bayaka live year-round near the village and work in the plantations. Other relationships have been completely broken, with the result of Bayaka as free agents in the rain forest. The Dzanga Bayaka moved from an edge-of-forest situation to a deep-forest situation when they broke their alliance with their Bagandu patrons. The Bofi-speaking Bayaka of Mbakoro have moved from a sedentary situation to a deep-forest situation leaving their Bofi patrons.

4.4.3 Conclusion

The motivations for language shift are very much the same for the Bayaka and their villager patrons. As the world changes, each group is seeking to move out into a larger world. For the villagers, the village is no longer big enough, and knowledge of Sango gives them access to urban life in C.A.R. For the Bayaka, the forest is becoming smaller, literally. Soon it will no longer be big enough for them. Those who retain alliances with villagers are developing closer relationships with village life, and some of those have gone so far as to experience language shift to villager languages. The Bayaka who have broken alliances with the villagers are finding direct access to the outside world through the industries which have come into the forest. They are becoming bilingual in LWCs such as Sango, while retaining

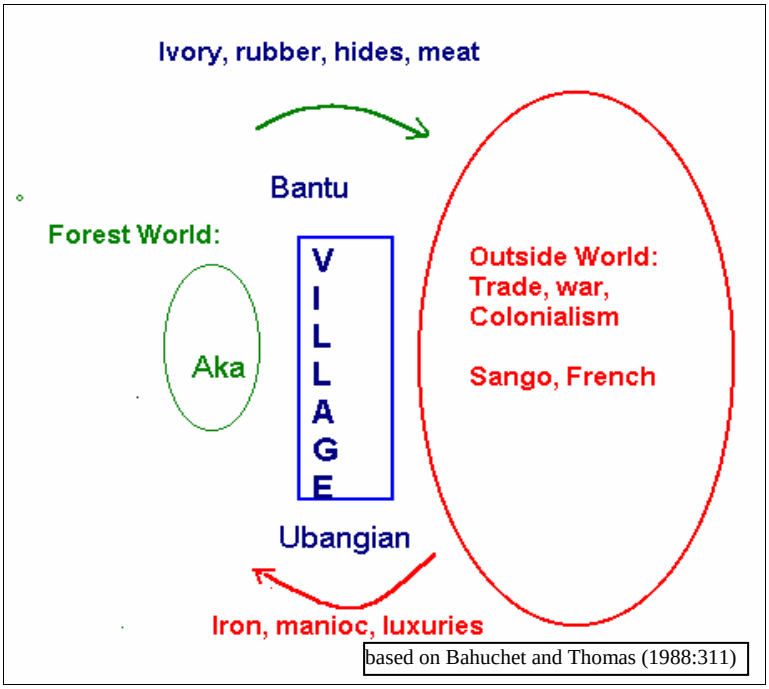


Figure 4.6. Changing Worlds.

Aka as their own language. This situation of change is illustrated in figure 4.6, Changing Worlds.[27]

As the forest gets smaller, and the outside world gets larger, language choices are part of adapting. The forest is getting too small, so the Bayaka are reaching out to learn other languages. Most of them do not have access to the trade language, and so they are learning (and sometimes shifting to) villager languages. Likewise the villagers are still trying to be intermediaries, but the village is too small for them now. They are switching to Sango. In the case of Ngbaka Mabo, the villagers are moving away from their language even as the Bayaka are adopting it. If the situation were to continue, one day the Ngbaka Mabo language might be spoken only by Bayaka, the villagers having already experienced language shift to

[27]Compare with Bahuchet and Thomas (1988:311).

Sango.[28] The Ngbaka Mabo of the Lobaye already use it only in limited domains, almost as a sort of secret language.

All of these changes are adaptations to a changing world. Adapting to the new situation is not merely a question of wishes and desires, but it can become a necessity of survival. Always practical and resourceful, the Bayaka do whatever they need to do when it comes to survival. The villagers have the same viewpoint when to comes to assuring success at staying alive. If the changes in the larger world continue (e.g. deforestation and economic opportunities elsewhere), these motivations will lead to more changes in language use patterns as well.

4.5 Conclusion: implications

In the Lobaye region currently, villagers are shifting towards Sango. The deforested Bayaka are shifting towards villager languages. The edge-of-forest Bayaka have bilingualism in villager languages, while the deep-forest Bayaka have bilingualism in Sango or Lingala. The Aka language is closely linked to the forest lifestyle, and as the forest decreases, the Bayaka learn other languages more and more. It is easy to see where this is leading, what the future could hold: more multilingualism, more eventual language shift perhaps.

4.5.1 Aka as a contact language

What does this language use situation reveal about the status of Aka as a contact language? Specifically, the claim of this thesis is that Aka is a mixed language, which is one kind of contact language.[29] Bakker and Muysken (1995) propose three useful generalizations

[28]This observation only applies to the Ngbaka Mabo living in C.A.R. There are also Ngbaka Mabo living in D.R.C. who were not included in this study.

[29]Thomason (1997b:81) posits three types of contact languages: pidgins, creoles, and bilingual mixtures.

about the situations which give rise to mixed languages. Each will be discussed in regard to the situation of Aka.

4.5.1.1 Bilingualism

Even as Bahuchet and Thomas (1986:90) noted that bilingualism is the necessary condition for language shift, Bakker and Muysken consider it to be essential:

> Language intertwining happens under specific historical circumstances. In the first place, the group must be bilingual when language intertwining starts. (Bakker and Muysken 1995:51)

If so, then, at the origin of Aka there must have been bilingualism between the **Baakaa* and a Bantu population. The Bayaka of the Lobaye have a high degree of bilingualism, which touches the entire population, although less so the women and children. Those Bayaka who retain their ancestral alliances have bilingualism in their patron's language, rather than in Sango. Those Bayaka who are "free" have increasing bilingualism in Sango. These current patterns, projected into the past, support the hypothesis of Aka as a mixed language, the result of language contact.

4.5.1.2 Secret language function

The next factor proposed by Bakker and Muysken fits remarkably well with the situation of the Bayaka: the function of a *secret language*.

> In these cases [Romani Gypsy languages] a different factor was responsible for the genesis of the intertwined language: the need to be unintelligible to outsiders . . . . By making one's in-group language sound like the language of the surrounding people, one can more easily hide the fact that one has a secret language. (Bakker and Muysken 1995:51)

The function of secrecy (or *exclusion*) explains why mixed languages have "borrowed" the grammar of another language: they wish to sound like the dominant language, but yet be unintelligible to the speakers of it. Many early researchers noted that the

languages of pygmies appear to be “secret languages.” Le Roy’s early observation, quoted in chapter 1, is worth bringing up again:

> Nous ne pouvons guère tirer de renseignements de la langue, car tous les Négrilles observés jusqu'ici parlent un mélange d'idiomes empruntés aux tribus parmi lesquelles ils ont auparavant séjourné, et qui, pour n'être pas connu de celle où ils sont pour le moment, passe souvent pour leur appartenir en propre.[30] (Le Roy 1929, first appeared 1897)

Bahuchet also noted the element of secrecy in the Aka language:

> La conservation de sa langue maternelle assure aux Aka et aux Baka une intimité qui les empêche d’être englobés dans la société de leurs maîtres, tout en les protégeant grâce à son emploi comme “langue secrète.”[31] (Bahuchet 1993:152)

This dynamic of exclusion was seen in the discussion of the intermediary relationship, and how that relationship plays out in language use patterns among both the Bayaka and the villagers. The Bayaka exclude the villagers from knowledge of the forest world, even as the villagers exclude the Bayaka from knowledge of the outside world.

It is this element of exclusion which explains why the Bayaka today tend to experience language shift to the languages of their villager patrons, and not to a LWC such as Sango.

4.5.1.3 In-group communication

The Aka language brings solidarity to the Bayaka people, who are dispersed over a large area of forest. Intercomprehension testing[32] confirms that the Aka language is

[30]"We can hardly get any information about the language, for all the Négrilles observed so far speak a mixture of speech borrowed from the tribes among whom they formerly sojourned, and which, since it is not understood by those near whom they are living now, is considered as their own" (author's translation).

[31]“The conservation of their maternal language assures the Aka and the Baka of a closeness which keeps them from being engulfed in the society of the masters, while protecting them by its use as a secret language” (author’s translation).

[32]See section 1.6.1.3, Intercomprehension testing.

remarkably homogenous, since the Bayaka both at the western and southern edges of the Bayaka region understood the texts recorded in the northeast corner of their territory. This homogeneity was noted by Thomas (1991:23), who proposed that the explanation was the mobility of the Bayaka people. It is true that the Bayaka are very mobile, but also it is important to them to keep solidarity as a group.[33] Bakker and Muysken consider the in-group nature of the language to be the key to the origin of a mixed language:

> The major factor, however, is that an intertwined language is an in-group language. We can actually expect similar language to emerge between soldiers in armies protractedly residing in a foreign territory, between pupils of foreign boarding schools, between bilingual traders, etc., but it is unlikely that these people would consider their speech a separate language. (Bakker and Muysken 1995:51)

It is the utility of Aka for special in-group uses that explains why so much of the ancient **Baakaa* language lexicon was kept as a substratum at the time when the ancestors of the Bayaka borrowed a Bantu language. Specialized vocabulary is needed for aspects of life which are *not* shared with the villagers, things that make up a unique group identity.

4.5.1.4 Conclusion

It is clear that the current language use patterns among the Bayaka and their patrons, projected into the past, provide good circumstances for the emergence of Aka as a mixed language. In fact, the sociolinguistic situation gives the motivation for the borrowing of a Bantu language, while keeping enough elements of their own language to make it a separate language, unintelligible to the Bantu speakers. Sociolinguistic concerns motivate the borrowing of grammatical elements and the retention of much earlier vocabulary, as seen in many mixed languages, including Aka.

---

[33]See section 4.4.1.2, Excluded from the forest world.

4.5.2 The Origins of Aka

What about the past? In the distant past, there must have been some major changes which brought the ancestors of the Bayaka into closer contact with Bantu villager populations. Bahuchet and Thomas (1986:90) have suggested that the *Baakaa migrated with the northern Bantus from the region of the Ituri forest to their present location. This is a strong possibility, and would explain the close degree of contact which would lead to language shift on the part of the *_Baakaa_. After this migration, the hypothesis would assert, when the *_Baakaa_ and their Bantu hosts settled down, the groups grew apart again, and so remained separate ethnic groups with separate languages to this day.

The current language use patterns of the Bayaka would support the possibility of such a theory. Cataclysmic events of the twentieth century brought about major changes in language use patterns of both the villagers and the Bayaka. In two generations only, the Bayaka north of the Lessé River have completely shifted to speaking only Ngbaka Mabo. If this is true, then a period of migrating together, with the *_Baakaa_ as hosts for the villagers they were migrating with, would be sufficient for language shift, depending on the length of the time the groups spent together.

The language use patterns of today also explain why the Bayaka would value their own language for in-group communication, distinct from any villager language. As specialists of the forest world, they need to keep a body of knowledge for themselves. Thus the substratum of *_Baakaa_ which remains in Aka and Baka today. Only when they have ceased to be involved in the forest, as in the case of the sedentary Bayaka, have they completely given up having a language of their own. The need for an in-group language for forest knowledge is no longer present among the Bayaka who have no more access to the forest. These are the Bayaka who have already shifted to the languages of their Bofi and Ngbaka Mabo patrons.

Both the past and the future remain covered in mystery and conjecture. The Bayaka live for today, in the world of now. Although people will never know the deepest answers to questions about the past and the future, understanding today's patterns of change illuminates both to some degree. The language structure illuminates the sociolinguistic situation, even as the sociolinguistic situation illuminates the structure. Each step brings more understanding, which has its own reward.

CHAPTER 5
CONCLUSIONS

5.1 Introduction

There is much more that could be said about the Aka language, and the sociolinguistic situation which lead to its origin. This chapter places the thesis in relation to: (1) the original research questions of chapter 1, (2) previous research, and (3) future research questions yet to be answered.

5.2 Research questions

There are two purpose statements which are found in chapter 1. The first is general, and the second is more specific. Each of these will be reviewed in this section.

5.2.1 Aka as a Contact language

The title presents the thesis as: *Aka as a contact language: sociolinguistic and linguistic evidence*. The definition of contact language was taken from Thomason:

> A *contact language* is a language that arises as a direct result of language contact and that comprises linguistic material which cannot be traced back primarily to a single source language. (Thomason 1997a:3, italics added)

The two elements of the definition were: (1) language contact and (2) linguistic material from more than one sources. Each of these will be seen in turn.

5.2.1.1 Language contact

Researchers agree that there must have been language contact between the ancestors of the Bayaka and Bantu villagers in the past. The Bayaka are not Bantu themselves, and yet they speak a Bantu language. It has been thought that the ancestors of the Bayaka borrowed a

Bantu language (Thomas 1979:153). If they borrowed an entire language from the villagers, they must have had language contact, and particularly bilingualism in that Bantu language. However, this thesis argues something more. The Aka language was created as a *new language* in the process of the borrowing of Bantu structure and vocabulary. It is not the same as the Bantu language from which they borrowed, nor was it ever the same. They borrowed enough of the Bantu language to make their own language Bantu in structure, but they kept enough of their previous language to make it incomprehensible to the Bantu-speaking villagers. The motivation for this partial borrowing is found in the relationship between the ancestors of the Bayaka and their villager patrons. This relationship can be partially reconstructed by the study of the relationship between the Bayaka and their patrons today. The thesis presents an in-depth discussion of the current language contact situation between the Bayaka and their patrons in the Lobaye region of C.A.R. There is bilingualism and even language shift occurring, and the study of those modern-day occurrences leads to insight into the past language contact situation which lead to the development of Aka.

5.2.1.2 Linguistic material

As in the case of the language contact criterion, there was not any real doubt that there are linguistic elements from more than one source in Aka. Previous publications have shown that at least 20% of the lexicon is not only non-Bantu, but is shared by other languages spoken by Pygmies (such as the Baka language, which is Ubangian and not Bantu). The present study adds to past observations in two ways: (1) showing how some Bantu elements have been incompletely adopted or re-interpreted and (2) showing some additional non-Bantu elements.

5.2.1.3 Conclusions

The original statement of purpose, *Aka as a contact language*, could be seen as the topic or theme of the present work. It is a general claim, that Aka found its origins in a language-contact situation. However, the thesis presents a more detailed and controversial hypothesis in the second statement of purpose, *Aka as a mixed language*.

5.2.2 Aka as a mixed language

The more specific purpose of this work was to present the original hypothesis that the Aka language is a mixed language, the result of contact between the language of the ancestors of the Bayaka and one or more Bantu languages. This purpose led to two distinct research questions: (1) what is the current language use situation of the Bayaka and their villager neighbors? and (2) what remnants of the earlier (non-Bantu) language remain in Aka today?

The *mixed language* claim is far more specific than the *contact language* claim. It proposes what type of contact language, and therefore invites comparison of Aka with other proposed contact languages of the same type. There is a considerable literature about mixed languages, and there are many typological predictions which can be made if the language is indeed a mixed language. For example, in mixed languages proposed so far, the grammar is the borrowed part, and the vocabulary is the conservative part. Mixed languages are in-group languages, devised and kept for secrecy in a multilingual situation.

If Aka is a mixed language, the ancestors of the Bayaka did not simply borrow the Aka language. Rather, they borrowed most of a Bantu language and in the process of borrowing it created a new language, which is Aka. The new language has an overwhelmingly Bantu structure, but conserves a good deal of the original lexicon of the now-abandoned language once spoken by the ancestors of the Bayaka. It is unintelligible to the Bantu-speaking patrons, and in fact quite different from any other Bantu language.

Typologically, the new resulting language–Aka–is a mixed language, with both Bantu and non-Bantu elements. To ignore the non-Bantu elements is to ignore the substantial linguistic material which Aka conserves of a now vanished language which was once spoken by Pygmies in particular.

The two research questions will be examined in sections 5.2.2.1 (the contact situation) and 5.2.2.2 (non-Bantu elements).

5.2.2.1 Contact situation

What is the current language use situation of the Bayaka and their villager neighbors? The thesis answers the question by looking at the Bayaka of the Lobaye region of C.A.R., along their patrons of the Ngbaka Mabo and Mbati groups. The sociolinguistic research data presented include group interviews, bilingualism testing, dialect comprehension testing, and participant observation. Previous literature contributed to form an overall picture of the language use patterns of the Bayaka and their patrons in the Lobaye.

There emerged a picture of the Bayaka in transition. The population can be divided into three groups: (1) the sedentary Bayaka, who live year round on plantations; (2) the edge-of-forest Bayaka, who divide their time between the forest and the plantations, and (3) the forest Bayaka, who live year-round in the forest and have broken off from their traditional patron-client relationships. Each of these groups has a different language use pattern.

The *sedentary Bayaka* live in deforested areas. The ones who are completely cut off from the forest by a river have experienced language shift to the language of their patrons (Bofi or Ngbaka Mabo). The rest of the sedentary Bayaka have some occasional interaction with the Bayaka community, and so have kept their language. They are bilingual in the language of their patrons. While there has not been testing done, the sedentary Bayaka are reported to have a low level of bilingualism in Sango.

The *edge-of-forest Bayaka* live in camps near their villager patrons. They divide their time between working on the plantations for the villagers and hunting in the forest. For several months of the year they move their camps into the deep forest for collective hunts or gathering foods such as honey or caterpillars. The "seasonal worker" lifestyle seems to be the prototypical pattern for the Bayaka as well as other Pygmy groups in Africa. They are bilingual in the language of their patrons, but they are reported not to have a high level of bilingualism in Sango.

The *forest Bayaka* have broken off their traditional ties and live deep in the forest. They are often employed by lumber operations and commercial hunters. This gives them a greater degree of contact with Sango than their counterparts who still have exclusive obligations toward a villager patron. In bilingualism testing, all portions of the population showed familiarity with Sango. The men did better than the women, the young men better than the old men or children, the Bayaka with villager neighbors did better than those without.

The situation of the Bayaka in the Lobaye is complex, with some portions of the population experiencing language shift, and others not, and bilingualism in various languages. In light of that, it is remarkable that their language remains very viable in most places, and very homogenous throughout the Bayaka area. This homogeneity is partially accounted for by their remarkable mobility, and partially by the strong in-group function which the Aka language holds for the Bayaka people.

The villagers are also in a time of transition. The Lobaye region has experienced a great deal of economic integration, resulting in urbanization, mixed marriages, and economic ambition on the part of the villagers. The Ngbaka Mabo interviewed are in the process of language shift towards Sango, and the Mbati seem to be beginning that process as well. Most children of the Ngbaka Mabo and Mbati grow up speaking and hearing Sango only. The

children of the Ngbaka Mabo do not learn the language until at least the age 12, and the Mbati children do not begin understanding the language until age nine. The Ngbaka Mabo language is used in restricted domains by all but the elderly. Most of those domains are specifically in-group communication and secrecy.

It is interesting that some Bayaka have shifted to Ngaka Mabo at the same time when the Ngbaka Mabo have started shifting to Sango. This situation resembles a chain reaction, and could eventually result in Ngbaka Mabo being spoken only by Pygmies,[1] after their patrons have shifted completely to Sango.

The language use situation of the Bayaka today confirms the hypothesis that Aka is a mixed language. There is bilingualism, the evident condition for the formation of a mixed language. In addition, there is the element of secrecy involved in their relations to the villagers, to whom the Bayaka are the intermediaries to the forest. The strongest condition for a mixed language is its in-group function. The strong in-group function of Aka explains its homogeneity, and also accounts for the cases of language shift. Only the Bayaka who are totally cut off from the wider Bayaka community experience language shift. The other Bayaka all have high levels of bilingualism, but keep Aka because of the solidarity it gives them as a group.

5.2.2.2 Non-Bantu elements

What remnants of the earlier (non-Bantu) language remain in Aka today? This research question was only partially answered. The discussion of Aka was based on the grammar of Thomas (1991) and various manuscripts by Kosseke, Kutsch-Lojenga, and Sitamon. Some data of the Baka language of the Pygmies of Cameroon was taken from

[1]This holds only for C.A.R. It appears that there are Ngbaka Mabo in D.R.C. who are not experiencing any language shift, and so the language remains viable there (Ken Olsen, personal communication 1999).

Brisson and Boursier (1979) and Brisson (1980). Aka clearly has a Bantu grammatical structure: noun classes, word order, verbal morphology, and the sound system are all very typically Bantu. However, some of the sounds have a very limited distribution and are especially linked to the Bantu material. These sounds seem to be imperfectly adopted from Bantu, and not quite integrated into the sound system. The noun class system in Aka is clearly Bantu, but unique in its high degree of productivity. It allows for a remarkably high number of combinations, and also the noun-class prefixes can be used to nominalize verbs even without the usual nominalization morphology.

The discussion of non-Bantu elements was very restricted. The lexical elements have already been discussed by Bahuchet (Bahuchet 1993b). Some additional elements were presented from three areas: (1) the demonstrative system, (2) verbal TAM morphology, and (3) pragmatics. These elements are shared with the language of the Baka Pygmies of Cameroon, and seem to be remnants of an ancient proto-language once spoken by the ancestors of the Bayaka and the Baka. The elements are few in number but are elements which have a high level of occurrence in speech. Only the very evident and obvious elements were brought out in this thesis, to illustrate from the linguistic data the claim that Aka is a mixed language. Further research may very well reveal many more elements which can be traced back to the ancient proto-language of the **Baakaa*.

5.3 Previous research contrasted

The conclusions of this study in general support previous claims made about the Aka language. There are, however, some points of difference which deserve to be highlighted. First, there are the observations about the current language use patterns of the Aka. Previous studies were based on data collected in the 1970s and 1980s, 10-20 years earlier than the

research for this thesis (1993-1998). The situation has changed a great deal in the intervening time; the most noticeable changes concern deforestation in the Lobaye region.

> La persistance actuelle des langues aka et baka sur des surfaces aussi larges, et ce malgré la grande diversité des autres langues occupant la même aire de forêt, souligne qu'il n'y a pas de nos jours d'assimilation linguistique des Pygmées par les Grandes Noirs.[2] (Bahuchet and Thomas 1986:86)

In fact, there is at the time of this writing (2001) linguistic assimilation occurring to a portion of the Bayaka population. The sedentary Bayaka who no longer have any contact with the forest are experiencing language shift to villager languages. The statement of Bahuchet and Thomas (1986:86) does still apply for the other Bayaka: the forest dwellers and the seasonal workers. In spite of their bilingualism, they are not experiencing language shift.

Another major difference between the previous publications and the present study is the view of the origin of Aka. It is agreed that the **Baakaa* borrowed a language, but the question is: why it is so different from the other Bantu languages? One might think that the Aka language was incompletely acquired for lack of time: some event put a stop to the close language contact situation before the Bantu language had been completely borrowed. This has not been proposed in the literature, but it could be. What has been proposed is that the **Baakaa* completely borrowed a Bantu language of the group C10. Then they were separated from the Bantu-speaking villagers from whom they had borrowed the language. Over time the Aka language developed independently, and became unintelligible with the other Bantu languages (Thomas 1979:153; Bahuchet 1993b:40; Bahuchet and Thomas 1986:88).

This thesis argues for a very different explanation of the differences between Aka and the other Bantu languages. When the **Baakaa* borrowed from a Bantu source, they borrowed specific elements: (1) core vocabulary, including terms for village life and villager

[2]"The current persistence of the Aka and Baka languages over such large areas, and this in spite of the great diversity of other languages occupying the same region of forest, highlights that there is in our day no longer any linguistic assimilation of the Pygmies by the Tall Blacks" (author's translation).

interactions, and (2) structure such as sounds and noun-classes so as to make their language sound like the language of the villagers, and thus disguise the fact that they have their own language. In short, Aka is not just a Bantu language borrowed by Pygmies, but is truly a mixed language typologically, and has been since its origin.

If it were not for the sociolinguistic factors which lead to language mixing, the Aka today would have no reason not to just speak the language of their patrons. They do speak the language of their patrons, but they also keep an in-group language, known only to them. They always have, and most likely always will as long as there is a strong Bayaka group identity. Those Bayaka who have been cut off from the rest of the group are the ones who have experienced language shift. When they no longer feel membership in the Bayaka community, they no longer need the Aka language. The Aka community is currently linked to the forest and the forest way of life. If the forest disappears, perhaps the Aka community will cease to exist. If so, the language will be gone as well most likely. But is there is still a group Bayaka to belong to, dispersed as they are among other groups, they will need there own in-group language to speak alongside the other languages. That will be some form of Aka.

5.4 Future research

Much research remains to be done. There are points which are very incompletely covered in this thesis, which need more research. There are implications of this research for other languages and linguistic theory.

5.4.1 Research in Aka

This thesis is primarily sociolinguistic in nature, focusing on language use and language origins from the perspective of contact linguistics. The linguistic material included is limited to the goal of illustrating some of the features which indicate that Aka is a mixed

language. For most aspects of the linguistic analysis, reference has simply been made to the previous works of Thomas (1991) and Kosseke and Kutsch Lojenga (1996). Very little discussion is given of the function of the complex structures presented. A separate volume dealing only with linguistic phenomena is called for in order to give the linguistic issues the attention they merit. It is the author's belief that many more remarkable aspects of the Aka language could be found if more study was given to Aka grammar in comparison with other Bantu languages. Some of the singularities would be re-interpretations of borrowed Bantu structure, and others might be remnants of the **Baakaa* proto-language.

Much more research needs to be done on the sociolinguistic side of things as well. For example, when the sedentary Bayaka experience language shift to Bofi or Ngbaka-Mabo, do they also keep part of the Aka language in the way they speak those villagers languages? Perhaps the Bofi language as spoken by the Bayaka is not intelligible with Bofi as spoken by villagers. Has the need for an in-group or secret language really ceased for those sedentary Bayaka? If so, are they in fact integrated into the villager societies, perhaps as a lower class of people?

This study was limited to the Lobaye region of the C.A.R. This region is the northeast corner of the Bayaka area, inhabited by perhaps only 25% of the total population of the Bayaka. In the Sangha river area, there are other language contact situations in which the Bayaka find themselves. There are Bayaka who make a living off tourism in Bayanga, C.A.R. Near Bayanga is the village of Monasao, where there are over 1,500 Bayaka who live in a agriculture community created by Catholic missionaries in the 1970s (Sarno 1996:10). These places were visited briefly by the author's colleagues Kosseke and Ndinga in 1996. They were interested in intelligibility of Aka throughout the extent of the Bayaka territory. They found that the Bayaka there understand Aka as spoken in the Lobaye region. However, the situation of the Bayaka in those places is very different from the situation found in the

Lobaye, and it is likely that their situation affects their language use patterns. Are the Bayaka who work as tour guides learning French through their contact with tourists? More research is needed among the Bayaka outside of the Lobaye region of C.A.R.

5.4.2 Theoretical implications

If Aka is a contact language, is it possible that other languages spoken by African Pygmies might be mixed languages also? Indeed, perhaps many or most languages spoken by hunter-gatherers are in fact mixed languages. Foragers throughout the world are in patron-client relationships with agriculturists in a similar way as the Aka are in relationships to their patrons. If the same sociolinguistic dynamics are going on, perhaps other forager groups speak special in-group languages which they disguise by heavy borrowing of structure from the languages of their patrons. It is well-known that migrant peoples such as the gypsies create mixed languages in this way–perhaps foragers around the world do it as well?

Linguistics and sociolinguistics are often treated as very separate entities. A notable exception to this is the field of contact linguistics. It is agreed that pidgins and creoles demonstrate the interaction between sociolinguistic situations and linguistic structure. Pidgins typologically tend to have certain properties, whatever languages they are based on. For example, pidgins have by definition a limited vocabulary and a simplified morphology (Thomason 1997b:76). In a like manner, predictions may be made for creoles and for mixed languages.

It is generally thought that contact languages are different from all other languages spoken by humanity, because of the direct affect the sociolinguistic situation has had on their origins and structures. Could it be that all languages are also affected to various degrees by the sociolinguistic situations of their speakers? This thesis applies the concepts of contact linguistics to a language which has not been considered as a contact language in the

literature. It introduces the idea that perhaps many languages spoken by foragers should by considered as mixed languages. By applying the principles found in contact linguistics, much more could be discovered about the interaction between sociolinguistic situations and linguistic structures, to the enrichment of the understanding of both.

5.5 Conclusions

Much has been written over the years about the Bayaka people and their language, and yet much more remains unknown. The story of the Central African Pygmies is an old one, and there is not an ending yet because the story is not yet finished. Many people have believed that little or nothing could now be known about what languages used to be spoken by Central African Pygmies. This thesis claims that there are still echoes reverberating of those ancient tongues. The echoes may be heard in the substratum which is shared by Aka and Baka. Perhaps other languages spoken by Central African Pygmies also have a tale to tell. If the linguistic residual elements are echoes of past voices, then the language use patterns of the Pygmies today are footprints which give clues as to where these languages may have come from, and how they originated. Echoes are often faint. Footprints are often partly washed away by time. Even so, who can resist following tracks which may lead to a spring, or pausing to hear the last reverberation of an echo which drifts over the hills? May we always follow, always pause to listen, and may we grow to understand.

APPENDIX A

SAMPLE GROUP QUESTIONNAIRE

APPENDIX A
SAMPLE GROUP QUESTIONNAIRE

This is the questionnaire used for the sociolinguistic surveys of the Mbati and Ngbaka Mabo languages (Bister 1995, Duke 1995). It was translated from the original French and Sango by the author.

1 Dialectal situation.

1. What are the villages that speak (exactly) the way you do? Do the people of _____ (village name) speak like you?

2. Are there other villages, far from here, where people speak the same language as you?

3. What do you call them? Are there connections between you and them? What are those connections (i.e. family, ancestral)?

4. Have you ever gone to _____?

5. Are there connections between you and the _____ people? What are those connections?

6. What languages do you speak when you are over there?

7. Do you speak the _____ language (mother tongue or other language)? When you speak _____, do you speak it well?

8. When you speak the _____ language, with what language do people reply to you?

(to verify if the intercomprehension is acquired, one can ask the following:)

9. Could a six-year-old child understand the people of _____? If not, at what age could he start to understand them?

(If one wants to verify if all the people in a linguistic area understand the neighboring speech variety, and not just those on the frontier, on could ask the following:)

10. Do the people of _____ (village far from the linguistic frontier) understand _____ (neighboring language)?

2 Bilingualism.

11. Which are the languages which you speak well?

12. Do the people of _____ (village far from the linguistic frontier) speak _____ (neighboring language)?

3 Language use patterns.

13. Are there people in this village who do not speak your language?

14. Which languages do they speak? Do they learn your language? Do you also learn their language?

15. Are there people in your village who speak your language as their only language? Who?

16. Do you know mother-tongue speakers of your language who no longer speak it? Are there many like that? Where do they live?

17. What is the first language that children of this village speak?

18. Are there many children who learn _____ (other language) before going to school?

19. When students who do not go to school yet play together, what language do they speak to each other with?

20. Which languages are most often used in school: in the classroom, by teachers, on the grounds during recreation, or between parents and teachers?

    Which languages are used most often with the government?

4 Attitudes.

21. Where is your language spoken the best or purest? Why?

22. Would you like to read materials in _____ (other varieties, local variety)? Which languages would you prefer for written materials? What is your second choice? Why?

23. Do people respect someone who speaks _____ (other language) more than someone who does not speak it?

24. Are there speakers of your language who do not speak the language very well? Who?

25. Do the young people here speak the _____ (mother tongue) language correctly, as it should be spoken?

26. If a youth spoke _____ (second language) in the home, would the elders be displeased?

27. Are the young people proud of your language?

28. In a future time far away, do you think people will cease to speak your language, and speak only the _____ (second language)?

29. When the children of this village become adults and have children themselves, do you think that those children will speak your language? Is that a good thing or a bad thing?

5 Social Factors.

30. What name do you use for yourselves? What name do your neighbors use for you? And the government?

31. Are there many people of your village who marry people from other groups? From which groups?

32. Do people of this village often go to _____ (important town or city)? Who goes there? Are there many, or just some individuals? Why do they go there (i.e. for the market, to find work, etc.)?

33. Do the young people stay in the village or do they move to the city? Why?

34. Do some of the people who have moved to the city return to live in the village? Who comes back, and why?

35. Are there people from elsewhere who emigrate to this village? Where do they come from? What do they do here? Do they learn to speak your language and speak it, or do they speak other languages here?

6 Official use of languages.

36. Do most of the children of this group go to school? If not, why don't they go?

37. Is there or has there been a literacy program for adults here?

7 Religious factors.

38. What churches, missions, or other religious groups are present in this village?

APPENDIX B

SAMPLE AKA TEXT

APPENDIX B
SAMPLE AKA TEXT

1 Introduction

This is the text of an Aka narrative called *Bakope Babaye*, or "The Two Sons-in-law." The story is about two young men who are recently married and hunting for the camp of their parents-in-law. It is a comic tale of misadventure while hunting, with the addition of a moral at the end which gives the overall text a hortatory thrust. The moral encourages the listeners to be diligent in their efforts to take up agriculture.

The story was recorded in Londo, C.A.R. in 1994 by Saint-Jérôme Sitamon. Sitamon later transcribed it and translated it into French. Duke parsed the text and provided the interlinear glosses. The free translation into English is based on Sitamon's original French translation. Section 1 presents the free translation into English, and section 2 presents the complete Aka text with interlinear glosses in English.

2 English translation

The Two Sons-in-law

One day, two sons-in-law went into the forest. Both of them had married their wives in the same camp. They walked a long time in the forest and when one of them glanced to the side and there he saw an animal on the ground, apparently asleep.

He told his companion: "Hey! Friend! Come let us look at that animal sleeping over there." The companions came and together they discovered the animal and saw that it was rotting. One of the sons-in-law said to his companion: "Let's leave this animal alone because it's rotten and full of maggots." The other answered him: "No, let's take this decay and bring it to our in-laws to eat." The first son-in-law again said to his friend, "As for me, I will not

touch the rottenness today." But his friend told him: "I am going to bring this decay to my in-laws so that they'll eat it."

Having heard this, the first son-in-law abandoned his friend and went on ahead. As for the second one, he gathered some leaves and made a package from the decay and carried it off. They walked a long time in the forest but they didn't kill animals. The son-in-law who refused to take the decay told his companion: "Hey, friend, let's go back," and the other answered: "Yes, let's go back!" As said, they returned to the camp. But at the camp, there wasn't anything to eat at all, except for the decay that the other son-in-law had brought back from the forest.

Upon arriving at the village, the wife of the second son-in-law reached into her husband's game bag and she pulled out the package of rotten meat. She gave it to her mother. The mother took the rotten meat. She added some paste from the *payo* nut (*irvingia excelsa*), seasoned it with several wild herbs, and then added in wild yams. She boiled all it all together with the rotten meat for a long time. She then took it off the fire and put it on the ground. Then she told her daughter: "Bring me a plate, and I'll put in your husband's part of this decay, so that he may eat."

The girl brought her mother a plate, which her mother filled up with this rotten meat. She then told her: "Take this to your husband so that he may eat it!" During this time, it became night and it rained a lot. Everybody was therefore stuck together in the camp.

The girl took the plate of rotten meat and set it before her husband. When the husband saw this, he turned his back on his friend and began to eat. He ate, he ate, and he kept on eating. His companion was telling himself: "Soon my friend is going to insist on inviting me to share his meal." But there was no question about that. He waited a long time but the invitation still didn't come.

Not being able to handle it anymore, he got up and went towards his companion. He grabbed him by the arm and told him: “Give me my share of this rotten meat to eat!” The friend replied: “Wasn’t it you who refused to touch this rotten meat? Yesterday you ran away from this rottenness in terror!”

Hearing this, the companion got very angry. He threw himself on the second son-in-law and the two of them beat each other up in the presence of their in-laws because of this rotten meat.

There is advice here for us Aka Pygmies. When it’s dry season, we must hasten to cultivate our fields. Because if we don’t cultivate our fields, we run the risk of becoming like this son-in-law who was content with looking at the decaying animal without taking it. Now when this game was prepared, he had to fight with his friend because his friend refused to give any of it to him. If we are content leading a passive existence, that’s to say without doing anything, we may wind up stealing our companion’s possessions from them.

3 Aka text with glosses

Bakɔpɛ Bâbâyê

Bafɔ̂kɔ̂	bakɔpɛ	bâbâyê	bâduânê	na	ndîmâ.	
c2.certain	c2.youth	c2.two	c2.go.pstn.	to	c9.forest	
Bêɛnê	bâlongânê	baîto	ka	mû	lângɔ	wûmɔtî.
They	3P.marry.asp	3P.women	only	in	c3.camp	c3.one
Bêɛnê	bâduânê	na	ndîmâ	têêê,		
They	3P.go.asp	in	forest	ideo		
wâgasê	mokɔpɛ	bô	wâfisɛ	mîsɔ	bô,	
c1.other	c1.youth	that	c1.throw	eye	that	
nyama	adzêɛ	molâlê	mû	sɔ̂pɔ̂.		
animal	1S.was	c1.sleep	on	ground		
Yɛê	na	kangâyê	bô:			
He	to	comrade	that			

« Bêka ê, yaâ î talɛ nyama âdzɛ molâlê wû! »
friend.voc come.imp we see animal 3S.is c1.sleep there

Kangâyê ayaâ. bêɛnê bâtalɛ bô,
comrade 3S.come they 3P.see that

nyama waândzo mopɔlê, wagasê mokɔpɛ na kangâyê bô:
animal c3.dem c3.rotted c3.other c3.youth to comrade that

« Bêka ê, î dikɛ ebɔdû yâ ngâ nyama,
friend.voc we leave.sub c7.rot c7.of dem animal

î duɛ mɔndɔ̂ ebɔdû yâ ngâ nyama na makisô nakî.»
we go.sub word c7.rot c7.of dem animal with c6.maggots many

Kangâyê bô: «Pɔ̂lɔ, yâdzɛ enyɛ,
comrade that no c7.is c7.good

î bɔsɛ ebɔdû yâ ngâ nyama waândzo,
we take.sub c7.rot c7.of dem c1.animal c3.dem

î tombɛ na bakiô bâ sînɛfɛ̂ ndê bô bêɛnê bâdzɛ.»
we take.sub. to c2.in-law c2.of us so that c2.they c2.eat

Wâgasê mokɔpɛ bô:
c3.other c3.youth that

« amê natîpîê elɔ̂ ebɔdû yândzo tâmbî.»
I 1s.neg.take.sub. today c7.rot c7.dem not

Kangâyê bô: «amê nâapîâ ebɔdû yâ ngâ nyama,
comrade that I 1s.take c7.rot c7.of dem animal

amê nâtombɛ na babhɛndɛ bâdzɛ»
I 1s.take.sub to c2.in-laws c2.eat

Wâgasê mokɔpɛ wâtâlâ bôonâ, wâfânâ yêî mû mbɛlî.
c3.other c3.youth c3.see like-that c3.pass him in before

kangâyê akɔmâ ebɔdû yâ ngâ nyama waândzo
comrade 3s.attached c7.rot c7.of dem animal c1.dem

na mângɔ, adîngâ.
to c6.leaves 1s.carry

Bêɛnê bâlêngânâ têêê, ngba bô bâwolɛ bafɔ̂kɔ̂ banyama tâmbî.
they 3p.walk ideo but that 3p.kill.sub c2.any c2.animals not

Moto mbisî âmûkɔmâ ebɔdû na boômbâ nê,
c1.man rel. 3s.perf.tied c7.rot with packet dem.

yɛê na kangâyê bô: «Bêka ê, îsuɛ ke! »
he to comrade that friend voc 1p.return.sub voc

Kangâyê bô: «Yii, îsuɛ ke! »
comrade that yes 1p.return.sub voc

Bêɛnê bâsûâ mû lângɔ.
they 3p.returned to camp

Mû lângɔ ngɔ̂ɔnê, yôma yêetê,
at camp there.dem c9.food c9.was-not

ka bhoôkâ ebɔdû yâ mokɔpɛ wâgasê wâmûkɔmaânu nê.
only only c7.rot c7.of c3.youth c3.other c3.perf.tied.rel.pstf dem.

Na wûbhêdî yaâbɔ̂ mû lângɔ, moîto wa moto,
at arrival c9.their at camp c1.woman c3.of c1.man

mbisî âbɔsâkânu ebɔdû yâ nyama nê,
rel 3s.take.rel.pstf c7.rot c7.of animal dem.

akanâ wɔbɔ̂ mûta kola wa motopayê wɔɔ̂î,
3s.put arm into sack c1.of c1.husband c1.her

abhiîsê eboto yâ ngâ ebɔdû yâ nyama,
3s.pull-out c7.package c7.of dem. c7.rot c7.of c1.animal

atômbâ na ngôyê wɔɔ̂î. Ngôyê abɔsâ ebɔdû yândzo,
3s.bring to mother c1.her mother 3s.took c7.rot c7.dem

alâmbâ, akanâ mopâyô, akanâ mongêmbâ,
3s.cook 3s.put c5.nut (sp.) 3s.put c6.spice (sp.)

apakê besuma mû sîsoko yaândzo.
3s.put c8.yam into over c7.dem

Beêndâ bêɛnê byâtɔkâ na ebɔdû têtêtê,
c8.they c8.dem c8.boiled with c7.rot ideo.

asipûlâ, adîkâ mû sɔ̂pɔ̂. Yɛê na mɔ̂na bô:
1s.took.down 1s.placed on ground She to c1.child that

«Bɛkê sɛmbê, amê nâkanɛ yâ payê wɔfê
bring.imp plate I 1s.put.sub c7.of husband c2.your

ngâ ebɔdû yândzo, âdzɛ! »
dem rot c7.dem 3s.eat.sub

Mɔ̂na akabâ sɛmbê,
child 3s.brought plate

ngôyê akanâ ebɔdû mûta sɛmbê, yâmulɔ̂nda.
mother 3s.put c7.rot into plate c7.fill.perf

Ngôyê bô:« Tômbâ na payê wɔfê âdzɛ! »
mother that bring.imp to husband c1.your 3s.eat.sub

Mûti nê, mbuâ amûnûâ na butû u,
after dem rain 3s.perf.fell at night there

bato bêsɛ ka mû lângɔ.
c3.people c3.all only in camp

Bâbɛkê ebɔdû yâ nyama nê, bâdîkâ na mokɔpɛ mû mîsɔ.
3s.give.sub rot c7.of animal dem 3s.place to c1.youth before eyes

Yɛê atâlâ bôonâ, afisâ kangâyê mabɛkɛ,
he 3s.saw like.that 3s.threw comrade c6.shoulder

âadzâ yôma, âadzâ, âadzâ.
3s.prog.eat food 3s.prog.eat 3s.prog.eat

Kangâyê bô: « Kambêlê bêka âyangɛ amɛ̂ na yôma.»
comrade that surely friend 3s.call.sub me with food

Kendê bô pɔ̂lɔ. Yɛɛ̂ abûngâ têtêtê,
however that no He 3s.wait ideo

ngba bô kangâyê âyangɛ yɛɛ̂ na yôma tâmbî.
but that comrade 3s.call.sub him with food not

Yɛɛ̂ atîâmâ, apîâ kangâyê wɔbɔ̂. Yɛɛ̂ bô:
he 3s.arose 3s.grabbed comrade arm he that

«bɛkɛ̂ ke yâmu ebɔdû yândzo nâdzɛ! »
give.imp voc c7.my rot dem 1s.eat.sub

Kangâyê bô: « ɔfɛ̂ ke fɛɛ̂ kpûâkâ nyânyê
comrade that you voc toi refuse yesterday

bô ɔfɛ̂ɛ tîbɔsɛ̂ ebɔdû tâmbî.
that you not.take.sub c7.rot not

ɔfɛ̂ɛ kunduâkâ nyânyê ebɔdû ndê ekunduɛ̂.»
you run yesterday c7.rot dem c7.running

Bɛli dzâmufânâ mosôko wâ wâgasê mokɔpɛ.
anger c5.perf.past head c1.of c1.other c1.youth

Bɛ̂ɛnɛ̂ na kangâyê bâbundânâ na bakiô mû mîsɔ
They with comrade 3p.fought with c2.in.laws before c6.eyes

mɔndɔ̂ wâ ebɔdû yâ nyama.
because c3.of c7.rot c7.of animal

Mosâmbo nɛ̂ wâdzɛ̂ɛ wâ sînɛ̂nû, wâ baâkâ.
c3.advice dem c3.is c3.of us c3.of c2.Pygmies

Bô yâwubhɛ mû ngimɔ ya esefo, yâdzɛ enyɛ, sînɛ̂nû bɛ̂sɛ,
well, c7.arrive.sub into time c7.of dry.season c7.is c7.good we c2.all

îpɔlɛ mambokâ bô sînɛ̂nû itîpɔ̂la mambokâ,
1p.cultivate c6.fields that we 1p.not.cultivate c6.fields

yɛ̂ɛnɛ̂	sînɛ̂nû,	î	mbêepɛ̂lâ	mbê	ngâ	mokɔpɛ,	
c7.dem	we	we	fut.become	like	dem	c1.youth	

mbisî	wâsɛ̂bâkânɛ̂	ebodû	yâ	nyama	ka	na	mîsɔ	nɛ̂.
rel	c1.rel.saw.pstn	rot	c7.of	animal	only	with	c6.eyes	dem

Yâwûbhâ	mû	bûse	bwâ	bâlâmâ	na	ebɔdû	yândzo,
c7.arrive	into	c14.day	c14.of	3p.cooked	with	c7.rot	c7.dem

yɛɛ̂	asûâ,	abundânyɛ̂	kangâyê	mû	sîsoko	ya	ngâ	ebɔdû	yândzo.
he	3s.returned	3s.fought	comrade	into	over	c7.of	dem	rot	c7.dem

Bô	sînɛ̂nû,	î	sɛbɛ	beêndâ	ka	na	mîsɔ	yɛ̂ɛnɛ̂	sînɛ̂nû,
well,	we	we	see.sub	c2.things	only	with	c6.eyes	c7.dem	we

î	mbêeyîbâ	beêndâ	bîâ	bakangâyê	bâ	sînɛ̂nû.
we	fut.steal	c2.things	c2.of	c2.comrades	c2.of	us

BIBLIOGRAPHY

ALAC. 1984. Atlas Linguistique de l'Afrique Centrale (ALAC). Paris: ACCT; Yaoundé: CERDOTOLA.

ALC. 1984. Atlas Linguistique de Centrafrique. Situation Linguistique en Afrique Centrale. Preliminaire: La Republique Centrafricaine. Atlas Linguistique de l'Afrique Centrale (ALAC). Paris: ACCT; Yaoundé: CERDOTOLA; Bangui: Equipe Nationale Centrafricaine.

ALCAM. 1983. Atlas Linguistique du Cameroun. Situation linguistique en Afrique Centrale. Preliminaire: Le Cameroun. Atlas Linguistique de l'Afrique Centrale (ALAC). Paris: ACCT; Yaoundé: CERDOTOLA.

Arends, Jacques; Pieter Muysken, and Norval Smith (eds.). 1994. Pidgins and Creoles: an introduction. Philadelphia: John Benjamins Publishing Company.

Arom, Simha. 1994. African polyphony and polyrhythm. translated from French by Martin Thom, Barbara Tuckett, and Raymond Boyd. Cambridge: Cambridge University Press.

Arom, Simha; Serge Bahuchet, Elisabeth Motte-Florac, and Jacqueline M.C. Thomas. 1991. Encyclopédie des Pygmées Aka I, fascicule 2: Le Monde des Aka. Études Pygmées IV. Langues et Civilisations à Tradition Orale N^{o} 50. SELAF 329. Paris: Peeters/SELAF.

Arom, Simha; Serge Bahuchet, Alain Epelboin, Susanne Furniss, Henri Guillaume, and Jacqueline Thomas. 1998. Les Pygmées, Peuple et Musique. Centre Nationale de la

Recherche Scientifique (CRNS/ORSTOM). Paris: Montparnasse Multimedia (www.montparnasse.net).

Bahuchet, Serge (ed.). 1979. Pygmées de Centrafrique. Études ethnologiques, historiques et linguistiques sur les Pygmées Ba.Mbenga (aka/baka) du Nord-Quest du Bassin Congolais. Bibliothèque de la SELAF 73-74. Études Pygmées III. Paris: SELAF.

_____. 1983. Langage, discours, et technique des Pygmées Aka de Centrafrique. Techniques et Culture 1. 101-20.

_____. 1989. Les Pygmées Aka et Baka: contribution de l'ethnolinguistique à l'histoire des populations forestièresd d'Afrique Centrale. Thèse de Doctorat d'Etat des Lettres et Sciences Humaines, Université René Descartes Paris V, Paris.

_____. 1991. Les Pygmées changent leur mode de vie. Vivant univers: les Pygmées. (November) 396: 2-13.

_____. 1992. Dans la foret d'Afrique Centrale: les pygmées Aka et Baka. Paris: Peeters-SELAF.

_____. 1993a. La rencontre des agriculteurs. Les Pygmées parmi les peuples d'Afrique centrale. Histoire d'une civilisation forestière II. Paris: Peeters-SELAF.

_____. 1993b. History of the inhabitants of the central African rain forest: perspectives from comparative linguistics. Tropical forests, people and food. Biocultural interactions and applications to development, ed. by C.M. Hladik, 37-54. Paris: Unesco/Parthenon.

_____. 1993c. L'invention des Pygmées. Cahiers d'Études africaines, 129, XXXIII-I, 153-81.

Bahuchet, Serge and Henri Guillaume. 1982. Aka-farmer relations in the northwest Congo basin. Politics and History in Band Societies, ed. by Eleanor Leacock and Richard Lee. 189-211. Cambridge: Cambridge University Press.

Bahuchet, Serge and J.M.C. Thomas (eds.). 1981. Dictionnaire ethnographique aka-français: /P/. Encyclopédie des Pygmées Aka, Livre 2, Fascicule 1. Paris: SELAF.

Bahuchet, Serge and J.M.C. Thomas. 1986. Linguistique et Histoire des Pygmées de l'ouest du bassin Congolais. Sprache und Geschichte in Afrika 7.2. 73-103.

Bailey, R.C., G. Head, M. Jenike, B. Owen, R. Rechtman, and E. Zechenter. 1989. Hunting and gathering in the tropical rain forest: is it possible? American Anthropologist 91,1. 59-83.

Bailif, N. 1954. Les danseurs de Dieu: chez les Pygmées de la Sangha. Paris: Hachette.

Bakker, Peter and Pieter Muysken. 1994. Mixed languages and language intertwining. Pidgins and Creoles: an introduction, ed. by Jacques Arends, Pieter Muysken, and Norval Smith. Philadelphia: John Benjamins Publishing Company.

Bister, Mikael. 1995. Rapport d'enquête sociolinguistique parmi les Mbati. Première evaluation. Unpublished manuscript. Bangui: SIL.

Blumenfield, Larry. 1995. Echoes of the Forest: Music of the Central African Pygmies. Roslyn, New York: Ellipsis Arts.

Bouquiaux, Luc and Jacqueline M.C. Thomas (eds.). 1976. Enquête et description des langues à tradition orale. 2nd edition. 3 volumes. Paris: SELAF.

Bouquiaux, Luc and Jacqueline M.C. Thomas (eds.). 1992. Studying and Describing Unwritten Languages, translated by James Roberts. Dallas: SIL.

Bouquiaux, Luc, Jean-Marie Kobozo, and Marcel Diki-Kidiri. 1978. Dictionnaire Sango-Français. Paris: SELAF.

Bradshaw, Mary. 1999. A crosslinguistic study of consonant-tone interaction. Columbus: University of Ohio dissertation.

Brenzinger, Matthias. 1997. Language Contact and Language Displacement. The Handbook of Sociolinguistics, ed. by Florian Coulmas, 273-84. Oxford: Blackwell.

Brisson, Robert. 1980. Contes et histoires des Pygmées Baka: textes pour l'étude de la langue baka. Four volumes. Douala: published by author.

Brisson, Robert and Daniel Boursier. 1979. Petit Dictionnaire Baka-francais. Douala: Collège Libermann.

Buchanan, Michael. 1996. A Sociolinguistic survey of Aka (Northern Congo-Brazzaville). Unpublished manuscript. Brazzaville: SIL.

Casad, Eugene H. 1987. Dialect Intelligibility Testing. Summer Institute of Linguistics publications in linguistics and related fields no. 38. Dallas: SIL.

Cavalli-Sforza, Luigi Luca. 1971. Pygmies, an example of hunter-gatherers, and genetic consequences for man of domestication of plants and animals. Human Genetics, Amsterdam, 4th International Congress of Human Genetics, 79-95.

_____. (ed.) 1986. African Pygmies. Orlando: Harcourt Brace Jovanovich.

Cloarec-Heiss, France and Jacqueline M.C. Thomas. 1978. L'aka, Langue Bantoue des Pygmées de Mongoumba (Centrafrique) : introduction à l'étude linguistique._ Phonologie. (Études Pygmées II). Paris: SELAF.

Coulmas, Florian (ed.). 1997. The Handbook of Sociolinguistics. Oxford: Blackwell.

Creider, Chet A. and J. Peter Denny. 1975. The semantics of noun classes in Proto-Bantu. Ohio State University Working Papers in Linguistics 19. 142-63.

Delobeau, Jean-Michel. 1989. Yamonzombo et Yandenga. Relations entre villages monzombo et campements pygmées aka (Centrafrique). Paris: Peeters/SELAF.

Demesse, Lucien. 1958. Quest for the Babingas: The Word's Most Primitive Tribe. London: Souvenir Press.

_____. 1972. Les Pygmées. Encyclopédie de la Pléide, Ethnologie régionale I, 662-93. Paris: Gallimard.

_____. 1978. Changements techno-économiques et sociaux chez les Pygmées Babinga. Études pygmées 1, 2 volumes. SELAF 26. Paris: SELAF.

Demolin, D. and Serge Bahuchet. 1990. Les langues des Pygmeées de Haut-Zaire: un réexamen de la question. Twentienth Colloquium on African Languages and Linguistics, Leyden.

Deschamps, Bernard. 1997. Pygmées: l'esprit de la forêt. Paris: Marval.

Dixon, R.M.W. 1997. The Rise and Fall of languages. Cambridge: Cambridge University Press.

Dominigue, Nicole. 1990. Bi- and multilingualism: Code-switching, interference and hybrids. Research Guide on Language Change, ed. by Edgar C. Polomé, 527-34. Trends in Linguistics Studies and Monographs 48. New York: Mouton de Gruyter.

Du Chaillu, Paul. 1872. The Country of the Dwarfs. New York: Harper and Brothers.

Duffy, Kevin. 1996. Children of the Forest. Prospect Heights, IL: Waveland Press.

Duke, Daniel. 1995. Rapport d'enquête sociolinguistique parmi les Ngbaka-Mabo. Première evaluation. Unpublished manuscript. Bangui: SIL.

_____. 1996. La semilinguisme en R.C.A. Unpublished manuscript. Bangui: SIL.

_____. 1998. Notes sur la Grammaire Aka. Unpublished manuscript. Bangui: SIL.

Duke, Daniel; Dominique Kosseke, and Jerome Sitamon. 1998. Unpublished field notes.

Fivaz, Derek. 1970. Shona Morphophonemics and Morphosyntax. Johannesburg: University of Witwatersrand dissertation.

Gardner, William L. 1990. Language Use in the Epena District of Northern Congo. (M.A. Thesis, University of North Dakota). Grand Forks: University of North Dakota.

Givón, Talmy. 1984. Syntax: a functional-typological introduction. Volume I. Philadelphia: John Benjamins Publishing Company.

_____. 1990. Syntax: a functional-typological introduction. Volume II. Philadelphia: John Benjamins Publishing Company.

Goodman, Morris. 1971. The strange case of Mbugu (Tanzania). Pidginization and Creolization of Languages, ed. by Dell Hymes, 243-54. New York: Cambridge University Press.

Greenberg, Joseph H. 1966a. Some universals of grammar with particular reference to the order of meaningful elements. Universals of language, ed. by Joseph H. Greenberg, 73-113. Cambridge: MIT Press.

_____. 1966b. The languages of Africa. Research Center for the Language Sciences. Bloomington: Indiana University and The Hague: Mouton and Company.

Gregersen, Edgar A. 1977. Language in Africa: an introductory survey. New York: Gordon and Breach.

Grimes, Barbara F. 2000. Ethnologue: Languages of the World. 14th Edition. Dallas: SIL International.

Grinker, Roy Richard. 1994. Houses in the Rainforest: Ethnicity and Inequality among Farmers and Foragers in Central Africa. Berkeley: University of California Press.

Guthrie, Malcolm. 1948. The classification of Bantu languages. London: Oxford University Press for the African Institute.

_____. 1967. Comparative Bantu. An introduction to the comparative linguistics and prehistory of the Bantu languages, part 1, volume 1: The comparative linguistics of Bantu languages. Farnborough, U.K.: Gregg International Publishers Ltd.

_____. 1970. Comparative Bantu. An introduction to the comparative linguistics and prehistory of the Bantu languages, part 2, volumes 1-2: A catalogue of common Bantu with commentary. Farnborough, U.K.: Gregg International Publishers Ltd.

_____. 1971. Comparative Bantu. An introduction to the comparative linguistics and prehistory of the Bantu languages, part 1, volume 2: An outline of Bantu prehistory. Farnborough, U.K.: Gregg International Publishers Ltd.

Harvey, Tammie K. 1997. The Bali of northeastern Congo-Kinshasha: uncovering the history of a people shrouded by the Ituri rain forest. M.A. Thesis. Arlington: The University of Texas at Arlington.

Hauser, A. 1953. Les Babinga. Zaire (Bruxelles) 7, 2. 147-79.

Headland, Thomas N. 1987. The wild yam question: how well could independent hunter-gatherers live in a tropical rain forest ecosystem? Human Ecology. 15, 4. 463-91.

Headland, Thomas N. and Robert C. Bailey (eds.). 1991. Human foragers in tropical rain forests. Human Ecology 19,2 (special issue). New York: Plenum Press.

Heine, Bernd; Ulrike Claudi, and Friederike Hünnemeyer. 1991. Grammaticalization: a conceptual framework. Chicago: University of Chicago Press.

Hewlett, Barry Steven. 1977. Notes on the Mbuti and Aka pygmies of Central Africa. M.A. Thesis. Chico: California State University.

Holm, John. 1988. Pidgins and Creoles. Volume 1: Theory and Structure. Cambridge: Cambridge University Press.

Hopper, Paul J. 1987. Emergent Grammar. Berkeley Linguistics Society 13, ed. by Jon Aske, Natasha Beery, Laura Michaelis, and Hana Filip, 139-57. Berkeley: Berkeley Linguistics Society.

Hymes, Dell (ed.). 1971. Pidginization and Creolization of Languages. New York: Cambridge University Press.

Jacquot, André. 1959. "La langue des Pygmées de la Sangha. Essai d'identification." Brazzaville: Bulletin de l'Institut d'Études Centrafricaines 17-18. 35-42.

Jacquot, André. 1967. La classification nominale comme système de dérivation en laadi (Congo). La Classification Nominale Dans Les Langues Négro-Africaines, ed. by Gabriel Manessy, 117-32. Aix-en-Provence: Éditions de Centre National de la Recherche Scientifique.

Jaquot, André and I. Richardson. 1956. "Report on the Western Team." Linguistic survey of the northern Bantu borderland, vol. 1. London: Oxford University Press for the International African Institute.

Jones, Randall L. 1975. Testing language proficiency in the United States Government. Testing language Proficiency, ed. by Randall L. Jones and Bernard Spolsky. Washington, D.C.: Center for Applied Linguistics.

Jones, Randall L. and Bernard Spolsky. 1975. Testing language Proficiency. Washington, D.C.: Center for Applied Linguistics.

Judah, Tim. 1990. Rumble in the jungle. Newspaper article. The Mail and Guardian. Johannesburg, South Africa. Available on the internet at: http://www.cc.emory.edu/LIVING_LINKS/a/bushmeat_articles.htm

Karan, Mark. 1993. Towards refining the SRT: observations drawn from the Sango SRT. Unpublished Paper presented at ILAC II, June 1993 at Horsleys Green, U.K.

_____. 1996. The dynamics of language spread: A study of the motivations and the social determinants of the spread of Sango in the Republic of Central Africa. Pennsylvania: University of Pennsylvania dissertation.

Kenstowicz, Michael. 1996. Phonology in Generative Grammar. Cambridge: Blackwell.

Kilian-Hatz, Christa. 1997. Die Baka-Ideophone: Ihre Struktur und Funktion. Afrikanisticsche Arbeitspapiere (AAP). Schriftenreihe des Kèolner Instituts fèur Afrikansistik. 50. 123-67.

Kisliuk, Michelle. 1998. Seize the Dance: BaAka Musical Life and the Ethnography of performance. Oxford: Oxford University Press.

Kitanshi, Koichi. 1996. Variability in the subsistence activities and distribution of food among different aged males of the Aka hunter-gatherers in Norhteastern Congo. African Study Monographs (Kyoto) 17, 1. 35-57.

Kosseke, Dominique and Saint-Jérôme Sitamon. 1993. Enquête sociolinguistique préliminaire parmi les Bambenga. Unpublished manuscript. Bangui: SIL.

Kosseke, Dominique and Constance Kutsch Lojenga. 1996. Le verbe en yaka. Unpublished manuscript. Bangui: Société Internationale de Linguistique (SIL).

Kosseke, Dominique; Constance Kutsch Lojenga, and Saint-Jérôme Sitamon. *in progress*. A grammar of Yaka. Work in progress.

Kosseke, Dominique, and Saint-Jérôme Sitamon. 1998. Phonologie de Yaka. Unpublished manuscript. Bangui: Société Internationale de Linguistique (SIL).

Knappert, Jan. 1979. Origin and development of Lingala. Readings in Creole Studies, ed. by Ian F. Hancock, 153-64. Ghent: E. Story-Scientia.

Leacock, Eleanor and Richard Lee. 1982. Politics and History in Band Societies. Cambridge: Cambridge University Press.

Longacre, Robert E. 1996. The Grammar of Discourse. Second Edition. New York: Plenum Press.

Maddieson, Ian and Thomas J. Hinnebusch. 1998. Language History and Linguistic Description in Africa. Trenton, NJ: Africa World Press.

Mayer, R. 1987. Langues des groupes pygmées au Gabon: un état des lieux. Pholia (Lyon) 2. 111-24.

McKey, Doyle B. 1996. Wild Yam Question. Encyclopedia of Cultural Anthropology, volume 4, edited by David Levinson and Melvin Embers, 1363-1366. New York: Henry Holt.

Meinhof, Carl. 1911. Sudansprachen und Hamitensprachen. Zeitschrift fär Kolonialsprachen 1:164.

Moehama, Elysée. 1994. Rapport sur le test de bilinguisme "SRT" parmi les Bayaka de la Lobaye. Unpublished manuscript. Bangui: SIL.

Ngonyani, Deo. 1998. Towards a typology of applicatives in Bantu. Language History and Linguistic Description in Africa, ed. by Ian Maddieson and Thomas J. Hinnebusch, 249-58. Trenton, NJ: Africa World Press.

Plisnier-Ladame, F. 1970. Les Pygmées: enquête bibliographique. Bruxelles: Centre de documentation économique et sociale africaine.

Polomé, Edgar C. 1975. The reconstruction of Proto-Bantu culture from the lexicon. Ohio State University Working Papers in Linguistics 19. 164-73.

_____(ed.). 1990. Research Guide on Language Change. Trends in Linguistics Studies and Monographs 48. New York: Mouton de Gruyter.

Pulleyblank, Douglas. 1986. Underspecification and low vowel harmony in Okpe. Studies in African Linguistics 17, 2. 119-53.

Radloff, Carla F. 1991. Sentence Repetition Testing for Studies of Community Bilingualism. Dallas: SIL and UTA.

Recensement RCA. 1988. Printout of the electronic data of the 1988 census of CAR. Bangui: SIL.

Reid, Lawrence A. 1987. The Early Switch Hypothesis: Linguistic Evidence for Contact Between Negritos and Austronesians. Man and Culture in Oceania 3 (Special Issue):41-59.

_____. 1994a. Possible Non-Austronesian Lexical Elements in Philippine Negrito Languages. Oceanic Linguistics 33:37-72.

_____. 1994b. Unraveling the Linguistic Histories of Philippine Negritos. Language Contact and Change in the Austronesian World, ed. by Thomas Dutton and Darrell Tryon, 443-475. Berlin: Mouton de Gruyter.

Roberts, James S. 1994. Nontonal Floating Features as Grammatical Morphemes. SIL-UND Work Papers 38. 87-99.

Samarin, William J. 1991. The Origins of Kituba and Lingala. Journal of African Languages and Linguistics, 12, 1, 47-77.

Sarno, Louis. 1993. Song from the Forest: My life among the Ba-Benjellé Pygmies. Boston: Haughton Mifflin Company.

_____. 1996. Bayaka: The Extraordinary Music of the BaBenzele Pygmies and sounds of their forest home. Roslyn, New York: Ellipsis Arts.

Sasse, Hans-Jurgen. 1992. Theory of language death. Language Death: Factual and Theoretical Explorations with special reference to East Africa, ed. by Matthias Brenzinger. New York: Mouton de Gruyter.

Schebesta, P. 1949. La langue des Pygmées. Zaire 3,2. 119-28.

Silver, Pamela and Scott R. Krause. 1978. A reanalysis of the class 5 prefix in Shona. Studies in the Linguistic Sciences 8,1. 181-96.

Sitamon, Saint-Jérôme. *to appear*. Declaration d'Orthographe: Langue Aka. Unpublished manuscript. Bangui: Société Internationale de Linguistique (SIL).

_____. 1998. Contes yaka: Introduction et textes. Unpublished manuscript. Bangui: Société Internationale de Linguistique (SIL).

Spears, Arthur K. and Donald Winford. 1997. The Structure and Status of Pidgins and Creoles: including selected papers from the meetings of the society for pidgin and Creole linguistics. Amsterdam: John Benjamins.

Sponsel, Leslie E.; Thomas N. Headland, and Robert C. Bailey. 1996. Tropical Deforestation: the Human Dimension. New York: Columbia University Press.

Stalder, Jürg. 1993. Rapid Appraisal: Strategy and Methodology as applied in Cameroon. Yaoundé, Cameroon: SIL.

Stalder, Jürg and Roselind Bagwell. 1993. Sentence Repetition Test in Cameroonian French and European French. Yaoundé, Cameroon: SIL.

Swadesh, Morris. 1951. Diffusional cumulation and archaic residue as historical explanations. Southwestern Journal of Anthropology, 7. 1-21.

Thomas, Jacqueline M. C. 1976. Classes et genres nominaux en aka, langue bantoue des pygmées de Mongomba (RCA). Théories et Methodes en Linguistique Africaines, SELAF 54-55, ed. by Luc Bouquiaux. 27-36. Paris: SELAF.

_____. 1979. Emprunt ou parenté? A propos des parlers des populations forestières de Centrafrique. Pygmées de Centrafrique. Études ethnologiques, historiques et linguistiques sur les Pygmées Ba.Mbenga (aka/baka) du Nord-Quest du Bassin Congolais. Bibliothèque de la SELAF 73-74. Études Pygmées III, ed. by Serge Bahuchet. Paris: SELAF.

_____. 1980. An interpretation of the system of noun classes in Aka in terms of semantic primes. Les Classes Nominales dans le Bantou des Grassfields, SELAF 238, ed. by Larry M. Hyman and Jan Voorhoeve. Paris: Peeters/SELAF.

_____. 1981. Dictionnarie aka-français (langue bantou C 10). Encyclopédie des Pygmées. Langues et civilisations à tradition orale, 50. Paris: CNRS.

_____. 1987. Relations sociales et projections idéologiques: exemple des Ngbaka-Ma'bo et des Pygmées Aka de l'Afrique Centrale. Cahiers du LACITO 2. 15-30.

_____. 1988. Du ngbaka à l'aka en quête des catégories. Linguistique, 24, 2. 93-111.

_____. 1991. Encyclopédie des Pygmées Aka I, fascicule 4: La Langue. Études Pygmées IV. Langues et Civilisations à Tradition Orale N^{o} 50. SELAF 331. Paris: Peeters/SELAF.

Thomas, Jacqueline M.C. and Serge Bahuchet. 1980. Encyclopédie des Pygmées Aka. Techniques et langage des chasseurs-cueilleurs de la forêt centrafricaine. Études Pygmées VI. Paris: SELAF.

Thomas, Jacqueline M.C. and Serge Bahuchet. 1988. La littérature orale pour l'histoire de l'Afrique centrale forestière. Die Oralliteratur in Afrika als Quelle zur Erforschung der traditionellen Kulturen, ed. by Wilhelm J. G. Möhlig, Hermann Jungraithmayr and J.F. Thiel, 301-27. Berlin: D. Reimers.

Thomas, Jacqueline M.C., Serge Bahuchet and Alan Epelboin (eds.). 1993a. Dictionnaire ethnographique aka-français: /B/. Encyclopédie des Pygmées Aka, Livre 2, Fascicule 2. Paris: SELAF.

Thomas, Jacqueline M.C., Serge Bahuchet and Alan Epelboin (eds.). 1993b. Dictionnaire ethnographique aka-français: /MB-M-V/. Encyclopédie des Pygmées Aka, Livre 2, Fascicule 3. Paris: SELAF.

Thomas, Jacqueline M.C. and Henri Guillame. 1991. Encyclopédie des Pygmées Aka I, fascicule 3: La Société. Études Pygmées IV. Langues et Civilisations à Tradition Orale N° 50. SELAF 330. Paris: Peeters/SELAF.

Thomason, Sarah G. 1983. Genetic relationship and the case of Ma'a (Mbugu). Studies in African Linguistics 14, 2. 195-231.

_____. 1988. Case Studies: Ma'a. Language contact, creolization, and genetic linguistics, ed. by Sarah Grey Thomas and Terrence Kaufman, 223-8. Berkeley: University of California Press.

_____. (ed.). 1997a. Contact Languages: A wider perspective. Philadelphia: John Benjamins Publishing Company.

_____. 1997b. A typology of contact languages. The Structure and Status of Pidgins and Creoles: including selected papers from the meetings of the society for pidgin and Creole linguistics, ed. by Arthur K. Spears and Donald Winford, 71-88. Amsterdam: John Benjamins.

_____. 1997c. Ma'a (Mbugu). Contact Languages: A wider perspective, ed. by Sarah G. Thomason, 469-87. Philadelphia: John Benjamins Publishing Company.

Thomason, Sarah Grey and Terrence Kaufman. 1988. Language contact, creolization, and genetic linguistics. Berkeley: University of California Press.

Tucker, A.N. and M.A. Bryan. 1966. Linguistic analyses: the non-Bantu languages of northeastern Africa. Handbook of African languages, Part 5. London: Oxford University Press for the International African Institute.

Turnbull, Colin M. 1962. The Forest People. New York: Simon and Schuster.

Turnbull, Colin M. 1986. Survival factors among the Mbuti and other hunters of the Equatorial African rain forest. African Pygmies, ed. by Luigi Luca Cavalli-Sforza. 103-23. Orlando: Harcourt Brace Jovanovich.

Ureland, P. Sture. 1990. Contact linguistics. Research Guide on Language Change. Trends in Linguistics Studies and Monographs 48, ed. by Edgar C. Polomé, 471-507. New York: Mouton de Gruyter.

Welmers, Wlliam E. 1973. African Language Structures. Berkeley: University of California Press.

Westphal, E.O.J. 1957. On linguistic relationship. Zaïre 11. 513-24.

Whinnom, Keith. 1971. Linguistic hybridization and the 'special case' of pidgins and Creoles. Pidginization and Creolization of Languages, ed. by Dell Hymes, 65-90. New York: Cambridge University Press.

Wilds, Claudia P. 1975. The Oral Interview Test. Testing language Proficiency, ed. by Randall L. Jones and Bernard Spolsky. Washington, D.C.: Center for Applied Linguistics.

Wilkie, David S. 1996. Logging in the Congo: Implications for indigenous foragers and farmers. Tropical Deforestation: the Human Dimension, ed. by Leslie E. Sponsel, Thomas N. Headland, and Robert C. Bailey, 230-48. New York: Columbia University Press.

BIOGRAPHICAL INFORMATION

Daniel J. Duke completed the Masters of Arts degree in Linguistics at The University of Texas at Arlington in August 2001. He was born in Indianapolis, Indiana in 1968 and attended high school in Brownsburg, Indiana. In 1990 he completed a Bachelor of Arts degree in linguistics (with highest distinction) at Indiana University in Bloomington, Indiana. That year he was also awarded the *Outstanding Achievement in Linguistics* award from the Indiana University Alumni Association. He pursued various graduate studies in linguistics at the University of North Dakota (Grand Forks) and in Greek at Anderson School of Theology (Anderson, Indiana).

He joined SIL International in 1990 and was assigned to work in Central Africa. After French studies at the Université de Neuchatêl (Switzerland), he arrived in Africa in 1994. He was engaged in sociolinguistic surveys in Cameroon and Central African Republic (C.A.R.) from 1995-1996. From 1996 through 1998 he worked as on-site technical and academic support for the Beka Project. The Beka project is a language development project which serves the Bayaka Pygmies of C.A.R through orthography development, literature development, and basic literacy instruction in the Aka language. It continues today under the leadership of Dominique Kosseke and Saint-Jérôme Sitamon. In 1997 he helped set up the 2,000 word *Electronic Comparative Wordlist* database for SIL Africa Area. Daniel Duke plans to continue working in linguistic research and language development in the context of SIL.

Daniel Duke, François Ndinga, and Dominique Kosseké