

Metalexicographical criteria for the compilation of a trilingual dictionary: Yilumbu-English-French

By

PAUL ACHILLE MAVOUNGOU



Dissertation presented for the Degree of Doctor of Literature (in Lexicography) at the
University of Stellenbosch

Promoter Prof. R.H. Gouws

December 2002

Declaration:

I, the undersigned, hereby declare that the work contained in this dissertation is my own original work and that I have not previously in its entirety or in part submitted in at any University for a degree.

Signature

December 2002

Summary

This work discusses various metalexigraphic theories in general and Wiegand's General Theory of Lexicography in particular, in order to determine its possibilities for the planning and compilation of a trilingual dictionary: Yilumbu-English-French. Chapter 1 of the dissertation gives an overview of Wiegand's General Theory of Lexicography as well as some aspects of lexicographic processes, dictionary typology and the structure of dictionaries followed by a survey of lexicographic activities in Gabon. On account of what already exists, this chapter will help the reader see why the choice was made to develop a theoretical model for a trilingual dictionary.

Chapter 2 discusses various issues related to the target user groups of the planned dictionary, their reference skills, and some aspects of dictionary use as well as a number of macro- and microstructural problems.

Chapter 3 focuses on a number of ways the planned dictionary could promote the standardization of the Yilumbu language.

Chapter 4 discusses the contents and presentation of all the data that will be included in the outer texts in the frame structure of the planned dictionary. Priority is given to the so-called **integrated outer text** as opposed to **non-integrated outer texts**.

In chapter 5, the macrostructure of the work is discussed to establish what should be included in the planned dictionary and what should not. This chapter shows that all types of lexical items, including multiword lexical items, should be given lemma status in the planned dictionary. Moreover all items should ideally be included according to the word tradition and on account of their usage frequency in the corpus and orthographical problems should be solved in accordance with the needs and reference skills of the target users. Apart from these aspects, types of dialectal forms as well as the type of special-field lexical items to be lemmatized in the planned dictionary are also discussed in this chapter. As far as the treatment of e.g. technical terms is concerned, it is the ultimate goal of the present Gabonese Government to promote Science and Technology in the vernaculars of the people of Gabon. For this to come true, it is expected from the Government to put some efforts into literacy development e.g. supplying teachers and pupils with relevant reading materials. It is also believed that Mother-tongue Education at primary, secondary and tertiary level is a major but feasible undertaking for Gabon.

Chapter 6 focuses on the microstructure of the planned dictionary. In this chapter, after presenting different types of microstructures, it is shown that an integrated microstructure is most suitable to enhance the retrievability of the information on the part of the users. This chapter also investigates different kinds of data types to be considered for inclusion in the microstructure of the planned dictionary.

In Chapter 7 the access structure of the planned dictionary is discussed. In this chapter, the focus is on various types of devices, typographic and non-typographic structural indicators as well as the use of equivalent registers, to enhance the accessibility of the data and give the work a truly poly-functional and poly-accessible character.

Chapter 8 will discuss the addressing structure of the planned dictionary. Since the latter is monoscopal and because of the lemmatic bias that usually prevails in such a work, the emphasis in this chapter will be on various aspects of non-lemmatic addressing procedures that will shift the focus from the source to the target languages.

Chapter 9 discusses the mediostructure and textual condensation in the planned dictionary. Explicit and consistent cross-referencing, the non-use of substitution symbols, explicit labelling, etc. are claimed to be best suited to capture the needs and reference skills of the target groups.

Opsomming

Hierdie werk bespreek verskeie metaleksikografiese teorieë in die algemeen en Wiegand se Algemene Leksikografiese Teorie in die besonder, ten einde die moontlikhede vir die opstel van 'n drietalige Yilumbu-Engels-Afrikaanse woordeboek te bepaal. Hoofstuk 1 van die proefskrif verskaf 'n oorsig van Wiegand se Algemene Leksikografiese Teorie sowel as sommige aspekte van leksikografiese prosesse, woordeboektipologie en die struktuur van woordeboeke gevolg deur 'n opname van leksikografiese aktiwiteite in Gaboen. Op grond van wat daar reeds bestaan, sal hierdie hoofstuk die leser help om te verstaan waarom die keuse geval het op die ontwikkeling van 'n teoretiese model vir 'n drietalige woordeboek.

Hoofstuk 2 handel oor verskeie aspekte rondom die teikengebruikersgroep van die beplande woordeboek, hulle ontsluitingsvaardighede en enkele aspekte van woordeboekgebruik asook 'n aantal makro- en mikrostrukturele probleme.

Hoofstuk 3 fokus op enkele maniere waarop die beplande woordeboek die standaardisasie van die Yilumbu-taal kan bevorder.

Hoofstuk 4 bespreek die inhoud en aanbieding van al die data wat in die buitetekste ingesluit sal word in die raamwerk van die beplande woordeboek. Voorkeur word verleen aan die sogenaamde **geïntegreerde buitetekste** teenoor **nie-geïntegreerde buitetekste**.

In hoofstuk 5 word die makrostruktuur van die werk bespreek ten einde vas te stel wat ingesluit moet word in die beplande woordeboek en wat nie. Hierdie hoofstuk dui aan dat alle tipes leksikale items, insluitende multileksikale items, lemmastatus behoort te kry in die beplande woordeboek. Verder is die ideaal dat alle items ingesluit word volgens die woordtradisie en op grond van hulle gebruiksfrekwensie in die korpus, terwyl ortografiese probleme opgelos behoort te word in ooreenstemming met die behoeftes en ontsluitingsvaardighede van die teikengebruikers. Afgesien van hierdie aspekte word tipes dialektiese vorms sowel as die tipe vakterminologiese items wat in die beplande woordeboek gelemmatiseer gaan word, ook in hierdie hoofstuk bespreek. Wat die hantering van byvoorbeeld tegniese terme betref, is dit die einddoelwit van die huidige Gaboenese regering om Wetenskap en Tegnologie in die tale van die mense van Gaboen te bevorder. Om hierdie ideaal te bereik word daar van die regering verwag om geletterdheidsontwikkeling te ondersteun deur byvoorbeeld die relevante leesmateriaal aan onderwysers en leerders te verskaf. Daar word ook geglo dat moedertaalonderrig op primêre, sekondêre en tersiêre vlak tegelyk belangrik en haalbaar is vir Gaboen.

Hoofstuk 6 fokus op die mikrostruktuur van die beplande woordeboek. In hierdie hoofstuk word daar nadat verskillende tipes mikrostrukture bespreek is, aangetoon dat 'n geïntegreerde mikrostruktuur die geskikste is vir gebruikers om inligting gemaklik te bekom. Hierdie hoofstuk ondersoek ook verskillende tipes data wat oorweeg moet word vir insluiting in die beplande woordeboek.

Hoofstuk 7 handel oor die toegangstruktuur van die beplande woordeboek. Hierdie hoofstuk fokus op verskillende tipes middele, tipografiese en nie-tipografiese strukturele indikatore sowel as die gebruik van ekwivalente registers om die toeganklikheid van die data te verhoog en om aan die werk 'n ware poli-funksionele en poli-teoganklike karakter te verleen.

Hoofstuk 8 sal die adresseringstruktuur van die beplande woordeboek bespreek. Aangesien laasgenoemde monoskopaal is en as gevolg van die lemmatiese vooroordeel wat gewoonlik teenwoordig is in so 'n werk, sal die klem in hierdie hoofstuk val op verskeie aspekte van nie-lemmatiese adresseringsprosedures wat die fokus verskuif van die bron- na die teikentale.

Hoofstuk 9 bespreek die mediostrukture en tekstuele kondensasie van die beplande woordeboek. Daar word beweer dat eksplisiete en konsekwente kruisverwysing, die nie-gebruik van substitusiesimbole, eksplisiete etikettering, ens. die beste manier is om die behoeftes en ontsluitingsvaardighede van die teikengroepe vas te vang.

Acknowledgements

I wish to express my deep gratitude to:

Prof. R.H. Gouws, my supervisor, for showing real interest in all the lexicographical activities in which I am involved, and for his academic guidance throughout the years.

My wife Marina for allowing me to stay for hours and hours in Humarga while ideas were germinating in my head.

My son Paul Timothée for always reminding me that apart from my dissertation there was life out there.

Financial assistance of the Gabonese Government Scholarship, administered by the Bourses et Stages, and the Stellenbosch 2000 Foundation of the University of Stellenbosch.

I am greatly indebted to my brothers and friends Thierry Afane Otsaga, Voua Otomo Patricks and Ndinga Koumba Binza Hugues Steve for helping me with the computerizing of some illustrative materials in this dissertation. And to my sisters and friends Ludwine Mabika Mbokou and Blanche Nyangone Assam who make all struggles worthwhile.

Finally, recognition also goes to my family and to all the persons who contributed directly and indirectly to the development of ideas expressed in this dissertation.

Abbreviations

Abbreviations, symbols and Labels used in Text examples

<F>: French

<E>: English

<T>: Translation equivalent(s)/traduction(s)

1, 2, 3, ... These are markers of polysemy

◆◆ These mark the boundaries of the paraphrase of meaning

< > These mark a specific search zone within a partial article stretches

▼: These marks a specific article slot in which extra-linguistic data are given

■: This introduce sublemmata

⇒: Reference marker

Σ ||: These introduce examples

<: Comes from

*: This introduces a diachronically reconstructed form (proto-Bantu reconstruction)

+:

Quot/cit.: Quotation/citation

(*apoc.*): apocope

(*bukrét.*): Bukréti (Christian religion)

by ext./par ext.: By extension/par extension

(*chrét.*): Religion chrétienne

(*chris.*): Christian religion

(*cf.*): Compare/voir

(*fig.*): Figurative meaning/sens figuré

(*frGab.*): Gabonese French/français du Gabon

(*Ghâng.*): Yilumbu yi ghângu

(*Mangúmba*): Label for dance held at funerals/étiquette pour danse organisée lors des cérémonie mortuaires

(*Men.*): Yilumbu yí menaáne

(*ndúbulu*): Figurative meaning/sens figuré (lit.: "way of saying/manière de parler")

SAE: South African English

cl.: class/classe

n.: Noun/nom

v.: verb/verbe

Other symbols

Phonetic transcriptions (using IPA symbols) are given between square brackets "[]"

Phonemic notations are given between slant lines "/ /"

+: This marks the border of a morpheme

[:]: This marks the vowel length

Abbreviations used in reference to dictionaries and lexica

AHD: *The American Heritage Dictionary of the English Language.*

CIDE: *Cambridge International Dictionary of English*

CMA: *Dictionnaire français-yipounou, yipounou-français*

COBUILD: *Collins COBUILD English Language Dictionary.*

DFM: *Dictionnaire Français-Mpongwé.*

DFV: *Dictionnaire du français vivant.*

DHLF: *Dictionnaire Hachette de la Langue Française.*

DL: *Dictionary of Lexicography.*

DSAE: *Dictionary of South African English*

GDX: *The Greater Dictionary of Xhosa.*

GW: *Groot Woordeboek/ Major Dictionary.*

HAT: *Verklarende Handwoordeboek van die Afrikaans Taal*

LDOCE: *Longman Dictionary of Contemporary English.*

M-HDSTT: *McGraw –Hill Dictionary of Scientific and Technical Terms*

ND: *Van Dale Groot Woordeboek Nederlands-Engels*

NW: *Nasionale Woordeboek.*

OALD: *Oxford Advanced Learner's Dictionary of Current English.*

PLI: *Petit Larousse Illustré.*

PR: *Petit Robert*

VAW: *Verklarende Afrikaanse Woordeboek*

WAHRIG-DW: *Gerhard Wahrig: Deutsches Wörterbuch*

WBD: *World Book Dictionary.*

Metaxicographical criteria for the compilation of a trilingual dictionary: Yilumbu-English-French

Table of Contents	
Title Page	i
Declaration	ii
Abstracts	iii
Acknowledgements	v
Abbreviations	vi
Table of Contents	ix
Chapter 1: Introduction	
1.0 Some general remarks regarding Gabon	1
1.1. Focus of the study	1
1.2 Survey of lexicographic activities in Gabon	2
1.2.1 The linguistic situation in Gabon	3
1.2.2 The language policy of Gabon	6
1.2.3 Survey of Lexicography in Gabon	8
1.2.3.1 Mazuna lexicography	8
1.2.3.2 Myene lexicography	11
1.2.3.3 Mekana-mena lexicography	14
1.2.3.4 Mekona-Mangote lexicography	14
1.2.3.5 Membe lexicography	15
1.2.3.6 Merye lexicography	16
1.2.3.7 Metye lexicography	18
1.2.3.8 Membere lexicography	19
1.2.3.9 Mekana lexicography	20
1.2.3.10 Baka lexicography	21
1.2.4 Galley (1964) & Raponda-Walker (1995)' dictionaries: studies in case	22

1.3	Lexicographic processes	35	
1.4	Dictionary basis of the planned dictionary	37	
1.5	Dictionary typology	40	
1.6	Typology of the planned dictionary	41	
1.7	The structure of dictionaries	45	
	1.7.1	Introduction	45
	1.7.2	The textual Book Structure	46
	1.7.3	The textual Word List Structure	46
1.8	General concluding remarks	48	
Chapter 2: User-perspective			
2.0	Introduction	49	
2.1	Target groups	50	
2.2	Needs and reference skills	52	
2.3	The user-perspective with special reference to the presentation of various data categories	53	
	2.3.1	Introduction	53
	2.3.2	The presentation of various data categories	54
	2.3.2.1	Phonetics	54
	2.3.2.2	Morphology	55
	2.3.2.3	Semantics	60
	2.3.4	Borrowing	63
	2.3.5	Cultural and pragmatic data	65
	2.3.6	Special-field terms	66
	2.3.7	On the data distribution structure	68
3.3.8	On the metalanguage	71	
2.3.9	General concluding remarks	81	
Chapter 3: Contribution of the planned dictionary towards the standardization of Yillumbu orthography			
3.0	Introduction	82	

3.1	The purpose of this chapter	82	
3.2	Efforts made to establish spelling conventions for African languages	86	
3.3	Yilumbu spelling and attempts towards its standardization	88	
	3.3.1	Efforts made to establish spelling conventions for Yilumbu and their critical evaluation	88
	3.3.2	Contribution of the planned dictionary towards the standardization of Yilumbu orthography	95
3.4	General concluding remarks	103	
Chapter 4: Minigrammars as outer texts in the frame structure of the planned dictionary			
4.0	Introduction	105	
4.1	The purpose of this chapter	106	
4.2	Interaction between users' needs and the dictionary typology	108	
4.3	English minigrammar	109	
	4.3.1	Geographical distribution of English	109
	4.3.2	Phonology	109
	4.3.3	Morphology and syntax	110
4.4	French minigrammar	110	
	4.4.1	Geographical distribution of French	110
	4.4.2	Phonology	111
	4.4.3	Morphology and syntax	111
4.5	Yilumbu minigrammar	112	
	4.5.1	Geographical distribution of Yilumbu	112
	4.5.2	Phonology	113

4.5.3	The tonal analysis of Yilumbu as an outer text in the planned dictionary	113
4.5.4	Morphology and syntax	123
4.6	On good outer texts practices	127
4.7	Examples of other outer texts	130
4.8	General concluding remarks	134
Chapter 5: The macrostructure		
5.0	Introduction	136
5.1	Dictionary basis and selection of lemma candidate list	137
5.1.1	Corpus	137
5.1.1.1	Definition	137
5.1.1.2	Oral sources	137
5.1.1.3	Technique of collecting material	138
5.1.1.4	Written sources	139
5.1.1.5	The theoretical framework and computational support	139
5.2	Culture specificity and borrowing	145
5.3	Language for special purposes and kinship system	148
5.4	Arrangement of lemmata	148
5.5	Lemmatization	160
5.5.1	Introduction	160
5.5.2	Lexicographic traditions in the African languages	160
5.5.3	The Gabonese situation	161
5.6	Types of special-field lexical items to be lemmatized	164
5.6.1	Historical context	164
5.6.2	Macrostructural treatment of technical terms	167
5.6.2.1	Transliteration	167
5.6.2.2	Loanwords	168
5.6.2.3	Extension of meaning	169
5.6.2.4	Total embedding or adoption	169
5.6.2.5	Neologism (new coinages)	170
5.7	Types of dialectal forms to be lemmatized	171

5.8	General concluding remarks	176
Chapter 6: The microstructure		
6.0	Introduction	177
6.1	Nature of the microstructure	177
6.2	Different types of microstructures	178
6.3	Different data categories to be included	185
6.3.1	Arrangement of entries	186
6.3.1.1	Lemmata	186
6.3.1.2	Word class allocation	186
6.3.1.3	Etymological data	186
6.3.1.4	Meaning explanations	187
6.3.1.5	Translation equivalents	187
6.3.1.6	Examples	187
6.3.1.7	Cross-references	187
6.3.1.8	Proverbial and idiomatic expressions	188
6.3.1.9	Semantic data	188
6.3.2	Treatment of dialectal forms	193
6.3.3	Additional sections for extra-linguistic data	194
6.3.4	Coverage	198
6.3.5	Diachronic data	199
6.3.6	Data distribution structure	199
6.4	Culturally bound lexical items	202
6.5	General concluding remarks	212
Chapter 7: Access structure		
7.0	Introduction	213
7.1	Outer access structure	214
7.1.1	The role of a dictionary title, its typological nature and front matter texts in the outer access structure	214
7.1.2	The use of guiding elements	216
7.2	Inner access structure	219
7.2.0	Introduction	219

7.2.1	The use of typographical and non-typographical structural markers	219
7.2.2	Improving the inner access structure	221
7.2.3	Mono- and poly-accessibility	223
7.2.4	Mono- and poly-functionality and the use of registers	224
7.2.5	Why equivalent registers in both English and French	226
7.3	Scope, direction and function of the planned dictionary	228
7.4	Proverbs and idiomatic expressions	230
7.5	General concluding remarks	240
Chapter 8: Addressing structure		
8.0	Introduction	241
8.1	On the addressing practices in dictionaries	242
8.1.1	Introduction	242
8.1.2	Lemmatic addressing procedures	242
8.1.3	Non-lemmatic addressing devices	242
	8.1.3.1 Context-free subaddressing	243
	8.1.3.2 Contextual subaddressing	244
	8.1.3.3 Zero addressing	246
8.2	Data categories and subaddressing as an addressing procedure	249
8.3	Addressing structure and user-friendliness	251
8.4	General concluding remarks	256
Chapter 9: Textual Condensation and Mediostructure		
9.0	Textual condensation	258
9.1	Introduction	258
9.1.1	Some general remarks	258
9.1.2	On procedures of textual condensation in the planned dictionary	258
9.1.3	Other examples of textual condensation	262
9.1.4	The use of substitution procedures in the planned dictionary	264
9.2	Mediostructure	265

9.2.1	The purpose of a theory of mediostructures	265
9.2.2	Mediostructural traditions	267
9.2.3	Poly-functionality and mediostructural procedures	269
9.2.4	Cross-reference by synonyms	270
9.2.5	Cross-reference by hyponyms	273
9.2.6	Cross-reference by co-hyperonyms	274
9.2.7	Cross-reference by hyperonyms or superordinates	275
9.2.8	Cross-reference by antonyms	278
9.2.9	Other uses of cross-reference devices	279
9.2.10	The use of a theory of mediostructures in linking of different linguistic signs from different parts of the alphabet	279
9.2.11	The use of a theory of mediostructures in indicating different members of a paradigm	284
9.3	General concluding remarks	286
	Conclusion	287
	Bibliography	290
	Appendices	

Chapter I. Introduction

1.0. Some general remarks regarding Gabon

Gabon, a state in central Africa, borders in the North on Equatorial Guinea and Cameroon, in the West on the Atlantic Ocean, in the South and East on the Republic of Congo. The country is administratively divided into 9 provinces, which are further divided into districts and communes. Gabon covers 267,667 square kilometres, most of which is dense tropical forest, interspersed with savannah, and fed by a river network of which the Ogooué is the most important one. Sitting astride the equator, Gabon has a hot and humid climate, with dry and rain seasons. The West Side of the territory along the Atlantic coastline is lowland up to 800 km long. The Mesa plateau occupies the north and East Side of the country. Massifs are located in the north (the Cristal Mountains) and south part of the country (including the Mount Iboundji (1,580 m), the highest elevation which is found in the Chaillu Mountains; Mount Koumouna Bouali and the Mayombe Mountains). The native population is 1.200,000 (of which the largest part are Bantu) as against an overall population of 1.380.000 (1995, National Census). It gained its independence from France on 17 August 1960. The literacy rate in 1995 is 70% as against 29% in 1977 (Grimes, B., 1996).

For years the mining industry (extraction of oil, manganese and uranium ores for export) and the timber industry (commercialization of the Gabon mahogany) have ensured the country's economic growth. For the last few years, more and more attention has been given to other sectors of the economy, namely agriculture, fishing, the processing industry, education, health, construction, service fields, transport and communications.

1.1. Focus of the study

This chapter gives an overview of Wiegand's General Theory of Lexicography as well as a survey of lexicographic activities in Gabon.

As an attempt to determine the status of lexicography Wiegand (1999:251) states that lexicography is “a (scientific) practice aiming at producing dictionaries in order to realize another practice, i.e. the cultural practice of dictionary use (...)”. This assertion of Wiegand brings lexicographers to the root of the debate on the relationship between lexicography and lexicology. In reply to concerns expressed by some scholars (Lehrer 1974, among others) in the field of semantics, Wiegand emphasizes that lexicography is neither a branch of lexicology nor a sub-discipline of applied linguistics. Among the many scientific fields that have an interest in lexicography, three stand out: sociolinguistics is of importance for the compilation of dictionaries of dialects useful in the mapping of a dialect continuum; history is concerned with all the changes that a given lexical item has undergone during a particular period; statistics provides lexicographers with a very important tool for criteria of incorporation of lemmata: the frequency count. Thus lexicography goes beyond the scope of linguistics. Although, this research project utilizes the theory of the German lexicographer Herbert Ernest Wiegand other metalexigraphic models are also applied.

Therefore, the focus will be on those aspects of Wiegand’s theory particularly relevant to develop criteria for the compilation of the proposed trilingual dictionary.

Wiegand’s contribution to the field of metalexigraphy is considerable and covers many aspects of the compilation of both monolingual and translation dictionaries as well as the history of lexicography and dictionary use. In the presentation of the theory of lexicography the focus will be on dictionary typology as well as the structure of dictionaries. But, before discussing the latter, a survey of lexicography in Gabon is given.

1.2. Survey of lexicography in Gabon

The survey of lexicography in Gabon presented here has a twofold objective:

- a. to give an account of lexicographic works and studies in Gabon, and
- b. to envisage the different lexicographic needs of the Gabonese languages.

An overview of the development of lexicography shows that there are imbalances between languages. Some are far more advanced than others. Therefore, the treatment of each group will vary in length according to the lexicographic data available.

However, before discussing lexicographic studies and the lexicographic needs, it is necessary to offer an explanation of the linguistic situation in and the language policy of Gabon.

1.2.1. The linguistic situation in Gabon

Like the majority of other African countries, Gabon is a multilingual country. It is, therefore, necessary to divide multilingual states between those that have one or more dominant languages and those without dominant languages, except regionally. Gabon belongs to the latter group.

For historical and sociolinguistic reasons, French has a very particular status in Gabon. It is a vehicular language, the language of the administration and the media as well as the obligatory passage to social promotion (see Nyangone Assam and Mavoungou, 2000). Moreover, French coexists with several local languages that are mainly Bantu, together with other foreign languages, mainly African, European, Asiatic and American that were introduced in Gabon by the migrants.

As far as classification is concerned, many studies exist, focusing on the Gabonese languages.

The inventories of Jacquot (1978) and Kwenzi-Mikala (1998 and 1998b) are regarded as the most recent classifications of Gabonese languages. Jacquot's classification updates Guthrie's (1953) listing. It is a genetic or genealogical inventory. However, the classification proposed by Kwenzi-Mikala is geographical-administrative. Kwenzi-Mikala (1988:57) initially grouped the 62 heritage speech forms ("parlers", including languages and dialects) in 8 language groups (a group of different speech forms that are mutually comprehensible) and thereafter (Kwenzi-Mikala 1998) in 10 language groups. In order to establish these language groups, Kwenzi-Mikala used the criteria of mutual intelligibility (also referred to as intercomprehension) and the opening greeting formality 'I say that' (cf. Emejulu and Nzang-Bie, 1999a:2). This classification is as follows:

- the MAZUNA group: Fan-Atsi, Fan-Make, Fan-Mvaï, Fan-Ntumu, Fan-Nzaman and Fan-Okak;
- the Myene group: Enenga, Ghalwa, Mpongwe, Nkomi, Orungu and Okoa;
- the Mekana-Menaa group: Akele, Ungom, Lisighu, Mbanwe, Metombolo, Seki, Tumbidi, Shake, Wumpfu and Lendambomo;
- the Mekona-MAngote group: Ikota, Benga, Shamayi, Mahongwe, Ndasha, and Bakola;
- the Membe group (or Okande-Tsogho): Ghetsogho, Ghepinzi, kande, Ghevho, Ghehimbaka, Ghevhiya, Ebongwe and Kota-kota;
- the Merye group: Ghisira, Ghivharama, Ghivhungu, Yipunu, Yilumbu, Yisangu, Ngubi, Civili, Yirimba and Yighama;
- the Metye group: Yinzebi, Yitsengi, Yimwele, Yivhili, Liduma, Liwanzi and Yibongo;
- the Membere group: Lembaama, Lekanini, Lindumu, Lateghe and Latsitseghe;
- the Mekana group: Bekwil, Shiwa (or Makina) and Mwesa;
- the Baka group with only one speech form: Baka.

Some criticism has been directed at this classification based on the sociolinguistic criterion of intercomprehension. Earlier, Hombert (1990) asked himself:

S'agit-il d'une intercompréhension totale et immédiate? ou doit-on considérer qu'il y a encore intercompréhension si le locuteur d'un parler A a besoin d'une période d'adaptation (de quelques jours ? de quelques semaines ?) pour comprendre l'essentiel (la totalité ?) des conversations des locuteurs d'un parler B? (Hombert 1990:30).

More recently, Emejulu and Nzang-Bie, (1999a:2) stated that "the intercomprehension criterion used confounds some crucial sociolinguistic historicity and does not systematically reflect the native speakers' linguistic intuition". Despite the shortcomings expressed above, Kwenzi-Mikala's classification serves as a useful

source of reference for scientific works for two reasons. Firstly, it offers a solution to the problem of the enumeration of all the heritage speech forms of Gabon. After Johnston (1922:138-144); Guthrie (1953:55-73); Doke and Cole (1963:63-76) and Jacquot (1978:492-496), Kwenzi-Mikala (1998) introduced a grouping of those speech forms in 10 language-units. Secondly, it is established according to a comparative underlying design that obviously allows comparison between those speech forms. Other speech forms are still to be identified, especially those, which are threatened with extinction.

As far as dialectology is concerned, Fan and Omyene are the sole Gabonese languages of which the dialectal status is more or less clearly established, having six dialects each. For the other Gabonese speech forms, dialectal differences are still to be identified and mapped. This is the difficult task that is currently being carried out by researchers of the Laboratory of Phonetics and African linguistics of the University Lyons 2 under the supervision of Prof. Jean-Marie Hombert using the framework of the *Atlas Linguistique du Gabon* (ALGAB). The conclusion of this project will give a clear picture of the dialect and language boundaries in Gabon.

A close look at Kwenzi-Mikala's internal classification confirms some of the sociolinguistic findings: the Mazuna and Myene groups are generally presented as homogenous entities with slight differences. In fact a speaker of Fan will always introduce himself or herself as *mona-Fan* (a Fan person) before mentioning the dialect he/she uses. The situation is different in the Myene group where people firstly introduce themselves as speakers of one of the six dialects of the Omyene language. But, they do recognize themselves as members of the Myene group.

Apart from, the Metombolo; Lendambomo and Tumbidi, the speech forms of Mekana-Menaa group also appear in Jacquot (1978) in the same section. Moreover, in Mekona-Mangote, Kwenzi-Mikala has decided to group together the speech forms Ikota, Ndasha, and Mahongwe (which appear in Jacquot's classification in the Ikota group), to which he adds the speech forms Benga (appearing in isolation in Jacquot's list) and Bakola (which does not appear in Jacquot's work).

As far as the Membe group is concerned, some of the speech forms that fall there have already been listed in Jacquot (1978). Kwenzi-Mikala's contribution lies in the fact that he lists four other speech forms, namely: Ghehimbaka, Ghevhiya, Ebonwe and

Kota-Kota. The speech forms Yipunu, Yilumbu, Yisangu, Ghisira and Ghivharama of the Merye group all appear in Jacquot (1978). Apart from Civili, the speech forms Ghivhungu; Ngubi; Yirimba and Yighama, which fall in this group, are the author's new findings. It should also be mentioned that many authors of oral tradition (Balandier (1952) and Deschamps (1962), to mention but a few) have stressed the linguistic and historic unity of the speech forms of the Merye group.

In the Metye group, Kwenzi-Mikala recaptures the speech forms Liduma, Yitsengi and Yinzebi of Jacquot's list, to which he adds Liwanzi, Yimwele, Yivhili and Yibongo. The same applies to the Membere group. The speech forms: Lembaama, Lekanini and Lindumu mentioned there have already been listed in Jacquot (1978). Kwenzi-Mikala enlarges his classification with Lateghe (mentioned by Jacquot) and Latsitsege.

In the Mekana group, Kwenzi-Mikala groups together Bekwil (which appears in isolation in Jacquot's list), Shiwa and Mwesa. Finally, given that the Baka group consists of the sole Baka speech form any internal comparison is not functional. However, the question to be addressed is why does the author list Baka (which does not appear in Jacquot 1978) in isolation? Moreover, why does Kwenzi-Mikala not put Bakola (falling in the Mekona-Mangote group) and Baka together knowing that they both belong to the group of pygmy languages? The answer to this question lies in Mayer and Voltz (1990:48): "Nombreux sont actuellement les parlers des groupes pygmées qui sont bantu, entre autres les Bakola (région de Mékambo) ou les Babongo (entre Etéké, Mbigou, la Lopé et Boumango)". In other words, the pertinence of the Baka group lies in the fact that Baka is a speech form of the family of oubanguian languages, indeed non-Bantu. Therefore, Bakola cannot appear in the Baka group because in contact with the Bantu languages of Gabon it became "bantouisé" so to speak.

1.2.2. The language policy of Gabon

According to Kwenzi-Mikala (1990:123) the language policy of Gabon largely depends on the one inherited from the colonial era. In fact, in the revised constitution it is stipulated that 'The Gabonese Republic adopts French as the Official language. Furthermore, she endeavours to protect and promote National languages' (1994, Art.2,

paragraph 8). With this official status, French serves as the sole medium of instruction in the national educational system, and as the language of business, civil administration, and the media.

For several years Gabonese languages have been sidelined. When the Government became aware of the importance of national languages in the development of the country, it started to promote them. A seminar *Les États généraux de l'Éducation et de la Formation* was convened from 12 to 23 December 1983 in this regard. One of the recommendations of the workshop was the introduction of Gabonese languages in the national educational system. However, no concrete policy ensued from this recommendation. Fourteen years later, this recommendation was stressed again during the *Table ronde sur les recherches linguistiques et l'Enseignement des langues au Gabon* that was held from 9 to 11 December 1997.

Recently, in April 1999, the *Séminaire sur la standardisation de l'orthographe des langues Gabonaise* was organised by the Ministry of National Education in Libreville.

National languages are used as a medium in the literacy program for adults and in broadcasting. The introduction of a postgraduate course at the *Normal sup* (College of Education) to train teachers of Gabonese languages during the academic year 1998-99 is an indication that the educational system of the country is undergoing drastic changes. All the concrete actions that the Government has undertaken toward the development of National languages will sooner or later allow the production of teaching materials enabling them to be used both as medium and subject of instruction in schools.

As far as lexicography is concerned, the *Séminaire sur la lexicographie Bantu* held at CICIBA (Centre Internationale des Civilisations Bantu) in Libreville is an indication of some of the recent developments in this field. This seminar took place in 1997, and was attended by delegates from six African countries. During the seminar Dr. D.J. van Schalkwyk, Editor-in-Chief and Dr. F.J. Lombard, senior co-editor of the *Woordeboek van die Afrikaanse Taal* (WAT), presented lexicographic training. Particular attention was paid to the planning and management of lexicographic units as well as to practical aspects of lexicography (cf. Bureau of the WAT 1997-1998).

1.2.3. Survey of lexicography in Gabon

The survey of lexicographic studies in Gabon will be done according to the 10 language groups of Kwenzi- Mikala (1998a).

1.2.3.1. MAZUNA lexicography

Fañ is the home language of 29 percent of the population (circa 427,000 people) of Gabon.

The speech forms of this group are mostly found in three of the nine provinces of Gabon, namely Estuary, Ogooue-Ivindo and Woleu-Ntem. The Fañ-Atsi is spoken in Ndjolé and Lambaréné, the Fañ-make in Libreville and Kango, the Fañ-Mvaï is found in Minvoul, the Fañ-Ntumu in Oyem and Bitam and, the Fañ-Nzaman and the Fañ-Okak are spoken respectively in the regions of Makokou-Ovan-Booué and Medouneu-Cocobeach-Mitzik. Fañ is a so-called cross-border language because it is also spoken in neighbouring countries, namely in Equatorial Guinea, Cameroon, São Tomé (cf. Grimes, 1996) and the Republic of Congo.

Mazuna lexicography starts with the publication of the bilingual *Dictionnaire fang-français* by R. P. Marling (1872). This lexicographic work is followed some years later by another bilingual dictionary, i.e. the *Dictionnaire français-fang* by R.P Lejeune (1892). The work consists of 347 pages and has two sections. The first section contains an overview of Fañ grammar; the second part is the dictionary itself. Important is the publication of the *Encyclopédie pahouine* by Largeau (1901), a colonial administrator. With its ±4996 articles covering 699 pages, the book is the sole encyclopedia ever compiled for a Gabonese language. It is divided into two parts.

The first part is a cultural overview of the Fañ people. Here the compiler does not only renew the question of the origin of the Bəfañ (speakers of Fañ), but other anthropological issues regarding rituals, the value system and mythology are discussed extensively.

The second part, which contains the encyclopedia itself, starts with a lexicological or lexicographic chapter (as the compiler calls it). This chapter contains the user's guidelines and the minigrammar of the encyclopedia. It provides the user with a

relevant discussion on the pronunciation system, the orthography and the punctuation system used in the book as well as some morphological data such as the parts of speech, word formation and the conjugation system of *Fan* that is abundantly illustrated by tables. Although credit is to be given to this work, it reveals a number of shortcomings. The writing system proposed by the compiler is very much along the lines of the orthographic traditions of French. However, there is a big difference between the sound systems of the African languages and those of the European languages. As a result, the transcriptions proposed are likely to be only approximate. Moreover, the grammatical content is somewhat outdated. These shortcomings can be remedied by taking into account some of the recent works on *Fan* grammar, namely those of Mba-Nkoghe (1979); Andeme Allogho (1980); Mba-Nzue (1981) and Ondo Mebiame (1992) on *Fan*-Atsi; *Fan*-Nzaman; *Fan*-Mvaï and *Fan*-Ntumu respectively. As far as the lexicographic section is concerned, the lemmata of the encyclopedia are arranged in alphabetical order. The articles vary in length from short explanations of terms and concepts to a more comprehensive treatment of lexical items. Cross-references guide the reader to thematically related articles. In the preface of the book it is clearly stated that the encyclopedia is based on the dialects *Make* and *Atsi*. However, the lexicographer mentions neither the primary sources nor the secondary sources of his macrostructural elements. The encyclopedia itself contains macro- and microstructural data such as the lemma (in French); the translation equivalent in *Fan*; some contextual information; plural indication.

According to Largeau (1901: 4) the value of the encyclopaedia lies in the fact that it can be used as a useful reference work by scholars from various fields, among others politics, philosophy, economics and ethnology.

The most important *Fan* dictionary is that of the Genevan pastor Samuel Galley entitled *Dictionnaire fang-français et français-fang*, edited by Henri Messeiller and published in Paris in 1964. Like its predecessors, this work is a bilingual dictionary. It consists of ±13925 articles covering 588 pages. It is the result of the input from the Société des Missions Évangéliques de Paris in Gabon through its station Talagouga, in the region of Njolé. After 40 years in Gabon, Galley passed away in 1959 without having the opportunity to see his major work being published. The *Fan* people are indebted to the

Association Française des Amis d'Albert Schweitzer for the publication of the Galley dictionary. It is based on the translation of the Bible in Fañ, another tremendous task that Galley undertook for the Fañ community of Talagouga. In contrast with earlier dictionaries such as the works by R. P. Marling (1872) and R. P. Lejeune (1892), the Galley dictionary is intended to meet the needs of both Fañ and French speakers because of its biscopal nature. As far as the macrostructure is concerned, the lemmata are arranged alphabetically. The microstructure includes a lot of data, e.g. the part of speech, class number, translation equivalents, meaning explanation as well as cross-references. Compare the article of the lemma **ABÎÑYA**:

(1)

ABÎÑYA (h) n.4, pl. *mebîñya*. Rameau vert, bout de branche avec feuilles vertes. On s'en sert pour fermer les barrages pour pêcher (*lôkh* h, pêcher). En faisant un paquet enveloppé d'écorces et en y mettant le feu, on obtient une épaisse fumée pour étourdir les abeilles et prendre le miel dans la ruche. Syn.: *ébî* (h).

Text example 1: Article **ABÎÑYA** (from *The Galley*, 1964:18)

Another feature of the dictionary worth mentioning concerns the access structure. The use of typographical markers such as the presentation of lemmata in bold small capitals as well as the running heads which form the outer rapid access structure (Hausmann and Wiegand, 1989:329) make it easier for users to find the word for which they are looking. Apart from his lexicographic and evangelical activities, Pastor Samuel Galley was also involved in the production of didactic materials. His best-known teaching aid is the book *Nteni Osu Nteni FaÑWE* published in 1889 under the aegis of the Protestant station of Talagouga. The following is Mayer's (1990) comment on the book:

(C'est) un opuscule de 14 pages centenaire! "premier livre de fang" dit le titre. C'est la mission protestante de Talagouga (près de Njolé) qui est à l'origine de cette publication dont la reliure est assurée par du fil à aiguille. Etrange illustration de couverture : minarets et chéchias composent un paysage sans doute exotique mais fantastiquement irréaliste (Mayer, 1990:74).

The last work to be treated was compiled by Martrou (1924), a missionary of the Congrégation des Pères du Saint-Esprit. It is the bilingual *Lexique FÂN-FRANÇAIS* consisting of 3431 articles covering 137 pages. It is divided into two parts. Part I

presents the outline of Fan grammar, while part II deals with the lexicon itself. The lexicon contains lemmata in Fan and French translation equivalents. The use of typographical markers such as the printing of lemmata in bold capitals, as well as the running heads, has improved the access structure of the lexicon. The orthography employed in the lexicon is based on the principles expounded by Ch. Sacleux in his book *Essai de Phonétique*. The fact that the work contains information on stress in lemmata shows the lexicographer's awareness of the necessity to give an account of the pronunciation of the language. According to Martrou, a global rise and the lengthening of the syllable characterize tonic accent in Fan. This tonic accent is indicated by the stress mark (').

In conclusion, all the dictionaries available for the Fan language are translating dictionaries and biased toward French. Furthermore, they reveal a number of shortcomings that need to be remedied. Most of these works do not mark tone as well as the pronunciation of the language. To a greater or lesser degree, the earlier dictionaries lack a metalexicographic foundation, but as far as these shortcomings are concerned, they are excusable if one considers that the compilers of these earlier works were neither linguists, nor trained lexicographers. The most important and most often stated shortcoming is that these dictionaries contain a lot of orthographic inconsistencies. For example Alexandre (1961, as quoted by Kidida Awak 1990: 11) points out that the Fan language has acquired “trois transcriptions [catholiques] et deux [protestants] pour environ un million de locuteurs, sans parler des différences morphologiques dues à des calques catholiques sur l'allemand, le français et l'espagnol, et protestants, sur l'américain”.

To a greater or a lesser degree, these shortcomings also apply to the language group that is the object of the following section.

1.2.3.2. Myene lexicography

Omyene is the home language of 5 per cent of the Gabonese population.

The speech forms of this language group are mainly found in three provinces of Gabon, namely Estuary province, Middle-Ogooué and Ogooué-maritime. Enenga is spoken in the northeast of Lambaréné, in the vicinity of lake Zilé. Ghalwa is found around the lakes of Onangué, Avanga, & Ezanga and on the island of Lambaréné. Mpongwe is spoken in Libreville as well as on the island of Pointe-Dénis. Finally, Nkomi is in use in the southeast of Port-Gentil and around the lagoon of Fernand-Vaz.

The first dictionary to be compiled in Myene lexicography is the *Dictionnaire français-mpongwe* by R.P. Amable Delorme (1877). The dictionary covers 354 pages and was published under the auspices of the Missionnaires de la Congrégation du Saint-Esprit et du Saint-Coeur de Marie. Lemmata are given in French and supplied with a Mpongwe translation equivalent as well as some examples. Except for suprasegmental and orthographic problems, the monoscopal nature of the work is the main weak point of the dictionary that could only be used actively by the speakers of French but passively by those of the Mpongwe dialect. This relation between active and passive language use is reversed in Gachon's *Dictionnaire mpongwè-français* published in 1881. The book covers 287 pages and consists of two sections. The first section presents Mpongwe grammar, while the second section contains the dictionary itself. Lemmata are arranged alphabetically and according to the word tradition. The dictionary has been a great contribution to Gachon's translation of the *Bible Gnangoine agamba mi re tendo pa gou'ejango j'agnambie ji felio né TESTAMAN NOUNGOU NI TESTAMAN GNONA gou'inongo gni mpongoue* published in 1891. The dictionary was republished in 1974.

The last contribution is the Raponda-Walker's dictionary. It was published for the first time by the Presses de la Libre Lorraine in Metz (1930-1934). It is monoscopal with Mpongwe as source and French as target language. In 1961, 27 years later, the dictionary was published in the reverse direction French-Mpongwe by the Imprimerie Saint Paul in Brazzaville. This version of the dictionary has since been reprinted under the auspices of the Raponda-Walker foundation in 1995. The last version of the work comprises some 8000 articles arranged alphabetically according to the full word tradition. The first part of the book is the dictionary itself, while the back matter or part

II of the dictionary contains an exposition of Mpongwe grammar. The dictionary articles include the following data categories: the lemma (in French), the part of speech, a label, the Mpongwe translation equivalent, some examples as well as the use of typographical indicators. Compare the following example from this dictionary:

(2)

Communiquer V. A. (*transmettre*) nóza ; pa. *Communiquer une lettre, une maladie, nóz'ezango ; nóze nkani. Communiquer un ordre, bol'okenge. (Correspondre). Communiquer par lettre, tendane yango ; une nouvelle, myeze ntsango. (Aboutir) punda, pókósa. Le Fernand-Vaz communique avec l'Océan, Eliwe-Nkómi zi punda go ntsuwa. Ce chemin communique avec la plaine, mpónó yinó yi pókósa g' orove. Se communiquer, nógana. Le pian se communique, abukwè mi nógana.*

Text example 2: Article **communiquer** (from DFM, 1995²:119)

As far as the primary source of the dictionary is concerned, the Raponda-Walker's work is based on examples of oral usage of Mpongwe, which was collected over many years from various sources. Earlier books on Mpongwe literature (especially dictionaries and the Bible) as well as some of the monolingual and bilingual dictionaries of French published during the period concerned, are most probably the secondary sources of the work. The compiler based the orthography used in the dictionary upon the set of symbols presented by himself (Raponda-Walker 1932). This alphabet is much along the lines of *The Practical Orthography of African Languages* published in 1928 by the International African Institute [See also, Touré (63-1990:55) and Kwenzi-Mikala (1998:219-220) for a comprehensive account on this matter].

From the foregoing exposition, it is clear that all the dictionaries available in the Omyene language have a common denominator: they are all translation dictionaries based on the Mpongwe dialect and were compiled by catholic missionaries. The next language group to be examined is less developed.

1.2.3.3. Mekana-mena lexiconography

The speech forms of this language-group are scattered in six provinces of Gabon, namely Estuary, Upper-Ogooue, Middle-Ogooue, Ngounié, Ogooué-Lolo and Ogooué-Ivindo. Nkele is spoken in Lambaréné and Sindara, Ungom in the north of Franceville, in Koulamoutou and around Mékambo. Lisighu and Metombolo are spoken in Lastourville and Seki in Cocobeach. Shake is found in Booué and Lastourville, Tumbidi in Mbigou and Malinga. Lendambomo is spoken in Booué, Okondja as well as south of Mékambo. Finally, Wumpfu is found in Mbigou, Malinga and north of Franceville.

Except for word-lists at the end of linguistic works in this language group, nothing exists as far as lexiconography is concerned.

1.2.3.4. Mekona-Mangote lexiconography

The speech forms of this language group are dispersed in five of the nine provinces of Gabon, namely Estuary, Upper-Ogooue, Ngounié, Ogooué-Lolo and Ogooué-Ivindo. Ikota is spoken in Booué and Mékambo, Benga in north of Libreville at Cap Esterias and in Pointe Santa-Clara. Shamayi is found in Makokou and Okondja, Mahongwe and Bakola in Makokou. Finally, Ndasha is spoken in Mbigou, Mandjaye and Okondja. Moreover, the Bandasha are also localized in the Republic of Congo, more precisely in Mossendjo and in Dolisie, in the region of Nyari in the Commune of Moutamba.

At present, there exists only one lexiconographic work in this group, namely *Lexique français-ikota* by R. P. Perron (1964), published under the auspices of the Mission Catholique de Makokou. An interesting fact is related to the primary sources of the work. The lexicon is based on the manuscript notes of R. P. Lamour. Moreover, the articles are arranged in alphabetical order. They start with a French lemma followed by a translation equivalent in Ikota, and some examples. The language group, which follows, is far more developed.

1.2.3.5. Membe lexicography

The speech forms of this group are mostly found in three of the nine provinces of Gabon, namely Ngounié, Ogooué-Ivindo and Ogooué-Lolo. Ghetsoghó is spoken in Mouila, Moabi and Sindara. Ghepinzi and Ghevhiya are found in Mouila and Ghevhyhe in Koulamoutou. Ghehimbaka, Ebongwe and Kota-kota are mostly found in Booué-Mimongo.

All the works available in Membe's literature touch the domains of linguistics and the religion. These works, which contain a lot of information regarding the lexicon as well as the grammar of the speech forms of this group, can be used as a starting point for the compilation of new dictionaries. Studies that have specifically dealt with lexicographic issues in this language group include works by the following authors: Raponda-Walker (s.a.) and Bodinga-bwa-Bodinga & Van der Veen (1990). Raponda-Walker's contribution is a bilingual dictionary entitled *Dictionnaire getsogo-français*. The work contains more than 5000 articles covering 237 pages. Lemmata in Ghetsoghó are supplied with French translation equivalents as well as some examples. The author also compiled a reverse edition with French as the source language and Ghetsoghó as the target language. Bodinga-bwa-Bodinga and Van der Veen's article "Plantes utiles des Evia" deals with plant names as well as their medicinal qualities. The work is much along the lines of the *Les plantes utiles du Gabon* published in 1961 by Raponda-Walker and Sillans and contains some 608 Ghevhiya terms. The entries of the lexicon appear in three columns. The scientific names of the plants are given in the first column in alphabetical order. The Ghevhiya names appear in the second column. The last column deals with the therapeutic properties of the plants listed. This is illustrated by the following example:

(3)

Abrus precatorius	di-ndèndè	Propriétés adoucissantes (feuilles), soins de la voix (chanteurs)
-------------------	------------------	--

Text example 3: Article *Abrus precatorius* (from Bodinga-bwa-Bodinga and Van der Veen, 1990:30)

Unfortunately, the authors propose no metalexicographic discussion on how those plant names should be treated in a dictionary of plant names for example. Finally, the collaboration of Bodinga-bwa-Bodinga and Van der Veen also includes the compilation of a bilingual dictionary: *Dictionnaire gevia-français* (in preparation).

1.2.3.6. Merye lexicography

The speech forms of this group are mostly found in four of the nine provinces of Gabon, namely Ngounié, Nyanga, Ogooué-Maritime and Ogooué-Lolo.

Ghisira is spoken in the regions of Fougamou, Mandji and Ndougou; Ghivharama in Setté-Cama and Gamba. Ghivhungu is found in Mandji, Yetsou and Moabi. Yipunu is spoken in Mouila, Tchibanga, Ndendé, Mabanda and Moabi. Yilumbu is mostly spoken in Mayumba, Gamba and Setté-Cama. Yisangu is found in the regions of Mimongo, Mbigou, and Koulamoutou to Ibounji. Ngubi is spoken around the Iguéla lagoon; Civili in Mayumba and Ndindi, and Yirimba in Moabi. Last but not least, Yighama is found between Mayumba and Tchibanga. Some speech forms in this group are so-called cross-border languages, namely: Yipunu, Yilumbu (also spoken in the Republic of Congo and the Democratic Republic of Congo) and Civili (also spoken in the Republic of Congo and Cabinda in Angola).

The first lexicographic work that has to be mentioned in this group is the *Dictionnaire français-vili* by R. P. Marichelle (1900). The dictionary, which covers 114 pages, was published in Loango. It comprises a brief outline of the Civili speech form. The dictionary articles supply the following lexicographic data: a treatment unit in French, a Civili translation equivalent as well as some examples.

The next work to be published was the *Grammaire pounoue et lexique pounoue-français* by R. P. Bonneau (1956). The work that covers 177 pages contains two sections. The first section presents Yipunu grammar, while the second section contains the lexicon itself. The lemmata are arranged alphabetically. They provide the reader with lemmata in Yipunu as well as translation equivalents in French. As far as the primary sources are concerned, Bonneau's work is based upon a series of articles that the author wrote from 1940 to 1952 in the *Journal de la Société des Africanistes*

(JSAfr). A more recent article “Lexique” by Rittaud-Hutinet (1980:193-245) is a very interesting work with regard to the lexicographic contents. As far as the primary sources are concerned, the lexicon was initially compiled on the basis of a questionnaire of Joseph H. Greenberg. Then it was enlarged by other sources. The work contains a comprehensive introduction in which the lexicographer deals with issues regarding semantics (synonymy, antonymy, homonymy and figurative speech) and morphology (gender, concord and derivation) as well as the tonal system of the speech form. Another good feature of the work is that the lexicographer gives an account of the principle or method of arrangement according to which all the lexical items have been entered in the lexicon. Entries are presented in three columns. In the first column, Yipunu lemmata are presented alphabetically under the initial letter of the stem of each word. The treatment units are accompanied by an indication of the class number and eventually by a label. The second column contains translation equivalents as well as meaning explanations. The last column deals with semantic and morphological information such as synonyms, metaphors, compounds, etc. The following example illustrates the point in question:

(4)

-kanga 1/2	ami avec lequel on est en relation	cf. –mba:tsi (C') 9/2 = ami
d'échanges et d'hospitalité		

Text example 4: Article -kanga (from, Rittaud-Hutinet 1980:206)

The lexicon itself contains some 945 articles and is divided into two sections, which reflect the different tonal patterns of Yipunu. In one section, the substantives are represented according to the following tonal classes: A, B, D, B/D, B' and B'/C' and in the other section the verbs are listed under the tonal classes, A, B and A/B.

As far as Yipunu is concerned, the work of Kwenzi-Mikala is indispensable. Some of his contributions deal with semantic issues, such as borrowing, componential analysis and anthroponymy, to list but a few. For example, his article “Contribution à l'analyse des emprunts nominaux du yipunu au français” is a phonological and semantic analysis

of Yipunu loanwords based on a corpus of 70 words borrowed from French by the Gabonese speakers of Yipunu (B43). In “Analyse sémique des termes dénotant les relations parentales en yipunu” the author analyses the kinship system and terms of Yipunu according to the model developed by the French structuralists in the field of semantics which is largely influenced by B. Pottier and A. -J. Greimas, among others. He organizes his description on the basis of the following semantic axis: axis of generations; axis of sex; axis defining the linear character; axis defining consanguinity; and finally the axis defining the direct and lateral characters of the relation on the father’s side.

Finally, his article “L’anthroponymie chez les Bapunu du sud-Gabon” of 1990 deals with anthroponymic issues. Particular attention is paid to the relation between the function of the personal name and the status of the bearer. Moreover, the author is currently working on a corpus of traditional personal names including all the Gabonese tribes. From ongoing research work, some unpublished contributions on the speech forms of this language group should be mentioned. The first unpublished work is the *Lexique isangu-français* compiled by Naidailac (1992) and presented at the University of Lyons 2. The second contribution is Jean Blanchon’s Yipunu dictionary in electronic form. It contains some 4272 entries with their proto-Bantu forms (cf. Blanchon, 1989:132).

1.2.3.7. Metye lexicography

The speech forms of this group are mostly found in four of the nine provinces of Gabon, namely Upper-Ogooue, Ngounié, Ogooué-Ivindo and Ogooué-Lolo.

Yinzebi is the most widely spread speech form of the group and it is located in regions such as Mbigou, Lebamba, Malinga, Lastourville, Koulamoutou, Pana-Iboundji and Mounana-Bakoumba. Yitsengi is spoken in Lastourville-Moanda-Bakoumba, Yiwele in Mbigou. Yivhili is found in Booué-Sindara, and Liwanzi in Lastourville-Moanda. Liduma is spoken in Lastourville and Yibongo in Moabi.

The first works in Metye lexicography are lexica *Vocabulaire français-aduma* and *Vocabulaire aduma-français* by R. P. Dahin (1893, 1895). The author started with French lemmata and their translation equivalents in Liduma. Later, he reversed his macrostructural elements and started again, this time with Liduma lemmata. This makes the lexica useful for speakers of both French and Liduma. As far as the primary sources of the lexica are concerned, it seems that R. P. Dahin based his work upon the *Catéchisme en langue adouma* that he wrote in 1891, as well as other literary materials.

The next lexicographic work to be published has a restricted macrostructure. It is the pocket dictionary of Yinzebi entitled *Petit dictionnaire bantou du Gabon: français-ndjabi; ndjabi-français* compiled by Muroi (1989). Despite segmental as well as suprasegmental shortcomings, the quality of the dictionary lies in its bicultural nature. Nadaillac is compiling another Yinzebi dictionary in collaboration with the ALGAB's team.

Finally, the most important dictionary of this group is certainly, the *Dictionnaire ndumu, mbede français* by A. Biton and J. Adam (1969). Biton and Adam's work is interesting because it does not only involve French and one of the Gabonese heritage speech forms as it is the case in most existing dictionaries, but it involves two Gabonese speech forms (Liduma and Lateghe) with French. The primary sources of this multilingual dictionary are probably the *Grammaire composée Mbede- Ndumu- Duma* which Adam published in 1954. However, this grammar book has to be regarded as only one of the various sources of the author. In fact, after 52 years in Gabon - a country where he passed away in 1981 - Adam's contribution to Gabonese oral literature encompasses many articles on the different speech forms of Upper-Ogooué province.

1.2.3.8. Membere lexicography

The speech forms of this group are mostly found in Upper-Ogooué province. Lembaama is spoken in the regions of Franceville-Okondja-Akiéni. LekaniNi is found in Franceville and Boumango. Lateghe is spoken in Akiéni-Lékoni and Latsitseghe in Lékoni. Lindumu is used in Franceville.

Membere lexicography starts with the publication of the bilingual dictionary *Dictionnaire français-ndumu et ndumu-français* by R. P. Biton (1907). The work covers 97 pages and is divided into two parts. The first part introduces the reader to the grammar of Lindumu, while the second part contains the dictionary itself. The first section of the dictionary starts with French lemmata. Then, the compiler reverses the languages in the second section of the dictionary. The present dictionary has served as a basis for the production of religious didactic materials such as the *Kateçism Ndumu* in 1962 and a few years later, the *Dictionnaire ndumu-mbede-français and français-ndumu-mbede* compiled by Biton in collaboration with Adam in 1969. The characteristic feature of this dictionary is that it involves three languages [French, Lidumu (Ndumu) and Lateghe (Mbede)] and that the languages are reversed within one and the same dictionary. Furthermore, lemmata are excerpted from the lexical stock of the plant names of the region of Franceville. The next work to be examined is an interdialectal lexicon entitled *Vocabulaire comparé des principaux dialectes ayant cours en Haut-Ogooué* published by Castex in 1938. The work is an interesting contribution to the field of dialectology (also called linguistic geography). For example, it can be used as a valuable reference work for the compilation of a multilingual or pan-dialectal dictionary involving the different speech forms of Membere group. The former presents a relative rich lexicographic insight in comparison to the last two groups of this survey, namely the Mekana and Baka language groups.

1.2.3.9. Mekana lexicography

The speech forms of this group are mostly found in Ogooué-Ivindo province. Bekwil is spoken in Makokou and Shiwa (or Makina) in Booué. Mwesa is found in Mékambo.

As far as this group is concerned, a lot of work still needs to be done. However, the contributions of Puech (1990) Yembi Bouka (1995) and Kwenzi-Mikala (1998a: 10-16) contain an outline of the grammar and the oral literature of Shiwa, Bekwel and Mwesa respectively. As far as lexicographic publications are concerned, nothing is available.

1.2.3.10. Baka lexicography

Baka is the sole speech form of this group, which is spoken in Minvoul-Makokou-Belinga.

The available literature in this group includes the work of Mayer (1987) and Mayer & Voltz (1990) in the field of anthropology, among others. Lexicographic activities are to be started.

1.2.3.11. Some concluding remarks

The purpose of earlier dictionaries was basically to serve as reference works for European traders and French colonial administrators in their daily routine. Moreover, dictionaries have served as a source for the compilation of pedagogical or teaching materials such as the translation of the Bible (for evangelization purposes), grammar books and syllabi to teach the inhabitants to read and write.

As far as the lexicographic needs of Gabonese languages are concerned, there is a lack of dictionaries of various types as well as a lack of a dictionary culture. This does, of course, not mean that the lexicographic needs of Gabonese languages have to be derived from the full typological diversity of dictionaries available, cf. Gouws (1996a:100). Thus, there is a need for dictionaries aimed at a very specific target user. It is here that once again the concerns of Gouws (1996a) can be recalled:

...the first priority for any given language is to compile a dictionary belonging to a typological category already represented in that language but where the existing dictionary does not comply with the criteria set by the needs' analysis of the real users (Gouws, 1996a:100).

As it clearly appears in the above survey, most dictionaries of Gabonese languages are translation dictionaries and biased towards French. Moreover, they lack important linguistic features such as tones as well as a metalexicographic foundation. For meeting the real needs as well as the reference skills of the intended target user of future dictionaries, one also has to take a close look at the structure of existing dictionaries. The above discussion has merely focused on the presentation of the linguistic situation

in Gabon as well as the survey of lexicography in Gabon itself. The section that follows is a textual approach of two existing dictionaries in the Mazuna and Myene groups, namely: Galley's *dictionnaire fang-français et français-fang* and Raponda Walker's dictionary: *Dictionnaire Mpongwé-Français*.

Obviously, the aim is to discuss advantages and limitations of those dictionaries. This may allow lexicographers to determine the appropriate macro- and microstructure (e.g. an integrated, a non-integrated or a semi-integrated microstructure); access structure; addressing structure; and mediostructure of future dictionaries and lead to a better product as far as the theory is concerned.

This section implicitly works with the theoretical frameworks of Wiegand and Kučera (1981, 1982). According to them, when criticizing dictionaries, one has to take into consideration the following components, namely: the history of the publisher, the dictionary basis, the macro- and microstructure of the dictionary. This will be done and attention will also be given to the treatment of special-field terms, before some concluding remarks are given (cf. Smit 1996:30).

1.2.4. GALLEY (1964) and RAPONDA-WALKER (1995)'s dictionaries: studies in case.

1.2.4.1. GALLEY (1964)'s dictionary

1.2.4.1.1. The macrostructure of the Galley dictionary

The macrostructure of the *Dictionnaire fang-français et français-fang* contains ±13925 articles listed in strict alphabetical order. It is a record of the language as the Fan community of Talagouga (around Ndjolé) uses it. As far as the dictionary basis is concerned, the compiler has included words used in everyday speech, geographic names, plant and animal names, proper names and idiomatic expressions as part of his macrostructural elements. It is really a representative collection of Fan lexical items in use in Talagouga. There is no doubt that the compiler wanted his dictionary to be a "real container of knowledge" (McArthur, 1986). However, the compiler or in this case the publisher did not mention the criteria according to which lexical items have been lemmatised in the dictionary. This kind of information is usually found in the user's

guide in the front matter of the dictionary. The preface of the dictionary merely states why the Association Française des Amis d'Albert Schweitzer has decided to publish the work of the Genevan pastor. This introductory section also gives a brief outline of Galley's missionary, lexicographic and pedagogical activities. But nothing is mentioned regarding the selection of lemmata. There are several questions likely to arise:

- What are the primary and secondary sources of the dictionary?
- Who are the target users of the dictionary?
- What are the needs and reference skills of the target user of the dictionary?

The above-mentioned questions are not fully addressed in the front matter of the dictionary. Therefore one has to guess the sources of the dictionary. As far as the primary sources¹ are concerned, the guide to the dictionary clearly states that the work is based on the translation of the Bible in Fan̄ that Galley undertook over a period of 40 years for the Fan̄ community of Talagouga. Special mention is also made of the help of Galley's interpreter: Obam Mendôme. The secondary sources² of the dictionary are not explicitly discussed in the instruction book. The preface did mention the existence of an earlier lexicographic work with restricted macrostructural elements. Most probably it is the *Lexique FAN-FRANÇAIS* compiled by Martrou.

However, a close look at the central list specifically in the article of **MVEP** leads to one of the secondary sources of Galley's dictionary:

(5)

<p>MVEP (h) n.3, pl. <i>bemvep</i> Rongeur, appelé en anglais canerat, rat de canne à sucre</p> <p>..., <u>Largeau</u> dit le même mot.</p>

Text example 5: Article **MVEP** (from The Galley, 1964:212)

¹ Also called lexicographic corpus or dictionary basis, which comprises all the sources that are not dictionaries themselves (cf. Smit 1996: 30-31 and 111).

² All dictionaries consulted during the compilation phase (cf. Wiegand and Kučera 1981: 100ff).

The treatment of the above-mentioned lemma witnesses the fact that Galley has used the *Encyclopédie pahouine* by Largeau (1901) as a secondary source for the compilation of his dictionary. As a matter of fact, Largeau's work is based on the dialects Atsi and Make. Moreover, the chances are good that Galley did not only consult Largeau's encyclopaedia, but also all earlier lexicographic works in Fan. As far as the French-Fan section is concerned, monolingual or bilingual dictionaries of French published during the period concerned are most probably the secondary sources of the work.

A fact worth mentioning is that the introductory section claims that the dictionary is not aimed at a sophisticated public because Galley has deliberately left out the phonetic transcription of his treatment units. Despite that it seems that the work is intended to meet the needs and reference skills of students, scholars and people who wish to learn the language. André-Charles Henry (1964: unpaginated Preface) is correct when stating that Galley's work is not a book for well-informed people. It is not reserved for initiates. Indeed, the medium used in the dictionary is everything except hermetic. In fact Galley does not want to sound intellectual. His paraphrases of meaning are simple and concise. But the inclusion of data categories such as class numbers, word-formation, structural markers, etymology, paraphrases of meaning, synonyms and homonyms presupposes a sound linguistic knowledge from the target user, even if one does include a minigrammar as a back matter text. The target readers of the dictionary are likely to be scholars and students. Even so the user still needs some guidelines explaining to him/her all the component parts of the dictionary.

1.2.4.1.2. The microstructure of the Galley dictionary

As it clearly appears in the survey, the microstructure of the Galley dictionary includes a lot of data, e.g. the part of speech, class number, translation equivalents, meaning explanation as well as cross-references. The lemma sign is immediately and systematically followed by a tonal indication. This entry is of great importance for the user. Very often, lexicographers compiling dictionaries for African languages have been guilty of ignoring this basic component of the phonological analysis of the language. Galley distinguishes three tone heights in his dictionary, namely: the high tone (h), the low tone (b) and the medium tone (m). Furthermore, one of the front matter

texts gives an account of tonal features. The tonal indication is usually followed by a paraphrase of meaning of the lemma in the target language (French). As far as this point is concerned, a paraphrase of meaning in the source language (Fan) will have empowered the speakers of Fan to a larger degree. Therefore, the dictionary is more likely to meet the needs of the speakers of French than those of Fan. Compare the article of the lemma **MVIA**:

(6)

MVIA (h) n.2, pl. *mimvia* (vb *via h*). Femme acquise avec la dot de notre fille. En d'autre termes, femme achetée par le beau-père avec la dot reçu de son gendre. Et sa fille dont la dot a été prise pour cela, c'est sa *mbala* (voir ce mot).

Text example 6: Article **MVIA** (from The Galley, 1964:213)

The paraphrase of meaning above actually tells the user what the lemma **MVIA** means. Moreover, when dealing with the meaning, the compiler also makes provision for information regarding distinctions in meaning (which refers to the polysemic values of one lexical item, cf. WAT 1999). Consider the following lemma:

(7)

ABANA (h) n.4, pl. *mebana* (vb *ban h*). *Abana zal*, fétiche enfoui dans la terre et qui garde le village. *Abana mon*, fétiche pour que le bébé ne tette plus sa mère et qu'elle puisse avoir un autre enfant. *Abana nsôm*, fétiche qu'un ennemi fait au chasseur pour l'empêcher de tuer.

Text example 7: Article **ABANA** (from The Galley, 1964:14)

The syntagms *Abana mon* and *Abana nsôm* reflect polysemic expansions of the meaning of the lemma **ABANA** ('fétiche enfoui dans la terre et qui garde le village') contained in the syntagm *Abana zal*. Another interesting feature of the dictionary is the treatment of lemma signs representing polysemous lexical items. Compare the treatment of the lemma **ABEÑY**.

(8)

ABEÑY (b) n.4, pl. *mebeñle*. 1. Pincettes de forgeron pour tenir le fer rouge. — 2. Mirliton du chanteur de la danse *akôm*, ...—3. Barre ou plaque de fer ou d'un autre métal. — 4. Museau allongé du crocodile ou de la civette *mvakh*. — 5. balle de fusil ou cartouche. —6. *Abeñy ndame*, chevalet à deux X en pente où l'on met en position penchée les lianes à caoutchouc coupées pour en recueillir le latex. —7. *Abeñy ntsap*, barre de savon. —8. *Abeñy ébom*, système de fer qui ferme la cangue du prisonnier. —9. *Abeñy e nzel*, grande barbe.

Text example 8: Article **ABEÑY** (from *The Galley*, 1964:16)

In example 8, the lexicographer provides the users with data categories accommodated in two sections of the article, i.e. the "comment on form" (CF) and the "comment on semantic" (CS) (cf. Hausmann & Wiegand, 1989:353). Entries such as the lemma sign (**ABEÑY**), tonal pattern (b), class number (n.4) and plural indication (*mebeñle*) which appear in the left core structure of the dictionary article are part of the CF. The remainder of entries on the right core structure of the article belongs to the CS (cf. Hausmann & Wiegand, 1989:353-354). Furthermore, the user can regard the lemma **ABEÑY** as representing a polysemous lexical item. Each sense is introduced by a structural indicator or marker 1, 2, ...9 which form part of the inner rapid access structure of the dictionary (cf. Hausmann and Wiegand, 1989:354-356).

In the article of a lemma sign representing a polysemous lexical item such as in (8), the different distinctions in meaning should not be presented at a random basis but according to fixed criteria that should also be explained in one of the front matter texts. For the lemma **ABEÑY**, one has to guess the principles of arrangement. It seems that the compiler has used the arrangement according to primary and secondary distinctions in meaning. Or more probably, for this example, the arrangement is done according to the principle of conjunctive and disjunctive distinctions in meaning. Sense 1 of the lemma sign seems to be the literal polysemic value of the lexical item; therefore it is placed first in the article. Senses 2, 3, 4, 5, 6, 7, 8 and 9 seem to be metaphorical extensions of the first sense. Moreover, senses 2, 3, 5, 6 and 8 have more or less related meanings because they all have something to do with the lexical item *iron* or with metallurgy. Thus they should have been arranged by the lexicographer in the above-mentioned order. Senses 7 and 9, in which the figurative meaning does not refer

directly to the first subcomment on semantics, could have been introduced later in the listing. Of course another principle of arrangement could also have been used by the compiler, namely: the principle of empirical arrangement in which distinctions in meaning are determined on the basis of frequency counts (cf. WAT 1999:17-20).

This article of the lemma **ABEÑY** also highlights some aspects of the presentation of compounds. *Abeñy ndame*, *Abeñy ntsap*, *Abeñy ébom* and *Abeñy e nzel* are compounds with the structure: noun plus (connective) noun and they are all written without hyphen. However, the following lemmata: **MÔR-A-MVAM**, **MVAKH-FÎN** and **AKAM-NYAR** are all presented with hyphens. This is very confusing since the lemmata in question are compounds with the structure: noun plus (connective) noun as was the case with the compounds *Abeñy ndame*, *Abeñy ntsap* and so on in (8). Does this correspond to an inconsistency in the dictionary or in the spelling system? This question is hardly ever addressed in the front matter of the dictionary. Moreover, up to the present, there is no spelling system in Fañ and as far as the *Orthographe des Langues Gabonaises* (1999) is concerned, there is still a lot of research to be done in the area of the writing of compounds, possessives, demonstratives, and so on.

The treatment of homonyms also reveals some shortcomings. Consider the following example in this respect:

(9)

<p>ABI (b) (lg) n.4, pl. <i>mebi</i>. Cuisse....</p> <p>ABI (h) (bf) n.4. ss pl. Mal, péché, ...</p> <p>ABI (h) (bf) adj. Sing. ...Mauvais,...</p> <p>ABI (h) (lg) n.4, pl. <i>mebi</i>. 1. Sein, ...</p>

Text example 9: Article **ABI** (h), **ABI** (h) and **ABI** (h) (from The Galley, 1964:17)

The last three treatment units of the above-mentioned paradigm, which, according to the compiler, have the same tonal pattern (*h*), have been given lemma status as homonyms. The question arises on what grounds the target user of the dictionary is going to distinguish between the three members of the homonym paradigm? They should have received superscript numbers, or start with a structural indicator, reflecting

frequency of use as it is usually done in such case e.g. For example, **ABI**¹; **ABI**²; **ABI**³ or **1. ABI**; **2. ABI**; **3. ABI**. Numerous examples could be listed to illustrate this systematic shortcoming in the dictionary. Thus it does not deserve further comment. Another interesting feature of the dictionary is the treatment of special-field terms and cultural concepts. Compare the treatment of the article of the lemma **ABYÔM**:

(10)

ABYÔM (h) n.4, pl. *mebyôm*. Chasse à environ 50 hommes, avec grands filets et chiens. Il peut y avoir 300 mètres de filets. 20 hommes restent près des filets, et les 30 autres s'éloignent pour rabattre le gibier qui consiste surtout en antilopes. Syn.: *ézakh* (b). Proverbe: *Wa tô abyôm ñkîa, ndôkh mveñ za ña ke noñ ndum*, tu as refusé d'aller à la chasse de ton beau-père, mais il va pleuvoir, et tout le monde restera assis au village, et toi comme les autres.

Text example 10: Article **ABYÔM** (from *The Galley*, 1964:22)

The compiler starts with a paraphrase of meaning of the lemma **ABYÔM**. Then a full explanation is given of how the hunting takes place and the number of the participants. Those explanations, which concentrate mainly on extra-linguistic features, are indeed not part of the paraphrase of meaning. However, they highlight some cultural aspects of the life of the **Bəfañ**. The user can retrieve a lot of useful information from these entries. One of the ways for lexicographers to give an account of cultural explanations without giving too much encyclopedic information in the paraphrase of meaning is the use of synopsis articles.

It is also important to mention how the compiler deals with plant names. Consider the following example:

(11)

TÔM (b) n.3, pl. *metôm*. Grand arbre parasol. Nom commercial d'après Meniaud: Tsoumbou. (Nom scientifique: *Parkia Klainei* Pierre). Couleur du bois : gris jaune. Arbre magnifique à voir. *Tôlba tôm* (vb *tole* h), se faire verser goutte à goutte une infusion de bois de *tôm* dans l'œil, comme épreuve pour savoir si l'adultère a été commis (ordalie).

Text example 11: Article **TÔM** (from *The Galley*, 1964:344)

(12)

MVON (b) n.3, pl. *bemvon*. Gros singe à long poils noirs (fourrure), colobe
(*Colobus Satanas*).

Text example 12: Article **MVON** (from *The Galley*, 1964:214)

Example 11 contains the following entries: tonal indication (bm), part of speech (n.), plural indication (*metôm*), scientific name, description and uses of the tree and label. In (8), the compiler basically provides the user with a sophisticated entry: the scientific name of the animal. The treatment of special-field words has been done quite satisfactorily as far as the cultural context is concerned because the user is provided with lexicographic data regarding the fauna and the flora of the natural habitat of Fan people. Except for a few examples (not necessary to be mentioned) the dictionary user is always provided with entries such as the scientific name (of the plant or animal concerned), uses of the plant as well as the sources consulted. Besides leaves, roots and barks, fruits, seeds and animal ingredients are listed with their uses in the folk medicines. All these data regarding the cultural context of the treated lemmata are important for the user who is likely to find plants and animal ingredients displayed for sale on markets.

In the section French-Fan of the dictionary, macrostructural elements most probably belong to everyday vocabulary of French.

The microstructure usually provides the target user with the following data: translation equivalent in Fan, sometimes preceded by synonym or synonyms of the lemma in French, and examples (each example in French is immediately followed by its Fan counterpart). Articles vary in length. An extreme illustration of this point is the treatment of the article of the lemma **ARBRE** "tree" (almost three columns in length):

(13)

ARBRE bois, *éli* (h). Boîte en bois, *évora éli* (bh).

Text example 13: Article **ARBRE** (from *The Galley*, 1964:419-420)

The length of the article is the result of the compiler's listing of some 200 trees of the Gabonese forest as well as their uses and descriptions. Moreover, the commercial name of the tree appears with its indigenous name. The lexicographer has tried to deal with special-field lexical items on an equal basis as far as the two sections of the dictionary are concerned. Unfortunately, the above-mentioned article displays quite an unusual structure in the dictionary and thus deserves some explanations in one of the outer texts of the dictionary.

1.2.4.1.3. Concluding remarks

To a lesser or greater degree, the front matter of the dictionary gives enough information regarding the primary sources of the work. However, it has failed to give an account of its secondary sources. There is no doubt that the compiler has used a large lexicographic corpus of the language, which makes the dictionary a valuable source of reference and a real container of knowledge.

Macrostructural elements have been selected from various fields (oral tradition, religion, forestry, and traditional pharmacopoeia among others). Unfortunately, the lexicographer gives no assessment for incorporation. In addition, the macrostructure does not show features of sophistication, i.e. the use of niching and nesting procedures. The microstructure contains a lot of useful entries. But, no metalexical discussion is provided in the user's guide to make it accessible to the target reader. Special-field lexical items are treated in a satisfactory way in the sense that the metalanguage used is accessible to the non-specialist, e.g. descriptions of medicinal and medico-magic plants. This is of importance for the user to understand the richness of Fan culture.

12.4.2. RAPONDA-WALKER (1995)'s dictionary

12.4.2.1. The macrostructure of the 'Français-Mpongwé' dictionary

The macrostructure of the *Dictionnaire Français-Mpongwé* contains some 8000 articles arranged alphabetically. Since the above-mentioned dictionary does not provide the users with information regarding the secondary sources of the work, one can say that most probably the lemmata belong to the everyday vocabulary of French.

Furthermore, earlier dictionaries on Mpongwe are most probably the secondary sources of the work. Contrary to the latter, primary sources of the dictionary are likely to be found in the biography of Raponda-Walker presented in one of the outer texts in the frame structure of the dictionary. In fact André Raponda Walker the first Gabonese priest, is the author of books and numerous articles on Gabonese's Literature. Examples of oral usages of Mpongwe presented in the dictionary have been collected over many years from various sources. However - like for the Galley dictionary - the compiler did not mention the criteria according to which lexical items have been lemmatized in the dictionary. The interesting fact to be mentioned here is that the dictionary was first published when the compiler was 90 years old. After the publication of the dictionary in the direction Mpongwe-French, the compiler decided to embark on the tremendous task of compiling the dictionary in the reverse direction: French-Mpongwe 27 or 30 years later. Adam, in the preface of the edition of 1961, is correct when stating that one needs a lot of courage, good health and a good memory to carry out such a task. As far as the target user of the dictionary is concerned, nothing is mentioned in the outer texts. However, from the data presented, the average member of the speech community can use the dictionary.

1.7.4.2.2. The microstructure of the *Dictionnaire Français-Mpongwé*

The average dictionary article includes the following data types: the item giving the form of the lemma sign comes first then follows the item on part of speech, the translation equivalent then the item on contextual information and examples. Compare the following articles:

(14)

affection	N. itónda ; (<i>en médecine</i>) nkani.
affranchir	V. A. (<i>un esclave</i>) dandun'osaka ; (<i>une lettre</i>) posty'ezango. <i>S'affranchir</i> , dandwa ; <i>un affranchi</i> , olanduno.

Text example 14: Articles **affection** and **affranchir** (from DFM, 1995:7)

The use of contextual entries as well as labels in the dictionary articles does not only add to the **predictability** of the dictionary but it also indicates a user-driven approach.

In fact, the target reader of the dictionary is consistently assisted with guidelines enabling him or her to choose and use the right translation equivalent in the right context.

Typographical structural indicators are also used in the dictionary articles in accordance with a user-perspective in the sense that they assist the potential users to retrieve the information they are looking for within a short time of dictionary consultation. Obviously, lemmata are printed in bold face letters, items giving the translation equivalents are printed in roman type and examples and meaning explanations in the source language (French) are given in Italics.

Along with typographical structural markers non-typographical structural indicators are used to achieve a metacommunicative function. Commas are used to separate translation equivalents of the same polysemous sense of the lemma whereas semi-colons separate translation equivalents representing different polysemous senses of the lemma cf. Gouws (1999a:12).

As already mentioned, parentheses are used to give contextual information and labels. Both typographical and non-typographical structural indicators have the same **genuine purpose** (as explained by Wiegand, 1999:299) of assisting the potential user in retrieving the relevant information as quickly as possible. Unfortunately, they are not explicitly explained in the introductory part.

By looking at this data it seems that the dictionary is compiled for well-informed users with the necessary dictionary using skills. But since there is no meta-text or outer text advising the target reader how to use the dictionary, the well-devised microstructure of the dictionary is likely to be unknown to the user.

(15)

bien N. mbya. *Un homme de bien, om'ombya. Rendre le bien pour le mal, finize mbya go mbe. Le bien public, mbya y'anaga waodu. (Richesse) tous ses biens, aniv'imè modu, sik'iyèyodu. Le bien d'autrui, ya yi ngani.*

ADV. mbyambye, kwèkwè. *Tu as bien agi, o denda mbyambye, o denda kwèkwè. Très bien, mbyambye polo. Mon fardeau est bien lourd, irwano ñami ñ'adiri polo. Bien des gens, anag'awenge, ntango anaga. Il y a bien*

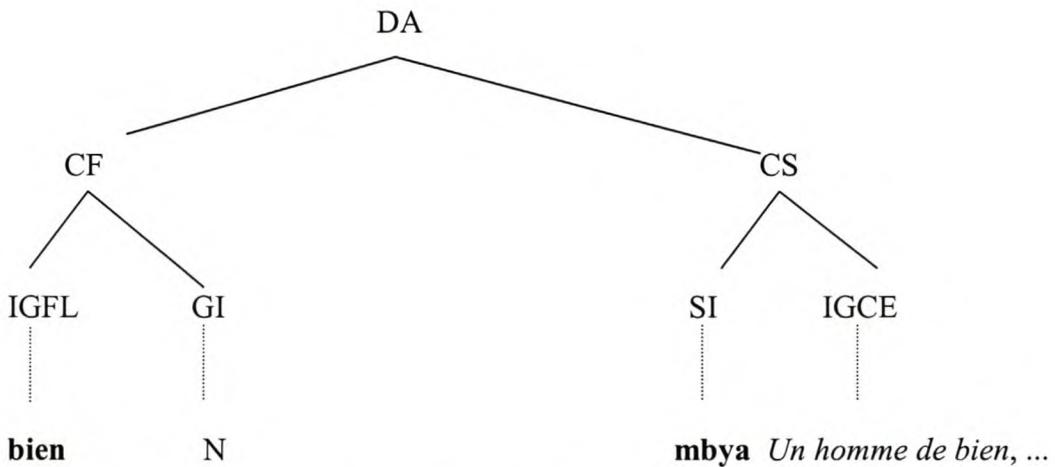
un an, atweni ga ompuâ. Tout va bien, zel'osamû. Ou bien, ntsó.

L. CONJ. *bien que, wanga go re, wanga go. Bien qu'il soit jeune, wanga go re yè omwango. Bien qu'il pleuve, wanga go nóge ningo.*

INTERJ. *hé bien! qu'en dis-tu? o buya sè rèti ! Eh bien ! soit, mbuku !*

Text example 15: Article **bien** (from DFM, 1995:46)

Bien is a lemma representing several parts of speech (it can be used as a noun, an adverb, a conjunction and an interjection) and different senses. The following represents a partial, annotated structural graph of the article in question.



Abbreviations: DA (dictionary article); IGFL (Item giving the form of the lemma); GI (Grammatical item); SI (Semantic item); IGCE (Item giving the competence example).

Figure 1: A partial, annotated structural graph of the article of the lemma bien.

The interesting fact to be mentioned here is that target language examples (in italics) display a non-lemmatic addressing. In other words, they are not addressed at the lemma but at the source language competence examples. Thus the latter become treatment units within the article. Furthermore, the user-perspective dominates the system applied in the dictionary, as far as this article is concerned. In fact apart from abbreviations for the word classes (e.g. "N", "ADV", and so on), the compiler does not make use of textual condensation devices that consist of decreasing the data types in order to save

space, cf. Gouws & Prinsloo (1997:51-55). Employing a textual condensation approach, the lexicographer would have used the tilde (~) or the hyphen (-) to substitute the lemma in the illustrative examples. By avoiding textual condensation procedures, in the treatment of this specific article, the compiler has taken into account the needs and reference skills of the potential user of the dictionary (high school pupils, students, scholars and learners). Compare to “the Galley”, plant names¹ are not fully dealt with in Raponda-Walker’s dictionary.

1.2.4.2.3. Concluding remarks

Like the previous dictionary under discussion in this section, Raponda Walter's work has failed to give an indication of its secondary sources. Although the dictionary contains lemmata from various fields, the lexicographer does not mention on which ground the selection of macrostructural elements took place. The dictionary displays a well-devised microstructure with a Mpongwe speaker in mind. The use of contextual entries, typographical and non-typographical structural markers, largely predictable, has improved the quality of the dictionary. However, no explanation of this well-devised structure can be found in the instruction book and the compiler also fails to give an account of the needs of the target users of the dictionary as well as their reference skills. In what follows, a brief account is given of the lexicographic processes.

1. Plant names have received a comprehensive treatment in *Les plantes utiles du Gabon* (1961) a book that Raponda-Walker wrote in collaboration with Sillans. This work gives an impressive picture of the names and uses of plants of Gabon. Some 8000 indigenous plant names, collected over a period of thirty years, as well as their scientific names and usage are listed. Apart from the introduction dealing with the primary, secondary and tertiary sources of the work, a survey of earlier works on Gabonese flora is also given in chapter 1 of the book. Chapter 2 deals with the history, taxonomy, distribution, soil types, as well as habitat and to a lesser degree some aspects of cultivation. In the introductory section of chapter 3, general uses of plants are discussed in a very funny and anecdotic way. Then plant names appear under their genus in alphabetical order. Each article is presented in three sections. The first section deals with the description of the plant listed. The second section deals with uses. And in the third section the user is provided with a list of indigenous names in some 21-speech forms. The book is abundantly illustrated by 53 painting by Sillans.

1.3. Lexicographic processes

In Wiegand (1998)'s view, lexicographic processes refer to all the activities leading to the compilation and publication of a specific dictionary. As far as the South African situation is concerned, Gouws (1999b:7-10) states that all the work done by the Pan South African Language Board (PanSALB) in establishing National Lexicographic Units (NLU) for each one of the eleven official languages is part of the **primary comprehensive lexicographic process**. In contrast to this approach, any research project within each one of the NLU falls within the scope of the **secondary comprehensive lexicographic process**. As far as Yilumbu is concerned, the planned trilingual dictionary is part of the **secondary comprehensive lexicographic process**. In the same way any future decision of the Gabonese government regarding the establishment of dictionary units for pre-selected Gabonese speech forms will be part of the **primary comprehensive lexicographic process**.

Wiegand (1984:13-30) identifies four constituent theories, namely: a general section (also known as constituent theory A), a theory of organization (also referred to as constituent theory B), a theory of lexicographic research on language (also called constituent theory C) and a theory of lexicographic description of the language (also referred to as constituent theory D). These constituent theories are further divided into different components.

Constituent theory A consists of three components, namely the **purposes of dictionaries**, the **relation of lexicography to other theories** and the **history of lexicography**. The component **purpose of dictionaries** is at the center of the interaction between dictionaries and society. Dictionaries are compiled so that they can be used. Thus purposes of dictionaries should always be identified in accordance with the needs and reference skills of the specific target user group. The component **other theories** links to the various fields from which lexicography has borrowed some of its methods and theories in order to establish itself as a discipline in its own right. The component **history of lexicography** deals with the development of the discipline from

the discovery of the first Sumerian and Akkadian word lists to the latest theoretical findings in the field, cf. Gouws (1991:1).

Constituent theory B deals with the dictionary plan, which consists of two components, namely **the organization plan** and **the dictionary conceptualization plan**. The organizational plan clearly states the mission of the dictionary project and gives a detailed discussion of all the structures involved in the preparation of a dictionary as well as an estimate of the time and capital needed for the project. The dictionary conceptualization plan has to make provision for all the data categories to be included in the dictionary as well as the structure of the dictionary.

The constituent theory C consists of three components, namely the theory of lexicographic data collection, theory of data processing and the theory of computer assistance. It is a well-attested fact that the compilation of any dictionary is practically impossible without an authoritative database. Thus it is important for the lexicographer to undertake all the lexicographic activities leading to the constitution of a **dictionary basis**. In Wiegand's view (1984:14), a dictionary basis is "(...) the complete linguistic material forming the empirical basis for the production of a language dictionary (...)". Moreover, a distinction is made between primary, secondary and tertiary sources. The primary sources of a dictionary usually consist of texts. However, recordings of the orature can also be used as primary sources also referred to as the lexicographic corpus of a dictionary. Secondary sources comprise all the dictionaries consulted during the compilation phase. Tertiary sources are all the reference works used by the lexicographer to address grammatical issues regarding the language dealt with, cf. Wiegand and Kučera (1981:100ff) and Gouws (1999b:16). As far as oral sources are concerned, research has to be conducted at grassroots level through fieldwork. For the sake of representativeness and for the quality of language data, field workers should be well equipped with recording material and their set of questionnaires should cover a wide range of subjects. Once the information is captured, transcripts of conversations, dialogues or interviews have to be computerized in the form of a database (also known as lexicographic files), which links to the theories of data processing and computer assistance.

With regard to this aspect, Wiegand (1984) has pointed out that:

The subject area of a theory of the lexicographic description of language is the class of all the presentations of the results of linguistic lexicography as texts about language. These include first and foremost language dictionaries, but also word indexes, concordances and glossaries. The theory of the lexicographic description of language has two components. The first component consists of a dictionary typology and its rationale. This is a major component of the general theory of lexicography, since many of the statements in this theory have to be formulated relative to typology (Wiegand, 1984:16-17).

1. 4. Dictionary basis of the planned dictionary

In order to test the model developed in this research, decisions had to be taken regarding the dictionary basis of the planned dictionary.

1.4.1. Primary sources

A good theory forms the basis for the compilation of a good dictionary. However, the data presented in the dictionary's articles is as important as the theory. Because the theory must always be linked with the practical aspect (cf. Gouws 1996a:97) the decision was taken to collect data for this project from both oral and written sources. The corpus collected so far will serve as a basis to address metalexicographic issues in Yilumbu. Obviously, the final goal is to have an authoritative databank that can warrant the eventual compilation of a dictionary.

- Oral sources

Fieldwork on spoken language was undertaken on three occasions, June 1995-September 1996, June 1996 – September 1996 and June 1997 - September 1997. This research was done in Mayumba (3°23'S, 10°38'E) and Gamba (2°32'S, 9°46'E) in Gabon.

- Technique of collecting material

The materials used in this work were collected as audio recordings and transcriptions. Audio recording is based on both the questionnaire of Tervuren, for isolated words, and on the questionnaire of WELMERS for contextual information (cf. Doneux 1967). From

ongoing research work, the corpus is based on forty-four audiocassettes (comprising a set of 36 one-hour cassettes and another 8 one-and-half hour cassettes), which represent words, sentences, songs, stories and proverbs in Yilumbu. Eleven of these cassettes have been transcribed and partially computerised. For the transcriptions we used the *Alphabet Scientifique des langues Gabonaises* (ASG, 1990).

The data corpus collected so far has been the object of a frequency study conducted at the Bureau of the WAT. This corpus, totalling 35,660 words and their concordances, was the source of data so that the model could be tested.

1.4.2. Secondary sources

Acknowledgement is made of information obtained from the following publications:

J. Pearsall (Ed.): *Concise Oxford Dictionary*, Oxford: Oxford University Press, 1999¹⁰.

Paul Robert: *Petit Robert*, Paris, 1976.

A. Raponda-Walker and R. Sillans: *Les plantes utiles du Gabon*, Paris, 1961.

The next section gives an account of the tertiary sources of the planned dictionary.

1.4.3. Tertiary sources

Yilumbu like the majority of African languages does not have a strong written tradition. However, some works do exist in Yilumbu and they deal with religious, pedagogical and scientific literature. The literature on religion includes the works done by GARNIER and MURARD. GARNIER is the author of three books based on the dialect which is spoken in the Nyanga province, Banio lagoon, namely: *katesisa igheghe nesi malonghi ma dzambi mu mbembu i-lumbu* (1897); *Syllabaire i-lumbu keti miganda mio mi teti mi uranganga mu mbembu i-lumbu* (1900) and *M'ambu ma nzambi mo make mu katesisa* (1904). Contrary to Garnier's work, Murard's books: *Katsisu ikeki irendulu mu mbembu bis' Setté-cama* and *Katsisu i neni irendulu mu mbembu bis' Setté-cama* (1903) are based on the dialect spoken in the Ogooue-Maritime province (cantons of Ndugu and Low-Nyanga). Scientific literature includes the works of Blanchon-1989-*"Présentation du yilumbu dans ses rapports avec le yi-punu et le ci-vili â travers un conte traditionnel"* and Emejulu & Pambo-Loueya-1990-*"yilumbu."*

Those works which, contain a lot of information regarding the lexicon of Yilumbu as well as a brief outline of its grammar (especially the last two mentioned above) have been used as a starting point. As far as tertiary sources are concerned, it is also important to mention that some findings of Nsuka Nkutsi¹ (1980) have been taken into consideration to avoid overlapping and duplication of work. Gouws (1996a) rightly argues:

In the planning of linguistic dictionaries the emphasis should be on the needs of individual languages, but the development within these languages may not be done in isolation. Planning should make provision for joint projects and for different languages to benefit from research on problematic areas of general interest (Gouws, 1996a:99).

This approach has a lot of implications as far as lexicographic processes are concerned. As already mentioned, lexicographic processes refer to all the activities leading to the compilation of a specific dictionary. To cope successfully with the challenges of any multilingual and multicultural country, the so-called hub-and-spoke model has been proposed by the Dutch lexicographer Willy Martin. Gouws (1999b) explains that:

The hub and spoke model has been inspired by the system followed by domestic airlines in the USA where these airlines have a basis airport and from that basis they fly to a number of other airports. All flights between the other airports, the spokes, have to go via this basis, the hub (Gouws, 1999b:69-71).

According to Gouws (Op. cit. p 69), the first phase of the hub-and-spoke model leads to the situation where all the spoke languages are paired with the hub language while in the second phase all the spoke languages are co-ordinated with one another. As it will clearly appear in the survey of lexicographic activities in Gabon, most existing works are bridging dictionaries between Gabonese languages (spokes) and French, the official language (hub). Thus they fall within the domain of the first phase of a hub-and-spoke model.

1. Nsuka kutsi (1980) presents an overview of Yipunu grammar. Guthrie (1953) classifies Yipunu as B.43 which falls in the same language group (the so-called Sira-Punu group) as Ghisira (B.41), Yisangu (B.42) and Yilumbu (B.44).

For future research works, the focus should also be on the second phase. With regard to this point, Kwenzi-Mikala's internal classification offers an ideal theoretical platform for establishing National Lexicographic Units. Since language planning is still a sensitive matter in Gabon, the hub-and-spoke model may be of particular interest for language policy makers. At present, French is the official language of Gabon and Gabonese languages primarily function on regional level without any official status. Employing the hub-and-spoke model for language groups such as Mazuna and Myene, the major challenge facing language policy makers will be the choice of the two dialects to stand for Fan and Omyene languages respectively. Once an agreement is reached (the available literature within the dialect may be one of the criteria to make the decision), subsidies from the government will be allocated to the Fan and Omyene lexicographic units to compile and publish a monolingual dictionary in the respective pre-selected dialects. For the other dialects, the compilation of say a multidialectal dictionary may be the solution. The situation is different in a language group like Merye where dialectal boundaries are not established yet. Suppose, for example, that Yipunu is accepted as the official language within this group, and then a Yipunu monolingual dictionary may be compiled while the other speech forms could be co-ordinated with one another forming a hub-and-spoke configuration through the compilation of lexicons (cf. Martin 1996:21). The same principle could also be applied within the other language groups where dialectal issues have yet to be addressed. Whatever the language policy chosen, it is likely to encounter stiff resistance from the local communities because of ethnocentric reasons.

1. 5. Dictionary typology

In this section, the focus will be on the features of the most important types of dictionaries. A detailed discussion can be found in Zgusta (1971) and Gouws (1989: 65-72).

In devising dictionary typology Zgusta firstly makes a distinction between **encyclopedias** and **linguistic dictionaries**. Encyclopedic dictionaries are huge reference works, which aim to present data as comprehensively as possible. Thus they usually concentrate on extra-linguistic features rather than on the meaning of lexical items. In contrast to this approach, the emphasis of linguistic dictionaries is on the

presentation of the meaning and distinctions in meanings (where such exist) of the treatment units. As far as linguistic dictionaries are concerned, Gouws (1999b) emphasizes that one has to make a distinction between general and restricted dictionaries:

The term **general dictionary** is an opposite of the term **restricted dictionary** and refers to dictionaries dealing with a broad selection of lexical items, i.e. not only items taken from one specific field, and it offers a treatment aimed at different linguistic and pragmatic features of the lexical items in question (Gouws 1999b:31).

On the ground of Saussurean findings, diachronic dictionaries are concerned with the study of the changes that a particular lexical item undergoes through a given period of time, whereas synchronic dictionaries concentrate on the description of a given lexeme at a specific stage of the development of a given language. Within diachronic dictionaries, a sub-typological diversity prevails between historical dictionaries and etymological dictionaries (both general and restricted). In the category of synchronic dictionaries, a distinction can be made between monolingual (often called explanatory or descriptive dictionaries) and translation dictionaries¹ (including bilingual, trilingual and other multilingual dictionaries). Moreover, “the category of descriptive monolingual dictionaries can be divided into four subcategories, i.e. **comprehensive dictionaries, standard dictionaries, desk/college dictionaries and pedagogical dictionaries**”, cf. Gouws (1999b:32). On the ground of the above-mentioned distinction between general and restricted dictionaries, comprehensive dictionaries as well as standard, desk/college and pedagogical dictionaries belong to the category of general dictionaries, whereas a dictionary of pronunciation for example falls within the domain of restricted dictionaries. Finally, pedagogical dictionaries are divided into school and learner’s dictionaries.

1. 6. Typology of the planned dictionary

The compilation of a dictionary may be a long-term and costly process. On the one hand, the Gabonese government is willing to support any project for the production of

¹ Here a translation dictionary is defined as a lexicographic work in which translation equivalents can be found.

educational materials in national languages. On the other hand, some scholars (cf. Kromann, Riiber and Rosbach 1984a, 1984b) have suggested, on the ground of the active-passive principle, that for any given language pair the ideal situation would necessitate the compilation of at least four or even eight bilingual dictionaries. In comparison with the number of Gabonese speech forms (62) there is little chance that the government will sponsor the production of more than one dictionary per speech form. These extra-linguistic factors should lead one to compile a poly-functional dictionary. This concept of poly-functionality has not been applied consistently in any dictionary yet (cf. Wiegand 1996:XV). It compels the lexicographer to present the data in the dictionary in such a way that the intended target user may be in the position to perform both the decoding and encoding function of the dictionary. Furthermore, Gouws (1999b) has emphasized the fact that:

A poly-functional dictionary has to adhere to certain structural norms. It should be poly-accessible and should display a semi-integrated microstructure...(Gouws, 1999b: 37).

The model of the **planned dictionary** will suggest a **typological hybrid** (cf. Gouws 1999b: 39) in the sense that it will have features of translation and monolingual dictionaries. As far as monolingual features are concerned, the model will propose a dictionary that will provide the user with a brief paraphrase of meaning of the lemma in the source language (Yilumbu). This paraphrase of meaning can later be expanded for the compilation of a comprehensive version of the dictionary. The low-density orientated microstructure will give the work the features of a pedagogical dictionary. In other words, by presenting the data as explicit as possible the **planned dictionary** could be used by high school pupils, students and learners. It will have translation features because, where necessary, lemmata will be supplied with translation equivalents in English and French. With regard to the interaction between user's needs and dictionary typology, the planned dictionary will be a typological hybrid in the sense that it will also include special-field terms. This is relevant because at this stage no dictionary for special-field terms exists in Yilumbu. Moreover, there is no dictionary at all in the speech form. It will not only display features of special purpose dictionaries, but by including systematically multidialectal data (especially sub-dialect indications such as, "word in use in X village") the planned dictionary will have a pan-dialectal status, cf. Breedveld (1997:178). Finally, the inclusion of data regarding the

proto-Bantu reconstruction of the genuine Yilumbu lemmata as well as the source language items for Yilumbu loanwords will give the planned dictionary features of both historical and etymological dictionaries.

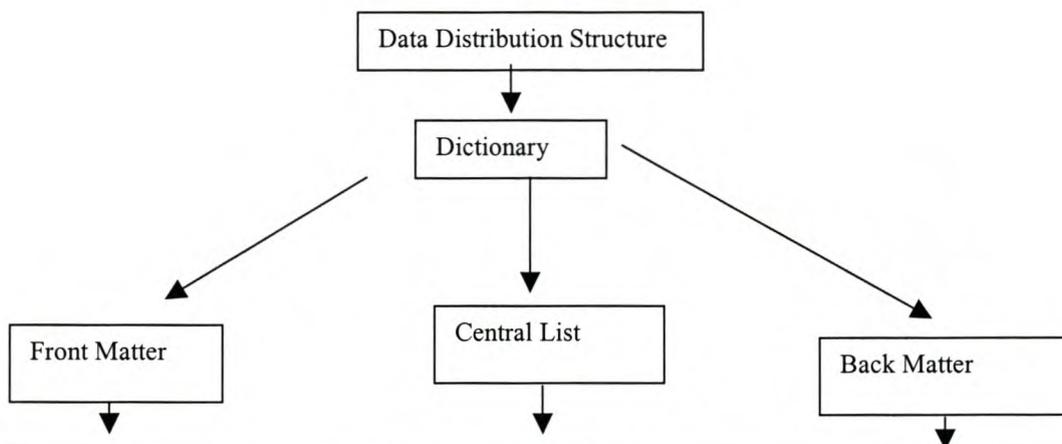
With respect to the concept of a textual approach, Kammerer and Wiegand (1998 as cited in Gouws, 2001:102) state that a dictionary can display a so-called **frame structure**. Dictionaries have to be regarded as **carriers of text types**. According Hausmann and Wiegand (1989:331), there are three major components in a dictionary, namely: the **front matter**, the **central list** and the **back matter**. The front and back matter sections both contain outer texts. They precede and follow the central list respectively.

In a dictionary, the Title page, the Table of Contents, the Preface, the List of Contributors, the User Guide, the List of Abbreviations, the Pronunciation Key, the Minigrammar or Dictionary Grammar, the Historical Development of the language, etc. are the typical texts to be included in the front matter. Similarly, back matter texts in dictionaries usually include the following: Index (List of words used in the dictionary), the List of irregular verb forms and Spelling Table. One may also find Number Table, Weights and Measure Tables, Table of Military Ranks, List of Geographical names, Nationalities and Languages, List of Proverbs and other Idiomatic Expression, etc.

As far as the above different texts and text types are concerned, it is important to mention the distinction drawn by Bergenholtz, Tarp and Wiegand (1999:1777-1778 as cited in Gouws, 2001:104) between integrated and non-integrated outer texts. An outer text is said to be integrated when it is in accordance with the genuine purpose of a specific dictionary. Texts containing the user's guidelines are widely regarded as highly valuable for users because they explicitly present data regarding the content and structures of a dictionary. Without this fundamental and compulsory text, even a dictionary having the world's best-ever produced micro-architecture will be of little use for its intended target users. However, the user's guidelines are usually regarded as non-integrated outer texts. Nevertheless, a users' guidelines text, especially when it helps with the presentation of data, may become an example of an integrated outer text.

It is part of our editorial policy to include abbreviations (abbreviations, symbols and labels used in the different Text Examples as well as abbreviations used in reference to dictionaries and lexica) as outer texts in the planned dictionary. By including these editorial abbreviations, the lexicographer is creating a mediostructural link between the different Text Examples in particular and the text containing these abbreviations and their respective full forms (cf. Gouws 1999c:7). Given the fact that these abbreviations are aimed at achieving the genuine purpose of the planned dictionary, they can therefore be regarded as integrated outer texts. The distinction between integrated and non-integrated outer texts is again discussed in the chapter dealing with outer texts in the frame structure.

Although the main focus in this dissertation is on the macro- and microstructure, the access structure, the addressing structure, and the mediostructure of the planned dictionary, some aspects regarding the data distribution structure will also receive attention. Below is an adapted version of Hausmann and Wiegand's (1989) visualization of the so-called frame structure:



Title page	Dictionary Article 1	Index
Table of contents	Dictionary Article 2	List of irregular verb forms
List of Contributors	Dictionary Article 3	Spelling Table
User Guide	Dictionary Article 4	Number Table
List of Abbreviations	Dictionary Article 5	Weights and Measure Tables
Pronunciation	Dictionary Article 6	Table of Military Ranks
Dictionary Grammar	Dictionary Article 7	List of Geographical names, Nationalities and Languages
Historical Development of the language	Dictionary Article n	List of Proverbs and other Idiomatic Expressions

Figure 2: Visualization of the so-called frame structure

The next section accounts for dictionary structures.

1.7. The structure of dictionaries

1.7.1. Introduction

Hausmann and Wiegand (1989) may be regarded as one of the most comprehensive documents on the structure of dictionaries. Although this article primarily focuses on the structure of monolingual dictionaries, it contains a lot of proposals that can also be applied to translation dictionaries. In this section, the focus will be on The Textual Book Structure and The Textual Word List Structure of dictionaries.

1. 7. 2. The Textual Book Structure

As already said, with respect to the concept of a textual approach Wiegand (1996) states that dictionaries have to be regarded as **carriers of texts**. There are three major components in a dictionary, namely: the **front matter**, **central list** and the **back matter**. The front and back matter sections both contain outer texts (cf. Hausmann & Wiegand 1989:331). They precede and follow the central list respectively, which leads to the so-called frame structure (cf. Gouws 1999b:41).

1. 7. 3. The Textual Word List Structure

The Textual Word List Structure or central list “consists of article stretches and each article stretch includes a variety of articles which function as texts in their own right” (cf. Gouws, 1999b:41). A dictionary article encompasses a variety of lexicographic data and displays a microstructure, an addressing structure, a mediostructure and a data distribution structure.

- **Macrostructure:** The macrostructure contains all the lemmata, i.e. the collection of lexical items that have been included as treatment units in the dictionary. Macrostructural elements are usually entered alphabetically thus they form part of the primary access structure of the dictionary. When looking up a word in the dictionary, the target reader firstly comes across the lemma sign (or single morphological form representing the total set of grammatical and morphological forms of the linguistic sign treated in the microstructure), (cf. Hausmann & Wiegand 1989:329 and 336). Often, the macrostructure of a dictionary runs parallel with the **outer access structure**. The macrostructure of the planned dictionary is discussed in chapter 5 of the dissertation.
- **Microstructure:** According to Hausmann & Wiegand (1989:340), the microstructure of a dictionary article is the total set of linearly ordered information items following the lemma. A more comprehensive discussion on the microstructure is given in chapter 6 of the dissertation.

- **Access structure:** “The search route followed by a user to reach a specific lemma sign or data category” (cf. Gouws, 1999:42). Hausmann & Wiegand (1989:329) mention that a dictionary may have several search routes, although it may only have one macrostructure. As far as the search path is concerned, Hausmann & Wiegand (1989:328-329) distinguish between the outer and the inner access structure. The outer search path proceeds vertically through the carriers of guiding elements (i.e. from A to Z) while the inner search path starts at the lemma and proceeds horizontally through the dictionary article, cf. Hausmann & Wiegand (1989:338). For more detailed information on the access structure see chapter 7.
- **Addressing structure:** “The way in which a form and information relating to that form are brought together is the addressing procedure” (Hausmann & Wiegand, 1989:328). A distinction is made between a **lemmatic addressing structure** and a **non-lemmatic addressing structure**. Where a particular entry is addressed at the lemma it represents a lemmatic addressing procedure while any addressing procedure between microstructural elements themselves falls within the domain of the non-lemmatic addressing structure, also known as **sub-addressing**, cf. Hausmann & Wiegand (1989:329). The Addressing structure is discussed in chapter 8.
- **Mediostructure:** It is according to Gouws (1999b):

The system of cross-referencing which leads a user from a reference position to reference address. The **article-internal cross-referencing** works within the boundaries of an article. The **article-external cross-referencing** refers a user to an entry in another article or other text in the dictionary (Gouws, 1999b:43).

It can be argued that in some mediostructural procedures, lexicographers often employ a system of textual condensation but all textual condensation devices do not necessarily include a system of cross-referencing. A more comprehensive account of the Mediostructure and textual condensation procedures are given in chapter 9.

1.8. General concluding remarks

In this chapter we have mainly attempted to give an overview of some aspects of Wiegand's General Theory of Lexicography as well as an outline of lexicographic activities in Gabon. When planning the secondary lexicographic processes of a given dictionary it is very important to evaluate existing dictionaries in the language or the society being described. When criticizing dictionaries, the lexicographer obviously seeks to discuss advantages and limitations of those dictionaries with a view to improve them. In the light of Gouws (1996a:100), after analyzing shortcomings in existing dictionaries, the lexicographer will do well to choose to compile a dictionary belonging to a typological category already represented in the language or the society described. Such an approach enables him/her to concentrate on devising a set of criteria in accordance with modern-day lexicography and metalexicography.

Chapter 2: User perspective

2.0. Introduction

Earlier Busane (1990:20) and more recently Nyangone Assam and Mavoungou (2000: 266) have pointed out that, where motives or purposes were explicitly stated earlier dictionaries in the African languages were compiled by European missionaries and colonial administrators for the benefit of their follow foreigners to serve as practical tools in the area of evangelization, trade and administration. As a result, they are characterized by a biased presentation in the sense that they only take into account the needs and reference skills of the Europeans. From the ongoing exposition, obviously there is a need for dictionaries aimed at a very specific target user. More specifically, there is a need for dictionaries serving the needs and reference skills of the African users. Apart from Grimes (1996), there are hardly any sociological user surveys that describe potential user groups, their needs and reference skills (linguistic competence, world view, etc.) for Gabonese languages. In order to determine the needs and reference skills of the user group at which a given dictionary project is aimed, the lexicographer, the metalexicalographer or the terminologist have at their disposal two instruments, namely: an internal needs assessment and an external needs assessment:

The internal needs assessment is usually done by a language bureau or language organization or publisher when the organization is not sure what needs people may have in terms of dictionary projects...During external needs assessment exercise, the lexicographer or language bureau already has a specific dictionary project in mind and now needs to collect specific information on the structure of the planned dictionary project, e.g. information regarding the macro structure, that is the typology, scope, source language, target language or target languages, target group, level of literacy of the target group, etc. (Alberts, 1997:9).

On internal level, the lexicographer as a judge is sometimes obliged to guess the potential needs and reference skills of the users. This is particularly relevant when one takes into account the fact that very often the users themselves do not know clearly, what their needs are. Hartmann (1989:103) has pointed out that there is no one-to-one match between the dictionary compilers' assumptions and the needs of the potential users. Thus, the aim of this section is to deduce certain facts from empirically acquired data in order to determine what provision should be made to satisfy the

needs and reference skills of the dictionary users. Before the compilation phase, an external investigation should be carried out to verify to what degree the recommendations are matched by actual expectations of the speech community.

Obviously, different user groups have different needs. Although, it is impossible to satisfy the needs of everyone, it is the lexicographer's responsibility to find ways of accommodating users. Therefore, cf. Hartmann (1989:104), the challenge facing the lexicographer is how to accommodate a wide range of needs and reference skills of the intended users in one single dictionary type. Another challenge is addressed by Whitcut (1986:111) who pointed out the dilemma facing the lexicographer as far the user is concerned: "We know who we are, but who are they?"

2.1. Target groups

Any dictionary project should clearly identify its target user prior to the compilation phase. The target users of the dictionary under discussion on the one hand range from senior high school pupils to academics that have Yilumbu as first language and a relative good command of French or English, and, on the other hand, pupils and scholars who are willing to improve or learn Yilumbu as a second language. Because there is a range of ability within these two main target groups, they can each again be subdivided into different subcategories. Within the category of senior high school pupils and academics, one will find people that have Yilumbu as their first language (in the sense that they are able to use Yilumbu successfully with only a little assistance), whereas others would clearly find major difficulties in understanding and speaking Yilumbu. They are the Balumbu and French dominates their linguistic performance. They have a passive knowledge of Yilumbu because it is the language of their parents but they are more proficient in French than in Yilumbu. This applies particularly to pupils and academics from urban areas. As far as this point is concerned and for quite a significant number of cases, French is the medium of communication in the homes and children are not exposed enough to Yilumbu. Given the fact that school is an extension of the home in education, children have very little chance to learn Yilumbu simply because at this stage the latter is not the medium of

instruction nor a school subject¹. Within the category of pupils and scholars who are willing to improve or learn Yilumbu as a second language there are several questions likely to arise:

- What is a learner²?
- Is the person willing to learn Yilumbu, a beginner, experienced or an advanced learner?
- What are the needs and reference skills of that learner?

To answer the first question, it can be said that the learner may be someone living in Gabon or abroad. These two potential learners will obviously have different needs and reference skills. In fact, the learner living in Gabon and the prime target group (senior high school pupils and academics) will have the same or many of the same references³. With the learner living abroad, the references (linguistic system, world view, etc.) may be different. This will require some attention on the part of the lexicographer as far as this particular area is concerned. The situation is likely to be complicated if one takes into account the fact that the potential learners will be both children and adults. With regard to the question of the level of foreign language (beginner, experienced or advanced learner) it can be said that the planned dictionary should be addressed at the beginner for essentially two reasons. Advanced learners usually get what they need in monolingual dictionaries. In fact, at this stage no monolingual dictionary exists in Yilumbu. Moreover, there is no dictionary at all in the speech form. The fact that Yilumbu is a language without a strong written tradition and that it is still in the process of standardization should be a motivation for directing the dictionary at the beginners. This choice is particularly relevant if one takes into account that a dictionary culture has yet to be established in the Gabonese speech communities. The needs and reference skills of the latter are fully addressed in the following section.

¹ The situation was even worse during the colonial era: on the ground of the French language assimilation policy, in public schools, pupils were not allowed to speak their vernacular language. Where they did speak it, they were identified as offenders and had to carry a symbol indicating their offence. The last to bear the symbol was unquestionably punished at the end of the day, cf. Kwenzi-Mikala (1990:123, translated by the author).

² I am indebted to Prof. S. Tarp for inspiring me in writing this section dealing with learner's lexicography. Personal discussions with him helped me to improve the content and presentation of this section.

³ This information comes from a class lecture of Prof. R.H. Gouws.

2.2 Needs and reference skills

Dictionary consultation has to be seen as a response to specific user questions or needs. According to Hartmann and James (1998:117) “The reference skills are the abilities required on the part of the dictionary user to find the information being sought”. It is a well-attested fact that any dictionary project has to take into account the needs and reference skills of the intended target user groups. Having said that, it should also be mentioned that one of the major problems in pedagogical lexicography is related to ascertaining the level of proficiency, which the user has in a specific language. Given the trilingual nature of the planned dictionary, it is worth emphasizing that in a multilingual situation the perfectly balanced equal competence in two or more languages is hardly ever possible. Apart from Balumbu speakers whose linguistic performance is dominated by French as referred to above, Yilumbu is the dominant language for most prospective users of the planned dictionary. Nevertheless when it comes to certain topics of conversation (topics related to specialized domains such as science and technology), French is the preferred language for most Balumbu speakers.

Many reasons and circumstances drive users to seek information in a dictionary. It is generally accepted that the average user often consults a dictionary to find information about the meaning of a lexical item. However, sometimes people do consult a dictionary to find out whether a given item exists or not or to determine its orthography. As far as this point is concerned, cf. Hausmann and Wiegand (1989:353), dictionary articles usually convey information about the comment on form (e.g. spelling and phonetic items) and the comment on semantics (e.g. monosemy or polysemy, meaning paraphrase). For example, an item giving the pronunciation of the lemma sign is part of the macrostructure, whereas items regarding the meaning of an item are microstructural data. Therefore, it is part of the duty of the lexicographer to guide the user regarding the presentation of data about pronunciation, compounds, derivations, affixes, idiomatic expressions, etc. The most pressing questions for the dictionary maker are (1) Where these different categories of lexicographic data should be included: in the central list or in the front and back matter texts? (2) Should all lexical items be listed in straight-alphabetical order or

should the compiler also make provision for a lemma-clustering arrangement. These questions will be fully addressed when referring to the data distribution structure and in the chapter dealing with the macrostructure respectively.

- **Concluding remarks**

The identification of the intended target user groups of the planned dictionary was the primary concern of the discussion above. The latter has also shown how tricky is the problem of ascertaining the level of proficiency, which the user has in a specific language. In fact it is a difficult task to accommodate a wide range of needs and reference skills of the intended users in one single dictionary type. The problem of the Balumbu prospective users whose linguistic performance is dominated by French has to be addressed:

1. By keeping the language alive at home as the first language.
2. By allowing for mother-tongue instruction in local schools both as medium and subject of instruction.

Mother-tongue instruction in particular is a major undertaking for Gabon. Proposals to be found in the section below should ideally be taken into account when introducing a component "dictionary using skills" at school's level that will equip users with the indispensable knowledge to use dictionaries as sources of reference.

2.3 The user perspective with special reference to the presentation of various data categories

2.3.1. Introduction

When working on a dictionary project the lexicographer has to ask himself/herself many questions: What is the best way to present grammatical and semantic data in the dictionary? On which ground should a data type be left out? What is the competence of the average user? When consulting the dictionary the user has to bear in mind that the dictionary will never answer all his/her questions. Before consulting any reference work, the dictionary user has to take cognizance of the introductory notes explaining how to use the work effectively. The typology and the target users of the dictionary

usually determine the type of information the user can expect to retrieve from the data presented. This is the only way to keep the user from having false expectations.

2.3.2. The presentation of various data categories

2.3.2.1. Phonetics

- **The problem**

In the critical analysis and evaluation of existing Gabonese dictionaries, it has been shown that the main weak point of those lexicographic works was the lack of tones in the written transcription of oral productions (cf. Nyangone Assam and Mavoungou 2000). These suprasegmental problems have to be solved in accordance with the needs and reference skills of the target users. It is well accepted that the transcription of African languages requires the use of special characters or symbols – usually drawn from the International Phonetic Alphabet or the "Africa Alphabet" – whose values will be apparent to specialists but are discussed here with special reference to the reference skills of the lower order of the potential target user groups.

- **Decision taken**

On the one hand, the fact that the potential target readers of the planned dictionary range from senior high school scholars to academics makes it possible for the compiler to include pronunciation as a data category in the dictionary. On the other hand, since there is no one-to-one correlation between the written form and the spoken word, the pronunciation is important for both L1 and L2 users of the planned dictionary. As a matter of fact, within the primary target user group, pupils and students attend schools and universities where foreign languages such as English, Spanish, German, Italian, Portuguese, Arabic, etc. are taught on third language level. For those pupils and students, a relative degree of familiarity with the International Phonetic Alphabet (IPA, revised to 1993, updated 1996) will be assumed. However because of the big difference between the sound systems of the African languages and those of the European languages, problems that are likely to arise in this particular area should be solved by introducing (i.e. in inserted inner texts or in the minigrammar) explanations on the specificities of the Alphabet scientifique des langues du Gabon (ASG) or the "Africa Alphabet" published by the International

African Institute (IAI). As far as this point is concerned, pronunciation has to give an account of both segmental and suprasegmental features. Supraphonemic features that include stress, intonation and tone indications are particularly relevant to the users because distinction in tone between homographs (words which have exactly the same spelling) usually result in a difference in meaning. Only the basic tone should be indicated and may help the L2 users to reproduce the Yilumbu sound system correctly. Furthermore, the incorporation of a (full or partial) phonetic transcription has another advantage: it would make a separate pronunciation dictionary superfluous, cf. Ponelis (1996:30).

- **Concluding remarks**

The decision to supply Yilumbu lemmata with a phonetic transcription merely results from the lexicographer's willingness to give an accurate picture of the pronunciation of the language. Phonetics transcriptions are needed in order to allow users to correctly reproduce the Yilumbu sound system without having to resort to a separate pronunciation dictionary. However, this should not be taken for granted because too often lexicographers' assumptions do not match with users' expectations. With regard to this point Crystal (1986) envisages the ideal users as follows:

Such users have been taught to understand dictionary conventions as a routine part of early education, starting in junior school...They know their transcription symbols...Playing with dictionaries for them is a leisure activity...(Crystal, 1986:79, as cited in Lombard 1994:206).

2.3.2.2. Morphology

- **The problem**

Another area where the lexicographer will have considerable problems incorporating the user perspective when compiling a dictionary is the presentation of morphological data. According to Tarp¹ learner's dictionaries have to fulfill three basic functions, namely: reception of the foreign language, production of the foreign language and assimilation of the foreign language system. In the critical analysis and evaluation of existing learner's dictionaries, Tarp says that some of these dictionaries too often fail to provide the learner with data regarding flexion, collocations, idioms, proverbs,

¹ I have obtained this information during a presentation by Prof. S. Tarp on the topic: "Towards a general theory of learner's lexicography" (University of Stellenbosch, 2001).

pronunciation, definition, etc. With regard to the three basic functions that any learner's dictionary should ideally fulfill it is highly questionable whether class number indications should be included. It is a well-attested fact that any morphological presentation for a given lexical item should be based on sound linguistic principles. However, the presentation of morphological data (indication of what are the prefix, the stem and the class number) for each lemma sign may be a bit complicated to understand for the learner at beginner's level (or even for the L1 speaker).

- **Decision taken**

- **With regard to the affixal system**

With regard to the affixal system, one of the solutions is to try to combine reference skills of both specialists and laypersons (the average member of the speech community). To achieve such an option, the lexicographer will have to compile the dictionary focusing on the reference skills of the lower order of the users¹.

As a matter of fact, the value of class numbers will be apparent to specialists but of a very limited use to uninformed users. The lexicographer's dilemma may be found in Gouws' (1990) comment:

By restricting the linguistic scope of the dictionary the lexicographer also restricts its value as a linguistic tool, because there is less information to be exploited by the user Gouws, 1990:55).

Bennett's viewpoint (1986) with regard to the problem involved is also worth quoting:

If items are alphabetized by prefix, some sectors are overcrowded and others nearly empty, and a verb will be listed far from its nominal derivatives, however transparent these may be. In the case of nouns, singular and plural differ in prefix in most cases, the degree to which singular may be predicted given the plural and vice versa varies, but there is nowhere complete predictability (Bennett 1986:3-4).

As it clearly appears above, if a lexicographer chooses only to present the singular or the plural form for each lemma sign there is no guarantee that the user will be able to reconstruct the plural form given the singular or vice versa. It is part of our editorial

¹ This information comes from a class lecture of Prof. R.H. Gouws.

policy not to drop the prefix because of all the attendant morphological problems. Given the fact that most morphological data will be of direct use for specialists, the decision to enter nouns under their complete form followed by their stems, their class numbers, etc. merely results from the lexicographer's willingness to give an accurate picture of the morphology of the language. With regard to stem and class number indications maybe the best way to arrive at a user-friendly dictionary will be to include these data categories in parenthesis. This is relevant because the parentheses will be used to indicate the facultative parts of the data on the comment on form. This is clear from the following example:

(16)

diwééla, ma (+ **wééla**) [diwéé́lǎ̀/màwéé́lǎ̀] *n.* (cl.5/6) < *-kúéd-....

Sometimes, dictionary makers expect too much knowledge from the users as far as morphological data is concerned, cf. Prinsloo (1992:187). The target user is not supposed to be well informed about the affixal system of the language. Even if one does include a minigrammar explaining to the user the whole idea of the derivation in the language, cross-references from the article to the minigrammar should also be entered, turning the minigrammar into an integrated outer text. This is relevant because, cf. Busane (1990:28), the dictionary users are known to allocate very little time to the reading of the grammatical outlines of the language as well as other outer texts. By both decomposing derivatives into their constituent parts and cross-referring the user to the minigrammar of the dictionary, the lexicographer adopts a user-driven approach. Although the literate Yilumbu speech community has access to a comprehensive and sophisticated collection of dictionaries in French it is assumed that people do not have the necessary expertise to use dictionaries as sources of reference. Once affixes (prefixes, infixes and suffixes) have been isolated from their roots it is much easier for the user to disambiguate the sense of each lexical item treated. A dictionary culture has to be established and one of the best ways to do so is to include in the user's guidelines an explanation of the structure of the dictionary as well as the different data categories presented.

➤ **With regard to lemma-clustering arrangement**

With regard to the arrangement of lemmata, derivatives formed by prefixation such as dúvínú ‘hate’ (cf. uvína ‘to hate’) or dinóghu ‘dew’ (cf. unógha ‘to rain’) can easily be given lemma status. But it may be appropriate to include derivatives formed by suffixation such as ubókísa ‘cause to die’ and ubókasána ‘to kill each other’ (cf. ubóka ‘to kill’) and compounds such as má keki ‘little mother’ and ma kãtsi ‘uncle’ in a sinuous lemma file. Whatever the decision taken, derivatives should be decomposed into monomorphemic units. This gives a better route to get the needed information. So it is part of the access structure of the planned dictionary. This principle is illustrated in the following:

(17)

ubókísa u + bok + is + a
 pf. cl. 15 root causative finale
ubókasána u + bok + asan¹ + a
 pf. cl. 15 root reciprocal finale

However this implies a bias towards prefixation. In fact as it will be seen in the next section as well as in chapter 5, it is usually claimed that the adoption of the word tradition causes some sectors of the dictionary to be overcrowded and others nearly empty. This is especially true of certain data categories such as verbs, adjectives, possessives and so on. The solution to this problem may be found in the combination of features of both the word and the stem traditions. For example, De Schryver and Prinsloo (2000:9) have pointed out that in the *Lexicon Cilubà-Nederlands* (1997, henceforth LNC) verbs are lemmatized in the imperative as it clearly appears in the following example:

¹ As far as the lexical item *ubókasána* is concerned, it may be necessary to posit a compound monomorphemic unit, namely: -asan- in which the simple extension -an- is the reciprocal. With regard to this point, Fontaney (1980:66, translated by the author) has explained that perhaps /-asan-/ represents [-is- - an-]. This vowel /i/ could have been assimilated by the sequence /a+ a/. It should be noted that /u/ is not subject to such an assimilation.

(18)

-dyà [tww; cf **spw3, 5**] *eten*; ~
kuukuta [ud] *eten en verpaidig z* ►
bidyà; cidilu; cyàkudyà; -dìika; -
dìikiibwa; -dìila; -dìisha; mudì;
Mudiila-mpiku

Text example 18: Article **-dyà** (from LCN as cited in De Schryver and Prinsloo, 2000:9)

According to De Schryver and Prinsloo (2000:9) “(it is) a rather traditional approach, as bringing all the verbs together under **ku/kw** would only result in an artificial overcrowding of one particular lexicon-section”. Following the LNC but rather differently, in the *Pukuntšuthaloši ya Sesotho sa Leboa 1.0 (PyaSsaL's First Parallel Dictionary, 2001)* verbs are entered under their complete form whereas adverbs are lemmatized according to the stem tradition. Compare the following example as an illustration:

(19)

-nanalana *lehlaodi* BONA **-nalana**

Text example 19: Article **-nanalana** (from PyaSsaL 2001:37)

An aspect of the article worth emphasizing is that after the treatment unit **-nanalana** (without its class prefix **ku-**), the user is provided with the word class or part of speech to which the lemma belongs (*lehlaodi* = adverb) before he/she is referred to a related lemma (**-nalana**). The entries (BONA = see) and (**-nalana**) constitute two different text segments. The first one is referred to as the reference marker because its role is to indicate the reference relation. The second text segment is referred to as the entry marking the reference address.

- **Concluding remarks**

From the discussion above, it appears that the arrangement of lemmata remains a debate among various "Bantuist" lexicographers. In keeping with the user-perspective, the word tradition should be preferred to the stem tradition (see also

chapter 3 and chapter 5 for more detailed information with regard to this aspect). With regard to lemma-clustering ordering, it should be emphasized that nested and niched arrangements usually add to the problem in multilingual dictionaries. Provision for the inclusion of lexical items in a sinuous lemma file has to be made with great care. These aspects are once again discussed in subsequent sections in this chapter as well as in the chapter dealing with the macrostructure.

2.3.3. Semantics

- **The problem**

According to Gouws (1990:56) and Hausmann (1981:73) it has been proven that both monolingual and translation dictionaries usually display a semantic bias. This is detrimental to the user of a dictionary. Gouws (1990) has argued convincingly that a balance should always be maintained between encyclopedic data in dictionaries and linguistic data. That is to say that all information types have to be treated alike.

The emphasis of monolingual dictionaries is on the presentation of the meaning and distinctions in meanings (where such exist) of the treatment units. In contrast to this approach, translation dictionaries aim to coordinate source and target language forms. Thus, they usually concentrate on translation equivalents rather than on the explanation of the meaning of lexical items. According to Al-Kasimi (1977:36), the users predominantly consult a dictionary to find out about the meaning of a given lexical item. This has many implications for user expectations. In fact, the absence of a particular data category that the may expect from a specific dictionary could lead to a situation of frustration.

- **Decisions taken**

- **With regard to the meaning**

The fact that no Yilumbu dictionary exists at this stage could lead to a situation of frustration within the Yilumbu speech community that urgently needs to be empowered. The best way to empower the users of the speech community is to make provision for the incorporation of a short paraphrase of meaning of each lemma in the source language giving the dictionary a hybrid character. Furthermore, African

languages are known to be more expressive in the domain of the concrete than in the field of the abstract. The inclusion of items from special languages in the planned dictionary may help the development of the speech form on the level of the abstract, so that it becomes as suitable as English or French for example. In other words, the formulation of paraphrase of meaning entries or short explanations in the mother-tongue of the target users may serve as vehicles of conceptualization and possibly also as a starting point for technical communication in the vernaculars of the people of Gabon, cf. Carstens (1997:3). It is believed that the inclusion of lexical items from the fields of astronomy, agriculture, fishing, hunting and traditional pharmacopoeia could contribute towards improving the user's proficiency for these specific subject-fields. The inclusion of a short explanation of the meaning also has a lot of implications for the choice of the metalanguage of the planned dictionary (see section 2.3.8 for more detailed information).

➤ **With regard to the order of senses**

In the light of Al-Kasimi (1977:36), users mostly consult a dictionary to find the meaning of a word and because of the time pressure they usually stop their search at the first sense. This is likely to cause problems to the users because in the article of a polysemic lemma the different distinctions in meaning are not arranged arbitrarily. For example, in a historical dictionary – focusing on the principle of **primary and secondary polysemic values** – distinctions in meaning are ordered chronologically from the oldest sense to the most recent sense. The user of such a dictionary is then obliged to work through the entire dictionary article before finding out about the present situation, a time consuming task that is hardly ever undertaken by most users, cf. WAT (1999:17-18). The arrangement according to primary and secondary distinctions in meaning is sometimes used in combination with the so-called division into **conjunctive** and **disjunctive** distinction in meaning. The conjunctive distinction in meaning of a particular lexical item – that is its literal polysemic value(s) – is regarded as the primary value and placed first followed by the disjunctive values or metaphorical distinctions in meaning. Finally, senses might also be ordered according to the **principle of empirical arrangement**. Such an arrangement makes provision for the inclusion of the different distinctions in meaning on the basis of the frequency of their use and the register in which they are used. As far as a frequency count is

concerned, the highest usage frequency distinction in meaning comes first in the list, followed by the less frequent ones. As far as register is concerned, distinctions in meaning are arranged on the grounds of whether they are "generally used", "colloquial language", "archaic or obsolete form", etc. For example, the most generally used distinction in meaning of a given item should always make it first into the list before its archaic distinctions in meaning. However, this principle of empirical arrangement is problematic and therefore less reliable because of its strong dependence on the intuition of the lexicographer, cf. WAT (1999:18-20).

All these remarks have led to the well-attested fact that the user perspective is one of the areas that really need to be treated with a lot of attention. When looking at the way people use dictionaries, there are three striking facts: (i) users hardly spend time in reading prefatory matters, cf. Busane (1990:28); (ii) users mostly consult a dictionary to find out about the meaning, cf. Al-Kasimi (1977:36) and curiously this "definition search is to verify an existing intuition about the meaning, not to acquire new information". That is to say that often people consult dictionaries for meanings that they already know; (iii) users mostly consult dictionaries to check spelling and to find synonyms, cf. Greenbaum et al. (1984) and Cowie (1987)¹.

With regard to the variety of dictionary typologies as well as their structures and the way people use dictionaries, dictionary users have to be made aware of the different ways in which lexicographical data are presented in a dictionary. In the case of the treatment of lemma signs representing polysemous lexical items, the user has to be made aware of the fact that he/she should not stop his/her search at the first sense that is presented but should rather check the following entries until he/she finds the desired meaning. By making use of symbols or structural markers, the boundaries of each sense can be clearly perceived by the user. Even better, with reference to Wiegand's (1996d) concept of micro-architecture, the presentation of each data type should start on a new line. Such a foundation could greatly improve the access structure of the dictionary. This can only be achieved in two ways. Firstly by reflecting on the structure of the planned dictionary in the compulsory users' guide that has to be regarded as a prerequisite for successful dictionary use. Secondly by

¹ This information comes from Nyangone Assam Blanche. She is currently undertaking a doctoral dissertation at the University of Stellenbosch on a bilingual dictionary Fang-French with special reference to the user-perspective.

introducing a component "dictionary using skills" at school's level that will equip users with the necessary expertise to use dictionaries as sources of reference.

- **Concluding remarks**

Although translation dictionaries primarily focus on the coordination of source and target language forms, the planned dictionary should also consider the many ways lexicographers utilize to convey semantic information in monolingual dictionaries. Given its hybrid nature the planned dictionary should provide the user with paraphrases of meaning in the source language. The discussion above also clearly shows that problems such as the presentation of entries (organization of different senses in the case of the treatment of lemma signs representing polysemous items) should not be done on a random basis but according to fixed criteria accounted for in the compulsory target users' text.

2.3.4. Borrowing

- **The problem**

The treatment of loans in translation dictionaries usually provides the user with data categories regarding the donor language as well as some examples. These data types are useful for the dictionary users but not sufficient because there is less information to be exploited by the user. As a matter of fact, a dictionary has to reflect as much as the lexicon of a particular language as the typological restrictions allow. In other words, it has to give an account of both the linguistic aspects (phonetics, phonology, morphology, semantics, etc.) of the treated lexical items and their underlying cultural value.

- **Decision taken**

The presentation of loanwords in a dictionary requires both a linguistic and a sociolinguistic approach. The linguistic analysis does not only deal with the phonological and morphological features of the borrowed word but should also give an account of its co-text or syntactical environment, while its context or pragmatic environment can be reflected on via the sociolinguistic description.

The treatment of the lemma **dikása** as it occurs in (19) may be of a limited value for the potential user because immediately after the item giving the form of the lemma

sign; the noun class number and the phonetic item appear. Then the user is provided with two supplementary entries: the item giving the donor language and a relevant example in the source language as well as the translation equivalents in the target languages.

(20)

dikása cl. 5 [dikásə], Mp. Atsiwēnda o dikása = He went to the market = Il est allé au marché.

Contrary to the system followed in (20), the treatment should also reflect on the cultural background of the lemma. This can be achieved in two ways. First, the lexicographer can give an account of the sociolinguistic context of the lexical item being treated by making use of an inserted inner text, cf. Gouws (1999b:70).

(21)

Ikasa, primitivement pont, jetée, a pris ultérieurement la signification de marché public, parce que le premier marché établi dans la colonie était installé sur la jetée de Libreville ‘*Ikasa*, originally bridge, breakwater, has become market because of the fact that the first market opened in the colony was situated on the breakwater of Libreville’ (A. Raponda-Walker: *Les langues du Gabon*, 1998, 148).

Then the linguistic analysis of the loanword can be reflected on via an integrated outer text included somewhere in the frame structure of the dictionary.

This is particularly relevant because a dictionary always has space limitations. The compulsory user’s guidelines should give an account of such a text which may contain the history and processes of borrowing from Portuguese, English, French, etc. as well as the way it should be dealt with in the dictionary (Mavoungou 2002, to appear). This is significant because educationists and language purists tend to disprove the use of borrowed words (especially those that have retained a large number of their original phonological features). However, in the field of sociolinguistics borrowing as well as code-switching/mixing procedures play a natural role in language changes. A text giving an account of the history and process of borrowing may help the L1 speakers not to be reluctant to use loanwords. In a

multilingual environment, language contact is a daily reality, which necessarily results in borrowing.

- **Concluding remarks**

As far as the treatment of borrowing is concerned, a linguistic and sociolinguistic approach for this category of lexical items has been suggested above. It is a well-attested fact that languages thrive on variation. To cope successfully with the arrival of new concepts and products speakers of a particular language have sometimes no choice but to borrow from a foreign language. However, on puristic grounds, some people are against loanwords. Conscious of this fact, a lexicographer will be well advised not to force on a speech community a word that is not accepted for emotional reasons. This point is best explained by Drame (2000):

Acceptance must be considered as most important. If a large part of the population does not accept a foreign word for emotional reasons, it must not be insisted that it should be used. A country, which was under the rule of a colonial power for long, might feel certain reluctance to the colonial language. Although necessary because of a lack of native terminology, it might not appreciate terms from the colonial language and replace them with either native words or words from another more acceptable language... (Drame, 2000:234).

2.3.5. Cultural and pragmatic data

- **The problem**

As far as lexicographic reference work is concerned, Wiegand has drawn a distinction between **dictionary**, **encyclopedia** and **encyclopedic dictionary**. One of the strong points of existing dictionaries of Gabonese languages is that their macrostructure tends to survey the full vocabulary of the language which makes them valuable sources of reference and real "containers of knowledge" (McArthur, 1986:19), cf. Mavoungou (2001). Thus, those dictionaries are in accordance with a tendency in present-day lexicography also to give an account of the underlying culture and civilization of the language being described. However, reservations can be made with regard to an encyclopedic bias. Too often lexicographers compiling dictionaries in the languages in question have been guilty of focusing too much on encyclopedic or extra-linguistic aspects of the lemma instead of on linguistic data. In fact, it is important to make a distinction between **encyclopedic dictionaries** and **encyclopedic data** in dictionaries. The latter occurs in linguistic dictionaries; in fact, a limited

quantity of such data is an essential component of **linguistic dictionaries**, cf. WAT (1999:2).

- **Decision taken**

The variety within the intended target user groups has many implications as far as the treatment of culturally bound lexical items is concerned. In fact, for the treatment of say the Yilumbu lexeme tsômbu "lobola" (*SAE*), the mother-tongue speakers of French and English may need more encyclopedic data explaining to them the cultural context of lobola than the native speakers of Yilumbu or mother-tongue speakers of another Bantu language which are assumed to be familiar with the cultural background of lobola. Thus, a focus on contextual data is important.

- **Concluding remarks**

On account of their role as "containers of knowledge" (McArthur, 1986:19) dictionaries should not only portray linguistic aspects of the treated lexical items but also their underlying cultural values. As far as this point is concerned, if one looks at articles in existing dictionaries of Gabonese languages along encyclopedic lines then they all contain a wealth of information about Gabonese cultures. Following this approach, it is part of the editorial policy of the planned dictionary to treat lexical items encompassing a description of a wide variety of customs and traditions typical of Gabonese cultures. In addition, the lexicographer should always adopt the middle way in order to avoid both semantic and encyclopedic bias. It is also believed that the presentation of both semantic and encyclopedic data should ideally be supported by a well-advanced access structure to allow users to gain maximally from the data presented.

2.3.6. Special-field terms

- **The problem**

With regard to the question on items from languages for special purposes, it has already been said that the planned dictionary will include special-field lemmata from among others the field of astronomy, agriculture and traditional pharmacopoeia. With regard to the extent to which technical vocabulary should be treated, it has to be

mentioned that the data presented are not intended for specialists but for the layperson. Obviously there is a limit to what can be included in a dictionary. Therefore the questions to be addressed are: What can be included? What should be left out? And Why? For example, as far the treatment of plant names is concerned, it has been decided to leave out entries such as the scientific description (height and diameter considerations, arrangement and texture of the foliage and leaves, etc.), the distribution and the cultivation requirements of the tree dealt with. These entries will be interesting to the knowledgeable reader but of little use to the uninitiated or non-specialist. As far as these entries are concerned, the specialist can always be referred to LSP dictionaries and botanical journals. Contrary to this approach, a simplified presentation of the description, habitat and uses of the plant dealt with may be useful to users. In addition, a nice pictorial illustration may be more accurate than a complete scientific description of the plant name lemmatized. But this chiefly depends on the space the publisher is willing to allocate to a trilingual dictionary of this type that obviously has space constraints. The ideal for this kind of work will be to have a final product combining dictionary and encyclopaedia. The scientific name as well as the genus of the plant may be useful to the target reader.

One of the greatest challenges facing the lexicographer is the writing up of definitions. Lexicographically speaking, a definition consists of a **definiens** (the explanation of the meaning) and a **definiendum** (what is defined, the referent). The lemma acts as the **definiendum** and the explanation of the meaning as the **definiens**. That is why the term **definition** encompasses the **lemma** and the **explanation of the meaning** (WAT, 1999:7). The lexicographic treatment of a lemma sign representing a polysemous lexical item makes provision for more than one **definiens** for the same **definiendum**.

Lexicographers know only too well how difficult it is to write definitions. The situation is even worse when it comes to the definition of special-field terms. No lexicographer can be an expert in every particular field of study. Thus, the dictionary maker will do well to consider doing the job in cooperation with a subject-field specialist. The lexicographer does not only need more authority to judge the term from languages for special purposes but also for the writing up of definitions for ordinary lemmata. As a matter of fact, no one knows a language to its full extent.

Given this fact, lexicographers, whether they are mother-tongue speakers or not, have to rely on native speakers as consultants.

When writing definitions, the choice of words should be done with great care especially when emotional aspects come into play. In other words, only neutral terms should be used whereas degrading items must be avoided at any cost. Moreover, dictionaries contain lexicographical data of which the occurrence is restricted to certain areas, subject fields, professional fields, style levels, etc. When including those lexical items, the lexicographer – for the sake of the user – should indicate this restricted usage by employing a system of appropriate labels (different types of labels as well as problems in labelling are discussed in section 3.3.8).

- **Concluding remarks**

In the above section an attempt has been made to survey some of the problems related to the inclusion of special-field terms. As for as the former are concerned, it is believed that their inclusion may serve as vehicles of conceptualization and possibly as a starting point for technical communication in the vernaculars of the people of Gabon.

2.3.7. On the data distribution structure

- **The problem**

When critically evaluating existing dictionaries, it is not rare to find publications that are real reservoirs of knowledge but not user-friendly. The reason for this lack of user-friendliness is to be found mostly in the arrangement (and thus the accessibility) of data in these publications. In fact, too often, these publications lack a clear indication of the boundaries of the different search zones. For example, the definition is not clearly perceived by the user, illustrative examples and idiomatic expressions are hardly ever discriminated from one another, and not to add procedures of textual condensation that usually add to the problem on the part of the user. In the case of bilingual lexicography, too often, translation equivalents in the publications in question are of a very limited value for users simply because of the absence of contextual data addressed at the translation equivalents. The failure of these dictionaries is thus not surprising. To address this problem, in recent years, the issue

of dictionary use has been the focus of growing interest among metalexicographers and language specialists. The task of the lexicographer is complicated by the fact that his/her assumptions, too often, never coincide with users' expectations. As far as this point is concerned, Cowie (1987) has correctly argued that:

The problem that arises when one tries to inculcate users with reference skills, is that dictionaries (...) are developing more rapidly than before, thus widening the gap that already exists between the complexity of information and the users' often rudimentary reference skills" (Cowie, 1987 as cited in Al-Ajmi, 2001:62).

The correctness of data in a dictionary is as important as its presentation. If as a starting point the lexicographer chooses, for each lemma sign, to include the following data categories: translation equivalents, collocations and idioms, for the sake of presentation, these data types should start on a new line preceded by different structural indicators to help the user find the information he/she is looking for. This is what Wiegand (1996d) calls **micro-architecture** (this concept is once again discussed in chapter 6). With regard to the role of dictionaries as "containers of knowledge" (McArthur, 1986:19), it has been decided to include a certain amount of non-linguistic data in the so-called **synopsis articles** (this category of dictionary articles is discussed in more details in chapter 6). Some articles – especially those with a high degree of cultural information – will have, according to cases: (i) a cultural or encyclopedic section presenting texts in the three languages of the dictionary (Yilumbu-English-French), (ii) a cultural or encyclopedic section presenting texts in only the target languages of the dictionary (English-French), (iii) a cultural or encyclopedic section presenting excerpts from relevant literature dealing with the lexical items treated. It has already been mentioned that within the main target user group, one may find senior high school pupils and academics who would clearly experience major difficulties in understanding and speaking Yilumbu. They are the Balumbu whose linguistic performance is dominated by French who may be in a situation of sociolinguistic insecurity with regard to their culture. People in this category therefore need to be made aware of the underlying culture represented by words. In addition, because they are more fluent in French than Yilumbu, French is the ideal language to convey to them that culture present in words. The Yilumbu and English counterparts of the French text can be regarded as a bonus for users. The culturally knowledgeable

Yilumbu speaker may consult the Yilumbu text for information on culture that he/she already knows. In this way, the planned dictionary will be much more like a monitoring device, or a metabook, than a reference work in the usual sense¹. Moreover, the genuine purpose of the Yilumbu text will be to empower both culturally skillful and inexperienced Yilumbu speakers. Actually, people hardly ever complain when they have received more than expected. On the contrary, they usually complain because of the lack of an expected data type. Given the poor representation of English in the linguistic situation in and the language policy of Gabon, the value of the English may raise some questions. However given the role of dictionaries, as teaching tools the value of the English text should not be underestimated. As far as this point is concerned, Busane (1990:32) has emphasized “...with the increasing spread of English in Central Africa, it appears that French will have to compete not only with the African languages but also with English”. We therefore strongly believe that the users may learn or improve their competence of English via both the English translation equivalents and the English texts offered in the encyclopedic section of synopsis articles. Moreover, the presentation of texts in only the target languages as well as excerpts from relevant literature in the target languages will likewise be of most direct use to the French and English speakers as an encoding tool. The lexicographer should not allow this fact to have a detrimental influence on the users. Moreover, the challenge facing the lexicographer is to both keep a balance between **communicative-directed** and **knowledge-directed functions** and determine the place in the dictionary where a specific data category will be best suited to capture the needs and reference skills of the target groups. These aspects will once again receive attention in chapter 7 of this investigation.

- **Decision taken**

Motivations have already been made with reference to the inclusion of lexicographic texts in the target languages. These motivations have to be accounted for in the compulsory user's guide to make users aware of what they can reasonably expect from

¹ This information comes from Blanche Nyangone Assam. She is currently undertaking a doctoral dissertation at the University of Stellenbosch on a bilingual dictionary Fang-French with special reference to the user-perspective.

the dictionary. Synopsis articles with an encyclopedic section presenting lexicographic texts only in the target languages of the planned dictionary should be kept to the minimum.

- **Concluding remarks**

From the discussion above it is clear that the planned dictionary will need a well-advanced data distribution structure in order to be used in the most efficient way. This includes clear decisions regarding the presentation of a wide range of data categories as well as their location in the planned dictionary.

2.4. On the metalanguage

- **The problem**

If French or English is chosen as the metalanguage (e.g. the language used for the texts of definitions as well as metalanguage notes in the form of labels) of the planned dictionary, the latter will be less informative for Yilumbu speakers than for their French and English counterparts whose language will be used predominantly to reflect on the meaning of lexical items as well as their underlying culture.

- **Decision taken**

The solution would lay in the combination of a few standardized sets of abbreviations in the form of labels and the use of Yilumbu on a metalanguage level. This has to be reflected in the users' guidelines.

However, before discussing metalanguage related problems, it is necessary to offer an account of different types of labels as well as problems in labelling. With regard to lexicographic studies that have so far dealt with labelling issues, one can roughly classify lexicographers' viewpoints into three approaches. Some (cf. WAT, 1999:10-13) believe that lexicographic labels may be divided into four main categories, namely stylistic, geographical, and temporal and sphere of usage labels. Labels in the first category are used to indicate style levels, e.g. (*formal.*), (*pop.*), (*slang*), etc. The second category deals with the so-called diatopic or regional labels such as (*American English*), (*British English*) or (*South African English*). Labels in the third category have a diachronic function. They are temporal labels, i.e. (*archaic*), (*historical*),

(*obsolete*). Sphere of usage labels are labels indicating use in special field of activity. Labels such as (*Lexicography*), (*Physics*) and (*Law*) fall into this category. Further types of labelling include labels indicating attitude or connotation (e. g. *derogatory*, *offensive*, *obscene*), labels indicating frequency (i.e. *seldom used*) and labels of borrowing (e. g. *loanword*)... Contrary to this viewpoint, Landau (1991:217-218) distinguishes eight groups of lexicographic labels, namely: labels indicating currency or temporality (*old-fashioned*, *dated*, *archaic*, *obsolete*, *old use*), labels indicating regional or geographic variations (*U.S*, *British*, *Canadian*, *Australian*, *New Zealand*, *South African*, etc.), labels indicating technical or specialized terminology (*astronomy*, *chemistry*, *physics*, *sports*, etc.), labels indicating restricted or taboo sexual and scatological usage (*offensive*, *taboo*, *vulgar*, *obscene*, *rude*, etc.), labels for insulting terms (*offensive*, *insult*, *disparaging*, *derogatory*, *disproving*, *contemptuous*, *sexist*, *racist*), labels for slang language (*slang*), labels indicating style (level), functional variety, or register (*formal*, *written*, *informal*, *spoken*, *colloquial*, (now rarely used) *literary*, *historical*, *poetic*, *humorous*, *facetious*, *jocular*, *approving*, *euphemistic*, *baby talk or child's word*), and labels indicating status or cultural level (*nonstandard or not standard*).

Another group of lexicographers [cf. Benson, Benson and Ilson (1986:215-6) as cited in Norri, 2000:72] indicates that labels under the heading ‘stylistic labels’ include among others *derogatory*, *pejorative* and *offensive*. This constitutes quite a different opinion compared to the WAT’s approach in which labels such as *derogatory*, *pejorative* and *offensive* appear under the heading ‘labels indicating attitude or connotation’.

In a recent article “Regional labels in Some British and American Dictionaries” Norri (1996:1-29) addressed the issue of labelling in some British and American dictionaries. More recently, the author (Norri, 2000: 71-106) discusses the same topic again in the article entitled “Labelling of Derogatory Words in Some British and American Dictionaries”. In this new approach, she grouped the 145 words of her corpus into seven headings, namely: (1) Labelling of words for nationalities, (2) Labelling of words denoting racial and cultural group, (3) Labelling of words for people considered to be lacking in intelligence, (4) Labelling of words for deceitful

people, (5) Labelling of words for sexual orientation, (6) Labelling of some derogatory words of women, (7) labelling of some derogatory words for men.

When discussing advantages and limitations of the Raponda-Walker's dictionary with special reference to labelling issues, it has been shown that the work does assist users with a well-devised set of labels but has failed to supply lists of labels in the outer texts of the dictionary, cf. Mavoungou (in preparation). This example of a recurring and typical failing in a single dictionary may stand as an archetypal instance of a widespread lexicographic practice in most of the existing translation dictionaries of Gabonese languages. In addition, problems relating to labelling also include the absence of a clearly defined and consistent policy on labelling. Attempts should be made towards the standardization of labels across dictionaries, cf. WAT (1999:10 and 14). The only solution to this problem is to study existing abbreviations indicating parts of speech, style levels, attitude or connotations as well as labels with a diachronic function, labels used in special field of activity and labels of borrowing. In order to tackle the work various dictionaries were consulted. However, this was by no means an exhaustive study. More research needs to be done on criteria for dealing with the standardization of labels across dictionaries.

With regard to French and English, the standardized set of abbreviations (in the form of labels) used in dictionaries include the following:

- **Part of speech labels (abbreviations for the word classes)**

These labels are usually italicised or written with small capitals: *n.* (nom/noun), *v.* (verbe/verb), *adj.* (adjectif/adjective), *adv.* (adverbe/adverb), *v.trans.* (verbe transitif), *v.intrans.* (verbe intransitif), *dimin.* (diminutif/diminutive), *fém.* (féminin), *masc.* (masculin), *n.fém.* (nom féminin), *n.masc.* (nom masculin), *n.masc.plur.* (nom masculin pluriel), *n.plur.* (nom pluriel/noun plural) *n. pr.* (nom propre), *interj.* (interjection), *pron.* (pronom/pronoun), *pron.pers./pers.pron.* (pronom personnel/personal pronoun), *prép./prep.* (préposition/preposition), *prono.* (pronominal), *prov.* (proverbe/proverb), *sing.* (singulier/singular), *plur.* (pluriel, plural), *loc.* (locution), *loc.v./v.loc.* (locution verbal, verbal locution), *loc.conj./conj.loc.* (locution conjonctive/conjunctive locution), *loc.prép./prep.loc.* (locution prépositive/prepositive locution), *loc. exclam./exclam.loc.* (locution

exclamative/exclamative locution), *non-compt.* (non-comptable), *num.* (numéral, numeral), *conj.* (conjonction/conjunction), *démons/demons* (démonstratif, demonstrative), *dériv./deriv.* (dérivé, derivative), *exclam.* (exclamation), *impers.* (impersonnel/impersonal), *infin.* (infinitif/infinitive), *interrog.* (interrogatif/interrogative), *poss.* (possessif/possessive), *prop.* (proposition) *inv.* (invariable), *onomat.* (onomatopée/ onomatopoeia), ANT (*antonyme/antonym*), HOM (*homonyme/homonym*), SYN (*synonyme/synonym*).

Among these part of speech labels, only *n.* (nom/noun), *v.* (verbe/verb), *adj.* (adjectif/adjective), *adv.* (adverbe/adverb), *dimin.* (diminutif/diminitive), *interj.* (interjection), *pron.* (pronom/pronoun), *prono.* (pronominal), *prov.* (proverbe/proverb), *loc.* (locution) *non-compt.* (non-comptable), *num.* (numéral, numeral), *conj.* (conjonction/conjunction), *exclam.* (exclamation), *impers.* (impersonnel/impersonal), *infin.* (infinitif/infinitive), *prop.* (proposition), *interrog.* (interrogatif/interrogative), *inv.* (invariable), *poss.* (possessif/possessive) and *onomat.* (onomatopée/onomatopoeia), ANT (*antonyme/antonym*), HOM (*homonyme/homonym*), SYN (*synonyme/synonym*) may be regarded as less problematic for the average person because it is easier for him/her to reconstruct the full forms. In fact, these labels encompass a lesser degree of textual condensation as such they are less problematic for the user. That is why some are longer than others. To a larger degree, they form part of the standardised set of labels in both French and English. For example, the part of speech label (*interjection*) has a two-fold representation according to dictionaries. It is represented by (*inter.*) in the *Concise Oxford Dictionary of Current English* whereas the *Petit Robert*, the *Dictionnaire du français langue étrangère Niveau 2* and the *Dictionnaire Hachette de la langue française* have opted for (*interj.*). The first entry may create communicative problems for the user because the latter may ask himself/herself whether "inter." is a short for "interrogative" or "interjection". Being at the loss to find out about the correct form, the user is then obliged to investigate further in the guide of the dictionary. We all know that the dictionary user is not especially worried about consulting the explanatory notes. Contrary to this approach, in the second data (*interj.*), the lexicographer gives a longer abbreviation and thus enabling more clues to find their way into the entry for the benefit of the user who has less trouble to guess the complete form. The same line of argumentation holds true for

the following part of speech labels: *masc.* vs. *fém.*, *sing.* vs. *plur.*, *trans.* vs. *intrans.*, to list but a few. The part of speech labels (*masculin*) and (*féminin*) are abbreviated "m." and "f." in most French dictionaries. However, the *Petit Robert* (1976) proposes the entry "masc." (but also "m") for the part of speech labels (*masculin*) and "f." for the part of speech labels (*féminin*). Similarly the *Dictionnaire du français langue étrangère Niveau 2* (1979) proposes both "f" and "fém." for the part of speech label (*féminin*). As far as the two sets of notations are concerned, the entries (*masc.* vs. *fém.*) will obviously be more user-friendly than (*m.* vs. *f.*) because they fulfil the requirements for an unambiguous retrieval of the information that the user is seeking. In the case of the part of speech labels (*singular*) versus (*plural*) most reference works do present "sg." and "pl." as abbreviations. However, the entries "sing." and "plur." may lead to an unambiguous information transfer on the part of the users. Finally, the part of speech labels (*transitive*) versus (*intransitive*) are often shortened as "i" and "t". This is likely to create communicative problems on the part of the users. Therefore I am strongly in favour of the use of the following notes: "intrans." and "trans."

- **Stylistic labels**

The following stylistic labels are used in French and English dictionaries and they mainly include style labels and labels indicating frequency of usage:

- ❖ **French dictionaries**

Fam. (*familier*), *pop.* (*populaire*), *cour.* (*courant*), *form.* (*formel*), *inform.* ou *arg.* (*informel* ou *argot*), *sout.* (*soutenu*), *enfant.* (*enfantin*), (majoritairement utilisé à la forme singulier ou pluriel), *fréquent.* (*fréquent*, *fréquemment*), *irrég.* (*irrégulier*, *irrégulièrement*) et *rare*.

- ❖ **English dictionaries**

Colloq. (*colloquial*), *pop.* (*popular*), *form.* (*formal*), *inform.* or *slang.* (*informal* or *slang*), *elevat.* (*elevated*), *child.* (*childish*), (*mostly used in the plural for or singular form*), *frequent.* (*frequentative(ly)*), *irreg.* (*irregular(ly)*) and *rare*.

- **Labels of borrowing**

The following are well-established labels of borrowing in French and English:

F. or *Fr.* (*French*), *E.* or *Eng.* (*English*), *P.* or *Port.* (*portugais/Portuguese*), *Yip.* (*Yipunu*), etc. *dériv.* ou *dér./deriv* or *der.*, *corrupt.* (*corruption*), etc.

As far as the planned dictionary is concerned, priority will be given to the use of the longer abbreviations for essentially two reasons. Firstly, the use of one and the same abbreviation for different terms can cause misunderstanding. Secondly, for reasons that are stated above, the longer abbreviations are much more user-friendly than the short ones. For example, the use of the labels of borrowing "F." and "E." may be confusing for the user because we already have the structural markers <F> and <E> that are used to indicate a specific article slot or search area in the planned dictionary where French and English can be found. Given this fact, I should have used the longer abbreviations (*Eng.* and *Fr.*) or even the full forms (*English* and *French*). Nevertheless in a trilingual dictionary of the kind that is being planned in this dissertation, the need to save space will obviously dictate the use of large numbers of abbreviations. And the more explicit the abbreviation is, the better the information retrieval will be on the part of the user.

- **Labels indicating attitude or connotations**

The following labels indicating attitude or connotations are used in French and English dictionaries:

- ❖ **French dictionaries**

Dénigr. (*par*) (*par dénigrement*), *iron.* (*ironique, ironiquement*) or *antiphrase* (*par*) (*par antiphrase*), *vulg.* (*vulgaire*), *dérog.* (*dérogatif*), *péj.* (*péjoratif*), *mél.* (*mélioratif*), *triv.* (*trivial*), *erron.* (*erronée*), *plais.* (*par*) (*par plaisanterie*), *obs.* (*obscène*).

- ❖ **English dictionaries**

Offens. (*offensive*), *iron.* (*ironical(ly)*), *vulg.* (*vulgar*), *derog.* (*derogative*), *pej.* (*pejorative*), *amel.* (*ameliorative*), *triv.* (*trivial*), *erron.* (*erroneous(ly)*), *joc.* (*jocular(ly)*), *obs.* (*obscene*).

- **Labels indicating expansion or narrowing of the meaning**

The dictionary under discussion will also make use of labels indicating expansion or narrowing of the meaning. The former are usually italicised words in parenthesis as it occurs in the French and English traditions.

- ❖ **French dictionaries**

Anal. (par) (par analogie), exagér. (par) (par exagération) ou abusiv. (abusivement), ext. (par) (par extension), fig. (figuré), métaph. (métaphore), propre (au) (au propre), oppos. (par) (par opposition), littéralit. (littéralement), sens restr. (sens restreint).

- ❖ **English dictionaries**

Anal. (analogical(ly)), emphat. (emphatic(ally)), fig. (figurativilly), metaph. (metaphorical), oppos. (as) (as opposed (to)), literally. (literal(ly)), narr. (narrowing of the meaning)

- **Labels for special field of activity**

The following special-fields of activity will be used in the planned dictionary:

Littér.ora./liter.ora. (littérature orale/oral literature), conte/tale, pêche/fishing, chasse/hunting, relig.trad./trad.relig. (religion traditionnelle/traditional religion), agric. (agriculture), astron. (astronomie/astronomy), pharm. (pharmacopée/pharmacopoeia).

- **Temporal labels**

Labels in the third category having a diachronic function in the planned dictionary will mainly be the following: *Ancien./archaic (anciennement/archaic).*

This temporal label (*Ancien./archaic*) has nothing to do with either the productive or the receptive functions of the dictionary. But it is motivated on the ground of the lexicographer's responsibility for imparting or enhancing the cultural knowledge of the source language. This is clear from the following example:

(22)

malámu (+ lámu) [málámù] n. (cl.6) < *-dámù		
1 ♦ Dingĩba di yĩlu (⇒ malámu ma yĩlu) ♦	1 <E> Palm wine obtained from a palm tree that has not been felled.	1 <F> Vin récolté sur un palmier non abattu.
Σ Ngé malámu utsínu?	<E> Are you drunk?	<F> Es-tu soûle ?
2 woótsú ke dingĩba nána malámu mabênga vho malámu mangólu.	2 <E> Any kind of intoxicating drink such as wine or whisky.	2 <F> N'importe quel type de boisson alcoolisée tel que le vin ou le whisky.
Σ Mí sǎbénu malámu.	<E> I have stopped drinking.	<F> J'ai arrêté de boire.
3 (<i>pěta</i>) (<i>Ghâng.</i>) Muyínu bákaata báyinanga mo téému dúfu (<i>Men.</i>) Muyínu bivhúnda báyinanga mo dúfu.	3 (<i>archaic</i>) <E> Dance held at funerals to pacify the spirit of the deceased.	3 (<i>Ancien.</i>) <F> Danse organisée à l'occasion des funérailles pour pacifier l'esprit du défunt (ou de la défunte) ⇒ Yip. ikóóku .
Σ (<i>Ghâng.</i>) Vho téému íghulu báyinanga malámu (<i>Men.</i>) Vho íghomba í ghaála báyinanga malámu (⇒ ▼).	<E> In ancient time people danced <i>malámu</i> (⇒ ▼).	<F> Autrefois, on dansait <i>malámu</i> (⇒ ▼).
(<i>cf. 2</i>) (<i>Men.</i>) malámu má mbari (aussi/also ditútu) (⇒ (<i>Ghâng.</i>) mbúla) Malámu bavabônga mu díba/mbari ili vhotsi.	<E> Palm wine obtained from a palm tree that has been felled.	<F> vin de palme récolté sur un palmier abattu.
Σ (<i>Men.</i>) Uběntsurómba malámu má mbari vǎhvǎ íki isyému.	<E> It is now difficult to find palm wine.	<F> Il est en ce moment difficile de trouver du vin de palme.
(<i>cf. 1</i>) malámu ma yĩlu (⇒ tsám̄ba) Malámu bavabônga mu díba/mbari ili vho yĩlu.	<E> palm wine obtained from a palm tree that has not been felled.	<F> Vin récolté sur un palmier non abattu.
Σ Yisyéeli avásúmbisi malámu ma yĩlu.	<E> The <i>malafoutier</i> is selling palm wine obtained from a palm tree that has not been felled.	<F> Le <i>malafoutier</i> vend le vin de palm récolté sur un palmier non abattu.
▼ (<i>Ghir.</i>) Vho téému íghulu báyinanga malámu. Á Mutrafu. Bǎtelanga dína di múghisi á Mutrafu. Vho yĩlu malámu ika mangúmba. Vho yĩlu mangúmba ké kwǎgha <E> In the time of the ancestors people danced <i>mangúmba</i> . <i>Mutrafu</i> was the name of the spirit. After <i>malámu</i> came <i>mangúmba</i> and thereafter <i>kwǎgha</i> <F> Au temps des ancêtres, on dansait <i>malámu</i> . <i>Mutrafu</i> était le nom du génie. Après <i>malámu</i> vint <i>mangúmba</i> et ensuite <i>kwǎgha</i> ⇒ dingúmba .		
■ yisyéeli yí malámu (⇒ yisyéeli) ; mulǎngi malámu (⇒ mulǎngi) ; malámu Mútrafu (also malámu ma múvhyanga) (⇒ ▼) ; (<i>cf. II</i>) malámu ma myénga <E> Fresh palm wine <F> Vin de palme frais.		

Text example 22: article **malámu**

From the data presented in this article given as Text example 21, the user can retrieve a lot of information. With regard to the issue of labelling, the temporal label

(*Ancien./archaic*) actually tells the user that although the lexical item "malámu" is used on a daily basis by the Balumbu, sense 3 of the lemma sign is now obsolete. It was in use in the past but has now fallen out of use. The matter to which it refers (funeral dance) is now referred to by another lexical item: "dingúmba (pl. mangúmba)".

A further aspect related to the problem of the metalanguage used in the planned dictionary is the explanation of the structure of the dictionary. Given the fact that dictionaries should ideally contribute towards the development of international metalexicographic terminology, the section of the guide explaining the structure of the dictionary should be given in the three languages of the dictionary. This is a more challenging but exciting task for Yilumbu than for French and English that have long and strong established lexicographic terminologies and a relative good foundation of metalexicography.

Given the fact that the main target user group of the planned dictionary is the Balumbu mother-tongue speaker, the metalanguage for the paraphrases of meaning, the so-called diatopic or regional labels such as (*Ghâng.*) and (*Men.*), sphere of usage labels such as (*Mangúmba*), and encyclopedic data in synopsis articles addressed at mother-tongue speakers should be in Yilumbu. This is very important and can be motivated by what follows. With regard to dictionary typology, Zgusta (1989:71) has mentioned the role of a subcategory of dictionaries instrumental in the revival of languages. Given the fact that presently the Gabonese in general and the Balumbu in particular live in a society where all aspects of life have become increasingly westernized, the cultural dimension must be said to be one of the areas that really need to be examined in more detail. Thus all attempts (both at state level and individually, e.g. in a dictionary) towards preventing the indigenous cultures from disappearing may be referred to as **culture revival**.

It has been said that paraphrases of meaning should be given in Yilumbu in the central list. Contrary to this approach, in the register section, the lexicographer should also allow for the inclusion of short explanations of the meaning in French and English¹

¹ This information comes from a class lecture of Prof. S. Tarp.

that will benefit users to improve or learn French and English. As far as this point is concerned, Kavanagh (2000) rightly emphasizes that:

Problems of cross-cultural communication are not necessarily a misunderstanding of words, but a lack of understanding of the concepts behind words (Kavanagh, 2000:101).

This aspect also has a lot of implications for the first language speakers. Although target language data is primarily directed at L2 speakers who wish to have access to Yilumbu it may be superfluous for the L1 speakers who can empower themselves in the official language (French) and English of which the international status is of importance, especially nowadays where multilingual education is the key to globalization.

The compulsory users' guide should contain a list of all abbreviations used in the planned dictionary as well as their explanations. It is better to give a long abbreviation than a short and scientific well received one because it is usually difficult to reconstruct the longer from the shortened form. The dictionary user will then be obliged to investigate further in the guide in order to find the form he/she is seeking, a time-consuming activity that is in practice hardly undertaken by most users.

- **Concluding remarks**

Metalanguage related problems have to be solved in accordance with the needs and reference skills of the potential target user groups. A user-orientated lexicographic practice is to list and explain, in the compulsory users' guide, all the abbreviations used in the planned dictionary. It has been shown that it is better to give a long abbreviation than a short one even if it has been well received because it enables a quick and successful information retrieval on the part of the user. As a result, the former is not obliged to investigate further in the guide in order to find the form he/she is seeking. This will enhance time-saving so greatly appreciated by most users. Chaffey (1992), quoted by Kavanagh (2000:104) talks about the "degree of cultural loading" to refer to the amount of culture-specific knowledge a language user must have in order to be able to understand the full meaning of a lexical item. Given this fact, the user will need quite a lot of guidance in the form of metalanguage notes to cope successfully with the data presented.

2.5. General concluding remarks

In this chapter we have dealt with the importance of the user-perspective (determination of the target users of a dictionary and their reference skills in particular) when planning the secondary lexicographic processes of a particular dictionary. Various aspects, e.g. grammatical issues, the microstructural program of a dictionary, cultural matters, etc. can be discussed in the so-called prefatory or introductory matters. That is why front and back matter texts form an essential part of any lexicographic project. Because outer texts usually contain data on the structure of the dictionary, its typological nature, its target users and their reference skills, they must be taken into account by users. If they fail to do so, users may run the risk of experiencing dictionary consultation failure.

In the same way, by ignoring this important aspect during the dictionary conceptualization phase a lexicographer may put on the market a publication that will lack essential user-friendly parameters. For the good of the user, a lexicographer should never allow such a thing to happen.

Chapter 3: Contribution of the planned dictionary towards the standardization of Yilumbu orthography

3.0. Introduction

Due to its geographic spread, Yilumbu has a number of dialects. In Gabon, the two major dialects are the so-called Yilumbu yí ghângu (the variety of the Nyanga province) and Yilumbu yí menaáne (the variety of the Ogooué-Maritime province). Although the level of intelligibility between these dialects is high, there are a number of differences in pronunciation, grammar, and vocabulary. Lexicographers working with languages with regional varieties usually experience problems in the area of orthography. In addition, dictionary compilers know too well how tricky these problems are.

3.1. The purpose of this chapter

As mentioned above, the issue of dialects is a complex one and the problem is worse when a language has not yet been standardized. As far as this point is concerned, Yilumbu has yet to be standardized and no dictionaries are currently available to the speakers of the different speech communities. In the majority of the world languages that have a wide demographic distribution, thus several regional varieties, language planners usually select one dialect to serve as a standard variety. Criteria that are usually put forward for the choice of the standard dialect are the following: numerical importance of the dialect speakers; socio-economic importance of the dialect, availability of written documents in the dialect, etc., cf. Sadembouo (1980, as cited in Emejulu and Nzang-Bié, 1999:39). It is generally acknowledged that the choice of the dialect or the language to serve as the norm or standard is a highly sensitive issue in African societies in particular. With regard to the concept of language attitudes, people inevitably tend to compare varieties of the same language with one another. Mother-tongue speakers will generally like their own variety of the language and tend to reject or criticise other varieties. As far as Yilumbu is concerned, this prejudice is

often encountered among some mother-tongue speakers of the so-called Yilumbu yí menaáne who often regard their dialect as being "pure" compared to

Yilumbu yí ghângu. Linguistic "purity" is so strong in the eye of these mother-tongue speakers that they call themselves **Balumbu** and they refer to the speakers of Yilumbu yí ghângu in terms of **Bavili**. This statement on linguistic "purity" is relatively true if one bears in mind the conclusions of a comparative study conducted by Blanchon (1984) on Yilumbu, Civili and Yipunu. Blanchon (1984:33) has pointed out that approximately 25% of the Yilumbu (the variety of the Nyanga province, especially the one spoken in the Mayumba area) vocabulary is of Civili origin. However, Blanchon (1984:32) also puts the figures at about 40% of the shared vocabulary between Yilumbu, Yipunu and Civili. Moreover he also estimates the shared vocabulary between Yilumbu and Yipunu at about 65%. From ongoing research work, our corpus shows that the so-called Yilumbu yí menaáne shares more common features with Yipunu. On the contrary, in the so-called Yilumbu yí ghângu shared affinities are the highest with Civili. It goes without saying that policy makers, language planners and lexicographers should depart from these claims based on the disputable criterion of "purity". Blanchon himself warns students of Yilumbu, Yipunu and Civili not to jump to conclusion:

Mais ce serait une erreur d'en conclure que le yi-lumbu est equidistant des deux autres parlers [Yipunu and Civili]. La phonologie et la tonologie du ci-vili sont très différentes de celles du Yi-Punu/Yi-Lumbu, et d'autre part les trois parlers ont de toute façon environ 40% de vocabulaire commun (si l'on tient compte des correspondances phonologiques systématiques). Le yi-lumbu est donc en fait un parler du même groupe que le yi-punu, mais au contact du ci-vili il semble avoir emprunté à ce dernier environ 25% (65%-40%) de son vocabulaire. Ce chiffre est une moyenne car, comme le montre le conte que nous venons de présenter, la proportion d'emprunts présumés au ci-vili peut s'élever, pour les verbes courants, jusqu'à plus de 40% (Blanchon, 1984:32-33).

From a linguistic point of view, there is no doubt that Yilumbu, Yipunu and to a certain degree Civili are varieties of the same language. From a sociolinguistic viewpoint, the Balumbu, the Bapunu and the Bavili share the same cultural background. Therefore some Balumbu are literate in Yipunu and Civili and vice-versa, and they frequently inter-marry.

With regard to the topic of language change, I have implicitly shown that, to a lesser or greater degree, other Bantu languages (especially Civili and Yipunu), and European

languages (Portuguese, French and English in particular) have influenced the so-called Yilumbu yi ghângu (Mavoungou 2002, to appear). I have also pointed out the fact that speakers of the so-called Yilumbu yi menaáne have borrowed a significant amount of words of French and Omyene origin. With regard to these facts, it can be argued that both speakers of the two major dialects had to recourse to borrowings in order to cope with the growing demands in the fields of science and technology, government, education, and commerce.

When a dialect is chosen to be the standard form it becomes the form for the written language as well as the language of the administration and the media, whereas other dialects are confined to spoken and informal communication. The choice of the standard dialect between Yilumbu yi ghângu and Yilumbu yi menaáne will obviously favour those who already use the chosen variety and disfavour those who do not. In order to avoid social unrest a compromise solution is to be preferred to the choice of one single variety. Drame (2000:235-236) has pointed out that the development of a writing system for isiXhosa by John Bennie in 1824 was based on two dialects, namely Ngqika and Gcaleka. The same principle maybe applied to Yilumbu since its two major dialects are largely intercomprehensible despite variation that might occur in their lexicon. In addition to the foregoing, language or dialect standardization is most often initiated from governmental level (language planners) rather than from grass-root level (speech communities). Prof, Emejulu¹ has pointed out that by publishing a teaching aid together with audiocassettes in Mpongwe (one of the six dialects of the Omyene language), AYILÉ (nongovernmental organization whose main purpose is the promotion of the Omyene language and its culture) has implicitly chosen Mpongwe as the norm or standard for Omyene (see also Nzang-Bie 2001:21). This implicit stand may be problematic because in the end the speakers of the speech community will decide whether they want Mpongwe to be their standard.

From the foregoing, it should be made clear that it is not the aim of this discussion to apply any of the criteria earlier mentioned with respect to dialect choice. Given the richness of the Yilumbu lexicon, I advocate treating the language as a whole. Some of the problems rise from the very recognition of the fact that dictionaries play a

¹ Personal communication, July 2001.

significant role in the standardization of a language. This important aspect is best summarized in Mini (1995):

The general public's attitude towards a dictionary as a source of "accurate" language and thus as a significant factor in the standardization of a language, the fact that a dictionary has an influence on people's use of a language..., as well as the fact that lexicographers of isiXhosa see their work as a preservation of isiXhosa as a language, all place a heavy responsibility on the lexicographers to ensure that they maintain a very high standard of accuracy in all aspects of their work (Mini, 1995:52).

This is a point of great importance, and a lexicographer would do well to heed this observation of Mini. As part of the planning of the **secondary comprehensive lexicographic process**, a lexicographer should make sure that his/her dictionary plan is not only a sound semantic description of a language but also a guide to other aspects of language study, in particular orthographic issues. After all, is the dictionary not the most [Ilson (1985:2) uses the term *successful*] influential and important book about language?

To sum up, the planned dictionary clearly departs from being the formulation of a theoretically motivated model for a standard dictionary of Yilumbu¹. It is a well-attested fact that the compilation of a standard dictionary can play a valuable role in the standardization process of a particular language. Moreover, standard dictionaries must adhere to a certain set of criteria as it clearly appear in Gouws (2001a):

Standard dictionaries can be regarded as products resulting from a well-established lexicographic environment. These dictionaries are the most commonly used monolingual lexicographic instruments and display a wide range of lemmata and microstructural categories. Standard dictionaries usually are single volume products in which a synchronic and normative approach prevails. The macrostructure represents the standard variety of the treated language although a number of high usage frequency items from non-standard varieties will also be included. These items will be marked by lexicographic labels indicating stylistic, chronolectic, regional or other deviations from the standard variety. Standard dictionaries include a representative selection of macrostructural items and an extensive treatment of these items. These dictionaries consequently have a high data density (Gouws, 2001a:76).

As far as the present model is concerned, attempts are only made to indicate the ways in which the planned dictionary could be used as an instrument in the standardization

¹ Afane Otsaga (forthcoming) is busy with the formulation of a theoretically motivated model for a standard dictionary of Fang at the University of Stellenbosch in the Department of Afrikaans and Dutch.

of Yilumbu. Because this dissertation does not seek to formulate criteria for the compilation of a standard dictionary, the planned dictionary should be comprehensive with regard to the selection of its macrostructural elements. Therefore as part of the planning of the macrostructure, the planned dictionary should deal with all possible dialectal forms. Before examining issues of spelling in Yilumbu, it is important to provide some essential aspects on efforts made to establish spelling conventions for African languages in general and Gabonese languages in particular.

3.2. Efforts made to establish spelling conventions for African languages

It is a well-attested fact that, compared to e.g. European languages, African languages do not have a strong written tradition. In the past, languages and cultures were exclusively transmitted orally, with the exception of a few languages, e.g. Bamum (in the Cameroon). For the majority of the African languages the written tradition started with the advent of Christian evangelisation and colonialism on the continent. The reasons often stated for carrying out such a task were the necessity of translating the Bible into these unwritten African languages for the purpose of evangelisation as well as the production of literacy materials in African languages for the colonial administrations who were not willing to rely on interpreters any longer.

Although credit has to be given to these early works, they reveal a number of shortcomings such as the absence of suprasegmental features and above all insufficient help with the orthography. In developing orthographical systems for the African languages, scholars, missionaries and colonial administrators tried to devise a set of symbols reflecting the writing systems used in their own languages. The British and American – influenced by their mother-tongue – reduced African languages to writing according to English and American orthographic conventions respectively, while the French stick to the orthographic traditions of French. That resulted in approximate transcriptions because of the big difference between the sound systems of the African languages and those of the European languages, cf. Raponda-Walker (1932:139-146), Kwenzi-Mikala (1988a:207) and Bendor-Samuel (1996:689). In the francophone area, and in Gabon in particular, the best-known case of inconsistent orthography is the example of Fan, which Alexandre (1961, as quoted by Kidida Awak 1990) says that it has acquired:

...trois transcriptions [catholiques] et deux [protestants] pour environ un million de locuteurs, sans parler des différences morphologiques dues à des calques catholiques sur l'allemand, le français et l'espagnol, et protestants, sur l'américain (Kidida Awak 1990:11).

The quotation above clearly shows how intricate orthographical problems are. As a matter of fact, Fan̄ is suffering from the co-existence of two major standards (one in the tradition established by French Catholic missionaries and one in the tradition of American Protestant missionaries in particular) as well as some substandard varieties from Spanish and German.

In taking steps towards the standardization of the orthographies for the Gabonese languages, in 1932, Raponda-Walker published in the *Journal de la société des Africanistes* the article “Alphabet des idiomes gabonais” in which he presents the set of symbols according to which the Gabonese languages should be transcribed. Furthermore, attention is paid to the principle of bi-univocity: one symbol for one sound and vice versa. This alphabet is much along the lines of *The Practical Orthography of African Languages* published in 1928 by the International African Institute [see also, Ahmadou Touré (1990:55-63) and Kwenzi-Mikala (1998:219-220) for a more comprehensive account on this matter].

Fifty eight years later the Alphabet scientifique des langues du Gabon (ASG) was created during the Séminaire des Experts sur l'établissement d'un Alphabet Scientifique des langues du Gabon held at the LUTO (Laboratoire Universitaire de la tradition Orale) in Libreville. This seminar took place from 20 to 24 February 1989, and was attended by delegates from three countries: Gabon, Belgium (represented by the Free University of Brussels as well as the Royal Museum of Tervuren), France (represented by the University of Lyons 2) as well as some experts from two International Institutions, the CICIBA (Centre International des Civilisations Bantu) and the ACCT (now known as the Agence Internationale de la Francophonie). The aim of that seminar was to devise a scientific standardized set of symbols that could be used for a writing system for the Gabonese languages. It was followed by an implementation phase where delegates worked in commissions to evaluate the practical use of the proposed alphabet. The Scientific Alphabet of Gabonese languages also updated Raponda-Walker's proposed set of symbols. It is based on both the International Phonetic Alphabet (IPA, revised to 1993, updated 1996), and

the “Africa Alphabet” published by the International African Institute (IAI) soon after its foundation in 1926. Furthermore, it implements the conclusions of some of the conferences on the standardization of the writing of African languages organised by UNESCO namely the conferences held in Bamako (1966), Yaoundé (1970) and Niamey (1978). Finally the acts of the colloquium are published in the Luto’s mouthpiece: the *Revue Gabonaise des Sciences de l’Homme* 2 (1990).

3.3. Yilumbu writing system and attempts towards its standardization

This section aims to reflect on spelling as well as on issues dealing with the standardization of spelling. The idea here is to point out variant spellings of words written by different authors, to comment on them, and to propose possible improvements.

3.3.1. Efforts made to establish spelling conventions for Yilumbu and their critical evaluation

As it clearly appears in the preceding section, with the exception of Bamum, very few African languages had developed a written form. Explorers, missionaries and colonial administrators developed writing systems and they followed the conventions of the colonial languages. Early works such as Garnier (1897, 1900, & 1904) and Murard (1903) established the Yilumbu spelling system on an orthography based on French orthographic conventions. Later Blanchon (1989) wrote a traditional story in Yilumbu by using the “Africa Alphabet”. Emejulu and Pambo-Loueya (1990) propose the following set of symbols for Yilumbu: a, b, d, e, ε, ə, f, γ, γw, l, k, kw, l, m, mb, n, nd, ndz, ng, η, o, ɔ, p, r, s, t, ts, u, β, w, y.

With regard to writing issues, the book by Le Testu (1918) contains a wealth of information because it involved writing down explanations on various cultural aspects, names of places and people. A fact worth mentioning concerns the title of the work. Although this publication is entitled *Notes sur les Coutumes Bapounou dans la Circonscription de la Nyanga* it is in fact a comprehensive account of some cultural aspects of the life of the Bapunu, the Balumbu and the Bavili living in the Nyanga

province. The following Table gives an illustration of a whole range of lexical items representing different cultural phenomena in Yilumbu (henceforth Yil.), Yipunu (henceforth Yip.) and Civili (henceforth Civ.):

Le Testu (1914)	Current spelling of the same words	Source languages	Phonetic transcriptions	Meaning
<i>bifoula</i>	bifúla	Civ. and Yil.	[bifúlə]	Slave
<i>mwana</i>	mwâna	Yil., Yip. & Civ.	[mwâ:nə]	Child
<i>tchifoumba</i>	tshífoumba	Civ.	[tʃifù:mbə]	Family
<i>ibadou</i>	yibându	Yil., Yip. & Civ.	[yibâ:ndù]	Clan
<i>boukali</i>	bukāli	Yil., Yip. & Civ.	[bùkālì]	Fine
<i>mwa fougou</i>	mwâ fumu	Yil., Yip. & Civ.	[mwáfùmù]	Noble person
<i>ntekolo</i>	ntékula	Civ.	[ntékulə]	Grandson
<i>fougou</i>	fumu	Yil., Yip. & Civ.	[fùmù]	Chief, king
<i>cama na combo</i>	káma na kômbu	Yil., Yip. & Civ.	[kámənàkó:mbù]	Fine
<i>mboundou (boundou?)</i>	bûndu	Yil., Yip. & Civ.	[bû:ndù]	Trial by ordeal
<i>nganga kossi</i>	ngânga kósi	Yil., Yip. & Civ.	[ŋgâ:ŋgə]	(SAE) Sangoma

Table 1: List of cultural terms as extracted from Le Testu (1918)

Lexical items in Table 1 above have both segmental and supra-segmental shortcomings. For all pioneering works, reservations have already been made with respect to the lack of tone in the written transcriptions of words (without tones, one cannot expect a user to reproduce correctly the Yilumbu sound system). A related problem to the one just outlined is that vowel length is not recognized (as far as this point is concerned, the most commonly used convention is the doubling of the vowel in question). From the foregoing, it is worth mentioning that in Table 1 above the orthography of most of the words from Le Testu (1918) differs from the current spelling of the same words because the author used French orthographic conventions. From a phonological viewpoint, the French *ou* which is pronounced [u] is used to

represent the Yilumbu vowel **u** as can be seen in Le Testu's list, e.g. *foumou*, *boukali*, *bifoula*, etc. Another fact worth mentioning is that the French consonant *c* is used to represent the Yilumbu consonant **k**, e.g. *cama* and *combo*. The French writing system has signs for the gemination or the doubling of a consonant, however this is not the case with Gabonese languages in particular. Under the influence of his mother-tongue, Le Testu wrote the Yilumbu **s** as the French *ss* that is pronounced [s], e.g. *kossi* (instead of *kósi*).

Further information regarding spelling conventions may be found in Table 2 and Table 3 below. A blank means that the form does not exist or it is unknown to the author. The hyphen (—) means that Le Testu did not list the form in question:

Tribe's names in Le Testu (1918)'s list	Yipunu tribe's names (Kwenzi-Mikala 1998: 3)	Yilumbu tribe's names (Singular forms, from the Yilumbu Corpus)	Yilumbu tribe's names (Plural forms, from the Yilumbu Corpus)	Varied forms of the Yilumbu tribe's names, (from the Yilumbu Corpus)	Yilumbu sub-tribe's names ¹ And nick names (from the Yilumbu Corpus)
Badoumbi	Badoumbi [bádú:mbi]	Mudúmbi	Badúmbi		
Bassoumba		Músuumba	Básuumba		Ibébi (Fumu), Mughôntsi, Kári and Nzútsi
—		Muyéma	Bayéma		
Bayengé	Badjengui [bàjèŋgi]	Muyéngi	Bayéngi		Kúsu (Fumu), Pili
—	Dikanda [diká:ndó]	Mwisi Dikánda	Bisi Dikánda	Músi Dikánda	
—	Boumouéli [búmweéli]	Mwisi Imgndu	Bisi Imgndu	Músi Imgndu	Ibáasa (nick name)
Coucongo	Minzoumba [mínzú:mbə]	Mwisi Kōngu	Bisi Kōngu	Músi Kōngu	
	Boudjiala [bújyálə]				
	Dibamba-Kadi [dibâ:mbə-kádi]				
	Didjiaba [dijyábə]	Mwisi Diyába	Bisi Diyába	Músi Diyába	
	Ndingui [ndi:ŋgi]	Ndingi	Ndingi		
		Mughâmbu	Baghâmbu		

¹ According to Kwenzi-Mikala (1998:3) Yipunu sub-tribe's names are: Djoundou or Bagodjou [bàjójù], Simbou [sí:mbù], Polou [pòlù], Ibassa [ibàsə] and [tābè].

Tribe's names in Le Testu (1918)'s list	Yipunu tribe's names (Kwenzi-Mikala 1998: 3)	Yilumbu tribe's names (Singular forms, from the Yilumbu Corpus)	Yilumbu tribe's names (Plural forms, from the Yilumbu Corpus)	Varied forms of the Yilumbu tribe's names, (from the Yilumbu Corpus)	Yilumbu sub-tribe's names ¹ And nick names (from the Yilumbu Corpus)
Badoumbi	Badoumbi [bádú:mbi]	Mudúmbi	Badúmbi		
Bassoumba		Músuumba	Básuumba		Ibébi (Fumu), Mughòntsi, Kári and Nzútsi
—		Muyéma	Bayéma		
Bayengé	Badjengui [bájɛŋgi]	Muyéngi	Bayéngi		Kúsu (Fumu), Pili
—	Dikanda [diká:ndə]	Mwisi Dikánda	Bisi Dikánda	Músi Dikánda	
—	Boumouéli [búmwéli]	Mwisi Ímɔndu	Bisi Ímɔndu	Músi Ímɔndu	Ibáasa (nick name)
Coucongo	Minzoumba [minzú:mbə]	Mwisi Kòngu	Bisi Kòngu	Músi Kòngu	
	Boudjiala [bújyálə]				
	Dibamba-Kadi [dibá:mbə-kádi]				
	Didjiaba [dijyábə]	Mwisi Diyába	Bisi Diyába	Músi Diyába	
	Ndingui [ndi:ŋgi]	Ndíngi	Ndíngi		
		Mughámbu	Baghámbu		

Table 2: Yilumbu and Yipunu tribe 's names

In the above list like in the preceding Table, the French consonant *c* is used to represent the Yilumbu consonant **k**, e.g. *Coucongo* (instead of **Kukòngu**) is the Civili term for the Yilumbu Mwisi Kòngu. The next Table gives an account of names of places in Le Testu (1918) and Kwenzi-Mikala (1980). The hyphen (—) means that the form was not listed:

¹ According to Kwenzi-Mikala (1998:3) Yipunu sub-tribe's names are: Djoundou or Bagodjou [bàyojú], Simbou [sí:mbù], Polou [pòlù], Ibassa [ibàsə] and [tābə].

Place names in Le Testu (1918)'s list	Place names in Kwenzi (1980)'s list	Current spelling of the same words
Loango ¹	Lwango	Lwango
Loubinda	Doubinda	Dubínda or Lubínda
Tchibanga	Tchibanga	Tshíbanga
Dicoundou	—	Dikúndu
Penignioudou	—	Peninyúndu
—	Massanga	Másaanga
Penibatu	—	Penibátu
—	Moabi	Mwâbi
Moussitou	—	Musítu
—	Mouila	Mwîla

Table 3: names of places in Le Testu (1918) and Kwenzi-Mikala (1980)

Compared to the preceding Table, the data worth mentioning in Table 3 is the use of the digraphs *gn* and *ch*. Keeping with the French system of writing, Le Testu used *gn* for [ɲ], e.g. *Penignioudou* (instead of **Peninyúndu**) and *ch* for [ʃ], e.g. *Tchibanga* (instead of **Tshíbanga**). From the foregoing, it should also be noted that in the current spelling of Gabonese languages, *gh* has been retained for [ʎ], e.g. the word meaning ‘woman’ is orthographically represented as *mughétu* in Yilumbu.

Loubinda and *Doubinda* are both orthographical representations of the same toponym in Civili and Yilumbu respectively. They both appear in Class 14 with the prefix **lu-** in Civili and **du-** in Yilumbu. Thus they are not morphological variants.

Lastly and in keeping with French orthography, pioneering works hardly ever distinguish certain vowels in the alphabet even though they are known to be phonemically distinct, e.g. [e] and [ɛ] were both represented by *e* and [o] and [ɔ] were both represented by *o*. The *Rapport Final de la Session de Concertation sur*

¹ Loango, Loubinda, Doubinda, Tchibanga, Moussitou are up to the present the official denominations for administrative purposes.

l'Orthographe des Langues Gabonaises (1999) moved away from this approach in advocating the use of diacritics. In the current spelling of Gabonese languages the underlined e and o are used to transcribe [ɛ] and [ɔ] respectively.

As part of the planning of the macro- and microstructure of a dictionary, a lexicographer should not only reflect on criteria of selection for the many variant forms across the language's dialects and registers, but also on new forms that have been incorporated or coined as a result of language contact, mainly through borrowing. Watch (1993) and Raponda-Walker (1933) contain valuable information in this regard as it can be seen in the following Tables. A blank means that the word does not exist in our corpus:

Watch (1993)'s list	Current spelling of the same words in the Yilumbu Corpus
Santu	Sântu
Krusu	Krúúsu
Ekaristi	
Kommunion	Kóminyí
Santa Kommunion	
Paradi	
Kretien	Kréti
Jezu	Yéésu, Fumu
Batema	Báteema
Lekaristi	
Penitansi	
Noela	Nóweela
Egliza	Ingánga, nzúbu Nzâmbi

Table 4: Religious borrowed terms in Watch (1993)

Raponda-Walker (1933)'s list	Current spelling of the same words in the Yilumbu Corpus	Pronunciation
Kabala	kúvhaalu, kávhála	[káβà:lù], [káβà:lè]
Salu	Sáálu	[sá:lù]
Mensa	Mêtsa	[mê:tsè]
Cadella		

Karesa	Kárasa	[kárəsè]
Saku	Sááku	[sá:kù]
Nsabaku	Nzábaaku	[nzábà:kù]
Sabela	Sábala	[sábəlè]
Lumingu	Dumĩngu	[dùmĩ:ŋgù]

Table 5: Miscellaneous borrowed terms in Raponda-Walker (1933)

A fact worth emphasizing in the above Tables is that the spelling conventions of the originating languages (French as far as Watch's list is concerned and Portuguese with regard to Raponda-Walker's list) have been retained as words are borrowed, e.g. the gemination or the doubling of a consonant is marked, the vowel length is not recognized and the spellings of schwa is omitted. A sound base spelling would have resulted in the suppression of the unnecessary letters in loanwords such as *Kommunion* and *Santa Kommunion*. Because of all this, examples such as *Jezu* (instead of **Yéésu**) and *Egliza* (instead of **ingángá**) — in Watch's list — seem more a case of forced loanwords than a genuine outcome of borrowing. Contrary to this approach, in Raponda-Walker's list one letter corresponds more or less to one phoneme and vice versa (principle of bi-univocity). This is important because it is argued that an alphabet ought to reflect the pronunciation of its language. Despite the absence of tones in the orthography of words, the Balumbu know almost all the borrowed terms in Raponda-Walker's list. Tied to this problem is the question of **conjunctive system** as opposed to **disjunctive system**. Raponda-Walker settled for a conjunctive system of word division, whereas Watch settled for a disjunctive system. The following is a list from Watch (1993):

Words	Meanings
ma ngolo	Strength
ma sumu	Sins
ba kallanga	They stayed
bi lumbu	Days
Lu Mingu	Sunday
Tchi lunzi	Spirit

Table 6: Examples of disjunctive writing in Watch (1993)

An important question arises here, viz.: Where to put capital letters? It is generally acknowledged that to revere God, all terms referring to him or to something connected with Him should be written with capitals even in ordinary discourse. With regard to this point, in Watch's list *Jezu* (Jesus Christ) is written with a capital "J".

However, here is an interesting example: *Lu Mingu* (Sunday) is written with a capital "L" but the first letter of the stem is also a capital letter. The fact that *Lu Mingu* is written with a capital "L" is not surprising since in e.g. English, days of the week start with capitals. On the contrary, the fact that the first letter of the stem also starts with a capital letter is highly questionable. A number of examples can be listed in this regard. This may be acceptable if the author used this notation for stylistic purposes. However if that notation is to be followed in a dictionary this surely will not make things easier for the users of that system.

- **Concluding remarks**

The presentation of grammatical data in dictionaries is unquestionably one of the greatest tasks facing lexicographers. Orthographic inconsistencies add to the problem on the part of the user. As it appears in the above section, in the written literature of Yipunu, Yilumbu and Civili among others there are various orthography related problems that have been solved in accordance with the needs and reference skills of the target users. This is what the next section will attempt to do.

3.3.2. Contribution of the planned dictionary towards the standardization of Yilumbu orthography

3.3.2.1. Introduction

As far as orthography is concerned, there are many problems, but the problems on word division, stem tradition versus word tradition, hyphenated lemmata versus compound lemmata and the writing of variants are quite fundamental and therefore merit special treatment. Moreover, the orthography of the planned dictionary is in accordance with the *Rapport Final de la Session de Concertation sur l'Orthographe des Langues Gabonaises* (1999). In addition, the lexical tone within the planned dictionary will be the tone pattern of the word in isolation. The latter may vary

according to the position of the item in the sentence because Yilumbu is a speech pattern with tonal perturbations. In order to reduce the writing of tone to a minimum, three suprasegmental features are indicated orthographically, namely the high tone, the rising tone and the falling tone marked respectively by the acute accent (´); the rising pitch (ˇ) and the circumflex (^).

3.3.2.1 Word division

As far as word division is concerned, African languages have two different traditions, namely **conjunctivism** and **disjunctivism**. According to the conjunctive system, words are represented with a complex inner structure (e.g. verbal prefixes, formatives, roots and their extensions are written together), whereas in the disjunctive system a simple inner structure prevails. For reasons that are accounted for in the chapter dealing with the macrostructure (chapter 5), the disjunctive tradition has been adopted for the planned dictionary. However, the following should be written conjunctively:

- (a) Prefixes (nominal, verbal, etc.) and stems of lexical items are written conjunctively, e.g.:

(23)

mútu or mǔtu	‘person’
úyi	‘to eat’
bábáana	‘children’
bataáata	‘fathers’
bámaama	‘mothers’

- (b) Verbal prefixes, formatives, roots and their extensions are written together, e.g.:

(24)

Anásyáála ó mbusa	‘he stayed behind’
Ábû tukasíílaanu?	‘what are we going to do?’

- (c) Locative prefix cl. 16 vha- with nouns should be written conjunctively, e.g.;

(25)

vhoyĩlu or vhayĩlu	‘on top of’
vhótsi or vhátsi or ótsi	‘on the ground’

vhokáti	'inside'
vhongânda	'outside'

(d) Possessive pronouns that are used with kinship terms are written conjunctively, e.g.:

(26)

tayáami	'my father'
nguyândi	'his/her mother'

(e) Demonstrative pronouns with nouns are written together, e.g.:

(27)

mútwághu	'this man'
mwánáaghú	'this child'
ntsubwáayi	'this house'

N.B. Despite the fact that it has been suggested that the locative prefix cl. 16 vha- with nouns should be written conjunctively, the pronominal prefixes o- or ghu- (cl.17) and mu- (cl.3) used with nouns with a locative value should be written disjunctively rather than conjunctively, e.g.

(28)

o dikása	'to the market'
o músiru	'in the forest'
o méésu	'in front of'
ó mbusa	'behind'

- **Concluding remarks**

From the discussion above and as far as rules of word division are concerned, the system applied in the planned dictionary widely follows the disjunctive tradition.

3.3.2.2. Word tradition versus stem tradition

The **stem tradition** has been motivated as more scientific and more user-friendly than the **word tradition** for essentially the following reasons: this method makes it easier for related items to be grouped together; it avoids some sectors of the dictionary to be overcrowded and others nearly empty, etc. We believe, however, that these explanations and arguments are not sufficient reasons for a user-friendly product. The fact that the majority of existing dictionaries in the Gabonese languages have adopted the word tradition could lead to communicative problems on the part of the users if items are alphabetized by stem. Therefore, for reasons that are explained in chapter 5, we strongly advise that the word tradition be adopted for future lexicographic works in the Gabonese languages.

- **Concluding remarks**

It should be emphasized that the system applied in the planned dictionary widely follows the word tradition. More detailed information can be found in the chapter dealing with the macrostructure.

3.3.2.3. The orthography of compounds

The presentation of compounds in dictionaries usually results in inconsistencies in orthography. The question to be asked is whether compounds should be hyphenated, one word or two words? In order to answer this question some more specific information must be given with regard to the structure of compounds. From a morphological point of view, Yilumbu compounds may be classified into three categories, namely:

1. Compounds having the structure: noun + noun,
2. Compounds having the structure: derivative + noun,
3. Compounds having the structure: noun + connective + noun.

In English, for example, it is often a matter of personal choice whether compounds are hyphenated or not. For compounds that belong to the three categories mentioned above, a decision has been taken to represent them as two words. However, an

exception has been made to allow for a conjunctive presentation for a number of compounds where it is assumed that the mother-tongue speaker would not normally write them disjunctively. That is to say that the native speaker usually regards these cases of compounds as single units. Nevertheless, it should be acknowledged at the same time that this decision is problematic because it is based on the intuition of the lexicographer. Actually, what is believed to be a single unit for one speaker may form a separate unit for another one. With regard to compounds denoting personal names, a decision has been taken to write them with a hyphen. An illustration of all those decisions can be found in the following:

- **Compounds written with a space**

(29)

mwâna dibaála ‘boy’ (structure: noun + noun)
Yibúra mâmbu ‘trouble maker’ (structure: derivative + noun)
dikûmbi di mamba ‘flying-boat’ (structure: noun + connective + noun)

- **Compounds written conjunctively**

(30)

kumbúkuku ‘kind of ant’
Dighághalabônga ‘varan’
púngapúnyi ‘ogre’

- **Compounds denoting personal names**

(31)

Udíghu-Ibînda
Miyîndu-Mi-Nzâmba

- **Concluding remarks**

The discussion above merely results from the very recognition of the fact that the orthography of compounds has to be solved as early as possible in order to avoid problems that may occur when e.g. devising the macro- and microstructure of the planned dictionary.

3.3.2.4. Indication of the vowel quantity

The vowel quantity is phonemic thus the doubling of a vowel marks it. However, the vowel length occurring in the context of VNC is not usually indicated orthographically. Apart from examples of re-syllabification, the vowel length occurring in the context of CGV (MEEUSSEN's Rule) is recognized. This is illustrated in the following examples:

1. Context of VNC

(32)

pînda	'peanuts'	[pî:ndə]
dítambi	'foot'	[dítà:mbì]
dilěngi	'pumpkin'	[dilě:ŋgi]

2. Context of CGV

(33)

mwâna	'child'	[mwâ:nə]
mwéégha	'one'	[mwé:γə]
myáami	'my' (cl.4)	[myâ:mì]

From the data above, it worth mentioning that despite the fact that the length occurring in the context of VNC is usually unindicated in writing, an exception has been made for prolonged length. In addition to the foregoing the lengthening that occurs when a vowel is doubled or tripled etc. for emphasis is also taken into account in the orthography because it indicates signs of rhetoric speech.

- **Concluding remarks**

The discussion above merely results from the recognition of the importance of the vocalic length in Yilumbu. Vowel quantity is phonemic in Yilumbu thus it has to be indicated in writing for the sake of the target users.

3.3.2.5. Problems of variation

It is generally acknowledged that language thrive on variation. In most languages, phonology and morphology are the key areas where variation can yield an unlimited potential of variant forms.

3.3.2.5.1. The writing of the phonetic sounds [nz] versus [nts]

It is a well-known fact in the field of sociolinguistics that within the same dialect, there are as many idiolects as there are speakers of that dialect. Furthermore, each speech act implies the use of different codes or registers according to the speaker's competence in the dialect as well as the context and the situation of the communication, cf. Crystal (1992:69). An account of all variants is important. The point here has a twofold objective: (i) an account of all variants is likely to illustrate the tonal environment of a given lexical item (the tone pattern of the word in isolation has been taken into account for the lemma sign, since Yilumbu is a speech form with tonal perturbations. But, whenever possible the usage examples should take into account the tonal variants of the word according to its position in a sentence), (ii) the phonetic sounds [nz] and [nts] are in free variation in quite a number of utterances in Yilumbu. It has become a norm to write the digraph "nz" to represent the two sounds, and this happens predominantly in the written literature of Yipunu, Yilumbu and Civili among others. A notable exception in this regard is the *Dictionnaire français-yipounou, yipounou-français* (1966) in which members of the Language and Literature Committee of the Christian and Missionary Alliance (CMA) working in the Yipunu language chose to orthographically represent the phonetic sounds [nz] and [nts] by the digraph **ns** as it clearly appears in the Table below:

Spelling of Lexical items in which [nz] and [nts] are in free variation as they appear in CMA (1966)	Current spelling of the same words	Meaning
ngensa (my bold characters)	ngênsa	true; truth
Nsala	nzála	hunger; starvation
Nsambi	Nzâmbi	God
Nsanda	nzanda	spider's web
Nsila	nzíla	path
Nsima	nzíma	back; after
Nsitu	nzíitu	end
nsonsi	nzônsi	judge
nsungi	nzûngi	gall
nsungu	nzûngu	pain; wound

Table 7: Spelling of Lexical items in which [nz] and [nts] are in free variation

It is worth mentioning in Table 7 above that orthography of most of the words from CMA (1966) differs from the current spelling of the same words because the authors chose to orthographically represent the phonetic sounds [nz] and [nts] by the digraph **ns**. That is the reason why in the present model some of the findings of Nsuka Nkutsi¹ (1980) have been taken into consideration to help the standardization process and avoid overlapping and duplication. The existence of two different variants for the term meaning "God" is also interesting to point out. *Nsambi* or *Nzâmbi* (current spelling) is the variant form used in the so-called Yilumbu yi ghângu (the variety of the Nyanga province) as well as in the Yipunu spoken in the Nyanga province, especially in Tchibanga. It is also used predominantly in the written biblical literature of Yipunu, Yilumbu and Civili. On the contrary, *Nyâmbi* is the variant form used in the so-called

¹ Nsuka Nkutsi's contribution that is entitled: *Éléments de description du Punu* is a series of linguistic and lexicographic articles on Yipunu, a sister speech pattern of Yilumbu.

Yilumbu yí menaáne (the variety of the Ogooué-Maritime province) as well as in Yipunu (except for the variety spoken in the Nyanga province).

A decision has been taken to use the digraph "nz" (representing both the sounds [nz] and [nts]), but, in order to maintain and preserve dialectal or even idiolectal authenticity of form, the user will still be provided with the form in "nts". This is illustrated by what follows:

- **Lexical items in which [nz] and [nts] are in free variation**

(34)

nzála (+ **zala**) aussi/also **ntsála** [nzálə̀] *n.* (cl.9)....

ubánza (+ **bánza**) aussi/also **ubántsa** [ùbá:nzə̀] *n.* (cl. 15)...

Text example 34: article **nzála** and **ubánza**

- **Concluding remarks**

As it appears in the above section, the phonetic sounds [nz] and [nts] are in free variation in quite a number of utterances in Yilumbu. The decision to write the digraph "nz" to represent the two sounds is an important stand. This approach to purpose-specific lexicography can lead to improvements on the part of the user as far as the dictionary consultation is concerned.

3.4. General concluding remarks

From the discussion above it should be clear that conscious of the normative influence of dictionaries, the lexicographer will do well to consider well in advance criteria for selection and presentation of a number of lexical items, e.g. homographs, homophones, and variant forms across the language's dialects and registers, as well as new forms that have been incorporated or coined as a result of language contact, mainly through borrowing. Given the fact that dictionaries play a significant role in the standardization of a language, a lexicographer should assist a user with regard to lexical items having competing variants. The choice of the spelling of a particular item out of its competing variants has already significant implications in terms of language standardization. It is part of the lexicographer's responsibility to ensure that

all variant forms are consistently spelt correctly in a dictionary. A consistent editorial policy in this regard will help both the users and the standardization process.

It should be made clear that the discussion above did not attempt to apply any sort of criteria with respect to dialect choice. The standard dialect to stand for Yilumbu has yet to be chosen. The standard orthography that will originate from the chosen dialect will be put into use in schools, the administration, the press and other areas.

All Gabonese writing systems use the Roman alphabet, which was introduced by the French (as well as by the Portuguese and the English to a lesser degree) at the beginning of the twentieth century, cf., Mavoungou (2001a). It is therefore expected from academics to use the new orthography of Gabonese languages in their works.

Chapter 4: Minigrammars and other outer texts in the frame structure of the planned dictionary

4.0. Introduction

It has already been mentioned that with respect to the concept of a textual approach, the central list or main text of the dictionary is usually framed by outer texts: front and back matter texts. Apart from the compulsory users' guide, the front matter of a dictionary usually contains the grammatical outline of the language being treated. Moreover, the back matter is an optional component. It often contains additional texts dealing with numbers, geographical names, nationalities and languages, etc., cf. Hausmann and Wiegand (1989:331).

Dictionary introductions are widely regarded as highly valuable metalexicographic texts in the hands of a (skilled) user. As various scholars have pointed out, they explicitly contain data touching on the content and structures of the dictionary (macrostructures, microstructures, access structures, etc.), spelling, etymology, pronunciation, needs and reference skills of the users, word-class categorisation as well as other morphological and syntactic properties of lexical items and (more and more in present-day lexicography) some knowledge in dictionary use as well as training in dictionary use. Reflecting on the state of the role of introductory matter in a bilingual dictionary of English and Arabic, Al-Ajmi (2001:63) has pointed out six focus areas that may be used in order to critically evaluate the introductions of these dictionaries, namely:

1. Specification of the intended group of users,
2. Indication of the reasons for compiling the dictionary,
3. Reference to the sources of the dictionary,
4. Outline of new features in the introduction,
5. Specification of the number of entries (or words),
6. Practical guidance.

To these focus areas the following may be added:

7. The history of the publisher,
8. The dictionary basis,

Chapter 2 of this dissertation already contains reflections on (1), (2), (3), (6), and (8). Although this chapter aims to present a grammatical overview of the languages being

treated in the planned dictionary, some aspects of the user perspective will also come into play. More specifically the aim is to reflect on recent findings in the field of learner's lexicography and also to propose a new approach in the way grammatical features may be presented in front and back matter texts. It should be noted that in presenting a grammatical overview of the languages being treated in the planned dictionary, this chapter does not aim to show a minigrammar in the way it will be given in the planned dictionary. Therefore all the aspects discussed in this section merely give an account of the topics often dealt with in a minigrammar. In the final product that will be in accordance with the reference skills of the potential target readers, a user-friendly and space-saving approach should be employed.

4.2 The purpose of this chapter

The planned dictionary is meant, in the first place, for speakers of Yilumbu, with a relative good command of French. What usually happens in such a case, i.e. where users are familiar with both languages, is that the source language remains the sole language of treatment. This applies to a monoscopal dictionary. As a result and because of the traditional lemmatic bias that prevails, target language data are often treated in an unsatisfactory way, e.g. lexicographers only provide the users with a mere listing of translation equivalents without any indication of the co-text in which they are generally used. Being at a loss to sort out which translation equivalent fits which occurrence of the source language form, the users have no option but to make a random choice. What usually happens is that they pick the wrong equivalent. To avoid such a situation and to assist the users in their choice of the right translation equivalent, the target languages should also be seen as languages of treatment shifting the focus from the source language to the target language, cf. Gouws (1996b:158). This shift in the treatment from a source language dominated approach to an approach where the target languages also come into play should also be reflected in the outer texts of a dictionary. For this to happen in the proposed model the planned dictionary should not only include a minigrammar of the source language (Yilumbu) but the lexicographer should also assist the potential users with grammatical data regarding the target languages. This approach is in accordance with the **genuine purpose** of the planned dictionary [“(t)he genuine purpose of a domain-specific dictionary consists of

(sic!) in that it is used for in order (sic!) to infer, from domain-specific lexicographic data in the texts with outer access structure (...), such pieces of information which are considered domain knowledge”, cf. Wiegand, 1999:299] is to assist native and foreign language speakers on an equal basis in retrieving the relevant information as quickly as possible. The outer texts dealing with e.g. the phonological and morphological analysis of the target languages do not necessarily have to be comprehensive as compared to those given for the source language. The extent to which they should be treated has to be determined by the needs and reference skills of the target users of the dictionary. As a matter of fact, French is a compulsory school subject but English and Yilumbu are not. It may be wise not to assume that the potential target users have a sound knowledge of any of the three languages treated in the planned dictionary. Consequently, the dictionary users will need more assistance to be able to cope successfully with the grammatical data presented in the dictionary. Obviously, the users will need more guidance regarding the grammatical analysis of both English and Yilumbu than French. This situation has motivated the decision to treat those two languages at length but the data presented will still fall within the scope of a minigrammar. That is why it is also important for the lexicographer to carefully consider the use of mediostructural procedures that include three categories, namely an internal reference address, an external reference address and the dictionary external reference address, cf. Gouws and Prinsloo (1998:20-22) (these different categories will be fully dealt with in chapter 9 of the dissertation). The dictionary external reference address is especially useful to refer a user from a minigrammar to a source outside the dictionary where e.g. grammatical data are discussed in more detail. In addition to the foregoing, in the planned dictionary, the grammatical presentation of the three languages dealt with should be a combination between the dictionary and the grammar as it is currently applied in pedagogical lexicography. Due to space limitations the grammatical exposition is never complete in any dictionary. As a result the minigrammars dealt with in the planned dictionary (especially the Yilumbu minigrammar) could serve as the basis for the compilation of more comprehensive works.

A phonological and morphological analysis of the source language and the target languages based on sound linguistic principles will add to the value of the work. The planned dictionary will not only be a lexicographic source of reference but also a

linguistic tool. People who do not feel the need to use dictionaries but who are particularly interested in linguistic issues may just as well consult the work.

4.3 Interaction between users' needs and the dictionary typology

It is a well-attested fact that the target users and their reference skills should determine the structure of any dictionary. At present there is no dictionary at all in Yilumbu. According to Gallardo (1980:61) for a language that is still in the process of standardization priority should not be given to the compilation of a monolingual dictionary but to the compilation of a bilingual or multilingual one. A comprehensive dictionary that is a costly and time-consuming enterprise should be compiled when a language already has a well-established lexicographic tradition of translation dictionaries. As a matter of fact, the Gabonese community is not well familiar with dictionary using skills. For all these reasons, it seems that the best option for the user will be the compilation of a hybrid type of dictionary. Moreover the dictionary to be compiled will be a monoscopal work (see also chapter 7 dealing with the access structure of the planned dictionary). The major problem with monoscopal products is that only source language forms will be lemmatized in the central list. This shortcoming can be remedied by making provision for the inclusion of back matter texts, e.g. an alphabetical register, giving the dictionary a poly-accessible character.

Hanks (1979:35) rightly stated that the lexicographer is in the impossible position of someone who has to supply answers without knowing what the questions are. This point immediately brings the lexicographer to the root of the problem of which data categories to include and which not. A solution to this problem should be based on dictionary typology and on the subject knowledge of the potential users (see chapter 2 dealing with the potential target users of the planned dictionary for more detailed information). Up to the present, French remains the sole official language of Gabon. However, French is not the sole language that is studied in Gabonese colleges, schools and universities. For example, Italian, German, Spanish, Portuguese and Arabic are subjects at schools and they are usually taught as the optional second or third languages. This aspect of language teaching brings us to the next point of this chapter dealing with the discussion of the outer-texts of the planned dictionary and

more specifically the presentation of the grammatical overview of English and French in the outer texts.

4.4. English minigrammar

4.4.1 Geographical distribution of English

Geographically speaking, English is generally acknowledged to be the world's most important language. The fact that English is used all over the world has led to the existence of several varieties: British English, American English, English spoken in New Zealand and India, South African English, Canadian English, etc. In this dictionary, the focus should be on one variety of English, e.g. British or American English. But when including lexical items restricted to a variety exclusively used by the target users of the dictionary, the lexicographer should indicate this restricted usage by employing a system of geographical labels. These labels could have both a lemmatic and non-lemmatic address but help to shift the focus from the source language to the target language when they display non-lemmatic addressing procedures.

4.4.2. Phonology

As mentioned above, it is not the aim of this chapter to focus on the way grammatical outlines will look like in the dictionary neither to focus on all the phonological and phonetic issues. Therefore the emphasis in this section will be on the identification of the *phonemes* (the smallest units without a meaning) of English. The introductory matter of the planned dictionary should contain explicit explanations of the pronunciation system of the English language as well as the IPA symbols used in the phonetic transcriptions in order to enable a user who has insufficient linguistic knowledge to benefit from using the dictionary. This may be achieved through the use of illustrative materials such as phonetic Tables (see Appendices 1 and 2).

4.4.3 Morphology and syntax

As far as this section is concerned, the minigrammar of the planned dictionary will merely include the inventory of the *morphemes* (units smaller than words that have a meaning) of English. In the topic **word classes** (also traditionally referred to as "parts of speech"), particular attention should be given to the distinction between the categories of the so-called "closed classes" (including a limited number of items) and 'open-classes' (those of which the inventory can be extended by the creation of new lexical items). Syntactic patterns such as the use of "connecting words" or conjunctions in cases like co-ordination and subordination for example, could also be discussed in the minigrammar of the planned dictionary. For a more detailed account of English grammar the potential users can for example be referred to Quirk et al (1985). This is important because in the field of EFL lexicography, the *Comprehensive Grammar of English* (1985) by Quirk, Greenbaum, Leech and Svartvik is often regarded as the most recent and best-known major work (Salerno, 1999:213). It is often argued that lexicographers in their works hardly ever take into account recent findings of linguistics. However, as far as the planned dictionary is concerned new grammatical findings in the field of linguistics should be taken into account.

4.5. French minigrammar

4.5.1. Geographical distribution of French

French is nowadays geographically dispersed in a significant number of continents and countries. The geographical dispersal of French has brought the language into daily contact with new usage in Europe (Switzerland, Belgium, Luxembourg), in North America (Canada, overseas territories, Louisiana) in Africa, in Asia and in the Middle East. This has strengthened and enriched the French as it is spoken in France. Although the Académie française remains the final linguistic arbiter, it is very important that dictionaries should give an account of usage of French spoken outside the Hexagon, especially as it influences the form used in France. As far as the planned dictionary is concerned, Africanisms in general and Gabonisms in particular should be reflected on in the dictionary.

4.5.2. Phonology

For reasons that are stated above, the focus of this section will only be on the identification of the *phonemes* of French (see Appendices 3 and 4).

4.5.3. Morphology and syntax

The study of morphemes usually comprises the description of affixes (prefixes, suffixes and roots), gender versus number, word classes (part of speech), modes, tenses, aspect and the conjugation system. In accordance with the reference skills of the potential target reader of the planned dictionary, the focus may be on one member of the category ‘open class’, e.g.: the noun as well as on one member of the category of ‘closed class’, i.e. the modal verbs as well as syntactic patterns. Once again, the lexicographer may carefully consider the use of the dictionary external reference address (e.g.: see *The Petit Larousse Illustré*, 1998) to direct a user from a minigrammar to a source outside the dictionary where grammatical data are discussed in more detail.

Of great importance in this section is the rendering of grammatical information on verbs. It is a well-attested fact that French verb morphology is very rich and complex. This richness and complexity of French verb morphology is usually accounted for in the existing French dictionaries by the use of various conjugation Tables in Appendices. A dictionary plan of the kind that is planned in this dissertation should follow that tradition for the sake of the user. In fact, the conjugation Tables in question are likely to help users to avoid common errors in the production of texts in the L2. Moreover and where necessary, the user should be referred from the central list in the article of a specific lemma to the conjugation Tables in the Appendix. For example, in reflecting on the state of grammatical data in bilingual Italian-French dictionaries, Salerno (1999) has pointed out that in the *Nuovo Dizionario moderno italiano/francese, francese/italiano* (1991):

...the user who is unsure how to conjugate *saisir* will find next to the headword the following suggestion: '(come finir)'. So he or she have to consult this entry in order to retrieve the required inflected form. (...) **abbaiare** ...*aboyer** → *cross reference to the entry aboyer...*(conjug. come employer) → *cross reference to the entry employer (cambia la y in i davanti a e muta: j'emploie, tu emploies, ecc.)*. The asterisk is thus an alarm signal for the reader, who is recommended to check the other (i.e. French-Italian) section to avoid possible mistakes (Salerno, 1999:212).

4.6. Yilumbu minigrammar

4.6.1. Geographical distribution of Yilumbu

Yilumbu is classified by Guthrie (1953) as B. 44 and falls in the same language group as Ghisira (B. 41), Yisangu (B. 42) and Yipunu (B. 43). It is a Bantu speech form spoken in Gabon and neighbouring countries such as the Republic of Congo and the Democratic Republic of Congo (DRC).

In Gabon, Yilumbu speakers reside mostly in two of its nine provinces, namely: the Nyanga province, [especially in Mayumba (3°23'S, 10°38'E)], and the Ogooué-Maritime province [especially in Gamba (2°32'S, 9°46'E) and Sette-Cama (2°32'S, 9°46'E)]. This geographical situation has led to the existence of two major dialects: *Yilumbu yi ghângu* (in the Nyanga province) and *Yilumbu yi menaáne* (in the Ogooué-Maritime province).

A speaker of *Yilumbu yi menaáne* is easily recognised by pronouncing, for example, [y] and [l], where a speaker of *Yilumbu yi ghângu* would pronounce [ɥ] and [r], e.g.:

(35)

Men	Ghang.	Translations
[mùyětù]	[mùɥětù]	'woman'
[kùsù kwêli]	[kùsù kwêri]	'species of parrot'

A speech difference of another kind needs to be mentioned; viz. the form of a word may vary according to dialect, e.g.:

(36)

Men	Ghang.	Translations
Dúkakagha	Lukabónyi	'pangolin' (B.43: dúkakagha)
Masíyi	Mavhálu (also masíyi)	'horns' (B.43: masíyi)

These differences in pronunciation and in vocabulary items have to be entered in the dictionary with an abbreviation in brackets indicating the source.

4.6.2. Phonology

In this section, particular attention should be paid to the treatment of the following different topics, namely the identification of the phonemic vowels and consonants (see Appendices 5 and 6), sound shifting (including vowel and consonant allophony, vocalic openness and vowel harmony) and vowel length. As a prerequisite for possible solutions to lemmatization problems in Yilumbu, a detailed account of the Yilumbu spelling is also given.

4.6.3. The tonal analysis of Yilumbu as an outer text in the planned dictionary

The distinction between **integrated** and **non-integrated outer texts**, as developed by Bergenholtz, Tarp and Wiegand (1999), gives the lexicographer the opportunity to devise a set of outer text types with or without a direct link with the central list of a specific dictionary. It can be argued that the List of Contributors, the Historical Development of the language, Number Table, Weights and Measure Tables, Table of Military Ranks, etc. are the typical example of non-integrated outer texts because they usually do not display a direct link with the central list of a particular dictionary or with its genuine purpose. On the contrary if instead of including all words presenting spelling difficulties in the central list, a lexicographer chooses to treat them in a back matter text, such a text type will be an example of an integrated outer text. The use of this integrated outer text enables a user who is not interested in consulting a dictionary as such but who experiences enormous difficulties with the spelling of certain lexical items to go directly to the Spelling Table for help.

4.6.3.1. Indication of the tonal identification as an outer text in the planned dictionary

- **Tossitura of Yilumbu tones**

[dítè:ɲgù]	$\left[\begin{array}{ccc} \bar{\quad} & - & - \end{array} \right]$	H ¹ tone + L tone + L tone
[ɲgùyì]	$\left[\begin{array}{ccc} & - & - \end{array} \right]$	L tone + L tone
[ɲgùmbè]	$\left[\begin{array}{ccc} \frown & & - \end{array} \right]$	HL melody tone + L tone
[yìpěti]	$\left[\begin{array}{ccc} - & \cup & - \end{array} \right]$	L tone + LH melody tone + L tone

- **Basic tones**

Yilumbu is a tone language with two distinctive tone levels, high (H) and low (L). These two basic tones are conventionally marked in the surface representations by the acute accent (á) for the H tone, whereas any unmarked vowel carries a L tone.

Examples:

- (37) mangólu ‘strength’
 díkaka ‘hand’
 bílongu ‘medecine’

- **Tone melodies**

There are two tone melodies in Yilumbu, a falling tone (HL) and a rising tone (LH). The circumflex accent (â or áa) is conventionally used to mark the falling tone, whereas the rising pitch (ǎ or aá) indicates a rising tone.

Examples:

- (38) ngômbi ‘cow’
 mbǒki ‘daman’

4.6.3.2. Tone classes and tonal analysis

Yilumbu is a speech pattern with tonal perturbations. In other words, the tone pattern of a given word in isolation may vary according to the position of the word in the

¹ All fixed tones are represented by capital letters e.g. L (short for Low tone) or H (short for High tone), whereas all floating tones are represented by small letters e.g. l (short for low tone) or h (short for high tone).

sentence. Reflecting on a traditional story in Yilumbu, Blanchon (1984) has pointed out the following about the nominal tonal class of Yilumbu:

...(le yilumbu) semble avoir perdu l'opposition °HH/°HB alors qu'il en reste des traces pour certains locuteurs du Yi-punu. Exemples:

-díte:ngu 'revenant' (B.43 díté:ngu) °HB

-mátayi 'branches' (B.43 mátáyi)

-díkakə 'main' (B.43 díkakə) °HH

Les classes tonales étiquetées B, C, D, et B/C dans Nsuka Nkutsi (1980) n'existent donc pas en Yi-lumbu (Blanchon, 1984:22).

In order to examine the tonal pattern of Yilumbu, the following contexts have been retained: the word in isolation (i.e. bounded by pauses), the form preceded by the associative or the conjunctive particle na, the word used with the possessive, the word in position of subject and the word in position of object.

As far as the Yilumbu tonal analysis is concerned, two groups of lexical items have been identified, namely the substantives that undergo tonal perturbations and the ones for which the tonal pattern does not change in any context. Furthermore, a distinction should be made in Group 1 between substantives that have a High tone (H) on the first vowel of the stem in isolation and surface with a High prefix in other contexts (G1a) and substantives of which the Low tone of the first syllable in isolation becomes High in other contexts (G1b). In this section some tonological phenomena will be discussed and rules will be formulated. The formulas use generally accepted linguistic conventions, which are discussed in detail in, e.g. Goldsmith (1995).

Group 1a

Monosyllabic

+CV

1. word in isolation

mútu, bātu 'person(s)' (noun classes1/2)

2. Word preceded by na

Batsiwé na mútu ghúna o bwâla. 'They went with that man to the village.'

3. Word used with the possessive

Bātu baami 'My people'

4. Word in position of subject

(Prov.) Mútu vhâna mútu. 'A person is a person'.

5. Word in position of object

Musênga avábúyi bātu. 'The pin parasol heals people.' (Men.)

Diweela dína utsíwiítsa pwééla bātu. 'A lot of people came to that wedding'.

Here, the word *mutu* is changing a sequence of Low-High-Low vowels (in isolation and after the verb) to High-Low (in the other contexts). Furthermore, the vowel of the

prefix is normally Low. The question to be asked is how the vowel of the prefix can surface with a contour tone Low-High in one case and a High tone in the other? To answer this question, two rules come into the picture. The first is the rule of association of fixed tones, which is formulated in (1). The second is the rule of association of floating tones that is formulated in (2). In order to better understand what is going on in (1) and (2), the existence of a floating Low tone followed by a floating High tone should be postulated as part of the lexical items (infinitive verbs and nouns) of which the vowel of the prefix is normally Low, cf. Blanchon (1997:134).

(1) All the fixed tones of the suprasegmental tier are associated with their segmental correspondents.

(2) A floating High tone occurring between two Low tones is immediately associated with the vowel that bears the first Low tone. The association of that floating High tone has a dual function. Firstly, the floating High tone can merely replace the tone of the vowel it is associated with. Secondly, the association can result in the creation of a contour tone. This rule first applies in the domain of the stem, then in the domain of the prefix.

(3) A floating Low or High tone adjacent to an identical tone is automatically deleted.

Examples

a. [O [mu[tu]]] subjacent form

lh hL L

b. [O[mu[tu]]] tonal association.

l h hL L

c. [O[mu[tu]]] progressive association of the floating H tone + creation of a contour tone \overline{HL} .

bh hB B

d. [O[mu[tu]]] deletion the High tone

l (h) HL L

e. [O[mu[tu]]] rule of extrametricality

(l) HL L

f. [mütù] surface
 "...person" (cl.1)

The observation from this data is that after the association rule has applied (d.), there is a floating High tone left on the (extreme) left-hand side. In order to stabilise the system the application of the rule of extrametricality is necessary. That notion of extrametricality (or extratonicity, in this case) means that – at a particular stage in the derivation – a given element of the system is marked ‘inert’, thus it is excluded from the application of the autosegmental rules, and placed in parenthesis, cf. Goldsmith (1990: 27 and 194).

a. [O[mu[tu]]] intermediate subjacent form.

 | |
 lh hL L

b. [O[mu[tu]]] progressive association of the floating H tone + deletion the Low tone.

 / |
 lh h (L) L

(other rules)

c. [mütù] surface
 "person..." (cl.1)

Disyllabic

+CVCV

1. dikũlu, makũlu ‘leg(s)’ (noun classes5/6)
2. Na dikũlu. ‘with the leg’
3. Makũlu maami. ‘my legs’.
4. Dikũlu divántsi nzũngu. ‘I have a pain in my leg’.
5. Batsimútabula makũlu. ‘People cut his legs.’

As shown in this data, the word meaning ‘leg’ with a LHLL tone pattern changes, and surfaces with a LHL pattern. Once again the floating Low tone followed by the floating High tone contribute to the tonal perturbations. The reason why it may optionally become LHLL or LHL tone lies in the fact that in one case, the application of the association rule yields a contour tone \widehat{LH} , while in the other case the same rule associates the floating High tone with the Low tone beard by the first vowel of the stem which becomes High in tone.

+CGVCV

1. Mukwili, bakwili ‘widow’ (noun classes1/2)
2. Na múkwili ‘With the widow’.
3. Mukwilyáámi. ‘My widow’.
4. Múkwili avalila. ‘The widow cries.’
5. Ayândi múkwili. ‘She is the widow’.

+GVGV

1. Iwúwu, biwúwu ‘white ant hill’ (noun classes7/8)
2. Na íwuwu ‘With the white ant hill’.
3. Íwuwu yáámi. ‘My white ant hill’.
4. Iwúwu mó tandu. ‘The white ant hill in the valley.’
5. Avárómba íwuwu. ‘He is looking for the white ant hill’.

+CVNV

1. Mufúna, mifúna ‘burden; load’ (noun classes3/4)
2. Na múfuna ‘With the load’.
3. Mifúna mína myootsu á myaághu. ‘You are responsible for all of this’.
4. Mufúna alí vho yílu múru. ‘The load is on top of the head.’
5. Nangulaanu mífuna! ‘Lift the loads!’

+CVNVCV

1. Ifúmba, bifúmba ‘family (pl.ies)’ (noun classes7/8)
2. Na yífumba ‘With the family’.
3. Yífumba yândi. ‘his/her family’.
4. Yífumba batsimúríina. ‘The family let him down.’
5. Aná yandi yífumba. ‘She has her own family’.

Trisyllabic

+CVCVCV

1. Dubábala ‘volubility’ (noun class12)
2. Na dúbabale! ‘With volubility’.
3. Dubábala dwaaghu. ‘Your volubility’.
4. Dubábala duvámúkambisi. ‘Glibness is a problem for him.’
5. Dúna dubábala. ‘That is volubility’.

Group 1b

Bisyllabic

+CVCV

1. Nguyi, (tsí)nguyi ‘mother (s)’ (noun classes 9/10)
2. Ná nguyi ‘With the mother’.
3. Nguyáámi. ‘My mother’.
4. Nguyi anáwiítsa. ‘The mother has arrived.’
5. Muyáába búkulu: ngúyi. ‘The knowledge of the genealogy starts with the mother’.

What this data shows is that the lexical item meaning ‘mother’ surfaces on the one hand with a LL tonal pattern and with a HL tonal pattern on the other according to the following derivations:

- a. [O[nguyi]] intermediate subjacent form.

$$\begin{array}{c} | \quad | \\ \text{lh} \quad \text{L} \quad \text{L} \end{array}$$

- b. [O[n[guyi]]] progressive association of the floating H tone + deletion the Low tone.

$$\begin{array}{c} / | \quad | \\ \text{lh} \quad \text{h} \quad (\text{L}) \quad \text{L} \end{array}$$

- c. [O[n[guyi]]] progressive association of the floating low tone + deletion the High tone.

$$\begin{array}{c} / | \quad | \\ \text{l} \quad (\text{H}) \quad \text{L} \end{array}$$

(other rules)

c. [ɲgùyi] surface

"mother..." (cl.9)

- a. [O[nguyi]] intermediate subjacent form.

$$\begin{array}{c} | \quad | \\ \text{lh} \quad \text{L} \quad \text{L} \end{array}$$

- b. [O[nguyi]] progressive association of the floating high tone + deletion the Low tone.

$$\begin{array}{c} / | \quad | \\ \text{l} \quad \text{h} \quad (\text{L}) \quad \text{L} \end{array}$$

- c. [O[nguyi]] rule of extrametricality.

$$\begin{array}{c} / | \quad | \\ (1) \quad \text{H} \quad \text{L} \end{array}$$

(other rules)

c. [ɲgúyi] surface

"...mother" (cl.9)

1. Taayi, (tsi)taayi ‘father(s)’ (noun classes 9/10)
2. Ná taayi ‘With the father’.
3. Tayáami. ‘My father’.
4. Taayi anáwěnda o músiru. ‘The father went to the forest.’
5. Vho téemu íghulu mwána áyaaba táayi. ‘In ancient time, the child knew the genealogy of his/her father’.

Group 2

Monosyllabic

+VCV

1. Mwána, bâna ‘child (pl. children)’ (noun classes 1/2)
2. Na mwána ‘With the child’.
3. Mwánáami. ‘My child’.
4. Mwána anábélúgha. ‘The child has recover.’
5. Avárómba bâna. ‘She is looking for children’.

Of interest in this data is that although the segmental form of *mwána* may change in case of resyllabification, this word meaning ‘child’ undergoes no tonal change in any context. The derivation of this word is given below.

- a. [O [mw a:[na]]] subjacent intermediate form

lh | |
 L L

- b. [O[mw a:[na]]] progressive association of the High tone + deletion of the Low tone.

 /| |
l h (L) L
(Other rules)

- c. [mwâ:nə] surface
"child" (cl.1)

+CVCV

1. Idúka, bidúka ‘fool (s)’ (noun classes 7/8)
2. Na idúka ‘With the fool’.
3. Idúka yaaghu. ‘Your fool’.
4. (Prov.) Bidúka byǒli biwěnda ghó mbǒki. ‘Two fools hunting a daman’
5. Mí isáli idúka. ‘I am not a fool’.

+CVGV

1. Dukúyi, bikúyi ‘flying bush rat’ (noun classes 12/7)
2. Na dukúyi ‘With the flying bush rat’.
3. Dukúyi dwaaghu. ‘My flying bush rat’.

4. Dukúyi ana mavhăpi nána mónanga ngêmbu. ‘The flying bush rat looks like the bat.’

5. Wúna dukúyi. ‘That is the flying bush rat’.

+CVCCV

1. Ifúnda, bifúnda ‘pack(s)’ (noun classes 7/8)

2. Na yifúnda ‘With the pack’.

3. Yifúnda yaaghu. ‘Your pack.’

4. Yifúndáyi bí? ‘What is inside this pack?’

5. Banábóna bifúnda. ‘They took the packs’.

+CCVCV

1. Mangólu ‘strength’ (noun class 6)

2. Na mangólu ‘With the strength’.

3. Mangólu maami. ‘My strength’.

4. Mangólu manámána. ‘The strength is gone.’

5. Mwánáaghu ana mangólu. ‘This child has strength’.

Trisyllabic

+CVCVCV

1. Dughúghúma ‘stammering’ (noun class 12)

2. Na dughúghúma ‘With the stammering’.

3. Dughúghúma dwaáaghu. ‘Your stammering’.

4. Dughúghúma dunamúvhyooghila. ‘The stammering is giving him tough time.’

5. Múku dughúghúma. ‘A stammerer’.

+GVCV

1. mwángala, myángala ‘stomach pain’ (noun classes 3/4)

2. Na mwángala. ‘With the stomach pain’

3. Mwángala wandi. ‘His stomach pain’.

4. Mwángala unálútila. ‘The stomach pain is worse’.

5. Ina mwángala. ‘I have a stomach pain’.

As illustrated in this data, in all contexts the tonality of the word meaning ‘stomach pain’ remains the same.

4.6.3.3. Some general findings of the analysis

The general findings of the above analysis are formulated below:

Two groups of lexical items may be identified for Yilumbu:

1. Substantives that undergo tonal perturbations.

2. Substantives for which the tonal pattern does not change in any context.

A distinction should be made in Group 1 between substantives that have a High tone

(H) on the first vowel of the stem in isolation and surface with a High prefix in other contexts (G1a) and substantives of which the Low tone of the first syllable in isolation becomes High in other contexts (G1b). According to Blanchon and Nsuka Nkutsi¹ (1984), the Low tone or the High tone of the stem is the basic criterion for identifying the different tonal classes. On the basis of this assumption, I have identified three tonal classes for Yilumbu:

Class 1: H – H

Class 2: H – B

Class 3: B – B

This is relevant because all Yilumbu lexical items pronounced in isolation fit into these three tonal classes. It is also worth mentioning that Blanchon (1984a) himself has identified two tonal classes [H – H (B) and H – B (B)] for Civili. These tonal classes have been identified with only the word in isolation. Most importantly, Blanchon (1984a) has also emphasized that class 2 [H – B (B)] may be doubled if words are put into different contexts.

Another fact that has to be mentioned is that Blanchon's (1984:22) findings: ..(le yilumbu) *semble avoir perdu l'opposition HH/HB...* (Yilumbu seems to have lost the opposition HH/HB) is relatively true if one bears in mind that his analysis was based on the so-called *Yilumbu yi ghângu* (the variety of the Nyanga province, especially the one spoken in the Mayumba area). In fact, most speakers of the variety in question have lost the opposition HH/HB. However, the Yilumbu corpus clearly shows that traces of the opposition HH/HB can still be found among some speakers of the so-called *Yilumbu yi menaâne*. Compare the following examples in this regard:

(39)

<i>Yilumbu yi menaâne</i>	<i>Yilumbu yi ghângu</i>	Meaning
búkúlu	bukúlu	vegetable
mábónyi	mabónzana	laziness
mápápi	mavhápi	wings
máyãgha	mayãka	cassava

¹ Blanchon and Nsuka Nkutsi's contribution that is entitled: "Détermination des classes tonales des nominaux en civili, isangu et inzebi" is a linguistic article on Civili, Isangu and Inzebi.

múfúdu	mufúdu	young man
--------	--------	-----------

Hausmann and Wiegand (1989:337) have argued that in many general monolingual dictionaries, the macrostructure and the only outer access structure coincide. If a dictionary has a tonal analysis of the kind that is referred to above it would have not one but two macrostructures and consequently several access structures or search routes. Given the fact that Yilumbu displays a set of two groups of substantives, namely those undergoing tonal perturbations and the ones for which the tonal pattern does not change in any context, the front matter or the back matter of the planned dictionary could contain a text with a list of all the items that are to be found in these two groups.

4.6.4. Morphology and syntax

The morphological analysis should provide the user with a relevant treatment of the following topics, namely the inventory of the morphemes (lexical and grammatical), the derivation, the flexion and the invariable. Given the fact that derivational processes in Yilumbu are very productive and the knowledge of the affixal system of the language necessary, the focus in this section will be on the derivation and the flexion. In fact, many substantives and verbs may be derived from verb-stems and nominal stems. Extended forms of the verbs include both the simple extensions and the compound extensions. The following are examples of simple extensions: /uwendísa/, /usikáma/, /unátíla/, /ubindíga/, /uvángana/, /utatíla/, /unémína/, /ukúmúga/. These are the causative (-is-), the stative (-am-), the applied (-il-), the impositive (-ig-), the reciprocal (-an-), the transitive and intransitive (-il- or -in-) and the passive (-ug-, -us-, -ul-) in that order.

Some verbs have fewer; others have more of these extended forms. Deverbative nouns of classes 7/8 which denote the agent of the action described by the verb, /yibúsi/, who gives birth (sister), and those of the class 5 which denote the action of the verb, e.g. /divutuga/ (action of going back), etc. as well as nominal derivatives obtained by either prefixation, reduplication or by composition have a productive occurrence in the language. Therefore they should be entered and defined. However it has been proven difficult to enter all the extended forms of the verbs. Some

derivatives are rarely used while others are normally used. That is where the frequency count parameter comes into play to decide for or against the inclusion.

Because of the various sound-shifting taking place in the noun and verb stems during the derivation process, the derived forms are not easily phonologically predictable. Consequently the user will need some assistance from the lexicographer. One of the ways to help the user is to make use of inserts. The so-called *inserted inner text blocks* are usually presented in the central list. However this concept of "insert" has nothing to do with the frame structure of the dictionary. As a matter of fact, inserts can be used in more than one-way, e.g. in the central list or in the outer texts (front and back matter texts). Therefore the lexicographer can assist the users by making use of inserted text blocks not to convey pragmatic information, as it is usually the case, but to concentrate mainly on grammatical aspects of the language. This has a lot of implications for dictionary consultation because a user can merely consult the dictionary not looking for information on meaning or the spelling of a given lexical item but to seek grammatical information. Thus for the user, ease in detecting verbal roots and stems can only be acquired by familiarity with the rules governing sound changes given in the following inserted text block as part of an outer text:

(40)

Lexical items (especially substantives) obtained by derivation are subject to phonetic and phonological changes. From a phonetic point of view, the sound [ɣ], for example, is sometimes changed into [y] or [s]. This is referred to as palatalisation (this process may also be interpreted as a kind of attenuation because the consonant undergoing the sound-shift is weaker).

Examples¹: [mùtɔ́yitsi] ‘fighter’ (cf. [ùtɔ́**ɣ**è] ‘to fight’)

[mùlòsi] ‘Witch’ (cf. [ùlɔ́**ɣ**è] ‘to bewitch’)

In the same way, certain consonants are not able to maintain their position in the formation of the derivatives and may be strengthened, for example the dorso-velar fricative [ɣ] is changed into a corresponding plosive voiceless sound: [k], e.g.:

[mùkábì] ‘generous person’ (cf. [ù**ɣ**ábè] ‘to share’)

Phonemically speaking, derivatives are liable to contraction and glide formation. Words ending in the suffix **-itsi** are sometimes contracted by the rejection of the entire antepenultimate syllable.

Examples¹: /mufútsi/ ‘liar’ (cf. /mufúrítsi/ ‘same meaning’)

/musátsi/ ‘worker’ (cf. musalítsi/ ‘same meaning’)

At the level of the syllable analysis, the rejected antepenultimate syllable is an autosegment that has a position on the skeletal tier as well as on the segmental tier. However it is only linked to the skeletal tier. As a result, it is not realized phonetically. The non-linear representation of the syllable in question is given below:

Line (A N) A ...N...

| |

Skeletal tier X X

Segmental tier. ...C.....V....

As far as glide formation is concerned, Yilumbu does not allow the combination of different vowels. Therefore in a situation of different vowels in succession, the second vowel undergoes glide formation at phonetic level, e.g.: [mùŋqítsi] ‘drinker’ (cf. [únù] ‘to drink’).

As far as the contraction phenomenon is concerned, a comment could be made in connection with frequency count. With regard to the dictionary basis, our lexicographic corpus shows that the contracting word is preferred for economical reasons indeed. Thus the full form could be labelled as "seldom used". In addition to the foregoing, contracting lexical items as well as their corresponding full forms should be lemmatized on the basis of frequency of use. Apart from the use of labels of

¹ In these examples the consonant undergoing the sound-shift is made "visual" by the use of bold characters for ease of identification.

temporal expansion (markers such as "often" or "seldom" used as earlier mentioned) the inclusion of both shorter and complete forms does not imply an equal treatment at microstructural level. For example, the full treatment could be given in the article of the contracting lemmata, whereas the complete forms will only receive a limited treatment, namely a cross-reference to the short forms, cf. Gouws (1999a:24)

When dealing with derivative lemmata, through the use of mediostructural procedures including internal and external reference addresses, the lexicographer will refer the potential reader to the inserted inner text as well as the minigrammar included somewhere in the front or back matter texts. These mediostructural devices have an important value as far as dictionary use is concerned because they will help to form an habit of immediately learning the different morphemes of derivation as well the process of the derivation itself. This approach which will enable the user to quickly locate the information being sought, links to a tendency in today's dictionaries to give explicit instruction in dictionary use. 'The teaching of dictionary skills' should ideally support this method at school level, cf. Hartmann and James (1998:viii).

As a prerequisite to dictionary consultation, the user is expected to read the chart of prefixes of the language (see Appendix 7) in order to familiarize himself/herself with all the concord possibilities for nouns, adjectives, pronouns and verbs. When this is done it allows the lexicographer to limit microstructural data to a minimum (the latter are almost characterized by the use of textual condensation procedures, cf. chapter 9 for a further discussion). For example, from the following treatment of the lemma sign **ngânga** (sangoma, *SAE*):

(41)

ngânga ... [ŋgâ:ŋgə/(tsi)ŋgâ:ŋgə] <i>n.</i> (cl. 9/10)
--

Text example 41: article **ngânga**

This is the information the user is expected to retrieve from the macro- and microstructural data presented: **ngânga**, noun that designates a human being despite its prefix markers that belong to gender 9/10. It occurs in class 9 for the singular and in class 10 for the plural. However in order to form the plural, the secondary prefix

tsi- is usually added to the primary prefix **N-** in the so-called *Yilumbu yi ghangu*. This secondary prefix **tsi-** is also the syntactic concord marker for all the verbal, adjectival and pronominal forms brought into relation with this noun, cf. Ngo Semzara Kabuta (1998:52-53). In the same way when looking at the left core structure of the dictionary article (the comment on form), the potential dictionary users are implicitly **instructed** how to pronounce, write or use the lemma sign **ngânga**, cf. Wiegand (1983:107).

4.7. On good outer texts practices

Reflecting on the Slimline Kanji Dictionaries, Horton and Horton (1996) have warned against ridiculous outer texts practices in dictionaries or when front matter texts and back matter texts tend toward the eccentric. As far as this point is concerned, Horton and Horton (1996), argued that:

In American dictionaries, we find the back matter cluttered with sections on children's names, the flags of the world, or lists of two-year colleges. In much the same spirit, kanji dictionaries have sections on the Chinese hexadecimal calendar... or advertisements and self-promoting personal bibliographies... or the Sexagenary Cycle and the Pentatonic Scale... or The Nickname [sic] of Barbarians... A particularly bad back-matter section is the gakken's nine misplaced pages of «Supplementary Notes»... These «Notes» are almost all brief, one- or two-sentence comments about kanji headword: its old written forms, common abbreviations, or points of historical and cultural significance. If such «Notes» warrant inclusion in the dictionary (and they do, in our opinion), then they belong with kanji headwords, which they are about (Horton and Horton, 1996:138).

This point of view brings us to the crucial problem of which outer texts to include and which not. The **Animal table** in the *Longman Dictionary of Contemporary English* (1978) as shown below forms part of good lexicographic practices:

ANIMAL	MALE	FEMALE	YOUNG	GROUP NOUN	Noise-all verb and noun: some are also interjections
cat	tom(cat)	queen	kitten		purr miaow <i>interj</i>
cattle (<i>pl.</i>)	bull	Cow	calf	herd	bellow (of bull) moo (of cow) <i>interj</i>
chicken	cock	Hen	chick	brood (of young)	
dog	dog	bitch	pup(py)		bark whine growl bowbow <i>interj</i>
dolphin, porpoise, whale	bull	Cow	calf	school	
donkey					heehaw <i>interj</i> bray
duck	drake	duck	duckling		quack <i>interj</i>
deer (<i>pl.</i> deer)	buck stag	doe hind (esp. of red deer)		herd	
fish				shoal	
fox	dog	vixen	cub		bark
goat	billy (goat)	nanny (goat)	kid	herd	bleat
goose (<i>pl.</i> geese)	gander	goose	gosling	flock gaggle	hiss honk
horse	stallion	mare	foal	herd (esp. in the wild)	neigh whinny
lion	lion	lioness	cub	pride	roar
pig	boar	Sow	piglet	herd	grunt oink <i>interj</i>
rabbit	buck	Doe			
seal	bull	Cow	pup	colony	bark
sheep	ram	Ewe	lamb	flock	bleat baa <i>interj</i>

Table 8: The **Animal table** in the *Longman Dictionary of Contemporary English* (1978:1298).

Despite this good example, Lists of plant names, list of tribe names are hardly ever touched on in front or back matter texts. However, they may contain a great deal of information for the user and have for this reason a stronger claim for inclusion. A list of Yilumbu tribe names as already been accounted for in chapter 3 of the dissertation. The following is a list of plant names:

Plant names	Scientific names	Commercial names
mughumunu	<i>Coula edulis</i> (Olacaceae)	Noisetier, coula
mulômba	<i>Pycnanthus angolensis</i> (Myristicaceae)	Ilomba, faux muscadier
musíghu	<i>Dacryodes buettneri</i> (Burseraceae)	Ozigo
musúgha	<i>Sacoglottis gabonensis</i> (Humiriaceae)	Ozouga
musúku, musúgha	<i>Scyphocephalum ochocoa</i> (Myristicaceae)	Sorro
mwíba	<i>Irvingia gabonensis</i> (Irvingiaceae)	Chocolatier, andok
mufúma	<i>Ceiba pentandra</i> (Bombacaceae)	Fromager
mbûndu	<i>Trichoscypha abut</i> (Anacardiaceae)	Raisin du Gabon
dibála (also musênga)	<i>Musanga cecropioides</i> (Moraceae)	Parasolier
myééma	<i>Rhizophora racemosa</i> (Rhizophoraceae)	Palétuvier
mwâbi	<i>Baillonella toxisperma</i> (Sapotaceae)	Arbre à beurre
mughãna	<i>Pterocarpus soyauui</i> (Papilionaceae)	Padouk, Bois corail
mukúmi	<i>Aucoumea klaineana</i> (Burseraceae)	Okoumé

Table 9: Twelve well-known Yilumbu plant names

Very much in the same way, a list of the denominations below one million and a list of days of the week in Yilumbu may be useful for text reception and text production for both mother-tongue speakers as well as for learners.

Words	Equivalence in the metrical colonial currency of Franc CFA Central African Francs
dóli ráánu	25f cfa
dighúma di dóli.	50f cfa
dighúúmi ná iráánu.	75f cfa
maghú mabăyi.	100f cfa
maghú mábăyi ná iráánu	125f cfa
maghú maráánu	150f cfa
maghú maráánu ná iráánu.	175f cfa
maghú măna	200f cfa
maghú măna na dóli ráánu	225f cfa

Table 10: A list of the nine first denominations below one million

Days of the week in Yilumbu	French equivalents	English equivalents
Ilumbu teti mo dumĩngu	Lundi	Monday
Tsímwaali	Mardi	Tuesday
Tsintatu	Mercredi	Wednesday
Tsína	Jeudi	Thursday
Tsintaanu	Vendredi	Friday
Sábala	Samedi	Saturday
Dumĩngu	Dimanche	Sunday

Table 11: List of the days of the week in Yilumbu

4.8. Examples of other outer texts

Kavanagh (2000) has pointed out how the cultural dimension is dealt with in both British and American dictionaries in particular. As far as African languages are concerned, the *Greater Dictionary of Xhosa* (henceforth abbreviated GDX) offers a good lexicographic picture and thus deserves a special mention. This publication, which is being compiled at the University of Fort Hare, is an explanatory trilingual dictionary with Xhosa, English and Afrikaans as treated languages. Within the central list covering 681 pages, the user will find Xhosa lemmata as well as their paraphrase of meaning and illustrative examples in the first column of each page. These data

categories are then translated into English and Afrikaans in two further columns. However a fact worth mentioning in this dictionary concerns the front and back matter texts of the book. With regard to front matter texts, there are introductions in all three languages. The latter includes data on the Xhosa language situation (point 1), data on Xhosa orthography and dialects (points 2 and 9). There is a lot of information to be retrieved with regard to phonetic, phonological, morphological and semantic aspects in isiXhosa (points 3, 4, 5, 10, 11, 12, 13,14, 15, 16, and 17). Place names range from the names of continents, oceans, and countries to the names of major cities, rivers and places of historical importance. Points 6, 7, 8 also provide a great deal of information about the IsiXhosa National Lexicographic Unit (henceforth XNLU, formerly Xhosa Dictionary Project which was established in 1967 under the leadership of the late Professor H. W. Pahl, first Editor-in-Chief of the Dictionary Unit). For example, the user will find why only the third volume has appeared yet in 1989, edited by H.W. Pahl et al.

With regard to back matter texts, GDX includes 51 addenda containing notes on all kinds of grammatical issues as well as a whole range of ethnographic details typical of Xhosa cultural heritage.

From an access structure point of view, an extreme part on either side of the cover gives an account of the following:

- a. History of Xhosa lexicography,
- b. Specification of the intended target user groups of the dictionary,
- c. Indication of the reasons for compiling the dictionary,
- d. Specification of the data categories to be found in the dictionary.

This is a good marketing strategy to announce the contents of the book on either side of the cover where the user can read the following:

“The Greater Dictionary of Xhosa, a project of the University of Fort Hare, is the first definitive trilingual dictionary in Southern Africa. For the first time, too, it amasses an unexpectedly large volume of data on the lexicon of the Xhosa language including material not only of semantic, but also of syntactic, morphological, and phonological importance. The approach is wide, dealing with a comprehensive range of information of sociolinguistic importance set against the background of Xhosa tradition and culture.”

Later on compilers add:

“The Greater Dictionary of Xhosa fulfils a long-felt need on the part of Xhosa speakers for an improved, comprehensive, lexicographical study of their language. But, as a trilingual dictionary, it also meets the needs of English and Afrikaans speakers who intend mastering Xhosa and require accurate translation of Xhosa words and expressions. The many technical

terms, idiomatic expressions, compounds, derivatives, and verbal structures are clearly conveyed in all three languages. An abundance of examples is included to demonstrate semantic and syntactic patterns of usage, as well as the equivalent forms of expression in English and Afrikaans.”

These application of the **data exposure structure** (Gouws 2002; 2002b) on either side of the cover give users a quick overview of what is to be found in the dictionary. Similarly, the *Rakibolana Malagasy-Alema/Madagassisch-Deutsches Wörterbuch* (1991) and the *Deutsch-Madagassisches Wörterbuch/Rakibolana Alema-Malagasy* (1994) by Bergenholtz et al. are interesting lexicographic products in the sense that both in the central list and other texts they concentrate on issues reflecting the daily life of the people chosen as target users. In the *Rakibolana Malagasy-Alema/Madagassisch-Deutsches Wörterbuch* in particular, there is a lot to be retrieved by users in terms of daily life in Madagascar as well as people's attitude and beliefs. It is worth mentioning how people in Madagascar perceive and talk about sensitive topics such as death. The following dictionary article is an example of the treatment of the lemma **famadihana**:

(42)

famadihana a. [ara-bakiteny] **Umwendung f**
Zentraler und wichtigster Ritus des madagassischen Ahnenkultes auf dem zentralen Hochland. Nach einer angemessenen Frist (mehrere Jahre) wird ein Verstorbener aus der Familiengruft geholt und in neue Leichentücher gewickelt. Famadihana ist ein großes, frohes Familienfest in dessen Verlauf auch Tiere (Rinder, Geflügel) geopfert werden. Es kann mehrere Tage dauern und wird von Musik, Tanz und Gesang begleitet.



Text example 42: Article **famadihana** (from Bergenholtz et al. 1991, 193)

The German encyclopedic section of the text can be translated as follows:

Famadihana is an important Malagasy ritual, which derives from the worshipping of the ancestral spirits in the country's highlands. After a long period (one year), the corpse of a person who has passed away is removed from the familial graveyard and covered with a new pall. *Famadihana* is a big and happy celebration in which animals are slaughtered to ancestral spirits. During this celebration, which can last for several days, songs and dances are performed.

Most importantly the dictionary in question contains several outer texts dealing with routine formulas. The following Text example is an illustration of a text entitled "Begrüßen = greetings". This text taken from the *Deutsch-Madagassisches Wörterbuch / Rakibolana Alema-Malagasy* (1994) presents cultural data in both source language (to the left) and target language (to the right) in two columns set apart typographically, and therefore clearly perceived by the user:

(43)

BEGRÜßEN mündlich/formel	MIARAHABA¹ amim-panajana/raha miteny
Auf madagassisch bedeutet das Wort "miarahaba" sowohl "begrüßen" als auch "gratulieren".	Mifono hevitra roa samihafa ny teny "miarahaba" amin'ny teny malagasy (→ GRATULIEREN, MIARAHABA ²)
In verschiedenen Situationen gibt es ganz bestimmte Grußformeln. Bei einem offiziellen Anlaß (etwa einem Staatsbesuch, einer Tagung, einem Geschäftsgespräch) können die Teilnehmer oder Delegationsmitglieder von einem Vertreter der einladenden Gruppe offiziell im Rahmen einer Begrüßungsrede oder auch einzeln persönlich wie folgt begrüßt werden :	Misy teny fiarahabana raikitra fampiasa amin'ny toe-javatra maro samihafa. Toy izao manaraka izao ny teny fiarahaban'ny solontenan'ny mpandray vahiny ireo manampahefana manao fitsidihana na ny olona manatrika ny fivoriana na mihaona hiresaka momba ny varotra/raharaha amin'ny fotoana ofisialy :
<i>Ich heiße Sie im Namen unserer Firma/der Regierung willkommen ! Ich begrüße Sie aufs herzlichste !</i>	<i>Amin'ny anaran'ny orinasa/fitondrampanjakana no iarahabako anao/anareo tonga soa ! Faly tokoa miarahaba anao/anareo !</i>

Text example 43: Article **Begrüßen/Miarahaba** (from Bergenholtz et al. 1994, 745)

Though the dictionary may be targeted primarily at the German community, in this outer text, compilers of the investigated dictionary have recorded a fair amount of cultural data, which is accessible not only to German speakers but also to Malagasy speakers themselves. With regard to cultural data in the source language (to the left), this outer text helps the German learner become more aware of the differences in lifestyle, heritage and values between Germany and Madagascar.

As far as the present model is concerned, the central list of the planned dictionary displays some articles with: (i) a cultural or encyclopedic section presenting texts in the three languages of the dictionary (Yilumbu-English-French) and (ii) a cultural or encyclopedic section presenting texts in only the target languages of the dictionary (English-French) (see chapter 6 for more details information). But most importantly, Yilumbu idioms and proverbs are treated in back matter texts of the planned dictionary.

These outer texts are important for both mother-tongue speakers chosen as prime target users and French or English learners who may as well use the planned dictionary. Some mother-tongue speakers may discover the culture that underlies idioms/proverbs, whereas French or English prospective learners may become aware of the differences in worldview between Gabon and their home countries. This is important because, although the planned dictionary is primarily aimed to aid the Yilumbu user with regard to text production and text reception in his/her mother-tongue, it should also assist non Yilumbu prospective users with a good command of French or English.

4.9. General concluding remarks

In this chapter dealing with minigrammars and other outer texts in the frame structure of the planned dictionary the primary focus was the content of minigrammars in both the source language (Yilumbu) and the target languages (English and French). Instead of focusing on the way grammatical outlines look like in dictionaries, this chapter has merely given an account of the topics often dealt with in a minigrammar. Moreover, some attention has already been given to other front matter texts as well as potential back matter texts, cf chapter 2 of the dissertation. Despite the fact that this chapter

made provision for disentangling the Yilumbu tonal system, more research needs to be done in this area of suprasegmental phonology as well as in segmental phonology. Orthographical inconsistencies are also likely to pose problems on the side of the user. Thus it is an area that should not be taken for granted by the lexicographer. Existing problems should be solved in accordance with the needs and reference skills of the users.

Chapter 5: The macrostructure

5.0. Introduction

When devising the macrostructure of a dictionary, the lexicographer is confronted with at least two major issues. First of all he/she has to give an answer to the question which lexical items to include and which ones not. This has to be motivated. Then the question of the arrangement of these macrostructural elements has to be addressed. To address the first question, the dictionary maker may rely on a useful tool: the usage frequency of lexemes, cf. Hartmann (1989:21) while the question of the ordering of lemmata links to the whole idea of a straight-alphabetical dictionary as opposed to a dictionary with a sinuous lemma file. The lexicographer should not only decide on the macrostructural elements to be included but he/she should also make up his/her mind on the form and presentation of these lemmata. But before dealing with these issues, it is important to know which types of lexical items should be lemmatized. As far as this point is concerned, one has to consider carefully to which extent items from languages for special purposes should be included. It has already been mentioned that the user needs to find information about the grammar as well as the typical context of the language. Thus, macrostructural elements of the planned dictionary will not only belong to everyday vocabulary of Yilumbu but will also include special-field lemmata from among others the field of astronomy, agriculture and traditional pharmacopoeia. (This aspect once again receives some attention in section 5.8 in this chapter. Moreover the microstructure discussed in chapter 6 of this dissertation also gives an account of the treatment of special-field terms). These three different special fields are not motivated arbitrarily but correspond to an empirical observation. In fact, people on a daily basis use medical, astrological and agricultural terminologies. With regard to the extent to which special-field terms should be treated, the data presented should not turn the work into a complete terminology or special-field dictionary.

Furthermore, all types of lexical items should be included as lemmata. This has a lot of implications as far as lemmatization is concerned, cf. Hausmann and Wiegand (1989: 337) and Gouws (1999b:72). First, nouns and verbs are usually regarded as universal categories. Thus their inclusion in a dictionary is often taken for granted. Hausmann and Wiegand (1989:329) correctly state that in the European tradition, verbs are

lemmatized under their infinitive form or under the first person singular of the present indicative. With regard to African languages, two lexicographic traditions exist, namely the **word tradition** and the **stem tradition**. According to the word tradition, lexical items are entered in their complete forms, i.e. prefix plus stem, while in the stem tradition lexemes are lemmatized under the stem without their prefixes (a more detailed presentation of this issue can be found in Van Wyk (1995). Later in this chapter these two traditional approaches are critically evaluated, with special reference to Gabon's lexicographic situation).

Although this chapter gives an account of lexemes in everyday language, the focus will be on culture-bound lexical items, loan words, special-field items and kinship terms that have been treated in a relatively unsatisfactory way in translation dictionaries in general and with special reference to existing Gabonese-foreign language dictionaries. A similar analysis will be carried out in chapter 6 dealing with the microstructure of the planned dictionary.

5.1. Dictionary basis and selection of lemma candidate list

5.1.1. Corpus

5.1.1.1. Definitions

A corpus can be defined as a body of written text or oral text from various sources, e.g. books, news papers, debates, informal face-to-face conversation, telephone conversation, broadcasting materials, etc. which can be use for several purposes (Dubois-Charlier 1997:312, translated by the author).

5.1.1.2. Oral sources

Fieldwork on the spoken language was undertaken on three occasions, viz. June 1995 - September 1996, June 1996 - September 1996 and June 1997 - September 1997. The research was done in Mayumba (3° 23'S, 10° 38' E) and Gamba (2° 32'S, 9° 46' E), Gabon. Particulars on the speakers follow below:

Name	Gender	Age	Dialect	Region of origin	Occupation
Dissouva, Louis	Male	65	Yilumbu yi ghāngu	Vemo	Administrator (retired)
Kokassa, Elisabeth (née Odigo)	Female	40	Yilumbu yi ghāngu	Mayumba	Hospital cleaning staff
Koumba Louembet, Madeleine	Female	60	Yilumbu yí menaáne	Sette-Cama	Domestic worker (retired)
Moussavou Moussouami, Jean-Marie	Male	70	Yilumbu yi ghāngu	Moulongu	Cook (retired)
Mouwembi Louembet, Marguérite	Female	56	Yilumbu yí menaáne	Gamba	Domestic worker (retired)
Nzigou Marguérite (née Poba Mavoungou)	Female	54	Yilumbu yi ghāngu	Mayumba	Domestic worker (retired)

Table 12: Yilumbu corpus: particulars on the informants

5.1.1.3. Technique of collecting material

Audio recording and transcriptions were used for this study. The audio recordings were based on the Questionnaire of TERVUREN for isolated words and on the Questionnaire of WELMERS for contextual information (cf. Doneux, 1967). The corpus is based on 48 hours of recording of words, sentences, songs, stories and proverbs in Yilumbu. Of these, fifteen hours of recording have been transcribed electronically. The *Alphabet Scientifique des Langues du Gabon* (ASG, 1990) was used for the transcriptions. The corpus collected so far has been the object of a frequency study conducted at the Bureau of the WAT. At present, this corpus consists of about 35,660 running words in Yilumbu.

5.1.1.4. Written sources

Like the majority of African languages, Yilumbu does not have a strong written tradition. However, some Yilumbu religious, pedagogical and scientific literature exists. The literature on religion includes the works by GARNIER and MURARD. GARNIER is the author of three books based on the dialect spoken in Nyanga province, Banio lagoon.

These works are titled: *Katesisa igheghe nesi malonghi ma nzambi mu mbembu i-lumbu* (1897); *Syllabaire i-lumbu keti miganda mio mi teti mi uranganga mu mbembu i-lumbu* (1900) and *M'ambu ma nzambi mo make mu katesisa* (1904). However, Murard's books, viz. *Katsisu ikeki irendulu mu mbembu bis' Setté-Cama* and *Katsisu i neni irendulu mu mbembu bis' Setté-Cama* (1903), are based on the dialect spoken in the Ogooué-Maritime province (cantons of Ndugu and Low-Nyanga).

Yilumbu scientific literature includes the works of Blanchon (1989) "Présentation du yi-lumbu dans ses rapports avec le yi-punu et le ci-vili à travers un conte traditionnel" and Emejulu & Pambo-Loueya (1990) "Yilumbu". These works contain much information on the Yilumbu lexicon as well as brief outlines of its grammar, and have been used as a starting point. In addition, some of the findings of Nsuka Nkutsi (1980) have been taken into consideration to avoid overlapping and duplication.

5.1.1.5. The theoretical framework and computational support

According to Prinsloo (2000:2) when it comes to corpus compilation, there are three steps to be considered, namely: (a) corpus design, (b) text collection, and (c) text encoding. Corpus design, which is the planning of the corpus, has to make provision for the gathering of the primary, secondary and tertiary sources for any dictionary project. Tertiary sources, in particular, encompass, e.g. all linguistic monographs, papers and grammars used for the constitution of the dictionary basis (Gouws, 2001:69). I have already given an account of such material. In the same way, text collection can be referred to as the primary sources of the dictionary: the recording of a large variety of spoken speech from as many different genre/topic areas as possible (Prinsloo, 2000:4) or as Gouws (2001:68) put it "recordings of the orature". I have also given some attention to this topic. According to Prinsloo (2000):

Text encoding can consist of any combination of the following: (a) tokenisation, (b) part-of-speech tagging, (c) lemmatization, (d) syntactic parsing, and (e) markup. Segmenting a text containing conjunctively written words into free-standing words is known as ‘word tokenisation’. Assigning a word class to all the words in a corpus is called ‘part-of-speech tagging’. And a structural analysis of sentences is known as syntactic parsing (Prinsloo, 2000:4).

According to Barnbrook (1996:50), “(...) the process of producing a list which groups together all the forms belonging to each lemma is often called ‘lemmatization’”. Given the wide scope of the above subjects, the analysis will focus on word tokenisation, and lemmatization. The latter, cf. Prinsloo (2000:4) is especially useful for lexicographic purposes.

- **Tokenisation**

Segmenting a text containing conjunctively written words into free-standing words is known as tokenisation. When it comes to word tokenisation, one usually deals with huge numbers of text files. In order to handle these text files, the lexicographer or any other specialist needs some software packages. There are, cf. Prinsloo (2000:5), quite a number of software packages, namely: *Corpus Bench* (from Denmark), *MonoConc* (from the US), *WordSmith Tools* (from England), and *Access-based program* (developed at the University of Pretoria). As far as the Yilumbu corpus¹ is concerned, the audio recordings were transcribed on MS Word 2000. Word lists and frequency counts were done with Python and MS Excel 2000. Final layout was done with MS Excel 2000. HTML and Unicode versions of the lists are in preparation.

¹ I hereby express my deep gratitude to Mr. E. Botha of the WAT for helping me with the building of the corpus.

What are the frequency lists for?

A frequency list shows the words that make up the texts in the corpus, together with their frequencies of occurrence. A preliminary survey of the Yilumbu corpus enabled me to produce the following frequency list:

Word	Number of occurrences in the corpus	Percentage of all items in the corpus
na	994	2,79
ghu	394	1,10
mwâna	265	0,74
gho	237	0,67
mú	214	0,60
í	117	0,33
mâmba	93	0,22
dîna	77	0,22
bíima	26	0,07
fumu	4	0,05

Table 13: Ten most frequent words in the Yilumbu corpus (a study conducted in January 2000)

Table 13 is an illustration of what were the ten most frequent words in the Yilumbu corpus in January 2000. These ten most frequent items (on the first column) appear in a version of the list arranged in descending frequency order. The second column shows the number of times that each word occurs in the corpus, whereas their counterpart percentage is presented in the third column.

An examination of the above-mentioned list shows that there are several points of interest. Apart from the lexical item mwâna the top six items of the list are purely grammatical words. In terms of class categories, they include the associative na, the locatives ghu (cl.17), gho (cl.17) and the connectives mú (cl.3) and í (cl.7). The first word in the entire list is na with 994 occurrences, followed by ghu with 394, mwâna with 265, gho with 237, mú with 214 and í with 117. This sequence may be a useful basis for examining affixes to be included in the dictionary.

It should also be mentioned that these data statistics are merely significant as a starting-point. Thus, the following step is to enlarge the data corpus. As a point of departure, a lexicographer has to rely on large corpora in order to justify the inclusion of a specific lexical item as a lemma in a dictionary. Nevertheless, a dictionary maker is also a judge and the incorporation of lemmata can also be motivated on account of his/her competence and knowledge of everyday speech.

It has already been mentioned that Table 13 shows a version of the list arranged in descending frequency order. Although this is very convenient for some purposes (availability of data to decide against or for the inclusion of a given lexical item, etc.), the first type of a frequency list that has to be considered is the one produced in alphabetical order of word forms. This would produce the following rearrangement:

Word	Number of occurrences in the corpus	Percentage of all items in the corpus
bíima	26	0,07
dína	77	0,22
fumu	4	0,05
gho	237	0,67
ghu	394	1,10
í	117	0,33
mâmba	93	0,26
mú	214	0,60
mwâna	265	0,74
na	994	2,79

Table 14: The ten most frequent words in the Yilumbu corpus

A version of the frequency list produced in alphabetical order of word forms is especially useful for the constitution of the lemma candidate list. When the preliminary survey was conducted, the ongoing corpus contained 12,653 words or tokens. At that time I decided to start with the assumption that all the lexical items with more than three occurrences in the corpus will be given lemma status. And, conversely, items with three and less occurrences will not be included. This was motivated by my view to lemmatize all types of lexical items and preferably on the ground of frequency study. It should be noted that this was maybe a fairly generous approach and it has yet to be applied. Due to

the limited space in a dictionary, the decision to lemmatize words with more than three occurrences is likely to be changed.

In October-November 2000, it was again time to put the running text through WordSmith Tools. It produces the list shown below:

Word	Frequency
na	1944
mí	1664
tí	1111
ngé	973
ó	970
yá	937
ké	827
mo	745
vho	664
mútu	529

Table 15: The ten most frequent words in the Yilumbu corpus (a study conducted in October-November 2000)

This time the ongoing corpus contains 35,660 words or tokens, made up of 10, 623 different word forms. This has a lot of implications as far as the degree of lexical variation within the text file is concerned. As a matter of fact, the ratio of tokens [a “(...) token is an individual occurrence of any word form”, Barnbrook 1996:53] to types is 35, 660/10, 623 or 29, 79. This is an extremely high ratio, which means that almost every single word in the lexicographic file is a different lexical item. Therefore, in terms of types (the total of each different word form), the corpus collected so far is a sophisticated one.

It is particularly interesting to compare the results in Table 13 and in Table 15. The most striking feature of this comparison is the fact that apart from *na*, all the words in Table 13 do not make it in Table 15. Moreover, apart from *mwâna*, the top six words in the two lists are purely grammatical lexical items. Table 15 goes even a bit further because words in seventh, eighth and ninth positions are also purely grammatical occurrences.

The frequency list becomes much more meaningful once it is compared with similar lists constructed from other texts, from large corpora in particular. The Pretoria Sepedi Corpus (PSC), cf. De Schryver and Prinsloo (2001:3), is a corpus that was painstakingly assembled during the past decade by D.J. Prinsloo and G.-M. de Schryver. Currently, PSC stands at 5.8 million running words. What follows is a simplified version of Table 5 [Collocates of the base ipona (with horizons L5-R5) in PSC] extract from Prinsloo (2000:14)

Word	Frequency
a	342
ipona	311
ke	159
le	141
o	139
ka	134
go	129
ba	87
ge	664
e	529

Table 16: Ten most frequent words in PSC (a simplified extract from Prinsloo, 2000:14)

In this list, the most frequent words in the corpus are also purely grammatical occurrences. Compare below a list produced from the entire text of *Frankeinstein* and COBUILD (*Collins COBUILD English Language Dictionary*):

FRANKEINSTEIN		COBUILD CORPUS	
Word	Frequency	Word	Frequency
the	4194	the	3094497
and	2976	of	155044
I	2847	and	153801
of	2641	to	137056
to	2094	a	129928
my	1777	in	100138
a	1391	that	67042

in	1129	I	644849
was	1021	it	61379
that	1018	was	54722

Table 17: The ten most frequent words: *Frankeinstein* and COBUILD (Barnbrook, 1996:46)

As for Table 15, this list also shows that the most frequent words in the two corpora are also purely grammatical occurrences.

5.2. Culture specificity and borrowing

According to Tomaszczyk (1984:289) “culture-bound lexical units include items which represent objects, ideas and other phenomena that are truly unique to a given speech community. In the pursuit of this definition it should be emphasized that culture-specificity is merely a matter of degree” (Tomaszczyk op. cit. p. 289). This is particularly relevant because the culture-bound lexical items in question, although they enlighten some aspects of the typical socio-cultural background of the Yilumbu lexicon, to a lesser or greater degree, have to be regarded as cross-cultural lexemes in the African languages in general and in the Gabonese languages in particular. This is especially the case with the lemmata in (41) which may create communicative problems for the speakers of both English and French because they are usually performed at funeral ceremonies by the Balumbu.

(44)

tsângu (tsângu úbeela, tsângu úfu)...

ikũmbu...

kósi...

mbũmba...

The lexicographic treatment of these lexical items may provide a great deal of information for the user and have for this reason a stronger claim for inclusion in the planned dictionary. The same line of argumentation holds true for some of the loan words in Appendix 8. These loan words represent ± 300 lexical items that have so far been identified in the Yilumbu corpus. In macrostructural terms, these loan words are already part of the so-called lemma candidate list. However, some of these borrowed

terms have their indigenous counterparts in the Yilumbu corpus. Space constraints only allow us to present a few representatives of these borrowings in the following Table:

Yilumbu loan words	Source language	Source language items	indigenous counterparts	Translation equivalents
(<i>Ghâng.</i>) kárasa	Portuguese	calças	múkandi	Trouser
(<i>Ghâng.</i>) bwátu	English	boat	ndúngu	Boat
mutúúra	French	tour	nyongu	Time
télevisu	French	télévision	mbweenu	television
upéyi	French	payer	ufúta	To pay
krápila	French	crapule	púnyi	murder
rígotu	French	rigolo	dikúlisi/dikwílisi	fool
(<i>Men.</i>) kwĩsini/kúsini	French	cuisine	(<i>Men.</i>) dusângu	kitchen
póóka, dipóóka	French	époque	(<i>Ghâng.</i>) téému, dééku, (<i>Men.</i>) íghombu	Period of time
(<i>Ghâng.</i>) shápu	French	chapeau	(<i>Men.</i>) yibúdu; yípokudu	hat
(<i>Ghâng.</i>) diféélu	French	fer à repasser	(<i>Men.</i>) dimányi du ukíligha	iron
upééra	French	opérer	ubéntsígha; upása	to do surgery
(<i>Ghâng.</i>) dúfoonsu	French	fosse	(<i>Men.</i>) itsímbi	small canal
(<i>Ghâng.</i>) dúfwaandi	French	défense; défendu	yína	taboo
síngareta	French	cigarette	tsungu	cigarette
(<i>Ghâng.</i>) dúvhaanda	French	viande	(<i>Ghâng.</i>) mbitsi, (<i>Men.</i>) nyáma	meat

Table 18: Borrowed terms with their indigenous counterparts in the Yilumbu corpus.

For all the loan words in Appendix 8, selective criteria need to be set for inclusion in the planned dictionary. More specifically, space considerations unfortunately cannot allow a lexicographer to include both loan words and their indigenous counterparts. Faced with this dilemma, on the basis of the data presented in Appendix 8, a lexicographer could for example compile a list of Yilumbu loan words that have their indigenous counterparts in the language. Then he/she could use the list in question in order to determine user preferences for loan words versus indigenous or 'genuine' words. This is exactly what Nong, De Schryver and Prinsloo (2002) did by conducting a fieldwork among 100 Northern Sotho mother-tongue speakers in order to determine their

preferences for loan words versus so-called 'traditional or 'original' counterparts in the language. As far as the planned dictionary is concerned, interesting information can be retrieved from Table 18 in order to decide for or against the inclusion of some loan words. The loan word *síngareta* (from French 'cigarette') means 'cigarette', whereas the indigenous word *tsungu* means 'tobacco'. This simply means that both the borrowed term and the indigenous word should be included in the planned dictionary because of the differences in connotation and denotation between them. A lexicographer may also decide for or against the inclusion of a loan word such *shápu* (hat) versus its indigenous counterparts *yibúdu* and *yípokudu*. The borrowed term *shápu* is widely used by speakers of the so-called Yilumbu yi ghângu, while *ibúdu* and *yípokudu* are used by speakers of the so-called Yilumbu yí menaáne. For ethnocentric reasons, it can be argued that a speaker of the so-called Yilumbu yi ghângu would like *shápu* to be included and treated in the planned dictionary. The same also goes for *yibúdu* and *yípokudu*. As it will be shown later in this chapter, *yibúdu* and *yípokudu* have a very low usage frequency in the Yilumbu corpus. Therefore, frequency count will be of little use to decide for or against their inclusion in the planned dictionary. The situation is even worse for loan words such as *kwísini/kúsini* (kitchen) versus their indigenous counterpart *dusângu*. In fact these loan words and their indigenous counterparts are only used by speakers of the so-called Yilumbu yí menaáne. The usage frequency will hardly reveal which one of the lexical items mother-tongue speakers will prefer to use on a daily basis: the loan word or the indigenous term? For the case of loan words versus indigenous words in Northern Sotho, Nong, De Schryver and Prinsloo (2002) rightly emphasize:

It was shown that the bynow standard empirical basis consisting of data derived from an electronic corpus is not good enough for the treatment of loan words, and that fieldwork is imperative (Nong, De Schryver and Prinsloo 2002:17).

As far as loan words such as *kwísini/kúsini* (kitchen) versus their indigenous counterpart *dusângu* is concerned, research has to be conducted at grassroots level through fieldwork. The same line of argumentation holds true for all the members of Table 18.

With regard to the so-called culture-bound lexical units, and as part of the planning of the macrostructure, the planned dictionary will include all the lexical items given in

(44). However, they will not be included on account of their culture specificity but on account of their usage frequency in the Yilumbu corpus.

5.3. Language for special purposes and kinship system

As already mentioned, the treatment of special-field terms is one of the components that have to be taken into consideration when evaluating and planning a dictionary. Thus their inclusion as lemmata in the planned dictionary is of importance. Because of their different connotations (traditional beliefs, superstitions, etc.) for the Balumbu, items such as those in (45) will deserve a special treatment.

(45)

díu**bogha...**

ngo**ndi...**

nya**ngu...**

The same line of argumentation holds true for the inclusion of the following kinship terms:

(46)

mwâ**na ng**u**yi...**

mwâ**na taayi...**

kâ**tsi...**

As was the case for the so-called culture-bound lexical units, lexical items given in (45) and (46) will be included in the planned dictionary not on account of their appartenance to language for special purposes or kinship system but on account of their usage frequency in the Yilumbu corpus.

5.4. Arrangement of lemmata

As mentioned earlier there is a distinction between a straight-alphabetical macrostructure and a macrostructure with a sinuous lemma file. The latter results from procedures of niching and nesting. In a niching dictionary, lemma clusters that do not

necessary display a semantic relation are put together in a strict alphabetical order. Furthermore, the alphabetical ordering has also to be maintained with regard to the preceding and following lemmata in the vertical ordering. In a nesting dictionary two levels also have to be identified. Externally the horizontal ordering does not necessarily fit into the alphabetical arrangement of the vertical ordering. This is referred to as **first level nesting** (Gouws, 2001a:106). Internally sublemmata within a nest may also present a deviation from the alphabetical ordering. This is known as **second level nesting** (Gouws, 2001a:106). The deviation on alphabetical level is not only a space-saving device but also allows the lexicographer to exhibit morpho-semantic relationships between sublemmata, cf. Hausmann and Wiegand (1989:336). To illustrate this point, the lemma cluster with **boek**: as lemma external lemma part in article entrance position and the lemma sign **blus**² have the following treatment in *Groot Woordeboek/Major Dictionary* and in *Verklarende Afrikaanse Woordeboek* respectively:

(47)

boekanier

boek:~**band**,cover,binding (book); ~**beoordelaar**, reviewer, critic;~**beoordeling**,~**bespreking**, review, criticism; critique; ~**bewys**, book token; ~**binder**, book-binder; ~**bindersperkament**, for(r)el; ~**bindery**, bookbinding; bookbinder's shop; ~**deel**, volume, part; dit spreek ~dele, it speaks volumes; ~**drukker**, printer; ~**drukkersaak**, printing business; ~**drukkersbedryf**, printing trade; ~**drukkery**, printing works; ~**drukkuns**, printing art, typography; ~**eantikwaar**, bibliopole; ~**egek**, bibliomaniac; ~**ekamer**, bookroom; ~**ekas**, bookcase; ~**ekennis**, book- learning; ~**ekoors**, bibliomania; ~**elys**, list of books, catalogue; ~**enasien**, audit.

boe'kenhout

blus¹

blus², (w), **ge-**.1. Vuur doodmaak met 'n vloeistof of iets ander. 2. (Kalk) natmaak en laat verpoeier. 3. Krummelrig word. 4. Melerig wees (ertappel); ~**baar**; ~**gereedskap**; ~**middel**; ~**ser**; ~**sing**.

blus'emmer

Text example 47: articles **boek** and **blus** (from GW and VAW)

The article clusters **boek**: ~**band**,...~**beoordelaar**,...~**beoordeling**,...~**bespreking**,...~**bewys**,...display certain features of textual condensation, namely the use of substitution procedures in particular (a more detailed account of procedures of textual

condensation is given in chapter 9 of the dissertation). More specifically Lexicographers have used the tilde (~) in order to substitute the lemma sign **boek** in the different clusters. This use of a **place-keeping symbol** (the tilde or the hyphen, cf. Wolski, 1989:964) in a condensed lemma sign usually add to the problem on the part of the user because the latter has to reconstruct the decreased or omitted data by himself/herself. It should also be noted that this article is characterized by the use of the so-called **lemma parts** (cf. Wolski, 1989:365). They usually represent the basis lemma, which is a full/partial lemma functioning in a niche/nest entrance position. In fact all sublemmata encompass the tilde plus the second stem of the respective compound and the sinuous arrangement fits into the vertical ordering. These sublemmata are thus introduced by **lemma parts in niche external position: boek: ~band,...~beoordelaar,...~beoordeling,...**(cf. Wolski, 1989:365 and Gouws, 2001:108).

The lemma **blus** shows all the characteristic features of a niching due to the fact that the internal alphabetical ordering is maintained in the sinuous file. Moreover, derivations (**blusbaar, blusser, blussing**) and compounds (**blusgereedskap** and **blusmiddel**) are all mixed up in the article. Therefore this clustering of lemmata should be referred to as **first level nesting** (cf. Gouws, 2001:106). A typical example of a lemma nest is given in *Nasionale Woordeboek*:

(48)

broederskap

broei (ge)ww1. Op eirs sit en hulle warm hou om hulle te laat uitkom. 2.,...3. ...4
5. Hitte ontwikkel, warm word. ...6. Warm word deur gisting. ..7. deur
spesiale verwarming vroeër laat bloei of ryp word. ...9. ...**broeiery, broeiing;**
broei-eend, -eiers, -gans, hen, -hok, -kamer, -kolonie, -paar, -proses, -sak,
-tent (by1); **-mis** (by5); **-aarde, -bed** (by6); **-bak, glas, -huise** (by7).
broeiend (-e;-er,-ste)

Text example 48: article broei (from NW)

The following is Gouws' (1999:32-33) comment on the article:

The sinuous ordering in the article of the main lemma **broei** does not fit into the alphabetical arrangement of the vertical ordering. Neither does the nest-internal arrangement maintain a strict alphabetical ordering. This already qualifies this clustering of lemmata as an example of a lemma nest. A closer investigation reveals motivations other than the alphabetical for this nest-internal arrangement. Morpho-semantic considerations play an important role in the arrangement within this lemma cluster. In this nest the lexicographers make a distinction between derivations and compounds. The derivations **broeiery** and **broeiing** are ordered before

the compounds and separated from them by means of a semi-colon. The two derivations are ordered alphabetically. The listing of compounds has not been done at random but adheres to a definite semantic principle. The main lemma **broei** is a polysemous lexical item and the sublemmata are subjected to different senses of **broei** prevailing in the first stems. Those compounds in which the stem **broei-** has the same sense are grouped together. Each one of these groupings displays an internal alphabetical ordering. The lexicographers assist the users by clearly indicating which sense of **broei** applies to a specific grouping of sublemmata (Gouws, 1999:32-33).

As far as the looking up of a lexical item in the dictionary is concerned, a straight-alphabetical dictionary with a vertical row of lemmata is usually regarded as less problematic than a macrostructure with a clustering of macrostructural elements. Niched and nested clusters add to the problem on the user's side because he/she has to struggle through the dictionary article characterized by the use of textual condensation procedures, cf. Hausmann and Wiegand (1989:336). Lexicographers usually make use of textual condensation where the target users of a dictionary have a long tradition of dictionary consultation, cf. Gouws (1999b:33). However, the Yilumbu speech community is not assumed to be well familiar with dictionary using skills. Thus the question to be addressed is how the dictionary maker goes about to account for both the use of space-saving textual condensation and the reference skills of the users. Wiegand (1989b as quoted by Smit 1996:178-179) has pointed out an example of the use of a sinuous lemma file that is very user-friendly from the *Dictionnaire du français vivant* (DFV) by Davau et al. The latter have interpreted the lemma signs **colombage**, **colombe**, **colombine** and **colon** as a **strictly alphabetical macrostructure with groupings** as it occurs in (49).

(49)

colombage [kɔlɔbaʒ] *n. m.* (de *colombe*, anc. forme de *colonne*; du lat. *columna*. V. *colonne*). Dans les vieux quartiers de la ville subsistent des maisons à *colombage* = charpente apparente consistant en pièces de bois horizontales, verticales ou obliques, fixées dans l'épaisseur même des murs de maçonnerie ou de torchis.

colombe [kɔlɔb] *n. f.* (lat. *columba*. Même fam. : *columbarium*). 1 Nom poétique du pigeon blanc, considéré comme symbole de pureté, de douceur. ▲ Une *colombe* blanche portant en son bec un rameau d'olivier symbolise la paix. 2 Dans la théologie chrétienne, la *colombe* symbolise le Saint-Esprit.

colombier *n. m.* Bâtiment ou partie de bâtiment où l'on élève des pigeons. *Syn.* pigeonnier.

colombophile *adj.* (V. -phile). Les sociétés *colombophiles* ont pour but de favoriser l'élevage et l'entraînement des pigeons voyageurs.

colombophilie *n. f.* (V. -philie). Élevage et utilisation des pigeons voyageurs.

Colombine. Personnage de la comédie italienne (femme d'Arlequin ou de Pierrot), dont le costume est à bandes blanches et noires.

colombophile, colombophilie ⇨ COLOMBE.

colon [kɔlɔ] *n. m.* (lat. *colonus* « agriculteur, colon »; de *colere* « cultiver ». V. *cultiver*). 1 Personne qui a quitté son pays pour aller cultiver et mettre en valeur une terre dans une colonie. 2 Membre

Text example 49 (from DFV 1981, as cited in Wiegand, 1989:392)

In this macrostructure with groupings dominated by a user-driven approach, the main lemmata **colombage**, **colombe**, **Colombine** and **colon** are arranged in a strict alphabetical order. In the same way, the sinuous ordering in the article of the main lemma **colombe** displays a strict alphabetical ordering. However, this internal arrangement is not maintained with regard to the following lemmata in the vertical ordering. Only the sublemma **colombier** precedes the next main lemma **colombine**. **Colombophile** and **colombophilie** are out of the alphabetical order. This already qualifies this clustering of lemmata as an example of nesting.

Wiegand (1989:392) explains that the alphabetical ordering is interrupted with the sublemma **colombophile**. All nest lemmata that interrupt the alphabetical ordering are also given in DFV as reference lemmata in their appropriate alphabetical slots. Thus he comes to the conclusion that the ordering procedure in DFV is user-friendly.

The interruption at alphabetical level mentioned above also explains why in the treatment of the lemma **colombine**, **colombophile** and **colombophilie** listed as sublemmata in the article of **colombe** are entered once more as *sub-sublemmata*¹ of this main lemma (**Colombine**) with a cross-reference to **colombe**. The sinuous ordering in the article of the main lemma **colombe** does not only fit into the alphabetical arrangement but also displays semantic relationships between sublemmata. **Colombophile** and **colombophilie** are listed before **colombine** in violation of the alphabet because they are both directly derived from **colombe**. **Colombophile** can be used as an adjective or a noun refers to a breeder of carrier pigeons, whereas **colombophilie** is the activity of breeder of carrier pigeons and the love of it. On the contrary, **colombine** also has to do with the meaning of **colombe** but rather on a figurative or metaphorical way. In fact, it refers to a comic character of the Italian comedy with whitened face and loose white clothes. This good-natured buffoon reminds one of a pigeon, symbol of sweet kind and purity.

- **Proposed article structures for the treatment of kinship terms**

Mwâna is the first kinship term that is going to be investigated here. For this lexical item three different lexicographic approaches are proposed. According to the first approach the lexicographic treatment that is offered for **mwâna** results in homonymous word list sections as it clearly appears below:

¹ I am using the term *sub-sublemmata* because of the occurrence of **colombophile** and **colombophilie** in the treatment of the article of the lemma **colombe** as well as in the treatment of the article of the lemma **Colombine** respectively. Characters that are used to write **colombophile** and **colombophilie** are much more smaller in **Colombine** than in **colombe**. Because the user can clearly perceive this use of typographical means, **colombophile**, and **colombophilie**... may be regarded as an example of an open addressing unit (see chapter 8).

(50)

mwâmbu...

mwâna (-ana) [mwâ:nə/ bâ:nə] <i>n.</i> (cl.1/2) < *-yâna, *(j)âna		
♦ Ilétsi baála vho ilétsi ghetu. ♦	<E> Young boy or young girl; <T> child (pl. children).	<F> Jeune garçon ou jeune fille; <T> enfant(s).
Σ Batsiwé na mwâna ó yipítaáli.	<E> They went with the child to the hospital.	<F> Ils sont allés avec l'enfant à l'hôpital.
Σ Bâna bavasáána bálu.	<E> Children are playing football.	<F> Les enfants jouent au ballon.
mwâna dibaála¹ Mwâna o dibaála tulí <u>nguyi</u> fiimba.	<E> Brother of the same mother.	<F> Frère de la même mère.
Σ Mwánándi dibaála atsiwiítsa muyítsa utúba mambu.	<E> Her brother has arrived to solve the palaver of his sister.	<F> Son frère est arrivé pour régler la palabre de sa sœur (utérine).
mwâna kâtsi¹ Mwâna yíbura yíbúsi ⇒ mwâna fumu	<E> Son or daughter of someone's sister of the same mother <T> nephew; niece.	<F> Fils ou fille né(e) de la sœur de même père, même mère qu'une personne <T> neveu; nièce.
Σ Mwâna kâtsi lá fumu.	<E> The nephew is the head (of the family).	<F> Le neveu est le chef (de la famille).
mwâna kâtsi² Mwâna yíbura ivhúnda vho <u>koomba</u> táayi ⇒ mwâna taayi	<E> Son or daughter of the paternal uncle <T> nephew; niece.	<F> Fils ou fille de l'oncle paternel <T> neveu; nièce.
Σ Bônga mwâna kâtsi, mukósi o bíkóola.	<E> Take your nephew and send him to school!	<F> Prends ton neveu et envoie le à l'école!
mwâna múghetu¹ Mwâna o múghetu úbura <u>nguyi</u> mwéégha, taayi mwéégha ⇒ yíbúsi .	<E> Sister of the same mother.	<F> Sœur utérine.
Σ Mwâna múghetu ú Pambu anátígha anányénga	<E> (<i>euph.</i>) Pambu's sister (of the same mother) passed away.	<F> (<i>euph.</i>) La sœur (utérine) de Pambu s'est éteinte.
mwâna <u>nguyi</u> Mwâna úbura <u>nguyi</u> mwéégha, taayi mwéégha	<E> Brother or sister of the same mother.	<F> Frère ou sœur de la même mère.
Σ Atsibókisi mwâna <u>nguyi</u> .	<E> He lost his brother.	<F> Il a perdu son frère par la mort .
mwâna nzáyi: Mwâna úbura nzáyi.	<E> Child of the brother-in-law or sister-in-law.	<F> Enfant du beau-frère ou de la belle-sœur.
Σ mwâna nzáyi i Mbúla anamána ikoola.	<E> The child of Mbula's brother-in-law has completed his studies.	<F> L'enfant du beau- frère de Mbula a fini ses études.
mwâna taayi Mwâna úbura táayi.	<E> Brother or sister on the father's side.	<F> "Enfant(s) du même père" c'est-à-dire frère et sœur nés d'un même père et leurs cousins, fils et filles des frères et sœurs du père (KWENZI MIKALA)."
Σ Yá mwâna tayáami	<E> He is my brother on the father's side.	<F> Lui c'est mon frère du côté paternel.

mwâna dibaála ² Mwâna o dibaála.	<E> A male child, <T> a boy.	<F> Enfant de sexe masculin, <T> un garçon.
Σ Manômba atsíbura mwâna dibaála.	<E> Manomba gave birth to a boy.	<F> Manomba a mis au monde un garçon.
mwâna múghetu ² Mwâna o múghetu ⇒ (Men.) mwâna múyeetu .	<E> A female child, <T> girl.	<F> Enfant de sexe féminin, <F> fille.
Σ Atsíbura mwâna múghetu.	<E> She gave birth to a girl.	<F> Elle a mis au monde une fille.
mwâna pala Mwâna úbura pála.	<E> (<i>pej.</i>) Child of the rival (as opposed to your own child).	<F> (<i>pej.</i>) Enfant de la rivale (co-épouse) (par opposition au sien propre).
Σ Ághu mwâna paláami (burându).	<E> This is the child of my rival.	<F> C'est l'enfant de ma rivale.
■ <mwâna dyânga ^o ; mwâna mbáátsi ^o ; mwâna múndumba ^o ; mwâna múrima ^o ; mwâna Nzâmbi ^o > <(Ghâng.) mwâna díkaata ^o , mwâna ívhunda ^o > <(Ghâng.) mwâna ilétsi ^o , (Men.) mwâna ghééyi ^o , mwâna (múyééyi), mwâna káli ^o > <mwâna myóoghú ^o , mwâna muvhígha ^o ; mwâna úbura ^o > <mwâna mútu ^o ; mwâna íbulu ^o > <mwâna íbeedu ^o ; mwâna ngânga ^o > <mwâna mvúbu ^o , mwâna nzághu ^o > <(Ghâng.) mwâna ngânda ^o , (Men.) mwâna vhéélú ^o > <(Ghâng.) mwâna bwála ^o , (Men.) mwâna dímbu ^o ; mwâna ífumba ^o ; mwâna mambu ^o > <mwâna mvúmbi ^o , mwâna tyaana (also/aussi yísyaa ^o) > <(Men.) mwâna mángala ^o , (Ghâng.) mwâna isíshu ^o > <mwâna dyâmbu ^o > ■		

Text example 50: article **mwâna**.

The lexicographic treatment presented in the article above results in a lengthier article displaying an integrated microstructure. In addition, a variety of data types have been presented into four search zones that can be clearly perceived by the user. The first search area presents the lemma sign followed by its stem, the phonetic transcription item, the word class indication, and the item giving the class number as well as the proto-Bantu reconstruction. The second search area starting with the diamond (◆) presents the paraphrase of meaning of the lemma sign followed by two co-text entries. In the third search zone starting with **mwâna dibaála**, the lexicographer deals with sublemmata. In the fourth section or search zone introduced by the symbol (■), the lexicographer is once again dealing with a paradigm of compounds with **mwâna** as first component.

In general, the above dictionary article displays a strictly alphabetical macrostructure with groupings like the one presented in the *Dictionnaire du français vivant* (DFV) by Davau et al. However, some deviations do occur in the third search zone in particular.

As far as the arrangement prevailing in this third search zone is concerned, data is given in two groups. In the first section of this search zone sublemmata **mwâna dibaála**¹, **mwâna kátsi**¹, **mwâna kátsi**², **mwâna múghetu**¹, **mwâna nguyi mwâna nzáyi** and

mwâna taayi have been entered together in a strictly alphabetical order for semantic reasons: they all have something to do with Yilumbu kinship system. In the second section of this search zone, however, the alphabetical arrangement is interrupted with the next sublemma **mwâna dibaála**² moving towards a nest.

As already said, when looking at the elements of the fourth section one finds a paradigm of compounds with **mwâna** as first component. The ordering within this sinuous lemma file could not have been done on the ground of morphology because all the lemma clusters are compounds. Therefore there should be some semantic reasons for that kind of treatment. In fact these nested lemmata are thematically related. Data occurring between the following structural indicators < > represents a specific topic within the article. These symbols are the so-called ordering devices. In Hausmann and Wiegand's (1989:338-339) approach ordering devices have the genuine purpose of visually dividing different search areas from one another. As such they form part of the inner rapid access structure of a dictionary because the users can have a quick access to the information they are seeking merely from the way these structural markers create divisions in the lexicographic text. Along with structural markers non-typographical structural markers are also used. Commas are used to separate sublemmata of the same polysemous sense of the lemma whereas semi-colons separate different polysemous senses of the lemma. In case of variant forms, the deviation at dialectal level is acknowledged by the use of geographical or regional labels. This is particularly relevant for the fourth section of the article in which the user can find two diatopic or regional labels, namely: (*Ghâng.*) short for *Yilumbu yi ghângu* (the variety of the Nyanga province) and (*Men.*) short for *Yilumbu yi menaáne* (the variety of the Ogooué-Maritime province). Apart from the symbol ° after the sublemmata (in the fourth section of the dictionary article) which mean that they are explained somewhere in the dictionary, it seems that the planned dictionary article does not provide the user with the necessary assistance in finding the meaning of these sublemmata. In fact, it has been decided to leave out translation equivalents for these sublemmata because of the lack of space and since they will be explained somewhere in the specific dictionary. Moreover, sublemmata **mwâna mvúbu** (fat person) and **mwâna nzághu** (fat person) have been presented together because they are synonyms in a figurative way. In fact the lexical items *mvúbu* (hippopotamus) and *nzághu* (elephant) denote two of the biggest animals

of the forest. The requirements for pedagogical lexicography are likely to be met if one considers that the system applied here clearly avoid the use of substitution instructions procedures which form part of the process of textual condensation. In fact, nested lemmata are presented in their full form. The lexicographer could have used the tilde ~ or the hyphen to substitute the lemma part representing the first component (**mwâna**) of the compounds in a nest entrance position in the different compounds. This is illustrated by the following example:

(51)

mwâna (-ana) [mwâ:nə/ bâ:nə] *n.* (cl.1/2) < *-yâna, *(j)âna • Ilétsi baála vho ilétsi ghetu • ...<E>child(ren) <F> enfant(s)..... ~**bwâla**, ...~**dĩmbu**; ~**díkaata**; ~**dibaála**...; ~**dyâmbu**...; ~ **dyânga**...; ~**íbeedu**...; ~**íbulu**...; ~**ífumba**...; ~**ilétsi**...; ~**ívhunda**...; ~**kãtsi**...; ~**káli**...; ~ **mángala**...; ~**mâmbu**...; ~**mbáátsi**...; ~**múghetu**...; ~**múndumba**...; ~**múrima**...; ~**muvigha**...; ~ **mvúbu**...;~**mvúmbi**...

In this proposed article structure, the tilde ~ has been used to substitute the basis lemma (**mwâna**) in the different compounds. According to Wolski (1989:365), **mwâna** functions as a lemma external part in a nest entrance position in this cluster.

If the lexicographer wishes to utilize such a metalexigraphic foundation, it first has to correspond to the needs and reference skills of the intended target users. Then it has to be accounted for in the introductory notes of the dictionary at hand. A last comment with regard to the article of the lemma **mwâna** is that in the explanatory section of the article in question meanings directed at French have been taken over from a relevant literature on the kinship system of Yipunu, a sister speech pattern with acknowledgement of the source. As far this point is concerned, the questions to be addressed are: Which arrangement of the macrostructure enhances communication and which arrangement hinders communication? Because the lexicographer could also have ordered these sublemmata differently as it occurs below:

(52)

mwâna (-ana) [...] *n.*(cl.1/2)... **mwâna bwâla**, ...**mwâna dĩmbu**; **mwâna díkaata**; **mwâna dibaála**...; **mwâna dyâmbu**...; **mwâna dyânga**...; **mwâna íbeedu**...; **mwâna íbulu**...; **mwâna ífumba**...; **mwâna ilétsi**...; **mwâna ívhunda**...; **mwâna kãtsi**...; **mwâna káli**...; **mwâna mánkala**...; **mwâna mâmbu**...; **mwâna mbáátsi**...; **mwâna múghetu**...; **mwâna múndumba**...; **mwâna múrima**...; **mwâna muvigha**...; **mwâna mvúbu**...; **mwâna mvúmbi**...; **mwâna myóogh**...; **mwâna ngânda**...; **mwâna nguyi**...; **mwâna Nzâmbi**...; **mwâna pala**...; **mwâna taayi**...; **mwâna tsyâna**...; **mwâna úburu**...; **mwâna vhélu**...

In this presentation, the arrangement is alphabetical irrespective of the fact that some sublemmata belong to the kinship system of the language. From this presentation, the potential target reader of the dictionary will obviously retrieve less information because he/she is not that much helped by the lexicographer. In fact all the compounds are given without any consideration of their semantic relations as well as their respective spheres of usage. What the user gets is merely a list of unexplained compounds. What can be deduced from such a presentation is that the lexicographer has considered the compounds in question as semantically unproblematic. In other words, they are transparent compounds and therefore the user can retrieve the meaning by merely looking at the different constituent parts.

The advantage of putting sublemmata in a lemma nest is that it corresponds to the thematic arrangement that prevails when the speakers think about kinship terms. Adopting the above-mentioned arrangement will impede the richness of linguistic association that is created in the mind of the speaker when encountering these sublemmata. Wiegand (1978 as quoted by Smit 1993:141) takes the view that the specific arrangement in which lexicographic data occurs actually **inform** the users about their morphological and semantic features.

In the second lexicographic approach, a lexicographer can choose not to work with the idea of sublemmata and interpret **mwâna dibaála**, **mwâna kãtsi** and **mwâna múghetu** as respectively two times polysemous as shown below:

(53)

mwâna dibaála [mwâ:nèdibã:lè] ...		
1 ♦Mwâna o dibaála tulí <u>nguyi</u> fiimba. ♦⇒ mwâna	1<E> Brother of the same mother.	1<F> Frère de la même mère.
Σ Mwánánda dibaála atsiwiítsa muyítsa utúba mambu.	<E> Her brother has arrived to solve the palaver of his sister.	<F> Son frère est arrivé pour régler la palabre de sa sœur (utérine).
2 Mwâna o dibaála.	<E> A male child, <T> a boy.	<F> Enfant de sexe masculin, <T> un garçon.
Σ Manômba atsíbura mwâna dibaála.	<E> Manomba gave birth to a boy.	<F> Manomba a mis au monde un garçon.

Text example 53: article **mwâna dibaála**

(54)

mwâna kâtsi [mwâ:nəkâtsi] ...		
◆ Mwâna yíbura yibúsi ◆ ⇒ mwâna	1 <E> Son or daughter of someone's sister of the same mother <T> nephew; niece.	1 <F> Fils ou fille né(e) de la sœur de même père, même mère qu'une personne <T> neveu; nièce.
Σ Mwâna kâtsi lá fumu.	<E> The nephew is the head (of the family).	<F> Le neveu est le chef (de la famille).
Mwâna yíbura ivhúnda vho koomba tááyí ⇒ mwâna taayi	2 <E> Son or daughter of the paternal uncle <T> nephew; niece.	2 <F> Fils ou fille de l'oncle paternel <T> neveu; nièce.
Σ Bônga mwâna kâtsi mukósi o bíkóola.	<E> Take your nephew and send him to school!	<F> Prends ton neveu et envoie le à l'école!

Text example 54: article **mwâna kâtsi**

(55)

mwâna múghetu [mwâ:nəmúyètù] ...		
◆ Mwâna o múghetu úbura nguyi mwéégha, taayi mwéégha ◆ ⇒ yibúsi .	1 <E> Sister of the same mother.	1 <F> Sœur utérine.
Σ Mwâna múghetu ú Pambu anátígha anányênga.	<E> (<i>euph.</i>) Pambu's sister (of the same mother) passed away.	<F> (<i>euph.</i>) La sœur (utérine) de Pambu s'est éteinte.
Mwâna o múghetu ⇒ (<i>Men.</i>) mwâna múyeetu .	2 <E> A female child, <T> girl.	2 <F> Enfant de sexe féminin, <F> fille.
Σ Atsíbura mwâna múghetu.	<E> She gave birth to a girl.	<F> Elle a mis au monde une fille.

Text example 55: article **mwâna múghetu**

Finally as a third lexicographic option, another lexicographer may choose not to work with the idea of main lemmata as opposed to niched and nested lemmata within the central list. If the dictionary maker in question chooses to stick to the idea of a so-called **straight-alphabetical dictionary**, the notion of **integrated** and **non-integrated outer texts**, as developed by Bergenholtz, Tarp and Wiegand (1999), gives him/her the opportunity to treat lexical items in front and back matter texts together with a link to the central list. Such a treatment will create another access possibility for the user and therefore give the work a poly-accessible character.

5.5. Lemmatization

5.5.1. Introduction

The emphasis in this section will be on the lexicographic tradition in the Gabonese languages. Although this section aims at addressing specific issues in Yilumbu, metalexicographic proposals in the other African languages will necessarily come to the fore. On this line of argumentation, Prinsloo (1996) has pointed out that:

African languages spoken in South Africa on the one hand collectively share certain common lexicographic problems which are completely unknown to the English or Afrikaans lexicographic situation, such as tonal indication, handling of singular versus plural forms of nouns, selection inclusion versus omission of derivatives of the verb (Prinsloo, 1996:40).

Therefore in what follows, suggestions will be made along the lines of what already exist as far as the lexicographic traditions in the African languages are concerned.

5.5.2. Lexicographic traditions in the African languages

Van Wyk (1995), on the one hand and Prinsloo (1992), Gouws and Prinsloo (1997) on the other hand discuss various issues regarding the lemmatization process in several of the indigenous South African languages. As far as word division is concerned, African languages have two different traditions, namely **conjunctivism** and **disjunctivism**. According to the conjunctive system words are represented with a complex inner structure (...), whereas in the disjunctive system a simple inner structure prevails. Van Wyk (1995:84) has emphasized that:

Conjunctive writing has had the benefit of having been championed by C.M. Doke, who attempted to justify it on phonological grounds, whereas no authors tried to provide a theoretical basis for disjunctivism. As a result, conjunctivism has been accepted uncritically by many African linguists as the only linguistically correct method, on the unjustifiable assumption that there is a one-to-one correspondence between conjunctively written, phonologically defined "word" on the one hand and grammatical words on the other hand. It has been proven conclusively, however, that neither conjunctivism nor disjunctivism is merely an orthographical convention (...) The conjunctive system of words division has given rise to the stem tradition in the Nguni languages and disjunctivism to the word tradition in the other South African languages (Van Wyk, 1995:84).

As indicated earlier in this chapter, according to the word tradition, each lexical item is entered as a separate lemma, while in the stem tradition words are lemmatized under

their stem without their prefixal morphemes. Focusing his discussion on the four arguments in favour of the stem principle put forward by Mabilille et al (1974:xii-xiii), viz. (1) it gives a survey of word-formation, (2) it shows the relative place of a word in the language, (3) it reveals lexical relations, and (4) it avoids repetition, Van Wyk (1995:85) has proved that none of these above-mentioned assumptions is based on scientific or linguistic foundations.

As an attempt to find solutions to the problems of the lemmatization of reflexives in Northern Sotho, Prinsloo (1992) gives an account of the way in which this data type is traditionally lemmatized. This presentation is rather dominated by a random-basis approach than by scientific procedures. Therefore he strongly advise that lemmatization of reflexives should be based on frequency of use.

Reflecting on the lemmatization of adjectives in Sepedi, Gouws & Prinsloo (1997) first made a decision regarding the presentation of the lemma signs: adjectives are entered on the stem. In planning the macrostructure for any Sepedi dictionary, the lexicographer is confronted with a dilemma: with its 30 adjectives of reasonable frequency multiply by 9, 270 possibilities have to be accommodated in terms of lemmatization. The lemmatization of all the occurrences may be very user-friendly but very redundant as well. Thus Gouws and Prinsloo plead for alternative solutions namely, (1) the use of the frequency of an adjective, in order to decide for or against its inclusion, (2) the use of procedures of textual condensation characterized by shorter articles with a decrease of data categories and low density of information and (3) mediostructural strategies. Whatever the possibility maybe, it has to be dominated by the user-perspective.

5.5.3. The Gabonese situation

In the case of Gabonese languages very little research exists as far as lemmatization problems are concerned. Kwenzi-Mikala (1988:210), focusing on Yilumbu and Latege, has pointed out that Gabonese languages can indifferently be written conjunctively or disjunctively as it occurs in the following examples:

- **Conjunctively written**

(56)

Yilumbu: bambáatsi bátsimúnaangúlø

"des camarades le soulèvent" ('friends lift him up')

Latege: osáli mîmaná gásála

"l'ouvrier a fini de travailler" ('the worker has finished to work')

- **disjunctively written**

Yilumbu: ba-mbáatsi bá tsi mú naangúlø

Latege: o-sáli mî maná gá-sála

In reference to Van Wyk's remarks (1995:83-84), these above-mentioned examples regarding word division prove once more that conjunctivism or disjunctivism is purely a matter of orthographical convention.

To sum up with the concept of conjunctivism versus disjunctivism, Nida¹ (1964) has pointed out that:

The length to which our verbs can grow is alarming. Because of the system of prefixes and suffixes (at least they are considered as such) we combine what in English are whole phrases into long words. For example, in Acts 10:7 there is one word *abamamusalilanga* 'who had been working for him'. It contains at least three prefixes and two suffixes. (The number depends somewhat upon the system of analysis used). Such a word seems extremely long, and it seems to us that as much simplicity as possible should be introduced into the system of writing words. For us who are not used to reading long word units, such words as occur in many of the Bantu languages do seem unnecessary long and involved. Since we as analysts can recognize the constituent parts, and since some of the constituent parts, especially the prefixes correspond to full words in English, it is natural for us to want to break up long words in Bantu languages. However, the constituent prefixes: *ba-* plural subject, *ma-* past tense and *mu-* third singular object, do not occur in isolation as complete words. They are both phonologically and structurally bound to the verb stem with which they occur. Some of the Bantu words do seem amazingly long, but many words in the Quechua and Aymará languages of South America are of similar length. It is not at all unusual to find Quechua and Aymará words of eight and ten syllables, and some are even longer. In the Aymará particularly there are heavy clusters of consonants; but despite this fact, the Aymará speakers have relatively little difficulty in reading such long words (Nida, 1964:154).

¹ Nida's contribution is based on the work done by the Language and Literature Committee of the Christian and Missionary Alliance (CMA) on Yipunu (a sister language of Yilumbu).

Emejulu and Nzang-Bie (1999b:12) have emphasized that lexical items should be lemmatized under their stem. But no explanation is put forward to justify such a choice. A brief look at the available Gabonese dictionaries shows that the word tradition is by far the most widely used. Stem dictionaries are assumed to be more user-friendly than word dictionaries. However, as a matter of fact, adopting a stem system for Gabonese languages may be very confusing for the user due to a tradition already established in these languages. Stem dictionaries could even be unpopular with the general public for two reasons. First, cf. Van Wyk (1995:93), such dictionaries will loose in user-friendliness in that they assume considerable linguistic knowledge on the part of the users. But, it is assumed that dictionary user groups in Gabon are not equipped with dictionary using skills. As a result, dictionary consultation will take quite long because the way in which data will be presented is unfamiliar to the majority of users. The minigrammar that usually gives an account of morphophonological rules and morphological structures will be of little use for the target reader because, with reference to Busane's remark (1990:28), the latter is known to fairly consistently ignore the lexicographers' advice. Formulated differently, the users often disregard grammatical data as well as explanation notes.

If the lexicographer chooses to adopt the word tradition, one of the ways to arrive at a user-friendly dictionary is to provide the user with a list of all the stems in a back matter text. However this means that users with insufficient knowledge on word categorization before they open the dictionary must tediously search through the entire list of stems one-by-one for whatever item they are interested in. As already said in chapter 2 another way to arrive at a user-friendly dictionary will be to adopt the word tradition, but still to provide the users with the stem of the lemma being treated as it occurs in (57).

(57)

mwâna (-ana)...

Such a presentation is not to be seen here as a method to give an account of word-formation. This is, cf. Van Wyk (1995:86), the task of a grammar to do so, not the task of a dictionary. Kromann et al. (1991) echo this view when they declare:

... there is [a] natural division of work between the grammar and the dictionary. It is normally regarded as the job of the grammar to state general rules for particular parts of speech, while the dictionary deals with the *word*...(Kromann et al. 1991:2773).

Data regarding the morphological structure of a lexical item are useful for a specialist. But when looking up a word in a dictionary, the ordinary user in the first place needs to find information about the spelling and the meaning of the word. Therefore, the stem given in parenthesis is a user-orientated method, which may improve the target reader's receptive and productive knowledge of the language without being a key for dictionary consultation.

5.6. Types of special-field lexical items to be lemmatized

5.6.1. Historical context

Early works that have specifically dealt with special-field issues in Gabonese languages encompass work by the following authors: Raponda-Walker (1937, 1940) and Raponda-Walker & Sillans (1961). Raponda-Walker's contributions, which are entitled: "Dénominations astrales au Gabon" (1937) and "Enquête sur l'agriculture noire au Gabon et sur certaines techniques utilisant des produits végétaux" (1940) are terminologies for astronomy and agriculture respectively. The book entitled *Les plantes utiles du Gabon* (1961) that Raponda-Walker wrote in collaboration with Sillans is an interesting contribution to the field of traditional pharmacopoeia because it gives a picture of the names and uses of Gabonese plants.

Later, following the conclusions of the conference on the Intergovernmental Conference on Educational Issues in French speaking countries (CONFEMEN) held in Quebec (1979) Gabon embarked in the promotion of his languages through the following five basic points:

1. Linguistic Atlas of Gabon,
2. Gabonese languages and media,
3. Scientific description of Gabonese languages,
4. Special-field terminologies in Gabonese languages,

5. And the teaching of Gabonese languages (cf. Dodo-Bounguenza 2002:33, translated by the author).

Points 1 and 4 are of importance in the present discussion. With regard to point 1, the Linguistic Atlas of Gabon (ALGAB) has a three-fold objective:

- to make a census and localize Gabonese languages,
- to establish classification,
- to collect and treat more in depth data for about ten representative languages (Hombert, 1990:37) .

The Phonetics and African Linguistics Laboratory of Lyons 2 carries out this program of research under the supervision of Prof. Jean-Marie Hombert. With regard to the compilation of special-field terminologies (point 4), studies are also being conducted by Gabonese and international academics of the Phonetics and African Linguistics Laboratory of Lyons 2. One notable example in this regard is an unpublished D.Litt. dissertation at the University of Lyons 2 (Mouguiama 1995). This study of the names of fish including all Bantu languages spoken in Gabon contains a wealth of information on synchronic and diachronic African linguistics.

Another example is an article by Bodinga-bwa-Bodinga and Van der Veen (1990) entitled “Plantes utiles des Evia”. This work that deals with plant names as well as their medicinal qualities contains some 608 Gheviya terms.

Since 1983, Gabon, following a number of African countries, is in the process of rethinking its educational system (Nzang, 2001:17). It can be argued that this process started with a seminar *Les États généraux de l'Education et de la Formation* that was convened from 12 to 23 December 1983. One of the recommendations of that workshop was the introduction of Gabonese languages in the national educational system. However, no concrete policy ensued from that recommendation because at the time there was no (or almost no) existing relevant specialized technical literature in the local languages. Generally speaking and up to the present, technical terminologies are made accessible to pupils and students via French. If subjects such as Mathematics, Biology, Physics, History, Geography, etc. are to be taught in the mother tongue of pupils, teachers will obviously need teaching materials. A related problem to the one just outlined is that African languages are often said to lack expressions to cope with the

needs of modern technology and sciences. It is against this background that Chumbow (1990) has pointed out that:

all languages are capable of being developed (sufficiently rapidly) by the expansion of vocabulary to cope with any aspect of knowledge, including science and technology (Chumbow, 1990:65, as cited in Carstens, 1998:4).

Given this fact, the development of African languages as languages of scientific communication is feasible and here we follow again Carstens (1997):

Each language is capable of naming everything; it is a political decision whether people are allowed to develop terminologies in their mother tongue or in a 'national' language, or whether they have to resign to themselves to borrowing a vehicular language for a particular subject field. The impression that certain languages cannot supply the needs of conceptual structures is purely ideological (Carstens, 1997:4).

With regard to the concept of introspection, one might be surprised by the level of complexity involved in the compilation of technical dictionaries as it clearly appears in Rey (1995):

According to Wiegand (1990:2207) one special-field expert should not alone decide which terms to include as lemmata in a general dictionary. This principle is just as valid for special-field dictionaries: in the case of a subject-domain such as chemistry it is important to involve at least one expert on each of the main fields, namely organic, inorganic, physical and analytic chemistry. The contributions of the various experts must be mentioned explicitly in the outside matter of the dictionary, they are the persons who are ultimately responsible for the scientific correctness of subject-field (encyclopedic) information included in the dictionary. Lexicographers and terminographers can only intervene in an auxiliary capacity, e.g. advising on linguistic appropriateness... (Rey, 1995, as cited in Carstens, 1999:11).

It should be made clear that it is not the aim of this discussion to deal with problems encountered by lexicographers who wish to compile scientific dictionaries. Some of the problems arise from the very recognition of the fact that dictionaries play an important role in the implementation of new terminologies. Special-field items are traditionally included in general dictionaries. In addition various lexical items usually have a special-field sense. Given these facts, which technical terms should be included? How to treat an item that has a special-field sense? The following section aims to give some answers to these questions.

5.6.2. Macrostructural treatment of technical terms

With regard to the first question (Which technical terms should be included?), it has been said in the introductory notes of the present chapter that macrostructural elements of the planned dictionary should include technical terms from the following fields: astronomy, agriculture and traditional pharmacopoeia. If Yilumbu is to be promoted and given the fact that up to the present there is no special-field dictionary in Yilumbu or even mother-tongue textbooks on scientific and technical subjects taught in schools, items from these fields are of importance in the planned dictionary.

In order to develop special-field terminologies for various subjects such as Mathematics, Biology, Physics, Astronomy, Chemistry, etc. terminologists and terminographers traditionally use, among other things, the following means:

-transliteration

-loan words

total embedding or adoption

-extension of meaning

neologisms (cf. Alberts, 1999:27-28).

5.6.2.1. Transliteration

With regard to transliteration, Alberts (1999) has pointed out that:

The classic stem (usually Latin or Greek) is used to coin an equivalent. **silver**: ME from OE *seolfor* to OHG *silabar*, *silbar*, *silver*, ON *silfr*, Goth *silubr* — all from a prehistoric Germanic word borrowed from an Asiatic source. Equivalent in South African languages: **silver**, **silwer**, **silibera**, **silifera**, **selefera**, **isilivere**, **isiliva**... (Alberts, 1999:27).

With regard to the macrostructural treatment that is to be offered to borrowed technical terms in various fields such as Mathematics, Biology, Physics, Astronomy, Chemistry, etc., there are two arguments to be considered:

1. A lexicographer will be well advised to consider well in advance the delimitation of the macrostructure of the special-fields earlier mentioned. This can only be achieved if the lexicographer in question works in cooperation with

universities, technikons and high schools by requesting Departments of the special-fields mentioned above and teachers to comment on a preliminary term list.

2. Given the fact that the planned dictionary will be compiled to be used by the Yilumbu speech community, the latter should also be involved in the project as early as possible.

5.6.2.2. Loan words

Loan words will be understood here as lexical items or phrases taken from one language (the source language) and adapted (and integrated) into another language (the target language). With regard to the macrostructural treatment that is to be offered to borrowings, a lexicographer should depart himself/herself from a purist approach. This is important if one bears in mind Fellman and Fishman (1977)'s statement:

With regard to Israel as example, Fellman and Fishman (1977) warn that if a language is too purist, especially in science, it hampers the natural language change and development in language structure which implies that phoneme and morpheme inventories are to a certain degree closed systems and that the lexicon is open but very limited. It also hampers standardization because in many instances higher education students are already familiar with English terms (Fellman and Fishman 1977, as cited in Drame, 2000:232-233).

Table 19 below gives an account of some Yilumbu medical terms borrowed from French:

Yilumbu words	Source language item	Meaning
pǎli	Palu (abbreviation of paludisme)	Malaria
upééra	Opérer	To do surgery
bufirama	Infirmier	Medical craft
dátoola	Docteur	Doctor
dókatéra	Docteur	Doctor
mufirama	Infirmier	Nurse
yipítali	Hôpital	Hospital

Table 19: Yilumbu medical terms borrowed from French

As already said in 5.2 up to the present the Yilumbu corpus contains ± 300 loan words (see Appendix 8). Loan words in Table 19 will be included in the planned dictionary on account of their usage frequency in the corpus.

5.6.2.3. Extension of meaning

A lexicographer can use semantic expansions of existing lexical items in order to cope with the needs of a particular technical field. However, he/she should only reflect the actual language usage. For example in Yilumbu, Yipunu and Civili to list but a few the meaning of the word **díronda** ("the loved wife; boyfriend/girlfriend") has been broadened to encompass the arrival of a new concept in the field astronomy: *Venus*, cf. Raponda-Walker, 1937). This new coinage also results from a well-spread lexicographic approach, which consists of observing the behavior of a thing/concept and giving it a name that qualifies that observation. As a matter of fact and according to the Oxford Advanced Learner's Dictionary of Current English (henceforth OALD⁶), Venus is the "planet in the solar system that is second in order of distance from the sun between Mercury and the earth". However from an etymological point of view, *Aphrodite* (Venus in the Roman mythology) was the ancient Greek goddess of love. That is why the meaning of the lexical item *díronda* (the loved wife) has been expanded also to refer to the planet Venus. From a microstructural point of view, the treatment of the lemma **díronda** should make provision for the inclusion of its special-field sense. The special area of knowledge (*astronomy*) to which the lemma **díronda** belongs should be introduced by an italicized word in parenthesis used as label.

In the present model, the lexicographer should make use of semantic expansions of existing lexical items to cope with the needs of technical fields such as Astronomy, Mathematics and Biology to list but a few. However these semantic expansions will be reflected on in the planned dictionary only if they are known to the Balumbu at large.

5.6.2.3. Total embedding or adoption

With regard to total embedding or adoption, Alberts (1999) has pointed out that:

A term is used in its original form without transliteration. The original term usually stems from Latin (in the case of legal or medical terms) and Italian (in the case of music terms). The term is embedded in the target language without changing or adapting any part of the original source language term. The terms are usually explained in the target language to enable users to use them appropriately.

bona fide (in good faith; te goeder trou)

mutatis mutandis (pending; nog hangende)...(Alberts, 1999:28).

As far as the present model is concerned, the legal, medical and music terms used in their original form without transliterations will be of the utmost importance for the knowledgeable user but of a very little use for the average member of the speech community. Given these facts, lexical items obtained of total embedding or adoption will not be included in the planned dictionary. The knowledgeable or sophisticated user can always find what he/she needs in technical or special terminologies.

5.6.2.4. Neologisms (new coinages)

In order to cope with the challenges of globalization, new terms have been coined in Yilumbu, Yipunu and Civili for new concepts such as Aids (**sídè** borrowed from the French *sida*). In addition, given its devastating effect on the world population, Aids is often referred to by the Balumbu and the Bapunu in terms of **yivhūngu yivanáta bátu** or **yivhūngu yibégha bátu**. This paraphrase literally means "the disease that takes (away = kill) people". Given the growing demands in the field of administration, education and industry, new terms have to be coined by language boards for new inventions such as *cellular phone, e-mail, internet, etc.* (Mavoungou, 2001b).

Lexicographers should never record neologisms related to passing modes in their works because by the time the latter are published they are already outdated. As far as the planned dictionary is concerned, the number of neologisms to be included should be kept to the minimum. No lexicographic work can be made absolutely timeless but it is the lexicographer's responsibility to make sure that his/her work is not too rapidly outdated.

To sum up with regard to this section, a list of all special-field terms in the back matter of the planned dictionary could play an important role in providing access to Science and Technology. From the foregoing, it is the ultimate goal of the present Gabonese Government to promote Science and Technology in the vernacular of the people of Gabon. For this to come true, it is expected from the Government to put some efforts into literacy development, e.g. supplying teachers and pupils with relevant reading materials. It is also believed that Mother-tongue Education at primary, secondary and tertiary level is a major but feasible undertaking for Gabon. As far as the former is

concerned, not much research has been done in the field of terminology and terminography. With regard to this point, Alberts (1999) has pointed out that:

The development of the language is to a certain extent the task of the Government, but every citizen should make it his/her own workplace. By these means all languages will be developed and be given a functional value (Alberts, 1999:35).

In this section we have tried to follow this approach. In the following section, an account is given of the types of dialectal forms to be lemmatized in the planned dictionary.

5.7. Types of dialectal forms to be lemmatized

Dialectal forms are the result of various phenomena, allophony and allomorphy in particular.

- **The rendering of phonemes**

A phoneme (the smallest unit without a meaning) is generally defined in terms of families of distinct physical sounds grouped together to form phonemes. These various members of the sounds which are grouped together to form phonemes are known as allophones. For example, the [nts] in *ntsala* (hunger) and [nz] in *nzônzî* (judge) form two allophones (or variants) of the phoneme /nz/. These are free variants because they are not determined by phonetic conditions. They rather occur in free variation in quite a number of utterances in Yilumbu. Chapter 2 already gives an account of some problems in the lemmatization of some variant forms. As a matter of fact, a decision has been taken to use the digraph "nz" to represent both the sounds [nz] and [nts]. Nevertheless, where necessary, the user will still be provided with the form in "nts". It is the aim of this dictionary plan to account for all the particularities of the two main varieties of Yilumbu spoken in Gabon. More specifically, the rendering of allophonic forms can be best presented in Tables. The following Table¹ given as part of the central list may be useful for both decoding and encoding functions:

¹ Part of the materials used in this Table has been obtained from Fontaney (1980).

Words	French translations	English translations	variants	English translations	French translations
ubwíla	se baigner	to bath oneself	ubwítsa	to bath	baigner
ulúla	flamber	to burn	ulútsa	cause to burn	faire flamber
ubóla	être mouillé	to be wet	ubótsa	cause someone or something to be wet	mouiller
uvhóla	refroidir	to cool down	uvhótsa	cause to cool down	rafraîchir
uréláma	être debout	to be in a standing position	urétsáma	to stand up	se lever, se mettre debout
urógha	bouillir	to boil	urósa/urósi	cause to boil	faire bouillir
uwénda	aller	to go	uwénda	Allow to go	laisser partir
usúnda	déposer, descendre	to leave something; to go down	usúnza	to put or leave on the ground	poser par terre
ulénga	être léger, ne rien valoir	to be light; to be a fool	ulénda	cause to be light; look upon someone	alléger, mépriser
ubánga	être allumé	to be lighten	ubánza	to put (the light, the fire, etc.) on; to ask for advice	allumer (une lampe, le feu, etc.); consulter
udónga	être profond	to be deep	udónza	to deepen, to make deeper (a hole); to exaggerate (a fact)	approfondir (un trou); exagérer (un fait)
unyénga	brûler	to burn	unyénda	to burn	brûler
uwáála	remplir	to fill	uwáátsi	to fill	remplir
úfu	mourir	to die	ufwíla	to die	mourir

Table 20: List of verbs with consonantal variants

In chapter 1 of the dissertation, it has been argued that the planned dictionary will owe its pan-dialectal status to the systematic inclusion of sub-dialectal data such as "word in use in X village". This point is illustrated in the following Table. A blank means that the form listed does not have regional restrictions. In other words, it is used throughout the area where the dialect in question is spoken:

Yilumbu Words	Dialectal indications	Sub-dialectal indications	Translations
mapáápa	Yilumbu yí menaáne	This word is in use in the region of Nyanga	Shoes
tsisápaatu	Yilumbu yi ghangu		Shoes
pôndu	Yilumbu yí menaáne		Shoes
pêntsu	Yilumbu yí menaáne	This word is in use in the town of Sétté-Cama	Cockroach
duvhési	Yilumbu yi ghangu	This word is in use in the town of Gamba	Cockroach
yípokudu	Yilumbu yí menaáne	This word in use in the village of Panga Bikódi	Hat
yidúdu	Yilumbu yí menaáne		Hat
shápu (loan word)	Yilumbu yi ghangu		Hat
dulônga	Yilumbu yi ghangu		Plate
dubŷyi	Yilumbu yi ghangu	This word is in use in the village of Ghondi.	Plate
ngééyu	Yilumbu yi ghangu		You
ééyu	Yilumbu yi ghangu	This word is in use in the village of Ghondi.	You

Table 21: Some dialectal and sub-dialectal words in Yilumbu

There are several questions likely to arise:

-How many dialectal forms should be included?

-How should these dialectal occurrences be lemmatized?

These questions will be fully addressed in what follows. Since any bit of extra information can prove crucial for the user's understanding of the Yilumbu lexicon, I

advocate incorporating as much extra data as possible. Like the majority of languages in the world, due to its geographical distribution Yilumbu has a number of dialects marked by differences in pronunciation, grammar, and vocabulary that can with difficulty be served by a single dictionary. Moreover, a standard dialect has yet to be established. This is the norm for the written language as well as the main dialect that will be used in education, administration and the media. In order to distinguish the dialectal provenance of words, lexicographers generally make use of labels. But to be accurate labelling has to be systematic.

More specifically, faced with the problem of lemmatizing the lexical items, e.g. *ngééyu* and *ééyu*, the dictionary maker may for example give the full treatment in the article of the lemma **ngééyu** and then offer a limited treatment for the other lemma (**ééyu**) together with a cross-reference to **ngééyu**. In the choice of the form to be lemmatized, preference would be given to the occurrence with the highest usage frequency. *Ngééyu* accounts for 84 or 0, 24% whereas *ééyu* appears three times in the entire text of the Yilumbu corpus. This simply means that the focus for the lexicographic treatment of the lexical item meaning ‘you’ should be on *ngééyu* with a cross-reference to *ééyu*.

Similarly, faced with the problem of lemmatizing the lexical items, e.g. *yípokudu* and *yibúdu*, the dictionary maker may for example include the term *yípokudu* with a cross-reference to *yibúdu* where the full treatment is to be found. Given their dialectal status, *ípokudu* and *yibúdu* both appear once in the entire text of the Yilumbu corpus. This means that here the frequency count will be of a very limited value to decide for or against the inclusion of one of these variants as part of the lemma to receive the full treatment. Compared to *yípokudu*, the lexical item *yibúdu* can only be given a full treatment on account of its geographical spread: it is used throughout the area where the so-called Yilumbu *yi menaáne* dialect is spoken. In cases where the frequency count offers very little help to the lexicographer, the same line of argumentation may be used to lemmatize the other members of Table 19.

▪ The writing of morphemes

A morpheme is understood here as a unit smaller than a word that have a meaning. Morphemes, however, are not necessarily words. Thus in *uwélasána* (to get married),

uwééla (to marry) is a word, but e.g. the reciprocal *-an-* is not. Despite this fact, it is a morpheme since it has a meaning: "one another". As was the case for the sounds [nz] and [nts] some morphemes do occur in free variation in quite a number of utterances in Yilumbu. For example the word meaning "money" is orthographically represented as *mbôngu* in Class 9 and as *dubongu* in Class 11. Similarly *Kantu* and *dukantu* meaning "canton" are two variant forms that can be used at will by a single speaker. They both appear in Class 9 with the prefix **N-** and in Class 11 with the prefix **du-** respectively.

Where a particular lexical item has competing forms it is generally expected from the lexicographer to record the standard form. With regard to the lexical items *mbôngu* versus *dubongu* and *kantu* versus *dukantu*, by merely giving lemma status to one of these variants a lexicographer will indicate which form is considered standard and which is not. The usage frequency of the variants in question may be useful in order to select the standard form. From a frequency of use point of view, *mbôngu* accounts for 26 or 0,07% whereas *dubongu* appears twice in the entire text of the Yilumbu corpus. With regard to macro- and microstructural treatment this simply means that the lexical item *mbôngu* should be given lemma status and cross-referred to *dubongu*. This argumentation holds true for *kantu*, which accounts for 77 or 0,22 against 4 or 0,05 for *dukantu*.

For the lexicographer, this conflict is further compounded by the unlimited potential of variant forms for Class 7 nouns. As a matter of fact, almost all Class 7 lexical items have two prefixes **yi-** and **i-**. If a lexicographer chooses to enter all nouns of Class 7 twice, i.e. once under the letter "Y" and again under the letter "I", the dictionary will obviously contain much redundancy. Therefore selective criteria need to be set for inclusion in the dictionary. It is part of our editorial policy to posit **yi-** as the prefix and **i-** as its variant in nouns of Class 7. Formulated differently, Class 7 nouns will be treated under the letter "Y" and spelling variants with **i-** as prefix will be supplied after the lemma. Compare the following examples in this regard:

(58)

yíkoola (+ **koola**) also/aussi **íkoola** [yíkò:lè] *n.* (cl.7)....

yitébi (+ **tébi**) also/aussi **itébi** [itébi] *n.* (cl. 7)...

Text example 58: articles **yíkoola** and **yitébi**

5.8. General concluding remarks

The macrostructure of the work discussed above has clearly established what should be included in the planned dictionary and what should not. For example it has been argued that the following categories of lexical items should be given lemma status: nouns, verbs, prefixes, adjectives, possessives, etc. including multiword lexical items. Moreover, these categories of lexical items should ideally be included according to the word tradition and on account of their usage frequency in the corpus; orthographical problems should also be solved in accordance with the needs and reference skills of the target users. This chapter also reflects on other criteria, e.g. the type of special-field lexical items to be lemmatized as well as dialectal forms to be included.

Chapter 6: Microstructure

6.0. Introduction

6.1. Nature of the microstructure

According to Hausmann and Wiegand (1989:346), when first looking at microstructural issues lexicographers should be aware of the existence of the obligatory microstructure, the absolutely obligatory microstructure and the complete obligatory microstructure.

The difference between the absolutely obligatory microstructure and the obligatory microstructure lies in the fact that the latter comprises the set of information categories that has to be treated obligatorily for each type of lemma sign. The obligatory microstructure may be derived from the absolutely obligatory microstructure in the sense that it includes data types from the obligatory microstructure plus other information categories that are not necessarily relevant for each lemma sign. The best example of such data categories is the case of antonymic items. In fact, not all lemma signs have antonyms, cf. Hausmann and Wiegand (1989:346). Hausmann and Wiegand (1989:346) also emphasize that both the obligatory microstructure and the absolutely obligatory microstructure do not provide the user with information about all the types of lemma signs, all item classes and their distribution in the whole dictionary. That is the *raison d'être* of the complete obligatory microstructure of the dictionary. The latter makes provision for all the possible data categories for lemma signs as well as their distribution in the dictionary article.

The obligatory microstructure displays, on the one hand, a structure that is common to all articles and, on the other, structures that differ from the prescribed substructures. Consequently the absolutely obligatory microstructure is made up of information categories that have to be found for any lemma sign. These information types include data regarding the comment on form (e.g. the item giving the word class) as well as the comment on semantics (e.g. translation equivalents, meaning paraphrase or a synonym). In a sense it is a partial representation of both the comment on form and the comment on semantics of a given lemma sign. At the opposite pole, the complete obligatory microstructure of the dictionary gives, in Hausmann and Wiegand's (1989:

349) view, the entire configuration of the dictionary article without the omission of any data category.

Apart from the so-called obligatory microstructure, Hausmann and Wiegand's (1989) distinction between absolutely obligatory microstructure and complete obligatory microstructure, however, is not simple as it looks. Especially the entries "absolute" and "complete" are quite confusing since they are synonyms to a certain degree. With regard to the above distinction, Gouws (1999) follows in the same footsteps, but in a more clear way:

In terms of Hausmann and Wiegand (1989:346), lexicographers should identify beforehand the **obligatory microstructure**, i.e. the structure which is common to all articles. This obligatory microstructure contains those data categories, which have to be treated obligatory for each lemma sign. In a general monolingual dictionary the article of each lemma sign should contain a part of speech indicator and some form of semantic description – either a meaning paraphrase or a synonym. However, all articles do not include e.g. an entry representing an antonym of the lemma sign. An article slot for antonyms will only be utilised in articles where something more than an obligatory microstructure prevails. This constitutes an *extended obligatory microstructure* because it includes more data categories than the prescribed minimum (Gouws, 1999:45).

In the above quotation, Gouws makes a distinction between the obligatory microstructure (which comprises the set of data categories to be treated obligatorily for each type of lemma sign) and the extended obligatory microstructure (which requires more than the prescribed minimum). As far as the present model is concerned, we adhere to Gouws' point of view.

6.2. Different types of microstructures

According to Hausmann and Wiegand (1989:354) four types of microstructures may be distinguished, namely integrated microstructures, partially or semi-integrated microstructures, unintegrated microstructures and rudimentary microstructures. In addition to the foregoing, Hausmann and Wiegand (1989:356) also mention that all microstructures, whether they are integrated, semi-integrated or unintegrated, can be expanded. A **right-expanded** microstructure has a **back comment**, whereas the **left-expanded** one has a **front comment**.

In Hausmann and Wiegand's (1989:355) approach, a dictionary article displays an unintegrated microstructure when all the items indicating semantic data and the items giving idioms and the competence examples are presented in two different

subsections, respectively the first subcomment on semantics and the second and further subcomment on semantics. Compare the following examples from Hausmann and Wiegand (1989:356) and WAHRIG-DW (1994) respectively.

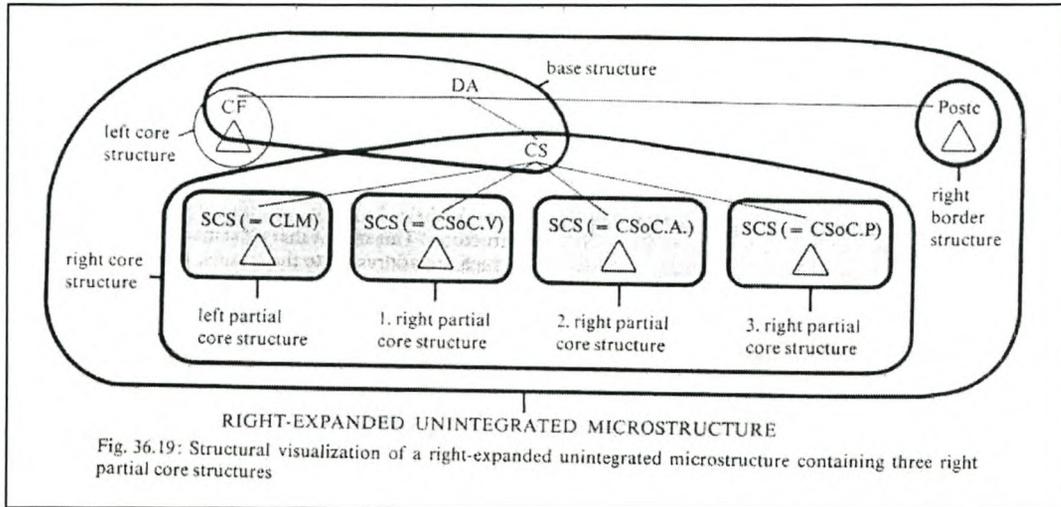


Figure 3: Right-expanded unintegrated microstructure containing three right partial core structures (from Hausmann and Wiegand, 1989:356).

(59)

Kranz (m. lu) 1 *kreisförmiges Gewinde aus Blüten od. Laub, z. B. als Grab-schmuck, Siegerpreis, Kopfschmuck* (Blumen-, Efeu-, Lorbeer-, Sieger-); (fig.) *kranz-, kreis-, ringförmiger Gegenstand* (Strahlen-); *Kranzkuchen* (Nuß-) 2 ein – Feigen; ein – junger Mädchen (fig.) 3 einem Mädchen einen – aufsetzen, aufs Haar setzen; einen – binden, winden; den Hinterbliebenen einen – schicken (als Zeichen des Beileids); wenn du das tust, kannst du dir gleich einen – schicken lassen! (fig.; umg.) *dann setzt du dein Leben aufs Spiel (und andere werden dir einen Trauerkranz schicken)*; dem Sieger den – überreichen 4 einen – auf dem Kopf tragen; er kommt in die Kränze (schweiz.; fig.; umg.) *er ist unter den Siegern*; das kommt nicht in die Kränze (schweiz.; fig.; umg.) *das hat keine Aussicht auf Erfolg, auf Verwirklichung*; ein – von Vergebmeinnicht; das Haar flechten und zum – aufstecken (fig.); *Wirtshaus „Zum grünen –(e)“* [*< späthd. kranz, Rückbildung aus kränzen „mit einem Kranz versehen“; – kränzen*]

Text example 59 (from WAHRIG-DW, 1994 as cited in Wiegand, 1996d: 24).

Compilers of the *Gerhard Wahrig: Deutsches Wörterbuch* (WAHRIG-DW) have interpreted the lemma sign **Kranz** as having four subcomments on semantics. In the

first subcomment on semantics, the user is provided with a paraphrase of meaning of the lemma sign Kranz. In the second subcomment on semantics, the lemma sign is combined with nouns. In the third subcomment on semantics, the lemma sign is combined with verbs. In the fourth subcomment on semantics, the lemma sign is combined with prepositions. A fact worth mentioning in the article above is that it displays an unintegrated microstructure. Compilers first give all meaning paraphrases and then present co-text entries. In other words, co-text examples are not integrated in the respective subcomments on semantics where the relevant explanation of meaning is given.

Along the line of Hausmann and Wiegand (1989) but rather focusing on the concept of addressing, Gouws (1999b) proposed a reformulation of the unintegrated microstructure:

An unintegrated microstructure displays a distant addressing between a co-text entry and the relevant paraphrase of meaning/translation equivalent. In the case of a lemma sign representing a polysemous lexical item, a bilingual dictionary will give all the translation equivalents and then present the co-text entries. Contrary to the above-mentioned microstructure, an integrated microstructure displays a system of direct addressing between a paraphrase of meaning/translation equivalent and its co-text entry/entries. Each paraphrase of meaning/translation equivalent is immediately followed by the co-text entry illustrating the typical usage of the lexical item in question (Gouws, 1999b:47).

Compare the following examples from Hausmann and Wiegand (1989:355) and the *Longman Dictionary of Contemporary English* (henceforth abbreviated LDOCE) respectively.

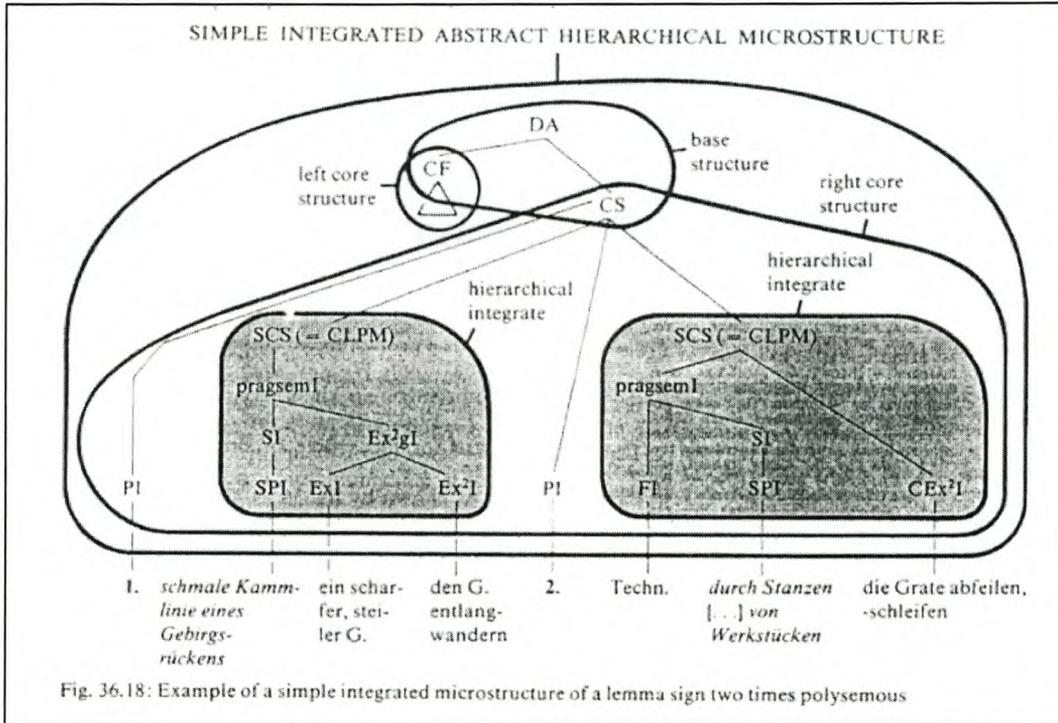


Figure 4: Example of a simple integrated microstructure of a lemma sign two times polysemous (from Hausmann and Wiegand, 1989:355)

(60)

birth /b :θ|| b rθ/ n 1 [C;U] the act or time of being born, of coming into the world esp. out of the body of a female parent: *the birth of a child|birth , marriage, and death|Last year there were more births than death.|She weighed 8 pounds at birth* 2 [U;(C)] the act or fact of producing forth young (often in the phr. give birth to): *She gave birth to a fine healthy baby.|Birth need not to be unpleasant for the mother* 3 [U] family origin: *of noble birth|French by birth* 4 [C] beginning; start; origin: *the birth of a new political party*

Text example 60: article **birth** (from *OALD*, 2000:149-150)

Compilers of LDOCE have interpreted the lemma sign **birth** as four times polysemous.

The article above displays an integrated microstructure. Each paraphrase of meaning is immediately followed by the appropriate illustrative example. In this article, typographical structural markers and non-typographical structural indicators are also used to achieve a meta-communicative function. The lemma appears in bold type whereas illustrative examples are in italics. A vertical line (|) separates different co-texts example illustrating the typical use of the lemma. Typographical and non-typographical structural indicators also include the use of big letters and square brackets. Capital letters C and U in square brackets stands for "nouns that can be counted and "uncountable nouns" respectively.

Compared to the integrated microstructure, the semi-integrated microstructure is a hybrid model. Gouws (1999b) describes a semi-integrated microstructure as follows:

A semi-integrated microstructure is a hybrid form displaying features of both an integrated and an unintegrated microstructure and is typically used in more comprehensive dictionaries where lengthier articles with a variety of data types and search zones occur. The article structure has two distinct sections to deal with the two microstructural types, cf. Wiegand (1996). In the first article component, a single co-text entry is added to each entry given as a paraphrase of meaning/translation equivalent. A separate article component is presented to accommodate additional co-text entries. In this unintegrated component the relation between each co-text entry and the relevant paraphrase of meaning/translation equivalent entry is explicated by means of a clear and unambiguous cross-reference entry marking the co-text entry as addressed at a specific paraphrase of meaning/translation equivalent entry (Gouws, 1999b: 47).

Compare the following proposed article structures as an example:

(61)

Kranz, der, -es; Krän-ze

1. *in der Form eines Rings geflochtene od. gebundene Blumen, Zweige o.d.* | In der Gärtnerei konnte man Kränze aller Art, z.B. Blumen-, Efeu-, Lorbeer- und Adventskränze bestellen.

2. *etw., das in einer kreisförmigen Form erscheint* | ein ~ von Haaren wuchs rings um seinen kahlen Schädel.

3. *Anzahl von etw. od. jmdm., die um eine Art Mittelpunkt gruppiert sind* | Der Kanzler präsentierte sich mit einem ~ von Ministern vor der Presse.

4. (schweiz.) *einer der ersten drei Plätze bei einem Wettbewerb* | Sie setzten sich nach den Kränzen auf die Ehrentribüne.

5. (Jägerspr.) *Abdruck der äußeren Kante der Hufe von Rotwild auf trockenem Boden* | Er konnte die Fährten deutlich erkennen, war sich aber nicht sicher, ob es sich um Kränze handelt.

6. (Kegeln) *Wurf, bei dem alle acht um den König stehenden Kegel fallen* | Ein Kranz war ihm heute abend nicht gelungen

Sub. ein ¹ *Feigen* | ein bunter ² *tanzender Kinder* | ein ² *junger Mädchen* (geh. *Gruppe, Kreis*) | ein schmackhaftes *Stück* ² (kurz für ↑Kranzkuchen)

V. einem Mädchen einen ¹ *aufsetzen* | einen ² *backen* (Kranzkuchen) | einen ¹ *binden* | einen ¹ *flechten* | einen ¹ *heraushängen* (bes. als Zeichen, daß Wein ausgeschenkt wird) | einen ¹ *niederlegen* (am Grab [Ehrenmal] als Zeichen der Trauer) | den Hinterbliebenen einen ¹ *schicken* (als Zeichen der Anteilnahme) | dem Sieger einen ¹ *überreichen* [aushändigen] | einen ² *werfen* | einen ¹ *winden*

Adj. bunter [grüner, verwelkter] ¹

Präp. einen ¹ *auf* das Grab legen | einen ¹ *auf* dem Kopf tragen | Kerzen *auf* einen ¹ *stecken* (bes. einen Advents-) | *in* die Kränze kommen (schweiz.; umg. *unter den Siegern sein*) | das kommt nicht *in* die Kränze (schweiz.; umg. *hat keine Aussicht auf Erfolg* [auf Verwirklichung]) | den Sarg *mit* Kränzen (¹) schmücken | ein ¹ *mit* Schleifen [Kerzen] | einen ² *von* Blüten um den Teller des Ehrengastes legen | ein ¹ *von* Rosen | ein ² *von* Seen umringt die Stadt | die Blumen *zu* einem ¹ *winden* | das Haar *flechten und zum* ² *aufstecken*

MIKROARCHITEKTUR
 erste glatte Schnellzugriffsstruktur

Lemma	FK als TB
PA	1. SSK als TB
PA	2. SSK als TB
PA	3. SSK als TB
PA	4. SSK als TB
PA	5. SSK als TB
PA	6. SSK als TB
KoKa	SSKko.Sub als TB
KoKa	SSKko.V als TB
KoKa	SSKko.Adj als TB
KoKa	SSKko.Präp als TB

zweite nachgeordnete Schnellzugriffsstruktur

h
n
u
w

dritte nachgeordnete Schnellzugriffsstruktur

a
i
m
z

Text example 61: article **Kranz** (from Wiegand, 1999: 36).

In keeping with his concept of **micro-architecture** Wiegand (1996d:36) has rewritten the treatment of the lemma **Kranz** given as text example 59 (displaying an unintegrated microstructure) with a semi-integrated microstructure in mind. In the dictionary article above, a variety of data types have been presented into two distinct sections. In the first article component, each paraphrase of meaning is followed by its

relevant co-text entry. In order to accommodate additional co-text entries, a separate article component is also presented. In this unintegrated component starting with sublemmata **Sub.** ein¹ *Feigen* the relation between each co-text entries and their relevant paraphrase of meaning entries is of a distant nature. In order to anticipate any problem in the retrieval of the information sought by the use, the latter is helped by superscript numbers indicating which sense of **Kranz** applies to a specific co-text entry.

According to Wiegand (1990:56), a rudimentary microstructure prevails when the dictionary article is restricted to the comment on form. Thus the comment on semantics is substituted by a cross-reference entry. One also finds rudimentary microstructures in the case of lemma signs representing abbreviations. Where abbreviations are included as lemmata in the central list, their treatment is usually restricted to an entry indicating the full form of the abbreviation, cf. Gouws (1999b:45)

6.3. Different data categories to be included

Data categories to be included are usually determined on, among other things, the basis of the functions of the dictionary. The present work should be both a productive and receptive dictionary of Yilumbu. Formulated differently, it should fulfill two main functions. These are: (i) a dictionary for the Balumbu helping them to understand Yilumbu texts. (ii) a dictionary for the Balumbu helping them to produce Yilumbu texts (see chapter dealing with the access structure for more detailed information).

Wiegand (1978 as quoted by Smit: 1993, 143-144) takes the view that all parts of the dictionary article such as the meaning explanations, the items indicating word class, etymology, spelling, etc. can be regarded as answers to specific user questions. These questions that may be anticipated by the lexicographer also determine the dictionary type.

6.3.1. Arrangement of entries

Successful dictionary consultation chiefly depends on the way data are arranged.

6.3.1.1. Lemmata

Across dictionaries, lemmata are given in boldface. In the present model, provision is made to provide the user with the phonetic transcription of the treatment unit. Important spelling variants are also given, e.g.:

(62)

ngwîsi... [ŋgwî:sî] *n.* also/aussi **ngúsi**....

kéfu... [kéfù] *n.* also/aussi (*Men.*) **kyééfu** [k^hyé:fù]...

Text example 62: articles **ngwîsi** and **kéfu**

6.3.1.2. Word class allocation

The item giving the pronunciation of the main treatment unit is immediately followed by an indication of the part of speech to which that lemma belongs. In the present dictionary plan this is done by means of the conventional abbreviated part of speech in both the English and French traditions, e.g. *n.*, *v.*, *adj.*, *adv.*, etc. An indication of word function classification (part of speech classification) is of the utmost importance.

6.3.1.3. Etymological data

The next most important type of data after the item giving the part of speech to which the lemma belongs is the etymological data. In the present dictionary plan this is done by means of the proto-Bantu reconstruction of the treatment unit. Proto-Bantu forms that are to be found in the planned dictionary come from Meeussen (1965). However, some findings of Nsuka Nkutsi (1980) have also been taken into consideration to avoid overlapping and duplication of work.

6.3.1.4. Meaning explanation

The type of data given just after the protoBantu reconstruction is the explanation of the meaning of the lemma.

6.3.1.5. Translation equivalents

After the explanation of the meaning there is an indication of the different translation equivalents of the lemma in both English and French. Given the fact that a list of translation equivalents cannot be dealt with without further semantic guidance, provision in the form of labels is made at each member of the translation equivalent paradigm to disambiguate the data in order to ensure a successful retrieval of the information on the part of the user. Furthermore, translation equivalents are separated from one another by means of typographical structural markers, e.g. a comma or a semi-colon. Other structural indicators, "E" (for English) or "F" (for French) are added for more clarity and this is followed by the translation equivalent paradigm.

6.3.1.6. Examples

Given the fact that the planned dictionary displays an integrated microstructure, each paraphrase of meaning/translation equivalent is immediately followed by an example illustrating the typical use of the lemma. Prinsloo and Gouws (2000) believe in the richness/naturalness of authentic or corpus examples. In keeping with the user perspective I tend to follow Prinsloo and Gouws (2000) as far as possible with regard to this point.

6.3.1.7. Cross-references

As part of the planning of the mediostructural component of an article, some lemmata within the central list appear with a restricted treatment. In other words, instead of a full treatment a user will find a cross-reference to where he/she will find additional information. The dictionary conceptualization plan also makes provision for a data distribution structure that warrants a differentiated approach with regard to cross-reference articles. Sometimes, within the same article a user will be referred to

another lexical item for the meaning of a given item (internal reference address). Contrary to this, a user may also be referred from one article to another or to another text in the dictionary (outside the dictionary article in the front or back matter texts or in some cases outside the dictionary itself).

6.3.1.8. Proverbial and idiomatic expressions

As part of the planning of the data distribution structure of the dictionary-to-be, proverbial and idiomatic expressions are not to be found in the central list in a particular article slot but in the register sections at the end of the dictionary at hand. In these register sections, proverbs and idioms will appear in three columns. In the first column, for the treated proverb/idiom a Yilumbu keyword is presented alphabetically according to the word tradition followed by the proverb/idiom. In the second and third columns and whenever possible, English and French equivalents of the proverb or idiomatic expression are supplied. When English or French has no proverbial or idiomatic equivalent, the meaning of the Yilumbu is paraphrased in both English and French (see chapter 7 for more detailed information).

6.3.1.9. Semantic data

The emphasis of monolingual dictionaries is on the presentation of the meaning and distinctions in meanings (where such exist) of lemmata. Modern dictionaries offer much more than the mere explanation of meaning. They also give an account of semantic relationships between lexical items. Macro- and microstructural treatment encompasses many semasiological and onomasiological choices as it clearly appears in Louw's (2000) statement:

On a macrostructural level, semasiological presentation corresponds to a strict initial alphabetical listing and on a microstructural level, to an approach emphasizing the denotative meaning of a word. On a macrostructural level onomasiological presentation to a thematic listing and on a microstructural level, to an approach that emphasizes the semantic relations a word has with other lexical items in a specific language, e.g. synonymy, hyponymy and antonymy (Louw, 2000:121).

In the present model and with regard to the different types of meaning, the focus will be on explanations of meaning, synonymy, homonymy and antonymy.

- **Explanations of meaning**

In the case of the planned dictionary that is a typological hybrid it can be assumed that the user will need some meaning descriptions in Yilumbu. In keeping with the user-perspective, the short explanation of the meaning is deliberately written in ordinary language.

The paraphrase of meaning is meant in the first place to empower speakers of Yilumbu in their abilities in their own language. The traditional way in explanatory dictionaries is to present meaning explanations without translation equivalents. Such an approach is normal if one considers that comprehensive dictionaries are primarily aimed at the description of the meaning. But in bilingual or multilingual dictionaries although paraphrases of meaning may be included, the priority is not the description of the meaning but the co-ordination of source and target language forms. The translation of the paraphrase of meaning and other texts given in the target languages has the genuine purpose (as defined by Wiegand) of giving the adequate translation equivalent to each source form. In addition, it may serve as a useful aid in the acquisition of the languages in question by the learners of both English and French and once again helps to shift the focus from the source language to the target languages.

- **Synonymy**

Word synonyms are traditionally defined as having the same meaning (see chapter 9 for an account of Louw's (2000) reservations with regard to this aspect). Furthermore, a distinction is usually drawn between lexical items that are absolute synonyms as opposed to those that are partial synonyms. Table 22 below gives an account of some synonyms in Yilumbu:

Yilumbu lexical items			Meaning
mubédi	musúli	twaali	porridge
yífwilu	dúfu	dibǒgha	death
inóóghu	Ngǒndu		toucan
iyúúnga	dubíta		jacket
būta	mubeeta		gun
mbeenu	télevisu or télezu		television
iyǎgha	iyéémbi		poor person

pīta	mbōghu	camp
dubūyi	dulōnga	ipēla
		plate

Table 22: Some lexical item synonyms in Yilumbu

In Table 22 above only the couples *inóoghū/ngōndu* and *iyāgha/iyéémbi* can be regarded as the so-called absolute synonyms. The other members of Table 22 do not have exactly the same meaning in terms of denotation and connotation. For example the lexical item *musúli* is a deverbative noun (cf. *usúla* "to dissolve"). It refers to any kind of porridge that can be obtained from the dissolution of e.g. cassava, maize, flour, etc. in water. The term *mubédi* usually refer to a porridge obtained from cassava, potatoes or yam, whereas *twaali* refers in particular to rice porridge.

When dealing with synonyms, there are especially two issues lexicographers should be aware of, namely: the existence of synonyms that have multiple meanings and where to treat synonyms in a given dictionary article. Svensén (1993) addresses the first issue:

Using synonyms and near-synonyms as definitions saves space, and the method is entirely valid when the need for semantic precision is not too great, but one has to be on guard against synonyms that have multiple meanings. If a synonym is polysemous, it must not stand as a complete definition, but must be disambiguated... (Svensén, 1993:119).

As a general criticism applying to the *Verklarende Handwoordeboek van die Afrikaanse Taal* (henceforth abbreviated HAT) in particular, Louw (2000:130) has mentioned that this dictionary consistently fails to provide users with accurate specification of senses to which the treated polysemous synonyms apply. As far as the planned dictionary is concerned, a correct and systematic application of labels addressed at synonyms that have multiple senses will ensure a successful retrieval of the information on the side of the target user.

With regard to the second issue (where to treat synonyms in a given dictionary article), in monolingual dictionaries synonyms are usually placed close to the item giving the meaning paraphrase and are introduced by a typographical structural marker, e.g. SYN, cf. Hausmann and Wiegand (1989). Hausmann and Wiegand's proposal for the treatment of synonyms, i.e. positioning them close to the explanation of meaning, makes great sense because the user immediately gets information about semantic relations between the lemma and other lexical items. If the lexicographer consistently

follows this system, it warrants a successful information transfer. This is clear from the following proposed article structures:

(63)

mubédi, mi (+ bedi) [mùbédi] <i>n.</i> (cl. 3/4) < * -bédò		
♦1 Iliighu baválamba na mayāka v́hó malānga, tsimbála yó bavárósi na unīgha♦ SYN musúli; twaali	1 <E> Dish obtained from cassava, or from boiled and pounded potatoes or yams.	1 <F> Plat préparé à base de tubercules de manioc trempés, ou à partir de taros ou d'ignames bouillies et écrasés.
Σ Maama atsílamba mubédi.	<E> Mum has prepared porridge.	<F> Maman a préparé de la purée.
Σ Manômba akátiyi mubédi.	<E> Manomba never eat porridge.	<F> Manomba ne mange jamais la purée.
2 (<i>ndúbulu</i>) Kúba; yivhūngu yivanáta bátu/yivhūngu yíbég̃ha bátu.	2 (<i>fig.</i>) Failure to win, defeat; Aids.	2 (<i>fig.</i>) Manque de réussite, défaite; sida.
Σ Munāji atsíbó mubédi ná yilíma.	<E> Munaji has lost his first football match since the beginning of the year.	<F> Munaji a concédé sa première défaite de l'année.
Σ Anábó mubédi.	<E> He has contracted Aids.	<E> Il a contracté le sida.

Text example 63: article **mubédi**

In the treatment of the article **mubédi** in text example 63, immediately after the item giving the paraphrase of meaning of the lemma sign the user gets two lexical item synonyms (printed in bold letters and introduced by the structural marker SYN) separated from one another by means of a semi-colon functioning as structural marker. The latter is used to achieve a meta-communicative function. The information to be retrieved is that *musúli*, *twaali* and *mubédi* are partial synonyms. This use of the semi-colon to achieve a meta-communicative function already constitutes a form of textual condensation. The user is instructed to look up these synonyms in order to find additional information (cross-referencing and textual condensation are discussed in chapter 9 of this dissertation).

- **Homonymy**

Homonyms are traditionally defined as lexical items having the same form.

Compare the following Tables dealing with homonyms as opposed to polysemous lexical items. A blank means that the form was not found:

Yilumbu lexical items	Meaning	Etymology ¹
nééla ¹	window	borrowed from the Portuguese Janela "window"
nééla ²	ring	borrowed from the Portuguese Anel "ring"
uréesi ¹	to divine	
uréesi ²	rice	borrowed from the French Riz "rice"
pāli ¹	type of bush rat	
pāli ²	malaria	borrowed from the French Palu (abbreviation of paludisme "malaria")
kála ¹	crab	*N-kádá
kála ²	related to the past	*-kádà, *kà-dàì
káfi ¹	paddle	*-kápì
káfi ²	coffee	borrowed from the French Café "coffee"

Table 23: Some lexical item homonyms in Yilumbu

Yilumbu lexical items	Meaning	Etymology
ibũngu	village of ghosts	*-bũngu < or -bũngu
	seat	*-bũngu < or -bũngu
	shell	*-bũngu < or -bũngu
nyéenzi	cricket	*-jédì or *jénje
	pleasure; joy	*-jédì or *jénje
mānga	ponds	*đíbá
	oracles	*đíbá
	type of fish	*đíbá

¹ As already said, most of the protoBantu forms in this Table are from Meeussen (1965) and Nsuka Nkutsi (1980).

pěsi	grave	
	vow	
	cockroach	
yisêngu	insult	
	metallic piece	
yiwúwu	ant hill	
	fire place; fire tripod	
mbása	jar	
	small stick	

Table 24: Some polysemous lexical items in Yilumbu

From a macro- and microstructural point of view, Table 23 above contains a wealth of information. Homonyms are traditionally given lemma status together with superscript numbers when they are of different origin. If not, the same words with different meaning should be treated as X times polysemous.

6.3.2. Treatment of dialectal forms

When dealing with dialectal forms there are several questions likely to arise:

-What types of labels will best serve the needs and reference skills of users (*Ghâng*? *Men*? *dial*? *sub-dial*? *region*? etc.)?

-How should these labels be defined?

Traditional labels such as *dial.* for "dialect", *region.* for "regional" or even *sub-dial.* for "sub-dialect" are too general in modern dictionaries to be of a real help for the user.

With regard to this point of view, Osselton (1994) has pointed out that, e.g.:

The label 'dialect' has...become within the English tradition a universal label for all regionalisms, a blanket term covering diatopic complexity, or geographical imprecision (Osselton, 1994:108).

Despite the fact that the labels *dialectal*, *regional*, etc. are usually indicators of regional use, it is better to have a very clear terminological distinction of labels. As far as Yilumbu's diatopic labels are concerned, two categories can be identified. With regard to the first category, diatopic labels such as *Ghâng.* and *Men.* will be mainly used to

distinguish words that belong to the so-called Yilumbu yi ghāngu as opposed to Yilumbu yí menaáne. With regard to the second category, an abbreviation or a complete form of the county name or the village name will be given for all the forms that can be pinned down to a particular area. Compare (62) in this regard:

(64)

yípokudu...(*Pānga Bikódi*) <E> hat <F> chapeau....

Text example 64: article **yípokudu**

A fact worth mentioning in this simplified article is that, among other things, the lexicographic treatment makes the user aware of the regional restriction of the lemma **yípokudu**: it is mainly used in the village of Pānga Bikódi. This is important for the user because such treatment may help him/her to know more about the commonest dialect words as well as their distribution in the all language continuum. The twofold classification given here may be useful given the fact that the treatment of dialectal terms in general dictionaries is usually a bone of contention among lexicographers. When the treatment of dialectal words is done in a satisfactory way in a given general dictionary, the work in question may be a reference book in the hands of both the average user of the speech community and the dialect specialist.

6.3.3. Additional sections for extra-linguistic data

6.3.3.1. Synopsis articles versus single articles

In addition to the foregoing and with regard to dictionary typology, some articles of the intended dictionary will have some features of the so-called **ethnographical dictionary**. According to Zgusta (1987:14), an ethnographical dictionary is “ (...) a dictionary that tries to describe a culture in the entries of the single relevant words.” These articles in which some degree of encyclopedic data is necessary are also referred to as synopsis articles in this study.

As far as this point is concerned, a distinction has to be made between **single articles** and **synopsis articles**. Single articles are the so-called **default articles**. They do not deviate from the traditional microstructural approach of the dictionary because they present the minimum data for each lemma treated. In other words, they usually omit

e.g. an extensive treatment of cultural aspects. In terms of the three types of microstructures, they are the so-called obligatory microstructure. Apart from traditional data categories to be allocated to each lemma, synopsis articles contain additional data types, which can be either of a linguistic or of an extra-linguistic nature. These data entries that usually focus on things more than on words are very important to the target users because they are likely to improve their understanding of a particular treatment unit.

The classical conception of synopsis articles comes from Bergenholtz, Tarp and Wiegand. (1999). In their view, synopsis articles which were devised for language for special purposes (LSP) dictionaries, have to make provision for the treatment of lemmata functioning as superordinate terms (general lemmata or topics) as well as their hyponyms. In this research project, the term "synopsis article" is not used in the same sense as in Bergenholtz, Tarp and Wiegand (1999). Language for special purposes, although very important, may not be regarded as the only field of application for synopsis article. In other words, it is believed that synopsis articles have a more general use than its restricted application in LSP dictionaries. In fact, the focus will not be on the treatment of technical or scientific vocabulary but rather on cultural terms. More specifically, priority will be given to the treatment of lexical items with a high degree of cultural information. Contrary to this point of view, Gouws (2002; 2002b) rather uses the term **complex articles** to describe these articles in which the lexicographer gives more than a synopsis or summary of a given topic or theme.

With regard to macrostructural selection the following criteria will apply: without necessarily working with the idea of superordinate versus hyponym as in Bergenholtz, Tarp and Wiegand (1999), lexical items of the same genus and other scientific terms as well as cultural terms will be included. The dictionary conceptualization plan (cf. Prinsloo and Gouws 2000:153) should therefore provide a data distribution structure, which warrants a differentiated approach with regard to the structure of the dictionary articles. The point here is threefold. Instead of using inserted inner texts, some articles (especially those presenting a lemma sign representing a high degree of cultural information) will have, according to the specific case: (a) a cultural or encyclopedic section presenting texts in the three languages of the dictionary (Yilumbu-English-French), (b) a cultural or encyclopedic section presenting texts in

only the target languages of the dictionary (English-French) and (c) a cultural or encyclopedic section presenting excerpts from relevant literature dealing with the lexical items treated. The foregoing also applies to dictionary articles dealing with a general discussion of special-field terms: the classical conception of synopsis articles.

This wider application is important, because dictionary articles do not have to be treated alike. In addition, these synopsis articles may be qualified because articles with the encyclopedic section presented in the three languages of the dictionary may differ from one with a bilingual presentation or even with one merely containing a comment on pragmatics following the linguistic presentation. This difference in presentation may be motivated on account of culture specificity as well as the subject knowledge of the users. This discrepancy in the treatment should also be explained in the user's guide. User proficiency will furthermore determine the nature and extent of the lexicographic presentation. For example, in the case of surrogate terms, speakers of English and French may need more cultural information than mother-tongue speakers of Yilumbu because for the latter a certain degree of familiarity with the treated surrogate term will be assumed. These metalexicographic foundations have to be entered in the front matter of the specific dictionary.

Hausmann and Wiegand (1989:337) have argued that in many general monolingual dictionaries, the macrostructure and the only outer access structure coincide. If a dictionary has a spelling Table of the kind that is referred to above it would have not one but two macrostructures and consequently several access structures or search routes. The same approach holds true for the treatment of clusters. As part of the planning of the macrostructure of a particular dictionary, a lexicographer may choose not to work with the idea of main lemmata as opposed to niched and nested lemmata within the central list. If a dictionary maker chooses to stick to the idea of a so-called **straight-alphabetical dictionary** the notion of **integrated** and **non-integrated outer texts**, as developed by Bergenholtz, Tarp and Wiegand (1999), gives him/her the opportunity to list compounds or derivatives in front and back matter texts. The fact that the inclusion and (limited) treatment of a category of lexical items for e.g. the sake of orthography both in the front and the back matter texts is best explained in Gouws (2001):

An integrated outer text is one integrated into and helping to achieve the genuine purpose of the specific dictionary...a dictionary displaying both single and synopsis articles can assist the user by listing the lemmata heading the synopsis articles in a back matter text. Such a text explicates the heterogenous article structure and creates another access possibility for the user. In this way integrated outer texts, both in the front and the back matter, can be employed to create poly-accessible dictionaries. In a bilingual dictionary the treatment of lemmata representing culturally bound lexical items could best be done in synopsis articles, which allows a more comprehensive treatment than that presented in default articles. A back matter text listing all the culturally bound items treated in the central list in synopsis articles enhances the access to these items in the central list (Gouws, 2001:104).

This holds true for the next type of terms.

6.3.3.2. Microstructural treatment of other cultural terms: loanwords and kinship terms

As it clearly appears above, for the treatment of culture-bound elements, the lexicographer should make sufficient provision for data explaining to the users the typical context in which they customarily appear. The situation is similar for loanwords. Recalling that loanwords require both a linguistic and sociolinguistic approach, the dictionary maker should pay sufficient attention to the phonological and morphological analysis of the borrowing word being treated as well as its socio-cultural layer. Without such lexicographic provision, the treatment of loanwords will be of little use to the potential target user groups of the planned dictionary. This is relevant because the latter might need some explanations for the following loanwords because they encompass background knowledge of a linguistic and sociolinguistic nature:

(65)

fúúra...

dóli...

dikása...

Ngábu...

The same line of argumentation holds true for the treatment of kinship terms. It is well accepted that people from different cultures have varied representations of concepts and things that surround them. Since there is no one-to-one correspondence between European languages and African languages as far as the kinship system is concerned, the lexical items in question deserve a special treatment because they may require some

encyclopaedic data. For example, simple items like **táata** (father) or **maama** (mother) have different mental images or connotations for the Balumbu in particular:

(66)

táata 1. A man who has [a] child[ren] (biological father), 2. Any parent on the father's side regardless of the sex or the age, 3. Stepfather, 4. Any person of the age of someone's father.

maama 1. A woman who has [a] child[ren] (biological mother), 2. Any parent on the mother's side regardless of the sex or the age, 3. Stepmother, 4. Any person of the age of someone's mother.

These different representations of concepts and things are accounted for in the planned dictionary.

6.3.4. Coverage

In metalexicographic circles, lexicographers are generally warned against a lemmatic bias in their work. Non-lemmatic addressing procedures help to shift the focus from the source to the target language(s). In addition to the standard vocabulary, dictionaries usually include some words that are limited in some way, e.g. lexical items of which the occurrence is restricted to certain geographical areas, subject fields, professional fields (dialectal, slang, archaic, poetic, or obsolete words, etc). In order to give an account of such deviations and to ensure a successful retrieval of the information on the part of the user, lexicographers generally employ labels. In English dictionaries in particular, great care is taken to ensure coverage of the different national varieties of English (especially British and American English). In the present model the selection of English and French comes from different varieties. These varieties of English and French are marked accordingly in the planned dictionary. With regard to this point, care is taken to ensure that there is some coverage of words selected from French spoken in Gabon in particular. In terms of coverage, it is also worth emphasizing that in all existing bilingual dictionaries of Gabonese languages, coverage focuses on traditional crafts (fishing, hunting, weaving, pottery, wood-carving, etc.).

This has led to a good lexicographic practice in dictionaries of Gabonese languages. It is part of our editorial policy to follow in the same footsteps. However in existing dictionaries of Gabonese languages, citations are hardly ever used and references to relevant literature are seldom found. Citations and references to literature should be

included where necessary. This will be done in the present model.

6.3.5. Diachronic data

Provision is not made for the inclusion of etymological items explaining why and how a lexical item has become what it is from a historical point of view. That would fall within the scope of a historical dictionary. The inclusion of diachronic data in a synchronic dictionary rather results from the lexicographer's willingness to take into account both contemporary language and items from former language stages. Of course this has to be determined in accordance with the functions of the dictionary as well as the needs and reference skills of the potential users. This aspect will receive more attention in the chapter dealing with the access structure.

6.3.6. Data distribution structure

When the different data categories to be included are discussed, it is also important to comment on their distribution within the dictionary. This is the concern of the data distribution structure that basically determines where the different data categories have to be included. Some data types will make it into the central list, whereas others will be included in the different outer texts of the dictionary (i.e. idioms and proverbs will be included in the back matter section). In addition to the foregoing, provision should also be made with regard to the different search zones within the dictionary articles. The data distribution structure determines the article internal presentation and the different search zones within the dictionary articles. For example, if three data categories (lemma sign, part of speech indicator and translation equivalent) have to be included then the lexicographer has to make provision for three article slots or search zones in the dictionary article. This partly corresponds to Wiegand's (1996d) concept of **micro-architecture**. The following is Hausmann and Wiegand's visualization of the types of data inside the microstructure. This figure is also followed by Rey-Debove's visualization of the classical conception of the microstructure and by a proposed article structure for the treatment of kinship terms:

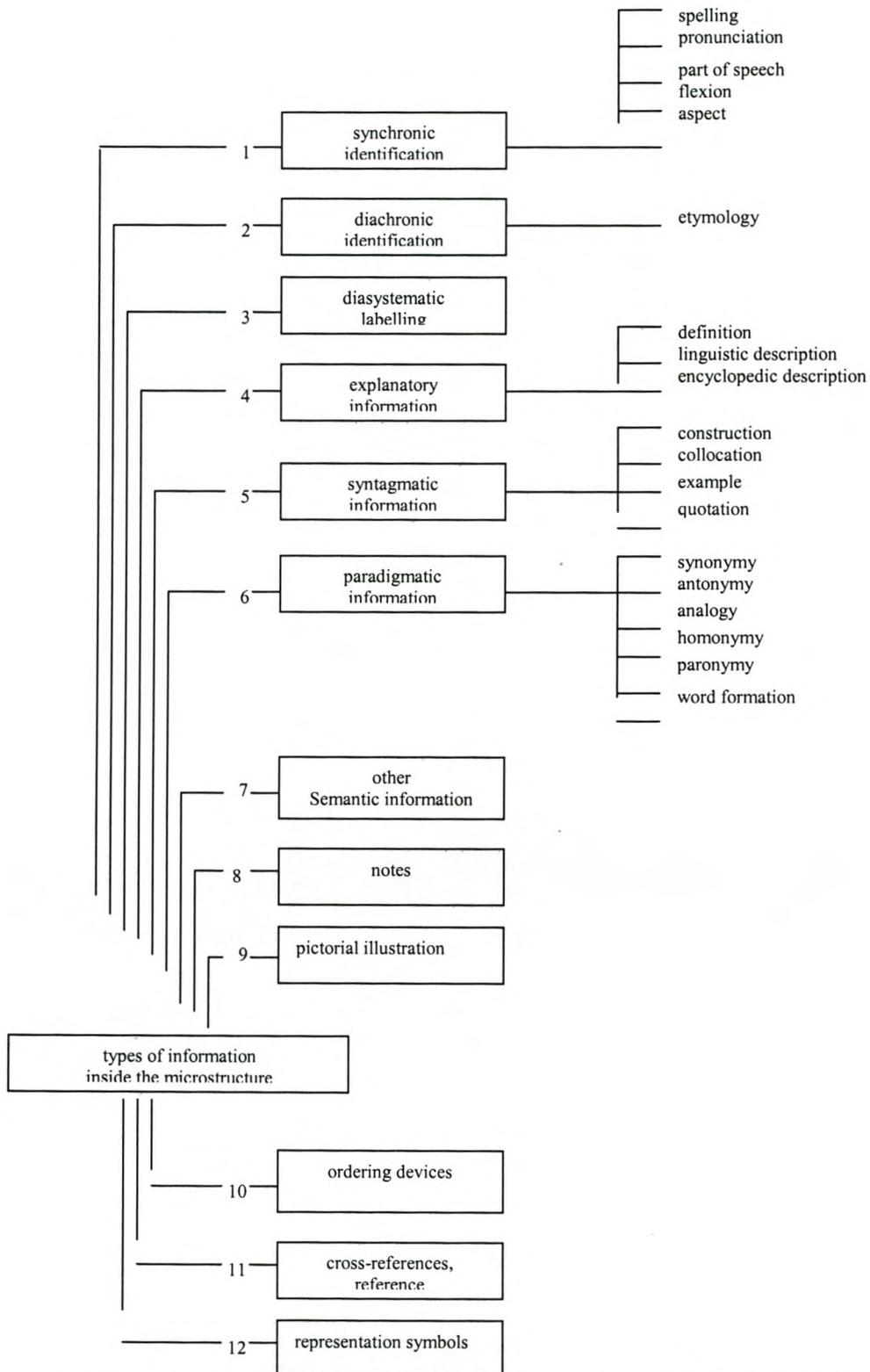


Figure 5: Types of data inside the microstructure (from Hausmann and Wiegand, 1989:343)

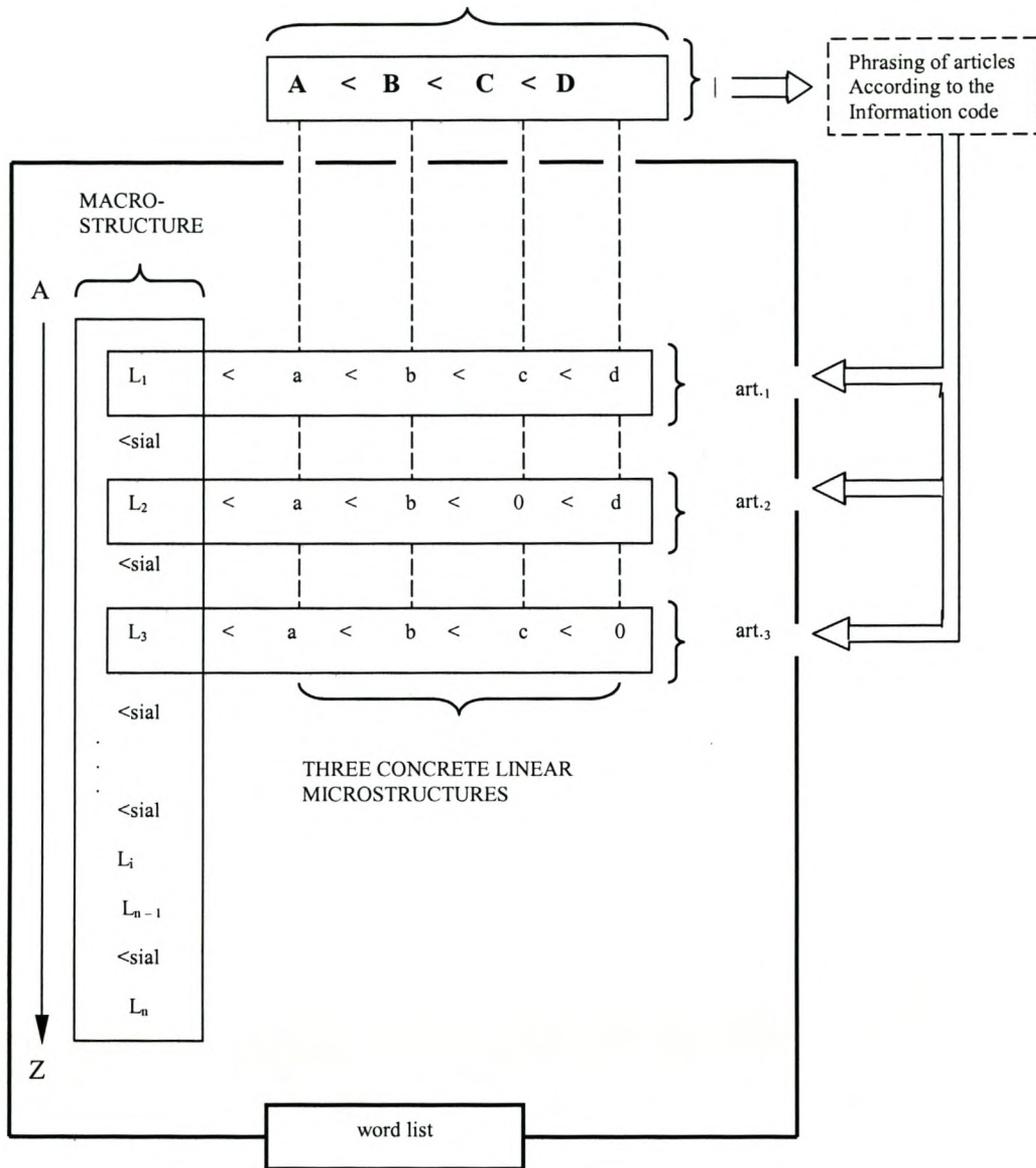


Figure 6: Visualization of the classical conception of the microstructure for monosemous lemma signs (according to Rey-Debove 1971, as cited in Hausmann and Wiegand, 1989:340)

6.4. Culturally bound lexical items

Busane (1990:33-34) has pointed out that the word in the Black African languages for the English *bride price* has been treated unsatisfactorily in several bilingual dictionaries of African languages. Unsatisfactorily because the word in the African languages meaning *bride price* is usually coordinated with the English *dowry* on the one hand and with the French *dot* on the other hand. However *dowry* and *dot* in the English and French traditions convey the following meaning: Possessions that a woman brings to her husband under a marriage contract ('Les biens qu'une femme apporte à son mari lorsqu'elle rentre dans un contract de mariage'). This meaning is different from that of the word *bride price* conveys, viz "(...) *a payment of money or cattle made to the family of a woman when she is married.*" as it occurs in the LONGMAN PRIMARY DICTIONARY:

(67)

<p>bride /braɪd/ <i>noun</i> a girl or woman who is going to be married, or who just been married</p> <p>bridal /braɪdl/ <i>adjective</i> of a bride or wedding.</p> <p>'bride price or 'bride wealth <i>noun</i> payment of money or cattle made to the family of a woman when she is married. Lobola is another word for bride price.</p> <p>bridesmaid /braɪdzmeɪd/ <i>noun</i> a girl or woman who helps a bride at her wedding</p>
--

Text example 67: Article **bride** (from Longman Primary Dictionary)

According to Busane (1990:34-35) this article of the lemma **bride** has been treated in a satisfactory way because the needs and reference skills of the potential target users of the dictionary have been taken into account. A DICTIONARY OF SOUTH AFRICAN ENGLISH by Brandford and Brandford (1991) also offer another user-friendly treatment of culturally bound lexical items. In this dictionary the lemma **lobola** has the following treatment:

(68)

lobola [lə'bəʊlə , lɔ̃'bɔla] *n.* Payment by a black bridegroom, usu. in cattle, to the parent or guardian of his bride. See at *moruti* and *play*. *Attrib.* in ~ *system*, ~ *cattle*. [*Ngu. ukulobola* to give bride price].....

Text example 68: Article **lobola** (from DSAE, 179)

There is an improvement in the treatment of the lemma in question as compared to the presentation given in Brandford (1980):

(69)

lobola [lə'bəʊlə , lɔ̃'bɔla] *n.* The bride price, usu. in cattle, paid by an African man to the parents or guardians of his prospective wife: see quot.: used attrib. In ~ *system*, ~ *cattle*. [*Ngu. ukulobola* to give dowry].....

Text example 69: Article of **lobola** (from DSAE)

Therefore in an attempt to co-ordinate source and target languages forms, the most suitable translation equivalents for the Yilumbu lemma **tsômbu** are undoubtedly *bride price* and *lobola* (SAE). Because *dowry* and *dot* do not capture the dominant meaning of the Yilumbu word *tsômbu*, namely "a payment made by one's father (in the indigenous sense of this word) to the family of a woman who is getting married", in co-ordinating these English and French forms respectively they should be accompanied by contextual entries as it occurs in (70).

• **A proposed article structure for the treatment of culturally bound lexical items**

(70)

tsômbu (tsi-) (+ tsômbu) [tsô:mbù/ (tsi)tsô:mbù] n. (cl.9/10) < *-còmbò		
◆(Ghâng.) Tsimbôngu na bíima taayi avanáta muyékuma díron ^{da} mwáná ^{ndi} . (Men.) Dóli na bíima taayi amábégha muyékuma díron ^{da} mwáná ^{ndi} ◆	<E> Financial payment and goods brought by one's father to the family in order to marry the fiancée of his son <T> bride price, (SAE) lobola; dowry (in the sense that the word has in the Black African languages).	<F> L'argent numéraire et les marchandises que le père apporte (à la belle-famille) pour épouser la fiancée de son fils, <T>dot(s) (au sens qu'on donne à ce terme dans les langues Négro-africaines); (frGab) marchandise.
Σ Taayi anáyítsivé bíweetsi tsômbu .	<E> The father has paid lobola to his son' family-in-law.	<F> Le père a versé la dot à la belle-famille de son fils.
Σ (Men.) Rabusi mí tsômbáami!	<E> Give me my bride price back!	<F> Rembourse-moi ma dot!

Text example 70: article **tsômbu**

The keywords in this paraphrase of meaning above are *taayi* (father) and *ukũma* (to give bride price) because amongst the Gabonese tribes in general and the Balumbu in particular, apart from cases where an elderly person marry another wife, it is the father (any member on the father's side regardless of the sex is called father) who brings lobola to the family-in-law.

Where should the additional data be given in a synopsis article?

To answer this question different proposed article structures will have to be devised in order to provide examples for the lexicographer. Three article structures are given for the treatment of special-field terms and three other for the treatment of ethnological terms.

• A proposed article structure for the treatment of special-field terms

(71)

díbogha, ma (+ bogha) [dí bò yè/ má bò yè] <i>n.</i> (cl.5/6) < *-búga or -búka		
♦ Mwíri múdíídi ivávéggha (tsi)mbânzi mu úyaaba búkulu bu bulônggu ♦	<E> Shrubby tree of which fresh rasping of the bark, dried powdered roots or decoction of the roots is given to initiates in order to acquire knowledge of the world, <T> Iboga (Tarbernanthe Iboga)	<F> Arbuste dont les râpures d'écorces fraîches, la poudre de racines séchées ou encore la décoction des racines est donnée aux initiés afin qu'ils acquièrent une connaissance du monde, <T> Iboga (Tabernanthe iboga).
Σ Bamúve dí bo gha.	<E> He was given iboga.	<F> On lui a donné l'iboga.
Σ Anághólu na dí bo gha.	<E> The iboga has intoxicated him.	<F> L'iboga le fait souler.
<p>▼ <E> Shrubby tree of the undergrowth forest, the <i>ibogha</i> forms part of the well-known products of the traditional Gabonese pharmacopoeia. It has a double use, medical and magic. Rasping of the bark as well as the roots of the tree are taken as stimulant, aphrodisiac and hunger-depressant. A small dosage of the roots is an effective remedy for colic. The magical properties of the <i>ibogha</i> have been known to the local community for a long time. But it is in the so-called Bwiti religion (⇒ Bwíti) that the <i>ibogha</i> tree is held in high esteem. In fact, it is the 'sacred' tree of the adepts of this religion.</p> <p><F> Arbrisseau des sous-bois de la forêt, l'<i>ibogha</i> fait partie des produits réputés de la pharmacopée traditionnelle gabonaise. Il possède un double usage, médical et magique. Les râpures d'écorce ainsi que les racines de l'arbrisseau se consomment comme fortifiant, aphrodisiaque ou encore comme coupe-faim. À faible dose les racines combattent efficacement les coliques. Les vertus magiques de l'<i>ibogha</i> sont connues des populations locales depuis longtemps. Mais ce n'est que dans ce qu'il convient d'appeler la religion du Bwiti (⇒ Bwíti) que l'<i>ibogha</i> est placé en très haute estime. En effet, c'est l'arbre 'sacrée' des adeptes de cette religion. ⇒ quot/cit.</p> <p>Quot/cit D'après RAPONDA et SILLANS (1961:90), d'un point de vue scientifique "(...) l'iboga est utilisé comme stimulant neuro-musculaire (dépressions et asthénies physiques et intellectuelles); antitoxique (convalescences des maladies infectieuses, intoxications)". "(...) c'est surtout dans les pratiques fétichistes qu'ils (les indigènes) en font usage (de l'ibogha). C'est en effet la plante magique par excellence des adeptes du Bouïti. Elle sert principalement pour la cérémonie rituelle d'initiation à cette société secrète. L'absorption des râpures d'écorce ou du bois de la racine détermine une sorte d'ébriété, d'hébétude, de torpeur dans les facultés intellectuelles. A doses massives, l'iboga fait perdre la raison, provoque des hallucinations et parfois la mort. L'état de léthargie dû à l'usage immodéré de l'iboga dure 4 à 5 jours pendant lesquels le patient ne prend aucune nourriture."</p> <p>"(Les adeptes du Bwiti) font également usage d'un breuvage magique confectionné avec les râpures d'écorce de Tabernanthe iboga. Cette mixture les plonge dans un état d'ébriété pouvant aller jusqu'à annihiler momentanément toute notion du monde extérieur. Au cours de cette cérémonie religieuse qui est le Bouïti, on ne se contentait pas d'absorber un tel <<léthé>> on y a pendant longtemps procédé à des agapes d'une nature particulière d'où les végétariens devraient probablement être exclus (...) Allons, ne rions donc pas des pratiques de sorcellerie des Noirs d'Afrique car il est bien rare en effet que l'homme, même évolué, néglige le</p>		

Merveilleux! Nous avons bien aussi nos cartomanciennes, tous les dispensateurs d'horoscope, les voyants, sans compter les sorcières du Moyen Age..." RAPONDA-WALKER et SILLANS (1961:32).

Text example 71: article **dībogha**

(72)

dighātsu, ma (+ ghātsu) [dìḡātsù / màḡātsù] <i>n.</i> (cl.5/6) < *-kácò		
◆ Mulūnda úvheema baváyānganga ◆	<E> Kola tree ; kola (or cola) (Cola Nitida, A. Chev.)	<F> Kolatier ; noix de kola (ou cola) (Cola Nitida, A. Chev.)
Σ Yénabónɡa dighātsu!	<E> Bring me a kola nut!	<F> Apporte-moi une noix de cola!
Σ Me íka dighātsu dyaandi.	<E> (<i>fig.</i>) I am his/her kola nut (= he/she is going to eat me).	<F> (<i>fig.</i>) Je suis sa noix de kola (= il/elle va me manger).
<p>▼ <E> Kola is used fresh for its stimulant properties and as a thirst quencher. It is used in medicinal and medico-magic compositions. From a medicinal point of view, the stimulant properties of the kola have been scientifically proved. Tonic drinks that are useful in case of convalescence can be obtained from the kola. Kola also fights diarrhea and stomach pain. From a medico-magic point of view, kola is used in the folk medicines in several compositions. It is often used as a substitute of <i>nzigò</i> in order to revive fetish by blowing upon (⇒ ufúlúlu). The "diviner-healer" (⇒ ngānga) masticates a piece of it and spits upon the fetish to be revived or upon the other ingredients of the medicine that he/she is currently preparing. This operation is almost always accompanied by incantations. Symbolically, the young man who is willing to learn the genealogy of his family (⇒ búkulu) or the proverbs and other idiomatic expressions of his mother tongue may go to the relative of his choice with some kola nuts and a drink as a present. After chewing the kola nut and taking a draught of the drink (brought by the young man) the elderly person consulted is more disposed to open his/her heart. <F> La cola est consommée fraîche pour ses propriétés stimulantes et aphrodisiaques. C'est également un fortifiant pour le travail physique et est souvent utilisé comme un calmant de la soif. La cola rentre aussi dans des recettes médicinales et médico-magiques. Au plan médicinal, les propriétés stimulantes de la cola ont été prouvées scientifiquement. Des boissons toniques utiles dans les cas convalescence peuvent être préparées à partir de la cola. La cola est également employée comme un anti-diarrhéique et guérit les coliques. D'un point de vue médico-magic, la cola est présente dans de nombreuses recettes de pharmacopée traditionnelle. Elle est souvent utilisée comme un substitutif de <i>nzigò</i> pour raviver les fétiches en soufflant dessus (⇒ ufúlúlu). Le devin-guérisseur (⇒ ngānga) en mâche un fragment le crache sur le fétiche à raviver ou alors sur les autres ingrédients du médicament qu'il/elle est en train de préparer. Cette opération est toujours ou presque accompagnée de paroles rituelles ou incantations. Sur un plan symbolique, le jeune homme désireux d'apprendre la généalogie de sa famille) ⇒ búkulu) ou encore les proverbes et autres expressions idiomatiques de sa langue maternelle se doit de se munir de quelques noix de cola et d'une boisson qu'il offrira comme présent au parent qu'il aura choisi pour l'informer. Après avoir mâché une noix de cola et bu une gorgée de la boisson apportée, l'ancien consulté est plus enclin à ouvrir son cœur.</p>		

Text example 72: article **dighātsu**

(73)

mufúma, mi (+ fuma) [mùfúmǝ] <i>n.</i> (cl.3/4) < *-fúma < or fúma		
◆Mwíri múneni o báyisi◆	<E> Big tree of tutelary spirit; <T> kapok tree (Ceiba pentandra).	<F> Grand arbre tutélaire des génies; <T> fromager, kapokier; faux cotonnier; arbre à ouate (Ceiba pentandra).
Σ Mufúma avábúra mikôndu mívheema.	<E> The kapok tree produces a white vegetal silk.	2 <F> Le fromager produit une soie végétal blanche.
Σ Mufúma, mwíri mi bíloongu.	<E> The kapok tree is a medicinal plant.	<F> Le fromager est un arbre medicinal.
<p>▼ (Men.) Umábúru mwána, mwána muyééyi, ubúkulu mufúma unééngi mú tseengi. Ubwísyanga mwána, mwána akúrógha. Kondé kyeeri ágho múru. Ukeba mamba gho múru, múru ukúróghu <E> If you give birth to a tiny child, take bark of the kapok tree and put it in a bassin. Bath the baby and he/she will grow bigger. However, the danger (with this bath) lies at the level of the head. Great care should be taken to avoid pouring water onto the (child's) head lest the latter becomes disproportionately big ⇒ quot/cit. <F> Si tu mets au monde un enfant chétif, prends des écorces du fromager que tu déposes dans une cuvette. Fais prendre au bébé un bain et il grossira. Toutefois, le danger (de ce bain) se situe au niveau de la tête. Il faut soigneusement éviter de mouiller la tête (de l'enfant) avec l'eau (du bain) de peur que celle-ci grossisse de façon disproportionnée</p> <p>Quot/cit <F> D'après RAPONDA et SILLANS (1961:106) le tronc (du fromager) sert parfois à faire des pirogues. Le kapok est vendu dans le commerce. Chez les indigènes, il sert à garnir les coussins et les matelas ou bien il est filé pour en faire des sacs de voyage. L'écorce des jeunes arbres, débarrassée des épines, est usitée pour faire des cloisons de cases. La décoction de l'écorce est employée comme vomitif ou en lavement. Les feuilles sont émollientes ou calment les névralgies. On tire de l'huile de ses graines. Ce végétal géant est considéré par les Noirs comme un arbre sacré. Lorsqu'on voit sur l'emplacement des anciens villages deux pieds de <i>Ceiba</i> côte à côte, c'est l'indice que là, autrefois, sont nés deux enfants jumeaux. On le plante aussi comme arbre principal du fétiche-protecteur ou sur les tombes. C'est au pied de ces arbres que l'on dépose les offrandes faites aux mânes des ancêtres ou aux génies tutélaire.</p> <p><E> According to RAPONDA-WALKER and SILLANS (1961:106) the trunk of the kapok tree is sometimes used to make canoes. The kapok is sold on the market. Among the indigenous population, it is used to stuff cushions and mattresses, otherwise it is spun to make traveling-bags. The bark of the young trees, with the thorns removed, is used to make partitions for huts. A decoction of the bark is used as an emetic or for enemas. The leaves can be used as an emollient or to soothe neuralgias. Oil can be obtained from its seeds. The Blacks regard this giant plant as a sacred tree. When two kapok trees, close to one another, are seen at the site of an ancient village it is an indication that twins were born there long ago. It is also the tree that is mainly planted as protecting fetish and on graves. It is at the foot of these trees that offerings to ancestral spirits or to tutelary spirits are left.</p>		

Text example 73: article **mufúma**

Dictionary articles as shown in Text examples 71, 72 and 73 have a limited data type. It is clear that the focus is not on linguistic data, e.g. etymology, translation equivalent, etc. but on the field (pharmacopoeia and to a lesser degree, ethnology). After the items giving the proto-Bantu form of the lemma sign as well as the paraphrase of meaning, the user is provided with target language entries that are introduced by structural markers e.g. <E> (for English) and <F> (for French). Co-text entries in the source language are introduced by two vertical lines (||) preceded by the symbol Σ. The French usage example is followed by a text introduced by another structural indicator, namely the black upside down triangle (▼) used to mark a specific search zone in which the user is provided with an additional lexicographic description of an encyclopaedic or extra-linguistic nature. The use of the upside down triangle enables a user who is not interested in the grammatical aspect of the lemma signs **díbogha**, **dighãtsu** and **mufúma**, immediately to jump to the upside down triangle. So the dictionary user does not have to read everything until he/she comes to the information on e.g. plant uses. From this introductory text, the user is referred to relevant literature in which the lemma sign is discussed at length. With regard to the question earlier mentioned (Where in a synopsis article the additional data be given?) the slot where extended entries occur is given at the end of the article. This has a lot of implications for the prospective user because his/her search for meaning/translation equivalents or co-text examples is not interrupted by extra-linguistic data.

- **A proposed article structure for the treatment of ethnographical terms**

(74)

ibũngu (+ bungu) [ibuŋgù] <i>n.</i> cl.7 < *-bũngu < or bũngu		
◆ Bwála bu mátengũ. (Bwála a búná bwála bú nyimbí. Bátu bootsu basábúmóna. Bwála bu bátu báfu kála.) ◆	<E> village of ghosts. (This village is regarded as being occult. It is therefore invisible to the layperson. It is the village of the dead.)	<F> Village des revenants. (Cet village est occulte et par conséquent invisible pour le profane. C'est le village des morts.)
Σ Anámúbóka anámútúúla mo ibungu yandi.	<E> He killed him and put him in his village of ghosts.	<F> Il l'a tué et l'a mis dans son village des revenants.
Fumu ibũngu Fumu nyimbi.	<E> The master of the village of ghosts.	<F> Le maître du village des fantômes.

Σ (Mangúmba) Fumu ibũngu ákâ?	<E> Where is the person in charge of the (funeral) wake?	<F> Où est la personne responsable de la veillée (mortuaire)?
Σ Mona fumu ibũngwa!	<E> Here is the person in charge of the wake!	<F> Voici la personne responsable de la veillée!
<p>▼ <E> The master of a village of ghosts uses the spirits of the people that he/she has killed to achieve a high social position. This quest for a better social status often results in a quick ascent. These spirits are also used as bodyguards and killers. The owner of a village of ghosts enjoys supernatural from the spirits protection he/she has under control. These spirits are believed to commit assassinations or ritual crimes amongst the population; in this way causing the vital force of the people they kill to be passed on to their master. However, the privileges enjoyed by a master of a village of ghosts bears a price. The latter has annually to provide these spirits with a human sacrifice. By refusing to respect this contract, the owner of these spirits exposes him-/herself to their merciless anger.</p> <p><F> Le maître du village des revenants utilisent les esprits de ceux et celles dont il/elle a tué et asservi pour accéder à une position sociale élevée. Cette quête d'un meilleur statut social se traduit souvent par une ascension fulgurante. Ces esprits sont également utilisés comme gardes du corps et hommes de main. Le propriétaire d'un village de fantômes jouit de la protection surnaturelle des esprits dont il/elle a le contrôle. Ces esprits passent pour commettre des assassinats ou crimes rituels au sein des populations, faisant ainsi passer en leur maître la force vitale des gens qu'ils mettent à mort. Mais les privilèges dont le maître d'un village de fantômes jouit ont un prix. Ce dernier pour se concilier ces esprits, il se doit de leur offrir annuellement un sacrifice humain. En se refusant à honorer les termes de ce contrat, le propriétaire des dits-esprits s'expose à leur colère impitoyable.</p>		

Text example 74: article **ibũngu**

In the treatment of the article in text example 74, *bwála bu mátengu*^o (village of ghosts) is the real paraphrase of meaning of the lemma **ibũngu**. The sentences *Bwála a búná bwála bú nyimbí*, *Bátu bootsu basábúmóna*, and *Bwála bu bátu báfu kála* are explanatory additions and marked as such by the use of parentheses. In addition to the foregoing, the symbol^o after the lexical item *mátengu* (ghosts) means that this word is explained somewhere else in the planned dictionary. What follows after the French co-text example is of ethnographical nature. This encyclopedic entry in both French and English gives the user more information regarding the cultural context of the lemma **ibũngu**.

(75)

púngapúnyi (+ púnyi) [pú:ŋgə̀púnyi/(tsi)pú:ŋgə̀púnyi] <i>n.</i> (cl.9/10) < *-pùŋg- and/et *-púŋi		
◆ (<i>mó tsikúghu</i>) Ibúlu ineni íbanga vho <i>téému</i> i bághulu, iyénaboka bátu o músiru. ◆ ⇒ yibobolu .	<E> (<i>myth.</i>) Big game that in ancient time often killed people in the forest; <T> ogre(s)	<F> (<i>myth.</i>) Grosse bête qui autrefois tuait souvent des gens dans la forêt; <T> ogre(s).
Σ Mamóosi bátu baváyíghughanga tsipúngapúnyi, bakénabokanga bátu.	<E> Sometimes people transformed themselves into ogres in order to kill people in the bush.	<F> Quelque fois des gens se transformaient en ogres pour tuer des gens dans la forêt.
Σ (<i>kúghu</i>) Púngapúnyi ná nduungu.	<E> (<i>a story title</i>) The ogre and the tom-tom.	<F> (<i>titre d'un conte</i>) L'ogre et le tam-tam.
▼ Bavátuba vandi tí púngapúnyi ayénawenda na yisi vho yílu múru, ikénarógha. Ké anabóka mútu akamútuula vho káti yísi. Akúvhi, akúyi. Mána mambu ma léélu mána? Mána mambu mávhyogha, má <i>peta</i> . Ké mangéntsá, ké má ufúra yétu tusámaya. Yíka máálu mandi mábanganga tsinzála yá utálanga ó mbusa. Ighóbí ikútála vho yá avawé tsinzála tsíkítalanga gho yá avawítsa. Ighóbí o méésu, tsinzála ó mbusa. Ngé ubaláánga ti avawé unáá kabó yáandi ukwésama avakwésama náaghu. <E> It is also said that that ogre carried a boiling pot over his head. After he has killed a person, he cooked him/her (inside the pot) and ate him/her. Is that corresponding to today's reality? These are stories of the past. Reality or fiction? We do not know about it. As far as his feet are concerned, they were on back-to-front so that their footprints mislead their victims. <F> On raconte également que cet ogre portait sur sa tête une marmite en train de bouillir. Après avoir tuer une personne, il la faisait cuire (à l'intérieur de la marmite) et la mangeait. Est-ce que cela correspond à la réalité d'aujourd'hui? Ces sont là des histoires du passé, d'autrefois. Réalité ou fiction? Nous ne le savons pas. S'agissant de ces pieds, ils étaient disposés de l'arrière vers l'avant de sorte que les empreintes laissées par leurs pas sur le sol désorientaient leurs victimes.		

Text example 75: article **púngapúnyi**

(76)

ngânga(tsi-) (+ ganga) [ŋgâ:ŋgə̀/ (tsi)ŋgâ:ŋgə̀] <i>n.</i> cl.9/10 < *-gànga		
◆ Mútu wó avábúgha (na uréési) bátu bavabééla. ◆	<E> Someone who treats (and divines) people who are ill. <T> traditional medical practitioner(s); traditional healer(s), herbalist (s); diviner(s); divine-healer(s); (<i>SAE</i>) sangoma(s), "soothsayer-healer(s)".	<F> Quelqu'un(e) qui soigne (et consulte) des personnes malades. <T> tradi-praticien(s); thérapeutes traditionnels; herboriste(s); devin(s); (<i>frGab.</i>) nganga, "devin-guérisseur(s)".
Σ Baniyéreesi tsingânga.	<E> They went to consult the divine-healers.	<F> Ils allés consulter les guérisseurs.
Σ Mwâna ótsána oté ngânga dede na vhâna óbelugha.	<E> The child will remain to the divine-healer until he has completely recovered.	<F> L'enfant restera chez le guérisseur jusqu'à guérison complète.
■ <ngânga Bilômbu°; ngânga Bwîti°; ngânga Disûmba°; ngânga Misoku; ngânga Njôbi° > <ngânga Bafyôti°; ngânga Bibâmba° > <ngânga kósi°; ngânga mávhasa° > <ngânga		

dibaála; (*Ghâng.*) **ngânga múghetu,** (*Men.*) **ngânga múyeetu** <(nguyi v^ho taayi) **ngânga**
(⇒ **ngwéntsôghu**)>

▼ <E> The role of the *nganga* is of a twofold nature: the population recognises his/her divinatory power that allows him/her to read in the past, present and future life of the people who come for the consultation. The diagnose is usually followed, on request of the patient, by the appropriated treatment. Because of this ambivalence of the role of the *nganga* the term "soothsayer-healer" (cf. *Contes du Gabon*, 1989) is used. But it should also be mentioned that cases of deceit do exist. False *nganga*, driven by self-interest, take advantage of the credulity of the people in desperate condition. <F> La fonction du *nganga* est double : les populations lui reconnaissent un pouvoir divinatoire grâce auquel il peut lire dans la vie passée, présente et future des personnes venues en consultation. L'établissement du diagnostique est généralement suivi, à la demande du patient, des soins appropriés. Cette ambivalence du rôle du *nganga* fait que l'on parle de "devin-guérisseur" (cf. *Contes du Gabon*, 1989). Mais il convient également de signaler que des cas de supercherie existent. Des faux *nganga* ou simulateurs en magie, mû par l'appât du gain abusent de la crédulité des populations aux abois.

Text example 76: article **ngânga**

The parentheses are used here to indicate the facultative parts of the paraphrase of meaning. Some students (Mbiti, 1969:167, among others) of ethnology ('traditional religion') have drawn a distinction between herbalists and divine healers. They both have knowledge of plants to cure diseases and protect people against any kind of misfortune. But, only divine healers are said to deal with the living-dead and spirits. "This is, however, chiefly an academic distinction and often the same specialist plays the role of both herbalist and diviner, and African names for them are often the same" (Mavhungu 2000). The relevance of the parentheses used in the above meaning paraphrase lies in the fact that the word meaning "sangoma" in the Gabonese languages can refer both to the divine healers and herbalists on the one hand. On the other hand, nowadays, the same word can also refer to the European doctor. However, in this case adding a qualification to the word *ngânga*, namely *ngânga Bafyöti* and *ngânga Bibâmba*, respectively, usually does the distinction between the traditional healer and the European doctor. In addition to the foregoing and due to the fact that the distinction between divine healers and herbalists is mainly academic, the word *ngânga* may be coordinated with the English compound "soothsayer-healer" (cf. the French "devin-guérisseur" used by the authors of *Contes du Gabon*, 1989). The number of compounds with *ngânga* that could be entered is high thus one must be selective. The compounds within the sinuous lemma file are divided into search areas. They are all unexplained compounds however for some the user is helped by the use of

cross-reference devices to the relevant lemma where the unexplained part of the compound is discussed at length. As far as the structure is concerned, this synopsis article having an encyclopedic section presenting texts in only the source languages (English and French) displays a relation of direct addressing between translation equivalents and their co-text examples in the first section of the article. With regard to the question (Where in a synopsis article the additional data be given?), in the treatment of the article of the lemma **ngânga** the slot where sublemmata occur is given after the co-text examples illustrating the typical use of the lemma. These clusters should have been given in a slot right at the end of the article. This is relevant because each sublemma heads an article. The lexicographer is in fact dealing with a whole range of sub-articles or partial article stretches given in a text block attached to the article of the main lemma (**ngânga**). Moreover, each sub-article includes a limited amount of data, which functions as texts in their own right. These clusters are worth memorizing right from the start for both encoding and decoding purposes.

6.6. General concluding remarks

If a semi-integrated microstructure was to be used in the present model, a system of contextual entries will be necessary to assist users in the most effective way due to the relation of distant addressing prevailing between co-text entries and paraphrases of meaning/translation equivalents. The degree of sophistication that characterizes a semi-integrated microstructure already disqualifies it for the present model. An integrated microstructure is by far the best microstructure for the planned dictionary.

The presentation of the most likely occurrences of clusters with a given lemma is of importance for prospective target users both for encoding and decoding purposes. Given their nature as sub-articles or a partial article stretches given in a text block attached to the article of the main lemma, clusters should be given in a slot right at the end of the article.

Chapter 7: Access structure

7.0. Introduction

Purposes that drive people to consult dictionaries are numerous. The **search path** to the information needed is referred to as the **access structure**. Within the latter a distinction is made between an **outer access structure** and an **inner access structure**, cf. Hausmann and Wiegand (1989:337). The outer access structure guides the user from an external point of departure to the lemma sign. This point of departure may be the title of the dictionary, the dictionary's header or a front matter text, i.e. a table of contents, cf. Gouws (1999b:48). The inner access structure starts at the lemma sign and proceeds through the dictionary article up to the required entry. From there the user retrieves the desired information. However, for a successful and quick retrieval of the information, the user is usually assisted by a set of **typographical structural indicators** and **non-typographical structural indicators**. The first category includes the so-called typefaces, i.e. normal, bold, italic, italic and bold, small characters, italic small characters, and the use of capitals, small caps, etc., cf. Gouws (1999b:48). Non-typographical structural markers include among other things the use of commas and semi-colons that are used to achieve a **metacommunicative function**. In some translation dictionaries commas are used to separate translation equivalents of the same polysemous sense of the lemma whereas semi-colons separate translation equivalents representing different polysemous senses of the lemma (cf. Gouws 1999a:12). Although use in every dictionary, most users are not always familiar with commas and semi-colons and what they denote. Therefore the use of these markers should always be accounted for in the front matter text of a specific dictionary.

Below is Hausmann and Wiegand's (1989) visualization of the typology of access-structures:

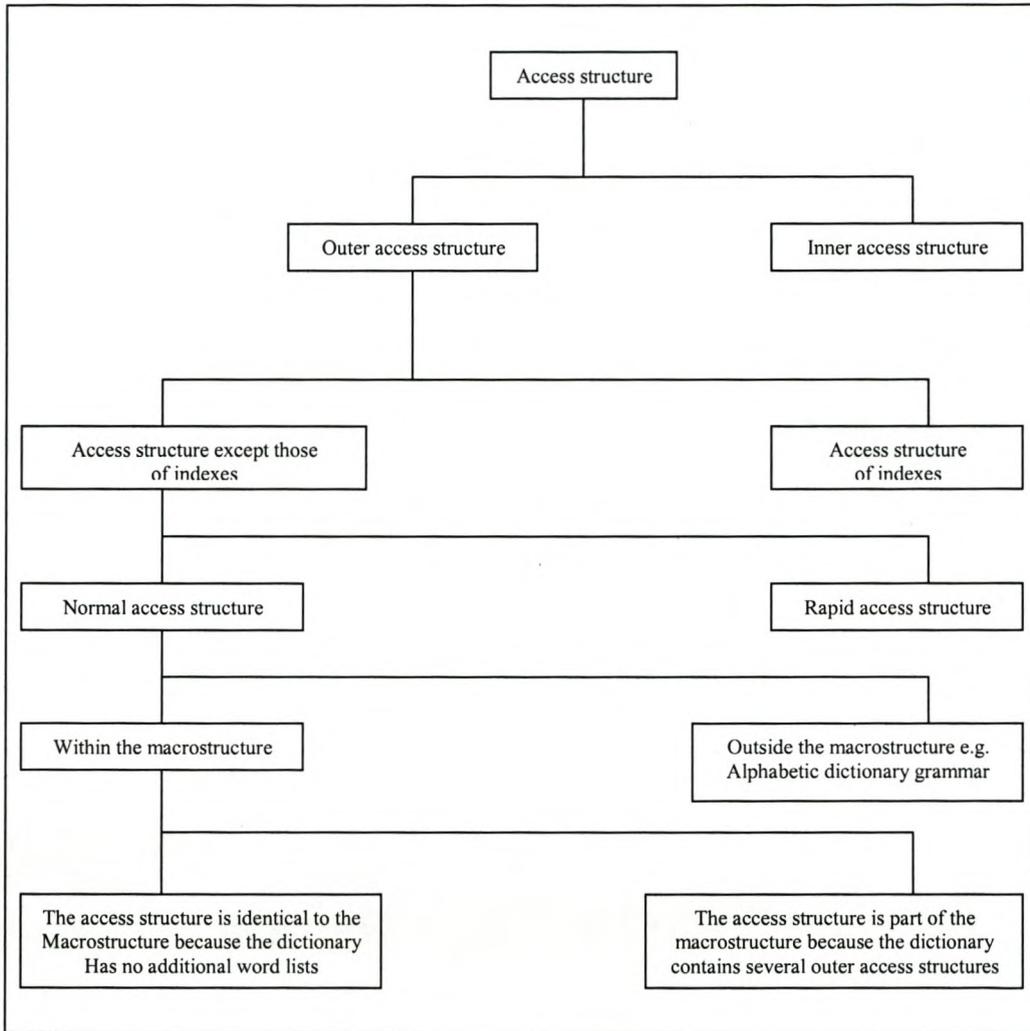


Figure 7: Typology of access structures (from Hausmann and Wiegand, 1989:339)

7.1.Outer access structure

7.1.1. The role of a dictionary title, its typological nature and front matter texts in the outer access structure

The search up to the needed lemma sign may be referred to as the outer access structure.

According to Gouws (2001:88), “(t)he *outer access structure* is the part of the search route which leads the user from the entries on the cover of the dictionary to the lemma sign given as guiding element of a given article. The outer access structure includes all the entries on the cover indicating the title of the dictionary and its typological nature as well as certain front matter texts, e.g. a table of contents, which guide the user to the relevant article”. Practically and depending on his/her needs and dictionary using skills, a user may begin and end the search at the dictionary title. From the title of the dictionary, another user (usually a skilful user) may proceed to the inside of the dictionary up to the front matter texts (where such texts exist). As a first option that user may stop, e.g. at the table of contents. When taking cognisance of the table of contents, the user mentioned above must be able to gauge immediately if the dictionary will answer the question that has motivated the search. From there an even more sophisticated user may investigate further in another text, namely the user’s guidelines to find out about, e.g. the typological nature of the dictionary as well as its entire structure that is the different ways in which the lexicographer has devised his/her system in order to help the user to retrieve information more easily and quickly. It is only when the user has taken cognisance of the structure of the dictionary, the criteria of incorporation of lemmata, what to expect in terms of the treatment for each lemma and where to find specific data in the dictionary, etc that he/she should proceed through the dictionary article up to the entry representing the required data. Such a foundation could improve the quality of dictionary consultation. However if by ignorance or because of the time pressure, a user chooses not to consult prefatory matters he/she will have to face the consequences viz. dictionary consultation failure. It is unfortunate that for most users, the reading of front matters texts — e.g. the guide to the dictionary in particular — is a time consuming activity. But front matter texts in particular often contain reflections on questions that are of crucial importance for a better understanding of the dictionary. Introducing the teaching of dictionary skills in the school curriculum should solve this important problem in the field of dictionary use.

7.1.2. The use of guiding elements

The headers are typical members of the outer access structure. The survey of lexicography in Gabon clearly shows that the use of the running heads has improved some of the translating dictionaries co-ordinating Gabonese languages and French, cf. Nyangone Assam and Mavoungou (2000). Therefore the planned dictionary will suggest two running heads on one page that will be identical to the first and the last lemma on the dictionary page. Running heads usually assist the user when he/she is scrolling rapidly through the dictionary page or when turning the pages.

While reading a technical textbook in the foreign language, an Italian learner of e.g. English may come across a word he/she does not understand. In order to find the meaning of this term he/she will have to consult a dictionary for assistance. It may be hypothesized the user mentioned above will know that in order to solve his/her problem he/she should consult a translation dictionary instead of a monolingual one. If that user comes across a dictionary title such as *Dizionario Tecnico/Technical Dictionary* (Marolli 1972) he/she may rightly think this is a bilingual dictionary. From the title of the dictionary written on the side of the book, that user may proceed to the dictionary cover. There he/she will have confirmation of the fact that the book in question is a *Dizionario Tecnico Italiano-Englese/Technical Dictionary English-Italian* (Marolli 1972). In other words, the bilingual nature of the title of the book written on the dictionary side already gives an indication of the typology to which the publication belongs. Therefore this indication forms part of the rapid outer access structure of the dictionary. That is why the data presented on the dictionary side is a special form of outer access structure.

Working with another hypothetical user situation, a French learner of e.g. English reading a textbook of metallurgy and coming across words without knowing their meaning will consult a technical dictionary for assistance. If the user in question comes across e.g. an *International Dictionary of Metallurgy Mineralogy Geology (English-French/German-Italian)*, he/she may assume the following:

1. This is a multilingual dictionary,

2. It has English lemmata as source and French translation equivalents as target language in the first section, whereas the second section includes German lemmata as source and Italian translation equivalents as target language.

The dictionary cover provides information for points 1 and 2. Especially the data "(English-French/German-Italian)" could lead to the conclusion that we are dealing with a two-way dictionary. It is in fact only a glossary, with lemmata and their different translation equivalents. There are no meaning explanations. Although the book is entitled *International Dictionary of Metallurgy Mineralogy Geology*, it is not a two-way dictionary as one may think but a glossary in four languages English, French, German and Italian in which lexicographic data are presented in four columns. More specifically, English lemmata appear in the first column, while the three other columns are devoted to translation equivalents in French, German and Italian respectively. This dictionary (lexicon?) owes its poly-accessible character to the inclusion of indexes in French, German and Italian in that order. The dictionary page with the title *Indexes French-German-Italian* forms part of the rapid outer access structure. In the case of e.g. bilingual dictionaries, a coloured page sometimes divides the two sections of the work from one another. However colour pages are expensive and rarely affordable in dictionaries. Nevertheless if the financial cost of the inclusion of colour pages does not alienate the target user of a specific dictionary, a lexicographer should rather choose a coloured page instead of a black-and-white page in order to separate e.g. sections of the dictionary from one another. This is important because the colour will make the book attractive to potential purchasers and prospective users will know in advance in which section of the book to look for a given piece of data.

Most shortcomings of the *International Dictionary of Metallurgy Mineralogy Geology* hold true for the *Elsevier's Dictionary of Building Construction*. A fact worth mentioning in this dictionary is that apart from the central list or main access structure, it has a second rapid access structure, namely a thumb index. The guiding elements of this thumb index are the letters D (short for Deutsch) F (short for Français) and NL (short for Nederlands). This makes it easier for users to find the language(s) for which they are looking for.

Compilers of the third edition of the *Collins COBUILD English Dictionary for Advanced Learners* (2001) seem to have carefully avoided the shortcomings of the above three special-field dictionaries. In fact, at the top of the back spine of the dictionary side a user will find *Collins COBUILD*. In the field of pedagogical lexicography, Collins COBUILD, LDOCE, OALD and CIDE may be regarded as the most commonly used dictionaries for learners of English. Thus the inscription *Collins COBUILD* at the top of the back spine of the dictionary speaks for itself. Below this inscription appears the title of the publication: *English Dictionary for Advanced Learners*. This clear and unambiguous reference to the user profile is important. This dictionary does not specify several categories of users but one: advanced learners. As a result, it may be assumed that beginners and experienced learners will begin and end their search at the dictionary title at the top of the back spine of the publication. After taking cognisance of what is written at the top of the back spine of the dictionary, advanced learners may then proceed to the front cover of the book. There these learners will find out what they already know: this is an *English Dictionary for Advanced Learners*. However, a learner who is prepared to spend time in knowing what to expect in terms of the treatment for each lemma will be well advised to read the back cover of the dictionary. There, he/she will find the following:

- a. Specification of the dictionary basis,
- b. Specification of new words and meanings in the dictionary (1000),
- c. Indication of the number of references (110, 000), examples (105, 000) and usage notes (2, 800),
- d. Indication of lexical coverage ("British and American usage clearly shown"),
- e. Outline of some claims on the superiority of the dictionary compare to similar publications ("essential grammatical information shown in unique COBUILD Grammar column", etc.).

The fact that all examples are fully corpus-based, the use of frequencies in the dictionary, etc. are obviously meant to tell the users that they can rely on the precision and comprehensiveness that characterize the lemma selection as well as the presentation of entries in the dictionary. However, dictionary excerpts that are given along with points a to e may be regarded as the most outstanding feature of Collins COBUILD. This back cover of

the dictionary immediately helps the prospective user to decide whether or not the dictionary will provide the information he/she is looking for. Therefore this back cover of the dictionary constitutes a special outer access structure and **data exposure structure** (Gouws, 2002). It is part of our editorial policy to follow this concept of **data exposure structure** in the planned dictionary.

7.2. Inner access structure

7.2.0. Introduction

As already mentioned, the inner access structure starts at the lemma sign and proceeds through the dictionary article up to the entry representing the required data. But, lexicographers usually make use of typographical structural indicators and non-typographical structural indicators to help the user in a quick and successful retrieval of the desired information.

Where they are used consistently, typographical and non-typographical structural markers can be effective instruments in the hands of the lexicographer. Although typographical structural indicators are slightly linked to the outer access structure in the sense that e.g. bold face letters clearly guide the users to a particular lemma on the dictionary page, here they will be presented as part of the inner access structure.

7.2.1. The use of typographical and non- typographical structural markers

As far as the planned dictionary is concerned, lemma signs will be printed in bold. Paraphrases of meaning/translation equivalents and illustrative examples will be given in roman. However, target language entries will be introduced by a structural marker, e.g. <E> (for English) and <F> (for French). These structural markers give a better route to the entry representing the required data therefore they are part of the rapid inner access structure in a dictionary article.

More specifically in keeping with Wiegand's (1996d) concept of **micro-architecture**, co-text entries in the source language will always be introduced by the symbol Σ || and

they will start on a new line. Diamonds♦ will be used to mark the boundaries of the paraphrase of meaning. The symbols <> will be used to mark a specific search zone within a partial article stretch whereas the black upside down triangle ▼ will appear in synopsis articles. It will mark an article zone in which the user will be provided with an additional text or lexicographic description of an encyclopaedic or extra-linguistic nature. Similarly lemma-clustering arrangement will be introduced by the black square symbol ■. Moreover, these diamonds, the black upside down triangle and other structural indicators are determined by the data distribution structure of the dictionary. When dealing with the treatment of lemma signs representing polysemous lexical items, boldface numbers will introduce the different senses and these distinctions in meaning will be numbered in separate sequences after each part of speech. These polysemic senses should not be arranged on a random basis, but according to fixed criteria accounted for in the compulsory text of the planned dictionary containing the users' guidelines. Lexical items with identical spelling but different etymologies will be entered separately and will have superscript or raised numbers. There should be some guidelines or criteria motivating in which order these homonyms will be presented. The frequency of use of the homonyms in question may be one of the criteria of incorporation and this foundation should ideally be reflected in the *guide*.

All these typographical structural and non-typographical elements form part of the rapid access structure of the dictionary. A user who is interested in one lemma sign, one data category or a given entry can have a quick access to the information needed by merely looking for the right typographical structural marker or non-typographical structural marker. With regard to the use of the black upside down triangle, if a user is not interested in the grammatical aspect of a given lemma sign he/she immediately jumps to the black upside down triangle. So a dictionary user does not have to read through everything until he/she gets the information on pragmatics for example.

7.2.2. Improving the inner access structure

As mentioned earlier, a dictionary may have several search routes, although it may only have one macrostructure. As far as this point is concerned, compare the following inserted inner text given in (21):

Ikasa, primitivement pont, jetée, a pris ultérieurement la signification de marché public, parce que le premier marché établi dans la colonie était installé sur la jetée de Libreville ‘*Ikasa*, originally bridge, breakwater, has become market because of the fact that the first market opened in the colony was situated on the breakwater of Libreville’ (A. Raponda-Walker: *Les langues du Gabon*, 1998, 148).

The inserted inner text can be improved at the level of the inner access structure by introducing pragmatic data in the treatment of the lemma **dikása** as it occurs in (74):

(77)

dikása

Ikasa, primitivement pont, jetée,

So far the concept of poly-accessibility has been defined in terms of the outer access structure. Generally speaking, a publication is poly-accessible when the user can have access to the needed information via the central list or dictionary proper or via outer texts in the frame structure, namely: front matter texts and back matter texts. However, the concept of poly-accessibility can also be defined in terms of the inner access structure. In fact, apart from the main text or central list of the planned dictionary, the entering of **dikása** as part of the inserted inner text will give the work the feature of a poly-accessible dictionary. In other words, the information regarding the treatment of the lemma sign (**dikása**) can be reached within two ways: firstly via the central list and secondly via the additional access structure given as a back matter text. The user seeking for the meaning of **dikása** will proceed vertically from the guiding elements of the column to the lemma sign. This outer search path will be followed by the inner search path starting at the lemma sign and proceeding horizontally through the dictionary article, cf. Hausmann and Wiegand (1989:338). From this primary search path, the user will only get the information regarding

both the comment on form (mainly the spelling of the lemma sign) and the comment on semantics (e. g. translation equivalents and examples). However if the user needs information of a pragmatic nature, he/she will have to consult the inserted inner text. From this secondary access structure given as a supporting text the user will once again proceed from the outer search route starting at the lemma to the inner access route leading to the pragmatic treatment of the lemma. According to Hausmann and Wiegand (1989), inserted inner texts belong to the so-called middle matter and they are usually characterized by their occurrence between the two sections of the dictionary. As far as this point is concerned, Gouws (1996b) has pointed out that:

In his analysis of the lexicographical text formation Wiegand (1995) makes provision for the inclusion of *inserted inner texts* as part of the article, and he regards this type of text as especially appropriate for learner's dictionaries. These inserted texts can easily be distinguished from the rest of the article because they are presented in a different manner, e.g. in boxes or tables (Gouws 1996b:25).

In this model, inserted inner texts will differ from other inserted inner texts in at least two ways. Some inserted inner texts will appear between the articles of two specific lemmata and some will not. As far as the treatment of the article of the lemma **dikása** is concerned, the boxed text will be presented as follows:

(78)

dikása (-kása) [dikásə] *n.* (cl.5) invar. < *-gàcà

♦ (Men.) Mbîngi vhána bátu <E> Place where people buy <F> Endroit où les gens
bavásúmbisi na usúmba and sell goods; <T> market vendent et achètent des
bíima ♦ ⇒ SYN(*Ghang.*) place. marchandises; <T> marché.
itánda.

Σ || Maama atsiwěnda ó dikása <E> Mum went to the <F> Maman est allée au
di Mont-Bouët. Mont-Bouët market place. marché de Mont-Bouët.

Σ || Dikása di Mont-Bouët <E> Mont-Bouët market place <F> Le marché de Mont-Bouët
dimánénga. was burnt to ashes. a été réduit en cendres.

dikása

Ikasa, primitivement pont, jetée, a pris ultérieurement la signification de marché public, parce que le premier marché établi dans la colonie était installé sur la jetée de Libreville. *Ikasa*, originally bridge, breakwater, has become market because of the fact that the first market opened in the colony was situated on the breakwater of Libreville' (A. Raponda-Walker: *Les langues du Gabon*, 1998, 148).

Text example 78: article **dikása**

7.2.3. Mono- and poly-accessibility

A mono-accessible lexicographic work includes data that can only be reached in one way, i.e. via the central list. A dictionary is **mono-accessible** if it only has **one search path** with which to solve a search problem. In such a publication the macrostructure completely overlaps with the outer access structure, cf. Hausmann and Wiegand (1989:337). On the contrary in poly-accessible works, the data can be reached in several ways, namely via the central list and the outer texts in the frame structure. As it will be seen later in this chapter, the planned dictionary could include an alphabetical equivalent register both in English and French. This additional macrostructure will give the work a poly-accessible character in the sense that a user looking up words from the register sections will not access the lemma list in the same way as another user starting the dictionary consultation from the central list. They will both have access to the lemma list but via different routes, namely via the register sections (secondary access structures) and via the central list (main access structure) respectively.

7.2.4. Mono- and poly-functionality and the use of registers

A mono-functional lexicographic work is a publication focusing on one function. That is to say that it may be aimed at mother-tongue speakers of the source language for text reception (also known as decoding function) or text production (also referred to as encoding function) purposes. It may be aimed at either the mother-tongue speakers or at the second language speakers (learners) of the target language for text reception or text production purposes. On the contrary, in poly-functional works, a range of functions can be accommodated within a single book. A bi-functional translation dictionary in particular is aimed at both the A-speakers (mother-tongue speakers) and the B-speakers (learners). Moreover this concept of poly-functionality has two aspects, namely the user aspect and the so-called active and passive use parameter. With regard to the first aspect and from the user-perspective, the ideal is to compile a dictionary that will serve the users of the three languages on an equal basis. In order to achieve this goal, the lexicographer has to ask himself/herself what is the genuine purpose of the dictionary? Does the dictionary focus on French or English speakers who want translation equivalents/paraphrases of meaning for a Yilumbu term (a receptive dictionary of Yilumbu for the speakers of English and French) or does the dictionary focus on Yilumbu speakers who want to translate from their mother-tongue to English or French? As far as the planned dictionary is concerned the answer to that question lies in the second option. The planned dictionary should be both a productive and receptive dictionary of Yilumbu. Formulated differently, the planned dictionary should function for three language groups at the same time, serving as both an L₂-L₁ and as L₁-L₂ dictionary. In line with what has previously been said, the planned dictionary should fulfil two main functions. These are:

- (i) a dictionary for the Balumbu helping them to understand Yilumbu texts.
- (ii) a dictionary for the Balumbu helping them to produce Yilumbu texts.

Apart from these primary functions, the planned dictionary may also fulfil three other functions. These are: (i) a dictionary for the Balumbu translating from English and French into Yilumbu. (ii) A dictionary for English translating from Yilumbu into English. (iii) A

dictionary for French translating from Yilumbu into French. The dictionary should fulfil these last two functions (from which it will earn its poly-accessible character) because it will have two separate alphabetical registers, one focusing on the English language and one focusing on the French language. This is relevant because the aim of the lexicographer compiling a learner's dictionary is to try to equip the user with a vocabulary enabling him/her to communicate in the L1. These secondary functions focusing on the learners also have an implication for the L1 speaker because they are in accordance with the *genuine purpose* of the planned dictionary: empowering the mother-tongue speaker through the mastering of the target languages. This concept of the genuine purpose runs parallel with the whole idea of dictionary function. It is well accepted that any dictionary only has one genuine purpose but it may have several functions. According to Wiegand (1998: 298) the genuine purpose of any lexicographical work is its ability to answer a particular user's question with regard to a specific lemma sign or a given entry in the publication in question. Presented differently, the genuine purpose of e.g. a dictionary is said to have been achieved when a particular user has effectively retrieved the desired information or as Gouws (2001:66) puts it, when the goals that motivated the search have been reached. Therefore the biggest challenge facing lexicographers is to devise practical and theoretical ways that will assist the user in decoding the data presented. In order to achieve successful dictionary consultation procedures, the ways in which the lexicographer may help the user should not be restricted to decoding purposes only but they should also encompass encoding devices. The alphabetical registers mentioned above are linked to the concept of the dictionary as **text type carrier**. In fact, and it has already been mentioned, a dictionary may contain different text types, e.g. front matter texts, central list and back matter texts. In accordance with the data distribution structure and in order to add to the poly-accessibility of the dictionary it has been decided to include an alphabetical register as one of the back matter texts in the planned dictionary. It is difficult to treat both the source language and target languages on an equal basis but provision for the inclusion of back matter registers in both English and French gives the lexicographer the opportunity to treat the three languages of the dictionary in more or less the same way. During the dictionary

conceptualisation phase it is also important to determine the extent of the utilisation of the register section. This alphabetical register constitutes a separate unintegrated outer text.

7.2.5. Why equivalent registers in both English and French?

When working with criticism of dictionaries, one of the shortcomings often mentioned is that lexicographers sometimes have a lemmatic biased approach that impedes the successful retrieval of the information sought by the user. As a matter of fact, a dictionary article has to display both lemmatic and non-lemmatic addressing procedures. The lemma cannot always be the address. Some data also need to be directed at e.g. the translation equivalent/meaning paraphrase. Moreover in a dictionary of the kind of the one discussed in this dissertation, the lexicographer will also be working with users who are not mother-tongue speakers of Yilumbu. Therefore it is part of the duty of the lexicographer to provide the users with data regarding both the source language and target languages. The use of equivalent registers both in English and French gives the lexicographer the opportunity to devise a system in accordance with the specific needs and reference skills of the speakers of English and French. Given the fact that at this stage no learner dictionary exists in Yilumbu, the planned dictionary should also be compiled to play a supporting role in the language learning process. As target languages and giving their international status, English and French are of importance for the speakers of Yilumbu. That is why the planned dictionary should also contribute to improving the source language user's receptive and productive knowledge of the target languages. For this to happen in the proposed model the planned dictionary should not only include lemmatic addressing procedures but the lexicographer should also assist the potential users with non-lemmatic addressing procedures shifting the focus from the source language to the target languages. When including the lexical item "abandon", the user has to be made aware of the fact that this is a reflexive verb. A lexicographic reference work like the *Chambers Universal Learners' Dictionary* (1985:ix) proposes the following abbreviation for the word in question: *v refl.* This is a short for *verb reflexive*. This entry is actually informing the user about the syntactic environment of the verb "abandon": in a co-text example, it should be followed

by a reflexive pronoun, i.e. a pronoun object that refers back to the subject. In the same way, in English, the lexical items "information" and "luggage" are the so-called *nouns uncountable*. When presenting these two utterances to the users, it should be labelled that they may not be used in the plural form. Such an entry will not be addressed at the source language form but at the English translation equivalent thus shifting the focus from the source language to the target languages.

It has already been mentioned that the planned dictionary will have two separate alphabetical registers, one with English and the other one with French as source language. This will give the work a poly-accessible character. As far as this point is concerned, the Yilumbu lexical item *mwâna* may be reached in two ways. First in the central list, the user will find that term under the treatment of the article of the lemma **mwâna**. Then in the back matter section the user will have both an English and French equivalent register in which all the lexical items given, as translation equivalents in the main macrostructure will be listed with a very restricted treatment, merely an indication of the Yilumbu lemma in the central list. In these English and French equivalent registers, the user will find the lexical items **child** and **enfant** respectively as well as a cross-reference to the Yilumbu **lemmata** in the central list where the full treatment will be given. This point is illustrated in (77).

(79)

<p>English register</p> <p>child ⇒ mwâna</p> <p>mother ⇒ nguyi & maama</p>
<p>French register</p> <p>enfant ⇒ mwâna</p> <p>mère ⇒ nguyi & maama</p>

In reply to concerns expressed by some scholars (among others Kromann, Riiber and Rosbach 1984a, 1984b) in the field of dictionary research, Wiegand (1996:XV)

emphasizes that the point of view that four or even eight dictionaries have to be compiled for any given language pair for an active and passive use is purely utopic. Indeed, a country such as Gabon with sixty-two speech forms could not afford to produce even four dictionaries per language pair. External constraints will be such that only a single dictionary for both encoding and decoding purposes will be compiled.

Obviously the compilation of a poly-functional dictionary serving the needs of both the source language and the target language users will lead to a better product for metalexicographic, economical and practical reasons.

7.3. Scope, direction and function of the planned dictionary

In this section the distinction between monoscopal/biscopal; mono-directional/bi-directional dictionaries will be discussed. For an explanation of the dichotomy mono-functional/bi-functional dictionary, the reader is referred to section 7.2.4 above.

According to Hausmann and Werner (1991:274) a distinction has to be made between monoscopal/biscopal; mono-directional/bi-directional and mono-functional/bi-functional works. A monoscopal dictionary is a publication including only one section dealing with the source language and the target languages (A>B). In other words, it is a publication in which the lexicographer is only dealing with one source language and one target language. A monoscopal dictionary will have, e.g. Yilumbu as source language and French as target language. This implies that only the lexical items of one member of the language pair will be lemmatized. In a biscopal work the lexicographer will be working with two source languages and two target languages. That is to say that it will include both A>B and B>A sections in the same dictionary. A *Yilumbu-French and French-Yilumbu Dictionary* will be an example of a biscopal dictionary in the sense that in the Yilumbu-French section, Yilumbu will be the source language and French the target language whereas in the French-Yilumbu section, French will be the source language and Yilumbu the target language. Such an approach will give us a total of two source languages and two target languages. This also implies that the lexical items from both languages will be lemmatized.

The concept of mono-directional is commonly used in the sense of monoscopal. In other words, a mono-directional dictionary is a publication including only one section dealing with the source language and the target languages (A>B). In the same way, bi-directional dictionaries are publications encompassing both directions, i.e. from A to B and from B to A. This should not be confused with what Hausmann and Werner (1991) regard as mono-directional/bidirectional and monoscopal/biscopal. According to Hausmann and Werner (1991:274), a mono-directional work is a publication that is directed at the speakers of one of the treated languages, whereas a bi-directional work is meant to serve both the speakers of the treated languages.

To sum up with regard to the distinction between monoscopal/biscopal; mono-directional/bi-directional and mono-functional/bi-functional publications, Hausmann and Werner (1991:2742 as cited in Gouws, 2001:79-80) have made it clear that:

Scope refers to the language direction (*monoscopal* = A>B; *biscopal* = A>B and B>A); *function* refers to the instruction purpose of the dictionary (dictionaries for text production or text reception) and *direction* refers to the mother-tongue of the target users (dictionaries for mother-tongue speakers of the source language or the target language or both these languages) (Hausmann and Werner, 1991:2742 as cited in Gouws, 2001:79-80).

With regard to the concept of monoscopal/biscopal, the very question to be answered is the following: which one of the treated languages gets the primary focus? As far as the present model is concerned, obviously the answer has to be: Yilumbu.

The dictionary under discussion will be monoscopal in the sense that it is only conceived for the following language direction A > B, namely Yilumbu >English-French.

It will be poly-directional in the sense that it will be directed at the speakers of both the source language and the target languages. It will earn its poly-accessible character through the inclusion of an additional outer access structure: the alphabetical equivalent register in both English and French as back matter text. Practically each translation equivalent given in the central list will be lemmatized in the register section. This can be done by means of various computer programmes e.g. OMBI (**O**mkeerbare **B**ilinguale Lexicale Databaken

'Reversible Bilingual Lexical Databases'). This computer program which was developed during the academic year 1994-1995 by the Dutch software house SERC (Software Engineering Research Centre, Utrecht, The Netherlands) under the auspices of the CLVV (Commissie voor Lexicografische Vertaalvoorzieningen 'Committee for Lexicographic Translation Resources'), cf. Martin (1996: 27). By applying the reversibility principle OMBI is able to create a secondary macrostructure by merely giving each translation equivalent in the central list a lemma status in the register section. Practically, while building the Yilumbu corpus, a computer programme can reverse all the English and French translation equivalents and the reversed counterparts that are automatically created and stored constitute a second database.

7.4. Proverbs and idiomatic expressions

A. Definitions

In studying idioms one is confronted with the problem of how to define it. According to Ntsanwisi (1985:2) any definition of the term idiom has to take into account two characteristic features viz. its fixed character and its unpredictability of meaning. These fixed phrasal patterns are typical or peculiar of the language being described. With regard to the first characteristic feature, idioms consist of words, which are habitually used together. Their meaning is unpredictable because it cannot be gathered logically from its component parts. The following are examples of idioms in English:

to lay down the red carpet for someone, bark up the wrong tree, one's eyes are bigger than one's stomach, etc.

The characteristic feature of the proverb lies in the fact that it is a figurative and didactic expression: *store is not sore* (proverb), *a good deed is never lost* (proverb).

Theoretically speaking it is possible to distinguish between dictionaries of syntactic patterns, a dictionary of collocations, a dictionary of proverbs and idioms, etc., cf. Hausmann et al. (1989-1991:XLII, XLIII). Where some languages with a well-established lexicographic tradition have several sentential dictionaries (e.g. dictionary of proverbs,

idioms, citations, etc.) Yilumbu has none. For the planned dictionary, it has been decided that it should include some features of sentential literature. Idioms and proverbs seem to be the best representatives of this sentential literature. The sentential exposition could be restricted to a presentation of samples. Formulated differently it may contain the most-frequently-used idioms and other fixed phrases. The inclusion of these members of the sentential literature does not mean that there is no need for separate and practical dictionaries of idioms, proverbs or collocations. Collocations, idioms and proverbs should be entered in specific dictionaries where a full treatment of these lexical categories may be proposed. The present dictionary plan should devote itself to the treatment of the core vocabulary of the Yilumbu language whereas sentential dictionaries would include the largest possible number of proverbs, idioms and collocations. In addition the dictionary will contain collocations and other fixed expressions and will be directed not only at mother-tongue speakers as primary target group but also at beginner learners as secondary target group. This has a lot of implications for the user-perspective. In fact, the rendering of the Yilumbu idioms/proverbs into English and French may be an area of difficulty because each language has its own way of expressing ideas or concepts, feelings and experiences of life. Formulated differently each society has its own worldview. To add to the better understanding of the idiom/proverb by the non-speakers of Yilumbu, a literal translation of Yilumbu idiom/proverb followed by their actual English and French translation equivalents will be proposed.

In some literature dealing with idioms and proverbs, the former are sometimes arranged alphabetically by keyword and numbered. In these publications a keyword is usually understood as the word that may be considered to be the most important lexical item in the proverb/idiom. Criteria to determine the most important word in the idiom/proverb are hardly accounted for in such works. Idioms and proverbs may also be arranged according to topic as opposed to proposition. According to Lisimba (1999:27), e.g. a proverb, usually consist of a **topic** or subject matter plus a **proposition**.

In keeping with the user-perspective, we believe that the most simple and most convenient approach is to work with word classification or part of speech parameters. In other words,

we are taking the first noun or even the first verb in the idiom/proverb as a keyword. This point is illustrated in (80).

- **Outer text presenting proverbs**

(80)

mútu	(<i>Ghir.</i>) Mútu atsíghubúla yáatsi <u>ngé</u> vaaghu ukúmúbúla <u>ngûmba</u> . Yó bwali bibúlu bi tsítsendi (<i>Men.</i>) Mútu atsíghudíimba yáatsi <u>ngé</u> vaaghu ukú mudíimba <u>ngûmba</u> . Yó ba báyi bibúlu bi tsítsendi.	<E> Eye for eye, tooth for tooth.	<F> <i>Oeil pour oeil, dent pour dent.</i>
yâmba	Ké vhasã yâmba vhali mubódóngu.	<E> <i>Where there is smoke there is fire</i> (There is no smoke without a fire).	<F> <i>Il n'y a pas de fumée sans feu.</i>

In the above alphabetical register data are presented in four columns. In the first column, a Yilumbu keyword is presented alphabetically according to the word tradition for the treated proverb/idiom. The second column contains the Yilumbu proverb. The third column lists the English equivalent of the Yilumbu proverb, whereas the last column deals with the French one.

It is a well-attested fact that dictionaries pose great access problems to their users. Therefore it is the lexicographer's responsibility to adapt to the needs of users. In order to have a user-friendly product, the access structure of the dictionary discussed here should be planned very carefully to enable unskillful dictionary users to benefit maximally from using the dictionary. To achieve this goal, typographical structural instructions will necessarily come into play. English and French translation equivalents of the Yilumbu proverbs are introduced by a structural marker, e.g. <E> (for English) and <F> (for French). In accordance with the data distribution structure, the lexicographer has made provision for three article slots or search zones in this secondary macrostructure. They correspond to the three Yilumbu/English/French data categories that have been included. Merely from the way they create divisions in the lexicographic text, these structural

markers or ordering devices form part of the inner rapid access structure of the dictionary because the user is immediately guided to the data that he/she is seeking. In addition, Yilumbu proverbs are given in normal type whereas actual or attested English and French proverbs appear in italic font. But where no lexically equivalent proverb exists in French or in English, the English or French equivalent of the Yilumbu proverb is provided in roman type. The English and French proverbs appearing below the Yilumbu proverb in parenthesis have to be regarded as the exact or nearly exact English and French counterparts of the Yilumbu proverbs.

- **Outer text presenting idioms**

(81)

mayanga	Mayanga mayúma.	<E> "the streams (are) dry" commonly used to say "there is nothing"	<F> "les étangs sont dé-séchés" généralement employée pour signifier "il n'y a rien"
utóbasána	Utóbasána mísu (to pierce each other's eyes <i>,se percer mutuellement les yeux</i>).	<E> "to speak out; to be naked, naked truth"	<F> "se dire les vérités en face"
ukânga	Ukânga múnu (to tie the mouth, <i>attacher la bouche</i>).	<E> "to remain silent"	<F> "se taire, garder le silence"

B. Where should proverbs, idioms and colloquial speech be treated?

A collocation is a frequently used combination of two or three words. A collocation differs from an idiom by the fact that it is semantically transparent, e.g.: *convene a meeting* (collocation) *vote by ballot* (collocation).

Collocations usually appear as part of the co-text of a given lemma. In addition to this data type no definitions are usually provided since collocations are by definition transparent constructions, cf. Gouws (1989:232) and Otto (1989:190-191).

Proverbs and idiomatic expressions are traditionally treated in the central list within a specific article slot and a structural indicator usually introduces them. For example in the *Verklarende Handwoordeboek van die Afrikaanse Taal* (HAT), proverbs are treated within the central list and they are introduced by the structural indicator: UITDR. (Uitdrukking). However within the main macrostructure they firstly appear under the constituent part of the lexical item, which has been given lemma status in the dictionary. Secondary they often do not start with a fixed word. Finally and very often there is no semantic relation between the proverb and the lexical item under which it has been treated. For these practical reasons of location, a decision has been taken to include and treat proverbs in a back matter text. This is not a new idea, for example in the *Van Dale Groot woordenboek Nederlands-Engels* (1986); proverbs are treated in the back matter section. Moreover, these proverbs are alphabetized by keywords: usually the first noun of the proverb. In comparison with the minigrammar, this functional text part dealing with proverbs belongs to the macrostructure whereas the minigrammar does not, cf. Hausmann and Wiegand (1989:329). Practically they can be reintegrated into the central list.

The same line of argumentation holds true for idiomatic expressions. Idioms are usually defined as lexicographic data of which the collective meaning is not equal to the added meaning of the different constituent parts. Therefore idioms are combinations of lexical items that function as if they were single units. Because they must be learned as a group, idiomatic expressions do not fit into the main macrostructure as a separate lemma sign. They should be treated as part of a separate access structure. The advantage to treat idioms and proverbs in the back matter has a twofold objective. Firstly in the back matter section, the lexicographer has more space at his/her disposal to provide the user with additional entries. As already mentioned, proverbs will be arranged according to the alphabet. Because there is no fixed word introducing proverbs and idioms will start with a particular lexical item (either the first noun or the first verb) given as a keyword. This keyword will be followed by the proverb or the idiom together with the translation equivalent in English

and French as well as the context and co-text (if necessary) in which they typically occur. This notion of supporting entries that either belongs to the co-text or the context is important. The co-text refers to the syntactical environment of the treated lexical item whereas the context gives the pragmatic environment of that lexical item. A dictionary does not only represent the lexicon of the language but also reflects the world image of a given speech community. As far as this point is concerned, Bergenholtz and Tarp (in press) distinguishes between **communicative-directed** and **knowledge-directed functions**. *Communicative-directed function* refers to both the decoding and encoding functions. Among the different functions that have to be fulfilled by a dictionary, a *knowledge-directed function* allows the lexicographer to devise a system enabling the user to utilise the work to understand and produce texts. *Knowledge-directed function* also provides the user with explanations of the meaning related to the knowledge. Central to this function is the underlying culture of the language. Kavanagh (2000) has stressed that culture is still a domain that needs a lot of attention on the part of lexicographers especially in the sphere of African languages. As far as this point is concerned it should be mentioned that attempts to improve the cultural coverage of information exist in both modern American and European dictionaries. The former usually provide the users with lists of names of celebrities, lists of abbreviations, lists of international institutions as well as texts dealing with the history and the grammatical overview of the language(s) being described. Kavanagh (2000:102-103) regards all this cultural based data — generally presented in the outer texts of the lexicographical work (front matter texts or back matter texts) — as "culture with a capital C". She is therefore in favour of the following:

(a) more challenging approach is to focus on the behavioural or social aspects of culture ...This is sometimes referred to as "behavioural culture" or "little c" culture" (Kavanagh 2000:102).

This "little c culture" encompasses value systems, social relations, kinship systems and beliefs, to list but a few. In the planned dictionary, this will be done because any lexicographic reference work should reflect the cultural life of the people and this may be done through the use of inserts. As a lexicographer I am giving additional data for the sake of the users. This additional data is not directed only at target language readers but also at

source language users. The latter are the ones who have to be made aware of the life-style and the cultural values that underlie the language described because this is part of their heritage. The proverbial message, the lesson to be learned may be conveyed to the user through short comments on pragmatics too. This point is illustrated in (82) and (83).

(82)

Mondi	(<i>Ghâng.</i>) Mondí máá lu mána nzíla mwéé gha) (<i>Men.</i>) Mondí m íflu mána nzíla móósi.	<E> "the dog (has) four legs but does not follow two routes (at the same time)".	<F> "le chien a quatre pattes mais il suit un seul chemin (en même temps)".
--------------	--	--	---

(83)

This proverb usually refers to traditional gatherings such as marriage. The young married couple is advised to experience union. During family crisis, husband and wife are encouraged to talk about their problems, to establish responsibilities, forgive each other in order to move in the same direction like the dog having four legs but does not follow two paths at the same time. Such wisdom is usually contained in the following co-text example from the elderly people: "Yénu boótsú dufwaana úba nzíla mwéégha mondi máálu máne!"

To sum up with regard to idioms and proverbs, it should be mentioned that compared to collocations, idioms and proverbs are treatment units in their own right whereas collocations are not. Given that fact, the lexicographer has every right to treat idioms and proverbs in back matter texts.

In addition, personal names and place names are also highly representative of this heritage for several reasons. In Africa and elsewhere the naming of a child is a matter of great importance. The name of a child usually refers to an event or circumstances related to the life of the parents. Thus there is a relation between the personal name and the status of the bearer. For example, a child whose mother or father died soon after his or her birth is named *Ubíkula*. *Báyoona* is the nickname automatically borne by an individual having the name of *Mavhungu* (*Mavoungou* is the administrative name). Very often when a village no longer exists, its inhabitants who have moved to another settlement usually keep the name

of the former village. So that in theory, there are as many *Moulongou*, *Douigny* and *Pembi* for instance as its inhabitants (see also Kwenzi-Mikala, 1980:12). That is why both personal names and place names should be reflected in this study. This is the only way to protect and keep them alive for future generations. This point is illustrated in the next section followed by Tables.

- **Outer text presenting proper names**

From a traditional point of view, dictionaries deal with ordinary nouns and proper nouns separately. The *Petit Larousse Illustré* (1998) is the perfect example of this lexicographic practice in dictionaries. The first section of that monolingual French encyclopedic dictionary encompasses standard French vocabulary lexical items whereas the second section gives an account of names of famous people, places, buildings, and works of art from all around the world (cf. Kavanagh 2000:108). Nevertheless both linguists (e.g. Haiman 1980) and lexicographers (e.g. Hartmann 1992) have denounced this tradition of separating ordinary nouns from proper nouns (cf. Horton and Horton 1996:134). In this model proper nouns will also be reflected on. The question likely to arise is: which types of proper names should occur in this register? Personal names will occur in this register. In publications dealing with anthroponomical issues in Gabonese languages particular attention is paid to the relation between the function of the personal name and the status of the bearer (cf. Nyangone Assam and Mavoungou 2000:264). That is why personal names are the ideal candidates for inclusion in this register.

Anthroponyms Anthroponymes	Mother-tongue explanation of the meaning/ Explication du sens dans la langue maternelle	English translation equivalent	Traduction française	Administrative orthography/ Orthographe administrative
Dingênza		Truth	Vérité	Dingenza
Ibínga	Mwâna avaláánda Kumba.	A child that comes after Kumba.	L'enfant qui vient après Kumba	Ibinga
Kôndi	mwâna múrima	Beloved	Bien aimé (e)	Kondi
Kumba	Mwâna avaláánda mávhasa.	A child that comes after the twins.	L'enfant qui vient après les jumeaux.	Koumba
Matámba	<i>(Ghâng.)</i> Mwâna butôghu/ (Men.) Mwâ na dyáába	Child that the parents think he/she will not live.	Enfant que les parents pensent qu'il/elle ne vivra pas	Matamba
Muswáámi	Musôngu yílu	Sleeping sickness.	Maladie du sommeil.	Mousouami; Mousoami
Nzíghu		Chimpanze	Chimpanzée	Nzigou
Sísu	Síngula masúbili uvá lila	Wipe your face (because) you are crying.	Essuie les larmes (parce que) tu pleures	Sissou
Yéési		Luck	Chance	Yesi
Yítumbu		Wind	Vent	Yitembou

TABLE 25: Alphabetical register for proper names

- **Alphabetical register for place names**

Village name	English translation equivalent	Traduction française	Cross-reference/ Renvoi
Dikúndu	witchcraft	sorcellerie	
Musítu	the last settlement	le dernier emplacement	
Pêmbi	white clay; bread	argile blanche; pain	
Penibatu	people are naked	les hommes sont nus	
Peninyundu	naked like a hammer	nu comme l'enclume	
Tshí<u>ba</u>nga	smoking-house; upper place	fumoir; lieu élevé	⇒ más<u>an</u>ga

TABLE 26: Alphabetical register for place names

7.5. General concluding remarks

Access structure related problems have to be solved in accordance with the needs and reference skills of the potential target user groups. A user-orientated lexicographic practice has to use both typographical and non-typographical structural markers in order to improve the accessibility of the information needed by the user. As far as this point is concerned, most dictionaries traditionally make use of various non-typographical structural markers in particular. The latter include different font types and sizes, bold print, capital letters and italics to list but a few. However to assist a user in a fast and effective way, an adequate access structure is needed. This implies the systematic use of special markers such as quadrangular or rectangular frames, blackened and empty diamonds, coloured blocks, etc. to mark a specific article zone or search areas. Yet these markers can only be effective if they are explained to the user in the introductory notes of a specific dictionary. In the case

of the planned dictionary, the user's guide will have to explain every structural marker used.

By including alphabetical equivalent registers both in English and French, the planned dictionary will acquire a poly-accessible character. By presenting samples of idioms, proverbs and personal names, the planned dictionary will earn a poly-functional character in the sense that it will be used not only as a linguistic tool *stricto-sensu* but also as an ethnographical or anthropological and anthroponomical reference work. However, the challenge facing the lexicographer is to keep a balance between *communicative-directed* and *knowledge-directed functions*.

Chapter 8: Addressing structure

8.0. Introduction

According to a theory of **addressing structure**, cf. Hausmann and Wiegand (1989), an addressing relation is established between an **address** or topic and the information relating to that topic: the **addressee**. A distinction is made between a **lemmatic addressing structure** and a **non-lemmatic addressing structure**. The form of address existing between a dictionary entry and the lemma is referred to as a lemmatic addressing procedure while the use of non-lemmatic addressing involves an entry addressed at an entry other than the lemma.

It is a well-attested fact that dictionaries have traditionally been dominated by a lemmatic addressing bias. This is easily understandable because according to Hausmann and Wiegand (1989:349) the central address of a dictionary article is the item that gives the form of the lemma sign. However, this is detrimental to the dictionary user because the lexicographer too often ignore that there are some data categories that need to be addressed at microstructural elements other than the lemma sign. The fact that the planned dictionary is a monoscopal work has a lot of implications for the user. What usually happens in monoscopal publications is that the source language remains the sole language of treatment. However for a successful retrieval of the information needed by the user, a system of topic switching is necessary. In other words, addressing procedures do not only have to be directed at the macrostructural domain but they should also involve the microstructure of the dictionary. This is relevant because each non-lemmatic address becomes a treatment unit or new topic within the article (cf. Hausmann and Wiegand 1989:329).

A system of topic switching is chiefly concerned with translation equivalents. However, data categories such as contextual entries and labels addressed at the translation equivalents enable the lexicographer to treat all lexical items alike and in this way the unbalanced presentation of data categories that usually prevails is also re-addressed, shifting the focus from the source language to the target languages. The lexicographer also has to carefully consider the choice between an unintegrated microstructure and an integrated microstructure. The first one displays a distant addressing between a co-text entry and the relevant paraphrase of meaning/translation

equivalent whereas the second one is characterized by a system of direct addressing between a paraphrase of meaning/translation equivalent and its co-text entry/entries. This aspect has already received attention in chapter 6 of this investigation.

As target languages and given their international status, English and French are of importance for the speakers of Yilumbu. That is why the planned dictionary should also contribute to improving the source language user's receptive and productive knowledge of the target languages. For this to happen in the proposed model the planned dictionary should not only include lemmatic addressing procedures but the lexicographer should also assist the potential users with non-lemmatic addressing procedures shifting the focus from the source language to the target languages.

8.1. On the addressing practices in dictionaries

8.1.1. Introduction

Dictionaries contain a great variety of addressing procedures. Depending on the user profile, the dictionary typology and the compiler's judgment, the lexicographer may use lemmatic addressing procedures, sublemmatic addressing devices (including context-free versus hidden subaddressing), non-lemmatic addressing practices or even zero addressing procedures in order to convey the most relevant information to the target users.

8.1.2. Lemmatic addressing procedures

This is the general form of addressing in most dictionaries. When an item that belongs to the microstructure is addressed at the lemma, that form of addressing is referred to as a lemmatic addressing procedure. If, cf. Hausmann and Wiegand (1989:349), all items inside the article are addressed at the lemma a situation of full lemmatic addressing prevails.

8.1.3. Non-lemmatic addressing devices

When an item that belongs to the microstructure is addressed at another element of the microstructure other than the lemma sign, the addressing relation is referred to as a non-lemmatic addressing procedure.

In modern-day dictionaries, several non-lemmatic addressing procedures may be identified, namely context-free subaddressing, (open and hidden) contextual subaddressing (also referred to as glossing) and zero subaddressing.

8.1.3.1. Context-free subaddressing

Hausmann and Wiegand (1989:349-350) have pointed out an example of the use of a context-free subaddressing from the *Petit Robert* (PR). The latter has interpreted the non-lemmatic address FEU DE JOIE as part of a context-free subaddressing procedure as it occurs in (84).

(84)

du feu (âtre, cheminée). — (1414) FEU DE JOIE, feu allumé en signe de réjouissance à l'occasion d'une fête. *Feu de la Saint-Jean*. FEU DE CAMP, feu allumé dans un camp de scouts, etc. , et autour duquel on se réunit pour chanter, jouer des saynètes. Par ext. Veillée récréative. *Organiser un feu de camp*. ♦ 3⁰ Source de chaleur (à l'origine, foyer enflammé) dans la transformation des aliments, etc. *Mettre un plat sur le feu. La soupe est au feu*. V. **Cuire**. — À, AU FEU. *Cuire à feu doux, à grand feu. Un excellent ragoût qui mijotait à feu doux*» (MAC ORLAN). *Plat qui va au feu* : qui résiste au feu. (V. aussi **Pot-au-feu**). — COUP DE FEU : action vive du feu. (1835) *Le cuisinier est dans son coup de feu*: au moment où tout est train de cuire. — Fig. *Coup de feu*: moment de presse où l'on doit déployer une grande activité. ♦ Par ext. Foyer d'une cuisinière, d'un réchaud. *Cuisinière électrique, réchaud à gaz, à trois feux*. ♦ Techni. Chaleur; source de chaleur dans les opérations techniques. *Premier, second, troisième feu* : degré de cuisson d'une manière vitrifiable. — *Feu nu* : qui chauffe directement (opposé à feu de réverbère, qui chauffe par réverbération). — *Feu de forge*. — Mar. *Pousser les feux* : activer la chauffe (en vue de l'appareillage). — Les arts du feu. V. **Céramique, émail, porcelaine, verre**. — Loc. *Faïence de grand feu*, cuite à haute température

Text example 84: Article **feu** (from PR, 775)

Another example of an item used in context-free subaddressing concerns the treatment of the article of the lemma **flood**¹ in LDOCE (p.392) as it occurs in (85).

(85)

flood¹ flad also **floods** *pl.– n* **1** the covering with water of a place that is usu. dry: a great overflow of water.
The town was destroyed by the floods after the storm.
*The water rose to flood level. | The river was **in flood**.*
(= overflowing) **2** a large quantity or flow: *There was a flood of complaints about the bad language after the show. | She was in floods of tears.* **3 before the Flood**
infrm a very long time ago

Text example 85: Article **flood**¹ (from LDOCE, 392)

The treatment unit "*Before the Flood = a very long time ago*" consists of the non-lemmatic address *before the Flood* and the semantic item *a very long time ago*, addressed at the entry **before the Flood** cf. Hausmann and Wiegand (1989:350).

8.1.3.2. Contextual subaddressing

A/ Open contextual subaddressing

An open contextual subaddressing (co-textual subaddressing?) relation prevails when the item giving the form of the subaddress is immediately followed by an explicit explanation or gloss (as it is explained by Wiegand, 1989) contextualising the subaddress in question. An example of such a contextual subaddressing is given by Hausmann and Wiegand (1989:350) for the treatment of the article of the lemma **flood**¹ in LDOCE as it occurs in (85) above.

As far as the treatment unit "*The river was **in flood** (= overflowing)*" is concerned, Hausmann and Wiegand (1989:350) have explained that "(i)n the case of **in flood**, addressing of the unit is open because the unit is emphasized and thus segmented by typographical means (here: semi bold-face as against italics)."

B/ Hidden contextual subaddressing

In an hidden contextual subaddressing (open contextual addresses are also referred to as "hidden boldface entries" in American lexicography, cf. Landau, 1984, 85, 88, 245 as cited in Hausmann and Wiegand, 1989:350), the user has to guess the relation between the subaddress and the subaddressee. An example of such an addressing practice has also been pointed out by Hausmann and Wiegand (1989:350) for the treatment of the article of the lemma **feu** in PR as it occurs in (86).

(86)

(1835) *Le cuisinier est dans son coup de feu*:au moment où tout est en train de cuire.

Compare to the unit **in flood** mentioned above where the compilers have made the typographical presentation of the lexicographical text in such a way that it is clearly perceived by the user, Hausmann (1990:64) has mentioned that the unit "(1835) *Le cuisinier est dans son coup de feu*:au moment où tout est en train de cuire" (extracted from the treatment of the lemma **feu** in PR, 775) is more hidden than in the case of **in flood** because it has not been made "visual" to the dictionary users by means of typographical indicators which means that they have to segment it themselves: *être dans son coup de feu*. This can of course be problematic because the compilers rely on a knowledge that the users may not have. As far as the present model is concerned, the way subaddressing procedures are applied should be considered with great care. For example, procedures of hidden contextual subaddressing will be of a very little use for the users of the planned dictionary. The lexicographer should rather avoid any implicit presentation of data if he/she wants to meet the expectations of the target users. As a matter of fact by making provision for the inclusion of glosses in the treatment in a specific article, the lexicographer is likely to meet the requirements of pedagogical lexicography because the user will easily have access to the information he/she is looking for given the fact that the degree of textual condensation will be low in the article in question.

8.1.3.3. Zero addressing

When something is addressed at nothing, a relation of zero addressing prevails. In a number of dictionaries, idioms are generally treated in the central list within a specific article slot in the treatment of a particular lemma. However, they are not really part of the treatment of that lemma. Let us look at (87), a dictionary article taken from the *Cambridge International Dictionary of English* (CIDE):

(87)

blood FAMILY /blad/ n [U] family relationship by birth rather than marriage · *They are related **by blood*** · She has Russian blood in her (= a parent, grandparent, etc. of hers was Russian) · *Painting must **be**/(Br also) **run in his blood*** (= come from his parents, grandparents, etc.), *as his father and grandmother were artists too* · (*saying*) ‘Blood is thicker than water’ means family connections are always more important than friendships.....

Text example 87: Article **blood** (from CIDE, 137)

A feature of this dictionary article worth mentioning concerns the existence of non-lemmatic treatment units. "She has Russian blood in her (= a parent, grandparent, etc. of hers was Russian)" is an interesting example of an open contextual (co-textual?) subaddressing procedure because the item giving the competence example is immediately followed by an explicit explanation or gloss (as it is explained by Wiegand, 1989). The same is true of the treatment unit "*Painting must **be**/(Br also) **run in his blood*** (= come from his parents, grandparents, etc.), *as his father and grandmother were artists too*." In case of **be...run in**, in particular, addressing of the unit is open because the unit is emphasized and thus segmented by typographical means (here: semi bold-face as against italics). Moreover, the user is provided with the idiomatic expression ‘Blood is thicker than water’ that is introduced by the italicised intra-structural marker (*saying*) given in parenthesis. However, this idiom has nothing to do with the meaning of the word blood. It is not addressed at the lemma **blood**. It has been presented as part of the article of the lemma sign **blood** because the latter merely offers a position where this idiom can be accommodated in the dictionary. Thus within the article, this idiom displays zero addressing. It is not

addressed at anything else; it forms a treatment unit on its own. Although it is part of the article of the lemma **blood** it is not part of the treatment of **blood**¹.

The treatment of idioms in dictionaries is the most typical use of zero addressing. But the former gets a very limited application in dictionaries. In fact, the majority of entries in a dictionary article have to be addressed at something, either in a lemmatic or in a non-lemmatic way. The occurrence of a specific entry without an address may be problematic for the user. To illustrate this point, the lemma cluster with **boek**: as lemma external lemma part in article entrance position has the following treatment in *Groot Woordeboek* (hereafter GW):

(88)

boek, (s) (-e), book; quire (of paper); die ~ e AF= SLUIT, balance the books; iem. het BAIE op sy ~ e, he has a lot to answer for; in iem. se ~ e BLAAI, pry into another's affairs; die ~ DER ~ e, the Book of books, the Bible; iem. se ~ e is DEUR= MEKAAR, he is in a fix; iem. se ~ e DEURME= KAAR krap, make things difficult for someone; DIT is nou 'n ~, that is a dead certainty; anderman se ~ e (briewe) is DUISTER om te lees, the lives of others are a closed book; 'n GESLOTE ~, a sealed book; in iem. se GOEIE ~ e wees, be in someone's good books; die GROOT ~, the Good Book; iem. soos 'n ~ LEES, read someone like a book; die ~ e NASIEN, audit the books; soos 'n ~ PRAAT, speak like a book; uit die ~ e PRAAT, speak by the book; iets op die ~ SIT, charge to one's account; dit SPREEK soos 'n ~, it goes without saying; te ~ STAAN as, be known as; te ~ STEL, commit to paper; so WAAR as 'n ~, as true as fate; (w) (ge-), book, enter; ~ aanbiddend, (-e), bibliolatrous; ~ aanbieder, bibliolater; ~ aanbidding, bibliolatry; ~ aankondiging, booknotice (review); press notice; ~ agtig, (-e), bookish.

Text example 88: Article **boek** (from GW, 1986¹³:83)

In the above article, the following lexicographic texts: *iem. (iemand) het baie op sy boeke* (he has a lot to answer for); *In iem. se boeke blaai* (pry into another's affairs); *iem. se ~ e is DEURMEKAAR* (Iemand se boeke is deurmekaar: Be in a fix); *die ~ DER ~ e*

¹This information comes from a class lecture of Prof. Gouws.

(the Book of books, the Bible); *iem.se ~e DEURMEKAAR krap* (Iemand se boeke deurmekaar krap: make things difficult for someone); *anderman se ~e (briewe) is DUISTER om te lees* (the lives of others are a closed book); *'n GESLOTE ~e* (a sealed book); *in iem. se GOEIE ~e wees* (In iemand se goeie boeke wees: be in someone's good books); *die GROOT ~e* (die Groot Boek: the Good Book); *iem. soos 'n ~e LEES* (Iemand soos 'n boek lees: read someone like a book); *die ~e NASIEN* (die boeke nasien: audit the books); *soos 'n ~e PRAAT* (soos 'n boek praat: speak like a book); *uit die ~e PRAAT* (uit die boeke praat: speak by the book); *iets op die ~e SIT* (iets op die boek sit: charge to one's account); *dit SPREEK soos 'n boek* (dit spreek soos 'n boek: it goes without saying); *te ~e STAAN as* (te boek staan: be known as); *te ~e STEL* (te boek stel: commit to paper); *so WAAR as 'n ~e* (so waar as 'n boek: as true as fate) are neither lemmata nor sublemmata. As idioms in Afrikaans, they are treatment units in their own right. In the above article, they, therefore, display a zero addressing relation (for more detailed information on Afrikaans idioms see De Villiers and Gouws, 1994). By making use of a zero addressing device the lexicographer is actually relying on a knowledge that the users may not have. As lexicographers we sometimes expect too much knowledge from the users. The dictionary user is not supposed to know that zero addressing refers to a situation in which a particular entry does not have an address. That is why in chapter 7 of this investigation, we have argued that idioms and proverbs should be included not as part of the treatment of a particular lemma within the central list but as lexicographic units of the back matter section of the planned dictionary.

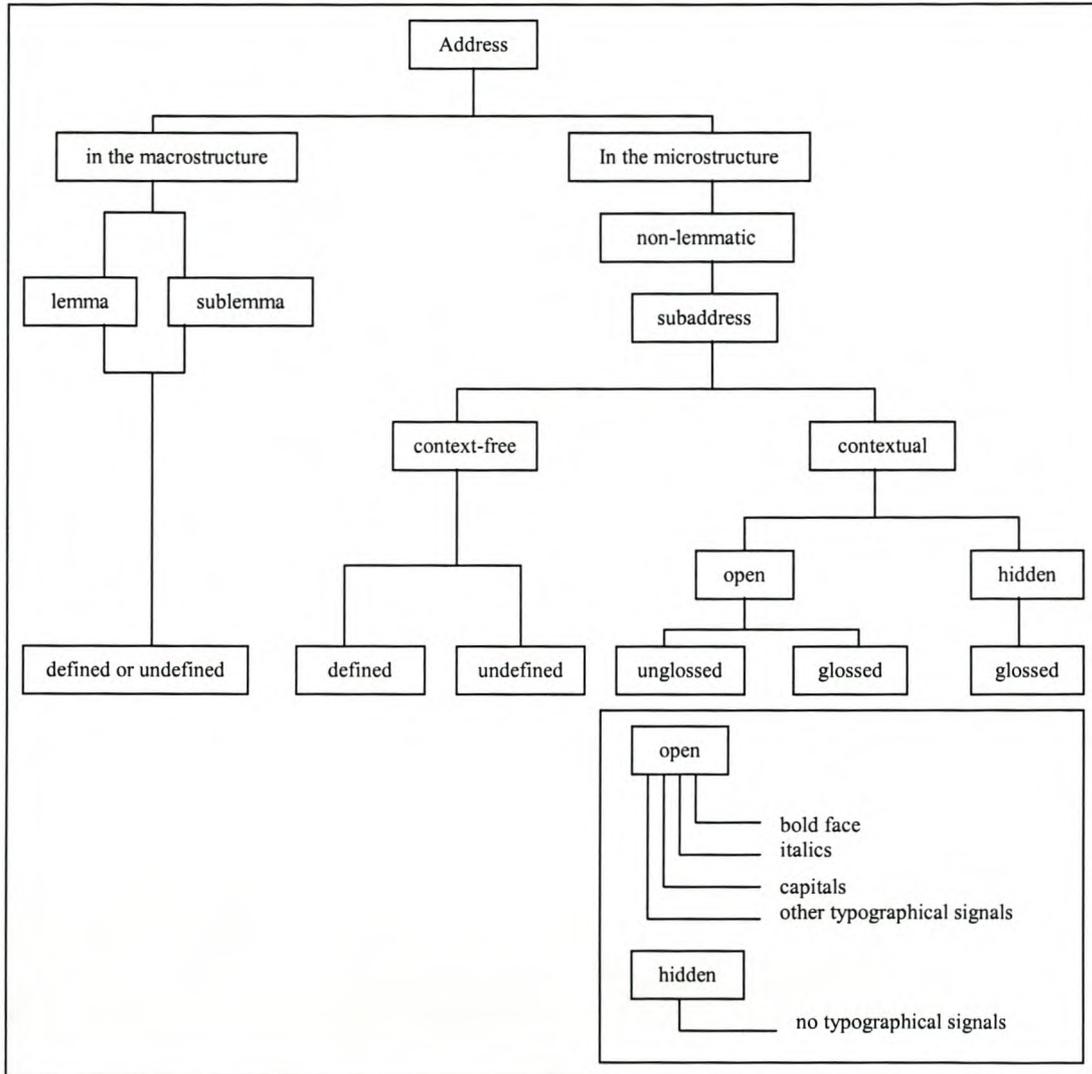


Figure 8: Some important types of definition addressing in the general monolingual dictionary (from Hausmann and Wiegand, 1989:351)

8.2. Data category subaddressing as an addressing procedure

According to Hausmann (1990:60) as far as mono-lexematic units are concerned, provision has to be made for three different addressing procedures, namely: 1) niching procedures, 2) nesting procedures and 3) data category subaddressing.

Niching and nesting related aspects have already received attention in chapter 5 of this investigation. They are also the so-called "run-on-entries" in American lexicography, cf. Landau, 1984, 77 ff, as cited in Hausmann and Wiegand (1989:350). Hausmann (1990:61) has pointed out an example of a subaddressing procedure

dominated by information types¹ for the treatment of the article of the lemma **jam**¹ in the *World Book Dictionary* (WBD) as it occurs in (89).

(87)	jam ¹	1	verb	transitive
		2	verb	intransitive
		3	noun	1.... 2.... 3....

jam¹ (jam). *v.* jammed, jam|ming. *n.* — *v.t.* **1** to press or squeeze tightly between two surfaces: **The ship was jammed between two rocks.** **SYN:** wedge, Pack. **2** to bruise or crush by squeezing: / *jammed my fingers in the door.* **3** to press or squeeze (things or people) tightly together: *They jammed us all into one bus.* **SYN:** force, thrust, push, shove. **4** to fill or block up (the way) by crowding: *The river was jammed with logs. Crowds that... jam the doors (Tennyson).* **5** to cause to stick, catch, or lock so that it cannot be worked: *The key broke off and jammed the lock.* **6** to push or thrust (a thing) hard (into a place); shove: *to jam one more book into the bookcase. The steersman ...jammed his helm hard down (Thomas Hugues).* **7** to pull or draw tight, as one does a noose. **8** to make (radio or telephone signals) unintelligible by sending out others of approximately the same frequency: *The broadcasts were jammed by the enemy.*

— **v.i.** **1** to press or push things or persons tightly together: *A crowd jammed into the bus.* **2** to stick or catch so that it cannot be worked: *The window has jammed: I can't open it.* **3** to become unworkable through the sticking, catching, or locking of a movable part. **4 Slang. a** to embellish a jazz composition with lively improvisations. **b** to take part in a jam session.

— **n.** **1** a crush or squeeze; crowded mass: *She was delayed by a traffic jam.* **2** the act of jamming. **3** the condition of being jammed. **4 Informal.** a difficulty or tight spot: *He was in a jam.* [perhaps imitative] — **jam'ma|ble.** *adj.*

jam² (jam), *n.* fruit boiled with sugar until thick: *raspberry jam, plum jam.* [perhaps special use of jam¹] — **jam'like'**, *adj.*

Text example 89: Articles **jam**¹, **jam**² (from WBD)

¹ WBD has interpreted the lemma sign **jam**¹ as a lexical item with more than one part of speech function. It can function as a verb transitive, a verb intransitive and as a noun. The use of the different typographical means is not from Hausmann but from the author.

The following is Hausmann's (1990) comment with regard to the treatment of the lemma **jam**¹ functioning as a noun:

Dans cette sous-structure, la définition 3.1. (comme 3.2.etc.) ne se rapporte pas au lemme, mais à une catégorie grammaticale spécifique qui, dans d'autres dictionnaires, jouit d'un lemme différent de celui du verbe (Hausmann (1990:62).

The English translation of this quotation is worth mentioning: In this substructure, definition (paraphrase of meaning?) 3.1. (definition 3.2 alike, etc.) is not addressed at the lemma but it is addressed at a specific grammatical category, which in other dictionaries enjoys the privilege of being a lemma on its own right that is different to the lemma sign functioning as a verb.

In addition to the point just outlined, it can be argued that that the article of the lemma **jam**¹ merely offers a position where the treatment of the lemma functioning as a noun occurs. This treatment of the lemma does not belong there. It should have been given latter in the treatment e.g. in the article of the lemma **jam**² or it should have at the best occurred under a treatment unit on its own right. Because data category subaddressing is likely to add to the problem on the part of the prospective user, it should rather be avoided in the planned dictionary. The user should always be given priority. This is referred to as user-friendliness. The latter is the concern of the next paragraph.

8.3. Addressing structure and user-friendliness

Hausmann and Wiegand (1989:353) believe that addressing is highly responsible for the degree of user-friendliness of a dictionary. While planning a dictionary project one must always bear the users in mind. For this study, the target users have been clearly identified as on the one hand senior high school pupils and academics that have Yilumbu as a first language and a relative good command of French or English, and, on the other hand, pupils and scholars who are willing to improve or learn Yilumbu as a second language. As far as the first target user group is concerned and as already mentioned in chapter 2, it is important to distinguish between potential dictionary users that have Yilumbu as their first language and those of which the linguistic performance will be dominated by French.

An implicit presentation of, e.g. culture bound lexical items may be acceptable for those who might have a sound knowledge of their mother tongue and native culture, but for those having a passive knowledge of Yilumbu this may prove to be highly problematic. That is why the dictionary-maker must make the information maximally explicit in the lexicographic text. As we also deal with learners in this research, the lexicographer has to be well aware of the needs of these learners. The dictionary has to be user-orientated. Compare the following in this regard:

(90)

ngwîsi (+gwisi) [ŋgw:îsi/(t)ŋgwî:sî] (also/aussi ngúsi) <i>n.</i> (cl.9/10) < * -guîsi		
◆ Muyínu o dúfu ná gho bá yisi ◆ ⇒ ngwêdi	<E> Ordinary dance or ceremony for tutelary spirits.	<F> Danse ordinaire ou cérémonie organisée en l'honneur des génies tutélaires.
Σ (<i>Ghâng.</i>) Yoonu batsísi ngwîsi i mfúúmbi Mákaya, (<i>Men.</i>) Yoonu batsívanga ngwîsi i mfúúmbi Mákaya.	<E> Yesterday they organised the late Makaya's (funeral) ceremony.	<F> Hier, ils ont organisé la cérémonie (mortuaire) de feu Makaya.
Σ (<i>Ghâng.</i>) Ngwîsi be yína utsíwiítsila pwééla bátu, (<i>Men.</i>) Ngwîsi be yína iyé tsíla bátu ba bîngi.	<E> A lot of people attended this (funeral) ceremony.	<F> Beaucoup de personnes ont assisté à cette cérémonie (mortuaire).
<p>■ ngwîsi dúfu is a funeral ceremony/ est une veillée mortuaire; ngwîsi i Mábaantsi is a rite of passage that allows girls to leave puberty and become adults. The ritual was first practiced by women. Today the Mabaantsi is a mixed initiation and secret society /rite de passage statutaire qui permet aux jeunes filles de passer de l'âge de puberté à l'âge adulte. Le rite a été pratiqué à l'origine par les femmes. Aujourd'hui, les Mabaantsi est une société secrète initiatique mixte; (<i>Men.</i>) ngwîsi i mîtsi (⇒ (<i>Ghâng.</i>) ngwîsi misînga is a funeral ceremony that is marked by the cutting of the pall that people bear around their wrist in sign of mourning. This ceremony also serves as a rising from the ground and it eventually announces the bearing of the mourning/ est une cérémonie mortuaire marquée par la (<i>frGab.</i>) coupure de cordes provenant du drap funéraire ou mortuaire que les gens portent autour des poignets en signe de deuil. Cette cérémonie est également organisée en guise de (<i>frGab.</i>) levée de terre et elle annonce éventuellement le (<i>frGab.</i>) port de deuil; ngwîsi Mughulu is an initiation and secret society that is believed to have come from the Bisiral est une société secrète et initiatique qui viendrait des Bisira; ngwîsi Mulóghu is an initiation and secret society. When the Mulóghu strikes a female person, she ordinary fall in a kind of trance (⇒ utúúgha), a sort of madness supposed to be caused by the ancestral spirits. Only the father (in the sense that this word has in the Gabonese languages) can appease the anger of the spirits of the dead. That is why, people generally call upon him to perform a ritual of deliverance that merely consists of words of blessing/ est une société secrète et initiatique. Lorsqu'une personne est frappée par le Mulóghu, elle tombe ordinairement dans une espèce de transe (⇒ utúúgha), un genre de folie qui est supposée causée par l'esprit des ancêtres. Seul le père (au sens que ce terme a dans les langues gabonaises) peut apaiser la colère de l'esprit des morts. C'est pour cette raison que les gens font généralement appel à lui pour un rituel de délivrance consistant simplement à des paroles de bénédiction. ■</p>		

Text example 90: article **ngwîsi**

With regard to this dictionary article given as text example 90, a lot of examples of sublemmatic addressing can be found, in particular in the section dealing with a niched paradigm of compounds with **ngwîsi** as first component, introduced by the symbol ■. The ordering within this sinuous lemma file is strictly alphabetic and user-friendly. In fact, each compound is followed by an explanation in the target languages so that the user gets a better idea of the meaning. As long as the explanation of the meaning continues, there is also a transfer of focus from the source to the target language. The purpose of the use of non-typographical markers in the case of the entries **coupure de cordes**, **levée de terre** and **port de deuil** which have been made "visual" to the dictionary-user by the use of bold characters and indicated by (*frGab.*), is that these lexicographic units are the so-called culture-bound elements in Gabonese French. In rural areas, the corpse of a person who has passed away can be kept for two days on the maximum. By the third day it has to be buried. If the person who passed away was a married man, the tradition requires his widow(s) to sleep on leafs of the banana-tree (*Musa paradisiaca*) for four days. On the fifth day a ceremony is organised in order to allow the widow(s) to sleep on a mat on the ground. Two weeks after the burial, a ceremony called *mangumba* is arranged in order to pacify the spirit of the deceased. During this ceremony, held at night, songs and dances are performed. In the morning, the cutting of the pall that people have around their wrist as a sign of mourning takes place. This is referred to as the "coupure de cordes" in Gabonese French. Then members of the family, the children of the deceased man and his widow(s) have to undergo purificatory rites. According to custom, an uncleanness caused by death is believed to rest on widows, in particular, after the death of the husband. This uncleanness has to be washed away by a ritual bath before the members of the family can wear the mourning of the deceased (referred to as "port de deuil" in Gabonese French). This ceremony also serves as a rising from the earth, which is referred to as "levée de terre" in Gabonese French. For this part of the funeral rite, the widow's bed (the mat) is put upside down (**uwúdigha tângi**) which literally means that the widow is now allowed to sleep on a bed. Finally after a year, a celebration is held to officially end the mourning period ("retrait de deuil" in Gabonese French).

ngwîsi dúfu is a funeral ceremony/ est une veillée mortuaire; **ngwîsi i Mábaantsi** is a rite of passage that allows girls to leave puberty and become adults. Women first

practiced the ritual. Today the Mabaantsi is a mixed initiation and secret society /rite de passage statutaire qui permet aux jeunes filles de passer de l'âge de puberté à l'âge adulte. Le rite a été pratiqué à l'origine par les femmes. Aujourd'hui, les Mabaantsi est une société secrète initiatique mixte.

From an addressing point of view, a feature of the above text example worth mentioning concerns the existence of sublemmatic addressing in the section dealing with a niched paradigm of compounds with **ngwîsi** as first component, introduced by the symbol ■. The lexicographic treatment that is offered for **ngwîsi dúfu**, **ngwîsi i Mábaantsi**, and **ngwîsi i mîtsi/ngwîsi misînga** is dominated by sublemmatic addressing procedures. In this lemma file, English and French paraphrases of meaning of the treated sublemmata have been differentiated from one another by the use of italic characters as opposed to roman characters. The use of these typographical structural markers enables e.g. an English user immediately to jump to the italics. So this user does not have to read everything until he/she comes to the information on the cultural background of the lemma **ngwîsi**. Instead of using non-typographical structural markers to enable users to choose between English and French paraphrases of meaning, a lexicographer can also combine both typographical and non-typographical structural indicators as it clearly appears below:

(91)

■ **ngwîsi dúfu** <E> is a funeral ceremony <F> est une veillée mortuaire; **ngwîsi i Mábaantsi** <E> is a rite of passage that allows girls to leave puberty and become adults. The ritual was first practiced by women. Today the Mabaantsi is a mixed initiation and secret society <F> rite de passage statutaire qui permet aux jeunes filles de passer de l'âge de puberté à l'âge adulte. Le rite a été pratiqué à l'origine par les femmes. Aujourd'hui, les Mabaantsi est une société secrète initiatique mixte; (*Men.*) **ngwîsi i mîtsi** (⇒ (*Ghâng.*) **ngwîsi misînga** <E> is a funeral ceremony that is marked by the cutting of the pall that people bear around their wrist in sign of mourning. This ceremony also serves as a rising from the ground and it eventually announces the bearing of the mourning <F> est une cérémonie mortuaire marquée par la (*frGab.*) **coupure de cordes** provenant du drap funéraire ou mortuaire que les gens portent autour des poignets en signe de deuil. Cette cérémonie est également organisée en guise de (*frGab.*) **levée de terre** et elle annonce éventuellement le (*frGab.*) **port de deuil**; **ngwîsi Mughulu** <E> is an initiation and secret society that is believed to have come from the Bisira/ est une société secrète et initiatique qui viendrait des Bisira; **ngwîsi Mulóghu** is an initiation and secret society. When the Mulóghu strikes a female person, she ordinary fall in a kind of trance (⇒ **utútúgha**), a sort of madness supposed to be caused by the ancestral spirits. Only the father (in the sense that this word has in the Gabonese languages) can appease the anger of the spirits of the dead.

That is why, people generally call upon him to perform a ritual of deliverance that merely consists of words of blessing <F> est une société secrète et initiatique. Lorsqu'une personne est frappée par le Mulóghu, elle tombe ordinairement dans une espèce de transe (⇒ **utútúgha**), un genre de folie qui est supposée causée par l'esprit des ancêtres. Seul le père (au sens que ce terme a dans les langues gabonaises) peut apaiser la colère de l'esprit des morts. C'est pour cette raison que les gens font généralement appel à lui pour un rituel de délivrance consistant simplement à des paroles de bénédiction ■

In the above box, the use of the structural indicator <F> (short for French) enables a user who is not interested in the English cultural aspect of the lemma immediately to jump to the symbol <F> in order to find the desired information. It may be argued that the fact that lexical items *coupure de cordes*, *levée de terre* and *port de deuil* have been made "visual" could increase the difficulties users will experience in their attempt to reach a desired sublemma. In other words and from an addressing point of view, given their bold character, **coupure de cordes**, **levée de terre** and **port de deuil** are actually interrupting the treatment of sublemmata with **ngwîsi** as first component. Therefore the use of bold characters does not only highlight the search route for sublemmata heading partial article stretches but also for the so-called culture-bound elements of Gabonese French (*coupure de cordes*, *levée de terre* and *port de deuil*). The latter should have rather been given in Italics. In addition to the foregoing, a lexicographer can also have opted to present the main lemma with no niche/nest attached to it and grouped sublemmata into different clusters headed by the basis lemma treated somewhere else in the planned dictionary. This could have been an example of a remote multiple niching/nesting (Gouws, 2002c). Compare the following in this regard:

(91)

nguyi...n. mother...mère...

ngwâmba...n. absence of meat in the homes...

ngwêdi...n. ceremony...

ngwétsõghu...n. père initiateur...

ngwîsi...n. <-* -guṣṣi...ceremony...cérémonie...

.
. .
.

ngwîsi dúfu, **ngwîsi Mábaantsi**, **ngwîsi misînga**, **ngwîsi mîtsi**, **ngwîsi Mughulu**, **ngwîsi Mulóghu**....

-nu...to drink...boire

nûmba...*n.* young girl...jeune fille, nubile..
nyimbi...*n.* witchcraft...sorcellerie...
nyĩmbu...*n.* accusation

From these simplified dictionary articles above, the user is provided with various data categories (part of speech indicator, translation equivalents, etymology, etc.) in the first treatment of the article of the lemma **ngwĩsi**. Latter the user also finds a grouping of articles with **ngwĩsi** as first component into a single text block. With regard to such lexicographic treatment, reservations can first be made in connection with the absence of structural markers to differentiate **ngwĩsi** without a niche/nest attached to it and **ngwĩsi** as a partial article stretches. Given the fact that the two *ngwĩsi* are not homonyms they cannot be given e.g. superscript numbers. For the user this presentation will be problematic and as such should be avoided in the planned dictionary.

8. 4. General concluding remarks

Due to the fact that dictionaries have traditionally been dominated by a lemmatic addressing bias, in this section dealing with the addressing structure of the planned dictionary more and more attention have been paid to devise a system of topic switching in the A-to-Z section or central list.

One should always plan the dictionary according to the needs of its potential users, and the genuine purpose of the dictionary. A point that deserves more attention of researchers and dictionary makers concerns the use of lemma clustering arrangements. More research needs to be done on criteria for dealing with addressing problems. Evaluation of addressing practices will also require the access structure and the mediostructure to be planned very carefully. This means that dictionary articles will have to be arranged typographically in an easy accessible manner (see chapter 7 for detailed information) and the degree of textual condensation should be kept to a minimum. Mediostructural aspects receive more attention in the following chapter of this investigation.

The application of remote addressing usually results in a significant deviation or interruption without the outer access structure of a dictionary. For this reason and

keeping with the user-perspective, direct addressing should rather be preferred to remote addressing.

Chapter 9: Textual condensation and Mediostructure

9.0. Textual condensation

9.1. Introduction

9.1.1. Some general remarks

Technically, the only way a lexicographer can achieve economy of space in a particular dictionary article is to decrease the format of its data presentation. This is referred to as textual condensation. There are a number of ways in which lexicographers employ a system of textual condensation in an attempt to save space. For example by treating specific lexical items as sublemmata the lexicographer is already making use of an important space-saving tool. Unfortunately in using this lexicographic device lexicographers too often do not take into account the needs and reference skills of the intended target users or the obligation to explain the use of this tool in the instruction book. Textual condensation of a high degree often prevails in dictionary articles encompassing procedures of niching and nesting. That is why textual condensation of such a nature should be avoided for the sake of inexperienced users. In niched and nested lemmata, the retrieval of information demands a reconstruction of the condensed data. This fact is emphasized by Gouws (2001):

Lexicographers often employ a system of textual condensation in the comment of form in an attempt to save space. This leads to a presentation characterised by the use of place keeping symbols, complex abbreviated entries and markers to indicate the non-occurrence of derivation. To illustrate this: the Afrikaans adjective *lui* can be used in attributive function with or without the suffix *-e*. The lexicographical treatment of this lexical item should include this variation in the comment on form along with the suffixes used to form the comparative and superlative forms of this adjective. This typical way in which this is done in a dictionary leads to the following entries:

lui, adj. (-of -e; -er, -ste)

This is a typical example of textual condensation rendering a condensed version of the full version:

lui, adjektief (*lui* of *luie*; *luier*, *luiste*)

In the condensed version the lemma sign is substituted by the place keeping symbol "-". To interpret this version correctly demands a certain degree of dictionary using skills on the side of the target user (Gouws, 2001:71).

9.1.2. Procedures of textual condensation in the planned dictionary

Lexicographers often employ a system of textual condensation in an attempt to save space. However, textual condensation does not only have a space saving endeavour but it is also concerned with the use of other operations. With regard to this point, Wiegand (1996c:139) has pointed out that textual condensation is mainly concerned

with the use of the following operations: repetition, abbreviating, omitting, shifting, substituting, summarizing, and embedding. Because textual condensation usually adds to the problem on the side of the user, its result has to be explained in one of the metatexts of the dictionary. As far as this section is concerned, the primary focus will be on the following procedures of text processing: substituting, omitting and abbreviation. According to Wiegand (1996c:133), textual condensation in dictionary articles may be understood as a process leading from a full text (a text showing complete cohesion and explicit syntax) to a condensed text (with addressing as syntax substitute and dependence on a metatext). As a result of the process of textual condensation, data categories that are decreased or omitted have to be reconstructed by the target users themselves. In Wiegand’s view (1996c:137), the full text consists of a title (the lemma sign or headword) and its co-text (the linearly structured set of items relating to that lemma sign). With regard to a specific dictionary article and depending on his/her reference skills, a user may reconstruct one or several full texts. In what follows, Wiegand (1996c:138) has proposed a visualisation of the condensation process.

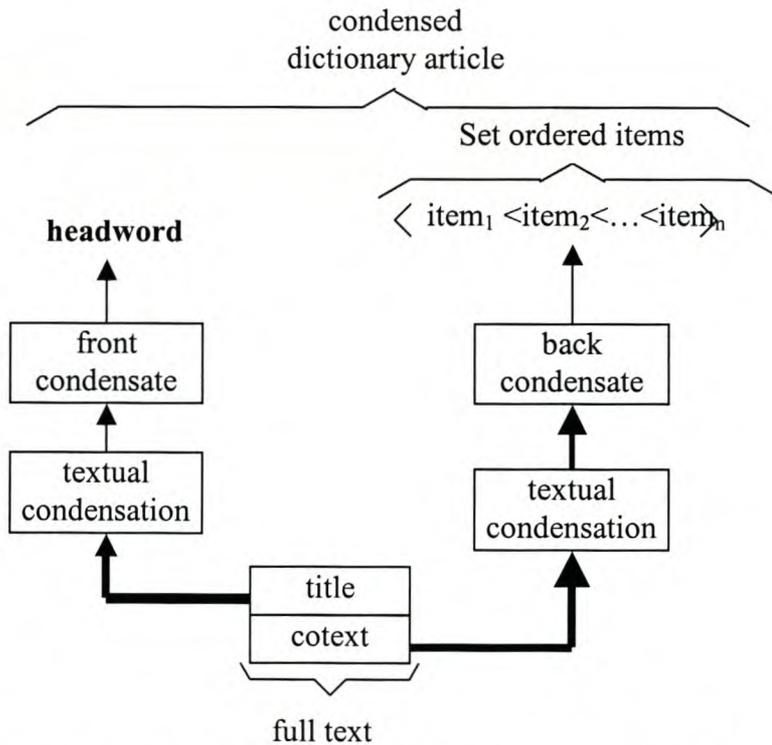


Figure 9: Visualization of the condensation process: from a full text to a condensed dictionary article (for further details see Wiegand (1988a; 1996b)); $item_1 < item_2 = item_1$ precedes $item_2$

With regard to textual condensation let us examine the treatment of the lemma sign **nzíghu** as given in text example 92:

(92)

nzíghu (+zighu) also/aussi ntsighu [nziǻ̀/(tsi)nziǻ̀] n. (cl. 9/10) < *-cíḡu		
1 ♦ (<i>Ghâng.</i>) káári ú díídi yína idúmbitsi yi mútu (nzíghu avábú ngula) (<i>Men.</i>) káári úgh ééyi yína idúmbitsi yi mútu (nzíghu avábúngula) ♦	1 <E> A small anthropoid or human-like monkey (a chimpanzee is a pet). <T> Chimpanzee(s) (<i>Pan troglodytes</i>).	1 <F> Petit singe anthropoïde (le chimpanzé s'apprivoise facilement). <T> Chimpanzé(s) (<i>Pan troglodytes</i>).
Σ Mureela atsíboka nzíghu	<E> The hunter killed a chimpanzee.	<F> Le chasseur a tué le chimpanzé.
Σ Ághu ába na dupá lu akúnónḡa nzíghu.	<E> That one had an assegai and he killed the chimpanzee.	<F> Celui-là avait une sagaie et il tua le chimpanzé.
2 Mútu wó avápása bátu báfu kála mu úyaaba díbandu dúfu ⇒ upása	2 <E> A person who examines a dead body in order to discover the cause of death; <T> forensic scientist(s), pathologist(s), expert in forensic medicine, (US) medical examiner.	2 <F> Personne qui examine les entrailles de ceux qui sont morts dans le but de découvrir les causes de la mort; <T> médecin(s) légiste(s), expert(s) ou spécialiste(s) en science de l'autopsie.
Σ Nzíghu atsitúba tí mfúúmbi ába na mú yaama.	<E> The pathologist said that the deceased had the "rainbow".	<F> le médecin légiste a dit que le défunt avait l' "arc-en-ciel".
Σ (<i>fig.</i>) Mútu ghúna ana nzíghu.	<E> This man has a "chimpanzee"(= the fetish of the chimpanzee)	<F> Cet homme a le "chimpanzé" (= le fétiche du chimpanzé).
Σ Kumba atsíbá mugha nzíghu.	<E> Kumba has learnt forensic medicine.	<F> Kumba a appris la science de l'autopsie.
Σ Rombaanu nzíghu mútu áfu.	<E> Someone has passed away, let's look for a pathologist.	<F> Une personne s'est éteinte, cherchons un médecin légiste.
Σ (<i>ndúbulu/cf. 1</i>) Adína itsighukâmba ti díkwili dí Port-Mikandi divasîmba na tsinzíghu.	<E> (<i>fig./cf. 1</i>) That is why I told you that no one took responsibility for the wake that took place in Port-Gentil (= everyone was just crying like a group of chimpanzees in the forest).	<F> (<i>fig./cf. 1</i>) C'est pour cette raison que je t'ais dis que personne n'a pris la responsabilité de la veillée (mortuaire) qui s'était déroulée à Port-Gentil (= Tout le monde était juste en train de pleurer comme un troupeau de chimpanzés dans la forêt).
Σ (<i>cf. 2</i>) Kumba atsíbámugha nzíghu.	<E> (<i>cf. 2</i>) Kumba has learned forensic medicine.	<F> (<i>cf. 2</i>) Kumba a appris la science de l'autopsie.

Text example 92: article **nzíghu**

With regard to this dictionary article one may reconstruct a number of full texts, which contain the following title:

- (1) Dictionary article on *nzíghu*.
- (2) This title could have the following co-texts, for example:
- (3) **nzíghu** is the item representing the total set of grammatical and morphological forms of the linguistic sign treated in the microstructure. Put differently, it is the **lemma sign** and therefore an element of the macrostructure.
- (4) The data type that follows the lemma sign also falls into the macrostructural domain. It is an indication of the stem of the lemma sign: **(-zíghu)**.
- (5) The next type of data is an indication of **pronunciation**. The phonetic transcription of **nzíghu** is [nzíɣù] indicating the singular form and [tsìnzíɣù] indicating the plural form in the so-called Yilumbu yi ghângu, whereas in the so-called Yilumbu yí menááne the singular form is indicated as [nzíɣù] and the plural form is indicated as [tsìnzíɣù].
- (6) The pronunciation is followed by an indication of a **spelling variant** that is introduced by “also/aussi”. *Nsíghu* is the variant form of **nzíghu**. This means that the conventional spelling is *nzíghu*, but *nsíghu* can also be used.
- (7) An indication of the item giving the word category or word class to which the lemma belongs to is given immediately after the data type on variants: *nzíghu* is a noun.
- (8) The part of speech indicator is followed by the gender. Because the lexicographer has chosen to enter nouns as singulars, the two poles of the gender are meant to enable the user to form, when applicable, the plural. In this regard, **nzíghu** occurs in class 9 for the singular and in class 10 for the plural.
- (9) After the gender to which the lemma belongs follows an indication of the **etymology**. The protoBantu reconstruction proposed for **nzíghu** is “*-cíɣu”.
- (10) The type of data category given just after the etymology is the **paraphrase of meaning**. The lemma **nzíghu** has been interpreted as two times polysemous. Moreover diamonds ♦ have been used to mark the boundaries of the (first) paraphrases of meaning.
- (11) In the so-called Yilumbu yi ghângu, sense 1 of the lemma is given by the following paraphrase: “Káári údíídi yína idúmbitsi yi mútu (nzíghu avábúngula)”.
- (12) In the so-called Yilumbu yí menááne, sense 1 of the lemma is given by the following paraphrase: “Káári úghéeyi yína idúmbitsi yi mútu (nzíghu avábú ngula)”.
- (13) The English translation equivalent of the Yilumbu paraphrase of meaning is “A small anthropoid or human-like monkey (a chimpanzee is a pet)”.
- (14) The French translation equivalent of the Yilumbu paraphrase of meaning is “Petit singe anthropoïde (le chimpanzé s'apprivoise facilement)”.
- (15) Yilumbu examples of the use of **nzíghu** (sense 1) are: “Mureela atsíboka nzíghu” and “Ághu ába na dupálu akúnónnga nzíghu”.
- (16) English translation equivalents of the Yilumbu examples illustrating the use of the lemma (sense 1) are: “The hunter killed a chimpanzee” and “That one had an assegai and he killed the chimpanzee”.

- (17) French translation equivalents of the Yilumbu examples illustrating the use of the lemma (sense 1) are: "Le chasseur a tué le chimpanzé" and "Celui-là avait une sagaie et il tua le chimpanzé".
- (18) Sense 2 of the lemma is given by the following paraphrase: "Mútu wó avápása bátu báfu kála mu úyaaba díbandu dúfu".
- (19) The English translation equivalent of the Yilumbu paraphrase of meaning (sense 2) is "A person who examines a dead body in order to discover the cause of the death".
- (20) The French translation equivalent of the Yilumbu paraphrase of meaning (sense 2) is "Personne qui examine les entrailles de ceux qui sont morts dans le but de découvrir la cause de la mort".
- (21) Yilumbu illustrative examples of **Nzíghu** (sense 2) are: "Nzíghu atsítúba tí mfúúmbi ába na múyaama" and "Rombaanu nzíghu mútu áfu".
- (22) English translation equivalents of the Yilumbu examples illustrating the use of the lemma (sense 2) are: "The pathologist said that the deceased had the *rainbow*" and "Someone has passed away, let's look for a pathologist".
- (23) French translation equivalents of the Yilumbu examples illustrating the use of the lemma (sense 2) are: "Le médecin légiste a déclaré que le défunt avait l'*arc-en-ciel*" and "Une personne s'est éteinte, cherchons un médecin légiste".
- (24) Additional Yilumbu illustrative examples of **Nzíghu** with accurate specification of the sense to which the lemma applies are: "(*ndúbulu/cf. 1*) Adína itsighukâmba ti díkwili dí Port-Mikandi divasimba na tsinzíghu" and "(*cf. 2*) Kumba atsíbámugha nzíghu".
- (25) English translation equivalents of the additional Yilumbu examples illustrating the use of the lemma (sense 1 and sense 2) are: "That is why I told you that no one took responsibility for the wake which took place in Port-Gentil" and "Kumba has learned forensic medicine".
- (26) French translation equivalents of the additional Yilumbu examples illustrating the use of the lemma (sense 1 and sense 2) are: "C'est pour cette raison que je t'ais dis que personne n'a pris la responsabilité de la veillée (mortuaire) qui s'est déroulée à Port-Gentil" and "Kumba a appris la science de l'autopsie".

9.1.3. Other examples of textual condensation

There are also interesting examples of textual condensation procedures in the *Dictionnaire Français-Mpongwé* (henceforth DFM). In this dictionary, every lexicographic convention plays an important role for a better understanding of a specific article. However, all this data is not indicated explicitly. In many instances the user has to derive additional information from the data presented. Compare the following example:

(93)

accorder V. A (*deux personnes*) sóngan'anaga'awani ;
 (*du temps*) pégombe ; (*une guitare*) su-
 sumye nómbi ; (*un tambour*) kande ngóma.
S'accorder, kwezangan'isamû. *Ces instruments*
s'accordent, itómbó si kotana..

Text example 93: article *accorder* (from DFM, 1995)

This is what the user is expected to retrieve from the lexicographic presentation:

- 1) Dictionary article on *accorder*.
- 2) *Accorder* is a verb.
- 3) Examples of use of *accorder* are: *Accorder deux personnes* (sóngan'anaga'awani); *Accorder du temps* (pégombe); *Accorder une guitare* (susumye nómbi); *Accorder un tambour* (kande ngóma); *S'accorder* (kwezangan'isamû); *Ces instruments s'accordent* (itómbó si kotana).

Apart from the treatment of the article of the lemma **accorder**, the dictionary in question also offers articles with a very limited treatment, namely an indication of the item giving the form of the lemma sign that is at the same time an orthography item as well as the translation equivalent. Compare the following examples in Table 27:

	Lemmata	Contextual data
1	amarante	N. (<i>du Soudan</i>) ilupu.
2	avocat	N. (<i>qui plaide</i>) okambi, oganisi ; (<i>fruit</i>) ivoka.
3	avocatier	N. ovoka.
4	bal	N. bólu.
5	balcon	N. epaga.
6	balluchon	N. ifunda.
7	barbeau	N. (<i>poisson</i>) mboka.

TABLE 27: Dictionary articles with a very limited treatment taken from DFM (1995²)

In point 1, point 2 and point 7 of the table above the dictionary maker makes use of italicised words in parenthesis after the lemma or an entry in order to convey information on pragmatics or on semantics. Immediately after the lemma sign (in

bold) and the part of speech indicator appear the following labels: (*du Soudan*), (*qui plaide*), (*fruit*) and (*poisson*) followed by their translation equivalents (in Italics). Through the use of these labels the user is immediately informed about the specific sense to which the lemma belongs. To the contrary in point 3, point 4, point 5 and point 6, the user only gets an indication of the item giving the form of the lemma sign as well as its translation equivalent. This may be acceptable in the light of Swanepoel (1989) who argues:

An indication of the part of speech to which the main lemmas belong is of the utmost importance, especially in cases where no examples giving information in respect of the syntactic behaviour of a lemma are supplied. Information pertaining to the part of speech to which the lemma belongs is often also an important means of distinguishing between translation equivalents, especially in cases where no additional information is offered in the form of a gloss (Swanepoel, 1989: 233-234).

However the main objection, which can be made with regard to this point, is the absence of a metatext in the introductory section explaining this system to the target reader.

9.1.4. The use of substitution procedures in the planned dictionary

Textual condensation is often concerned with the use of substitution procedures. Lexicographers usually make use of the tilde ~ or the hyphen to substitute a given lemma sign in the illustrative examples. Technically, textual condensation is a lexicographic device that consists of decreasing the data presentation in order to save space, cf. Gouws and Prinsloo (1997:51-55). In accordance with pedagogical lexicography, the degree of textual condensation should be kept to a minimum because it usually adds to the problem on the part of the dictionary user. In the process of textual condensation, the data types that are decreased or omitted have to be reconstructed by the user himself/herself. The lexicographer may never rely on the intuition of users because the reconstruction of text elements that have been omitted may be successful or not. That is why, ideally, textual condensation procedures should be avoided or kept to a minimum. The use of textual condensation devices also brings lexicographers to the root of the notion of user-friendliness. According to Gouws (1997), user-friendliness is the metalexicography or dictionary's adapting to the users' needs. Lexicographers usually make use of textual condensation devices

where the target users of a dictionary have a long tradition of dictionary consultation, cf. Gouws (1999b:33). In fact, it is assumed that the Gabonese community in general and the Balumbu speech community in particular are not well familiar with dictionary using skills. The use of substitution procedures should always be planned in accordance with the needs and reference skills of the specific target group. In addition, the microstructural arrangement of the dictionary articles and the access structure have also to be planned very carefully. This was done in chapters 6 and 7 of the planned dictionary. Most importantly, it is part of our editorial policy not to work with the idea of lemma part in a niche/nest entrance position.

9.2. Mediostructure

9.2.1. The purpose of a theory of mediostructures

In order to guide the user from one text to another the lexicographer usually makes use of a system of cross-referencing. According to Wiegand (1996) the reference position, the reference entry, the reference address and the entry marking the reference relation (also known as the reference marker) form the basis of the terminology used in the theory of mediostructures. A dictionary user can be referred from a reference position to a reference address. The lemma sign **button mangrove** in *The American Heritage Dictionary of the English Language* (henceforth, AHD) has the following mediostructural treatment:

(94)

button mangrove <i>n.</i> See buttonwood (sense 2).

Text example 94: article **button mangrove** (from AHD, 1992:262)

In this example, the article of the lemma sign *button mangrove* is the reference position, and the lemma sign *buttonwood* is the reference address. The entries *See* and *buttonwood* constitute two different text segments. The first one is referred to as the reference marker because its role is to indicate the reference relation. The second text segment is referred to as the entry marking the reference address. Here the user is

instructed to look up the lemma sign **buttonwood** (sense 2 in particular) in order to find additional information:

(95)

but·ton·wood (büt'n-wood') *n.* 1. See **sycamore** (sense 1).
2. An evergreen shrub or tree (*Conocarpus erectus*), growing in mangrove forests of tropical America and western Africa and having alternate leathery leaves and small buttonlike heads of greenish flowers. Also called *button mangrove*.

Text example 95: article **buttonwood** (from AHD, 1992:262)

In the treatment of the article of the lemma **buttonwood**, the user is provided with both macro- and microstructural information. Of importance, sense 2 of the lemma provides the user with a simplified presentation of the description, habitat and the scientific name of the plant dealt with. Right at the end of the treatment, the user is cross-referred to *button mangrove* to complete the circle.

A theory of mediostructures offers the lexicographer a variety of reference possibilities. Mediostructural procedures usually include three categories, namely internal reference address, external reference address and the dictionary external reference address, cf. Gouws and Prinsloo (1998:20-22). The first mediostructural category does not exceed the boundaries of an article. In other words, it opens search paths that end in the same article (cf. Hausmann and Wiegand, 1989:344). In a sense, it is an article internal cross-referencing or a kind of direct cross-referencing. To the contrary, both the external reference address and the dictionary external reference address are external mediostructural strategies. In an external reference address the reference relation that is established between the reference entry and the reference address guides the user from one article to another or to another text in the dictionary (front or back matter texts). Formulated differently, an external reference address opens search paths that end, according to cases, outside the dictionary article or outside the dictionary itself. The dictionary external reference address is especially useful to refer a user from the central list or another text to a source outside the dictionary where a comprehensive account on grammatical, anthropological,

historical, geographical etc. aspect can be found. Before discussing mediostructural aspects, an account of textual condensation procedures is given.

As already mentioned, a theory of mediostructures offers the lexicographer a variety of reference possibilities. It should be emphasized that it is not a theory merely for the sake of theory. Lexicographers usually make use of a variety of reference possibilities at their disposal. A theory of mediostructures allows the lexicographer to give an indication of the different semantic relationships of a particular lexical item to other lexical items. The semantic relations under discussion include hyponymy versus hyperonymy, synonymy and relations of semantic opposition (antonymy in most instances but this is not the only example of relations of semantic opposition). Moreover in cross-references, the reader's attention is drawn to related lexical items in the same dictionary article or in other parts of the dictionary and cross-referencing usually implies the use of instruction devices, e.g. "See", "compare", "Cf.", "Syn", "Ant", etc. This aspect brings us to the next point of our discussion, namely mediostructural traditions.

9.2.2. Mediostructural traditions

It has already been said that in the theory of mediostructures, a dictionary user can be referred from a reference position to a reference address. A reference marker does not always appear in the reference entry. Gouws (1999b:51) has already warned against the implicit presentation of data in mediostructural devices because this usually adds to the problem on the part of the user. An unproblematic approach should be adopted. An explicit presentation of mediostructural data leads to a better understanding and interpretation of an entry. This mediostructure-orientated lexicography can only be achieved if the reference marker always appears in the reference entry. Text segments which are usually used in dictionaries as reference markers include the following: *see*, *compare*, *voir*, *cf.*, \Rightarrow , \rightarrow , etc. The variety of reference markers, which are used in different dictionaries and often in one dictionary, cf. Gouws (1999b:19), may confuse the user. In the proposed dictionary plan, if in a mediostructural presentation the reference marker has to be given in the three languages of the dictionary it will constitute a non-economic and unfriendly approach for the users. A space saving

approach seems to be the adoption of the arrow (\Rightarrow) to refer the user to related articles as it is done in the *Dictionary of Lexicography* (DL) for example.

Another problem in this area is the lack of uniformity in cross-referencing. If a lemma sign A is cross-referred to a lemma sign B then the latter should be cross-referred to the first one. In case of biscopal works, what is cross-referred in one side of the dictionary should be mirrored in the other side. This aspect has an important role to play in maintaining the textual cohesion of a specific dictionary. To illustrate this problem let us consider the following dictionary articles with a restricted treatment:

(96)

nyimbi (+yimbi) [nyimbì] <i>n. cl. 9</i> < * -jimbì \Rightarrow dikúndu
nóyi (+noyi) [nóyì] <i>n. cl. 9</i> < * -nóyì \Rightarrow dikúndu
píipiri (+ piipiri) [pí:pirì] <i>n. cl. 9</i> < * -pìipì \Rightarrow dikúndu

Text example 96: articles **nyimbi**, **nóyi** and **píipiri**

In (96) it would be a waste of space to list the same English or French equivalent (*witchcraft/sorcellerie*) several times in the dictionary articles. On the contrary, it would be relevant to cross-refer the user to the article of the lemma **dikúndu** where he/she will find a paraphrase of meaning of that lemma as well as illustrative examples as it clearly appears in the following dictionary article. In addition and compared to Bergenholtz, Tarp and Wiegand's (1999:1793) concept of a (typical) **reference article**, the above examples are **extended reference articles**. The full treatment of the article of the lemma **dikúndu** appears below:

(97)

dikúndu, (ma) (+ kúndu) [dikúndù / màkúndù] <i>n. cl.5, 6</i> < * -kúndu.		
♦ Mwâ mbitsi ídiidi yi balosi bavásómugha muyé náyanganga bátu. ♦ \Rightarrow míisu mána, nyimbi, nóyi, píipiri	<E> Piece of meat, which gives wizards/witches the power to harm the physical and mental health of others <T> witchcraft, sorcery.	<F> Appendice ou excroissance de chair occulte dont la particularité est de douer les sorciers de la faculté de nuire au bien-être physique et mental d'autrui; <T> sorcellerie, vampire (au sens que ce mot a dans le français local).
Σ Ana dikúndu.	<E> He has got witchcraft.	<F> Il a le "vampire".
dikúndu di ngúnka, tiiti Ké anaká isimba asábésíisa.	<E> Merciless witchcraft.	<F> "Vampire" impitoyable.

Σ	Ana tiiti, ana dikúndu di ngúnka.	<E> She has merciless witchcraft.	<F> Elle a un "vampire" impitoyable.
<p>▼ <E> In this invisible viscera one finds an unexplainable and supernatural force that enables the witch/wizard (⇒ mulösi) to desert consciously or not his/her body, while he/she is in his/her sleep in order to go and "eat" the heart of their victims (⇒ úyi múrima) in this way causing their vital force to be passed on to him/her.</p> <p><F> Cette viscère invisible est le siège d'une force inexplicable et surnaturelle qui permet au "vampireux/vampireuses" de "sortir" consciemment ou non de leurs corps pendant leur sommeil pour aller "manger le cœur" (⇒ úyi múrima) de leur victimes et s'approprier ainsi leur force vitale.</p>			

Text example 97: article **dikúndu**

In the above dictionary article given as Text example 96, it worth noting that entries: **mífsu mána**, **nyimbi**, **nóyi**, **pípiri** are an example of multiple cross-referencing.

9.2.3. Poly-functionality and mediostructural procedures

It has been mentioned in chapter 6 that in poly-functional works, a range of functions can be accommodated within a single book. The planned dictionary will be poly-functional in the sense that it will be used for both *text reception* (also known as decoding function) and *text production* (also referred to as encoding function). But this concept of poly-functionality goes beyond the mere presentation of linguistic data. In other words, the planned dictionary will not only be a linguistic reference work but it will have a range of applications. For example, its ethnographical nature will allow the dictionary to be used by scholars from various fields, among others ethnology, philosophy, politics and religion. This is where mediostructural procedures will come into play, especially the external reference address and the dictionary external reference address, cf. Gouws and Prinsloo (1998:20-22). By using the external reference address the lexicographer may refer the user from the central list, in the article of a lemma with a high degree of cultural information, to an outer text dealing with the context or information on pragmatics of that particular lemma. In the same way because the grammatical exposition of the language is never complete in any dictionary, the user can be referred from the central list or the minigrammar to a source outside the dictionary where he/she will find a more comprehensive grammatical treatment. This dictionary external reference address is also relevant for e.g. anthropological or ethnographical literature in which the user may find more detailed information regarding the given lemma.

As far as the rendering of semantic relations in dictionaries is concerned, five types of cross-references can be identified, namely: **cross-reference by synonyms**, **cross-reference by hyponyms**, **cross-reference by co-hyponyms**, **cross-reference by hyperonyms** and **cross-reference by antonyms**.

9.2.4. Cross-reference by synonyms

- **Introduction**

According to Hartmann and James (1992:135), synonymy refers to “(t)he sense relation obtaining between the members of a pair or group of words or phrases whose meanings are similar.” In the pursuit of this citation, Hartmann and James (1992:135) add that “(t)his definition leaves out of account the degree and nature of the meaning similarity. "Complete" ("absolute", "strict" or "total") synonymy is impossible as no two words ever have exactly the same sense in terms of denotation, connotation, formality or currency, but "partial" ("relative", "loose", "quasi-" or "pseudo-") synonyms can be substituted for each other in some contexts, e.g. *able*, *capable*, *competent*, *qualified*.” Louw (1998:176) also believes that "there are a few if any absolute synonyms in a language". In reflecting on Wiegand's proposals for an integrated semasiological and onomasiological presentation of semantic data in general monolingual dictionaries, Louw (2000) has pointed out that:

...the term "synonymy" has been a bone of contention in metalexicographical circles. The common misconception of synonymy as referring to "two words meaning the same thing" has been severely criticised. Firstly, it is usually pointed out that synonymy is a relation between lexical items and not merely between words. Secondly, the inherent vagueness of the phrase "meaning the same thing" is criticised. It does not address the complexity of synonymy as a semantic relation (Louw, 2000:129).

The following is an example of a partial article of the lemma **percer** taken from DfV:

(98)

percer [perse] v. tr. 1° *Percer quelque chose*, le traverser de part en part, le marquer d'un trou : *La pointe du compas perce la feuille de papier* (syn. : TROUER). *L'acide a percé la tôle* (syn. PERFORER). *Le médecin a percé l'abcès* (syn. : CREVER, OUVRIR). *Une attaque qui a réussi à percer le front ennemi* (syn. : ENFONCER). — 2° *Percer un trou, une fenêtre, etc.*, produire ce trou, ménager cette fenêtre, etc. : *Percer des trous avec une chignole pour le passage des boulons* (syn. : FORER). *On a percé une large baie sur la façade de cette vieille maison* (syn. : OUVRIR). || *Percer une rue, une avenue*, abattre des constructions pour établir cette rue, cette avenue. — 3° *Percer la foule*, passer à travers (syn. : FENDRE, TRAVERSER). || *Lumière qui perce l'obscurité, les ténèbres*, qui apparaît dans le noir. || *Le soleil perce les nuages*, ses rayons filtrent à travers eux. — 4° *Percer un mystère, une énigme*, les comprendre, trouver la solution (syn. : PÉNÉTRER). — 5° *Cela vous perce le cœur*, vous afflige profondément (littér.) [syn. : CREVER]. || *Un bruit qui perce les oreilles, le tympan*, qui produit une impression très désagréable par son caractère strident. ♦ v. intr. 1° (sujet nom de chose) Commen-

Text example 98: article
percer (from DFV, 1981)

In the following entries, each illustrative example is followed by its appropriate lexical item-synonyms (printed in small capital letters and introduced by the structural marker "syn."). The user is instructed to look up these synonyms in order to find additional information:

- 1) *La pointe du compas perce la feuille de papier* (syn. : TROUER),
- 2) *L'acide a percé la tôle* (syn.: PERFORER),
- 3) *Le médecin a percé l'abcès* (syn.: CREVER, OUVRIR),
- 4) *Une attaque qui a réussi à percer le front ennemi* (syn.: ENFONCER),
- 5) *Percer des trous avec une chignole pour le passage des boulons* (syn.: FORER),
- 6) *On a percé une large baie sur la façade de cette vieille maison* (syn.: OUVRIR),
- 7) *Percer la foule,...* (syn.: FENDRE, TRAVERSER),
- 8) *Percer un mystère, une énigme, ...* (syn.: PÉNÉTRER),
- 9) *Cela vous perce le cœur,...*[syn.: CREVER].

From a mediostructural point of view and as already said in chapter 6, it is worth mentioning that in the dictionary article above, both the reference marker and the entry marking the reference address are placed not far away from the different paraphrases of meaning. This is important because as long as the explanation of the meaning continues, the user immediately gets information about semantic relations between the lemma and other lexical items. However reservations can be made with regard to the non-systematic use of the so-called synonym-definitions. It is a well-established practice across dictionaries to use synonyms as definitions in order to save space as it clearly appears in the dictionary article given as text example 94. In that dictionary article, the user only gets information of a macrostructural nature, namely: the spelling of both the lemma sign **button mangrove** and its synonym **buttonwood** (sense 2). The indication of the part of speech (*n.*) to which the lemma sign belongs is also another macrostructural data. The specification of the sense to which the synonym applies may be regarded as the sole microstructural data. The latter is important because it gives a user a clue where to search in order to find the meaning of *button mangrove* in the treatment of the article of the lemma **buttonwood**. Given the fact that **buttonwood** has been treated as a lemma sign representing a polysemous lexical item, a user could be at the loss to find the correct sense if the entry marking the reference address was not disambiguated.

9.2.5. Cross-reference by hyponyms

• Introduction

In terms of Hartmann and James (1992:70) hyponymy refers to “(t)he sense relation obtaining between the members of a set of words or phrases and their hyponyms”.

Hyponymy is generally regarded as a relation of inclusion. The semantic relation hyponymy versus hyperonymy is frequently used in the so-called "genus and differentia definition":

A genus-differentia definition consists of two parts. The definiendum is first placed in the semantic class (the **genus**) to which it belongs. After that the differences (**differentia**) between the definiendum and the other members of the class concerned are indicated cf. (WAT, 1999:21).

In Swanepoel (1990:165-166)'s terms, the so-called genus-differentia definition is referred to as **intensional definition**. Cf. the following example from the *Oxford Advanced Learner's Dictionary of Current English* (OALD⁶).

(99)

chair /tʃeə(r); AmE tʃer/ *noun, verb*

■ **noun** 1 [C] a piece of furniture for one person to sit on, with a back, a seat and four legs: *a table and chairs* ◇ *Sit on your chair!* ◇ *an old man asleep in a chair* (=an armchair) — see also ARCHAIR, DECKCHAIR, EASY CHAIR, HIGH CHAIR, MUSICAL CHAIRS, ROCKING CHAIR, WHEELCHAIR — picture on page 178 2 (**the chair**) [sing.] the position of being in charge of a meeting or committee; the person who holds this position: *She takes the chair in all our meetings.* ◇ *Who is in the chair' today?* ◇ *He was elected chair of the city council.* 3 [C] the position of being in charge of a department in a university: *He holds the chair of philosophy at Oxford.* 4 (**the chair**) [sing.] (AmE, informal) = THE ELECTRIC CHAIR

■ **verb** [VN] to act as the chairperson of a meeting, discussion, etc.: *Who's chairing the meeting?*

Text example 99: article **chair** (from OALD⁶: 177)

In (99) the entry "piece of furniture" places the definiendum within a particular semantic domain before illustrative examples are given. On mediostuctural level, the

user is referred to other members of the class concerned (furniture). Here we have what Swanepoel (1990:165-166) calls extensional definition because of the enumeration of furniture, which are at the same level of representation as the lemma: *armchair*, *deckchair*, *easy chair*, *high chair*, *rocking chair*, *wheelchair* and the lemma *sign chair* are all hyponyms. However, between these members of the paradigm and the lemma *sign*, a lot of transitive relations can be found. It can be argued that *chair* is a superordinate of *armchair*, *deckchair*, *easy chair*, *high chair*, *rocking chair* and *wheelchair* but a hyponym of *furniture*. Moreover, *deckchair*, *rocking chair* and *easy chair* are at the same level of representation because they all denote comfortable pieces of furniture suitable for relaxation. Similarly, on account on of their special functions, *high chair*, *wheelchair* and *musical chair* can form a group of their own. A *high chair* is piece of furniture with long legs and a little seat and table in which a small child can sit while eating. A *musical chair* is a children's game played with chairs, whereas a *wheelchair* is a chair for people who are unable to walk.

9.2.6. Cross-reference by co-hyponyms

In the following example taken from the *Dictionnaire Universel* (henceforth DU), cross-referencing is used to indicate fellow hyponyms:

(100)

Chameau, eaux [ʃamo] n. m. (et adj.) **1.** Mammifère ruminant (fam. camélidés) à une ou deux bosses dorsales graisseuses qui constituent des réserves énergétiques. (*Camelus bactrianus*, le chameau à deux bosses, est asiatique. *Camelus dromedarius* : V. dromadaire.) *Chameau qui blatère*, qui pousse son cri, *qui baraque*, qui se couche sur le ventre en fléchissant les membres antérieurs. **2.** Fig., fam. Personne méchante, d'humeur désagréable. ▷ adj. (inv. en genre) *Ce qu'elle est chameau!*

Text example 100: article **chameau, eaux** (from DU, 1995²)

In the dictionary article above, sense 1 of **chameau**, **eaux** (camel) does not only provide the user with the meaning of the lemma sign, but also places the latter within a broader semantic field. The entry "mammifère" (mammal) acts as superordinate or hyperonym, whereas "*Camelus bactrianus*" and "*Camelus dromedarius*" are subordinates or hyponyms. In addition the entry "le chameau à deux bosses, est asiatique" (the camel with two humps is Asiatic) helps the user to fully distinguished *Camelus bactrianus* and *Camelus dromedarius* from one another. From a mediostuctural point of view, and before co-texts examples illustrating the typical use of the lemma are given, the entry "V. dromadaire" (see dromadaire) takes the user directly to the article of the lemma **dromadaire**. The aim of this cross-reference is to make the user aware of the fact that **chameau** and **dromadaire** are co-hyponyms. The treatment of **chameau**'s fellow hyponym appears below:

(101)

<p>dromadaire [dRɔmadɛR] n. m. Chameau à une seule bosse (<i>Camelus dromedariu</i>), parfaitement adapté au climat désertique chaud, que l'on utilise comme monture ou comme bête de somme de la Mauritanie à l'Inde (appelé aussi cour. <i>chameau</i>). † pl. mammifères (II).</p>

Text example 101: article **dromadaire** (from DU, 1995²:376)

It is worth emphasizing in the above dictionary article that the cross-reference given in the treatment of the lemma **chameau** is unfortunately not met by a corresponding explicit cross-reference to complete the circle. Nevertheless, the user gets at the end of the lexicographic treatment the entry "appelé aussi cour. *chameau*" ("dromadaire" is also generally referred to as camel). In the case of "*chameau*", a user will do well to look up this lexical item since this entry has been made visual by typographic means (here the use of italics). However, this is not done for the sake of cross-referencing.

9.2.7. Cross-reference by hyperonyms or superordinates

• Introduction

According to Hartmann and James (1992:70) hyperonymy refers to "(t)he sense relation obtaining between the members of a set of words or phrases, one of whose

meaning is more general than, or superordinate to, that of its hyponyms”. Hyponymy is generally regarded as a generic relation. Compare the following example taken from the *Dictionnaire Universel* (henceforth DU):

(102)

perroquet [peRɔkɛ] n.m. 1. Grand oiseau percheur (fam. Psittacidés) au plumage généralement orné de couleurs éclatantes, au fort bec arqué, capable d’imiter la parole humaine. ▷ FIG. Personne qui répète sans comprendre ce qu’elle a entendu (V. pl. **oiseaux II**.) 2. (Afrique) Nom cour. De divers poissons dont les mâles sont vivement colorés de bleu, vert et jaune.

Text example 102: article **perroquet** (from DU, 1995²:897)

Of importance in the dictionary article given as text example 102 is that, just before sense 2 of the lemma is given, the user is provided with a cross-reference (V. pl. **oiseaux II**) to a pictorial illustration (see figure 11). For this pictorial illustration, entitled "**oiseaux II** (birds)", it is worth mentioning that it represents the superordinate of the lemma sign **perroquet** (parrot).

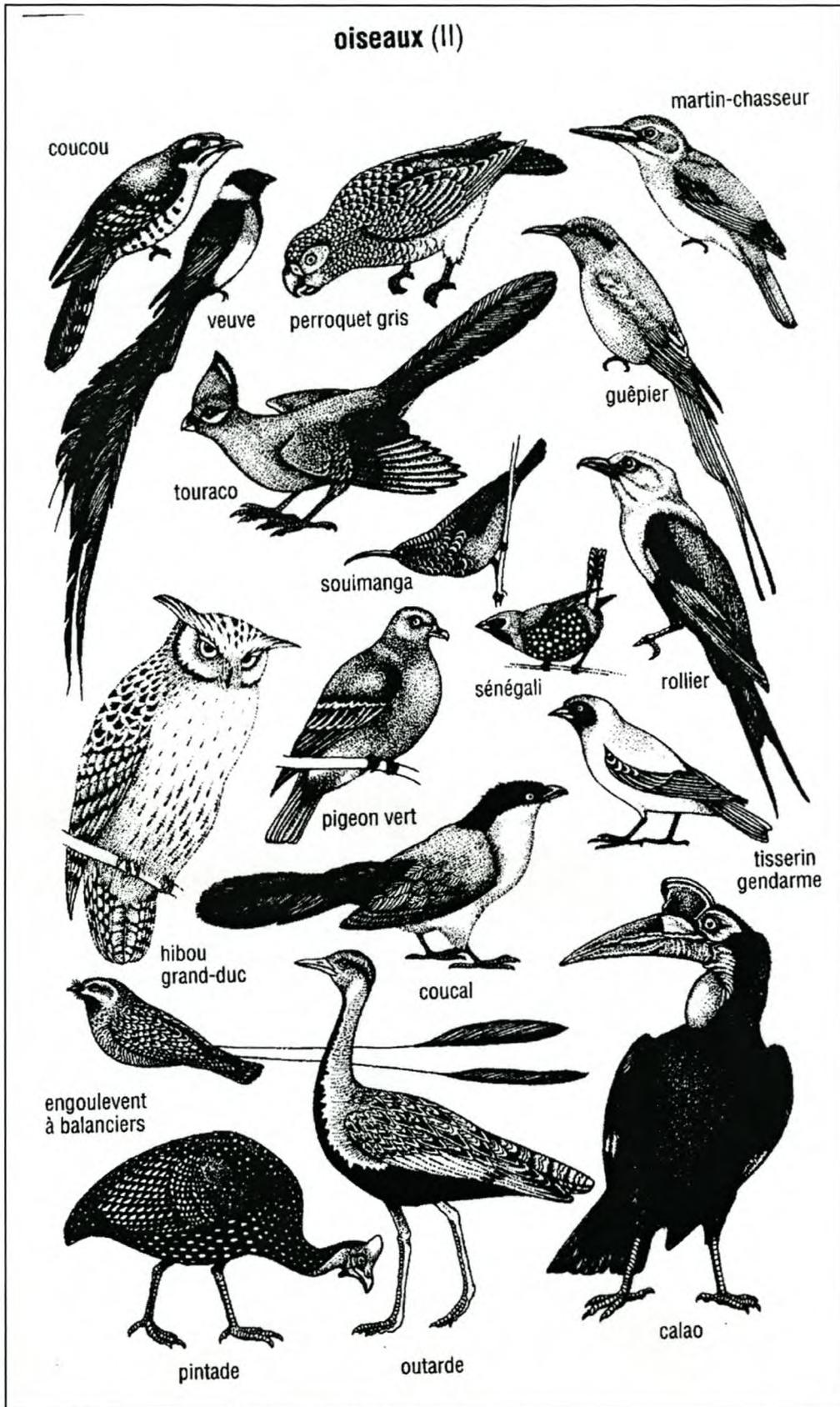


Figure 10: Picture of birds (from DU 1995²:842).

9.2.8. Cross-reference by antonyms

• Introduction

It can be argued that synonymy and antonymy are the two typical semantic relations dealt with in general monolingual dictionaries. In Hartmann and James' (1992:7) approach, antonymy refers to:

(t)he sense relation obtaining between words or phrases of opposite meaning. Antonymy can be 'complementary', with one member of a pair of implying the negation of the other: *alive, not dead*; 'conversive' or 'reciprocal', with the meaning of one member of a pair presupposing that of the other: *buy / sell*; or 'graded' ('gradable'), with two concepts being compared: *clean versus dirty, bigger/better than*....The term can also be used to refer to the phenomenon of one word having two opposite senses, e.g. *sanction* 'permit' or 'penalise' (Hartmann and James, 1992:7).

Cf. the following example from OALD⁶:

(103)

de·sir·able /dɪ'zɑrəɹəbl/ *adj.* **1** (*formal*) ~ (**that**) ...|
 ~ (**for sb**) (**to do sth**) that you would like to have or do;
 worth having or doing: (*BrE*) It is **desirable that** interest
 rates should be reduced. ◊ (*AmE*) It is **desirable that**
 interest rates be reduced. ◊ *highly desirable*. ◊ *The house*
has many desirable features. ◊ **It is no longer desirable**
for adult children to live with parents. ◊ *She chatted*
*for a few minutes about the qualities she considered **desir-***
***able in a secretary.** Such measures are desirable if not*
essential. **OPP** UNDESIRABLE **2** (of a person) causing other
 people to feel sexual desire: *She suddenly saw herself as a*
desirable young woman. ▶ **de·sir·abil·ity** /dɪzərəɹə-
 'bɪləti/ *noun* [U] (*formal*): *No one questions the desirabil-*
ity of cheaper fares.

Text example 103: article **desirable** from OALD⁶ (2000:315)

In the above article dictionary compilers have interpreted the lemma **desirable** as two times polysemous. A fact worth mentioning in this article is the type of information given just before sense 2 is the item giving the antonym of the lemma sign: UNDESIRABLE. This data category is presented in small capital letters and a hybrid or combined structural marker introduces it: **OPP** (short for opposite).

9.2.10. Other uses of cross-reference devices

In some cases, cross-references are also made to indicate variant spellings, acronyms, abbreviations and symbols. This is clear from the following dictionary articles from the *McGraw-Hill Dictionary of Scientific And Technical Terms* (hereafter M-HDSTT):

(104)

<p>aesthacyte <i>See</i> esthacyte. ASROC <i>See</i> antisubmarine rocket. At. wt <i>See</i> atomic weight. AU <i>See</i> gold.</p>

Text example 104: articles
aesthacytes, **ASROC**, **at. wt** and
AU (from M-HDSTT, 1994:ix)

Cross-references also allow the dictionary compiler to link different linguistic signs from different parts of the alphabet or to indicate members of a paradigm. All these aspects are discussed below.

9.2.11. The use of a theory of mediostructures in linking of different linguistic signs from different parts of the alphabet

Cross-referencing implies the linking of various lexical items from different parts of the alphabet. This is clear from the following example:

(105)

véhiculaire [veikyler] adj. et n. m.
Didac. Se dit d'une langue servant à la communication entre des communautés ayant des langues maternelles différentes (par oppos. à *vernaculaire*). *Le swahili, le dioula, le haoussa sont des langues véhiculaires.* (V. carte Langues véhiculaires d'Afrique, p. 1244.) ▷ n. m. *Un véhiculaire interethnique.*

ENCYCL *Les langues véhiculaires d'Afrique.* L'Afrique subsaharienne compte moins de cinquante États, mais, selon les inventaires linguistiques, de 1200 à 1500 langues. Seuls deux États, le Rwanda (avec le kinyarwanda) et Burundi (avec le kirundi), sont linguistiquement homogènes. Tous les autres États sont donc linguistiquement hétérogènes, mais à des degrés divers. 1. Quelques États possèdent une langue dominante : République centrafricaine (où domine le sango), Sénégal (wolof), Burkina Faso (moré), Mauritanie (arabe mauritanien), Gabon (fang), Somalie (somali), Mali (où la majorité de la population parle des langues mandé). 2. D'autres États présentent une hétérogénéité linguistique moyenne et disposent de langues immédiatement utilisables. C'est le cas du Togo, où l'éwé prédomine dans le Sud (mais le dialecte véhiculaire mina, ou guin, diffère sensiblement de l'éwé standard), alors que, dans la région centrale, le kabiyé prédo-

mine. 3. D'autres ne disposent que de langues non ou mal transcrites. Ainsi, le Niger est également partagé entre zarma-songhay, haoussa, peul, kanuri, tamacheq. Au Bénin, le yorouba et le fon prédominent dans le Sud, la bariba et le dendi dans le Nord. La Guinée est à peu près également partagée entre malinké, susu, poular (ou peul), accessoirement kpélé et kissi. L'Angola l'est entre le kimbundu et l'umbundu. 4. La plupart des autres États ont une forte hétérogénéité linguistique (Côte d'Ivoire, Tchad, Congo, Zaïre). On observe la différenciation maximale au Cameroun, où 248 langues ont été recensées. On comprend qu'en Afrique

le monolinguisme soit une rareté et le bilinguisme, sinon le trilinguisme, une nécessité. Pour établir les communications interethniques, environ une cinquantaine de langues ont émergé et on voit aujourd'hui s'accroître le nombre de leurs locuteurs, qui abandonnent progressivement leur langue maternelle. À l'exception du pidgin-english du Cameroun, du crio de Sierra Leone et du créole portugais, elles sont toutes d'origine africaine. On les nomme *langues de grande communication* ou *véhiculaires*. L'Afrique est, aussi, traditionnellement divisée en zones francophone, anglophone, lusophone, mais l'usage réel du français, de l'anglais ou du portugais concerne rarement plus de 15% de la population de tel ou tel État. La carte page suivante situe les principales langues véhiculaires d'Afrique. Elles appartiennent aux familles suivantes (sur lesquelles le lecteur trouvera des informations supplémentaires dans la carte *Les principales langues africaines*, que nous avons placée p. 1314) : - sous-famille nigéro-congolaise (au sein de la famille nigéro-kordafienne), wolof, temné, bambara, peul (ou pular, poular, fulfuldè, etc.), susu, mandé, dioula, moré, twi, yorouba, igbo, jukun, sango, zandé; cette famille renferme de nombreuses langues bantoues véhiculaires : fang, lingala, swahili, kinyarwanda, kirundi, ganda, cibuba, kikongo véhiculaire (nommé munukutuba), kimbundu, umbundu, lwena, lozi, bembabour, nyanja, kwanyama, shona, herero, tswana, fanagalo (zoulou pidginisé), zoulou, xhosa; - famille nilo-saharienne : songhay, kanuri, tubu, maba, fur, dinka, nuer; - famille afro-asiatique : arabe, amharique, berbère, tamacheq (touareg), somali, galla (ou oromo), haoussa; - famille austronésienne : malgache. La famille khoisan ne comporte pas de langue véhiculaire.

Text example 105: article **véhiculaire** from DU (1995²:1243).

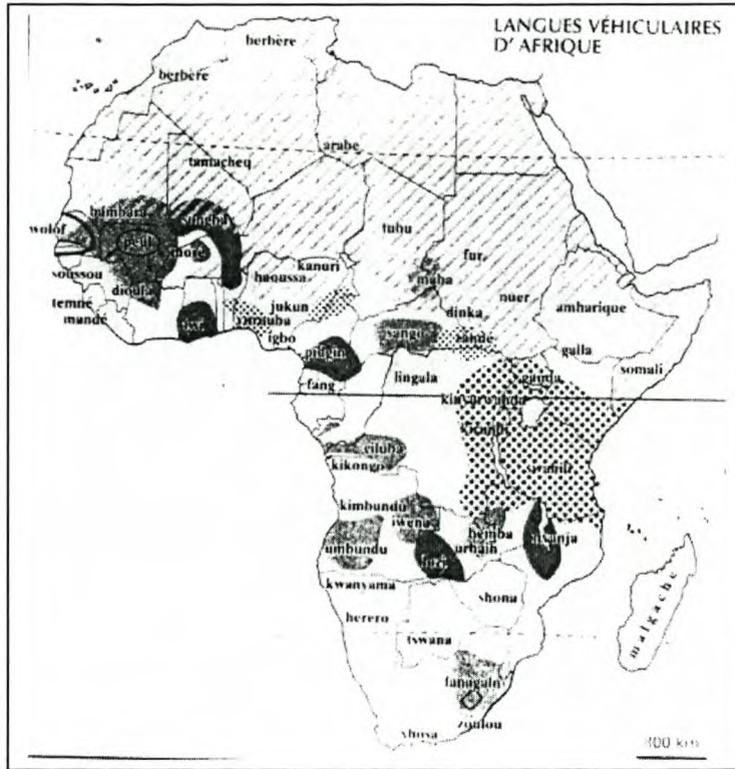


Figure 11: Map of vehicular languages of Africa (from DU 1995²:1244).

A fact worth mentioning in the dictionary article given as text example 105 (in a slot on the antepenultimate line of the first paragraph) is that the user is provided with a cross-reference (V. carte Langues véhiculaires d'Afrique, p.1244) to a pictorial illustration. For this pictorial illustration, entitled "Map of vehicular languages of Africa", it is worth mentioning that it is positioned close to the treatment of the article of the lemma **véhiculaire** (on page 1243). As a matter of fact, the pictorial illustration in question appears on the next page (on page 1244). From there it can be argued that a relation of direct addressing prevails between the treatment of the article of the lemma **véhiculaire** and its pictorial illustration. Given the fact this map forms part of the central list in DU, the cross-reference in this case is therefore text-internal cross-reference. Quite differently in the treatment of the article of the lemmata **helicopter** and **glider** in the *Cambridge International Dictionary of English* (henceforth CIDE), one finds an example of a **combined reference entry**:

(106)

hel·i·cop·ter /^hhel ·i:kɑp·tə^r \$' - ·kɑ:p·tə/ , *infml* **chop·per**
n [C] a type of aircraft without wings, that has one or two sets of large blades which go round very fast on top. It can land and take off vertically and can stay in one place in the air • *Two helicopters constantly hovered near the building.* • *The injured were ferried to hospital by helicopter.* • *a helicopter pilot* • A **helicopter gunship** is a military helicopter armed with guns and other weapons: *Helicopter gunships carry rockets and missiles capable of causing a large amount of damage.* •  **Aircraft, Emergency services**

Text example 106: article **helicopter** from CIDE (1998:660).

(107)

glid·er /^hglɑr·də^r, \$ -də/ *n* [C] • A glider is an aircraft without an engine and with long fixed wings: *To get airborne, gliders either have to be towed into the air by a plane with an engine, or launched into the air by a special machine.* •  **Aircraft**

Text example 107: article **glider** from CIDE (1998:599).

When first looking at the structural markers £ (short for British English) and \$ (short for American English), the above dictionary articles highlight the dictionary compilers' willingness to ensure that there is an adequate coverage of different varieties of English (especially British and American) with respect to pronunciation. Another fact worth mentioning is that right at the end of the treatment, the user gets an implicit cross-reference entry: a pictorial illustration that is to be found in page 31.

In these text examples, the entry  combines both typographical and non-typographical structural markers (cf. Louw 1998:122). **PIC** (short for pictorial illustration) is the typographical indicator, whereas the arrow frame is the non-typographical structural marker. In addition  indicates that there is a picture. It is not a reference marker. In fact for this entry, a textual condensation of a low degree prevails due to the absence of a reference marker. Therefore this entry should be referred to as a **combined reference entry**.

It is worth mentioning that the pictorial illustration of **aircraft** (See figure 12) is separated from the treatment of the articles of the lemmata **glider** and **helicopter** by

568 pages and 629 pages respectively. This is maybe an example of distance addressing.

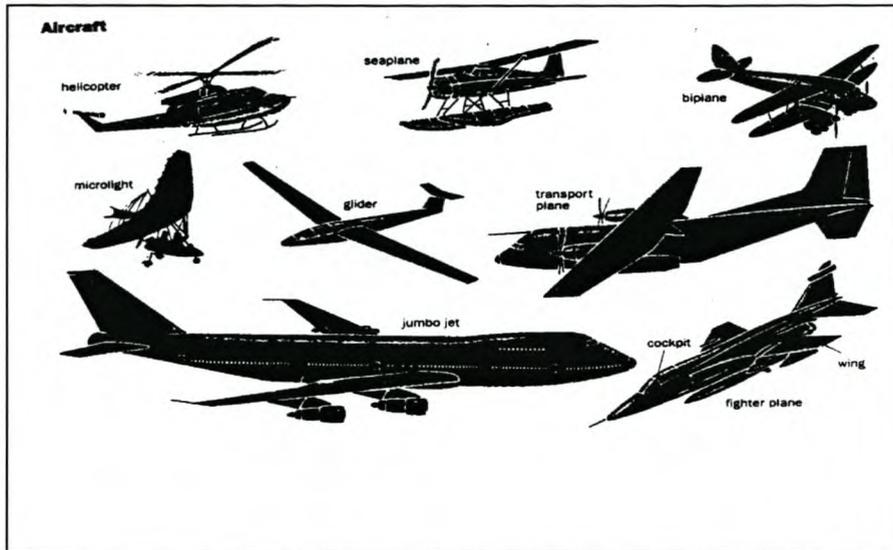


Figure 12: Pictorial illustration of **aircraft** from CIDE (1998:31)

In terms of integrated treatment, it can be argued that compared to the article of the lemma **véhiculaire**, the pictorial illustration entitled "Langues véhiculaires d'Afrique" is an example of a **direct integrated illustration** since it helps to achieve the genuine purpose of the dictionary: empowering the francophone user in its use of the French language. In fact a user consulting the article in question does not only learn the different vehicular languages of Africa but the pictorial illustration that is offered also enables him/her to visually locate these languages on the map of Africa. It can be argued that compilers of the *Dictionnaire Universel* have designed the pictorial illustration on page 1244 for a *knowledge-directed function*. On the contrary, compared to the articles of the lemmata **glider** and **helicopter**, the pictorial illustration of **aircraft** is an example of a **distant integrated illustration**. A quite far distant addressing relation can be found in the treatment of the lemma **wing** below:

(108)

wing STRUCTURE FOR FLYING /wiŋ/ n [C] the movable, usually flat, part of the body which a bird, insect or BAT uses for flying, or one of the flat horizontal structures that stick out from the side of an aircraft and support it when it is flying • *the delicacy of a butterfly's wings* • *I much prefer the white breast-meat of the chicken to the wing.* • *I could see the plane's wing out of my window.* • (literacy) A bird that is **on the wing** is flying. • If you **take** someone **under** your wing you start to protect and take care of them: *I was a bit lonely and fed up at the time and she took me under her wing.* • A **wing chair** is a chair with a high back from which large side pieces stick out. • A **wing collar** is the strip of material which goes around the neck on a man's formal shirt and is folded down into the shape of two small triangles at the front. • A **wing nut** is a NUT (, small metal fastening device) which has two flat pieces on it that you can hold with your fingers while tightening it- • "*Comin' in on a wing and prayer*" (the title of a song written by Harold Adamson, based on the remark of an airplane pilot, 1943) • PIC **Aircraft, Birds, Chairs, Clothes, Tools, Wing**

Text example 108: article **wing** from CIDE (1998)

A fact worth mentioning in the above dictionary article (in a slot right at the end of the article) is that the marker PIC actually tells the user that there is a picture to be found for **Aircraft** in particular. This pictorial illustration of **aircraft** constitutes an interesting example due to the fact that a user reading the above article and eager to learn about different types of aircraft will have to move from almost one extreme of the alphabet (from the letter W) to another extreme (the letter A). It is worth emphasizing that **Aircraft, Birds, Chairs, Clothes, Tools, Wing** constitute an example of a multiple referencing.

9.2.10. The use of a theory of mediostructures in indicating different members of a paradigm

In OALD⁶, the lemma **retarded** is first and foremost labelled as "old-fashioned, offensive" and defined as "less developed mentally than is normal for a particular age". This paraphrase of meaning from OALD highlights the complexity of defining lexical items referring to handicapped people. In order to observe what sociolinguists call "political correctness", lexicographers are often forced to make use of euphemisms in

their definitions. Instead of defining the term *idiot* as e.g. "a very stupid person", compilers of *Nasionale Woordeboek* (henceforth NW⁶) opted for a more scientific approach. In fact in the dictionary mentioned above, the lemma **idi'oot** is defined on the basis of IQ (abbreviation for 'intelligence quotient') tests. This is clear from the following example:

(109)

idi'oot (-diote) S.n.w. 1. *swaksinnige persoon met 'n I.K. onder 25 en 'n verstandsouderdom van 1 to 2 jaar.* 2. *dom mens.*

Text example 109 (from NW, 1988⁶:213)

The same approach is also followed with regard to the treatment of the lemmata **imbe'siel** and **moron** as it clear appears below:

(110)

imbe'siel (-e) s.n.w. *persoon met 'n I.K. van 25 to 50 en 'n verstandsouderdom van tussen 2 en 7 jaar.*
Vgl. **idioot, moroon. imbesili'teit.**

Text example 110 (from NW, 1988⁶:214)

(111)

'moron (-e) s.n.w. *persoon met 'n I.K. van 50 to 70 en 'n verstandsouderdom van 8 tot 12 jaar.* Vgl. **idioot, imbesiel.**

Text example 111 (from NW, 1988⁶:329)

The fact worth mentioning in the above dictionary articles is that the user will get a specific paraphrase of meaning of the lemmata **imbe'siel** and **moron** in which the IQ level is indicated. It can be argued that here NW⁶ has successfully avoided to behave politically incorrect. From a mediostructural point of view, in the article of the lemma **imbesiel**, right at the end of the treatment, a cross-reference takes the user directly to **idioot, moroon** and **imbesili'teit**. In the case of **moron**, this cross-reference is met by a corresponding cross-reference to complete the circle. This is not unfortunately the case

in the treatment of the articles of lemmata **idioot** and **imbesili'teit** where the circle is not completed by corresponding cross-references to the article of the lemma **moron**. This may lead to users' frustration. Cross-references would have drawn the attention of the user to related lexical items in the same dictionary.

9.3. General concluding remarks

In this chapter dealing with the mediostructure and textual condensation in the planned dictionary, the emphasis has been on finding ways in order to improve the system of cross-referencing. There are a number of ways lexicographers employ a system of cross-referencing, e.g. in an attempt to give an indication of the different semantic relationships of a particular lexical item to other lexical items, to link different linguistic signs from different parts of the alphabet, etc. Some of these cross-references may cover great distances in the search path but some may not. Because textual condensation usually adds to the problem on the part of the dictionary user, it has been decided not to make use of substitution instructions procedures such as the tilde (~) or the hyphen (-). Where textual condensation procedures are used to save space, they should be kept to a minimum. A crucial problem in this area is the lack of uniformity in cross-referencing or blind cross-referencing. If a lemma sign A is cross-referred to a lemma sign B then the latter should be cross-referred to the first one. In keeping with the user-perspective, in the present model we have tried as much as possible to follow these important aspects.

Conclusion

The discussion on various metalexigraphic theories in general and Wiegand's General Theory of Lexicography in particular, in order to determine its possibilities for the planning and compilation of a trilingual dictionary have formed the basis for the study undertaken in this dissertation.

In chapter 1, I stated the reason why the choice was made to develop a theoretical model for a trilingual dictionary. I have also provided a survey of lexicography in Gabon as well as some aspects of lexicographic processes, dictionary typology and the structure of dictionaries.

In chapter 2, I explored various issues related to the target user groups of the planned dictionary, their reference skills and some aspects of dictionary use. The investigation has shown that:

- A dictionary culture has yet to be established in the Gabonese speech communities,
- Apart from Grimes (1996), there are hardly any sociological user surveys that describe potential user groups, their needs and reference skills (linguistic competence, world view, etc.) for Gabonese languages. As a result, one has to guess what users' needs and reference skills are.
- There is a need for dictionaries serving the needs and reference skills of the African users in general and the Gabonese users in particular.

In chapter 3, I investigated a number of ways the planned dictionary could promote the standardization of the Yilumbu language. The key ideas in this chapter are formulated below:

- Dictionaries play a significant role in the standardization of a language,
- The standardization process of the Yilumbu language should take into account metalexigraphic proposals in the other African languages. This will facilitate the preparation of educational materials and thus promote education in Yilumbu,
- Policy makers, language planners and lexicographers should depart themselves from claims based on language purism. Loanwords which are phonologically and morphologically adapted and integrated into Yilumbu should be part of the selection of lemma candidate list for any dictionary,
- Borrowing of international terms and coining of local terms as to be seen as one of the ways to promote science and technology in the vernaculars of the

people of Gabon. However acceptance must be considered as most important in the borrowing process. As far as Yilumbu is concerned, in the end the Balumbu alone will decide if they want to use a loanword or a native term,

- The choice of a dialect to serve as a standard variety is likely to encounter stiff resistance from the local communities because of ethnocentric reasons. In order to avoid social unrest, a compromise solution is to be preferred to the choice of one single variety.

In chapter 4, I have investigated a number of ways in which minigrammars of the languages being treated in the planned dictionary could be presented. Attention was also paid to a wide selection of other outer texts.

In chapter 5, I have explored various issues related to the macrostructure of the planned dictionary. The following represent the main observations from this chapter:

- All types of lexical items should be given lemma status in the planned dictionary,
- The investigation has shown conclusively that all lexical items must be included according to the word tradition,
- On the basis of the needs of the target user groups as well as their reference skills, the decision to include lexical items in the so-called sinuous lemma-files should be taken with great care,
- All lexical items should preferably be included on account of their usage frequency in the corpus. Illustrative examples should ideally be fully corpus-based.

In chapter 6, I have investigated a variety of issues related to the microstructure of the planned dictionary. The presentation of different types of microstructures prompted me to use an integrated microstructure as well as a wide range of different data categories and typographical structural indicators and non-typographical structural indicators suited to help the user in a quick and successful retrieval of the desired information.

In chapter 7, I have investigated the access structure of the planned dictionary. Insights gained from the investigation into the study of the microstructure in chapter 6 prompted me to use a wide range of different structural markers and search zones in order to help the user to retrieve information more easily and quickly. This study has shown that Wiegand's (1996d) concept of micro-architecture cannot be ignored in such an investigation.

In chapter 8, the addressing structure of the planned dictionary was discussed. In keeping with the user-perspective, the investigation has shown conclusively that explicit addressing procedures are best suited to capture the needs and reference skills of the target users.

In chapter 9, mediostructural procedures and textual condensation in the planned dictionary were investigated. The main findings of this chapter may be summarized as follows:

- Some mediostructural procedures include a certain degree of textual condensation but textual condensation procedures do not necessarily include the use of cross-referencing,
- Explicit cross-referencing is claimed to be best suited to capture the needs and reference skills of the Balumbu users,
- In keeping with the user-perspective, textual condensation should ideally be kept to the minimum. As a result, it is part of the policy of the planned dictionary not to work with the idea of the so-called lemma part (the use of place keeping symbols). After considering the usefulness of the treatment of certain terms in the so-called sinuous file, sublemmata are presented in their full form.

Bibliography

Dictionaries and encyclopaedias

A Dictionary of South African English on Historical Principles. 1996. Oxford: Oxford University Press, in association with the Dictionary Unit for South African English.

AHD: *The American Heritage Dictionary of the English Language*. 1992. Boston and New York: Houghton and Mifflin Company, Third Edition.

Biton, A. et J. Adam. 1969. *Dictionnaire ndumu-mbede-français et français-ndumu-mbede. Petite flore de la région de Franceville (Gabon). Grammaire ndumu-mbede*. Archevêché de libreville. Bar-le-Duc: Imprimerie St Paul.

Bonneau, J. 1956. *Grammaire pounoue et lexique pounoue-français*, Brazzaville: Institut d'Études Centrafraines.

Bosman, D. B. et al. 1984. *Tweetalige Woordeboek. Bilingual Dictionary. Afrikaans-Engels*, Cape Town: Tafelberg.

Brandford, J & Brandford W. 1991⁴. *A Dictionary of South African English*, Cape Town: Oxford University Press.

Brandford, J. 1980. *A Dictionary of South African English (New Enlarged Edition)*, Cape Town: Oxford University Press.

Cagnacci Schwicker, A. 1970². *International Dictionary of Metallurgy Mineralogy Geology (English-French/German-Italian)*, Milan: Technoprint International/McGraw-Hill Book Co.

Castex (Dr.). 1938. "Vocabulaire comparé des principaux dialectes ayant cours en Haut-Ogooué. Essai de classification", *Bulletin de la Société des Recherches Congolaises* 26:23-54.

Chambers Universal Learners' Dictionary. 1980. Edinburgh.

CIDE: Procter, P. (Ed.). *Cambridge International Dictionary of English*, Cambridge: Cambridge University Press.

COBUILD: Sinclair, J. (Ed.). 1995². *Collins COBUILD English Language Dictionary*, London: HarperCollins.

Collins COBUILD English Language Dictionary. 1987. London.

Collins Concise Dictionary. 1999⁴, Glasgow: Collins.

- Crystal, D. 1986. *The Ideal Dictionary, Lexicographer and User*. Ilson, R. (Ed.) 1986: *Lexicography: An Emerging International Profession: 72-81*, Manchester: Manchester University Press.
-1992- *An Encyclopedic Dictionary of Language and Languages*, Oxford: Blackwell Publishers.
- Dahin (R.P.). 1893. *Vocabulaire français-aduma*, Kempten (Bavière): Kosel.
-1895- *Vocabulaire aduma-français*, Kempten (Bavière): Kosel.
- De Schryver, G.-M. and Ngo. S. Kabuta. 1997. *Lexicon Ciluba-Nederlands. Een circa 2500-lemma's-tellend strikt alfabetisch geordend vertalend aanleerderslexicon met decodeer-functie teen behoeve van studente Afrikaanse Talen en Culturen aan de Universiteit Gent*, Ghent: Recall.
- De Schryver, G.-M. (Ed.). 2001. *Pukuntšuthaloši ya Sesotho sa Leboa 1.0 (PyaSsaL's First Parallel Dictionary)*, Pretoria: (SF)² Press.
- De Villiers, M. and R. H. Gouws. 1994⁴. *Idiome-Woordeboek (Verklarings met afsonderlike Afr. en Eng. begrippellyste)*: Nasou.
- DFM: Raponda-Walker, A. 1961. *Dictionnaire Français-Mpongwé*, Brazzaville: Imprimerie St Paul. 1995². Editions Raponda-Walker. Classiques Africains.
- DFV: Davau, M. et al. 1981. *Dictionnaire du français vivant*. Nouvelle édition. Entièrement revue et augmentée. Paris.
- DL: Hartmann, R. R. K. & G. James. 1998. *Dictionary of Lexicography*, London: Routledge.
- Delorme, A. 1877. *Dictionnaire français-mpongwè*, Paris: Missionnaires de la Congrégation du St Esprit et du St-Coeur de Marie.
- Dictionnaire Hachette de la Langue Française*. 1980, Paris: Hachette.
- Dubois, J. et al. 1979. *Dictionnaire du français langue étrangère Niveau 2*, Paris: Librairie Larousse.
- Ferrante, V., Cassiani, E. 1991. *Nuovo Dizionario moderno italiano/francese, francese/italiano* (First edition 1973), Torino: SEI.
- Gachon, J.B. 1881. *Dictionnaire mpongwè-français précédé des principes de la langue mpongwè*. Paris.

Galley, S. 1964. *Dictionnaire fang-français et français-fang, suivi d'une grammaire fang*, Neuchâtel: Henri Messeiller.

GDX: Pahl, H.W. et al. (Eds.). 1989. *The Greater Dictionary of Xhosa (isiXhosa/English/Afrikaans)*, Volume 3: Q to Z, Alice: University of Fort-Hare.

German-Malagasy 1994. Henning Bergenholtz in Zusammenarbeit mit Suzy Rajaonarivo, Rolande Ramasomanana, Baovola Radanielina sowie Jürgen Richter-Johanningmeier, Eckehart Olszowski, Volker Zeiss unter Mitarbeit von Sabine Stegemaann, Hantanirina Ranaivoson, Raymonde Ravololomboahangy und Mavotiana Razafiarivony: *Deutsch-Madagassisches Wörterbuch /Rakibolana Alema-Malagasy*. Antananarivo: Tsipika/Moers: aragon 1994.

Gove, P.B. (Ed.). 1961. *Webster's Third New International Dictionary of the English Language*. 2 volumes, London: G. Bell & Sons / Springfield: Merriam-Webster.

Grundy, Marie-Hélène Corréard-Valerie (Ed.). 1994. *Oxford-Hachette French Dictionary (French-English/English-French)*, Oxford: Hachette Oxford University Press.

GW: Eksteen, L. C. (Ed.). 1997¹⁴. *Groot Woordeboek/ Major Dictionary*, Cape Town: Pharos.

GW: Kritzinger, M. S. B. et al. (Eds.). 1986¹³. *Groot Woordeboek. Afrikaans-Engels/Engels- Afrikaans*, Pretoria: Van Schaik.

HAT: Odendal, F.F. et al. 1985. *Verklarende Handwoordeboek van die Afrikaans Taal*, Johannesburg: Perskor.

HAT: Odendal, F. F. and R. H. Gouws. 2000⁴. *Verklarende Handwoordeboek van die Afrikaans Taal*, Midrand: Perskor.

Largeau V. 1901. *Encyclopédie Pahouine*. Eléments de grammaire et dictionnaire français-pahouin, Paris: E. Leroux. 699 P.

Larousse de poche. 1988, Paris: Librairie Larousse.

LDOCE: *Longman Dictionary of Contemporary English*. 1987. New Edition, London: Longman.

LDOCE: Summers, D. (Ed.). 1995³. *Longman Dictionary of Contemporary English*, Harlow: Longman.

Le Micro Robert de Poche. Dictionnaire d'apprentissage du français. Nouvelle Edition dir. par A. Rey, Montréal: A. DicoRobert INC.

Le Robert Junior Illustré. 1999². dir. par Sophie Chantreau-Razumiev et Laurence Laporte, Paris: Dictionnaire le Robert.

Lejeune L. 1892. *Dictionnaire français-fang ou pahouin*, précédé de quelques principes grammaticaux sur cette même langue, Paris. A. Faivre et H. Teillard, VIII-347 P.

Mabile, A & H Dieterlen, 1961. *Southern Sotho-English Dictionary*, Morija Basutholand: Morija Sesuto Book Depot.

Malagasy-German 1991. Henning Bergenholtz in Zusammenarbeit mit Suzy Rajaonarivo, Rolande Ramasomanana, Baovola Radanielina sowie Jürgen Richter-Johanningmeier, Eckehart Olszowski, Volker Zeiss unter Mitarbeit von Hantanirina Ranaivoson, Nicole Rasoarimanana, Raymonde Ravololomboahangy und Mavotiana Razafiarivony: *Rakibolana Malagasy-Alema/Madagassisch-Deutsches Wörterbuch*. Antananarivo: Leximal/Moers: aragon 1991.

Manchon, J. C. 19515. *Cassell's French-English English-French Dictionary*, New York: Funk & Wagnalls Company.

Marichelle, C. 1900. *Dictionnaire français-vili*, Loango: Imprimerie de la Mission.

Marling. 1872. *Dictionnaire fang-français*. New York.

Marolli Furga Gornini, G. 1972². *Dizionario Technico Italiano-Englese/Technical Dictionary English-Italian*, Firenze: Le Monnier Editore

Martrou, L. 1924. *Lexique FÂN-FRANÇAIS*. Procure Générale (des Pères du St Esprit) Abbeville, Paris: Imprimerie Paillard, 137p.

M-HDSTT: Sybil, P. Parker (Ed.). 1994⁵. *McGraw –Hill Dictionary of Scientific and Technical Terms*, New York/San Francisco/Washington D.C.: McGraw –Hill, Inc.

ND: Martin, W., G. A. J. Tops, et al. 1986. *Van Dale Groot Woordenboek Nederlands-Engels (ND)*. Van Dale Lexicografie bv Utrecht/Antwerpen.

Nouveau Petit Larousse. 1971, Paris: Librairie Larousse.

NW: De Villiers, M. et al. 1987⁷. *Nasionale Woordenboek*, Cape Town: Nasau.

OALD: Crowther, J. (Ed.). 1995⁵. *Oxford Advanced Learner's Dictionary of Current English*, Oxford: Oxford University Press.

OALD: Wehmeier, S. (Ed.). 2000⁶. *Oxford Advanced Learner's Dictionary of Current English*, Oxford: Oxford University Press.

Pearsall, J. (Ed.) 1999¹⁰. *Concise Oxford Dictionary*, Oxford: Oxford University Press.

Pharos Woordeboeke/Dictionaries 5 in 1. 2000. Johannesburg: Pharos and Logos Information Systems.

Pietzschke, F. et al 1964⁵. *The New Michaelis* (Illustrated Dictionary), Volume 1 (English-Portuguese), São Paulo: Edições Melhoramentos.

PLI: *Petit Larousse Illustré*. 1998. Paris: Larousse.

Raponda-Walker, A. & R. Sillans. 1961. *Les plantes utiles du Gabon: essai d'inventaire et de concordance des noms vernaculaires et scientifiques des plantes spontanées et introduites du Gabon*, Paris: Lechevalier.

Raponda-Walker, A. 1930/1934. *Dictionnaire mpongwè-français, suivi d'éléments de grammaire*, Metz: Imprimerie de la Libre Lorraine.

-s.a. *Dictionnaire getsogo-français/français-getsogo*. Typescript.

Robert, P. 1976. *Dictionnaire alphabétique et analogique de la langue française*. dir. par A. Rey, Paris: Société du Nouveau Littré.

Sinclair, J. (Ed.). 2001³. *CollinsCOBUILD English Dictionary for Advanced Learners*, London: HarperCollins.

Van Mansum, C.J. 1959. *Elsevier's Dictionary of Building Construction (America English/French-Dutch-German)*, The Hague: Elsevier Publishing Company.

Van Warmelo, N.J. 1989. *Venda Dictionary: Tshivenda-English*, Pretoria: J.L. van Schaik.

Viellard, T (Ed.).1995². *Dictionnaire Universel*. AUELF-EDICEF, Coll. "Universités francophones" de l'UREF, Paris: Hachette-Edicef.

WBD: *World Book Dictionary*. 1986. Chicago

Webster's New International Dictionary. 1909. London: G. Bell & Sons / Springfield: G & C Merriam.

Other literature

- Adam, J. 1954. *Grammaire composée mbede-ndumu-duma*, Brazzaville: Institut d'Étude Centrafricaines.
- Alberts, M. 1997. "Lexicographic Needs Assessment". *Lexicographic Consultative Meeting*: 7-15. PanSALB. Holiday Inn Johannesburg International Airport. 31 October 1997.
- 1999- "Terminology in South Africa". *Lexikos* 9: 18-35.
- Alexandre P. 1961. "Problèmes des états négro-africains à l'heure de l'indépendance". 2: 69-91.
- Al-Ajmi, H. 2001. "The Role of the Introductory Matter in Bilingual Dictionaries of English and Arabic". *Lexikos* 11: 60-70.
- Al-Kasimi, A M. 1977. *Linguistics and Bilingual Dictionaries*, Leiden: E.J. Brill.
- Ambouroué-Avaro, J. 1981. *Un peuple gabonais à l'aube de la colonisation*, Paris: Karthala. Présence Africaine.
- Barreteau, D. (Ed.). 1978. *Inventaire des études linguistiques sur les pays de l'Afrique Noire d'expression française et sur Madagascar*, Paris: CILF.
- Barnbrook, G. 1996. "Language and Computers: A Practical Introduction to the Computer Analysis of Language". McEnery and Andrew Wilson (Eds): *Edinburgh Textbooks in Empirical Linguistics*, Edinburgh: Edinburgh University Press.
- Bendor-Samuel, J. 1996. "African Languages". Daniels, P., T. and W. Bright. (Eds.). *The World's Writing Systems*: 689-691. New York/Oxford: Oxford University Press.
- Bennett, P.R. 1986. "Grammar in the lexicon: two Bantu cases" *Journal of African Languages and Linguistics* 8 (1): 1-30.
- Benson, M., Benson, E., and R. Ilson. 1986. *Lexicographic Description of English* (Studies in Language Companion Series, Volume 14), Amsterdam and Philadelphia: John Benjamins.
- Bergenholtz, H., and S. Tarp. 1995. *Manual of Specialised Lexicography*, Amsterdam: John Benjamins.

Bergenholtz, H., and S. Tarp. 2002. "Die moderne lexicographische Funktionslehre. Diskussionsbeitrag zu neuen und alten Paradigmen, die Wörterbücher als Gebrauchsgegenstände verstehe". *Lexicographica* (2002: to appear).

Bergenholtz, H., S. Tarp & H. E. Wiegand. 1999. "Datendistributionsstrukturen, Makro- und Mikrostrukturen in neueren Fachwörterbüchern". Hoffmann, L., H. Kalverkämper, H. E. Wiegand, together with Ch. Galinski, and W. Hüllen. *Fachsprachen. Ein Internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft / Languages for Special Purposes. An International Handbook of Special-language and Terminology Research: 1762-1832*. Berlin/New York: Walter de Gruyter.

Bergenholtz, H. 2001. Proskription, oder: So kann man dem Wörterbuchbenutzer bei Textproduktionsschwierigkeiten am ehesten helfen. In: *Sprache im Alltag. Beiträge zu neuen Perspektiven in der Linguistik. Herbert Ernst Wiegand zum 65. Geburtstag gewidmet*. Hrsg. von Andrea Lehr/Matthias Kammerer/Klaus-Peter Konderding/Angelika Storrer/Caja Thimm/Werner Wolki. Berlin/New York: de Gruyter 2001, 499-520.

Biton, A. 1903. *Cantiques endumu-ambété-akota-alimi*, Mission Catholique de Brazzaville-Franceville. Nantes: Imprimerie Bourgeois. 188 p.

-1907- *Dictionnaire français-ndumu et ndumu-français, précédé d'éléments de grammaire*, Nantes: Imprimerie Dupas et Cie. 254 p.

-1962- *Kateçism Ndumu*, Rome: Société St Pierre Claver. 124 p.

Blanchon, J. A. 1984. "Présentation du Yi-lumbu dans ses rapports avec le Yi-punu et le Ci-vili à travers un conte traditionnel", *Pholia Revue du Laboratoire de Phonétique et Linguistique Africaine* 1:7-35.

-1997-. "Les formes nominales de citation à préfixe haut en pounou (Bantu b43)". *Journal of African Languages and Linguistics* 18(2): 129-138.

Dictionnaire informatisé du pounou (4272 lemmes pour le moment, qui contient toutes les étymologies disponibles).

Blanchon, J. A. and F. Nsuka Nkutsi. 1984. "Détermination des classes tonales des nominaux en Civili, Isangu et Inzebi", *Pholia Revue du Laboratoire de Phonétique et Linguistique Africaine* 1:37-45.

Bodinga-bwa-Bodinga, S. and L.J. van der Veen. 1990. "Plantes utiles des Evia". *Pholia Revue du Laboratoire de Phonétique et Linguistique Africaine* 8: 26-65.
(in preparation) *Dictionnaire gevia-français*.

Bogaards, P. 1996. "Dictionaries for Learners of English". *International Journal of Lexicography* 4 (9): 277-317. Oxford: Oxford University Press.

Breedveld, A. 1997. "Paul P. De Wolf, *English-Fula Dictionary (Fulfulde, Pulaar, Fulani)*, a multidialectal approach. 3 volumes. (Sprache und Oralität in Afrika, 8) Berlin:Dietrich Reimer 1995. Approximately cxxx + 988, 1106, and 1110 pp. DM 340". (Review). *Journal of African Languages and Linguistics* 18(2): 177-181.

Bureau of the WAT. 1997-1998. *Activities of the Bureau of the Woordeboek van die Afrikaanse Taal* (WAT), Stellenbosch: Bureau of the WAT.

-1999- *Study guide of the Woordeboek van die Afrikaanse taal* (WAT). Unpublished course notes, Stellenbosch: Bureau of the WAT.

Busane, M. 1990. "Lexicography in Central Africa: the User Perspective, with Special Reference to Zaïre". Hartmann, R.R.K. (Ed.) (1990): *Lexicography in Africa*: 19-35, Exeter: University of Exeter Press.

Carpentier de Changy, H. & Voltz, M. 1990. "Alphabet Scientifique des Langues du Gabon (A.S.G)"(Scientific Alphabet of Gabonese languages, SAG), *Revue Gabonaise des Sciences de l'Homme* 2:113-115.

Carstens, A. 1997. "Issues in the Planning of a Multilingual Explanatory Dictionary Of Chemistry for South African Students". *Lexikos* 7: 1-24.

-1998- "Science through Sepedi: Is Terminologisation a Worthwhile Venture?". *Lexikos* 8: 1-17.

Chaffey, W. 1992. "Culture-specific Elements in Translation". Lewandowska-Tomaszczyk, B. and M. Thelen (Eds). *Translation and Meaning, Part 2*: 147-153, Maastricht: Universitaire Pers.

Chumbow, B. S. 1990. "The place of the Mother Tongue in the National Policy on Education". E. N. Emenanjo (Ed.) 1990. *Multilingualism, Minority Languages and Language Policy in Nigeria*: 61-72, Agbor: Central Books in Collaboration with the Linguistic Association of Nigeria.

CICIBA, 1997. *Rapport du Séminaire sur la lexicographie Bantu*, Rapport non publié, Libreville: CICIBA.

Courbon, A. 1908. *Elément et Manuel de conversation. Lexique*.

Cowie, A. P. 1987. "Syntax, the Dictionary and the Learner's Communicative Needs".
Cowie, A. P. (Ed.). *The Dictionary and the Language Learner*: 183-192, Tübingen:
Niemeyer.

-1999-. *English Dictionaries for Foreign Learners. A History*, Oxford:
Oxford University Press.

Crystal, D. 1986. "The Ideal Dictionary, Lexicographer and User". Ilson, R. (Ed.) 1986:
72-81.

-1992- *An Encyclopedic Dictionary of Language and Languages*. Oxford:
Blackwell Publishers.

Dahin, (R.P.). 1891. *Catéchisme en langue adouma* (Haut-Ogooué) = *mambo ma ndjambi ghu evovili si a tshenge a baduma*, Rixheim: Imprimerie A. Sutter. 136 p.

Dell, F., Hirst, D. and J.-R. Vergnaud (Eds.). 1984. *Forme sonore du langage*. Paris.
Hermann.

Deschamps, H. 1962. *Traditions orales et archives au Gabon*. Paris. Berger-Levrault.

De Schryver, G.-M. and D. J. Prinsloo. 2000. "The Concept of "Simultaneous Feedback":
Towards a New Methodology For Compiling Dictionaries". *Lexikos 10*: 1-31.

De Wolf, P. P. 1971. *The Noun Class System of Proto-Benue-Congo*. The Hague and
Paris: Mouton.

Dodo-Bounguenza, E. 2002. "Les langues du Gabon, le point en 2001". *Le Gabon et
l'UNESCO, Revue d'information 2*: 33-39. Libreville: Commission Nationale Gabonaise
pour l'UNESCO.

Doke, C.M. and D. T. Cole. 1963. *Contribution to the History of Bantu Linguistics*.
Johannesburg: Witwatersrand University Press.

Doneux, J. L.-1967-: *Questionnaires d'enquête linguistique* (Greenberg-Tervuren-
Welmers), Dakar: Université de Dakar.

Drame, A. 2000. ForeignWords as Problems in Standardisation/Lexicography: English
and Afrikaans Loan-words in isiXhosa. *Lexikos 10*: 231-241.

Dressler and O. E. Pfeiffer (Eds.), *Phonologica*: 111-19, Innsbruck: Institut für
Sprachwissenschaft.

Dubois-Charlier, F. 1997. "Review of the Oxford-Hachette French Dictionary".
International Journal of Lexicography, Volume 10(4): 311-329.

- Emejulu, J.D. 2000. "Lexicography, an Economic Asset in Multilingual Gabon". *Revue Gabonaise des Sciences du Langage/Gabonese Journal of the Language Sciences 1*: 51-69.
- Emejulu (Ed.), J.D. 2001. *Éléments de lexicographie gabonaise Tome I*, New York: Jimacs-Hillman Publishers.
- Emejulu J. D. and Y. Nzang- Bie. 1999a. "Linguistic Perspectives in Gabon". *Colloquium. Grand Forks*. University of North Dakota, SIL, Inc.
-1999b-. "Initial Language Development". *Explaining Multilingual Education: Information on Some Tough Questions*: 39-65.
- Emejulu, J. & Pambo Loueya F. 1990. "Yilumbu". *Revue Gabonaise des Sciences de l'Homme 2*:197-201.
- Fellmann, J.A. and J.A. Fishman. 1977. "Language Planning in Israel: Solving Terminological Problems". Rubin, J. et al. (Eds.) 1977: *Language Planning Processes*: 79-95, The Hague: Mouton.
- Fontaney, L. 1980. "Le Verbe". Nsuka-Nkutsi, F. (Ed.). *Éléments de description du Punu*: 51-144, Lyon: PUL.
- Gachon, J.B. 1891. *Bible gnango ine agamba mi re tendo pa gou'ejango j'agnambie ji felio né TESTAMAN NOUNGOU NI TESTAMAN GNONA gou'inongo gni mpongoue*, Sente-Maria yi Gabon, Freiburg im Breisgau:Herber B. Libr. Edit. Pontifical.
- Gallardo, A. 1980. "Dictionaries and the Standardisation Process". Zgusta, L. (Ed.). 1980. *Theory and Method in lexicography*: 59-69, Columbia: Hornbeam Press.
- Galley, S. 1889. *Nteni osi nteni Fañwe*, Talagouga: Imprimerie de la Mission.
- Garnier, A. 1897. *Katesisa i gheghe nesi ma loghi ma dzambi mu mbembu i-lumbu*, Loango: Imprimerie de la Mission.
-1900-. *Syllabaire i-lumbu keti mi ganda mio mi teti mi ranganga mu mbembo i lumbu*, Loango: Imprimerie de la Mission.
-1904-. *M'ambu ma nzambi mo make mu katesisa*, Loango: Imprimerie de la Mission.
- Goldsmith, J. 1990. *Autosegmental and Metrical Phonology*, Oxford/Cambridge: Blackwell Publishers.
- Gouws, R. H. & Prinsloo, D. J. 1997. "Lemmatisation of Adjectives in Sepedi". *Lexikos 7* : 45-57.

Gouws, R. H. & Prinsloo, D. J. 1998. "Crosss-Referencing as a Lexicographic Device" *Lexikos 8* : 17-36.

Gouws, R. H. & Ponelis, F. A. 1992. "The Development of Afrikaans and the Lexicographical Tradition". Zgusta, L. (Eds.): *History, Languages and Lexicographers*: 77-164. Tübingen: Max Niemeyer.

Gouws, R. H. 1989. *Leksikografie*. Pretoria/Kaapstad: Academica.

-1990- "Information categories in Dictionaries, with Special Reference to Southern Africa". Hartmann, R.R.K.(Ed.) (1990): *Lexicography in Africa*: 52-65, Exeter: University of Exeter Press.

-1996a- "A Sequence for meeting Lexicographic Needs ". *Lexicography as a financial asset in a multilingual South Africa*: 97-108. Language Planning Report No.5.3, October 1996, Seminar held at the Bureau of the WAT, University of Stellenbosch, 12 April 1996. Department of Art, Culture, Science and Technology (Ed.).

-1996b- "Bilingual Dictionaries and Communicative Equivalence for a Multilingual Society". *Lexikos 6*: 15-31.

-1997- "Lexicographic Planning". *Lexicographic Consultative Meeting*:

16-22, PanSALB. Holiday Inn Johannesburg International Airport, 31 October 1997.

-1999- *M. Phil. in Lexicography*. Class notes. Lexicography course. Department of Afrikaans and Dutch, University of Stellenbosch.

-1999a- *Equivalent Relations in Translation Dictionaries*. Class notes. Lexicography course. Department of Afrikaans and Dutch. University of Stellenbosch.

-1999b- *A theoretically Motivated Model for the Lexicographic Processes of the National Lexicographic Units*. Research report submitted to the Pan South African Language Board.

-1999c- "Mediostructural Representation, Textual Condensation and User-Orientation in the WAT X ", *Lexicographica 15*: 4-37. Tübingen: Max Niemeyer.

-2000- "Toward the Formulation of a Metalexigraphic Founded Model For the Lexicographic Units in South Africa". *Wörterbücher in Der Diskussion IV*: 109-133, Tübingen: Max Niemeyer Verlag.

-2001- "The Use of an Improved Access Structure in Dictionaries". *Lexikos 11*: 101-111.

- 2001a- “Lexicographic Training: Approaches and Topics”. Emejulu J. D. (Éd.). 2001: *Éléments de lexicographie gabonaise Tome I*: 58-94, New York: Jimacs-Hillman Publishers.
- 2002-“Using a framestructure to accommodate cultural data”. Unpublished paper presented at the 2002 AFRILEX Conference.
- 2002a- “Niching as Macrostructural Procedure”. *Lexikos 12*: 133-158.
- 2002b-“Issues regarding the comment on semantics in bilingual dictionaries dealing with closely related languages”. Unpublished paper.

Greenbaum, S., C. F., Meyer and J. Meyer. 1984. “ The Image of the Dictionary for American College Students”, *Dictionaries 6*: 31-52.

Grimes, B.F. 1996¹³. *Ethnologue*, Dallas : Summer Institute of linguistics Inc.

Guthrie M. 1953. *The Bantu Languages of Western Equatorial Africa*, Oxford: Oxford University Press.

Haiman, J. 1980. “Dictionaries and Encyclopedias”, *Lingua 50*: 329-57.

Hanks, P. 1979. “To What Extent Does a Dictionary Definition Define?”. Hartmann, R.R.K. (Ed.). 1979. *Dictionaries and their Users: Proceedings of the 1978 BAAL Seminar on Lexicography*: 32-38, Exeter: University of Exeter.

Hartmann, R.R.K. (Ed.). 1979. *Dictionaries and their Users: Proceedings of the 1978 BAAL Seminar on Lexicography*, Exeter: University of Exeter.

Hartmann, R.R.K. (Ed.). 1984. *LEXeter '83 Proceedings. Papers from the International Conference on Lexicography at Exeter, 9-12 September 1983*, Lexicographica Series 1. Tübingen: Max Niemeyer.

Hartmann, R.R.K. (Ed.) 1990. *Lexicography in Africa. Progress Reports from the Dictionary Research Centre Workshop at Exeter, 24-26 March 1989*, Exeter Linguistic Studies Volume. 15, Exeter: University of Exeter Press.

Hartmann, R.R.K. (Ed.) 1989. *Sociology of the Dictionary User: Hypotheses and Empirical studies*, Hausmann, F. J. et al. (Eds.). 1989-1991. *Wörterbücher. Ein internationales Handbuch zur Lexikographie/ Dictionaries. An International Encyclopedia of Lexicography/Dictionnaires. Encyclopédie Internationale de Lexicographie*: 102-111. Berlin: Walter de Gruyter.

-1992- “Lexicography, with Particular reference to English Learners' Dictionaries”, *Language Teaching 25 (3)*: 151-159.

Hartmann, R.R.K. 1992. *Lexicography, with Particular Reference to English Learners' Dictionaries. Language teaching, 25:3*, 151-159.

Hartmann, R.R.K. 1992. Lexicography, with Particular Reference to English Learners' Dictionaries. *Language teaching*, 25:3, 151-159.

Hausmann, F. J. & H. E. Wiegand. 1989. "Component Parts and Structures of General Monolingual Dictionaries: A Survey", Hausmann, F. J. et al. (Eds.). 1989-1991. *Wörterbücher. Ein Internationales Handbuch zur Lexikographie/ Dictionaries. An International Encyclopedia of Lexicography/Dictionnaires. Encyclopédie Internationale de Lexicographie*: 328-360, Berlin: Walter de Gruyter.

Hausmann, F. J., Reichmann, O., Wiegand, H. E. and Zgusta, L.(Eds.). 1989-1991. *Wörterbücher. Ein Internationales Handbuch zur Lexikographie/ Dictionaries. An International Encyclopedia of Lexicography/Dictionnaires. Encyclopédie Internationale de Lexicographie*. 3 volumes; 3355 pages, Berlin: Walter de Gruyter.

Hausmann, F. J. & R. O. Werner. 1991. "Spezifische Bauteile und Strukturen zweisprachiger Wörterbücher: eine Übersicht. ". Hausmann, F. J. et al. (Eds.): (1989-1991), *Wörterbücher. Ein Internationales Handbuch zur Lexikographie/ Dictionaries. An International Encyclopedia of Lexicography/Dictionnaires. Encyclopédie Internationale de Lexicographie*: 2729-2769, Berlin: Walter de Gruyter.

Hausmann, F. J. 1981. "Wörterbücher und Wortstatzlernen". *Linguistik und Didaktik* 45/46: 71-78.

Hausmann, F. J. 1990. "De quoi se compose l'article du dictionnaire de langue? L'importance du sous-adressage" T. Maguy and J. Zigány (Eds.): *BudaLex '88 Proceedings*: 59-66. Papers from the EURALEX Third International Congress, Budapest: Akadémiai Kiadó.

Hombert, J. M. 1990a. "Les langues du Gabon : État des connaissances". *Revue gabonaise des Sciences de l'Homme* 2 : 29-36.

1990b. "Atlas Linguistique du Gabon ". *Revue gabonaise des Sciences de l'Homme* 2: 37-42.

Hombert, J. M. et A.-M. Mortier. 1990. "Bibliographie des langues du Gabon". *Revue gabonaise des Sciences de l'Homme* 2 : 335-355. Mise à jour de la bibliographie publiée dans Pholia. *Revue du Laboratoire de Phonétique et Linguistique Africaine* 1. 1984.

Horton Emiko Hirose and Bruce W, Horton. 1996. "The Slimline Kanji Dictionaries. *International Journal of Lexicography* 1(9): 132-146. Oxford: Oxford University Press.

Householder, F.W. and S. Saporta. 1962. *Problems in Lexicography*, Bloomington: Indiana University Press.

Ilson, R. F. (Ed.). 1985. *Dictionaries: Lexicography and Language Teaching*. ELT Documents 120. Oxford: Pergamon Press.

-1986- *Lexicography: An Emerging International Profession*, Manchester: Manchester University Press.

Jacot, H. 1894. *Ezangô elônga zi mpôngwe gw'itangula nl'itenda*. Premier livre de lecture en mpongwè, New York: Société américaine des Traités Religieux.

Jacquot, A. 1978. "Le Gabon". D. Barreteau (1978) *Inventaire des études linguistiques sur les pays de l'Afrique Noire d'expression française et sur Madagascar*: 493-503, Paris: CILF.

Katamba, F. 1989. *An Introduction to Phonology*, London/New York: Longman.

Kavanagh, K. 2000. "Words in a Cultural Context", *Lexikos* 10: 99-118.

Kaye, J., Lowenstamm, J. and J.-R. Vergnaud. 1984. "De la syllabicité". Dell, F., Hirst, D. and J.-R. Vergnaud (Eds.): *Forme sonore du langage*: 123-159. Paris. Hermann.

Kidda Awak. 1990. "Historical Background, with Special Reference to Western Africa " Hartmann, R.R.K.(Ed.) (1990): *Lexicography in Africa*: 8-18. Exeter. University of Exeter Press.

Klein, M. 1993. *Vers une approche substantielle et dynamique de la constituance syllabique*. Thèse de doctorat, Paris: Université de Paris VIII.

Kobakhidze, T. A. and A. E. Beliaev. 1974. "Gabon". *Great Soviet Encyclopedia*: 155-159, Volume 5, New York and London: Macmillan.

Kromann, H.-P., T. Riiber, P. Rosbach. 1984a. "Active" and "Passive" Bilingual Dictionaries. The Ščerba Concept Reconsidered. Hartmann, R. R. K. (Ed.). 1984. *LEXeter '83*: 207-215, Tübingen : Max Niemeyer.

Kromann, H.-P., T. Riiber, P. Rosbach. 1984b. Überlegungen zu Grundfragen der zweisprachlichen Lexikographie. Wiegand, H. E. (Ed.). *Studien zur neuhochdeutschen Lexikographie*. Germanistische Linguistik 3-6/81: 159-238. Hildesheim: Georg Olms.

Kromann, H.-P., T. Riiber, P. Rosbach. 1991. "Grammatical Constructions in Bilingual Dictionaries". Hausmann, F. J. et al. (Eds.), Volume III: 2770-5.

Kromann, H.-P., T. Riiber, P. Rosbach. 1991b. "Principles of Bilingual Lexicography". Hausmann, F. J. et al. (Eds.), Volume III: 2711-28.

Kwenzi-Mikala, J. T. 1980. *Contes punu du Gabon: Etude linguistique et sémiologique*, Thèse de doctorat 3^{ième} cycle, Lyon: Université Lumière Lyon 2, 693 p.

-1988- "L'identification des unités-langues bantu gabonaises et leur classification interne". *Muntu* 8: 54-64.

-1988a- "Quelques remarques sur la transcription des textes oraux en langues africaines". *Pholia Revue du laboratoire de Phonétique et Linguistique Africaine* 3: 207-211.

-1989a- "Contribution à l'inventaire des parlers Bantu du Gabon". *Pholia Revue du laboratoire de Phonétique et Linguistique Africaine* 2:103-110.

-1989b- "Contribution à l'analyse des emprunts nominaux du yipunu au français". *Pholia Revue du laboratoire de Phonétique et Linguistique Africaine* 4:157-170.

-1990- "Quel avenir pour les langues gabonaises?" *Revue Gabonaise des Sciences de l'Homme* 2 : 121-124.

-1990a- "L'anthroponymie chez les Bapunu du Sud-Gabon". *Pholia revue du laboratoire de Phonétique et Linguistique Africaine* 5:113-120.

-1998a- "Parlers du Gabon". Raponda-Walker, A.1998: *Les langues du Gabon*: 217, Libreville: Éditions Raponda-Walker.

-1998b- *Mumbwanga*. Libreville: Editions Raponda-Walker.

-1998c- "Localisation des parlers du Gabon". Raponda-Walker, A.1998: *Les langues du Gabon*: 215-216. Libreville: Édition Raponda-Walker.

Landau, S.I. 1984. *Dictionaries. The art and craft of lexicography*, New York: C. scribner's Sons/Cambridge: O.U.P.

Lehrer, A. 1974. *Semantic Fields and Lexical Structures*, Amsterdam/London: North-Holland Publishing Company.

Lombard, F.J. 1994. "Lexicographer, Linguist and Dictionary User: An Uneasy Triangle?", *Lexikos* 4: 204-214.

Louw, P., A. 1998. *Kriteria vir 'n standaard vertalende woordeboek*, Unpublished M.A. thesis, Stellenbosch: University of Stellenbosch.

-1999- "Access Structure in a Standard Translation Dictionary", *Lexikos* 9: 108-118.

-2000- “An Integrated and Semasiological and Onomasiological Presentation of Semantic Information in General Monolingual dictionaries as Proposed by H. E. Wiegand's Semantics and Lexicography”, *Lexikos 10*: 119-137.

Lyons, J. 1977. *Semantics. Volume 1*. Cambridge: Cambridge University Press.

Mann, M. 1990. “A Linguistic Map of Africa”. Hartmann, R.R.K.(Ed.). 1990: *Lexicography in Africa*: 1-7. Exeter, University of Exeter Press.

Martin, W. 1996. “Lexicographic Resources in a Multilingual Environment: An orientation”. *Lexicography as a financial asset in a multilingual South Africa*: 9-24, Pretoria: Department of Arts, Culture, Science and Technology (ed.).

Mavhungu, K. N. 2000. “Of Witches and Witch-Doctors: Disentangling African specialists in the South African Far-North ”, A paper presented to the the Pan African anthropological Association Tenth Annual Conference held at the University of Bouake, cote d'Ivoire on 14th – 17th August 2000.

Mavoungou, P.A. 1998. *Esquisse phonologique et morphologique du ndafa parlé à Mandjaye*. Mémoire de Maîtrise, Libreville: Université Omar Bongo.

-2000- “A Frequency List of the Yilumbu Language”, Unpublished study conducted at the Bureau of Woordeboek van die Afrikaanse Taal (WAT), Stellenbosch.

-2001a- “Macro- and Microstructural Issues in Mazuna Lexicography”, *Lexikos 11*: 122-138.

-2001b- “La Mondialisation et la Lexicographie Trilingue ou Plurilingue au Gabon”. Emejulu J. D. (Éd.). 2001: *Éléments de lexicographie gabonaise Tome I*: 160-183, New York: Jimacs-Hillman Publishers.

-2002- “Synopsis Articles in the Planning of a Trilingual Dictionary: Yilumbu-English-French ” to appear in *Lexikos 12*: 181-200.

-2002a- “Sociolinguistic and linguistic aspects of borrowing in Yilumbu” to appear.

In preparation. “Labelling Issues in the Dictionnaire Français-Mpongwé”.

Mavoungou, P.A., T. Afane Otsaga and G.-R. Mihindou. 2002. “Dictionaries Compiled with French and the Reproduction of the Gabonese Cultures”. Paper presented at the Seventh International Conference of the African Association for Lexicography, organized by the Dictionary Unit of South African English, Rhodes University (Grahamstown), 8-10 July 2002.

Mayer, R. & M. Voltz. 1990. “Dénominations ethnoscientifiques des langues et des ethnies du Gabon”. *Revue Gabonaise des Sciences de l'Homme 2*: 43-53.

- Mayer, R. 1987. "Langues des groupes Pygmées du Gabon: un état des lieux. *Pholia. revue du Laboratoire de Phonétique et Linguistique Africaine* 2: 119-127.
- Mayer, R. 1990. "Histoire de l'écriture des langues du Gabon". *Revue Gabonaise des Sciences de l'Homme* 2 : 65-91.
- Mba-Nkoghe, J. 1981. *Phonologie et classes nominales en fang* (Langue bantoue de la zone A). Thèse de 3^{ième} cycle, Paris: Université Sorbonne Nouvelle.
- 1991a- "Le Gabon linguistique". *Littérature Gabonaise* 105. Notre Librairie: 20-23.
- 1991b- "Place et utilité des langues gabonaises dans l'activité nationale". *Message* 5: 18-22, Bulletin d'information et de liaison du Ministère de l'Éducation Nationale.
- Mba-Nzue, N. 1981. *Esquisse phonologique du mvaï* (parler de Minvoul). Mémoire de licence, Libreville: Université Omar Bongo.
- Mbiti, J.S. 1969. *African Religions and Philosophy*, London: Heinemann.
- McArthur, T. 1986. *Worlds of reference*, Cambridge: Cambridge University Press.
- Meeussen, A.E. 1965. *Reconstructions grammaticales Bantu* (Traduction française), Tervuren: MRAC.
- Metegue N'nah, N. 1984. *Lumière sur points d'ombre* (contribution à la connaissance de la société gabonaise), Langres: Imprimerie Guéniot.
- Meyo-Me-Nkoghé, D. 1997. "Les professions de foi des élites politiques de politiques de l'Afrique Equatoriale française de 1946 à 1958". *iboogha* 1: 59-81, Libreville: Les Editions du silence.
- Mini, B. M. 1995. "Lexicographical Problems in isiXhosa". *Lexikos* 5: 40-56.
- Ministère de l'Éducation Nationale, 1991. *Contes du Gabon*, Paris: EDICEF.
- 1999- Rapport Final de la Session de Concertation sur l'Orthographe des Langues Gabonaises, Libreville: Education Nationale.
- Misionarios Hijos del Inmaculado Corazón de María. 1936. *Manual español-pamue y pamue-español*, Madrid: Ed. del Corazón de María, VIII+I+483 p.
- Mission Catholique de Libreville (Vicariat Apostolique de Libreville). 1894. *I kambisa si kretien* = Livre de prières en mpongwè-français-latin, Libreville: Vicariat Apostolique du Gabon, 310 p.

-1948- *Ezango zi chrétien mpongwe-orungu-galoo-nkomi*, Issy-Les-Moulineaux: Presses Missionnaires Imprimerie St Paul, 125 p.

Mouguiama-Daouda, P. 1995. Les dénominations ethnoichtyologiques chez les bantous du Gabon. Thèse de doctorat, Lyon: Université Lyon 2.

Murard, P. (trad.). 1903. *Katsisu i keki i rendilu mu mbembo bis'Sette-Cama* (petit catéchisme), Lyon: Imprimerie Paquet, p.53.

-1903. *Katsisu i neni i rendilu mu mbembo bis'Sette-Cama* (grand catéchisme), Lyon: Imprimerie Paquet, p.135.

Muroni, J.-M. 1989. *Petit dictionnaire bantou du Gabon: français-ndjabi, ndjabi-français*, Paris: L'Harmattan.

Naidailac, L. 1992. *Lexique isangu-français*. Lyon: Université Lyon 2.

In preparation. *Lexique yinzebi-français*.

Nassau, R.H. 1881. *Panwe primer and vocabulary compiled from materials collected by H.M. Adam*, New York, 199p.

Ndinga Koumba Binza, H., S. 2000. *Phonologie du civil de Mayumba* (Langue bantou du Gabon, H12a). Mémoire de Maîtrise, Libreville: Université Omar Bongo.

Ngosemzara Kabuta, S. 1998. "Loanwords in Cilubà ", *Lexikos 8* : 37-64.

Nida, E.A. 1950. "Orthographic Problems in Yipounou". *Bible translator 1*:110-116. Reedited by William A. Smalley et al. 1964:148-155, London: United Bible Societies.

Nong, S. G.-M. De Schryver D.J. Prinsloo. 2002. "Loan Words versus Indigenous Words in Northern Sotho – A Lexicographic Perspective". *Lexikos 12*: 1-20.

Ntsanwisi, H W E. 1985. *Tsonga idioms. A descriptive study*, Braamfontein: Sasavona Publishers and Bookellers.

Nyangone Assam, B. & Mavoungou, P.A. 2000. "Lexicography in Gabon: A Survey", *Lexikos 10*: 252-274.

Nzang Bie, Y. 2001. "Vers une Éducation Multilingue au Gabon: Première Approche", *Revue Gabonaise des Sciences du Langage/Gabonese Journal of the Language Sciences 2*: 17-29.

Ondo-Mebiame, P. 1992. *De la phonologie et de la morphologie du fang parlé à Aboumezok* (langue bantu A. 78). 2 volumes. Thèse de doctorat, Tervuren: Université Libre de Bruxelles.

Osselton, N.E. 1994. "Dialect in General Dictionaries" Hyldgaard-jensen, K. & V. Hjørnager Pederson (Eds.). *Symposium on Lexicography VI*: 103-113 (Proceeding of the Sixth International Symposium on Lexicography May 7-9 1992). *Lexicographica Series Maior 57*, Tübingen: Niemeyer.

Osorio, Z. n.d. *Vocabulary of the Fan language in Western Africa*, London.

Otto, A.N. 1989. *Kriteria vir 'n Afrikaanse aanleerderwoordeboek*. Unpublished doctoral dissertation, Stellenbosch: University of Stellenbosch.

Perron, P. 1964. *Lexique français-ikota*. 2 volumes, Makokou: Mission Catholique.

Ponelis, F. A. 1996. "The Lexicographic Needs of Afrikaans". *Lexicography as a Financial Asset in a Multilingual South Africa*: 27-32, Language Planning Report No.5.3, October 1996, Seminar held at the Bureau of the WAT, University of Stellenbosch, 12 April 1996. Department of Art, Culture, Science and Technology (ed.).

Prinsloo, D. J. & Gouws, R. H. 2000 "The Use of Examples in Polyfunctional Dictionaries", *Lexikos 10*: 138-156.

Prinsloo, D.J. 1992. Lemmatization of reflexives in Northern Sotho, *Lexikos 2*: 178-191.

-1994- "Lemmatization of Verbs in Northern Sotho". *South African Journal of African Languages 14 (2)*: 93-102.

-1996- "The Lexicographic Needs of Pedi". *Lexicography as a Financial Asset in a Multilingual South Africa* :47-52. Language Planning Report No.5.3, October 1996, Seminar held at the Bureau of the WAT, University of Stellenbosch, 12 April 1996. Department of Art, Culture, Science and Technology (Ed.).

-2000- *The Compilation of Electronic Corpora, with Special Reference to the African Languages*. Class notes, Lexicography course, Department of Afrikaans and Dutch, University of Pretoria/University of Stellenbosch.

Puech, G. 1990. "Bekwel". *Revue Gabonaise des Sciences de l'Homme 2*: 127-128.

Quirk, R., Greenbaum, S., and Svartvik, J. 1985. *A comprehensive Grammar of the English language*, London and New York: Longman Inc.

Raponda-Walker, A. 1932. "Alphabet des idiomes gabonais". *Journal de la Société des Africanistes 3(2)*: 305-314.

Raponda-Walker, A. 1932?. “Dénominations astrales au Gabon”. *Bulletin de la Société des Recherches Congolaises* 24: 150-166.

-1932- “Enquête sur l'agriculture noire au Gabon et sur certaines techniques utilisant des produits végétaux”. *Revue de Botanique et d'Agriculture appliquée* 24: 150-161.

-1933- “Les néologismes dans les idiomes du Gabon”. *Journal de la société des Africanistes* 3(2): 305-314.

-1955- “Les idiomes gabonais, Similitudes et Divergences”. *Bulletin de l'Institut d'Etudes centrales africaines* 10: 211-236. Réédité dans *Langues du Gabon*, Editions Raponda-Walker, Classiques Africains, 222 p.

-1998- *Langues du Gabon*, Libreville, Editions Raponda Walker, Classiques Africains, 222 p.

République Gabonaise. 1994. *La constitution gabonaise*. Livre officiel. Loi N°1/94 du 18 mars 1994.

Rey-Debove, J. 1971. *Étude linguistique et sémiotique des dictionnaires français contemporains*, The Hague : Mouton.

Rittaud-Hutinet, C. 1980. “Lexique”. Nsuka-Nkutsi, F. (Ed.). *Éléments de description du Punu*: 193-245, Lyon: PUL.

Roulet, G. 1866. “La rivière Como au Gabon et les populations riveraines” *Annales des voyages t. IV*, Paris, p. 279.

Rubin, J. et al. (Eds.) 1977. *Language Planning Processes*, The Hague: Mouton.

Salerno L. 1999. “Grammatical Information in the Bilingual Dictionary. A Study of Five Italian-French Dictionaries”. *International Journal of Lexicography* 3: 209-222. Oxford: Oxford University Press.

Sarceux, Ch. (nd). *Essai de phonétique*, Paris.

Sledd, J. and W.R. Ebbitt (Eds.). 1962. *Dictionaries and That Dictionary*. Chicago: Scott, Foresman and Company.

Smit, M. 1996. *Wiegand's Metalexicography as a Framework for a Multilingual, multicultural, Explanatory Music Dictionary for South Africa*. Unpublished D.Litt. thesis. Stellenbosch: University of Stellenbosch.

Svensén, B. 1993. *Practical Lexicography. Principles and Methods of Dictionary-making*, Oxford/NewYork: Oxford University Press.

Swanepoel, P. H. 1989. *Only Study Guide for LEKPER-Q*, Pretoria: University of South Africa.

-1990- *Definisies in vakkommunikasie*, Pretoria: Human Sciences Research Council.

Taljad, E. & R. Gauton. 2000. "Supplying Syntactic Information in a Quadrilingual Explanatory Dictionary of Chemistry (English, Afrikaans, isiZulu, Sepedi): A Preliminary investigation" *Lexikos 10*: 191-208.

Tarp, S. 2000. "Theoretical Challenges to Practical Specialised Lexicography" *Lexikos 10*: 189-208.

The International Phonetic Alphabet (revised to 1993, updated 1996). 2001. Published by the Journal of the International Phonetic Association, Cambridge: Cambridge University Press.

Tomaszczyk, J. 1983. "The Culture-Bound Element in Bilingual Dictionaries". Hartmann, R.R.R. (Ed.). *LEXETER '83 Proceedings*: 289-297. Tübingen: Max Niemeyer.

Touré, A. 1990. "L'écriture des langues africaines: évolution et principes méthodologiques". *Revue Gabonaise des Sciences de l'Homme 2*: 55-63.

Van Wyk, E.B. 1995. "Linguistic Assumptions and Lexicographic Traditions in the African Languages". *Lexikos 5*: 82-96.

Watch, G. 1993. *Institut du Christ-Roi Souverain Prêtre*, Paris: Maison Bienheureux Daniel Brotier.

Wiegand, H. E. et Kučera. 1981. "Brockhaus-Wahrig: Deutsches Wörterbuch auf dem Prüfstand der praktischen Lexikologie. II. Teil: 1. Band (A-BT); 2. Band (BV-FZ)", *Kopenhagener Beiträge zur germanistischen Linguistik 18*: 94-217.

Wiegand, H. E. & Kučera, A. 1982. "Brockhaus-Wahrig: Deutsches Wörterbuch auf dem Prüfstand der praktischen Lexikologie. II. Teil: 1. Band (A-BT); 2. Band (BU-FZ); 3. Band (G-JZ)", Wiegand, H.E. 1982. *Studien zur neuhochdeutschen Lexikographie II. Germanistischen Linguistik 3-6/80*. Studien zur neuhochdeutschen Lexikographie II, 285-373.

Whitcut, J. 1986. "The training of Dictionary Users". Ilson, R. (Ed.). (1986): *Lexicography: An Emerging International Profession*: 111-122, Manchester: Manchester University Press.

Wiegand, H.E. 1983. "Synonyms Appearing in Major Alphabetical Dictionaries of Contemporary German". Wiegand, Herbert E. 1999: 113-138.

Wiegand, H.E. 1984. "On the Structure and Contents of a General Theory of Lexicography", Hartmann, R.R.K. (Ed.). *LEXeter '83 Proceedings*: 13-28, Tübingen: Niemeyer.

-1978- "Lexikographische Praxis – vom Standpunkt unterschiedlicher Wörterbuchtypen und Wörterbuchkonzepte", *Zeitschrift für germanistische Linguistik*, 6: 326-330.

-1989- "Aspekte der Makrostruktur im allgemeinen einsprachigen Wörterbuch: alphabetische Anordnungsformen und ihre Probleme". Hausmann, F. J. et al.(Eds.) (1989-1991), 371-409.

-1996- *Zur Einführung*. Wiegand, H. E. (Ed.) 1996: VII-XV.

-1996a- "Über die Mediostrukturen bei gedruckten Wörterbüchern". Zettersten, A. & H. Perdersen (Eds.). *Symposium on Lexicography VII*: 11-43, Tübingen: Max Niemeyer.

-1996b- "Über die Mediostrukturen bei gedruckten Wörterbüchern".

-1996c- "Textual Condensation in Printed Dictionaries. A Theoretical Draft" *Lexikos* 6: 133-158.

-1996d- "Das Konzept der semiintegrierten Mikrostrukturen". *Ein Beitrag zur Theorie zweisprachiger Printwörterbücher*. Wiegand, H.E. (Ed.):1-82.

-1998- *Wörterbuchforschung*, Berlin: Walter de Gruyter.

-1999. *Semantics and Lexicography. Selected Studies (1976-1996)*. Edited by Antje Immken and Werner Wolski, Tübingen: Max Niemeyer.

Wolski, W. 1989. "Das Lemma und die verschiedenen Lemmatypen", Hausmann, F. J. et al. (Eds.). 1989-1991: 360-371.

Yembi Bouka, L. 1995. *Structures phonologiques et structures prosodiques (le modèle bekwel)*. Thèse de doctorat, Tervuren: Université Libre de Bruxelles.

Zabala. 1887. *Vocabulary of the Fang language*, London.

Zgusta, L. 1971. *Manual of lexicography*. The Hague: Mouton.

-1980- "Some Remarks on the Context of Lexicography". Zgusta, L. (Ed.). 1980:3-32.

-1984- "Translational Equivalents and the Bilingual Dictionary". Hartmann, R.R.K. (Ed.). 1984:147-154.

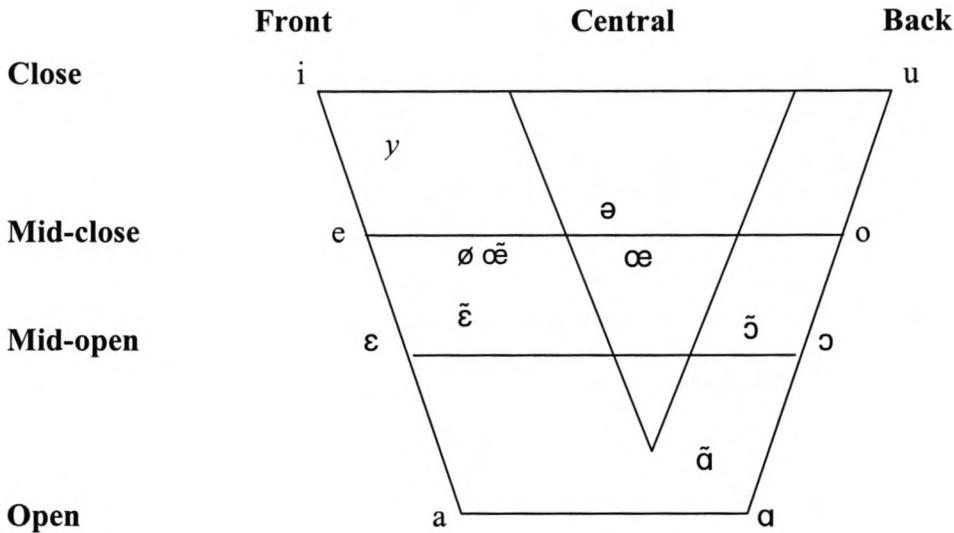
-1987- "Translational Equivalence in a Bilingual Dictionary". *Journal of the Dictionary Society of North America* 9: 1-43, Indiana.

-1989- "The Role of Dictionaries in the Genesis and Development of the Standard", Hausmann, F. J. et al. (Eds.). 1989-1991. *Wörterbücher. Ein Internationales Handbuch zur Lexikographie/ Dictionaries. An International Encyclopedia of Lexicography/Dictionnaires. Encyclopédie Internationale de Lexicographie*: 70-77, Berlin: Walter de Gruyter.

Zgusta, L.(Ed.). 1980. *Theory and Method in Lexicography*, Columbia: Hornbeam Press.
-1992- *History, Languages and Lexicographers*, Tübingen: Max Niemeyer.

Appendices

Appendix 3: French phonemic vowel chart



Appendix 4: French phonetic consonants chart

Places of articulation		Bilabial	Labio-dental	Alveolar	Postalveolar	Palatal	Velar	Uvular
Manner of articulation								
Plosive	Nasal	m		n		ɲ		
	Oral	unvoiced	p		t			k
		voiced	b		d			g
Trill				r				R
Fricative	unvoiced		f	s	ʃ			
	voiced		v	z	ʒ			
Approximant						j		
Lateral approximant				l				

Appendix 5: Yilumbu phonetic vowel chart

	<i>Front</i>		<i>Central</i>	<i>Back</i>		
	<i>Short</i>	<i>long vl</i>	<i>Short long</i>	<i>Short</i>	<i>long</i>	<i>vl</i>
<i>Close</i>	<i>i</i>	<i>i: j</i>		<i>u</i>	<i>u:</i>	<i>ʊ</i>
<i>Mi-clos</i>	<i>e</i>	<i>e: ẽ</i>		<i>o</i>	<i>o:</i>	<i>ɔ̃</i>
<i>Mid-open</i>	<i>ɛ</i>	<i>ɛ: ɛ̃</i>	<i>ə</i>	<i>ɔ</i>	<i>ɔ:</i>	<i>ɔ̃</i>
<i>Open</i>			<i>a a:</i>			

Appendix 6: Yilumbu phonetic consonant chart

Places of articulation		Bilabial	Labio-dental	Alveolar	Postalveolar	Palatal	Velar
Manner of articulation							
Plosive	Nasal	m		n		ɲ	ŋ
	Oral	unvoiced	p	t			k
		voiced	b		d		
Trill				r			
Fricative	unvoiced		f	s	ʃ		
	voiced	β	v	z	ʒ		
Approximant						y	
Affricate	unvoiced					tʃ	
	voiced					dʒ	
Lateral approximant				l			

Appendix 7: Yilumbu prefix table

Participants				
1 st p. Sg. nì +				
2 nd P. Sg. gù +				
1 st p. Pl. tù +				
2 nd P. Pl. dù +				
Classes				
1	mù+	mú+, mù+		
2	bà+	-	-	-
3	mù+		mú+	gù+
4	mì+	-	-	-
5	dì+	-	-	-
6	mà+	-	-	-
7	ì+, yì+	í+, yí+	í+, yí+	í+, yí+
8	bì+	-	-	-
9	N+	í+, yí+	-	-
10	(tsi) N+	tsí+	-	-
11	dù+	dú+	dù+	-
14	bù+	-	bú+	-
15	ù+			
16	và+	-	-	-
17	ò+	-	-	-
18	mù+	-	-	-

Convention: a dash indicates identity with the form given in the preceding column.

APPENDIX A: Yilumbu loans for religious terms

Yilumbu words	Source language	Source language items	Translation equivalents
báteema	French	(nom de) Baptême (prénom)	Baptism; first name
bupáyi	—	Païen	Paganism
dému	—	Démon	Devil
dyáábu	—	Diable	Lucifer, Satan
káteshisa	—	Catéchisme	Catechism
kátoliika	—	Catholique	Catholic
kréti	—	Chrétien	Christian
nzubu Nzâmbi	—	Maison de Dieu	Church, lit. House of God
páyi	—	Païen	Pagan, heathen
sâta	—	Satan	Satan
ukónfésa	—	Confesser	To confess

Convention: a dash indicates identity with the form given in the preceding row.

APPENDIX B: Yilumbu loans referring to political, military and administrative lexical items

Yilumbu words	Source language	Source language items	Translation equivalents of the source language items
bânka	French	Banque	Bank
bufframa	—	Infirmier	Nurse (Medical craft)
dipěyi	—	Payer	To pay (Salary)
dipłoma	—	Diplôme	Diploma
drápu or dirápu	—	Drapeau	Flag
dupělu	—	Appel	Appeal, call
duvhóóta	—	Vote	Vote, balance
frânka	—	Franc CFA	Central African Francs
fúúra	—	(corruption of) Franc	Metrical colonial currency
gálu	—	Gallon	Braid
líkopera	—	Hélicoptère	Helicopter
mónyitera	—	Moniteur	Teacher, schoolmaster
mufírama	—	Infirmier	Nurse
pólisa	—	Police	Police
pólitika	—	Politique	Politics
préésu	—	Prison	Prison, jail
sěfu kántu or shěfu kántu	—	Chef de canton	Canton's chief
sěfu or shěfu	—	Chef	Chief
támpu	—	Tampon	Stamp
ubéyíira	—	Obéir	To obey
úpeera	—	Opérer	To do surgery
upéyi	—	Payer	To pay
uvhóóta	—	Voter	To vote
yfkōla	—	École	School
yipítali	—	Hôpital	Hospital

Convention: a dash indicates identity with the form given in the preceding row.

APPENDIX C: Yilumbu loans referring to names of nationalities

Yilumbu words	Source language	Source language items	Translation equivalents of the source language items	Meaning
Muběmbi	—	Bembe < Bembe	A speaker of Bembe	A speaker of Bembe
Mubéninu	—	Béninois	Beninian	A native of Benin
Mudághuma	—	Dahomey (former name of Benin)	A native or inhabitant of Benin	A native or inhabitant of Benin

Metalexicographical criteria for the compilation of a trilingual dictionary: Yilumbu – English – French

Mukámaruna	—	Cameroun	Cameroon	Cameroones
Mukóngu	—	Congo < Ki. kongo	A speaker of Kikongo	A speaker of Kikongo
Mukúta	—	Kota < Ikota	A speaker of Ikota	A speaker of Ikota
Muláli	—	Lari < Lari	A speaker of Lari	A speaker of Lari
Mulíma	—	Allemand	German	German
Mumáli	—	Malien	Malian	Malian
Mungwénambáangi	—	Bangui	Bangui	A native or inhabitant of the Central African Republic
Munzábi or Muntsábi	—	Bandjabi (corruption of munzébi/banzébi) < Yinzebi.	A speaker of Yinzebi	A speaker of Yinzebi
Musékyaani	—	Sékanyi < Seki language	A speaker of Seki	A speaker of Seki
Musénengáli	—	Sénégal	Senegal	Senegalese
Mutóghule	—	Togolais	Togolese	Togolese
Muwúsa	—	Haoussa < Hausa	A speaker of Hausa	A speaker of Hausa

Convention: a dash indicates identity with the form given in the preceding row.

APPENDIX D: Yilumbu loans denoting miscellaneous terms as well as names of new products that were introduced by the traders

Yilumbu words	Source language	Source language items	Translation equivalents of the source language items
báunku	—	Banc	Seat
bíberu	—	Bibéron	Baby bottle
bídu	—	Bidon	Tin
bílata	—	Bulletin	Transcript
bíru	—	Bureau	Office
bíyi	—	Billet	Air-ticket, train-ticket, etc.
bóóku	—	Boque	Bock
bóóla	—	Bol	Small basin
bukrápila	—	Crapule	Evil behaviour
bukúsini	—	Cuisine	Gastronomy, cooking, <i>cuisine</i>
burígolu	—	Rogolo	Being a fool of oneself
burósa	—	Brosse	Brush
búyaara	—	Bouillard	Kettle
déndu	—	Dindon	Turkey-cock
diféélu	—	Fer	Iron
díle	—	Lait	Milk
dípe	—	Pain	Bread
dipómpi	—	Pompe	Tap
dúfoonsu	—	Fossé	small canal
dumbyaansu	—	Ambiance	Moving, fashion
dumóni	—	Monnaie	Change
dusansa	—	Essence	Petrol
dusísu	—	Ciseaux	Pair of scissors
dúvhyaanda	—	Viande	Meat
fásu	—	Façon	Manner
fééta	—	Fête	Celebration, party
fónu	—	Phonographe	phonograph, gramophone

Metalexicographical criteria for the compilation of a trilingual dictionary: Yilumbu – English – French

fótu	—	Photo (abbr. of photograph)	Photograph
gátu	—	Gateau	Cake
gúdrú	—	Goudron	Bitumen, asphalt
ílólooku	—	Allo!	Telephone
kábini	—	Cabinet	Toilette
kádu	—	Cadeau	Gift
kǎfi	—	Café	Coffee
kálasu	—	Caleçon	Under-cloth
káminyi	—	Camion	Car; lorry
karáta	—	Carte	Card
kǎratu	—	Carton	Cardboard box
káseeta	—	Cassette	Cassette
kásu	—	Caisse	Box; coffin
kátera	—	Cater (abbr. of caterpillar)	Cater
kǐlu	—	Kilo (abbr. of kilogram)	Kilogram
kókóta	—	Cocotte	Pot
kǒli	—	Colis	Good, parcel
kóntanera	—	Container	Container
krápila	—	Crapule	Murder; indifferent person; evil person, etc.
krávaata	—	Cravate	Tie
kūra	—	Courant	Electricity
kwísini or kúsini	—	Cuisine	Kitchen; cook
kyǎrasényi	—	Kérosène	Paraffin-oil
lákasida	—	Accident	Accident, crash
lámbe	—	Lampe	Paraffin lamp
lééta	—	Lait	Milk
liméti	—	Allumette	Matches
lǒtu	—	Auto	Car
mákaniika	—	Mécanique,	Mechanics
máratu	—	Marteau	Hammer
marǐku	—	Haricot	Beans
masfina	—	Machine	Machine
mǎsu	—	Maçon	Builder
masúti	—	Mazout	Paraffin-oil
mǐlyu	—	Million	Million
mótǎra	—	Moteur	Motor, engin
Muvhílǒpa	—	Enveloppe	Envelope
nyǐlu	—	Nilon	Nylon
nzávhu or ntsávhu	—	Savon	Soap
pǎki	—	Paquet	Package
páli	—	Palu (abbr. of paludisme)	Malaria
pínaasa	—	Pinase	pinnacle
plátu	—	Plateau	Plateau
póóka or dipóóka	—	Époque	Period of time
póóshi	—	Poche	Pochet
pwásu or pwázu	—	Poison	Poison
rǎdi	—	Radio	Radio
sááku	—	Sac	Bag
sápu or shápu	—	Chapeau	Hat
shókeeta	—	Chaussette	Socks
sída	—	Sida	Hiv/Aids
sǐfu or shǐfu	—	Chiffon	Rag
sǐma	—	Ciment	Cement
sǐngareta	—	Cigarette	Cigarette

Metalexicographical criteria for the compilation of a trilingual dictionary: Yilumbu – English – French

sípu	—	Jupe; jupon	Skirt
sófěra or shófěra	—	Chauffeur	Driver
sukila or sutshila	—	Sucre	Sugar
sūpu	—	Soupe	Soup
távhūlu or távhūli	—	Table	Table
télevisu	—	Télévision	Television
tīka	—	Ticket	Ticket
tómobila	—	Automobile	Car
trúsu	—	Trousseau	Trousseau
túúka	—	Touque	Bassin
upwásona	—	Empoisonner	To poison
Víinya	—	Vigne	Red wine
yirika	—	Brique	Brick
zóni	—	Oignon	Onion

Convention: a dash indicates identity with the form given in the preceding row.

Appendix E: Plant names

Yilumbu words	Source language	Source language items	Translation equivalents of the source language items
dóngila	—	Donguila	Species of sugar cane
kórosola	—	Corossol	Custard-apple
mubádaama	—	Badiane or Badamier, badenier	Aniseed-tree
mubélafuta or mubédafuta	French	Fruit à pin (pin maritime or pin de Bordeaux)	Pine-tree
múkoku	—	Coco	Coconut-palm; coconut
mushántanya	—	Châtaigne	Chest-nut tree
robééra	—	Robert	Species of sugar cane
rumééni	—	Roumanie	Species of pineapple
sálaadi	—	Salade	Salad
shántaanya	—	Châtaigne	Chest-nut
tómaata or dúmātu	—	Tomate	Tomato(es)

Convention: a dash indicates identity with the form given in the preceding row.

APPENDICE E : Yilumbu loans from Yipunu

Yilumbu loanwords	Source language names and linguistic forms	Translation equivalents of the source language terms	Yilumbu genuine forms
ibúdu	Ibúdu	Hat	(Men) ípokudu
ikóóku	Ikóóku (originally from the Yipunu spoken in Ndéndé)	Dance held at funeral	
ivhyövhi	Ivhyövhi	Hat	(Men) ípokudu
kávhala	Kávhála < Port. Caballo	Horse	
maghási	Mághási < Fr. <i>Magasin</i>	Factory shop	
máli	Máli < Port. Limão	Lemon	
mangátsa	Mángátsa < Fr. <i>Magasin</i>	Factory shop	
mudághi	Mudághi (muyíbi < Ling. <i>muyibi</i> is also in use)	Thief	mwífi
musäyi	Musäyi < Port. Sal	Salt	
págha	Págha	Doubt	kémi

Convention: a blank means that the form does not exist.

APPENDIX F : Yilumbu loans from Civili

Yilumbu loanwords	Source language names and linguistic forms	Translation equivalents of the source language items	Yilumbu genuine forms
bíngela	Bíngwela	Type of cassava	
dukúdáka	Dukúdáka	Dry shack	mukwĩmbi ghu yũma
fóóla	Fóóla < Port. Fólha	Plate	(Men.) dusãnga
íteeka	Tshítéka	flower	
kúvhaalu	Kúvhaalu	Horse	
lúzolu	Lúzolu	Love	
mási	Mási	Water	mãmba
mátaku	Mátaku	Buttocks	marãngi, mâraghũ
mbóta	mbóta	Star	mbwélila
tsishifu	Tshísifu	June-July	isívhu (meaning dry season)
zééta	Zééta	Oil	(Ghang.) muléembu ; (Men.) máátsi

Convention: a blank means that the form does not exist.

APPENDIX G : Yilumbu loans from Omyene

Yilumbu words	Source language terms	Translation equivalents of the source language terms	Yilumbu genuine forms
dughandagha	Dughandagha	Happiness	mbõndu
tsangunaghenda	Esanguna-aghenda	Type of ant	

Convention: a blank means that the form does not exist.