A theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu

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Declaration

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Abstract

This dissertation is an attempt to design a theoretical model for an encyclopaedic dictionary for Gabonese languages. It makes specific reference to Yilumbu, a developing language of the Bantu phylum (B44, according to Guthrie's classification) spoken in Gabon and in Congo. All existing metalexicographic studies on Gabonese languages (including Yilumbu) pursue the compilation of comprehensive language dictionaries. Most of them are bilingual languages.

On the other hand, a number of encyclopaedic dictionaries exist for Gabonese languages. Most of them were compiled by Catholic and Protestant missionaries and colonial administrators. However, none of these reference works was compiled on the basis of a prior metalexicographic orientation.

Ultimately, the present study is the first of its kind to propose an encyclopaedic dictionary for Gabonese languages on the basis of a comprehensive metalexicographic analysis.

This dissertation also shows that the planned encyclopaedic dictionary reflects the language planning needs of Gabon. Developing and documenting the Gabonese languages on all levels of communication in order to address all the roles and user characteristics are a great challenge. As far as encyclopaedic dictionary compilation is concerned, acquaintance with state-of-the-art developments in the theory and practice of lexicography is necessary.

This dissertation comprises nine chapters. Chapter 1 mainly focuses on the specific aims, the purpose and the motivation of the study. The research problem is also demarcated in this chapter. Furthermore, the chapter presents the theoretical model that provides the framework for this research as well as the methodological approach adopted. The potential impact of the study, the reasons for and the position of the source and target languages as well as the sociolinguistic situation of Yilumbu are also introduced in the first chapter.

Chapter 2 is a review of the dictionary typology with reference to the proposed model. It aims to present a typological framework for the planned encyclopaedic dictionary. It also

introduces various dictionary typologies and contrasts encyclopaedic lexicography and general lexicography. The chapter concludes with a typological profile of the planned encyclopaedic dictionary for Yilumbu before outlining specific principles of the proposed model for an encyclopaedic dictionary.

Chapter 3 is a review of encyclopaedic lexicography in Gabon. It introduces the concept of *encyclopaedic lexicography*. Then it provides a literature review of lexicographic surveys in the Gabonese languages by presenting existing encyclopaedic works in Gabon. The chapter also outlines recent trends in Gabonese lexicography in order to explain the situation of encyclopaedic lexicography in Gabonese lexicographic studies. Finally, the need for research in encyclopaedic lexicography in the Gabonese languages is underlined and specific advantages of encyclopaedic research for Yilumbu lexicography are introduced.

Chapter 4 focuses on the target users of the planned encyclopaedic dictionary and its lexicographic functions. The chapter starts with a broad outline of target users and the activity of dictionary compilation. It also reviews what is known as target users and outlines user characteristics. The lexicographic functions of the planned encyclopaedic dictionary are also outlined in this chapter.

Chapter 5 gives a comprehensive presentation of the frame structure of the planned encyclopaedic dictionary of Yilumbu. More specifically, the chapter provides a definition of the concept of frame structure and schematises the frame structure, highlighting its components. It outlines the accessory texts and the outer texts of the planned dictionary. This chapter also contains an outline of the front matter and the back matter strategies used for the Yilumbu encyclopaedic dictionary project. The central word list is also dealt with in this chapter. Finally, the chapter reports on the proposed frame structure functions.

Chapter 6 focuses on the macrostructure of the planned dictionary. In this chapter, a general overview of the concept of macrostructure is first given. Then the chapter presents the dictionary basis and the selection of the lemma candidate list. Further macrostructural issues are also described.

In Chapter 7, different aspects of the microstructure are discussed, focusing on a number of contributions. The chapter presents the concept of microstructure according to Hausmann and Wiegand (1989) and enumerates the different types of article to be included in the microstructure. Data to be included in the microstructure are also presented.

Chapter 8 discusses the notion of access structure and its related concepts, namely outer access structure, inner access structure and search zones. The effectiveness and success of any dictionary is measured, among other things, by the accessibility and retrievability of the desired information. The chapter contains an overview of the concept of access structure and also deals with the outer access structure. Moreover, the chapter presents the inner access structure and the rapid access structure. The mediostructure is finally dealt with as a way of gaining access to data.

Chapter 9 provides a comprehensive conclusion of the dissertation. This chapter also outlines the contribution of the research findings to lexicographic research, to the emerging Gabonese lexicography and to the fuller promotion of the Yilumbu language. It provides conclusions and formulates suggestions for further research.

Opsomming

Hierdie proefskrif is 'n poging om 'n teoretiese model te ontwerp vir 'n ensiklopediese woordeboek vir Gaboenese tale. Spesifieke verwysing word gemaak na Yilumbu, 'n ontwikkelende taal van die Bantoefilum (B44 volgens Guthrie se klassifikasie) wat in Gaboen en die Kongo gepraat word. Alle bestaande metaleksikografiese studie oor die Gaboenese tale (insluitende Yilumbu) is gerig op die samestelling van omvattende taalwoordeboeke; meestal tweetalige woordeboeke.

Daar bestaan wel 'n aantal ensiklopediese woordeboeke vir Gaboenese tale. Die meeste daarvan is deur Katolieke en Protestantse sendelinge en koloniale administrateurs saamgestel. Geeneen van hierdie woordeboeke is op 'n voorafbeplande metaleksikografiese basis saamgestel nie. Die huidige studie is die eerste van sy soort om 'n ensiklopediese woordeboek vir die Gaboenese tale voor te stel op die basis van 'n omvattende metaleksikografiese analise.

Hierdie proefskrif wil aantoon dat die voorgestelde ensiklopediese woordeboek die taalbeplanningsbehoeftes van Gaboen reflekteer. Ontwikkeling en dokumentering van die Gaboenese tale op alle vlakke van kommunikasie, ten einde aan al die rolle en gebruikerseienskappe aandag te gee, is 'n groot uitdaging. So ver dit die samestelling van 'n ensiklopediese woordeboek aangaan, is bekendheid met die allerjongste ontwikkelings in die teorie en praktyk van leksikografie nodig.

Die proefskrif bevat nege hoofstukke. Hoofstuk 1 bied die besondere oogmerke, die doel en die motivering van die studie. Die navorsingsprobleem word in hierdie hoofstuk afgebaken. Die hoofstuk bevat ook 'n uiteensetting van die teoretiese model wat die raamwerk vir hierdie navorsing asook die metodologiese benadering wat ingeneem is, verskaf. Daarbenewens word die potensiële trefkrag van die studie, die redes vir en die posisie van die bron- en doeltale asook die sosiolinguistiese situasie van Yilumbu aangebied.

Hoofstuk 2 bied 'n oorsig van woordeboektipologie met verwysing na die voorgestelde model. Dit beoog om 'n tipologiese raamwerk vir die beplande ensiklopediese woordeboek te bied. Dit stel ook verskeie woordeboektipologieë bekend en kontrasteer ensiklopediese leksikografie en algemene leksikografie. Die hoofstuk skets die

tipologiese profiel van die beplande ensiklopediese woordeboek vir Yilumbu voordat dit spesifieke beginsels van die voorgestelde model vir 'n ensiklopediese woordeboek skets.

Hoofstuk 3 bied 'n oorsig oor die ensiklopediese leksikografie in Gaboen. Dit stel die begrip *ensiklopediese leksikografie* aan die orde. Daarna verskaf dit 'n literatuuroorsig van leksikografiese opnames in die Gaboenese tale deur die aanbieding van bestaande ensiklopediese werke in Gaboen. Die hoofstuk beskryf ook onlangse tendense in Gaboenese leksikografie ten einde die situasie van ensiklopediese leksikografie in Gaboenese leksikografiese studies te verduidelik. Laastens word die behoefte aan navorsing in ensiklopediese leksikografie in die Gaboenese tale onderstreep en spesifieke voordele van ensiklopediese navorsing vir Yilumbu leksikografie word bekend gestel.

Hoofstuk 4 fokus op die teikengebruikers van die beplande ensiklopediese woordeboek en die leksikografiese funksies daarvan. Die hoofstuk begin met 'n algemene oorsig van teikengebruikers en die aktiwiteit van woordeboeksamestelling. Dit kyk ook na wat bekend is as teikengebruikers en skets eienskappe van gebruikers. Die leksikografiese funksies van die beplande ensiklopediese woordeboek word ook in hierdie hoofstuk beskryf.

Hoofstuk 5 verskaf 'n omvattende aanbieding van die raamstruktuur van die beplande ensiklopediese woordeboek van Yilumbu. Meer spesifiek, die hoofstuk verskaf 'n definisie van die begrip *raamstruktuur* en bied die raamstruktuur skematies aan, en belig die komponente daarvan. Dit skets die hulptekste en die buitetekste van die beplande woordeboek. Hierdie hoofstuk bevat ook 'n skets van die voor- en die agtertekstestrategieë wat vir die Yilumbu- ensiklopediese woordeboekprojek gebruik word. Die sentrale woordelys kom ook in hierdie hoofstuk aan bod. Laastens doen die hoofstuk verslag oor die voorgestelde raamstruktuurfunksies.

Hoofstuk 6 fokus op die makrostruktuur van die beplande woordeboek. In hierdie hoofstuk word eerstens 'n algemene oorsig van die begrip *makrostruktuur* gegee. Daarna bied die hoofstuk die woordeboekbasis en die keuse van die lemmakandidaatlys aan. Verdere makrostrukturele kwessies word ook beskryf.

In Hoofstuk 7 word verskillende aspekte van die mikrostruktuur bespreek, met die fokus op 'n aantal bydraes. Die hoofstuk bied die begrip *mikrostruktuur* aan soos in Hausmann

en Wiegand (1989), en noem die verskillende soorte artikels wat in die mikrostruktuur ingesluit moet word. Data wat by die mikrostruktuur ingesluit moet word, word ook aangebied.

Hoofstuk 8 bespreek die gedagte van *toegangstruktuur* en begrippe wat daarmee verband hou, naamlik *eksterne toegangstruktuur*, *interne toegangstruktuur* en *soeksones*. Die doeltreffendheid en sukses van enige woordeboek word onder andere gemeet deur die toeganklikheid en herwinbaarheid van die gewenste inligting. Die hoofstuk bevat 'n oorsig van die begrip *toegangstruktuur* en betrek ook die eksterne toegangstruktuur. Verder bied die hoofstuk die interne toegangstruktuur en die kitstoegangstruktuur. Die mediostruktuur kom uiteindelik aan bod as 'n wyse om toegang tot data te verkry.

Hoofstuk 9 verskaf 'n omvattende samevatting van die proefskrif. Hierdie hoofstuk skets ook die bydrae van die navorsingsbevindings tot leksikografiese navorsing, tot die opkomende Gaboenese leksikografie en tot die groter bevordering van die Yilumbu-taal. Dit verskaf gevolgtrekkings en formuleer voorstelle vir verdere navorsing.

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Abbreviations

Admin.: Administrative spelling/Orthographe administrative

AFRILEX: African Association for Lexicography

ASG: Alphabet scientifique des langues gabonaises

By ext.: By extension

CENAREST: Centre National de Recherche Scientifique et Technologiques (Gabon's

National Research Centre)

Civ.: Civili language

cl.: Class/Classe

E.: English language

Encycl.: Encyclopedic information/note encyclopédique

End.: Ending

ENI: Ecole Normale des Instituteurs (Gabon's College of Education for primary schools'

teachers)

ENS: Ecole Normale Supérieure (Gabon's College of Education for secondary and high

schools' teachers),

EP: Encyclopédie pahouine

Ext.: extension

EURALEX: European Association for Lexicography

F.: French language

Fam.: Family/Famille

Fo.: Formative

Fo1: Formative 1

Fo2: Formative 2

Ghâng.: Ghangu dialect of Yilumbu

GPDs: general-purpose dictionaries

H: high tone

HL: falling tone (high to low)

HL-L: tonal scheme of falling and low tones

H-L: tonal scheme of high and low tones

IPA: International Phonetic Alphabet

L: low tone

LH: rising tone (low to high)

LH-L: tonal scheme of rising and low tones

L-H: tonal scheme of low and high tones

LPFFP: Lexique pove-français/français-pove

LGP: Language for general purposes

Litt.: Word to word translation/traduction littérale

LNP: locative noun prefix

LOC.: Locution

LSP: Language for special purposes

Men.: Menaane dialect of Yilumbu

n.: Noun/nom

n. comp.: Noun, but compound/nom composé

Note encycl.: Note encyclopédique

NP: noun prefix

OLG: Orthographe des langues du Gabon

PanSALB: Pan South African Language Board

Par ext.: Par extension

pl.: plural/pluriel

PIC: Picture/Illustration pictographique

PUG: Plantes utiles du Gabon

SAG: Scientific alphabet of Gabon

v.: verb/verbe

VIALD: Via Afrika Learner's Dictionary

VP: verbal prefix

WAT: Woordeboek van die Afrikaanse Taal

WRt: word root

Yip.: Yipunu language

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CHAPTER 1: INTRODUCTION

1.1 Introduction

The purpose of this dissertation is to devise a theoretical model for an encyclopaedic dictionary for the Gabonese languages with specific reference to Yilumbu, an African language of the Bantu phylum spoken in Gabon and in the Republic of the Congo (Brazzaville). The dissertation endeavours to formulate insightful metalexicographic criteria for the compilation of such a dictionary.

This chapter is organised as follows: Section 1.2 contains the specific aim and purpose of the study. Section 1.3 provides the motivation for the study and a demarcation of the research problem. Section 1.4 highlights general views on the planning of an encyclopaedic dictionary. Section 1.5 presents the genuine purpose of the planned encyclopaedic dictionary. Section 1.6 provides a brief discussion on the potential impact of the study. Section 1.7 contains an exposition of the theoretical model that provides the framework for this research. Section 1.8 presents the methodological approach adopted. Section 1.9 outlines the reasons for and the position of the source and target languages. Section 1.10 highlights the advantages of this research for Yilumbu lexicography. Section 1.11 gives an overview of the sociolinguistic situation of Yilumbu. Section 1.12 concludes the chapter with an outline of the study by providing a preview of each chapter of the dissertation.

1.2 Aim and research purpose

Dictionaries are mirrors of a country's social, cultural, scientific and technological development. There are indications that speech communities of all the languages in Gabon need national dictionaries, not only to bridge the communication gap but also to document and preserve the rich variety of the Gabonese languages (cf. Emejulu 2001a, 2003; Nyangone Assam & Mavoungou 2000; Mavoungou 2002a; Ndinga-Koumba-Binza 2005a).

The purpose of this research is to devise metalexicographic criteria for the compilation of an encyclopaedic dictionary for the Yilumbu language. This implies important metalexicographic decisions.

This study will have to propose a suitable approach to the realisation of the Yilumbu encyclopaedic dictionary. This proposal will not follow the usual approach (of Gabonese metalexicographic research), but will rather present another vision in the conceptualisation of such a dictionary, suitable for the specific context of the Gabonese languages. In fact, this encyclopedic-dictionary research will be the first of its kind in Gabonese metalexicography.

The study process will primarily prevail on the level of the macrostructure and the microstructure of the encyclopaedic dictionary. However, the following questions will be central to this study:

- (i) What is the need for encyclopaedic dictionaries in the Gabonese languages?
- (ii) Who are the target users of the planned encyclopaedic dictionary?
- (iii) What data should be included in the planned encyclopaedic dictionary?
- (iv) What kind of macrostructure should it have?
- (v) What kind of microstructure should it have?

The organisational plan of every lexicographic project has to include a clear and unambiguous exposition of the genuine purpose of the specific dictionary to be compiled. The purpose of the compilation of an encyclopaedic dictionary can be the description of the lexical structure of a language or its varieties and the rendering of assistance in the production of texts, either in the native language or in the second or foreign language.

The dictionary purpose is essential and most often it depends on the category of target group or user. Within a multicultural and multilingual environment an encyclopaedic dictionary should reflect, to a greater or lesser degree, the linguistic reality with which the target users are confronted on a day-to-day basis.

1.3 Motivation and research problem

The contributions of Emejulu (2000), Mavoungou (2002a), Ndinga-Koumba-Binza (2005a; 2006) and Nyangone Assam and Mavoungou (2000) provide interesting surveys of lexicographic activities in Gabon. The existing practice is strongly biased towards bilingual dictionaries compiled with French as one of the treated languages. Very little knowledge exists with regard to encyclopaedic dictionaries in Gabonese languages. This is a situation that needs to be changed.

Currently, Gabon is on the way to introduce its native languages into its education system, and the significant question is which reference works to use for which language, especially when it is known that residual prejudice against native languages always remains present in the minds of people. Strategic planning for the Gabonese lexicography requires that speech communities determine their own needs and preferences.

This could also allow the birth of an encyclopaedic dictionary culture since Gabon is a multiethnic – thus multicultural – nation. It is hypothesized that an encyclopaedic dictionary could be a valuable tool for both interethnic communication and intercultural exchange within a multiethnic and multicultural nation.

Moreover, as stressed by McArthur (1986: 126), dictionaries are "real containers of knowledge". The compilation of an encyclopaedic dictionary will be of great importance for the Gabonese languages since it will have the various Gabonese cultures as one of its main focus areas.

In addition to views above, the planning of the proposed dictionary has also been motivated by research conducted by Herbst (1990:1379). According to him the "encyclopaedic elements of a monolingual dictionary may be of great importance to the native speaker".

With regard to this point of view, I seek to empower Yilumbu mother-tongue speakers as my primary target group. This can only be achieved by taking into account their needs as well as their reference skills. Nowadays young people are becoming more and more westernised. By working within the framework of an encyclopaedic

dictionary, it will be possible to make the Balumbu youth, in particular, aware of its culture.

The encyclopaedic dictionary should be an innovative all-in-one reference book, combining a description of the Yilumbu language with facts about the environment. The encyclopaedic dictionary will also integrate the cultural aspect of the language by explaining traditional practices. Because one of the aims of the formulation of the present model for an encyclopaedic dictionary is to provide the Balumbu speech community with information regarding its culture, the inclusion of cultural data is of special importance. As an illustration, a lexical item such as *mother* is polysemous because of the culture of the Balumbu, which is based on matriarchal descent. Apart from the meaning as the biological parent, users must also be aware that *mother* has a polysemous sense that also refers to the uncle on the mother's side.

In this regard, the main purpose of the proposed encyclopaedic dictionary will consequently be to adequately explain the meanings and use of the lexical stock of the Gabonese languages with Yilumbu as the reference language. In this sense, it will have a cognitive and communicative function. An encyclopaedic dictionary that can promote communication among various population groups is urgently needed. When the community steps into the school system in the framework of formal mother-tongue education, it restores the tenuous links between generations, facilitates the introduction of mother-tongue education and enlivens the teaching of art and craftsmanship. The overall result is a better synergy between the school and the community, which recovers the capacity to fully participate in the education of its own children. Social harmony will thus be facilitated through better dialogue. This, in turn, leads to better education in the broadest sense of the word. The overall result is sustainable development (Louw 2004:15).

1.4 Generalities on encyclopaedic dictionary planning

Planning is always directed at the future. Since the future is unknown, planning is necessary in addition to scenarios in order to obtain a feeling for the future. When planning an encyclopaedic dictionary it is important to know

- the potential user; and
- the user situation, in other words for what kind of consultation the user will need the encyclopaedic dictionary, the user problems for each type of user in each type of user situation and the data that can satisfy these needs.

The lexicographer should make it his or her priority to accomplish this goal. Planning is the design phase for creating both the text specifications and the way in which the whole text will be written. Gouws (1997:17) says that the planning of a dictionary starts with the planning of the system to be utilised in that specific dictionary. The lexicographer of any new dictionary project has to be familiar with the target user and the linguistic needs and reference skills of that user. Knowledge about the user and usage situations are prerequisites for decisions regarding the relevant lexicographic functions for a given encyclopaedic dictionary. This knowledge of the user and usage situations constitutes the basis for the theory of lexicographic functions. This is one of the reasons why it is important for the lexicographer to ensure good planning of the product.

The basic corpus will be used for different projects within the future lexicographic unit (cf. Emejulu 2001a) and for future encyclopaedic dictionaries in the Gabonese languages. Given all the information available at this stage of the planning exercise, it becomes much easier to formulate goals than it would be without such information. A lexicographic unit for Yilumbu will be responsible for the monitoring of the compilation of the dictionary in order to make sure that the project is accomplished effectively. The unit will have to be an efficient and effective organisation.

Gouws (2001:65) indicates that the organisational plan is a basic and compulsory component of every lexicographic process. It is the editor-in-chief of a lexicographic unit who is directly involved in the organisational plan. Planning is of no use unless it is implemented; therefore, action plans need to be drawn up and staff need to be organised to carry out these plans. Target dates should be set in such a way that the organisational plan as a whole steadily reaches its goals.

The organisational plan of an encyclopaedic dictionary project will focus on encyclopaedic dictionary functions and emphasise the user-directed approach, including the situation of usage, ever so strongly. This situation of usage needs to be

defined in an unambiguous way and it encompasses much more detail than lexicographers often acknowledge. For an encyclopaedic dictionary compiled for education students a lexicographer should know, among others, whether the encyclopaedic dictionary is to be used

- in a classroom with/without the assistance of a teacher;
- at home with/without the assistance of parents; or
- at home in an encyclopaedic dictionary-friendly environment or not.

When formulating the organisational plan the lexicographer must know which of the following approaches will be employed:

- Start with an encyclopaedic dictionary and work towards the user.
- Start with a user and his or her environment and work towards the encyclopaedic dictionary.

The organisational plan takes into account all the planning around the project before anything has been done.

Gouws (2001:58–94) states that dictionary planning involves many activities. One of them, probably the most important, is the identification and formulation of the genuine purpose and lexicographic functions of the intended encyclopaedic dictionary, in order to ensure a firm and secure theoretical foundation for the compilation of the encyclopaedic dictionary.

Gouws and Prinsloo (2005:13) state that the genuine purpose of a dictionary is achieved when all the functions of the dictionary have been achieved successfully. It follows by implication that during the planning stages of the dictionary, the genuine purpose of the dictionary has to be created to form a basis for the conceptualisation plan of the dictionary.

1.5 Genuine purpose of the planned dictionary

Gouws (2001:66) emphasises the importance of including a clear and unambiguous exposition of the genuine purpose of the dictionary to be compiled in the organisational plan of a dictionary project. The proposed encyclopaedic dictionary will be directed at mother-tongue speakers of Yilumbu and should have a text reception and text production function.

The system of the encyclopaedic dictionary will be adequately explained in a front matter text. For Gouws, the genuine purpose of a dictionary is codetermined by, among other, its typological nature and its intended user group. The data on offer in the articles are determined by the specific needs of the target group. Wiegand (1988:729–790) argues that lexicographic reference works are utility products that are produced for specific purposes.

On this basis, Wiegand ushers in the metalexicographical notion 'genuine purpose' of a dictionary. Tarp (1998:121–137) defines the purpose of a dictionary as the effort and ability of the dictionary to cover the complex of needs that arise in the user in a given reference act.

The genuine purpose of the intended educational encyclopaedic dictionary has major implications for the encyclopaedic dictionary conceptualisation plan because of its direct impact on the structure and contents of the encyclopaedic dictionary articles and the data distribution pattern.

Usage differences, knowledge of contrastively relevant and contrastively non relevant combinations and the proper use of fixed expressions are regarded as some of the major problems that target users experience in their encounters with a language. The purpose of this research is to model an educational encyclopaedic dictionary that is aimed at being a practical instrument for use by students, people who are engaged in the process of learning their mother tongue.

1.6 Impact

There is a need for interaction between mother-tongue education and mother-tongue literacy. Such interaction will benefit both adults and children. The impact of this

study is hoped to be of both practical and theoretical nature. The study hopes to expand the scope of practical lexicography in Gabon, which is currently limited to French, by stimulating the lexicographic process of a Yilumbu encyclopaedic dictionary compiled specifically for the Gabonese populace and also by satisfying other lexicographic needs in the Gabonese languages.

The planned dictionary also intends to fulfil an educational function for high school students. However, any learner of the Yilumbu language or any scientist whose work is related to the Yilumbu language may find the planned dictionary of great use. Moreover, with limited adaptations it could also be used for models aimed at other user groups. This planned encyclopaedic dictionary also displays some typical features and can be addressed at native or non-native Yilumbu speakers.

Gabon has been sparing no effort to promote and conserve national languages and cultures. This situation represents an exhilarating challenge for research in the linguistic and lexicographic field. Compiling reference sources such as encyclopaedic dictionaries could assist in achieving this goal. Indeed, an encyclopaedic dictionary presents the characteristics of dealing with both linguistic and encyclopaedic data and also conveys the culture-bound lexical items included in the articles.

Accordingly, encyclopaedic dictionaries in the Gabonese languages will be used primarily as tools in the process of teaching and learning these languages. This emphasises the need for a focus on both language for special purposes (LSP) and language for general purposes (LGP) items.

Encyclopaedic dictionaries will also represent a powerful reference in which the Gabonese culture will be stored and conveyed. There can be no human culture without a society and no human society without a culture. Hence, culture is something that the human species has and other social species, for example ants and bees, lack.

The encyclopaedic dictionary constitutes a sociocultural object of paramount importance in the sense that it allows sizing the knowledge of a language through cultural analysis.

Culture, particularly behavioural culture, is right at the heart of the humanities curriculum, closely linked to language and literacy and also to social studies. It may

be difficult to 'teach' culture, but it is possible to help people to become more culturally aware, aware of their own cultural behaviour and aware that other people's cultural practices, though they may be different, are equally valid.

The objective to promote and to develop the Gabonese languages and consequently the cultures of which they are the mediums leads me to think that we can register these languages in programmes that take into account the social, cultural, economic, historical, political, religious and scientific realities. The encyclopaedic dictionary can achieve this objective, which is not always accomplished by other dictionaries.

1.7 Theoretical model of research

This research makes use of the theory developed by HE Wiegand. As far as the typology of lexicographical reference works is concerned, Wiegand (1998) makes a distinction between dictionary, encyclopaedia and encyclopaedic dictionary. Linguistic dictionaries focus on a linguistic treatment of lexical items whereas in encyclopaedic dictionaries, the focus is on extra-linguistic aspects, for example a description of that which a word refers to.

Encyclopaedias can be regarded as the most typical examples of encyclopaedic dictionaries. They are classified as dictionaries on account of the way in which they are structured and compiled as sources of reference. The distinction between encyclopaedias and encyclopaedic dictionaries is presented in Section 3.2 of Chapter 3.

Thus in this research project the emphasis will be on those aspects of Wiegand's theory that are particularly relevant to the development of a theoretical model for an encyclopaedic dictionary with special reference to Yilumbu. In designing a theoretical model for an encyclopaedic dictionary for the Gabonese languages, Yilumbu will be the Gabonese language that I will use as illustration for the formulation of this model. This model should be designed in such a way that it will also serve as basis for the compilation of encyclopaedic dictionaries in other languages spoken in Gabon. The

development of the proposed model should focus not only on aspects regarding the content of encyclopaedic dictionaries but also on the presentation of data in these

sources of reference. The model should therefore make provision for a well-devised data distribution structure.

Aspects of Wiegand's theory are reconstructed and interpreted in this dissertation, not in the light of other competing or complementary lexicographical theories but rather in order to determine in which respects his theory offers possibilities for the model of an encyclopaedic dictionary that could be used in the Gabonese languages.

The work is primarily designed as a basic thesis, giving the theoretical background and practical guidelines for encyclopaedic dictionaries. The dissertation looks at the methodology of dictionary making in general by exploring different types of dictionary with particular focus on an encyclopaedic dictionary.

Similarly, the purpose of this dissertation is to respond to the needs and possibilities arising from Wiegand's theoretical work for the model of an encyclopaedic dictionary in the Gabonese languages. According to Bergenholtz and Tarp (2002), lexicography is not a branch or a sub-discipline of linguistics. Lexicography is a discipline in its own right. It consists of observing, collecting, selecting and describing units from the stock of words and word combinations in one or more languages and also includes the development and description of theories and methods that are to form the basis of this activity.

This research work intends to implement Wiegand's approach to lexicography with regard to an encyclopaedic dictionary. Wiegand's approach to lexicography is characterised by identification of the different components of dictionary articles and by meticulous description of the specific structures and functions.

1.8 Methodological model

Apart from offering a more complete description and a choice of entries selected to convey a range of knowledge, encyclopaedic dictionaries and encyclopaedias are also distinct from other dictionaries because encyclopaedic dictionaries and

encyclopaedias are traditionally monolingual while other dictionaries can be monolingual but also bilingual or multilingual.

Moreover, it is agreed with Rey-Debove (1971) that encyclopaedia can be read whereas dictionaries can only be consulted. As Béjoint (2000:10) puts it, "[t]he fact that the dictionary is consulted rather than read is clearly linked to the form and the text". The form of the text is created in such a way as to facilitate the consultation process "whereby the user acquires or verifies a particular piece of information: the dictionary is never consulted in its entirety" (Béjoint 2000:10). Encyclopaedias, on the other hand, often lend themselves to proper reading. Encyclopaedic articles, though often long, can be read in their entirety by the user who is looking at the comprehension of a specific theme.

In this sense, an encyclopaedic dictionary should aim to offer both reading and consultation facilities to the user. In fact, the encyclopaedic dictionary appears to be the middle ground between the encyclopaedia and the linguistic dictionary.

The research focuses on a monolingual encyclopaedic dictionary with a bilingual dimension, intended for Yilumbu native speakers and second-language learners in a country where the Gabonese languages are less spoken than French.

However, the linguistic situation of Gabon can be briefly summarised as a multilingual/multicultural one in which the French language is superimposed on the native languages. This situation compels Gabon to opt for multilingual systems, not only in education but also in lexicographic planning and language policies, in order to best meet the needs and aspirations of the majority of the population.

Therefore, the planned encyclopaedic dictionary will accommodate a certain degree of bilingualism in its microstructure. This comes within the multilingual systems proposed for the specific situation of Gabon.

For instance, a number of models of multilingual education involving the mother tongue, the languages of wider communication (or trade languages) and foreign languages have been suggested (Nyangone Assam 2006; Nzang-Bie 2001). These models require, among other things, the development of language-teaching materials.

An encyclopaedic dictionary should without any doubt be mentioned as a valuable instrument for teaching programmes (cf. Mabika Mbokou 2006 and Nyangone Assam 2006 for the situation with school dictionaries). I believe, however, that it is only by

introducing the use of encyclopaedic dictionaries across the education curriculum that we can expect learners to familiarise themselves with these materials and enhance their encyclopaedic dictionary reference skills for future study work.

Acquaintance with the use of encyclopaedic dictionaries involving all the languages they are acquiring should be encouraged among learners, just as the implementation of a bilingual/multilingual education will strengthen their ability and confidence in using the languages involved in Gabon. The great challenge now is to strengthen lexicography in Gabon as a science and to apply its system of science-based theories to the practical planning and compilation of encyclopaedic dictionaries.

The importance attached to the different types of data is that when a user consults an encyclopaedic dictionary, he or she should obtain information that allows him or her to solve a concrete problem or improve his or her general level of knowledge. The encyclopaedic dictionary must be able to meet the needs that arise in such situations.

Data about society and social practices, history, traditions and values must be included in this type of lexicographic work. With this in mind, I would like to look afresh at the level and type of cultural content of my research questions for the study and to consider whether the proposed encyclopaedic dictionary meets the needs of prospective users. It will have to possess characteristics from different dictionary types in order to fulfil the needs of the potential users. It should not only be a special-field encyclopaedic dictionary in the traditional sense. For example, it will have to incorporate elements of an explanatory encyclopaedic dictionary, including meaning explanations. For Gabon, the proposed encyclopaedic dictionary will include various fields of knowledge, especially as the dictionary will be poly-informative.

The data accommodated in an encyclopaedic dictionary should be supplied in response to the needs of the users. The encyclopaedic dictionary will determine the nature and the extent of, for example, cultural data but, yet again, lexicographers need to be both creative and pragmatic when applying the formulated typological criteria.

The model for an encyclopaedic dictionary as presented in this dissertation is intended to intersect questions on both the theoretical and the practical level as follows:

- (i) How should one organise in one encyclopaedic dictionary different typological elements and dictionary functions?
- (ii) How can the proposed model assist the users in solving problems?
- (iii) How should one deal with this study in the Gabonese situation where lexicography is not yet linked with education?

More specifically, research is needed within this framework that can provide lexicographers with

- (i) an adequate content for an encyclopaedic dictionary that supports the cultural needs of a user for a specific task; and
- (ii) a structured content (both at the macro- and the microstructural level) that optimises its accessibility for various kinds of user.

These are fundamental features of both practical and theoretical importance that must be presented in order to formulate a theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu.

1.9 Source and target languages

Lexicographers compiling encyclopaedic dictionaries to be used in a multilingual and multicultural environment are faced with additional challenges because their encyclopaedic dictionaries are regarded not only as containers of linguistic knowledge, according to McArthur (1986), but also as sources of pragmatic and cultural data. It is therefore important that lexicographers should plan and compile their encyclopaedic dictionaries in such a way that optimal retrieval of a wide-ranging selection of information can be achieved.

Like in all African countries, in Gabon the official language, French, plays an important role. French is an international language. Furthermore, it allows speakers of different Gabonese languages to communicate with one another. When data on national culture are included in encyclopaedic dictionaries, many Gabonese who are more familiar with French can be helped to learn about national culture through their understanding of French and the production of texts in the Gabonese languages. This also applies to the French-speaking foreigner who can be assisted through his or her understanding of French and the production of texts in the Gabonese languages. Therefore, encyclopaedic dictionaries in national languages in Gabon must provide French equivalents of the lemmata.

For historical and sociolinguistic reasons, French occupies a particular status in Gabon and within the Gabonese language landscape (Ndinga-Koumba-Binza 2005a; 2005b; 2006). It is at the same time the language of administration and of social promotion. In addition, it cohabits with a multitude of local languages and with other foreign languages introduced in Gabon by migrants. These languages, following the example of the Gabonese languages, are used as medium of communication within these linguistic communities.

This multilingual environment or the contact between languages is a daily reality, resulting necessarily in phenomena of borrowing, bilingualism and plurilingualism, and one observes the progressive emergence of a need for dictionaries in Gabon, in particular for encyclopaedic dictionaries in all the Gabonese languages. This basic characteristic, that encyclopaedic dictionaries are utility products conceived to cover

certain human needs, is valid for all encyclopaedic dictionaries. And it is exactly this basic characteristic that must guide this dissertation.

In the context of Gabon any lexicographic attempt at present needs to be bilingual in order to successfully reach the target users. The bilingual trends in Gabonese lexicography may constitute an obstacle to the tradition of encyclopaedic dictionaries, seeing that an encyclopaedic dictionary is primarily monolingual. The question may vary from which people actually own encyclopaedic dictionaries and which encyclopaedic dictionaries they own to what type of data users need and whether they need to know something about the language (i.e. semantic knowledge) or something about the matter to which a particular word refers (i.e. encyclopaedic knowledge).

The planned dictionary will be a monolingual encyclopaedic dictionary with a bilingual dimension because Yilumbu will be the source language and the target language will be French. Generally an encyclopaedic dictionary presents a single word list within which the treatment is either exclusively linguistic or mixed. In the proposed work, Yilumbu will constitute the main language.

However, the bilingual dimension will be introduced by the insertion of French equivalents. It is also important to highlight that French will only be used in providing translation equivalents of the lemmata. The treatment will be provided in Yilumbu. The intended user group and purpose will have a significant impact on the contents of the encyclopaedic dictionary.

1.10 Advantages for Yilumbu lexicography

Attitude problems have a long history. Some sections of the population, especially the middle class, have negative attitudes towards all the Gabonese languages in general. These people send their children to schools where the Gabonese languages are not taught or are taught as optional subjects (e.g. Catholic schools). Their negative attitude towards their mother tongues is likely to be transferred to dictionaries in these languages as well. Although this is a relatively small minority, they are the most influential people in the community.

These people tend to be well educated and well employed. Due to the colonially designed education system, they still falsely believe that French or other languages of wider communication are the only languages worth learning. They want their children to start primary school in French, which is their second language. At present French is the primary language at all levels of education in Gabon, and this puts students from other language backgrounds at a disadvantage.

It is important that Yilumbu lexicography incorporate the development of positive attitudes towards dictionaries in general and encyclopaedic dictionaries in particular. This could be done in many ways such as teaching and literature. For instance, creative writers who target the school market should rely on encyclopaedic dictionaries and other dictionaries as well as all the published books in the language for standard vocabulary and spelling and so would textbook writers and publishers in general. Should there be such developments, interest in research on encyclopaedic dictionaries would be bound to grow.

1.11 The sociolinguistic situation of Yilumbu

In a changing world where knowledge management and language industry pose an incalculable number of challenges, especially for many African countries, it should be noted that such changes, which necessarily comprise an equitable transfer of technologies and knowledge, cannot be accomplished validly without passing, inter alia, by a language of cultural heritage.

In this field, the focus is too often on the languages with large international diffusion. The most frequently quoted reason for this is political scale and economic valence. However, for better knowledge management of the world, weak diffusion and to integrate the lesser-used languages in this concert of knowledge, even if it does not appear lucrative without a commercial plan for the dictionary as well as its production (lexicography), research (metalexicography) in these small languages also has a significant role to play (cf. Al-Kasimi 1977). In the process of construction and development, it is the democratic right of every citizen to be empowered in any language of his or her choice in order to make a meaningful contribution to socio-

political and economic activities. This postulate is also valid for Gabonese lexicography.

The latest States General of French Teaching in French-speaking sub-Saharan Africa took place in Libreville, Gabon, on 17–21 March 2003. The participants of this gathering expressed the wish to put into practice, on the level of education systems, the concept of linguistic partnership. They made a point of maintaining that the coexistence of French and the Gabonese languages should not be lived in terms of conflict or 'wars of language' but rather in solidarity and complementarity. The linguistic partnership between French and the Gabonese languages is based on the affirmation of the equality of the various language cultures and the refusal of any hierarchisation in this field. French and the Gabonese languages coexist on the same ground and they should be given equal recognition, also in the process of encyclopaedic dictionary making.

Yilumbu is spoken in two countries of Central Africa, namely in the Republic of the Congo and Gabon. In Gabon, one finds the Balumbu (the ethnic group whose language is Yilumbu) in the provinces of Ogooué-Maritime (towns of Ndugu Lagune and Low Nyanga) and Nyanga.

The Balumbu are mixed with the Bavili (the ethnic group whose language is Civili) to a degree and with the Bapunu (the ethnic group whose language is Yipunu) in certain localities, quite a distance from the littoral maritime. Due to its geographic spread, Yilumbu has a number of dialects. In Gabon, the two major dialects are the so-called Yilumbu yi Ghangu (the variety of the Nyanga province) and Yilumbu yi Menaane (the variety of the Ogooué-Maritime province).

In the Nyanga province, in the town of Low Nyanga, for instance, one observes rather clear dialectal alternatives compared to the spoken Yilumbu in Sette-Cama. However, there exists mutual comprehension between the different communities of Balumbu in Gabon and between Gabon and the Republic of the Congo.

According to Mavoungou (2002a) linguistic 'purity' is so important in the eyes of mother-tongue speakers of Yilumbu yi Menaane that they call themselves Balumbu and they refer to the speakers of Yilumbu yi Ghangu in terms of Bavili. This

statement on linguistic purity is partially 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. Blanchon (1984:32) also puts the figure at about 40% for the shared vocabulary between Yilumbu, Yipunu and Civili. Moreover, he also estimates the shared vocabulary between Yilumbu and Yipunu at about 65%.

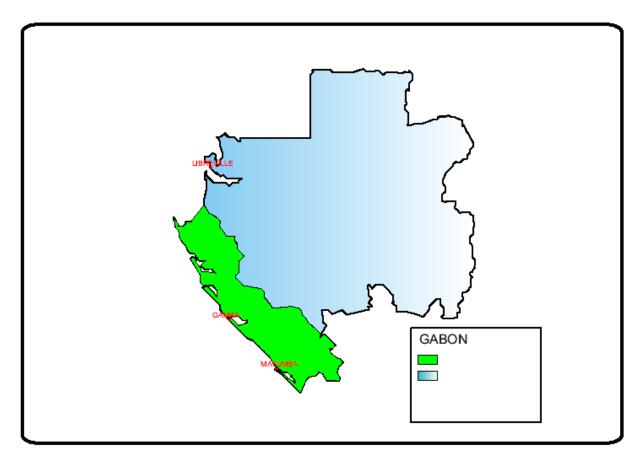


Figure 1.1: Yilumbu distribution in Gabon

1.12 Thesis overview

The present chapter introduces this research work. It presents the formulation of a theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu. The chapter specifically offers the aims of the research and the

problem statement and also presents the methodological approach and a map of Gabon that defines the localisation of the Balumbu and the target language in the country.

This dissertation is divided into eight chapters. Chapter 2 suggests a typological profile of the proposed model after a review of dictionary typology. Chapter 3 presents an outline of encyclopaedic lexicography in Gabon. It also gives the reasons and need for an encyclopaedic dictionary. Some important issues that are also the essence of this work will furthermore be dealt with in this chapter. Chapter 4 introduces the target users and the lexicographic functions. Chapter 5 provides the frame structure of the planned dictionary. Chapter 6 draws the macrostructure of the planned encyclopaedic dictionary. Chapter 7 outlines the microstructure of the planned encyclopaedic dictionary. Chapter 8 discusses the access structure of the planned encyclopaedic dictionary. Chapter 9 is the conclusion, which refers back to the introduction. It brings together all the chapters and recaps the root of the problem, the findings and possible solutions.

It is hoped that because of this dissertation a new debate on this topic will open up as well as new study fields that have not yet been explored, which will hopefully contribute to the development of the Gabonese languages.

CHAPTER 2: DICTIONARY TYPOLOGY AND THE PROPOSED MODEL

2.1 Introduction

Gouws and Prinsloo (2005:45) state that in any lexicographic process the decision regarding the typological nature of the dictionary to be compiled is an important issue. Therefore, the model suggested in this dissertation for a Yilumbu encyclopaedic dictionary should be specified according to a dictionary typology.

This chapter aims to present a typological framework for the planned encyclopaedic dictionary. The chapter commences with the presentation of various dictionary typologies in Section 2.2. Section 2.3 contrasts encyclopaedic lexicography and general lexicography. Section 2.4 introduces the typological profile of the planned encyclopaedic dictionary for Yilumbu. Section 2.5 outlines specific principles of the proposed model for an encyclopaedic dictionary. Section 2.6 concludes the chapter.

2.2 Dictionary typology

There are many kinds of dictionary such as bilingual dictionaries, monolingual dictionaries and translation dictionaries. Their variety and related terminology have been studied under the rubric 'typology'. User needs influence not only the contents and the structure of a dictionary but also the typological classification of dictionaries. Thus, dictionary typology is a direct result of the needs in a specific speech community.

A typology can be defined as a system for the classification and description of items (Al-Kasimi 1977; Richards & Schmidt 2002:568). Dictionary typology provides prospective dictionary users with a classification of existing dictionaries based on a set of distinctive features that

 provides a systematic overview of the various categories and subcategories of dictionaries that are distinguished;

- indicates what the most distinctive features of each main category and each subcategory are; and
- makes it possible to explicate the differences and correlations of different dictionaries within a (sub) category (cf. Swanepoel 2003:45).

A number of dictionary classifications have been made (Al-Kasimi 1977; Béjoint 2000; Malkiel 1980; Zgusta 1971). It is noticeable that all classifications acknowledge a distinction between linguistic dictionaries and encyclopaedic dictionaries¹. The linguistic dictionary type includes all kinds of dictionary (monolingual, bilingual, school, etc.) as they focus on the presentation of the linguistic features of lexical items whereas encyclopaedic dictionaries are interested in the extralinguistic features of lexical items.

Zgusta (1971:197) calls dictionaries linguistic and non-linguistic dictionaries respectively. Linguistic dictionaries are concerned with the words or lexical units of languages and they are called word books. Non-linguistic dictionaries are not concerned with words but with realia or denotata (things) and they are called encyclopaedias or thing books (cf. Singh 1982:13). They are similar to dictionaries only in their alphabetical arrangement of the words denoting the realia. The aspects that are called encyclopaedic features such as description are also given in certain types of dictionary to add to the utility of the dictionary, though.

The typological distinction that should be made when planning an encyclopaedic dictionary is that between encyclopaedic and linguistic dictionaries and concerns

- the selection of the chosen entry words; and
- the data provided for entry words.

In the linguistic dictionary a description is mainly given of the lexical items (lexemes) of a language and their linguistic features, for example a lexical item's syntactic category, pronunciation, inflectional morphology and meaning. In the encyclopaedia, data on the linguistic features of words are also sometimes included; however, most of

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¹ See Section 3.2 for broader definitions of encyclopedia, dictionary and encyclopedic dictionary.

the data supplied go much further. Linguistic dictionaries are distinguished from encyclopaedias in terms of the status of the lemma type included and the kind of data provided for them.

Two other features that are typical of the encyclopaedia but also occur, albeit on a limited scale, in the linguistic dictionary are the following:

- The use of sketches, illustrations, diagrams and photos to elucidate the data contained in the articles.
- The inclusion of proper names (in the European tradition especially names from the Bible and mythology), based on the assumption that proper names and the knowledge associated with them constitute a part of the lexical knowledge of language users.

In terms of their macrostructure dictionaries are compared with regard to the following:

- The stratum/strata and scope of the vocabulary of a language from which lemmata are selected for lexicographical description in an encyclopaedic dictionary.
- The principles underlying the ordering of the lemmata (alphabetic, conceptual/ideological or a combination of both).

Taking the microstructure as point of departure, encyclopaedic dictionaries are compared with regard to the following:

- The categories of data provided for each lemma in a dictionary article.
- The ordering of these data categories within a dictionary article.

Lexical items are included from both the general vocabulary and the specialised vocabulary of the language. Furthermore, a grammatical profile of lemmata is provided in each article and an extensive description could occur in the broader field of knowledge that lemmata refer to.

2.3 Encyclopaedic lexicography versus general lexicography

According to Haiman (1980) there is a complex activity involved in the design, compilation, use and evaluation of encyclopaedias and encyclopaedic dictionaries and similar reference works. There is no unified framework and works vary considerably in scope, content and presentation; there are very different encyclopaedic traditions.

I summarise as follows in **Table 2.1** below.

Encyclopaedic lexicography		General lexicography
Emphasis on things (facts)	Orientation of compiler	Emphasis on words (language)
Multi-expert knowledge	Compiling method	Small-scale database
Factual information	Scope	General vocabulary
Specialist texts	Corpus data used	Non specialist texts
Encyclopaedic reflecting specialist	Definition style	Linguistic reflecting semantic
Conceptual systems		Distinctions in regular usage
Library use by educated readers	Functionality	Multi-purpose general users
Systematic order with index	Arrangement of macrostructure	Script-based order
Provision of real-world knowledge	Overall aim	Explanation of meanings
Relatively common	Pictorial illustration	Relatively rare

With regard to their microstructural features dictionaries differ in the profile they present, for example the grammatical features of a lemma. The dictionary articles of various kinds of encyclopaedic dictionary contain all or a number of the following data categories:

- Syntactic data (syntactic category)
- Morphological data (inflectional morphology and derivation)
- Semantic data (senses and meaning structure and sense relations)
- Distributional data (geographical or sociolinguistic distribution and frequency within a corpus)
- Illustrative data

The encyclopaedic dictionary can also be a repository of the total culture of languages, even of all human knowledge. A good dictionary, one might say, is almost like a little encyclopaedia. The entry in an encyclopaedic dictionary normally provides a description of all the facts that can be associated with the article; the general purpose of an encyclopaedic dictionary is really the world from A to Z (Rey 1982:22).

Thus, an encyclopaedic dictionary constitutes a type of reference work that presents factual data in a wide range of subject disciplines. This data are collected by lexicographers and arranged in a combination of systematic and alphabetical order for the benefit of generally educated readers.

An encyclopaedic dictionary intended for a multilingual and multicultural environment describes the vocabulary within this specific condition. It is possible to define language within this context from a geographical, dialectal, historical or a specific person's point of view. In fact, a language is linked to a community (or communities) with geolinguistic, geographic and historical features.

Therefore, I will also revert to the following features for the proposed encyclopaedic dictionary:

- The target users of an encyclopaedic dictionary.
- The various kinds of function encyclopaedic dictionaries of different kinds are intended for.
- The prescriptive or normative stance of lexicographers in the lexicographic descriptions.

2.4 Encyclopaedic dictionary typology

Two questions need to be answered in this section:

- (i) Can there be a typology of encyclopaedic dictionaries?
- (ii) Of what type will the planned encyclopaedic dictionary be?

I have shown the following two aspects in the previous sections:

- (i) The encyclopaedic dictionary is just one type among other types of dictionary.
- (ii) Encyclopaedic lexicography differs from general lexicography although a number of similarities can be found.

Moreover, I have advocated the establishment of an encyclopaedic lexicography that should comprise not only both research on encyclopaedic dictionaries and research on encyclopaedias per se but also the compilation of the two types of reference work (see also Chapter 3).

Within the specific aspect of the encyclopaedic dictionary, the discussion regarding the typological profile consists first of analysing some basic principles regarding the encyclopaedic dictionary. When dealing with encyclopaedic dictionary typology one should take care that the nature and extent of traditional typological categories do not impede the successful implementation of a user-determined function.

This discussion will be followed by specific principles regarding the formulation of the proposed model. Zgusta (1971:222) observes that when a lexicographer sets out to compile a dictionary, he or she has to take two basic decisions: (1) what part of the total vocabulary of a language the proposed dictionary will cover and (2) to what type the proposed dictionary will belong.²

Both aspects will be addressed when we understand the typological classification of dictionaries and locate the proposed encyclopaedic dictionary in that classification. It is clear that the proposed dictionary belongs within the framework of encyclopaedic lexicography: It is an encyclopaedic dictionary.

Now, it is understood within the typological classification of dictionaries that linguistic dictionaries constitute a category of dictionaries that have its own classification. Various dictionary classifications exist according to different authors

typology.

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² It should be noted that a number of other suggestions have been added to this approach for the past few decades. A more comprehensive account of dictionary typology can be found in Gouws (1989) and Hausmann (1989). Also, note that typology is no longer regarded as of so much importance but that the inclusion of this aspect in this work is due to the necessity of suggesting an encyclopaedic dictionary

(see Afane Otsaga 2004 for details and an inventory of these various classifications). However, the present study adheres to the classification by Zgusta (1971) that recognises the following two distinct blocks: encyclopaedic dictionaries and linguistic dictionaries. Afane Otsaga (2004:31) schematises Zgusta's classification as follows:

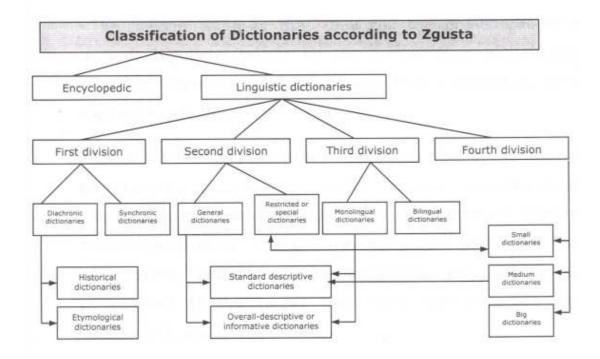


Figure 2.1: Schema of Zgusta's classification

Source: Afane Otsaga (2004:31)

The schema above shows an incomplete branch of the classification. This indicates a need for a classification of encyclopaedic dictionaries. In drawing up such a typology, the approach should focus on the users of the encyclopaedic dictionary and their specific needs. Encyclopaedic dictionary typology should therefore be defined in terms of the user profile (Gouws 1999b; Hartmann 1989b).

The first division of linguistic dictionaries is made between diachronic dictionaries and synchronic dictionaries. Diachronic dictionaries are primarily concerned with the history and development of words, both in respect to form and meaning.

On the basis of the analogy with the classification of linguistic dictionaries and taking into account only the second and the third division, the classification of encyclopaedic dictionaries can be schematised as follows:

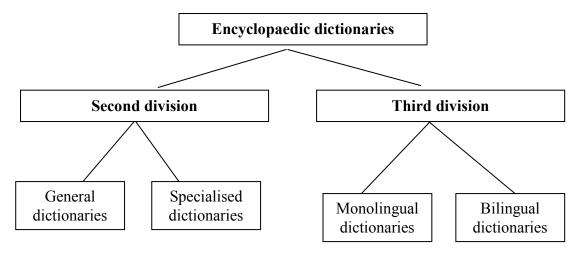


Figure 2.2: A proposed model of encyclopaedic dictionary classification

The structure of encyclopaedic dictionaries should be exactly the same as that of linguistic dictionaries with the difference that from the point of view of contents, encyclopaedic dictionaries should abound in the extralinguistic and cultural aspects of the lemmata.

Moreover, in the encyclopaedic dictionary typology there should not be any specification such as a standard dictionary since it is acknowledged that a standard encyclopaedic dictionary is monolingual and very often specialised.

It is true that many well-known encyclopaedic dictionaries are monolingual specialised dictionaries. I can quote Crystal (1999;2003), Ducrot and Schaeffer (1995), Dubois (1994), Matthews (1997) and Richards and Schmidt (2002), to name a few in the field of language sciences. The same type of dictionary exists in other disciplines such as medicine (Walton, Barondess & Lock 1994), biology (Hine 2008), physics (Illingworth 2001; Issaes 2003,), chemistry (Daintith 2008; Hunt 1999), law (James 1971), and so on.

The current trend in encyclopaedic lexicography is that many encyclopaedic dictionaries are specialised dictionaries because they relate to a specific field of knowledge. General language encyclopaedic dictionaries hardly exist or are less and less produced, unless they are general encyclopaedia such as *Encyclopaedia Britannica* (1899) or *Microsoft Encarta* (2001). At the same time, these encyclopaedic dictionaries that can be referred to as standard encyclopaedic dictionaries reflect a specific-field median or standardise the jargon of a scientific domain. Finally, they have a specific primary target-users group, namely the persons involved in the specific field.

The encyclopaedic dictionary focuses on the object. It is, therefore, a means also to increase cultural knowledge because data that serve as lemmata give access to broader developments than typical dictionary definitions or meaning paraphrases. Therefore, each category is defined as in the classification of linguistic dictionaries.

Decisions regarding the typology of the encyclopaedic dictionary to be compiled should not be based on emotional or ideological criteria but should reflect the results of a proper needs analysis of the intended target users (cf. Gouws 2001:72). One of the decisions could be whether the encyclopaedic dictionary should be monolingual or bilingual or even multilingual. In fact, encyclopaedic dictionaries of more than one language exist. For instance, in medicine and for the English and French languages, there are Delamare (2003) and Djordjevic (2004); in chemistry and for the English and Spanish languages, there is Kaplan (1998).

This study advocates the compilation of a general language encyclopaedic dictionary, in other words an encyclopaedic dictionary that goes beyond any specific field of knowledge and gathers users other than the specialists of any particular field. Such an encyclopaedic dictionary would necessarily imply not promoting the standard jargon of a specific field but rather bringing it to the common general knowledge. Dictionaries of this type are, for instance, *Le Grand Larousse Illustré* (2005) and *Le Grand Robert de la Langue Française* (2000). These dictionaries combine the characteristics of both encyclopaedic dictionaries (e.g. abundant extralinguistic and cultural data) and standard linguistic dictionaries.

According to Zgusta (1971:198) encyclopaedic dictionaries provide information about the extralinguistic world, physical or non-physical, and they are only arranged in the order of the words by which the segments of this extralinguistic world are referred to when spoken about.

According to Gouws (2001:80) new dictionary projects should not see themselves as bound to the existing typological models but should have the freedom to create innovative typological models. Hartmann (1989a) has already indicated very aptly that the compilation of any new dictionary has to be preceded by an in-depth needs analysis. This analysis can only be done once the intended target user has been identified unambiguously. It should reflect not only the needs but also the reference skills of the target users (cf. Gouws 2001:72).

The pursuit of the encyclopaedic dictionary typological profile should encourage the national and international collaboration of governmental and nongovernmental institutions engaged in the development of methods of teaching and evaluation in the field of lexicography and in the production of an encyclopaedic dictionary. This will ensure, as far as possible, that populations have access to effective means of acquiring knowledge of the Gabonese languages towards the encyclopaedic dictionary profile. Dictionaries serve as instruments in the development of a language, but their purpose is also to help in the process of the standardisation of languages.

It is of great importance that there be some kind of interaction between the lexicographer and the speech communities. The lexicographer has to come to an understanding of the profile of the target user and his or her needs, competence and knowledge and of the culture and circumstances of the speakers through this process of interaction³.

Teachers have to know the differences between the different types of encyclopaedic dictionary. This is important not only to guide students in using them appropriately but also to advise schools in purchasing the right kind of encyclopaedic dictionary. Knowledge of encyclopaedic dictionary types enables the user to know what to expect of a particular type of encyclopaedic dictionary. Knowledge of encyclopaedic

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³ Further details on the topic treated in this paragraph are given in Chapter 4.

dictionary typology may assist in the understanding of the encyclopaedic dictionary structure⁴.

Unless this knowledge is conveyed to teachers to pass on to students, encyclopaedic dictionary users will continue to think that all encyclopaedic dictionaries are the same and that anything can be looked up in any encyclopaedic dictionary. Dolezal and McCreary (1999:XIII) state the following:

Results of empirical studies suggest that dictionary users do not distinguish among types of dictionaries; moreover, no matter how lexicographers might classify a "thesaurus", students do not necessarily consider a thesaurus as a text belonging to a separate category of reference book.

As is shown in this quotation, many users of dictionaries, including encyclopaedic dictionaries, even in established languages such as French and English, still have problems with distinguishing among different types of dictionary. As already mentioned, the encyclopaedic dictionary is a type of book or bank about facts. Dictionaries and encyclopaedias are best seen as two types of reference work. The encyclopaedic dictionary is a blend of the dictionary as a word book/bank and the encyclopaedia as a fact book/bank.

The encyclopaedic dictionary gives importance to the contents of the text "with the entry words used as indexes to the crucial passages and or with broad encyclopedic treatment of the philosophical or other concepts expressed by the works" (Zgusta 1971:207). These dictionaries contain (1) linguistic information (the meaning of the words) and (2) encyclopaedic information (realia and denotata referred to in the text), according to Zgusta.

For compiling such an encyclopaedic dictionary each part of the text is interpreted in its context and this means not only its immediate verbal context but also the wider context of time (historical), place, (geographical) and human situation to which it belongs. With regard to culture it involves not only the interpretation of the several text parts, books, but also their interpretation as part of the culture, regarding the way in which each part contributes to the purpose of the culture as a whole.

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⁴ See Chpater 4 for further details on the topic treated in this paragraph.

The proposed encyclopaedic dictionary belongs to this class. I clearly identify the encyclopaedic dictionary as a type that can serve the needs of specific target users. The advent of theoretical lexicography led to an emphasis on the classification of dictionaries in terms of a range of typological models.

The proposed encyclopaedic dictionary is a fact book though it is also concerned with the translation equivalent. In fact, the lemma will first be translated into French before it is defined in an encyclopaedic way in an article. Encyclopaedic items are essential in the dictionary because of (1) the differences in the cultural and geographical setting of the Yilumbu cultures and (2) the progressive extinction of Yilumbu traditions in the modern period.

The target group or the users of the encyclopaedic dictionary are going to be Yilumbu speakers. However, French equivalents will be provided to help users by giving the encyclopaedic dictionary a partial bilingual character.

Acquisition of knowledge about basic distinctions in encyclopaedic dictionary types could greatly enhance the use of encyclopaedic dictionaries both as teaching and learning resources and as general reference works. Beyond establishing that there are encyclopaedic dictionaries of different types, students in Yilumbu are unlikely to master these basic distinctions in encyclopaedic dictionary types by themselves. They will have to be taught about these differences.

The classification that resulted from the practice of lexicography gave birth to encyclopaedic dictionaries that are compiled according to the needs of the intended target users and that respond to those needs.

2.5 Specific principles of the proposed model

The previous section has established that there can be a classification of encyclopaedic dictionaries and that these encyclopaedic dictionaries can be monolingual as well as bilingual, depending on the decisions taken by the lexicographer. The present section aims at introducing the specific principles of the proposed model.

According to the users of the proposed model and their needs and also according to the corresponding lexicographic function, as discussed in Chapter 4, the typological profile of the Yilumbu encyclopaedic dictionary will differ from that of the standard encyclopaedic dictionary. Indeed, as mentioned in Chapter 1, French language and culture must be included in this dictionary. As a result the Yilumbu encyclopaedic dictionary will be a monolingual unidirectional or monoscopal Yilumbu-French encyclopaedic dictionary. Therefore, having a bilingual dimension will be the unique and very important specificity of the proposed model compared to the standard encyclopaedic dictionary.

What is described in an encyclopaedic dictionary is the world. It can be said to distil that part of human knowledge that concerns the language. Whereas the encyclopaedic dictionary deals with the rest, the encyclopaedia gives an answer to the question, What is (the phenomenon)? The word *encyclopaedia* suggests a huge work of many volumes concerned with all the fields of human knowledge. It is important, however, to understand that specialised dictionaries can also be encyclopaedic provided that they are primarily interested in denotation (cf. Rey-Debove 1971).

Furthermore, every Gabonese language has enough specificities of its own and every lexicographic project also has many specificities of its own, caused by its purpose and by its cultural background and tradition. The encyclopaedic dictionary will not describe the linguistic units but will describe phenomena in the world outside the language. This is not to say that an encyclopaedic dictionary that is concerned with the language cannot include information about the world. This dissertation must take into consideration not only the whole structure of the language in question but also the culture of the respective linguistic community in all its aspects, to mention only two outstanding fields of its immediate interest. Such a definition goes far beyond the simple evocation that would be sufficient to isolate the concept.

In addition, the encyclopaedic dictionary may be described as mainly a linguistic dictionary with systematic inclusion of encyclopaedic data. This may appear either in separate entries about famous persons, countries, towns, and so on or as separate sections within the dictionary or both.

The encyclopaedic dictionary itself features more than concise and informative entries covering science and technology, the arts, modern and ancient history, religion, medicine, geography, current affairs, sports and popular culture. The entries should be arranged alphabetically throughout for rapid fact finding whilst cross-references and eye-catching illustrations should make the encyclopaedic dictionary interesting to browse.

I shall introduce the concept of the linguistic sign. This can be said to consist of an expression (a certain form) and a content (a certain meaning). Furthermore, the sign has a function (a certain way of behaving in combination with other linguistic signs). Starting from the three components or sides of the linguistic sign, we can thus group the different characteristics of things and thing combinations, as they are described in an encyclopaedic dictionary, in the following way:

Firstly, the encyclopaedic dictionary describes the formal characteristics of things. Secondly, their semantic characteristics are presented, that is, what they mean. Thirdly, the general characteristics of things are described: how they combine with other things, how they are essentially topical, dealing with an entire subject represented by the title of the article.

The encyclopaedic dictionary also gives certain data about the pragmatics of the words, among other things the non-linguistic facts that are involved in the use of things.

In the design of the proposed encyclopaedic dictionary, I envisage to opt for a concrete pragmatic approach that goes beyond the confines of broad academic categories. Unlike the classical conceptual index entries (such as religion or politics), for example only lexical and/or grammatical entries will be given. In an encyclopaedic dictionary article on the entry *religion* a systematic description of the religions of the world is provided with broad explanations including their histories, dogmas and conventions, in short, a summary of all the knowledge relating to religions.

I have chosen entries based on semantic 'attractors'. I call the entries attractors because they attract other concrete realities into clusters of meaning, an approach that is derived from neuroscience. These clusters constitute moving galaxies whose

dynamics vary. The proposed encyclopaedic dictionary will make it possible to spatio-temporally map Gabon, representing variations in the configurations of meaning ('attraction basins') according to parameters chosen by the user (cf. Svensén 1993).

In identifying the attractors, I will choose people from Gabonese societies (anthropologists, historians, linguists, archaeologists, lexicographers, etc.) but also other members of speech communities. This approach confers the undeniable advantage of giving users direct access to grass-roots components of Gabonese cultures.

In this way, I will remain close to everyday realities that are meaningful for Gabonese languages. Each of the lemmas will contain a wealth of semantic associations and will resonate with the ways in which the Gabonese languages exist in the world. A reference work that stores and classifies such factual information on all or some branches of knowledge or a single subject area is generally known as an encyclopaedic dictionary. Put simply, an encyclopaedic dictionary is a book or bank about facts.

Dictionaries are indications or mirrors of a country's social, cultural, scientific and technological development. Indications are that the speech communities of all the Gabonese languages need national encyclopaedic dictionaries, not only to bridge the communication gap but also to document and preserve the rich variety of the Gabonese languages.

National encyclopaedic dictionaries usually tend to contain the words generally used by people (in relation to history of the world, arts, history, geography, current affairs, religion, sports, popular culture, etc.). Humans use language to communicate about facts, things and people; words and the world are inextricably linked.

A linguistic description of nouns as names for plants, animals or insects and of adjectives as names for colours, for instance, necessarily involves encyclopaedic data.

Such items are entered in both dictionaries and encyclopaedias. The explanation will differ in degree rather than kind, namely in the amount of factual information required or provided to identify and characterise the object referred to according to the intended purpose of the particular reference work.

To assist users in this respect, I present in this dissertation a pragmatically orientated encyclopaedic dictionary typology. A typology of this kind is a classification of the various kinds of encyclopaedic dictionary that are available and of the lexical data they typically contain. The proposed dictionary should be a monolingual encyclopaedic dictionary with a bilingual dimension.

2.6 Conclusion

Encyclopaedic dictionary typologies are provided in the lexicographic literature and even more could be constructed, depending on the aim with which such classifications are devised. The typology presents a tool for language users to orientate themselves with regard to the vast selection of available encyclopaedic dictionaries that could be consulted when confronted with a lexical problem.

Given the large number of encyclopaedic dictionaries on the market and the seemingly endless variation they display with regard to their intended functions, the proposed typology is necessary. It is also a simplified representation of the objects it classifies and describes. In addition, it promotes mutual understanding and tolerance, respect for identities and cultural diversity through more effective national communication.

The proposed encyclopaedic dictionary should also maintain and further develop the richness and diversity of Gabonese cultural life through greater mutual knowledge of national and regional Gabonese languages included in the dictionary. The encyclopaedic dictionary should meet the needs of a multilingual and multicultural Gabon by appreciably developing the ability of Gabonese to communicate with each other across linguistic and cultural boundaries.

An encyclopaedic dictionary is essential to record data on the different cultures, the village names, the people and their environment.

CHAPTER 3: ENCYCLOPAEDIC LEXICOGRAPHY IN GABON

3.1 Introduction

This chapter presents an overview of encyclopaedic lexicography within Gabonese lexicography. The chapter aims to outline the status of encyclopaedic perspectives in Gabon and to highlight the need for encyclopaedic works within the emerging Gabonese lexicography.

The chapter commences in Section 3.2 with definitions of particular terms such as *encyclopaedia* and *encyclopaedic lexicography*. Section 3.3 provides a literature review of lexicographic surveys in the Gabonese languages. Section 3.4 presents existing encyclopaedic works in Gabon. Section 3.5 outlines recent trends in Gabonese lexicography in order to explain the situation of encyclopaedic lexicography in Gabonese lexicographic studies. Section 3.6 underlines the need for research in encyclopaedic lexicography in the Gabonese languages. Section 3.7 introduces specific advantages of encyclopaedic research for Yilumbu lexicography. Section 3.8 concludes this chapter.

3.2 Definitions: Encyclopaedia, dictionary and encyclopaedic lexicography

There are many references in the literature concerning encyclopaedic dictionaries and all of them are trying to distinguish encyclopaedic dictionaries from linguistic dictionaries and encyclopaedias. An analysis of this treatment has been given in Chapter 2.

Béjoint (2000), referring to Boisson, Kirtchuk and Béjoint (1991), has pointed out that the dictionary and the encyclopaedia may have evolved historically, at least in some cultures, from a common origin. They now differ in the nature of their articles, their arrangement and the nature of the data given in each article.

An encyclopaedia, or (traditionally) encyclopædia, is a comprehensive written compendium that contains data on all branches of knowledge or a particular branch of

knowledge. The encyclopaedia as we recognise it today developed from the general dictionary in the 18th century. The meaning attached from different sides to 'the encyclopaedic' in connection with dictionaries is connected to the world and methodic characteristics of the encyclopaedia.

Collison (1966:183) makes the following observation about the Webster's Third of Philip Gove: "Philip Gove, the editor-in-chief, has boldly abandoned some of the encyclopaedic features.... Former editions are therefore well worth preserving for their contribution to the state of knowledge at the periods they were issued."

In fact, in his Preface, Gove (1961:6) states in connection with the definition that

[t]he primary objective of precise, sharp defining has been met through development of a new dictionary style based upon completely analytical one phrase definitions. The new defining pattern does not provide for a predication (as in the previous editions) that conveys further expository comment. Instead of encyclopaedic treatment at one place of a group of related terms, each term is defined at its own place in the alphabet.

This reference to the encyclopaedic can be interpreted in the light of the long synoptic articles, especially of the Anglo-Saxon encyclopaedia. Webster's Third further restricts itself to 'generic words' in contrast to 'proper names'. The previous edition also contained as separate addenda a detailed Pronouncing Gazetteer of place names and a Pronouncing Biographical Dictionary of proper names.

Funk and Wagnall's New "Standard" Dictionary of the English Language (1946) and The Random House Dictionary of the English Language (1967) that can be compared to Webster, as well as other smaller publications, however, all contain place names and proper names as part of the text.

In Wiegand's (1984b:16) opinion, one should establish the principles that have been followed in lexicography up to the present. For example, one should state which principles have been valid for encyclopaedic dictionary types in the past and why. The model will be designed utilising the theory of Wiegand in combination with insights from the work of Tarp and Bergenholtz with regard to dictionary functions. Through its cognitive function, the encyclopaedic dictionary is a tool helping the user to extend his or her knowledge. The considerations mentioned above are also necessary as they

introduce a relevant discussion on what kind of empirical basis we need for a specific encyclopaedic dictionary.

The proposed encyclopaedic dictionary should reflect the culture of the language being treated. Because of traditional tasks or activities (fishing, hunting, agriculture, etc.), the special fields commonly used in Gabonese speech communities encompass names of plants, insects and animals as well as names of other natural phenomena (birth, death, traditional pharmacopoeia, traditional beliefs, etc.). Meaning explanations and types of data should be presented in such a way that students from other cultures may understand the semantic and cultural contexts in which expressions are used.

A dictionary primarily focuses on words and their definitions and typically provides limited data, analysis or background for the word defined. While it may offer a definition, it may leave the reader still lacking in understanding about the meaning or significance of a term in a second language and how the term relates to a broader field of knowledge. In case of a bilingual dictionary, the dictionary may give a translation equivalent, but the reader might still need a definition of the term in the initial language.

To address those needs, an encyclopaedia treats each subject in more depth and conveys the most relevant accumulated knowledge on that subject or discipline, given the overall length of the particular work. An encyclopaedia also often includes many maps and illustrations as well as a bibliography and statistics.

Among dictionaries, a distinction is made between linguistic dictionaries and encyclopaedic dictionaries. McArthur (1986:127) proposes that the dictionary-encyclopaedia relationship should be seen as a continuum rather than a dichotomy and proposes the term *micro-lexicography* to designate the activity dealing with "the world of words..." and the term *macro-lexicography* to designate the activity that "shades out into the world of things and subjects, and centres on compendia of knowledge...".

Meanwhile, within the theory of lexicographic functions the distinction between semantic and encyclopaedic data is not relevant. What is important is that the dictionary should provide the amount of data the user needs and to ensure that the particular function(s) of the dictionary can be achieved. In addition to the items of a linguistic dictionary, an encyclopaedic dictionary includes encyclopaedic data. This encyclopaedic data entail

- (i) the inclusion of names of persons, places, and literary works;
- (ii) coverage of all branches of human knowledge; and
- (iii) extensive treatment of facts.

Thus, the encyclopaedic dictionary is a combination of an encyclopaedia and a linguistic dictionary. In the amount of the data and the manner of its presentation, it combines the features of both.

Encyclopaedic lexicography is understood in this chapter and throughout the dissertation as the study and the compilation or production of encyclopaedias and encyclopaedic dictionaries. In other words, it can be seen as encyclopaedic research. An encyclopaedic dictionary may be defined as a reference work that documents the culture of the speakers of a given language and also reflects knowledge of other cultures.

Encyclopaedic dictionaries, however, may not always provide objective, clear and accurate information about cultural terms borrowed from other languages. A related case here is the treatment of proper names relating to the languages and the encyclopaedic dictionaries⁵.

The problem of place names and proper names in this connection is linked to the character of these words. Because of its purpose and design, nouns determine the most important domain of the encyclopaedic dictionary, which is proper names and place names, names of happenings, developments, tendencies, phenomena, materials, organisms, and so on and names that can serve as labels for the identification of a complex of knowledge. The treatment is determined by information about the objects, often multiple details, connected with names and explanation of cultural items.

In Onze Woordenschat (Our Vocabulary), De Tollenaere (1961:2) writes as follows:

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⁵ One may wonder whether an encyclopaedic dictionary also offers more than the culture of the speaker. However, it is understood that linguistic and semasiological borrowings imply an addition from another culture to the culture of the speakers of a specific language. This addition should be reflected in the encyclopaedic dictionary by means such as etymological or historical indications.

The task of an encyclopedia is the description of an object, while the real dictionary is content with defining the word itself. A user consulting a dictionary for the meaning of radio (for example) will find the following information "wireless telegraphy or telephony" ... while in contradistinction an encyclopedia will explain precisely how a radio functions, when and by whom it has been invented and how it has developed in all its aspects.... The user (on the other hand) who wants to know how many meanings the words staan (stand) and vallen (fall) can have, need not consult his Winkler Prins encyclopedia.

Attention is paid especially to biography, geography, history, science and art, in many cases elucidated by illustrations.

Encyclopaedic dictionaries are regarded as language banks. They play an important role in preserving and registering the culture of a language. One can establish which principles could apply in future in Gabon for new types of encyclopaedic dictionary. These will depend on factors such as user needs, scientific demands and technological and historical factors. The proposed encyclopaedic dictionary in Gabon is aimed at assisting with the promotion and establishment of the Gabonese languages as academic languages. With this project, Gabon wishes to make its own contribution to the development of the Gabonese languages.

3.3 Lexicographic surveys and encyclopaedic lexicography in Gabon

Four lexicographic surveys have been done in Gabonese languages: Mavoungou (2002b), Mihindou (2001), Ndinga-Koumba-Binza (2005a; 2006) and Nyangone Assam and Mavoungou (2000). The characteristics of each survey are presented separately as follows:

3.3.1 Nyangone Assam and Mavoungou

As a first account of lexicographic studies in Gabon, Nyangone Assam and Mavoungou (2000) traced the historical development of lexicography in Gabon. The survey included the linguistic situation in Gabon and the language policy, the lexicographic survey itself, as well as the lexicographic needs of the different speech forms (including languages and dialects). This lexicographic survey of the Gabonese languages showed that most of the dictionaries available for the Gabonese heritage speech forms are bilingual dictionaries and are biased towards French. It is noticeable in this survey that the only encyclopaedia recorded in the Gabonese languages is the *Encyclopédie Pahouine* of Largeau (1901) within the Mazuna lexicography. Other works of encyclopaedic interest noted in Nyangone Assam and Mavoungou are the following:

- (i) *Plantes Utiles du Gabon* by Raponda-Walker and Sillans (1961) within the Membe lexicography.
- (ii) Grammaire Pounoue et Lexique Pounoue-Français by Bonneau (1956) within the Merye lexicography.

The work by Raponda-Walker and Sillans (1961) is presented in this dissertation as an existing encyclopaedic work in the following section. The work by Bonneau (1956) covers 177 pages and contains two sections. The first section presents Yipunu grammar while the second section contains the lexicon itself, providing the reader with lemmata in Yipunu as well as translation equivalents in French.

3.3.2 Mihindou

Mihindou (2001) provides the second account of lexicographic studies in Gabon with specific attention to the contribution of missionaries to Gabonese lexicography. This survey focuses on bilingual dictionaries in Fang, Yipunu and Mpongwe in relation with French. In this survey, no encyclopaedic work is recorded.

3.3.3 Mavoungou

The account of lexicographic studies in Gabon by Mavoungou (2002b) is more or less in line with Nyangone Assam and Mavoungou (2000), with some new information, historical analyses and relative perspectives. No further encyclopaedic work other than those mentioned by Nyangone Assam and Mavoungou (2000) is recorded.

3.3.4 Ndinga-Koumba-Binza

The work by Ndinga-Koumba-Binza (2005b; 2006) offers an overview of current trends in Gabonese lexicography with regard to the language policy and the language landscape of Gabon. According to Ndinga-Koumba-Binza (2005), the current strategic planning of Gabonese lexicography leaves no space for encyclopaedic perspectives. However, Ndinga-Koumba-Binza (2006) ascribes encyclopaedic characteristics to the *Lexique Pove-Français/Français-Pove* by Mickala Manfoumbi (2004), a work he classifies into the modern era of dictionary production in Gabon (Ndinga-Koumba-Binza 2005:138; 2006:297). This work by Mickala Manfoumbi is also presented in this dissertation as existing encyclopaedic work in the following section.

3.3.5 Encyclopaedic lexicography

An overview of Gabonese lexicographic surveys shows that encyclopaedic lexicography is quasi-absent within the emerging Gabonese lexicography. The present dissertation advocates the development of encyclopaedic perspectives. These should be integrated into the strategic planning of Gabonese lexicography. For instance, the lexicographic units planned for each Gabonese language (Emejulu 2001:44) should have sections, programmes or projects for encyclopaedic lexicography (encyclopaedic dictionaries and encyclopaedias).

It is noticeable that the encyclopaedic metalexicographic project introduced in this dissertation is the first of its kind, since all recently proposed dictionary projects, for example Afane Otsaga (2004), Mabika Mbokou (2005), Mayoungou (2002a),

Mihindou (2006) and Nyangone Assam (2006), to name a few, do not fall within the framework of encyclopaedic lexicography.

The section that follows analyses a few of the existing encyclopaedic works in Gabon.

3.4 Existing encyclopaedic works in Gabon

Language is itself part of culture and reflects social structures and attitudes. This section examines existing encyclopaedic works in Gabon. It reviews the Gabonese tradition and the purpose of including cultural material in these works and considers the nature and scope of cultural data contained in a number of Gabonese dictionaries. The works examined herein are the following:

- (i) The *Encyclopédie Pahouine* by Largeau (1901)
- (ii) Les Plantes Utiles du Gabon by Raponda-Walker and Sillans (1961)
- (iii) The Lexique Pove-Français/Français-Pove by Mickala Manfoumbi (2004)

3.4.1 The Encyclopédie Pahouine (EP)

Victor Largeau, a French colonial administrator, compiled the *Encyclopédie Pahouine: Eléments de Grammaire et Dictionnaire Français-Pahouin* in 1901, dealing with the Fang language. It was published in Paris by Ernest Leroux Publishers. This work by Largeau has many times been under review by Gabonese lexicographers (cf. Afane Otsaga 2004; Mavoungou 2001b; 2002a; Nyangone Assam and Mavoungou 2000). This dissertation will only highlight prominent facts with regard to encyclopaedic lexicography.

3.4.1.1 General characteristics of the EP

It should be noted that the EP is the only reference work that, published during the colonial era, was entitled as an encyclopaedia. Formally, it is the only encyclopaedia of this period, "the only encyclopaedia ever compiled in Gabonese languages" (Nyangone Assam & Mavoungou 2000:257). However, in considering both its full title and contents, one finds that the EP equally contains not only a concise grammatical description of the Fang language but also a French-Fang bilingual dictionary part. Nyangone Assam and Mavoungou (2000:257) give the following description of the EP:

It is divided into two parts. The first part is a cultural overview of the Fan people. Here the compiler does not only renew the question of the origin of the Bafan (speakers of Fan), but other anthropological issues regarding rituals, the value system and mythology are discussed extensively. The second part, which contains the encyclopaedia itself, starts with a lexicological or lexicographic chapter (as it is called by the compiler). This chapter contains the user's guidelines and the minigrammar of the encyclopaedia. It provides the user with a relevant discussion on the pronunciation system, the orthography and the punctuation system used as well as some morphological information such as the parts of speech, word formation and the conjugation system of Fan that is abundantly illustrated by tables.

In the course of this section we will successively investigate the macrostructure and microstructure of the EP.

3.4.1.2 The macrostructure of the EP

The EP is an alphabetically arranged reference book of considerable size, consisting of 4 996 articles and covering 699 pages. The EP is intended, in the first place, for speakers of Fang who want to translate from French into Fang. In the second place, the encyclopaedia is meant for speakers of French. It is a useful aid for foreigners visiting Gabon. It has been an indispensable tool in the economic sector and public administration for French, English and German businesspeople operating in Gabon

(especially in Woleu-Ntem and Moyen-Ogooué) because it is generally acknowledged that colonial administrations were no longer willing to rely on interpreters. The following comment by Courbon (1908), as quoted by Raponda-Walker (1998:83), shows one of the reasons for colonial administrators' reluctance to depend on an interpreter:

Ce sera ce dernier (l'interprète) qui jouira de l'influence réelle sur l'indigène, influence que son naturel joint aux circonstances tentatrices lui fera exploiter à son profit, au detriment des indigenes aussi bien que de son maitre. Trop souvent, des malentendus, des revirements inexpliqués, des dissentiments, des « palabres » aux conséquences désastreuses ont été dus aux seules intrigues d'un interprète tout d'abord préoccupé de ses propres intérêts.

The latter (the interpreter) is the one who will enjoy the real influence over the native populations, while temptress circumstances of his position will lead him to use it for his own profit, to the detriment of natives as well as of his master. Very often, there have been misunderstandings, unexplained reversals, differences of opinion, "arguments" with disastrous consequences only due to intrigues of an interpreter who was first concerned about his own interests.⁶

Because Largeau's work is a monodirectional French-Fang publication, the lexicographer has not been confronted with the problematic aspects that African languages have in common or with language-specific issues in Fang. The compiler adheres to the lemmatisation principles established in the European tradition, for example verbs are lemmatised under their infinitive form or under the first person singular of the present indicative whereas nouns are entered under their natural simple form (cf. Hausmann & Wiegand 1989:329).

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⁶ All translations in this dissertation are made by the author.

In addition to the foregoing, it should be mentioned that different types of lexical unit including multiword lexical units such as *tout à coup, arc-en-ciel, tout à l'heure,* and so on have been lemmatised in the encyclopaedia. With regard to the scope of the work, lemmata have been taken from various fields, among others ethnology, religion, oral literature, metallurgy and astrology. As a large reference work the EP reflects the real language use and/or lexicon of the language.

With regard to the dictionary basis, a large lexicographic corpus was probably used. However, the lexicographer indicates neither the primary sources (also called lexicographic corpus or dictionary basis, which comprises all the sources that are not dictionaries themselves – cf. Smit 1996:30–31, 111) nor the secondary sources (all the dictionaries consulted during the compilation phase – cf. Wiegand & Kucera 1981:100ff) nor the tertiary sources of his lemma collection.

3.4.1.3 Items in the microstructure of the EP

Despite the alphabetical arrangement displayed by the lemmata, the encyclopaedic character of the work lies in its focus on extra-linguistic features rather than on the meaning of lexical items. As already mentioned, the EP aimed to present data as comprehensively as possible. The interesting fact that has to be mentioned is that the encyclopaedia usually provides the user with a great deal of contextual data. This point is illustrated in the article of the lemma AISELLE:

(1) AISSELLE (le dessous du bras), Mvagha, pl. me mvagha: Je porterai ce paquet sous le bras (sous l'aisselle), me ke babe mbom wele e mvagha'si (lit: moi irai portant un paquet ce dans aisselle dessous).

ARMPIT (the bottom of the arm), Mvagha, pl. me mvagha: I shall carry this package under the arm (under the armpit), me ke babe mbom wele e mvagha'si (lit: me shall go carrying a package this in armpit below).

Immediately after the lemma sign (in small capitals) appears, in parentheses, the explanation "le dessous du bras" (the underpart of the arm), followed by the translation equivalent (in italics) and the competence examples in both French and Fang. The latter is followed by its literal translation, given in parentheses. The systematic use of parenthesised explanations and word translations in the work corresponds to the lexicographer's willingness to meet the requirements of pedagogical lexicography. Another feature of the dictionary is the use of typographical markers. For example, in the article of the lemma CHANSON, encyclopaedic data are presented in both the source language (to the left) and the target language (to the right) in two columns set apart typographically and therefore clearly perceived by the user.

(2) CHANSON, za, pl. bia. Voici une chanson que chantaient quelquefois nos anciens compagnons pahouins pendant nos courses à travers le Congo; elle est en dialecte bedzi.

ZA NGOLA

CHANSON D'EXPLICATION

Ebon'I ne e Mellari,

Le coucher est aux Nénuphars,

SONG, za, pl. bia. Here is the song that our former Pahouin journeymen were singing sometimes during our journeys throughout the Congo; it is in Bedzi dialect.

ZA NGOLA

SONG OF EXPLANATION

Ebon'I ne e Mellari,

The bedtime is in Water lilies,

In (2) the user is provided with the singular and plural forms of the translation equivalent following the item giving the lemma sign. Then the lexicographer, after a short introduction of what is about to follow, gives in extenso a popular Fang song. A number of articles, *MORT* (death), *DESCENDANCE* (descent), *CREATION* (creation), *CONTE* (tale), and so on have the same bilingual presentation that could be used in the compilation of a monolingual dictionary of Fang, for example.

In addition to the foregoing, the lexicographer has sometimes thought that more data regarding the cultural context of the lemmata dealt with were necessary for a better understanding of the treated lexical items. To fulfil these anticipated expectations on the part of the users, Largeau has devised special articles divided into two sections or search areas (cf. Hausmann & Wiegand 1989:339).

The presentation of these articles is very much the same as that used in complex articles. In the first search area, the compiler basically deals with linguistic aspects whereas in the second (introduced by the word *Encyclopédie*), the focus is on the cultural aspects of the lexical item represented by the lemma. This structural marker (Encyclopédie) helps the user with quick and successful retrieval of the needed information because it clearly indicates the relevant article position.

As such it forms part of the rapid inner access structure (Hausmann & Wiegand 1989:338). Instead of going through the whole article the user who is merely interested in cultural data can immediately proceed along the inner search path (the outer search path ends at the lemma sign) to the article position 'Encyclopédie' and continue from there through the remainder of the article. This point is illustrated by the treatment of the lemma FEMME:

(3) FEMME: 1 en général, nga, pl. be ya; 2 femme accompli, qui donne des enfants, une dame, Monga, pl. bonga;

Encyclopédie: la femme; sa situation dans la famille; ses droits et devoirs.

WOMAN: 1 generally, nga, pl. be ya; 2 accomplished woman, who gives children, lady, Monga, pl. bonga;

Encyclopaedia: the woman; her situation in the family; her rights and duties.

From the data presented in these articles (cf. (2) and (3)) with a strong ethnographical angle, the user can retrieve a great deal of information regarding the lifestyle, value system, beliefs, in brief, the world view of the Fang people. The strong inclination

towards ethnographical data qualifies the EP to be classified in the subtype of the socalled *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". Although credit should be given to these cultural explanations, they reveal a number of shortcomings. Firstly, objections can be made with regard to the absence of metatexts in the user guidelines explaining the structure of these articles as well as the types of data category presented in them.

Secondly, the cultural analysis of certain treatment units reflects the biased observation of the colonising of the colonised. For example, as far as the question of anthropophagy among the Fang people is concerned, there is no doubt that Largeau was aware of the fact that anthropophagy was a very marginal phenomenon in this community. However, quite a significant number of co-text examples and cultural comments do highlight this practice (cf. Mavoungou 2001b).

This is likely to create a false impression in the mind of the users that the Fang community is anthropophagous. It has been proven by some scholars of ethnology (Deschamps 1962; Du Chaillu 1863; Metegue N'nah 1984; Roulet 1866, among others) that anthropophagy was restricted to a very small group of people. Moreover, only one piece of the body of the avowed enemy killed during war was eaten out of revenge in order to completely destroy any existence of him. Largeau (1901:337, 367) is correct when stating that women and children were excluded from these anthropophagous meals.

The aspect under discussion and others that are derived from an outmoded and dated Eurocentric vision should be removed from the work. The user profile has to be taken into account in order to achieve this goal. Largeau deserves credit for portraying the Fang society through its origin, rituals, mythology, wars, hospitality, and so on. However, he could not avoid the trap of cliché and personal judgments. As a result, some of his examples and comments often illustrate his own personal attitude towards the people described. It is well accepted that lexicographic data should illustrate an unbiased, impartial use of the language.

3.4.2 Les Plantes Utiles du Gabon (PUG)

The full title of the PUG is Les Plantes Utiles du Gabon: Essai d'Inventaire et de Concordance des Noms Vernaculaires et Scientifiques des Plantes Spontanées et Introduites. Description des Espèces, Propriétés, Utilisations Economiques, Ethnographiques et Artistiques (The Useful Plants of the Gabon: An Inventory Attempt and Concordance of the Vernacular and Scientific Names of the Spontaneous and Introduced Plants. Description of the Species, Properties, Economic, Ethnographical and Artistic Uses).

The length of the title is understandable through the necessity of rendering the diverse contents of the work. In fact, the book deals with indigenous and alien plants of Gabon. The essay presents not only the inventory and classification of these plants but also a comparative onomasiological study of vernacular and scientific plant names. The book finally includes a description of plant species, their properties and their economical, ethnographical and artistic usage.

According to Mavoungou, Afane Otsaga and Mihindou (2002:136),

Although entitled *Les Plantes Utiles du Gabon*, this publication is in fact an encyclopedic dictionary of the names and uses of Gabonese plants, published in 1961 by Raponda-Walker in collaboration with Sillans. It is arranged alphabetically, and consists of 1 497 articles covering 582 pages. It contains some 8 000 indigenous plant names (as well as their scientific names and usages), collected over a period of thirty years by Raponda-Walker. The work gives an account of its primary, secondary and tertiary sources and the front and back matter texts are also sources of valuable information for the users concerning the scientific description (height and diameter, arrangement and texture of the foliage and leaves, etc.), and the distribution and the cultivation requirements of the tree dealt with. As visual aids for users, the book is illustrated with 53 pictures by Sillans.

In his review of the PUG, Waldron (1962:431) makes the following analysis:

Les Plantes Utiles du Gabon is an inventory of more than 1, 500 species of plants used for nutritive, medical, religious, decorative, structural, and

commercial purposes by the residents of the former French colony of Gabon. Each species, classified according to genus, is briefly described, its uses itemised, and its names given in as many as 27 *Gabonaise* Bantu languages. Separate indices of botanical names, Bantu names, and French names, in supplement to a general index, make the information contained in this book particularly accessible...

It is therefore agreed that the authors of the PUG have compiled, in their work, a basic reference for a botanical use of hitherto unknown plants in Africa.

Botanists may find that the lack of a key restricts its usefulness as a field manual; anthropologists might have hoped for an ethnobotanical treatment of the material presented, or at least a mention of the particular ecological associations in which each plant is most frequently found (Waldron 1962:431).

Nevertheless, as Waldron (1962:432) puts it in the conclusion of his review, although the book is neither an ethno-botanical study nor an analysis of the Gabonese agricultural systems, "it is nevertheless of a great value to anthropologists ... with its publication, more is known of the useful plants of Gabon than of the people who use them".

Finally, although a prior metalexicographic study of the book is unknown, one can agree with Mavoungou, Afane Otsaga and Mihindou (2002:136) that "this publication is in fact an encyclopedic dictionary of the names and uses of Gabonese plants".

3.4.3 The Lexique Pove (LPFFP)

The LPFFP by Mickala Manfoumbi (2004) is a 761-page reference work containing three parts:

- (i) The front matter texts
- (ii) The lexicon
- (iii) The back matter texts

The front matter texts include, apart from the acknowledgements, not only the foreword but also the following:

- (i) Maps for the geographic location of the Pove populations
- (ii) An ethnolinguistic introduction of the Pove society (history, culture, socioeconomic organisation, etc.)
- (iii) A survey of research works on both the Pove language and ethnic group
- (iv) The language classification and an overview of the linguistic description of Pove (phonetic segments, phonemes, allophones distribution and classifiers)
- (v) A brief presentation of the organisation of the lexicon

The back matter texts record the bibliography, the list of existing works from the publisher and a very short introduction of the Fondation Raponda-Walker, owner of the publishing house Editions Raponda-Walker.

The second part of the book is the lexicon itself. Mavoungou (2005) has made a review of the LPFFP in general and criticised the macrostructure and the microstructure, which present a nomenclature of 8 227 words in 725 pages. Data contained in articles are presented in two sections and in four columns for each section. Section 1 comprises the lexicon with Pove as source language and French as target language. Column 1 of this section presents Pove lemmas in alphabetical order and their dialectal variants. The lemmas are nominal stems of Pove words. Column 2 gives noun class indications of these Pove words. Column 3 gives the complete Pove

words including their respective noun prefixes. Column 4 contains the French equivalents.

Section 2 comprises the lexicon with French as source language and Pove as target language. In this section, column 1 presents lexical items in French in alphabetical order. Column 2 records the Pove equivalents in their respective noun stems. The noun class indications appear in column 3. Column 4 gives the complete Pove words including the respective noun prefixes.

Ndinga-Koumba-Binza (2006) has questioned both the title and the nature of the LPFFP. The book is entitled as a lexicon but its bears dictionary characteristics and even characteristics of an encyclopaedic dictionary, as Ndinga-Koumba-Binza (2006) points out. Among these encyclopaedic characteristics, Ndinga-Koumba-Binza (2006:300–301) highlights the following two:

- (i) The density of information given in the front matter texts as well as the extent of the front matter texts part itself. Apart from textual information, this part also contains an abundant number of colour pictures, tables and maps.
- (ii) The second encyclopaedic characteristic is shown in the microstructure, in other words the content of articles. Articles contain not only the equivalents in the target language but also the full cultural description of the object designated (tree, plant, animal, cultural item, etc.). Black-and-white pictures as well as historical and etymological notes are also given for a number of lexical items.

In this dissertation, I agree with Ndinga-Koumba-Binza (2006) that the LPFFP is an encyclopaedic dictionary. In fact, as Mavoungou (2005:82) puts it, as well as being a scientific work the LPFFP is a cultural product since it was made to meet various needs of the Pove community.

Researching reviews of existing encyclopaedic dictionaries can provide useful information. One can learn a great deal from studying the features of such encyclopaedic dictionaries. One can also determine certain limitations and advantages of existing encyclopaedic dictionaries, which may enable lexicographers to compile

new and improved encyclopaedic dictionaries to fulfil the needs of potential users even better.

The relevant metalexicographic literature has been consulted. Arguments for the exclusion of encyclopaedic elements from linguistic dictionaries rest on a number of questionable linguistic-semantic assumptions. Geeraerts (1986:187–244) and Haiman (1980) argue convincingly that the difference between our linguistic and extralinguistic (or encyclopaedic) knowledge, which covers our knowledge of the referents of words, cannot always be clearly demarcated.

The conclusion of this section is that if no real encyclopaedia does exist in a Gabonese language, very few works can be identified as encyclopaedic dictionaries.

3.5 Recent trends in Gabonese lexicography

In the light of the foregoing, it is true that lexicography is still a developing research field in Gabon in terms of a metalexicographic conception of reference works. However, "Gabonese metalexicography experiences a fast-growing crop of literature" (Ndinga-Koumba-Binza 2005a:136). Ndinga-Koumba-Binza (2005a:136; 2006:302) indicates that although the lexicographic plan is still embryonic, Gabonese lexicography is at "five simultaneous phases in its development":

- (i) Lexicographic training.
- (ii) Metalexicographical accounting for dictionaries.
- (iii) Circumscribing lexicography as a career.
- (iv) Formulating a coherent general framework for Gabonese lexicography.
- (v) Updating reference works inherited from missionaries and colonial administrators.

It is noticeable that at this stage of its development there is still no specific attention to encyclopaedic lexicography within Gabonese metalexicography.

As for lexicographic practice, in other words the practical component of lexicography (Gouws 2001:59), Ndinga-Koumba-Binza (2005:138) has identified two major eras of dictionary production in Gabonese lexicography: the earlier era and the modern era.

According to Ndinga-Koumba-Binza (2005:138), the earlier era includes reference works from missionaries and colonial administrators. Mavoungou (2001b and 2002a), Mihindou (2001) and Nyangone Assam and Mavoungou (2000) show that the majority of lexicographic reference works available in Gabonese languages are bilingual dictionaries, lexicons and glossaries compiled by Catholic and Protestant missionaries and colonial administrators from 1800 to 1960, when Gabon gained its independence from France.

As for the modern era, Ndinga-Koumba-Binza (2005:138) indicates that it started with the publication of *Gedandedi sa Geviya/Dictionnaire Geviya-Francais* (henceforth DGF) in 2002 by Van der Veen and Bodinga-bwa-Bodinga. Mavoungou (2004:440) points out that the appearance of this dictionary opened a new era of dictionary publication in Gabon. The DGF was followed in 2004 by the *Lexique Pove-Francais/Francais-Pove* by Mickala Manfoumbi and in 2008 by the *Dictionnaire des Gabonismes* by Dodo-Bounguenza. It is acknowledged with Ndinga-Koumba-Binza (2005) that this period coincides with the completion of the first theses on metalexicographical planning of dictionaries in the Gabonese languages (Afane Otsaga 2004; Mavoungou 2002a)⁷.

New trends in the modern era of Gabonese lexicography are emphasised with the theoretical conception, in other words a metalexicographical design, of reference works. However, the current published dictionaries in this era did not experience a theoretical conception according to modern lexicographic theories. Thus, the modern era of Gabonese lexicography as identified by Ndinga-Koumba-Binza (2005:138) enumerates the following three aspects:

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⁷ Six other doctoral theses on metalexicographical planning of dictionaries in the Gabonese languages have been completed since 2006 (Ekwa Ebanega 2007; Ella 2007; Mabika Mbokou 2006, Mihindou 2006; Nyangone Assam 2006 and Tomba Moussavou 2007).

- Two reference works published⁸ (i)
- A number of currently and metalexicographically planned dictionary (ii) works in progress (e.g. Mavoungou 2002c)
- A strategic research framework: strategic planning of Gabonese (iii) lexicography (Emejulu 2001a; 2003)

The consideration of encyclopaedic lexicography in the current era of dictionary production in the Gabonese languages is characterised by the production of the Lexique Pove, which Ndinga-Koumba-Binza (2006) labels as an encyclopaedic dictionary.

Finally, in terms of metalexicographic planning Gabonese lexicography does not currently envisage a perspective of encyclopaedic lexicography. Nevertheless, an encyclopaedic perspective is proven through produced encyclopaedic works.

The following section introduces the need for encyclopaedic lexicography within the context of the emerging Gabonese lexicography in general.

3.6 Need for encyclopaedic lexicography

3.6.1 Introduction

To understand the importance of the encyclopaedic dictionary and the importance of the readability of encyclopaedic dictionaries, we may first need to tackle the question of why we need to compile an encyclopaedic dictionary in the first place. An encyclopaedic dictionary plays an important role in the culture with its cognitive function.

In Gabon, a number of people possess special knowledge and information. This gives sense to the commonly accepted and widely used quote from Hamadou Hampaté Ba: "In Africa, when an old man dies it is an entire library that burns". In fact, this knowledge and information are hardly available in books. An intensive production of

⁸ Now three reference works including Dodo-Bounguenza (2008), which did not exist at the time of Ndinga-Koumba-Binza's publication.

⁹ My translation from *En Afrique, quand un vieillard meurt c'est toute une bibliothèque qui brûle.*

encyclopaedia and encyclopaedic dictionaries can help not only to preserve all this knowledge but also to expand it worldwide.

There is a need for reference works, especially encyclopaedias and encyclopaedic dictionaries, in order to access this knowledge, whether mystical, magical, practical or technical. Through an encyclopaedic dictionary, knowledge is conveyed to people who do not understand the source language, and through the same encyclopaedic dictionary one reaches out to other cultures.

The encyclopaedic dictionary has developed over the years and theories and approaches have been developed to describe the processes involved in the compilation of the encyclopaedic dictionary. This section will look into what the encyclopaedic dictionary is and what is involved in compiling the encyclopaedic dictionary. It will also look into theoretical approaches, culture and the presentation of encyclopaedic data in the encyclopaedic dictionary.

3.6.2 Culture and general knowledge

The need of the Gabonese languages is for a combined encyclopaedic and linguistic dictionary. Encyclopaedic dictionary use and needs are of great interest to both the lexicographer and the user. Metalexicographers seek to determine the needs of encyclopaedic dictionary users in order to influence the compilation of encyclopaedic dictionaries accordingly.

Compiling encyclopaedic dictionaries that will provide relevant data about Gabonese, French and general culture will primarily represent pertinent reference sources that assist in promoting and standardising Gabonese culture. Furthermore, experts such as teachers, people in charge of the compilation of sources including the Gabonese languages, experts in education and culture, people dealing with and interested in culture, and so on will need to consult encyclopaedic dictionaries dealing with the Gabonese languages. Moreover, users of dictionaries want encyclopaedic dictionaries that will meet their lexicographical needs.

The needs of encyclopaedic dictionary users can be determined from the purposes for which the encyclopaedic dictionary is used. The basic task of an encyclopaedic dictionary is the inclusion of names of persons, names of famous people, places, buildings, literary works and works of art from all around Gabon, coverage of all branches of human knowledge and extensive treatment of facts. It serves the needs of the native speakers of a particular language.

Such an encyclopaedic dictionary is one that (1) includes all lexical items the expected user would want to look up, (2) puts every lexeme selected for the encyclopaedic dictionary in its appropriate place where the user can easily find it and (3) provides at the point of entry the lexicographical data that the user needs.

Recent lexicographic literature is quite silent in defining the primary traditional motivation for consulting an encyclopaedic dictionary. In fact, encyclopaedic dictionary users have different reasons for consulting an encyclopaedic dictionary. In my view, the main reason should be the desire to find data that are often not recorded in a general linguistic dictionary. Most of the time this data are of an extralinguistic nature.

It should also be noted that encyclopaedic dictionaries are more likely to be found than encyclopaedias. Thus, availability appears to be a motivation for consulting an encyclopaedic dictionary in the absence of an encyclopaedia. Note that encyclopaedias take more time than dictionaries to be produced, maybe because they are specialised and sometimes are released in different volumes; thus they are scarce and are not likely to be found in a household or on one's bookshelf.

Moreover, an encyclopaedic dictionary may also be used for encoding or decoding a language. Young language learners can use an encyclopaedic dictionary mostly when they read or write and less often when they speak or listen to someone in order to find something more than just the meaning of the equivalent in the initial language. This goes beyond the mere search for correct words, spelling or meanings when they write.

From a commercial point of view, an encyclopaedic dictionary that meets the user's needs will definitely sell if a dictionary culture is well established, hence the importance for an encyclopaedic dictionary publisher to compile and publish encyclopaedic dictionaries that meet this condition. Underscoring this, Barnhart (1962:161) observes the following:

It is the function of a popular dictionary to answer the questions that the user of the dictionary asks, and dictionaries on the commercial market will be successful in proportion to the extent to which they answer these questions of the buyer.

The vision is for an encyclopaedic dictionary that can function as a powerful communication and academic tool to aid not only in the linguistic empowerment of mother-tongue speakers but also in the improvement of knowledge of their culture.

The culture of a society consists of the particular knowledge and beliefs that members of a community share. It enables them to operate in a manner acceptable to the group and in any role that the group finds acceptable. This means that lexicographers will deal with special vocabulary and special language, according to the purposes of the text, based on the user's needs.

The knowledge, beliefs and practices of a particular society are reflected in its language. The vocabulary of a language can provide some evidence of what is considered culturally important, and there may be several words for the most familiar items and concepts. Thus, language dictionaries, for instance, provide data about the language and only about the extra-linguistic world in so as far as this is necessary for the correct usage or understanding of linguistic expressions. Encyclopaedic dictionaries, however, provide data about things or about a subject and only about the language in as far as this is necessary for understanding of the subject matter.

Gabon is multilingual and multicultural. Although there are some shared aspects of culture, such as political institutions, the justice system, sports and music, many traditions, practices, events and folk heroes are little known outside individual cultural groups. For the Yilumbu people, at least, the proposed Yilumbu encyclopaedic dictionary will be recording a fair amount of cultural information that is accessible not only to Yilumbu speakers but also to Yipunu and Civili speakers. Though the encyclopaedic dictionary may be targeted primarily at the Yilumbu community, the neighbours understand each other and the dictionary will be widely accessible. The purpose of this study is also to determine the potential value of an encyclopaedic

dictionary within an environment where there is a multiplicity of languages and cultures and the need for mutual comprehension. I intend to focus on how the potential value of an encyclopaedic dictionary can be realised within such a diverse environment.

3.6.3 Culture and encyclopaedic dictionaries

Encyclopaedic dictionaries typically reflect the language of a given speech community. An encyclopaedic dictionary can also be a valuable instrument to reflect something about the culture of that speech community.

National encyclopaedic dictionaries, like general monolingual and bilingual dictionaries, are important reference sources because they are carriers of the general vocabulary of a language. As Alberts (2003:1) mentions, a national dictionary tends to contain the general words (vernacular, common words, literary words, dialectal words, slang, vulgar words, etymology, frequently used scientific and technical terms, etc.) of a specific language. This can also apply to an encyclopaedic dictionary when it bears the features of the one proposed in this research work, namely a monolingual encyclopaedic dictionary with a bilingual dimension intended for students.

Moreover, national encyclopaedic dictionaries are reference sources through which languages are documented and preserved. Since national culture is to be fully established in education, among other things specialised terms used when teaching, used in scholars' conversation and used when scholars are dealing with different subjects (such as natural history) must be provided in these languages.

Cultural change is a universal phenomenon. All cultures change in the course of time, more or less rapidly. There is no such thing as a stable society, even if the synchronic method used by many lexicographers, in other words investigating a culture at a particular time, may lead one to think that way. An acknowledged objective of the envisaged encyclopaedic dictionary is also to contribute to a better knowledge of the history of Gabon, which, similarly to that of other countries of sub-Saharan Africa, is insufficiently known. As an example, one of my objectives is also to convince the reader that the proposed presentation and treatment of village names in this model can

make it possible to better understand the history of immigration into and settlement of the Gabonese territory.

In addition, most African countries do not have a well-established dictionary culture, except the Anglophone zone. However, the current situation of a combination of linguistic and educational issues is about to create a need for numerous reference works in African languages, especially regarding the presentation of national culture.

For the specific case of Gabon it then appears important to establish a dictionary culture by first introducing the users to less complicated dictionaries. This is being done since Gabon is experiencing a fast-growing lexicographic research (see Ndinga-Koumba-Binza 2005a and 2006 for a review of recent lexicographic research in Gabon).

In my view, it should be within this fast-growing research in the discipline of Gabonese lexicography that an introduction to encyclopaedic dictionaries should take place at the same time. This will comply with the general idea of the whole language research epistemology of Gabon, namely that Gabon has to catch up on the delayed improvement of its languages.

3.6.4 Education and encyclopaedic dictionaries¹⁰

The compilation of an encyclopaedic dictionary is extremely important in the context of education in Gabon. Teachers would be more knowledgeable and confident in their use of reference works once they have learnt how to use these reference works. This ability would enable them not only to use encyclopaedic dictionaries effectively in their teaching but also to teach reference skills to students. Once students and teachers have acquired reference skills and developed positive attitudes towards encyclopaedic dictionaries, an encyclopaedic dictionary culture would be growing amongst the Yilumbu. The Yilumbu community, like most Gabonese communities, is generally poor and schools have very limited resources.

For the foreseeable future, encyclopaedic dictionaries in Yilumbu will be for a general public, including mainly students and their teachers. Once students develop the habit of using encyclopaedic dictionaries, parents would have to acquire encyclopaedic dictionary skills too, as they would be required to assist their children with homework.

Teachers would be interested in better encyclopaedic dictionaries for teaching purposes. Publishers generally want to keep their market satisfied with the best that can possibly be produced. Writers would be compelled to produce better works too. All these factors would combine to enhance research on encyclopaedic dictionary making in Yilumbu. Such research to establish user needs would currently not yield much, considering the low standard of reference skills amongst speakers. Once teachers have a basic knowledge of encyclopaedic dictionaries and how they can best be utilised, however, there would be users able to give reliable feedback about particular dictionaries and user needs.

Teaching of the workings of an encyclopaedic dictionary should develop an encyclopaedic dictionary culture amongst the Yilumbu community. The conditions for such a development are favourable, judging from the enthusiasm people showed for the encyclopaedic dictionary in newspaper articles, letters to editors and phone-ins on the radio. The linguistic environment is now conducive to decisive changes in the teaching and promotion of Yilumbu in Mayumba. Among potential users the

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¹⁰ See emphasis on this topic in Chapter 4.

motivation is already there; what now remains is to provide them with the required skills to make full use of encyclopaedic dictionaries.

The encyclopaedic dictionary is a must-have reference work for any library with collections in lexicography, anthropology as well as the natural sciences, social sciences and humanities. It should provide students, educators and a wide array of interested readers with a greater understanding of and deeper appreciation for those facts, concepts, methods, hypotheses and perspectives that make up modern lexicography and related disciplines.

The encyclopaedic dictionary can contribute to bridging the knowledge gap between rural development workers and Yilumbu speakers. In fact, most Yilumbu speakers nowadays live in cities and the younger generation very likely speaks better French than Yilumbu. This situation puts these speakers in a likely position to forget not only cultural items but also the vocabulary to name these items.

The encyclopaedic dictionary aims to provide its users with a general knowledge basis of the Yilumbu culture. A good reference guide would lower the learning curve of the student and be a useful aid to lecturers. The primary aim is, after all, to produce an encyclopaedic dictionary that will be a relevant and useful tool for its target users: students in a multilingual Gabon.

An encyclopaedic dictionary is an extra-linguistic tool, also used for the development and preservation of languages. It may be regarded as an indispensable tool in the process of knowledge transfer at the targeted education or training levels and for promoting effective knowledge.

The following scenario is proposed in order to promote encyclopaedic dictionary use in the Gabonese languages at all levels of education:

General dictionary culture

Awareness of the Gabonese languages should begin in primary school.
 Programmes should be developed in order to create a general consciousness of linguistic phenomena (relationship with the native Gabonese languages or other languages present in the classroom environment). This should

consequently present the need for dictionaries in the Gabonese languages as support material.

 With the emphasis on basic oral communication and clearly predetermined linguistic content, which should be aimed at establishing basic linguistic components, primarily phonetic and syntactic aspects, language teaching should promote general dictionary use and elementary oral interaction in class.

High school lower level¹¹

- The aim of dictionaries in the Gabonese languages introduced at this stage would be to promote sensitivity to and increase awareness of the learner's approach to the Gabonese languages and learning activities. The regular programmes designed to develop the different skills continue until the end of secondary school but at various intervals, these are supplemented with revision and discussion sessions relating to the resources and methods used for teaching and learning so as to accommodate an increasing differentiation between the profiles of different pupils and their expectations of and interest in the encyclopaedic dictionary.
- At this stage, a particular emphasis on dictionary culture could be placed on sociocultural and sociolinguistic elements as perceived through increasing familiarity with the encyclopaedic dictionary and possibly linked with the Gabonese culture course and benefiting the pupils, who should be given an opportunity to learn other subjects contained in an encyclopaedic dictionary (e.g. history or geography).

High school upper level

 An encyclopaedic dictionary should continue in the same direction but at a more complex and demanding level. Learners who opt for a Gabonese language do so primarily for 'vocational' purposes and relate their

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¹¹ In Gabon's education system, high school comes after six years of primary school. High school has two levels: the lower level of four years (often known as secondary school) and the upper level of three years.

Gabonese language learning to a more professionally oriented or other academic branch of their studies (for example orientation towards the encyclopaedic dictionary of commerce, economics or technology). The dictionary can be used in the language class as well as in other classes, depending on specific needs.

These levels (lower and upper) should be set aside for teaching learners how to use an encyclopaedic dictionary: how to use the front matter, interpret the signs, abbreviations and explanations, and so on. There is no perfect method of teaching, which is a very complex activity. In most cases, the method used in a lesson will be determined by different situations, the type of subject being taught, the resources, the time available and the type of user. It can serve as a focus for knowledge and classroom interaction and a means of exploring personal preferences in learning styles. The envisaged lexicographic units should establish contacts with schools in Gabon; a pilot website should be set up at a local school, enabling the children to send words to the units.

Data categories dealing with culture- and language-specific aspects will be considered, together with aspects of encyclopaedic dictionary structure in view of the user needs and reference skills. This is hoped to indicate the effectiveness of encyclopaedic dictionaries in solving cognitive and communication-related problems faced by users.

The proposed encyclopaedic dictionary should be composed of terms from both modern and traditional educational practices. It will be compiled with the aim of providing a tool for communication between teachers and students. There will be a need for better communication between teachers and students so that student expectations could be fulfilled after a course in encyclopaedic dictionary use. We can make the encyclopaedic dictionary a primary source of interaction instead of being a book consulted in private or largely for individual learning problems; it can become a springboard to all sorts of other knowledge activities.

By exploiting the encyclopaedic dictionary as source of interaction, we can help students develop their confidence as encyclopaedic dictionary users, and an important spin-off is that students are exposed to a great deal of language data that will help them to experience and explore the language as a system. Teachers benefit as students develop better encyclopaedic dictionary skills.

Encyclopaedic dictionaries provide an extra source of information in the classroom and add variety to lessons. They can provide useful support not only when students are in doubt about something but also when teachers want students to confirm their own suppositions about an aspect of Yilumbu cultures.

It is possible to improve the reference skills of encyclopaedic dictionary users through teaching the culture covered by the encyclopaedic dictionary. By focusing firstly on teacher training, this knowledge would easily reach the school pupils and eventually the general Gabonese community. The eventual role of the envisaged Gabon national lexicographic units would be to compile comprehensive dictionaries in order to enable the Gabonese languages to operate in various fields such as science, education, economy, technology, and so on.

There is a need for user education in Gabon, especially for teacher training. User education is defined by Hartmann and James (1998:152) as "the training of users in the reference skills in response to reference needs". Reference skills are "the abilities required on the part of the dictionary user to find information being sought" (Hartmann & James 1998:117) while reference needs are "the circumstances that drive individuals to seek information in reference works such as dictionaries" (Hartmann & James 1998:116). I agree with Hadebe (2004:90) that "by training teachers to be good users themselves, it is envisaged that they could pass these skills on to students and eventually to society in general".

The choice of focusing on teacher training is justified. To improve the lexicographic situation in Gabon in general, the teaching of reference skills should first target the teachers themselves, for example teachers in the ENS¹² (*Ecole Normale Supérieure*) and ENI (*Ecole Nationale des Instituteurs*). Teachers should be taught reference skills as part of their training in order to enable them to make maximum use of encyclopaedic dictionaries and reference books and impart this knowledge to students at any high school.

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¹² ENS (Higher School of Education) and ENI (National School for Primary School Teachers).

Teachers are in a better position than researchers or even lexicographers to assess students' lexicographic needs. If teachers gain competence in encyclopaedic dictionary skills and pass on these skills to students, an encyclopaedic dictionary culture could grow in the community. In addition, there is evidence that the problems encountered with regard to the Gabonese languages could have an impact on the teaching of dictionary skills in these languages and could be the cause of the lack of existing dictionaries available in the Gabonese languages, the lack of competence, the lack of training lecturers, and so on.

Since the Gabonese Government has become aware of the importance of the Gabonese languages in the development of the country, it started to promote them. One notes some changes: There have been important lexicographical developments in Gabon. Lexicography is now one of the focus areas of important research units established at Omar Bongo University, namely the *Groupe de Recherches en Langues et Cultures Orales* (GRELACO), the *Laboratoire Universitaire des Traditions Orales* (LUTO), the *Chaire UNESCO Interculturalité* as well as the *Département des Sciences du Langage*.

The proposed encyclopaedic dictionary is intended to be useful to the average reader, student and teacher of any of the two languages, who is at the same time interested in the study of the Gabonese languages or has, of necessity, for official or other utilitarian purposes to know the culture expressed in the Yilumbu language. In schools that require pupils to take Gabonese languages as subjects, both students and teachers should find the encyclopaedic dictionary a great help. This model requires, among other things, the development of language teaching materials. Yet, encyclopaedic dictionaries are rarely mentioned in the discussions of the materials necessary to implement such programmes. I believe, however, that it is only by introducing the use of encyclopaedic dictionaries across the curriculum at the early stages of the child's education that we can expect students to familiarise themselves with these materials and enhance their encyclopaedic dictionary reference skills for future study work.

3.7 Conclusion

Lexicographic research in the Gabonese languages should lead to the compilation of new encyclopaedic dictionaries, as containers of knowledge, with a hybrid and polyaccessible character.

We rely on encyclopaedic dictionaries to provide us with descriptions of facts or things, their history, and so on. These facts or things are used at home and at school, cited in courts of law, sermons and parliament and referred to by crossword addicts and scrabble players alike.

There is a great need not only for new encyclopaedic dictionaries but also for expert lexicographers to produce them. Compiling cultural dictionaries or reference works in the Gabonese context sounds like an ambitious undertaking. The culture of using encyclopaedic dictionaries will also be determined by teaching/learning situations. Teachers can play an important role in enhancing encyclopaedic dictionary use in class if they know how to incorporate it in their teaching.

Yilumbu is in need of dictionaries of every kind: monolingual dictionaries, school and standard translation dictionaries, thesauri, idiom and proverb dictionaries, technical dictionaries, usage guides and also encyclopaedic dictionaries. It is essential that Yilumbu lexicographic projects be undertaken along with the development of the language itself. An encyclopaedic dictionary will certainly enhance pride and interest in the language. The continued use of French as language of instruction and official language of administration has denied the Yilumbu language the opportunity to develop vocabulary and terminology in fields such as agriculture, commerce, law, science, and so on.

The significance of a Yilumbu encyclopaedic dictionary for encoding and decoding Yilumbu does not need to be overemphasised. However, because foreigners learn Yilumbu for official usage and communication with a wide spectrum of the speech community, the language they need is the accepted norm, a language that exposes the meaning of factual information, such as literary, historical, geographical, biographical and other entries, together with a large number of longer 'articles' on broader aspects of Yilumbu cultures. These aspects need to be highlighted in the encyclopaedic dictionary with emphasis on extra-linguistic information.

Of paramount importance is the establishment of closer co-operation with other institutions that deal with lexicography, particularly in Africa. Much could be learnt from the Pan South African Language Board (PanSALB) and the Bureau of the *Woordeboek van die Afrikaanse Taal* (WAT) at Stellenbosch. But this is only possible if language institutions of this kind are established in Gabon.

In this way, an encyclopaedic dictionary culture could be enhanced that, in turn, would be instrumental in directing future lexicographic work based on the actual reference needs of the encyclopaedic dictionary users. Once teachers have acquired the appropriate skills and the teaching of reference skills is incorporated in school, additional means of enhancing encyclopaedic dictionary skills could be employed as well. User-friendly encyclopaedic dictionaries in the Gabonese languages can be compiled when the reference needs and reference skills of an encyclopaedic dictionary user are known.

CHAPTER 4: TARGET USERS AND LEXICOGRAPHIC FUNCTIONS

4.1 Introduction

This chapter aims to present the target users of the planned encyclopaedic dictionary and its lexicographic functions. The chapter starts in Section 4.2 with a broad outline of target users and the activity of dictionary compilation. Section 4.3 reviews the target users of the proposed encyclopaedic dictionary. Section 4.4 presents an outline of user characteristics. Section 4.5 deals with lexicographic functions. Section 4.6 draws the conclusion of the chapter.

4.2 Target users and dictionary compilation

The needs of users and the way in which they will use the proposed encyclopaedic dictionary should be taken into account. One could divide the different problematic situations into different categories, for example problems with regard to culture gaps, usage gaps, Gabonese languages gaps and derivation gaps. The possible relationship between the users and the proposed encyclopaedic dictionary use should be determined. The needs of users should be taken into account when determining the functions of an encyclopaedic dictionary. The dictionary will also have to fulfil cognitive functions to meet an educational need.

Encyclopaedic dictionaries have to be compiled in accordance with the specific needs and demands of a well-defined target user. Within a multilingual environment, different encyclopaedic dictionaries should be aimed at the respective needs of the different groups of languages. In modern-day lexicography the users and the lexicographic functions play an essential role when it comes to compiling dictionaries. Encyclopaedic dictionaries are produced so that they can be used by the speech communities at which they are directed.

It is important for lexicographers to know the needs of their target users before the work of compiling an encyclopaedic dictionary can begin. In this regard, Tarp

(2000:194–196) works out the scientific basis that can be used to analyse the users and their needs and also the corresponding lexicographic functions of the dictionary to be compiled. On the basis of Tarp's work the following paragraphs present a discussion of the target users and the lexicographic functions of a Yilumbu encyclopaedic dictionary.

Any encyclopaedic dictionary project should clearly identify its target users prior to the compilation phase. Encyclopaedic dictionaries are compiled for real users and they must be regarded as useful tools. That is the reason why lexicographers should make sure that their target users are able to retrieve information from their encyclopaedic dictionaries.

According to Lombard (2000:8)

It is very important for the lexicographer to know who the target users of his labors are going to be before the work on the dictionary can begin. Because the character of a dictionary and the nature of material presented in it should be determined by who the target users are, one of the most important tasks of the compiler of any dictionary is to make the product user-friendly. User-friendliness thus becomes one of the criteria in terms of which a dictionary is assessed.

According to Tarp (2000:194) there are two important concepts when compiling the dictionary: the users and their needs. This means that the lexicographer must carefully determine the intended target group. The determination of the intended target user group of the proposed model relies on the functions of the dictionary as Tarp suggests: communication-orientated functions and cognitive functions.

The potential target users belong to different groups such as children, students, teachers, scientists, trainees, technicians, and so on. The needs of these users are different. Hartmann (1983:10) classifies the needs of the users into two types:

- (i) Information: One of the reasons why users seek the help of a dictionary is to check spellings, meanings, synonyms, pronunciation, etymology, and so on.
- (ii) Operations: When the user performs tasks such as reading, writing and translating, he or she refers to the dictionary to find words and meanings.

From the point of view of types of user and their two types of need, encyclopaedic dictionaries fall into different categories such as encyclopaedic dictionaries for students and those for adults (i.e. those who are not in a learning position).

Categorisation of the encyclopaedic dictionary from the point of view of users influences the articulation of the work in the collection of material, selection of entries, and choice of defining things while constructing the articles, and so on.

The target user of a dictionary is without question the central figure in lexicography. The lexicographer, after all, does not write a dictionary for the sake of personal gratification. The encyclopaedic dictionary is intended for a specific target user.

The central question is thus, "who are the users of the encyclopaedic dictionary?" This question remains even if the lexicographer can only form a vague image of the user who is going to consult the encyclopaedic dictionary. The compiler of an encyclopaedic dictionary must thus have some clarity about this even in the planning stages of the dictionary because the entire approach to the task will depend on the answer to this question.

In this dissertation, it is believed that the users the encyclopaedic dictionary depends on the compiler. He/she should determine the users from the group of people the dictionary is intended to.

In the past, lexicographers have often been guilty of ignoring or neglecting the needs of the user. Such an attitude among lexicographers can easily alienate the user of an encyclopaedic dictionary. The lexicographer must therefore adapt his or her methods and presentation to the needs and requirements of potential users.

A question that can be asked in this respect is whether users should not be trained in the use of dictionaries. This is certainly a matter that could receive greater attention at school level¹³ than it does at present, but it is, in fact, easier for the lexicographer to adapt to the needs of users than the other way around. As encyclopaedic dictionary

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¹³ It is herein recommended that school curricula should consider imparting pupils and students with a dictionary culture.

skills do not enjoy a particularly high priority at present and users are often quite ignorant, a lexicographer must find ways of accommodating users.

There are a number of ways in which a lexicographer can assist target users. The first way is making data easy to find. The lexicographer must know or be able to anticipate where the user will search for a certain piece of data. Typography and layout can also assist users.

In Gabon lexicographers must compile user-friendly dictionaries, always keeping the target users in mind. In presenting each piece of data a lexicographer must ask whether the users will understand it or whether it is relevant to their needs. Dictionaries differ from one another in several ways, including their aims.

Dictionaries should also satisfy the lexicographic needs of linguistic communities in Gabon, promote multilingualism, enhance communication as well as record the language in written form for future generations to provide the ordinary users of the language with a source of information and a reference tool.

4.3 The target users of the proposed dictionary

It is important to recall, as mentioned in Section 1.4, that the proposed encyclopaedic dictionary is intended for both adults and children and will also fulfil a pedagogical function. The potential users of the proposed encyclopaedic dictionary thus represent a culturally homogeneous community¹⁴. This community is made up of Yilumbu mother-tongue speakers, in other words the Balumbu.

However, in areas where the Balumbu live¹⁵ polyglossia is the norm rather than the exception. In Mayumba, for instance, quite a significant number of Balumbu speakers are conversant with Civili and Yipunu, among others, and vice versa. As a result, the planned encyclopaedic dictionary is also intended to be used by Yilumbu secondlanguage speakers and/or learners.

¹⁴ The Balumbu are a culturally homogenous community, but in terms of their language – Yilumbu – two main mutually intelligible dialectal variants are found (cf. Mayoungou 2002a & 2006).

¹⁵ It should be recalled that the main centres of living of the Balumbu are Gamba and Sette-Cama in the Ogooué-Maritime province and Mayumba and Moulengui-Binza in the Nyanga province.

In fulfilling its cognitive function, the planned dictionary will be used not only by learners (adults, students and school pupils) but also by educators¹⁶.

For the future it will be better to project the kind of dictionaries that will be used by various users; they all share the same historical and linguistic background. Meanwhile, besides native speakers of Yilumbu who might need to use the encyclopaedic dictionary, it might also be useful for native French speakers who might need translation equivalents (cf. Mavoungou 2002a & 2006 for further details). In fact, the prospective user living in Mayumba and the prime target group will have the same advantages.

4.4 Users and their characteristics

When lexicographers plan, produce or review a specific dictionary, they must always determine the corresponding or expected group of users and their characteristics.

Tarp (2000:194) suggests that a concrete group of users can be homogeneous or heterogeneous. Lexicographers must determine the characteristics and specific needs of the users and decide on the corresponding data to be included in the dictionary.

The first type of characteristic refers to the users' language competence:

• Which language is their mother tongue?

Yilumbu is the mother tongue of most of the prospective users who live in the hinterland (Gamba, Sette-Cama, Mayumba and Moulengui-Binza). French is the mother tongue of the younger generation who lives in cities such as Libreville and Port-Gentil.

• On which level do they employ their mother tongue?

In the hinterland people using Yilumbu as first language employ the language only on the oral level because the writing system has not yet been standardised and implemented. People who have French as first language can show reasonable ability on both written and oral levels.

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¹⁶ There is surely a huge difference between their reference skills, but this is compensable with the level of dictionary culture of each group.

On which level do they employ a foreign language?

A discussion regarding foreign language is not applicable in the present investigation since the envisaged model only focuses on Yilumbu and French.¹⁷ On the other hand, when analysing users and their needs it is also important to know the users' level of general cultural and encyclopaedic knowledge, according to Tarp (2000: 94–195):

What is the level of general and encyclopaedic knowledge?

People using Yilumbu as first language and living in the hinterland mostly have a low level of general knowledge. However, they mostly have a fairly good knowledge of the Yilumbu culture.

Yilumbu people using French as first language generally have a good general knowledge because they are mostly students and workers with good qualifications. However, because they are far away from the hinterland and Yilumbu cultural activities they have little knowledge regarding the Yilumbu culture.

According to Tarp (2000:195) all these competences have to do with the basic or primary characteristics of the user group. However, in order to produce a high-quality dictionary that is user friendly; lexicographers must also know the users' general experience of dictionary use, which can be called the secondary characteristics.

In the Yilumbu-French encyclopaedic dictionary that I am planning to compile, all the above-mentioned steps will be followed in order to avoid the mistakes of other dictionaries. By properly planning and defining the target users and their needs I will be able to achieve my goal.

4.4.1 User situations

I agree with Tarp (2002:11) that user needs are not abstract but are related to concrete situations. Therefore, it is important that these situations should "be detected,

¹⁷ French is a language of multiple status in Gabon (Pambou 1998). It is at the same time a foreign

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language, a national official language, an initial language and a second language (cf. Mayoungou 2002; Moussirou Mouyama 1984, 1986; Ndinga-Koumba-Binza 2004, 2005a; Ogden 1984; Pambou 1998). In this dissertation I regard French in its status of official language.

distinguished from each other and analyzed in order to determine which type of needs a specific type of user might have in each of them".

According to Tarp (2000:194) the lexicographer must also determine in which situation the user is going to use the dictionary and with what purpose. Basically, there are two different kinds of general user situation, according to Tarp. First, the user consults the dictionary in order to facilitate existing or future communication. This situation is called a communication-orientated situation. Second, the user consults a dictionary in order to acquire knowledge about the special subject or, in very rare cases, in order to learn and study a foreign language. This situation is called a knowledge-orientated or cognitive situation. In these situations, the only communication that is taking place is between the lexicographer as author of the dictionary and the users of this dictionary. The users want knowledge and the lexicographer provides it.

4.4.2 User needs

Once lexicographers know the characteristics of the user group and the user situation, in other words the user profile, they can proceed to a characterisation of the user needs. Béjoint (2000:140) says that

[l]exicographers in many countries have recently felt the need to go beyond empirical observation on the use of the general-purpose dictionaries. Seeking to find out what the users really do, as opposed to what they are believed to do, in order to make sure that the dictionary really corresponds to the needs of the public.

Lexicographers should identify the needs of their target users. Encyclopaedic dictionary compilers have to know and not only assume what users know.

Users consult the dictionary in order to retrieve information that allows them to solve a concrete problem, according to Tarp (2000:195). According to the proposed model, the intended target user might need the following, among others:

• *Information about the native language.*

The users of the proposed model might need information about the writing system of the Yilumbu language.

• Information about the official language

The users of the proposed model might need information about French, not as a foreign language but as an official language. This need is secondary in the use of the envisaged encyclopaedic dictionary.

• Comparison between the native and the official language

The intended target user might need to compare Yilumbu and French. Cultural gaps between the Gabonese and European languages (French in particular) play an important role in the change of meaning of numerous current words. As far as French is concerned, many words have another meaning in the Gabonese environment as compared to the meaning they have in French society. The term *cadeau* for example, firstly means 'present' or 'gift' in French. In the Gabonese context, this term also means 'free' or 'gratis'. The envisaged encyclopaedic dictionary will focus on Gabonese French, which comprises standard French and the way vernacular French is spoken in Gabon in terms of vocabulary ('gabonisms'), idiomatic forms, phrasing, and so on. (cf. Bounguenza 2008; Nyangone Assam & Ndinga-Koumba-Binza 2008).

Many lexical items and expressions such as *caïman*, *levée de terre*, *concombre*, *hangar* and *sanglier* and a great deal of vocabulary on fauna and flora are labelled as Gabonese French and each has a specific semantic value for Gabonese culture. For instance, *caïman*, "a crocodile found in America", and *sanglier*, "a bush-pig mainly found in Europe", are the local forms of French used to refer to *Osteolaemus tetrapis* (or *Crocodylus niloticus*) and *Potamochoerus porcus* respectively. Similarly, the lexical item *concombre*, "cucumber", does not refer to the same extra-linguistic reality in France and in Gabon. In the latter, people easily assimilate *concomber* to the French *courge* because the two belong to the same family *Cucurbitaceae*.

• Information about culture and the world in general

The users of the planned dictionary might need information about Yilumbu culture, general culture and/or the world in general. All these needs are the primary user needs because they are the needs that give birth to the consultation of the dictionary (Tarp

2000:196). There is however, also another kind of lexicographic user need, which can be called the secondary user needs.(Tarp 2000:196). These are the needs that arise when using the dictionary.

• General information about lexicography and dictionary use

The proposed model must include data that allow the user to have precise and concise information on the use of the encyclopaedic dictionary.

• Information about the dictionary and how to use it

The Yilumbu encyclopaedic dictionary must make provision for including information about this dictionary in a relevant user guide.

After analysing the target user group in terms of user characteristics, user situations and user needs, the lexicographer can determine the so-called lexicographic functions of the dictionary (Tarp 2000:196).

An encyclopaedic dictionary with a bilingual dimension is used for decoding and encoding a language. Both a native speaker and a language learner use an encyclopaedic dictionary for comprehension, in other words for decoding purposes, but a language learner uses it for production as well, in other words for encoding the target language. Encyclopaedic dictionaries for encoding a language offer additional and sometimes detailed data that help the user to use the language more productively.

If lexicographers are really concerned about user needs and have the real goal of improving the functional quality of encyclopaedic dictionaries, they simply have to take the methodological leap that is required of them. The methodology outlined in this dissertation is precisely aimed at achieving this.

The encyclopaedic dictionary also supports methods of learning and teaching that help young people and indeed older learners to build up the attitudes, knowledge and skills they need to become more independent in thought and action and also more responsible and co-operative in relation to other people. In this way the work contributes to the promotion of democratic citizenship.

Given these fundamental aims, the encyclopaedic dictionary encourages all those concerned with the national lexicographic unit of a language to base their work on the A theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu

needs, motivations, characteristics and resources of people, learners and students. This means answering questions such as the following:

- What do learners need to do with Yilumbu?
- What do they need to learn in order to be able to use Yilumbu to achieve those ends?
- What makes them want to learn?
- What sort of people are they (age, sex, social and educational background, etc.)?
- What knowledge, skills and experiences do their teachers possess?
- What access do they have to course books, reference works (encyclopaedic dictionaries, grammars, etc), audio-visual aids, computer hardware and software, and so on?
- How much time can they afford (or are willing or able) to spend on the compilation project?

On the basis of this analysis of the learning/teaching situation, it is seen as fundamentally important to clearly and explicitly define objectives that are at the same time worthwhile in terms of users' needs and realistic in terms of their characteristics and resources.

Many parties are concerned with an encyclopaedic dictionary, including both teachers and learners in the classroom as well as public services, educational authorities, and so on. If they agree on objectives, they can work coherently, even if quite separately, to help users achieve them. They are also in a position to make their own objectives and methods clear and explicit for the benefit of those who use encyclopaedic dictionaries.

4.5 Lexicographic functions

Encyclopaedic dictionaries can help in the teaching of both native and non-native speakers of the language. These encyclopaedic dictionaries can also help to bridge cultural and linguistic gaps and can enhance the communicative competence of the members of different speech communities. The proposed encyclopaedic dictionary should be compiled to serve a specific purpose for the user, as previously presented in Section 1.4.

In the modern theory of lexicographic functions a basic communication-orientated function of dictionaries is to assist users in solving problems related to text production and text reception. However, further development of the functional theory of lexicography also implies fundamental aspects of both theoretical and practical importance. These fundamentals are

- (i) a clear definition of text production;
- (ii) an understanding of how text production takes place;
- (iii) the typology of the users expected to consult an encyclopaedic dictionary in order to solve problems related to this kind of text production;
- (iv) a definition of these problems; and
- (v) a demonstration of how encyclopaedic dictionaries can assist users in solving these problems.

Lexicographic functions can be defined as the endeavour and ability of the dictionary to cover the complex of needs that arise in the user in a particular user situation.(Tarp 2000:196). When lexicographers know the user group and its specific characteristics, the user situations and the specific user needs related to these situations, they can proceed to the determination of the so-called lexicographic functions.

I believe that in a multilingual society the use of the encyclopaedic dictionary with a bilingual dimension will form an integral part of the everyday knowledge process. An encyclopaedic dictionary should educate the future generation to appreciate the Gabonese languages and the culture and customs of others within Gabon.

The two subsections that follow present the dictionary functions as indicated by Tarp (2000:196). The envisaged Yilumbu encyclopaedic dictionary should fulfil these functions.

4.5.1 Communication-orientated functions

The most important communication-orientated functions are as follows:

- (i) To assist in the reception of texts in the native language.
- (ii) To assist in the production of texts in the native language.

The native language will be Yilumbu in the proposed model. In fact, the proposed encyclopaedic dictionary model will assist Yilumbu mother-tongue speakers in the production and the reception of texts in the language. All the lemmata will be treated in such a way that the readers will have all the information needed for the production of texts in the specific area or domain.

(iii) To assist in the translation of the texts from the native language into the foreign language.

Considering the proposed model this communication-orientated function will consist in assisting in the translation of texts from Yilumbu into French. In other words, this proposed encyclopaedic dictionary will assist the mother-tongue speakers of Yilumbu who are not well equipped in the language by giving the translation of the lemma in French, the language most familiar to them, in order to conceptualise and fully understand the treated items.

It should be added that in order to prevent and assist with communication problems, French translation equivalents of this language will also assist students who may have French as first language.

In fact, the Gabonese government has spared no effort to introduce national languages in education with the further intention to use them as medium in education besides French. Acute communicative, cognitive and specific needs will result from this intended policy.

The initiative of Gabon to use national languages as medium of education besides French will create major needs regarding special-field languages for education in national languages such as Yilumbu, among others, to make provision for communication needs that will arise.

These identified communicative needs in the national languages of users in Gabon provide valuable orientation and also information to the lexicographer when it comes to dealing with the analysis of the intended target user group and the typology and the structure of the proposed model.

Besides encyclopaedic data, students will need linguistic data in order to achieve the correct usage of the linguistic expressions they deal with. Therefore, all necessary communication-orientated functions will have to be provided to assist this user group with purely linguistic matters it will encounter when using Yilumbu and French as established languages as medium of communication.

4.5.2 Cognitive functions

According to Tarp (2000:197) the cognitive functions are as follows:

- (i) To provide general cultural and encyclopaedic data.
- (ii) To provide data about the language.

These knowledge-orientated functions will consist in providing data. Because we are working in two different languages, it could happen that there is no clear translation of a specific Yilumbu lemma into French. Thus, we can encounter a situation of zero equivalence when the target language has no item to be co-ordinated as a translation equivalent with a lemma representing a source language item (cf. Gouws & Prinsloo 2005:158–160). This will be very important for Yilumbu. However, the relation of zero equivalence can be treated with the inclusion of either surrogate equivalents or partial equivalents (Gouws & Prinsloo 2005:159).

The target users will have to access information and knowledge about the culture of the language. They will then be directly taught about everything concerning the language, for example the origins of village names, the history of the language, and so on. Strongly descriptive, the proposed encyclopaedic dictionary will be admirably suited not only to cognitive-oriented functions but also to communication-oriented functions.

This provides for the aim of theoretically and empirically motivated encyclopaedic dictionaries but then in a way that cognisance is taken of what has already been done in the field of lexicography on the functional value of encyclopaedic dictionaries and what areas are in need of further research.

4.5.3 Specific functions of the planned encyclopaedic dictionary

I have in Section 1.4 presented the genuine purpose of the planned dictionary in agreement with Wiegand (1999:299) who states that any dictionary project should clearly identify its genuine purpose prior to the compilation phase.

At this stage, it should then be recalled that the planned encyclopaedic dictionary should assist Yilumbu native and second-language speakers, learners and educators in retrieving relevant information as quickly as possible.

More specifically, the planned encyclopaedic dictionary should have the cognitive function as main function. In this regard, it should be noted that an encyclopaedic dictionary differs from linguistic dictionaries in the sense that it contributes significantly to building the general knowledge of the user. Thus, the cognitive function is regarded as the primary function of the proposed encyclopaedic dictionary. It should meet the cognitive, cultural and scientific needs of the potential users.

The genuine purpose and lexicographic function of the dictionary are therefore formulated around the user needs. Consequently, encyclopaedic dictionaries usually include the lexicographic function (also serves as internal criteria) in the front matter to inform the user of the goals of the encyclopaedic dictionary. This function must be decided upon at the start of the lexicographic process because it determines the type of contents and their structure in an encyclopaedic dictionary. According to Tarp (2000:198), the functions constitute the leading principle of all dictionaries because everything in a dictionary is to a greater or lesser extent influenced by its respective functions and purpose, for example the components of a dictionary and the structure they assume.

Apart from the cognitive function, the planned encyclopaedic dictionary should also fulfil a communicative function in terms of the following specifications:

- (i) To help users in understanding Yilumbu texts.
- (ii) To help users in producing and receiving Yilumbu texts.
- (iii) To give translation equivalents from Yilumbu to French.

Moreover, it is important to note that the communicative function of the planned encyclopaedic dictionary is only relevant in the situation where the users will also present the need for producing or reproducing the knowledge acquired from the planned encyclopaedic dictionary.

4.6 Conclusion

Finally, the planned encyclopaedic dictionary will be a typological hybrid model (cf. Gouws 1999a:39) by not only containing features of both bilingual and monolingual dictionaries but also fulfilling both cognitive and communicative functions. The way in which these functions will be achieved is determined by the central list of the dictionary, which comprises the macrostructure and the microstructure, the access structure. These are respectively presented in chapters 5, 6, 7 and 8 of this dissertation.

With regard to the interaction between user needs and dictionary typology, the proposed encyclopaedic dictionary will be a typological hybrid in the sense that it will also include special-field terms.

Gabonese cultural terms should be recorded in an appropriate way in order to prevent the indigenous cultures from disappearing in a society where all aspects of life have become increasingly westernised.

The inclusion of lemmata and the data presented in the treatment regarding the village names of the genuine Yilumbu lemma signs as well as the source language items for Yilumbu will give the proposed encyclopaedic dictionary the features of both historical and etymological encyclopaedic dictionaries.

The encyclopaedic dictionary should be available to students who need to study different kinds of Gabonese culture. Translation equivalents and types of information should be presented in such a way that students from other cultures may understand the semantic and cultural contexts used.

The lexicographic functions approach is the most consistent application of the user perspective in lexicography. According to this approach all decisions regarding, for

example, the contents and structures of an encyclopaedic dictionary should be determined by the relevant functions of that encyclopaedic dictionary.

Dictionaries must show that the only way to reach a scientific conclusion of what should be included in an encyclopaedic dictionary is to base this conclusion on an analysis of the user, the user characteristics, the user situations, the user needs and the corresponding lexicographical functions. This means that dictionaries should be as efficient as possible, and a sensible classification of the examples is one way to achieve this. The planned encyclopaedic dictionary will show how a classification is dependent on the data and on the cognitive and communicative functions.

CHAPTER 5: THE FRAME STRUCTURE OF THE PLANNED DICTIONARY

5.1 Introduction

An encyclopaedic dictionary is a tool used for the development and preservation of languages. It may be regarded as an indispensable tool in the process of knowledge transfer at the targeted education or training levels and for promoting effective communication.

To better describe the different aspects of the envisaged model, this chapter gives a comprehensive presentation of the frame structure of the planned encyclopaedic dictionary of Yilumbu. More specifically, Section 5.2 of the chapter provides a definition of the concept of frame structure. Section 5.3 schematises the frame structure, highlighting its components. Section 5.4 outlines the accessory texts and the outer texts of the planned dictionary. Section 5.5 and Section 5.6 contain respectively an outline of the front matter and the back matter strategies used for the Yilumbu encyclopaedic dictionary project. Section 5.7 deals with the central word list. Section 5.8 reports on the proposed frame structure functions. Section 5.9 concludes the chapter.

5.2 Definition

Planning is the design phase for creating both the text specifications and the way the whole text will be written. Gouws (2004a) argues that before the lexicographer puts one word on paper in the compilation process, he or she has to be well aware of the precise structure each article should display so that the system can be applied with meticulous care. The compilers of the encyclopaedic dictionary will have to adapt the frame structure of the dictionary. They could use the outer texts section to accommodate certain data categories in order to enhance the retrieval of information. The frame structure offers lexicographers the opportunity to diversify the presentation in their encyclopaedic dictionaries by extending the nature of both the data and text types to be included in encyclopaedic dictionaries. Accessibility of data is not only determined by the use of a well-defined access structure, leading the user to a venue

within the word list structure, but it is also determined by a functional positioning of the data within the word book structure of the encyclopaedic dictionary by employing different texts in the dictionary to explain and explicate the contents of the dictionary. Utilising a word book approach, a dictionary can display a so-called frame structure (Kammerer & Wiegand 1998:230, 233). Any dictionary is regarded as a carrier of different text types. The frame structure makes provision for three textual focal points, namely the front matter, the central list and the back matter. The employment of a frame structure gives the lexicographer a much wider range of possibilities when it comes to decisions regarding the distribution of the data to be included in the encyclopaedic dictionary and, if used with the necessary care, enhances the access of the user to a more comprehensive data selection.

The basic premise of the notion 'frame structure' initially perceives dictionaries as *carriers of text types* that are functionally positioned in dictionaries in varying ranges (Wiegand 1996:134–149). Texts can be positioned in three identifiable areas that include the front matter, the central word list and the back matter, as said earlier.

The central list is the textual component that is the most typical venue for encyclopaedic dictionary consultation procedures. The structure of the central list should therefore facilitate quick and unimpeded access to the required data. The outer access route has to guide the user to a specific article stretch within the central list and within the article stretch to a specific lemma sign.

These are elements that the lexicographers of an encyclopaedic dictionary have to take on, and using a frame structure and outer texts that complement the central list can provide the ideal way of presenting data.

In a multilingual and multicultural society the user of an encyclopaedic dictionary aiming at text production in the target language would need to be able to extract information and increase his or her knowledge about the culture of the target language speech community in order to be able to communicate successfully. On the other hand, the user needing an encyclopaedic dictionary for text reception would also have to gain some knowledge and insight into the culture of the target language speech community in order to comprehend a given text in the target language and ultimately for the communication process to succeed. This strategy makes the systematic utilisation of outer texts possible in order to treat and present cultural data more

successfully in an encyclopaedic dictionary, bearing in mind that the planned dictionary would perform a cognitive function.

5.3 Frame structure schema

The frame structure can be schematised as follows, comprising various components: central list, front matter and back matter, which contain different text types. In fact, the ideal is that each dictionary should contain a range of different texts that are functional components of a dictionary as a generally so-called 'big' text.

The word book structure approach complements the central list by including some additional texts, situated either before and/or after the central list. These texts are collectively referred to as outer texts and within the collection of outer texts a distinction can be made between the front matter texts and the back matter texts as structural components of a dictionary. According to Gouws and Prinsloo (2005:57), the word book approach is the one that is prevalent in the majority of modern-day dictionaries and strongly promoted by dictionary research because it accommodates various text types.

Book structure (A dictionary is a carrier of texts and text types.)

I List of contents

- Shows users what the encyclopaedic dictionary actually contains.
- Provides a guide or reference to the organisational structure of the encyclopaedic dictionary.
- Should be situated in the front matter.
- Should contain a reference to each macrostructure element following it.

II Preface (Introduction/foreword)

- Presents the author's explanatory remarks and shows the functions, scope and application of the encyclopaedic dictionary.

III User guide

- Explains how the user can use the encyclopaedic dictionary optimally.

- Explains how the data can be found (e.g. the order in which the words are lemmatised in a word list).

IV Table (list) of abbreviations

- List of the abbreviations, including abbreviations of labels and bibliographical abbreviations, used in the encyclopaedic dictionary that explains their meaning to the user.

Word list (A-Z section or main text or the dictionary to a layperson)

- Two types exist:
- a) Continuous word list: no inserts, no middle matter articles.
- b) Discontinuous word list: at least one insert or middle matter article.

Appendices (back matter)

- Contain illustrations.
- A lemma in the appendix that refers to an illustration should contain an explicit reference to the illustration.

Explanation of cross-references (means of establishing and indicating relationships between different but related dictionary components)

- May be references to synonymous expressions, related expressions or the field introduction.
- Information item that directs the user from one place in the encyclopaedic dictionary to another.
- Three types exist:
 - a) Article-internal: User is directed from one place in the article to another within the same article.
 - b) Word list-internal: User is directed from one article to another within the same word list.
 - c) Word list-external: User is directed from a word list to an address outside the word list.

Cross-reference items could be right-pointing arrows (→) or words such as 'see',
 'see also' or 'compare'.

The purpose of this series of texts is to describe as clearly as possible all kinds of data included in the encyclopaedic dictionary. The system of cross-referencing leads a user from a reference position to a reference address. In the case of a frame structure schema with one word list and offering an extensive use of cross-referencing to the back matter, this kind of encyclopaedic dictionary is likely to present a secondary frame structure.

5.4 Outer texts

According to Gouws and Prinsloo (2005:58), no lexicographer may assume that the target user of the specific dictionary will know how to use, interpret and understand the full lexicographic presentation. Therefore the structure, contents, presentation and dictionary-specific conventions should be explained to the user. Outer texts can play an important role in enhancing the quality of the information transfer to which the dictionary is committed (Gouws & Prinsloo 2005:58).

The collection of outer texts can be divided into two categories: integrated and non-integrated outer texts (Kammerer & Wiegand 1998:224–237). Integrated outer texts are those that directly affect the subject matter of the central word list and are in accordance with the genuine purpose of the encyclopaedic dictionary. They function in co-ordination with the central list. The choice of adopting an integrated outer text approach in the proposed encyclopaedic dictionary is strengthened by the idea that a data distribution programme should be worked out with meticulous care to ensure a functional data distribution structure. It will be based on the relation between the outer text and the genuine purpose of a specific encyclopaedic dictionary.

However, depending on the intended user group and user situations, a number of dictionaries also place part of the function-related data in special-component parts that may or may not be integrated into the central word list. This distribution and structuring of the lexicographic data within a specific component part and between various component parts are determined by the data distribution structure. In the process of distributing data, lexicographers need to ensure that items with a strong

cultural connotation will receive special treatment in the proposed encyclopaedic dictionary. Culture is so peculiar to the Gabonese languages that they convey the deepest thought a human language can allow and therefore bear much more meaning than is usually admitted in dictionaries.

The data distribution must determine the way in which the outer texts function, as either integrated or non-integrated outer texts, and the nature and extent of the data to be accommodated in these texts.

Such integrated function-related component parts are especially appropriate for dictionaries with cognitive functions and can be used even by persons with little knowledge of a specific culture.

Gouws and Prinsloo (2005:59) explain that non-integrated outer texts do not contain data from which information regarding the subject matter of the dictionary can be retrieved. For this reason, non-integrated outer texts are perceived as not contributing directly to the genuine purpose of the encyclopaedic dictionary. Gouws (2001:104) argues that the relevance and functional value of an outer text does not depend on its integration into the genuine purpose of the dictionary. For example, the table of contents is not directly linked to the subject matter of the dictionary but gives information regarding the texts that function within the different focal areas (i.e. front matter or back matter) constituting the word book structure. As is common to most books, the table of contents increases accessibility and hence its functional value of aiding the user should not be underrated (Gouws 2001:105).

5.5 Front matter section

According to Al-Kasimi (1977:109–112) the front matter should contain an introduction that has to indicate the purpose of the dictionary, the sources that were used in the compilation, the method of compilation, the underlying grammatical philosophy, the coverage of the dictionary or the range of lexical items and word senses, and the types of data that are provided in the dictionary.

Moreover, the front matter could contain a text presenting the history of the language. For the proposed encyclopaedic dictionary, the front matter section will include the table of contents, the user guide and the grammar. The grammar, which is not a compulsory text, is also important. The decision to include a grammar for the pair of

languages is motivated by the intention to introduce the students to the basic rules of grammar, syntax and morphology of Yilumbu.

The user guide is widely regarded as a compulsory text. This is not necessarily the case with the grammar, which is also usually located in the front matter. It is, however, accepted that "a dictionary presupposes a grammar, and that a lexicographer should have a firm grasp of the morphology and syntax of the language or languages he is dealing with" (Al-Kasimi 1977:49). A grammar presents explicit aid to users and can, if integrated with the central list by means of text-external cross-references, be a powerful tool to supplement the immediate data transfer provided in the microstructure, with detailed knowledge of the systems and processes governing the lemmatised lexical item that is being looked up.

The user guide of the proposed encyclopaedic dictionary will focus only on indicating the use of the dictionary and explaining the process to easily retrieve information contained in the dictionary list. The purpose of the guide is to describe as clearly as possible all the kinds of data included in the encyclopaedic dictionary, to show the users how to interpret the data given (i.e. how to read the encyclopaedic dictionary 'style') and to provide clues for locating particular items of information as quickly as possible.

Users can read all of the front matter from the beginning to the end and thereby get a general overview of the dictionary in general or they can also choose only to read the table of contents or the user guide, whatever is most relevant for them. It is important that lexicographers always explain clearly what they do when guiding users, otherwise they run the risk of not being understood or, perhaps worse, being misunderstood. If users need additional information, they can access the relevant articles in the central word lists through the indirect cross-references provided by the subject-field terms written in bold.

The varying needs of target user groups, varying lexicographic traditions, the specificity of typological profiles, and so on contribute to a lexicographic diversity that makes it impossible for users to gauge all the relevant data regarding the internal systems employed in the proposed encyclopaedic dictionary without consulting the user guide. An important element of an encyclopaedic dictionary culture would be consultation of the user guide to answer any queries regarding the internal

lexicographic system of the relevant encyclopaedic dictionary and employment of the user guide to facilitate the acquisition of encyclopaedic dictionary consultation skills.

The user guide functions as an immediate constituent of the encyclopaedic dictionary as a whole. The table of contents of the encyclopaedic dictionary also falls in this category. Both can be regarded as first-order primary outer texts. The table of contents gives access to most of the elements of the word book structure and occasionally to parts of these elements. While the typical outer access structure guides a user to a lemma sign, the table of contents includes entries that guide the user to the different components of the frame structure and to the individual texts contained in these components of the encyclopaedic dictionary as a big text.

In the proposed encyclopaedic dictionary there should be a systematic presentation of the phonemes of the Yilumbu language and the distribution of the allophones, a pronunciation guide illustrating the transcription system adopted in the dictionary and a key to pronunciation.

The front matter of a dictionary could contain a text in which the lexicographer expresses his or her gratitude to people or institutions for their assistance with the dictionary project. Although this text is important it does not play a pivotal role in conveying data regarding the treatment units or the subject matter of the dictionary to its potential users (cf. Gouws 2003)

Consider the text parts of the front matter in the proposed encyclopaedic dictionary. The suggested thematic ordering in the central list will have to be presented in the table of contents to make the encyclopaedic dictionary consultation simple and unambiguous. One expects that the way in which the table of contents will be presented will be of particular value because of the innovative typology. From its front matter to its back matter texts, including the central list, the proposed encyclopaedic dictionary will present data with very strong cognitive functions.

The table of contents below provides a thematic overview of subject fields about Gabon. Consequently, this front matter text should be organised in a thematic way according to the system of the extra-linguistic world. It will be illustrated with figures and pictures and the most important terms will be written in bold and serve, in addition, as indirect cross-references to the central word list where a more detailed explication can be found:

Table of contents of central list

- 1 Ditonu (Introduction)¹⁸
- 2 Bahulu (Archaeology and Prehistory)
- 3 Batu (Population)
- 4 Bukulu (History)
- 5 Bukulu (Traditions)
- 6 Busina (Economy)
- 7 Fiku (Arts)
- 8 Ikol yi butowu (Geography)
- 9 Ikol yi mamani (Geology)
- 10 Ihum/Mbembu (Languages)
- 11 Ineng (Education)
- 12 (Industry)
- 13 Mambe ma bwale (Society and Social Issues)
- 14 Mighaagha (Politics and Government)
- 15 Misamu (Media)
- 16 Miyisi (Religion)
- 17 Musiru (Environment, Fauna and Flora)
- 18 Technique (Technology)
- 19 Tsavu (Literature)
- 20 Uhangle (Tourism)

¹⁸ Apart from the introductive chapter (Ditonu), the rest of the content of the central list adhere to an alphabetic ordering.

All these themes will also contain subsections that will be presented in the central list. The central list comprises several themes, as shown above, but in Section 6.3.3 the sub-themes will be elaborated further. Also notable is that in the proposed encyclopaedic dictionary, as the model presents innovative typological features and also because students are among the intended users, one can anticipate that the front matter texts will also have to include comprehensive compulsory user guidelines. For the proposed encyclopaedic dictionary the user guide will be a pre-eminent accessory text that will explicate to the users the codes, conventions, markers and other systems employed in the dictionary. However, the table of contents will also be of special value because of the existence and the location of Yilumbu and the equivalent in French will have to be clearly indicated. In this regard, the thematic ordering will have to be explained in the user guidelines in the front matter section. Because encyclopaedic dictionaries are often dominated by a central list bias, users and especially students often limit the consultation of dictionaries to the central list.

This description will have to present the thematic organisation of each subject dealt with in the corresponding titles. Examples of *environment*, *fauna* and *flora* can be used so that users will be aware of the steps to pursue to retrieve the needed information. This explanation will have to provide the hierarchical organisation of the lexicographic data categories included. According to the needs of the users and the functions and typology of the intended model, the treatment of lemmata will consist of the presentation of linguistic and encyclopaedic data.

One envisages a conceptual or thematic ordering of the macrostructure as an arrangement that can be regarded as one of the means to achieve successful consultation procedures in the model.

5.6 Back matter section

In the proposed model the back matter could contain a text with a list of all the items that are treated as units in the complex articles in the central list. Some texts in the back matter can be considered as an integrated outer text because users are referred to the text from the central list. The references in the central list are given to direct the user to retrieve additional information (Gouws, 2003).

With regard to the back matter of the proposed encyclopaedic dictionary, these appendices give the lexicographer the opportunity to provide commonly sought data concerning the target language culture such as lists of major educational and political institutions, weights and measures, thermometric systems, currencies and maps. It should be important for users to know where Balumbu are located and to be able to locate them on a map. These texts have a pragmatic function to provide extra encyclopaedic data.

The proposed back matter texts of the planned encyclopaedic dictionary can be seen as an attempt to adhere to the cognitive function of the encyclopaedic dictionary. In terms of the communication-directed function of the encyclopaedic dictionary it should be helpful if the same kind of attention has been paid to the concepts and items that are important to Yilumbu people. More information on Balumbu society needs to be given to the students. Such a text should provide clear and simple guidelines for the use of the dictionary and these guidelines should target both the teacher and the students, as this text may be employed, under supervision, in the classroom context or by the students at home.

Moreover, the lexicographer dealing with encyclopaedic dictionaries should not assume, as remarked by Gouws and Prinsloo (2005:57), that the user of such dictionaries will know how to use, to interpret and to understand the full lexicographic presentation. To accomplish its function, the envisaged encyclopaedic dictionary should be able to provide good and useful information to the users by means of the outer texts that function in combination with the central list and are also integrated in the genuine purpose of the dictionary. The frame structure of the proposed encyclopaedic dictionary should include front and back matter texts, featuring both integrated and non-integrated outer texts.

Encyclopaedic dictionaries should be of pivotal importance in Gabon. They need to bridge cultural gaps in our multicultural society. The use of back matter texts that contain lists of items that also feature as lemmata in the central list of the encyclopaedic dictionary necessarily elevates the dictionary to a poly-accessible source because there is more than one position from where a user can gain access to a specific lemma. The inclusion of the themes in the back matter texts consolidates the

idea of full interaction and interconnection between the central list and the back matter.

The set of functional parts in the back matter are also arbitrary and vary considerably from one dictionary to the other. For example, the back matter of the proposed encyclopaedic dictionary could contain the following text parts:

- 1 Bibliographies
- 2 Directories
- 3 Geographical aspects of Gabon
- 4 Grammar
- 5 Greetings
- 6 Index of authors
- 7 Index of proper names
- 8 Index of subjects
- 9 Index of titles
- 10 Maps of Gabonese provinces
- 11 River names
- 12 Thanksgiving
- 13 The offering of condolences
- 14 Threats and warnings
- 15 Traditional events and ceremonies
- 16 Village names
- 17 Ways to curse

The back matter texts, for instance, apart from bibliographies will consist of more works dealing with the subjects treated in the proposed encyclopaedic dictionary. They should offer a comprehensive additional cultural data presentation for users.

Users may have access to the same data through the central list or by means of consulting the back matter texts.

One expects the back matter texts to include Yilumbu and French colour plates of themes, referring to the page numbers of pictures included in the central list of the envisaged encyclopaedic dictionary. A table of contents presented as part of a secondary frame could list all the texts included in the back matter. These colour plates will provide straightforward and easy access to the lemma accommodating a specific pictorial illustration and the relevant page number. The use of colour is important to distinguish different components such as the front matter texts, the central list and the back matter texts. When a user consults a dictionary that makes use of different colours, the chances are greater for this user to have access not only to the data she or he is looking for but also to discover more information, stored in various places in the dictionary, than if these colour indicators were not used.

It is clear that pictorial illustration data can help the user to find unknown words and phrases. The compilers of the proposed encyclopaedic dictionary could also make use of pictorial illustrations to implement the treatment of cultural data in the back matter text. With regard to the positioning of ostensive illustrations, large pictures will be employed in the back matter; small pictures will be included as microstructural items addressed at a few selected lemmas. Besides, the lexicographers of the proposed model should ensure that users could easily refer to these pictures in order to enhance their understanding of the corresponding article included in the central list. The pictures should be presented in such a way that users more familiar with either Yilumbu or French would retrieve in the easiest way the different information categories included within the central list. Outer texts that function as part of the back matter should be compact and the data contained therein should directly target the needs of potential users.

The central list of any dictionary has limited space, which restricts the amount of data to be included and treated. This is one of the reasons why the lexicographer should use the outer texts to accommodate the data that do not fit in the central list of the dictionary, but the type of data is a more compelling reason. It is during the data distribution that the lexicographer decides which data must be treated in which part of the dictionary. The lexicographer should plan the structure of the dictionary and the

use of the outer texts while dealing with the dictionary conceptualisation plan. The benefit is that the use of outer texts necessitates an ultimate decision about ways in which data should be presented in these outer texts and the central list. All these form part of the data distribution programme of the dictionary, which allows the distribution of the relevant data across the dictionary in the specific text.

In order for this to work successfully, the lexicographer has to consider using a simple data distribution structure or an extended data distribution structure. A simple data distribution structure is applied when the central list is the only text where all data should be accommodated. If the outer texts or parts of outer texts are used to accommodate data as part of the treatment, the dictionary displays an extended data distribution, according to Bergenholtz, Tarp and Wiegand (1999:1779), as mentioned by Gouws and Prinsloo (2005). As far as the proposed encyclopaedic dictionary is concerned, the use of an extended data distribution structure will ensure the accomplishment of the role and the functions that the dictionary is expected to perform in the Gabonese environment as it will ensure the poly-accessible guidance of users to the needed data via different search routes.

Thus, a secondary frame is helpful to the user, not only to retrieve the information she or he is looking for but also to further the treatment of a given lemma in order to provide additional data regarding its meaning. The secondary outer texts inform the user about the contents of the primary outer texts by means of a contents page or introduction to the back matter that is situated after the central lists.

5.7 Central word list

The central word list is the most important obligatory immediate text constituent of the encyclopaedic dictionary as a whole. The central list consists of article stretches including a variety of articles that function as texts in their own right and that are arranged or ordered in certain ways. As such, the central word list receives much lexicographic attention in terms of the distribution of structural components. The central list is the most salient component of an encyclopaedic dictionary displaying a frame structure (Gouws & Prinsloo 2005:63).

The word book has a frame structure hosting the functional components of the front matter text, central word list and back matter text. Each functional component is further divided into smaller functional components carrying data that may or may not have a direct impact on the central word list. The thematic ordering of the central word list of the proposed model should offer users a successful way to retrieve information when dealing with any topic. The central list components receive a more comprehensive discussion in the following chapters.

5.8 The proposed functions of the texts in the frame structure

The functions must be decided upon before commencement of the lexicographic process because they determine the type of contents and their structure in an encyclopaedic dictionary.

The dictionary has a few significant features:

- Lexicographic functions
- Lexicographic data
- Lexicographic conceptualisation plan
- Lexicographic structures

Both the front and the back matter sections can contain texts that have a functional role in the presentation of the lexicographic data. The functions determine the structures and contents of any planned dictionary. An encyclopaedic dictionary has lexicographic data as contents and has specific structures so that it may perform one or more of its specific functions.

Data are also distributed to all focal areas of the central list and the outer texts through the data distribution programme conceived of in the encyclopaedic dictionary conceptualisation plan. In the conceptualisation plan of the encyclopaedic dictionary, the lexicographer(s) decides on the data to be included, (i.e. what data, where and how much data) in all the functional parts of the frame structure. Lexicographic functions should co-determine the full lexicographic process.

This is important because the use of outer texts requires a final decision regarding the data to be presented in these outer texts and the relation between the outer texts and the central list (Gouws & Prinsloo 2005:58). The proposed encyclopaedic dictionary should have both a cognitive function and a communicative function. In line with the two functions, the compilers should use a transtextual functional approach. All the

dictionary texts, especially an outer text, may also accommodate lexicographic data that are relevant to a lexicographic function covered or not covered in the central text. Note for instance grammatical indications which are given in the front matter, the central text as well as in the back matter. The entries on the cover should inform the user what to expect in the specific encyclopaedic dictionary.

5.9 Conclusion

For the proposed encyclopaedic dictionary we need the following structures:

- (i) Data distribution structure, the main ordering structure
- (ii) Frame structure

The notion of a frame structure, as developed by Kammerer and Wiegand (1998), creates the opportunity for a more comprehensive application of front and back matter texts (cf. Gouws 2001), which further improves the accessibility of dictionaries. Frame structures of different levels can be identified.

The data distribution structure must determine the way in which outer texts function, as either integrated or non-integrated outer texts, and the nature and extent of the data to be accommodated in these texts. The frame structure is not only a means to describe the distribution of texts in the encyclopaedic dictionary but is primarily an instrument to assist the lexicographer in enabling comprehensive use of the encyclopaedic dictionary as a carrier of different text types and to ensure user access to the data in the encyclopaedic dictionary. Lexicographers and dictionary users should be made aware of the fact that an outer text is not only an ornamental part of an encyclopaedic dictionary or a text included as a page filler; outer texts are functional textual constituents and they need to be utilised as such.

The lexicographer should make sure that there is a clear link between the items included in the front matter, the central list and the back matter via a well-designed cross-reference system. The used system should guide the users of the dictionary carefully to the needed information.

I suggest that efforts to compile encyclopaedic dictionaries aimed at users of the Gabonese languages be made and encouraged in order to meet the specific needs and requirements of these users.

CHAPTER 6: MACROSTRUCTURE

6.1 Introduction

This chapter focuses on the macrostructure of the planned encyclopaedic dictionary. The macrostructure of a dictionary should be understood as the presentation and arrangement of the lemmata occurring in the word list. Various types of macrostructure exist. Planning an encyclopaedic dictionary requires careful consideration of the type of macrostructure.

Rey-Debove (1971) and Wiegand (1983b) have suggested that an encyclopaedic dictionary may have a hybrid macrostructure. In fact, the macrostructure of the encyclopaedic dictionary is, after all, simpler than its microstructure. One might have included the discussion of both within one bigger chapter (Saphou-Bivigat 2002:184). However, in this work it is important to separate the two due to the hybrid nature of the planned encyclopaedic dictionary. It has been mentioned earlier that the planned encyclopaedic dictionary will provide the lemma sign in Yilumbu with its relevant translation equivalent in French when possible.

Béjoint (2000:31) defines an encyclopaedic dictionary as a dictionary that has the macrostructure of a dictionary plus encyclopaedic features, including entries for proper names and general knowledge, providing encyclopaedic data whenever necessary. This study adopts this definition of Béjoint in order to comprehend, conceptualise and elaborate a macrostructure for the planned encyclopaedic dictionary.

In this chapter, Section 6.2 is an overview of generalities on the concept of macrostructure. Section 6.3 presents the dictionary basis and the selection of the lemma candidate list. Section 6.4 outlines further macrostructural issues. Section 6.5 offers concluding remarks on the chapter.

6.2 Generalities

Macrostructures are of two kinds: alphabetic and systematic. Although the macrostructure usually contains a list of words, it may not be defined as a collection of words. The lexicon of a given language contains all the lexical items of that language. Although the majority of these lexical items are words, the lexicon also contains elements larger than words as well as elements smaller than words. They remain fully fledged members of the lexicon as the so-called multiword and subword lexical items.

The point of departure of the alphabetical arrangement principle is the set of letters that constitutes the alphabet of a particular language. The alphabet arranges letters in a fixed order, and knowledge of the user regarding the alphabet implies that lemmata may easily be looked up.

The alphabetical arrangement of lemmata helps the user in his or her search of data by identification of the initial letter of the lemma sign. A guiding element guides the user from a given point of departure to the needed data. It is a point of departure that may be a typographical or a non-typographical marker (visual graphic symbols, graphemes, etc.).

A user may start the search route from an external point of departure to the needed data. Therefore, the outer access structure will lead the user up to the lemma sign, whereas the inner access structure will guide the user within the dictionary article to the search zone in which the relevant data is presented.

Wiegand (1983c431) proposes two senses for the term *guiding element*:

- i) A guiding element is a feature or a complex of features of the lemma; in other words, the lemma is the carrier of the guiding element. In this case, Wiegand calls it a guiding element within the lemma (*lemmainternes Leitelement*).
- ii) A guiding element may be a sign or a symbol, for example a number. A guiding element is part of the lemma, but it can fulfil a lexicographical arrangement function by guiding the user toward the lemma. This is called a guiding element external to the lemma (*lemmaexternes Leitelement*).

Lemmata elements with a metacommunicative function (structural indicators) must be carefully planned. Quite often, these guiding elements add to the complexity of the macrostructure and impede its successful interpretation. Once again, the ordering may only be employed if the dictionary-using skills of the target users are sophisticated enough to ensure successful retrieval of all the necessary information.

Users rely on the encyclopaedic dictionary for instant assistance without being obliged to follow cross-references to other parts of the encyclopaedic dictionary. However, quite often, data in dictionaries are coded. Data should therefore be decoded by the user in order to retrieve the necessary information. A theoretical model for an encyclopaedic dictionary for the Gabonese languages has to respond to the need for instant retrieval of information by inventing and using the necessary and relevant access structure.

When planning the macrostructure of a given dictionary, the arrangement of lemmata is of importance. As far as this point is concerned, Wiegand (1984b:563) distinguishes between *lexicographical principles* and *lexicographical methods*. Lexicographical principles determine that something specific should be done whereas lexicographical methods determine how it should be done lexicographically. Wiegand (1984a:564) distinguishes between two different classes of methods of arrangement (see also Smit 1996:98–99). These are the alphabetical and the non-alphabetical methods of arrangement. For specific purposes, both these classes can be subdivided into various subclasses. When using the expression *alphabetical encyclopaedic dictionary*, one does not necessarily denote a specific type of encyclopaedic dictionary in which all carriers of guiding elements are arranged alphabetically. Because the macrostructure is the place where the lemmata are entered as guiding elements, it can be part of the primary access structure of the dictionary. Ordering in the macrostructure does not only imply alphabetical arrangement; it also concerns other ways in which the lemmata could be arranged within the same macrostructure.

The systematic approach is referred to as the non-alphabetical arrangement of a word list, known as systematic arrangement or systematic macrostructure. Alphabetical arrangement is based on the expressional aspect of the linguistic sign whereas in systematic arrangement the focus is on the content aspect. In the latter case,

arrangement is according to conceptual systems based on definitions, which, among other things, serve to delimit the concepts relative to each other as well as to establish their mutual relationships.

The ordering of individual concepts in a conceptual system will determine the article structure in the encyclopaedic dictionary wordlist. The alphabetical arrangement principle has the advantage of being universally applicable to all subject fields, no matter how widely different their systematic classification diagrams are (cf. Hausmann & Wiegand 1989:336–337). Thus, in the preface to Grimm's dictionary, one can read that it is a sin not to use the alphabetical arrangement principle, given that this is a prerequisite for the safe and quick consultation of dictionaries.

Macrostructural elements of the planned encyclopaedic dictionary will not only belong to the everyday vocabulary of Yilumbu but will also include special-field lemmata from a wide variety of fields: history, onomastics, astronomy, agriculture and traditional pharmacopoeia.

In order to satisfy the needs of its intended target user, the macrostructure of the proposed encyclopaedic dictionary will give a representation of the Yilumbu spoken in Mayumba. The role of the macrostructure of the proposed encyclopaedic dictionary is to ensure cognitive and educational features. It should fulfil the genuine purpose of the dictionary, namely to function in a multilingual environment as a tool to aid in the linguistic empowerment of both mother-tongue and non-mother-tongue speakers of Yilumbu.

The typological profile of the proposed encyclopaedic dictionary should be reflected on when designing its macrostructure.

6.3 Dictionary basis and selection of lemma candidate list

6.3.1 Dictionary basis

The dictionary basis is the set of all the dictionary sources. For the model developed in this research, the wordlist must be selected like in all dictionaries. Sources can be divided into primary, secondary and tertiary ones. Sources refer to the collection of material and they may be oral or written.

Here directions are given about which sources should be regarded as relevant for an encyclopaedic dictionary. Relevant sources may be regarded as the ones that will be representative of the linguistic and cultural reality that the target users of the planned dictionary will have to face on a daily basis.

Encyclopaedic dictionaries are compiled from a variety of sources. When dealing with the type of the planned encyclopaedic dictionary, lexicographers must be aware of two important facts: the outer selection and the principle of data arrangement.

6.3.1.1 Primary sources

According to Prinsloo (2000:4), primary sources refer to the recording of a large variety of spoken speech from as many different genre/topic areas as possible. Two field trips to the Yilumbu-speaking areas in Gabon were successively undertaken during December 2001 to January 2002 and December 2002 to January 2003 to obtain data. This research was done in Mayumba and in Libreville.

Five native Yilumbu speakers of various ages and educational levels were selected as informants. A balance between young and relatively old speakers was maintained. This was done to ensure an accurate representation of certain important historical aspects of the culture (culture-specific concepts) being described and to gain insight into the present-day reality of the language and living conditions. It is worth noting that this material collection does not pretend to be representative. It merely reflects some aspects of the diversity of the potential primary sources. As far as the former is concerned, it should also be mentioned that the lexicographer's 'native-speaker competence' is a special type of source for the dictionary basis.

As far as the technique of collecting material is concerned, it should be noted that written questionnaires are not a suitable method of obtaining judgments on non standard varieties. This is evidenced by the fact that some local forms do not even have an agreed written form. Presentation of non standard sentences in a written form seems strange to native speakers because, unfortunately, they never see them in writing, and the use of non standard forms in writing is particularly strongly criticised in the education system. Thus oral questioning is essential.

Moreover, although it might be thought that it would be more scientific to adopt a rigorous system of questioning in which each speaker was asked exactly the same questions, it is in fact important to keep the interaction as informal as possible and to work with speakers to establish what is grammatical in the Yilumbu language. Most of the oral material was collected by means of structured and unstructured interviews.

6.3.1.2 Secondary sources

Secondary sources are written materials and they basically refer to all the dictionaries consulted during the compilation phase (cf. Wiegand & Kučera 1981:100ff). It should be mentioned that these are very important dictionary sources. Whenever they exist, they should never be left out of consideration.

More often than not, lexicographers refer to other dictionaries of the same kind, dealing with the same language, when they are selecting entries for their own dictionary. Given that there is no dictionary at all within the speech form at issue here, a lexicographer may consider including data from other dictionaries dealing with sister languages, for example Yipunu. Some findings of Bonneau (1956) and Rittaud-Hutinet (1980) have thus been taken into account to avoid overlapping and duplication. Both sources are published lexicographical reference works in Yipunu, a sister language of Yilumbu.

The sole Yilumbu lexicographic reference work is that of Plumel and Mavoungou (forthcoming). This monoscopal dictionary has a central list of around 2 000 lemmata (in the Yilumbu/French section) as well as 3 000 indexes (French/Yilumbu). In order to emphasise the importance of secondary sources, Zgusta (1971:239) writes that "sometimes, one dictionary is the basis for the compilation of another". He also suggests that the lexicographer comparing his or her own material with other dictionaries should have an attitude of scientific criticism. "Nothing is to be accepted from another source without a constant checking up of every detail" (Zgusta 1971:239). In the same line of argumentation, it can also be mentioned that a lexicographer may also use a good monolingual dictionary as a major source for the dictionary basis. Here again, and on account of Zgusta's remark, if the lexicographer uses such a monolingual dictionary as a primary source for the encyclopaedic

dictionary, the selection of lemmata that is presented in the monolingual dictionary should be approached with an attitude of scientific criticism.

6.3.1.3 Tertiary sources

Tertiary sources encompass all linguistic monographs, papers and grammars used for the constitution of the dictionary basis (cf. Gouws 2001:69). With regard to tertiary sources, most existing works in Yilumbu deal with religious, pedagogical and scientific literature. The literature on religion includes the work done by Garnier and Murard. Garnier is the author of three books based on the dialect that is spoken in the Nyanga province (in Mayumba in particular): *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 mukatesisa* (1904). Contrary to Garnier's work, Murard's books *Katsisu ikeki irendulu mu mbembu bis' Setté-Cama* and *Katsisu neni irendulu mu mbembu bis' Setté-Cama* (1903) are based on the dialect spoken in the Ogooué Maritime province where one also finds Yilumbu (cf. Mayoungou, 2002a:139).

Scientific literature was obtained from the following works: Blanchon (1989), Emejulu and Pambo-Loueya (1990), Garnier (1897; 1900; 1904) and Murard (1903) for pioneering works in Yilumbu and Mavoungou (2000; 2002a; 2002b; 2006) for more recent studies in Yilumbu. Publications dealing with the Yipunu language (a sister language of Yilumbu) were also taken into consideration: Bonneau (1956) and Rittaud-Hutinet (1980).

In addition, what was mentioned above for secondary sources also holds true for tertiary sources. In other words, no data from any scientific source should be accepted uncritically by a lexicographer.

6.3.2 Selection of lemma candidate list

The lemma candidate list may be referred to as the list of lexical items that are selected by the lexicographer for inclusion as primary treatment units in a given dictionary. The selection of core vocabulary items may rely on the available

frequency lists of a given language. As far as this point is concerned, "A Frequency List of the Yilumbu Language", a small, structured electronic corpus comprising 35 660 running words (also called tokens in corpus linguistics), was compiled by Mavoungou (2000). Relying on this frequency list, we will consider the issue of what sort of lexical items should be included in the planned encyclopaedic dictionary. Let us first have a look at the 80 most frequent types of the Yilumbu corpus (see Appendix B for an extract of the Frequency List).

Lexical items	Frequencies
na	1 944
mí	1 664
ti	1 111
nge	973
0	970
ya	937
ke	827
mo	745
vho	664
mutu	529
nana	515
mwaana	495
a	481
ka	430
kantsi	383
vhana	383
ti	381

Gilles Saphou-Bivigat/Doctoral Dissertation

 $\label{thm:continuous} A \ theoretical \ model for \ an \ encyclopaedic \ dictionary \ for \ the \ Gabonese \ languages \ with \ reference \ to \ Yilumbu$

mu	367
ika	359
bwaala	311
yaandi	297
batu	296
ghuna	292
baana	289
aghu	288
0	285
yetu	284
ibili	277
gho	275
ana	267
be	266
maama	264
mwaana	243
i	237
yina	237
lyongu	233
mwa	232
sa	230
maamba	210
vhana	209
vho	204

Gilles Saphou-Bivigat/Doctoral Dissertation

 $\label{thm:continuous} A \ theoretical \ model for \ an \ encyclopaedic \ dictionary \ for \ the \ Gabonese \ languages \ with \ reference \ to \ Yilumbu$

ma	198
di	192
noongu	192
kala	190
ifuumba	184
mo	184
nguyi	183
pi	181
utuba	179
dyaambu	178
a	173
vhavha	173
mweegha	166
i	165
me	160
dibaala	157
mu	153
yenu	153
yo	150
má	149
ibaamba	144
iboonga	142
mbaatsi	141
mbe	141

uyi	139
minu	130
yaayi	130
vandi	129
ba	126
beeni	126
maambu	123
mughetu	122
mbeembu	120
dí	119
muru	117
musiru	117
fu	116
pweela	115
vangi	115

Merely by going through the 80 most frequent types, one already covers one-third of the entire electronic Yilumbu corpus. An examination of the above list shows that apart from the lexical items mi (short for minu 'I') and nge (short for ngeeyu 'you') the top 10 items of the list are purely grammatical words. In terms of class categories, they include the associative na, the relative ti, the locatives o (cl. 17), vha or vho (cl. 16) and mo or mu (cl. 18) and the invariable ke.

The top 10 items of the list already gives us a useful basis for examining affixes (especially prefixes) to be included in the proposed encyclopaedic dictionary. However, given the genuine purpose of the planned dictionary (namely to function in a monolingual environment as a tool to aid in the linguistic empowerment of both mother-tongue speakers and non-mother-tongue speakers of Yilumbu), it will be

unproductive to base the compilation of the lemma sign list only on word frequency counts. In this regard, the lexicographer could rightfully include additional lexical items that do not appear in the frequency counts but are very important to the users. Apart from affixes, a lexicographer should also consider the inclusion of other types of lexical item (including multiword lexical items). Ideally, all types of lexical item should be included but this forces the lexicographer to consider a wide range of lemmatisation procedures.

6.3.2.1 Stem versus word dictionaries

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, in other words, prefix plus stem, while in the stem tradition, lexical items are lemmatised under the stem without their prefixes. It will be part of the editorial policy of the proposed encyclopaedic dictionary to lemmatise all the lexical items according to the word tradition.

The figure below illustrates the stem tradition in one of the Gabonese languages, Pove, as applied in Mickala Manfoumbi (2004:44). Column 1 shows the lemmatised stem, column 2 gives an indication of the noun prefix number, column 3 shows the entire word and column 4 gives the French equivalent and/or the encyclopaedic information (see Mavoungou (2005) and Ndinga-Koumba-Binza (2006) for detailed reviews on Mickala Manfoumbi's dictionary).

		b	
+ bá -		báká	être
+ bà -		báka	épouser
+ bà -		baáka	sarcler
+ bã	7,8	geba biba	endroit calme et profond d'un fleuv
-bă ~ - bàlé ~ - bàdi (variante apocopée de - hàlé)		biba (classe 8)	deux
(variante apocopee de - naic)		nzima diba	vingt (deux fois dir
+ bá - án -		báná	épouser
+ bàbà	3,4	mubaba mibaba	grande lèvre d'un sexe féminin
+ bábà	5,6	ebába mabába	gifle
+ bàbě	7,8	gebabe bibabe	écarce
+ bábàkâ	5,6	ebábaka mabábaka	pancréas
+ bábáká	5,6	ebábáká mabábáká	petit manioc (plié en deux)
+ bậb -"ũd -		babwáka	débiter, décapiter
⊢ båd -		badáka	se couvrir, se protéger

Figure 6.1: Stem tradition in Mickala Manfoumbi (2004:44)

Dictionaries using the stem tradition are usually considered by Gabonese linguists (who mostly do not have any background in metalexicography) as being more scientific than word dictionaries. However, the choice of the stem tradition over the word tradition may lead to access difficulties on the part of users.

A close look at the survey of lexicographic activities in Gabon (Nyangone Assam & Mavoungou 2000) shows that lexicographers are more in favour of word lemmatisation than stem lemmatisation. Mavoungou (2002a) has emphasised that adopting the stem tradition for the Gabonese languages will have confusing results for

users not familiar with stem dictionaries. That is the reason why I adhere to the word tradition.

6.3.2.2 The Yilumbu orthographic system

a) The Yilumbu alphabetic list

Ndinga-Koumba-Binza (2005a:141) has mentioned that the Gabonese languages are still called non-written languages though "most languages inherited considerable literatures from missionaries and colonial administrators". He refers to "writing systems, alphabets, orthographies and spellings for the Gabonese native languages" established by these missionaries and colonial administrators for use in native education and local administration.

However, one of the critiques (cf. Idiata 2002; Mayer 1990; Ndinga-Koumba-Binza 2005; Nyangone Assam & Mavoungou 2000) levelled at these works is that "[t]hese writing systems, alphabets, orthographies and spelling were mainly copies of their mother tongues, i.e. French, English and Portuguese" (Ndinga-Koumba-Binza 2005:141). That was the case with early works such as those of Garnier (1897; 1900; 1904) and Murard (1903) who "established the Yilumbu spelling system on an orthography based on French orthographic conventions" (Mavoungou 2002:88).

Since then, a number of proposals have been made for a unified orthography of the Gabonese languages that takes the specific particularities of these African languages into account (cf. Carpentier de Changy & Voltz 1990; Hombert 1990a & 1990b; Idiata 2002; Mayer 1990; Raponda-Walker 1932).

At a conference held for the purpose of establishing a scientific alphabet for the Gabonese languages (*Alphabet Scientifique des Langues Gabonaises* [ASG]), Emejulu and Pambo-Loueya (1990) presented an inventory of phonetic vowels and consonants of Yilumbu and proposed an alphabet with an orthographic purpose for the language. The alphabet is shown in Table 6.1 below.

Vowels **Consonants Complex consonants** i k b r ndza γw d m e S kw 0 ng ε f Э n t mb ts β Э u γ ŋ nd p W y

Table 6.1: Emejulu and Pambo-Loueya's Yilumbu alphabet

It should be noted that Emejulu and Pambo-Loueya (1990) recommended the writing of the high and low tones in their Yilumbu orthography proposal.

Meanwhile, the ASG was reported to pose a number of difficulties and issues that hindered its implementation. In an attempt to solve these discrepancies, Gabonese linguistic experts met in 1999 within the framework of a workshop that witnessed the creation of the Orthography of the Gabonese Languages (cf. Idiata 2002).

It bears the following characteristics, as reviewed by Ndinga-Koumba-Binza and Roux (2008):

- Twenty single consonants (two underlined consonants), six complex consonants and nine single vowels (three underlined vowels)
- Prosodic characteristics: five tones, vowel length and nasality
- Processes: palatalisation and centralisation
- International Phonetic Alphabet (IPA) and Africa inspired
- Presented as more functional than the previous orthography proposal (Hombert 1990b)

This alphabet for the orthography of the Gabonese languages is presented below in Table 6.2.

Table 6.2: Alphabet for the orthography of Gabonese languages

Vov	vels	Tones	Consonants				
Sig	gns	Signs and names	Monographs		Digraphs		
a	O	high	b	j	r	gh	[γ]
e	<u>o</u> [၁]	low	c [t∫]	k	S	jh	[3]
<u>e</u> [ε]	u	- median	d	1	t	sh	$[\int]$
Э	<u>u</u> [y]	^ falling	<u>d</u> [ð]	m	V	vh	[β]
i		rising	f	n	W	ny	[ɲ]
			g	<u>n</u> [ŋ]	y [j]		
			h	p	Z		

Source: Idiata (2002)

This study proposes that the planned encyclopaedic dictionary for Yilumbu should consider the alphabet established for the orthography of the Gabonese languages (see Table 6.2) but with a reformed structure, as suggested in Hubert and Mavoungou (2009). The proposal presented in Hubert and Mavoungou is displayed in Table 6.3 below.

Vowels Complex consonants Consonants a [a] 0 [0] gh [y] e [e] ö [ɔ] c [tf] i [dʒ] W ny [n] è[ε] u [u] x [χ] ng [ŋ] i [i] ü [y] y [j] g m

Table 6.3: Alphabet for the Gabonese languages

Source: Hubert and Mavoungou (2009)

The proposal presented in Hubert and Mavoungou (2009) can be reviewed as follows:

- Twenty-three consonants (three complex consonants) and eight vowels
- Prosodic items:
 - no tones (cf. semantic and topical environments)
 - vowel length (only in minimal-pairs contexts)
 - nasality (cf. writing and reading rules)
- No phonetic-phonological details and processes (e.g. palatalisation, centralisation, labialisation, aspiration, etc.)
- Could be functionally better and accepted for popular use

This study finds this proposal by Hubert and Mavoungou (2009) suitable for the planned Yilumbu encyclopaedic dictionary because of its greater functionality and its purpose for popular use.

b) Conjunctive writing versus disjunctive writing

As far as word division is concerned, African languages have two different traditions: the conjunctively written tradition and the disjunctively written tradition.

Conjunctively written languages display a complex inner structure whereby words are written with their prefixes, formatives, ending, and so on whereas in disjunctively written languages, words are decomposed into their prefixes, stems, and so on.

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As far as the South African situation is concerned, the Nguni group (isiZulu, isiXhosa, siSwati and isiNdebele) is written conjunctively while the Sotho group (Sepedi, seSotho and Setswana) as well as Tshivenda and Xitsonga adheres to a disjunctive writing system (cf. Gouws & Prinsloo, 2005:30).

Van Wyk (1995) has emphasised that the choice between conjuctivism and disjunctivism is merely a matter of orthographic conventions.

Note the following examples as presented in Ndinga-Koumba-Binza (2009:52–53):

Nguni group

Zulu (conjunctive tradition)

Bayasebenza

Ba- (VP) -ya- (Fo1) -se- (Fo2) -benz-a (Rad + End.)¹⁹ 'they are working'

Ekha:ya

e- (LNP) -khaya (WRt) 'at home'

Bazofika

ba- (VP) -zo- (Fo.) -fik-a (WRt + End.) 'they will come'

Xhosa (conjunctive tradition)

Bayasebenza

ba- (VP) -ya- (Fo1) -se- (Fo2) -benz-a (WRt + End) *'they are working'*

Ekhaya

e- (LNP) -khaya (WRt) 'at home'

Bazakufika

ba- (VP) -za (Fo) -ku- (NP, cl.15) -fik-a (WRt + End) 'they will come'

Swati (conjunctive tradition)

Baya sebenta

ba- (VP) -ya (Fo) sebent-a (WRt + End) 'they are working'

Ekhaya

e- (LNP) -khaya (WRt) 'at home'

¹⁹ cl. 15 = class 15; End. = Ending; Fo. = formative; LNP = locative noun prefix; NP = noun prefix; VP = verbal prefix; WRt = word root.

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Batao fika

ba- (VP) -ta- (Fo1) -o (Fo2) fik-a (WRt + End)

'they will come'

Sotho-Tswana group

Sesotho (disjunctive tradition)

Ba ea sebetsa

ba (VP) ea (Fo) sebetsa (WRt + End) 'they are working'

Hae Ø (LNP) hae (WRt) 'at home'

Ba tla khutla

ba (VP) tla (Fo) khutla (WRt + End) 'they will come'

Tswana (disjunctive tradition)

Ba mo tirong

ba (VP) mo (Fo) tirong (WRt) 'they are working'

Ko gae

ko (LNP) gae (WRt) 'at home'

Ba tla tla

ba (VP) tla (Fo) tla (WRt) 'they will come'

Sepedi (disjunctive tradition)

Ba ya bereka

ba (VP) ya (Fo) bereka (WRt + End) 'they are working'

Ko gaye

ko (LNP) gaye (WRt) 'at home'

Ba ye kla

ba (VP) ye (Fo) kla (WRt) 'they will come'

Yilumbu (conjunctively written)

Bambaatsi batsimunaangule 'friends lift him up'

(disjunctively written)

Ba-mbaatsi ba mu naangule

It is observed from the Yilumbu example above that the disjunctive form looks more easily readable than the conjunctive form. For reasons given in this chapter that presents the macrostructure of the planned Yilumbu dictionary, the disjunctive form has been adopted for the planned dictionary. This is in line with what has been suggested by a number of scholars for word division in Yilumbu (Mavoungou 2002; Watch 1993). It is also herein agreed with Mavoungou (2002:96–97) who has suggested that some affixes such as prefixes and possessive and demonstrative pronouns be written conjunctively.

c) Tone marking in Yilumbu

In scientific works, the tonal dimension is of crucial importance in Yilumbu, given that tones are used to make both semantic and grammatical distinctions. This is best illustrated by means of the example of the word *mutu* taken from Mavoungou (2002). Without tonal indication, this form could represent any of the following possibilities:

H-L mútù

L-H mùtú

HL-L mûtù

LH-L mŭtù

An account of all the variants is very important as they are likely to illustrate the tonal behaviour of a given lexical item.

As a matter of fact, within a syntactical utterance, in isolation position and when it follows a verb (object position), the word *mutu* changes from a sequence of low-high-low vowels (mǔtù) to high-low vowels in the other contexts (mútù). In order to reduce the writing of tone to a minimum, at scientific level 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 (´) and the circumflex (^)

Both the tone pattern of the word in isolation as well as its variants according to their position in a sentence have been taken into account, since Yilumbu is a speech pattern with tonal perturbations. However, in accordance with Hubert and Mavoungou (2009), it has been decided not to mark tones in the Yilumbu cotext examples of the

planned encyclopaedic dictionary. Tones will only be acknowledged in the phonetic transcription of the lemma.

6.3.3 Principles of arrangement

The selection of macrostructural elements and the decision regarding ordering principles in the encyclopaedic dictionary should correspond to the user-friendliness approach. The recognition of semantic fields and lexical relations, however elementary they might be, plays an important role in acquiring language skills. The macrostructure contains a selection of lexical items representing the lexicon of the object language, and this selection may not be made on a random basis.

Two main macrostructural traditions exist in lexicography, namely the onomasiological and the semasiological traditions. The application of the first approach leads to a thematic ordering of the lemmata in an encyclopaedic dictionary. The application of the second approach leads to an alphabetical ordering. The two approaches are not incompatible since most encyclopaedic dictionaries display an alphabetical ordering of their lemmata, although a thematic arrangement may be used. In other words, the lexicographer has the liberty of choosing between the two types of macrostructural ordering of the lexical items, but one can also combine them. This is why the planned encyclopaedic dictionary will adhere to a thematic arrangement and inside each topic or theme, lemmata will be presented alphabetically. The first dimension consists of the alphabetically ordered thematic organisation of the proposed encyclopaedic dictionary with theme as primary macrostructure. The second dimension or level is concerned with the ordinary organisation of sub-theme as secondary macrostructure.

In the following I present a few topics to be dealt with in the planned encyclopaedic dictionary. These topics, which are part of the macrostructure, will be presented alphabetically.

The theme *Bibulu* in 'environment, fauna and flora' includes, among others, the following subsections:

1 BIBULU (ANIMAL KINGDOM)

- 1.1 Birds
- 1.1.1 Dikuunda (pigeon)
- 1.1.2 Dzuengi (hummingbird)
- 1.1.3 Ibidu (*owl*)
- 1.1.4 Mbire (eagle)
- 1.1.5 Nuni (bird)
- 1.2 **Fish**
- 1.3 Dubali (sardine)
- 1.4 Ikwata (*bream*)
- 1.5 Mukondzi (mangrove fish)
- 1.6 Tsundze (grey mullet)
- 1.7 Yale (carpus)
- 1.8 Insects
- 1.9 Dikoku (locust)
- 1.10 Dikuku (butterfly)
- 1.11 Ibebele (*mite*)
- 1.12 Ifuru (mosquito)
- 1.13 Kuru (scorpion)
- 1.14 Mammals
- 1.14.1 Ikumbu (*lion*)
- 1.14.2 Kima (monkey)

- 1.14.3 Maghena (leopard, panther)
- 1.14.4 Moondi (*dog*)
- 1.14.5 Ngembu (*bat*)
- 1.15 **Reptiles**
- 1.16 Dugwena (chameleon)
- 1.17 Mbambi (iguana)
- 1.18 Mubambe (green snake)
- 1.19 Muduma (black snake)

The theme *Inguyi* in 'society and social issues' includes the following:

2 INGUYI (CHIEF FOOD PLANTS)

- 2.1 Dyani (*maize*)
- 2.2 Ilembi (meal of cassava leaves)
- 2.3 Itebi (banana)
- 2.4 Mbala (yam)
- 2.5 Mupoghu (vegetable)
- 2.6 pinda (peanuts)

The theme *Iburunu* in 'population' includes the following:

3 IBURUNU (KINSHIP TERMINOLOGY)

- 3.1 Ibusi (sister)
- 3.2 Katsi (uncle)

- 3.3 Mwana dibaala (son)
- 3.4 Nguyi (mother)
- 3.5 Taayi (father)
- 3.6 Tsikaagha (grand-parents)

The theme *Iniuru* in 'population' includes the following:

4 INIURU (PARTS OF THE BODY)

- 4.1 Bilili (lips)
- 4.2 Diaru (ear)
- 4.2.1 Diisu (*eye*)
- 4.3 Dunyuru (*body*)
- 4.4 Ghooghu (arm)
- 4.5 Ghuulu (*foot*)
- 4.6 Maduungu (testicles)
- 4.6.1 Munu (*mouth*)
- 4.7 Mureela (height)
- 4.7.1 Muru (head)

The theme Bwala in 'society and social issues' includes the following:

5 BWALA (SOCIAL ORGANISATION)

- 5.1 Fumu (lord)
- 5.2 Fumu bwala (village chief)
- 5.3 Fumu kaantu (chief of canton)

- 5.4 Mighaagha (administration, authorities)
- 5.5 Mutinu (State, king)
- 5.6 Muvhigha (*slave*)

As already said, the different topics or themes presented above are not randomly presented. These elements are arranged alphabetically. Moreover, some of them are usually regarded as universal categories, namely parts of the body, food terms, animal names, and so on.

The choice of lexical items that are to be included in the planned dictionary has to be based on objective criteria such as the frequency of the item amongst the target users, the role or the importance of the item in the language and the field of the item.

The central list is the place where all the lexical items included as lemmata find their lexicographic treatment. The macrostructure should be presented in a straight alphabetical order within each semantic field/theme/topic. Those lemmata display a vertical macrostructural arrangement and they are in thematic order.

An alphabetical arrangement in a dictionary can be seen as a continuous arrangement of lemmata that are ordered independently in a strict alphabetical ordering of the central list, whereas a thematic ordering can imply that the dictionary presents a discontinuous arrangement of lemmata that are ordered together in alphabetical order according to their membership relation within each of the different themes included in the macrostructure. The topic of the macrostructure field is a level of macrostructure that contains the main topics, in other words thematic fields to be included in the encyclopaedic dictionary as a whole, and may present an alphabetic arrangement or a thematic-alphabetical arrangement.

Accordingly, I foresee the thematic ordering of the central list of the proposed model as the ordering that would offer users the best way to successfully retrieve information when dealing with subjects divided into themes or concepts. Since the aim of the proposed encyclopaedic dictionary is to present an encyclopaedic dictionary that will be user-friendly for both the expert and the layperson, the presentation of themes should take this reality into account. The average user of this encyclopaedic dictionary

should be satisfied by both the chosen themes and their organisation. This organisation should allow the layperson to access the encyclopaedic dictionary with no difficulty.

I envisage a conceptual or thematic ordering of the macrostructure as an arrangement that can be regarded as one of the means to achieve successful consultation procedures in the model.

As far as the present model is concerned, a lexicographer will be well advised also to consider the following topics for inclusion: fishing, hunting, weaving, pottery, wood-carving, and so on. There are no specific criteria for the selection of topics and their inclusion in the planned dictionary other than the needs of the target users as well as the exposition of the Yilumbu culture. This means that topics related to Yilumbu culture and traditions are de facto retained for inclusion in the planned dictionary.

As a matter of fact, it has been proven that in all existing bilingual dictionaries of Gabonese languages, coverage focuses on traditional crafts (cf. Mavoungou, Afane Otsaga & Mihindou, 2002). In general, dictionaries are reference sources that bridge the communication gap. Moreover, they are reference sources through which languages are documented and preserved. Since the Gabonese national languages are to be fully established in education, specialised terms used when teaching, used in scholars' conversation and used when scholars are dealing with different subjects, among other things, must be provided in these languages.

The need for an adequate encyclopaedic dictionary and an innovative typology discussed in Chapter 2 can motivate a calculated deviation from an alphabetical arrangement of the central list of the intended model. This need and the typological characteristics determine that the model should display a thematic arrangement. This dissertation seeks to formulate a specific content for the proposed encyclopaedic dictionary by exploring various fields. In this regard, the model will fit the programmes of the education system. As already indicated, this will be accomplished by presenting the thematic arrangement of the central list of the proposed encyclopaedic dictionary.

Unlike the previous list that illustrated the topics, the following list consists of a wide range of area/domain themes:

- 21 Archaeology and Prehistory
- 22 Arts
- 23 Economy
- 24 Education
- 25 Environment, Fauna and Flora
- 26 Geography
- 27 Geology
- 28 History
- 29 Industry
- 30 Languages
- 31 Literature
- 32 Media
- 33 Politics and Government
- 34 Population
- 35 Religions
- 36 Society and Social Issues
- 37 Technology
- 38 Tourism
- 39 Traditions

The macrostructure of the proposed encyclopaedic dictionary of the intended model in dealing with various domains should adopt a thematic arrangement according to the establishment of the list of the preferred terms that can be regarded as a classification.

However, this list will have to be presented alphabetically. The thematic arrangement of the central list of the proposed encyclopaedic dictionary should follow a system that appears in the list of domains presented above whereby each domain represents a theme that can be divided into sub-domains or sub-themes.

The presentation of sub-domains or sub-themes should also adhere to the alphabetical ordering of the lemmata and sublemmata. Within each topic the lemmata will be ordered alphabetically; the topics will reflect the scope of the lexical items to be included as lemmata.

In this regard, the intended model will be regarded as suitable for assisting a bilingual education system, in other words the programmes as included in the education system. Teachers, students and other users may find it convenient for classes and assignments as they will be able to retrieve specific-field terms regarding the theme of a given subject from a specific part of the encyclopaedic dictionary corresponding to the theme and not spread all over the encyclopaedic dictionary.

In addition, students with limited encyclopaedic dictionary-using skills may find it convenient to use the model because they will just need to search for the required specific-field term in the part dealing with the corresponding subject instead of having to look through the whole dictionary.

6.4 Further macrostructural issues

The encyclopaedic dictionary conceptualisation plan also forces the lexicographer into making early decisions as to the types of lexical item to be lemmatised. Given the fact that the proposed encyclopaedic dictionary does not seek to stick to one single variety for its macrostructural perspective, it is important for the lemma selection of the proposed encyclopaedic dictionary not to be too restricted. In other words, the planned dictionary should include a fairly representative selection of macrostructural items. This has many implications as far as lemmatisation is concerned (cf. Gouws 1999b:72; Hausmann & Wiegand 1989:337).

Furthermore, according to Prinsloo (1996:40), African languages spoken in South Africa collectively share certain common lexicographic problems that are completely

unknown to the English or Afrikaans lexicographic situation, such as tonal indication, handling of singular versus plural forms of nouns and inclusion versus omission of derivatives of the verbs. Although this section aims at addressing specific issues in Yilumbu, metalexicographic proposals in other African languages will necessary come to the fore.

Nouns and verbs are usually regarded as universal categories. Thus, their inclusion in an encyclopaedic dictionary is often taken for granted. Hausmann and Wiegand (1989:329) correctly state that in the European tradition, verbs are lemmatised under their infinitive form or under the first person singular of the present indicative. Gouws and Prinsloo (2005:31) have mentioned that in the Nguni and Sotho languages, verbs are lemmatised under the infinitive form. This means that the lemmatisation strategies are chosen at the lexicographer's discretion and according to the specificity of each language. The lexicographer always has to make realistic choices that take into account the needs of the target users, their reference skills and the dictionary culture.

6.5 Conclusion

The macrostructure of an encyclopaedic dictionary is not too different from that of other dictionaries in terms of theory because they all obey several criteria of metalexicography. An encyclopaedic dictionary presents several sections within which any user can identify a typical thematic ordering of the intended encyclopaedic dictionary.

There are great possibilities in extending and improving the existing work by using a proper lexicographic methodology. An encyclopaedic dictionary such as the proposed encyclopaedic dictionary will provide a good basis for a theoretically sound work. However, for an encyclopaedic dictionary to be useful, the lexicographer should combine theory and practice in order to respond to the needs of the target users.

Although practical work provides good data, the relevance of that is made possible by a theory adjusted to a particular context. I think that a thematic lexicographic ordering is very productive because the researcher can focus on the content of a theme and the completeness of an encyclopaedic dictionary with regard to specific subjects can also be assessed.

CHAPTER 7: MICROSTRUCTURE

7.1 Introduction

Good modern encyclopaedic dictionaries increasingly base the compilation of both their macro- and microstructure on a corpus. This chapter aims to present the microstructure of the planned encyclopaedic dictionary. It will picture the different ways in which the corpus plays a key role in writing better encyclopaedic dictionary articles, with special reference to Yilumbu.

In what follows, different aspects of the microstructure will be discussed, focusing on a number of contributions. Section 7.2 presents the concept of microstructure according to Hausmann and Wiegand (1989). Section 7.3 enumerates the different types of microstructure. Section 7.4 presents the data to be included in the microstructure. Section 7.5 outlines the etymological notes. Section 7.6 concludes the chapter.

7.2 Understanding the microstructure

According to Gouws (2001:86) the microstructure represents all the data categories included in a dictionary article as part of the treatment of the lemma sign as well as in the structure and the presentation of the articles. This also includes the typographical conventions used (various typefaces and font sizes, punctuation and special symbols). The user and the genuine purpose of the dictionary govern the selection of items for the word list in the encyclopaedic dictionary and also the method of treatment of each individual entry.

According to Hausmann and Wiegand (1989:340), the microstructure of a dictionary article is the total set of linearly ordered information items following the lemma sign. In the data that are to be taken into account when devising the microstructure of a given dictionary, it is important to distinguish between elements of the so-called *obligatory microstructure* and the *extended obligatory microstructure* (cf. Gouws 1999b:45; Hausmann & Wiegand, 1989:346).

The obligatory microstructure comprises the set of data categories that is to be presented obligatorily for each type of lemma sign. For example, the treatment of a

given lemma sign usually encompasses the presentation of both grammatical (the part of speech indicator of the lemma sign) and semantic (the meaning paraphrase of the lemma sign or its translation equivalent as well as some co-text entries) data. The extended obligatory microstructure, however, requires more than the prescribed minimum. For example, the presentation by the lexicographer of data regarding synonyms, antonyms, homonyms, and so on of the lemma sign has to be seen as part of the extended obligatory microstructure.

Dictionary research has resulted in the identification of different types of microstructure, according to Wiegand (1989b and 1996). The dictionary-specific lexicographic process of each project has to instruct the lexicographer with regard to the type of microstructure to be employed in an encyclopaedic dictionary. In order to avoid any confusion during the consultation process, the presentation of the microstructure of any dictionary has to be as clear and simple as possible.

7.3 Different types of microstructure

The analysis of the microstructure presented here has a twofold objective:

- To give an account of the data types which are to be included in the dictionary article.
- To find better ways to make the data accessible to the user so that he or she retrieves the correct information.

Bergenholtz, Tarp and Wiegand (1999) make a distinction between single articles and synopsis articles. Single articles can be regarded as the default article in both general dictionaries and technical dictionaries. These articles display the standardised structure and microstructural data categories. A synopsis article also includes the typical data presented in a single article but goes further by also including additional data, often of a more encyclopaedic or general nature. The contexts in which the lexicographer may separate or split a particular article vary for numerous reasons. History and/or culture can be one of them. From a cultural or historical point of view the lexicographer may think that it is important to introduce some additional data, treated separately from the main lemma. This treatment may be presented in the back matter texts or can be presented within the dictionary article as a separate text.

Based on the assumption that synopsis articles have a more general use than their restricted application in LSP dictionaries, Mavoungou (2002a; 2002b) has proposed enlarging the concept of synopsis article to the treatment of lexical items with a high degree of cultural information. Following Mavoungou (2002b), I have also presented an analysis of sample articles in a number of Gabonese dictionaries compiled in French (cf. Saphou-Bivigat & Ella 2006).

For articles in which the lexicographer gives more than the default treatment of a given topic or theme, Gouws (2002; 2002b) uses the concept of *complex articles*. As far as the present model is concerned, I adhere to Mavoungou's (2002a) approach. In what follows I present the different types of microstructure used in metalexicographical circles.

The main function of the microstructure is to present items within a dictionary article in an ordered way. There are more than two types of microstructure, each of which arranges data in a completely different way. The conceptualisation phase of a given encyclopaedic dictionary and its data distribution structure should make provision for the inclusion of more than two types of article in the proposed dictionary. Each microstructural item is part of the treatment of either the lemma of a given article or another microstructural item in the same article. An item can also function as part of the treatment of a lemma or other item in an article elsewhere in the same dictionary. Microstructural items are directed or addressed at specific targets.

In fact, to avoid confusion in information retrieval, it is better for each dictionary article to display a specific microstructural presentation and treatment of a given lemma sign based on the provision made during the dictionary conceptualisation plan. The lexicographer should not limit him- or herself in the use of a specific type of microstructure because the treatment of the items in the dictionary article is determined by the availability of the data needed for that lemma sign. The treatment of a noun will differ from that of an adverb or preposition.

When compiling the dictionary, the lexicographer must always keep in mind that the needs and the skills of the dictionary users should be taken into consideration. The

A theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu

easier the microstructure is presented, the easier the users are guided to the needed information in the dictionary article²⁰.

The decision regarding the type of microstructure is linked with the typological classification of the planned encyclopaedic dictionary. A model for a new dictionary project should make provision for the choice between different types of microstructure, for example integrated, non-integrated and semi-integrated microstructures.

Although metalexicographic research has formulated models for various types of microstructure, all these types are not relevant for general dictionaries. I will suggest the way in which one of these types will be included in the proposed encyclopaedic dictionary, and this will be motivated. At this point, let us take a look at existing microstructures. According to Hausmann and Wiegand (1989:354) four types of microstructure can be distinguished, namely integrated microstructures, partially or semi-integrated microstructures, non-integrated microstructures and rudimentary microstructures.

7.3.1 A non-integrated microstructure

A dictionary has a non-integrated microstructure when all items giving the meaning of the lemma sign are given in the first subcomments on semantics, which are called subcomments on lexical meaning, and all examples and linguistic items are distributed in the semantic subcomment coming after the first ones, in accordance with a system explained in the metatext of the dictionary.

Gouws (2001:87) specifies that a non-integrated microstructure displays a distant/indirect addressing between a co-text entry and the relevant paraphrase of meaning/translation equivalent.

The main concern is that the choice between existing microstructures should be based on the needs of the target users as revealed by detailed empirical study conducted in the Yilumbu environment. The fact that a large part of the target user group will be non-mother-tongue speakers of Yilumbu means that the need for adequate, easily

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²⁰ Note that a microstructure is said easy when it gives easy and friendly access to the users (cf. Ekwa Ebanega 2007).

understandable data will be even greater than in an encyclopaedic dictionary for mother-tongue speakers only.

A non-integrated microstructure offers a presentation whereby some of the data inside the comment on semantics are presented in a separate text block. The co-text will not be presented in the same subcomment on semantics in which a translation equivalent or paraphrase of meaning is given.

The non-integrated microstructure will help to accommodate different data types and texts blocks in the treatment of lemmas in the dictionary articles. This does not necessarily differ from integrated macrostructures, which are mostly found in linguistic dictionaries (cf. Genouvrier, Désirat & Hordé 1997; ILALOK 2008; Kromhout & Kritzinger 1998; Maurin 1993). However, the aim of our model is to achieve both linguistic features and encyclopaedic features. At the same time, we expect to achieve comprehensiveness of the treatment of lemmas in the microstructure.

It must be pointed out that the microstructure of an encyclopaedic dictionary differs from that of linguistic dictionaries not only in the microstructural treatment of the items but also in the types of item included in the treatment. The lexicographer will always have to make sure that all the distinctive features of encyclopaedic dictionaries are taken into consideration in this regard. The following randomly chosen article, *muvhaangi* (maker), is a typical illustration of a non-integrated microstructure:

mu-vhaangi. cl.1/2. muvhaangi/bavhaangi [mùβà:ŋgi]. Voir Kuvhaanga

- 1. Nom. Qui crée, inventeur.
- 2. Nom. Le fabricant.
- 3. Loc. Le Créateur (Dieu).

NZAGHU muvhaangi maambu. NZAOU invente des histoires. (1)

Atsisuba dwabi na muvhaangi. *Elle a acheté la courroie chez le fabricant*. (2)

NDZAAMBI muvhaangi buloongu bwotsu. Dieu est le Créateur de tous l'univers. (3)

Men.: muvhaangi/bavaangi. **Yip:** muvhaangi/bavaangi. **Civ:** n'vänji [ńvá:dʒì].

Text example 1: Article muvhaangi

mu-vhaangi. cl.1/2. muvhaangi/bavhaangi [mùβà:ηgì]. See Kuvhaanga

- 1. Noun. Maker, designer.
- 2. Noun. Producer.
- 3. *Loc*. The Creator (God).

NZAGHU muvhaangi maambu. NZAOU is a story maker. (1)

Atsisuba dwabi na muvhaangi. *She bought the strap from the producer*. (2) NDZAAMBI muvhaangi buloongu bwotsu. *God is the Creator of all the universe*. (3)

Men.: muvhaangi/bavaangi. Yip: muvhaangi/bavaangi. Civ: n'vänji [ŋváːdʒi̞].

English translation of Text example 1: Article muvhaangi

From the data presented in this article (displaying a non-integrated microstructure) given as Text example 1, the user can retrieve much information. As part of macrostructural data, the lemma sign (decomposed into monomorphemic units) followed by its class number, the full form of the singular and the plural form of the lemma, the phonetic transcription and the part of speech indicator are presented.

Microstructural data such as the translation equivalent (*maker*) followed by a cross-reference entry (*Voir* **Kuvhaanga**) are useful to the user, especially the note on prohibition because of its ethnographical nature. Finally, the user also finds data regarding the so-called Yiluumbu yi menaane, Yipunu and Civili introduced by their respective diatopic labels.

7.3.2 A semi-integrated microstructure

According to Gouws (2002a:87), a semi-integrated microstructure is a hybrid form displaying features of both an integrated and a non-integrated microstructure and is typically used in more comprehensive dictionaries in which lengthier articles with a variety of data types and search zones occur. In the first subcomments on semantics, 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 to a specific paraphrase of meaning/translation equivalent entry.

Gouws (2002b specifies that this type of microstructure assists the user with regard to both decoding and encoding needs. The integrated component is directed primarily at a decoding function whereas the unintegrated component adds an encoding function to the article. A semi-integrated microstructure leads to a sophisticated lexicographic procedure and should be considered for more comprehensive bilingual and monolingual dictionaries.

7.3.3 A rudimentary microstructure

According to Wiegand (1990:56), a rudimentary microstructure prevails when the dictionary article is restricted to the comment on form. A cross-reference entry often substitutes the comment on semantics. One also finds rudimentary microstructures in the case of lemma signs representing abbreviations.

If 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 1999a:45, as cited in Mavoungou, 2002c:183). Lexicographers should avoid this confusing type of microstructure because it offers limited guidance to users, depending on their dictionary usage culture. For cross-reference articles and the treatment of abbreviations, one could opt for this type. However, in many other cases it poses a problem.

The microstructure of an encyclopaedic dictionary needs to be planned with precision and care in order to offer users an optimal chance of a successful encyclopaedic dictionary consultation.

7.3.4 An integrated microstructure

An integrated microstructure displays a system of direct addressing between a paraphrase of meaning/translation equivalent and its co-text entry/entries. Moreover, each paraphrase of meaning/translation equivalent is immediately followed by the cotext entry illustrating the typical usage of the lexical item in question (Gouws 1999:47).

The fact that no other occurrences of paraphrases of meaning/translation equivalents come between a given paraphrase of meaning/translation equivalent and its co-text entry decreases the textual condensation and makes it easier for a user to interpret the contents of the subcomment on semantics correctly. Especially in the treatment of lexical items with many polysemous senses, the direct relation between a co-text entry and a paraphrase of meaning/translation equivalent ensures optimal retrieval of information.

Integrated microstructures play a prominent role when it comes to text production. Given that an integrated microstructure assists the user with regard to both text production and text reception needs, it will be policy to work with this type of microstructure. The user will have an idea of an integrated microstructure in the treatment of the lemma *fumbu*:

fuumbu. **1.** Légume issu d'un petit végétal lianescent. MAAMA atselaamba *Maman a préparé le légume foumbou*. **Encycl**. Très riche en fer, largement consommé sur l'ensemble du territoire congolais. Il se prépare mélange soit au poisson fumé, soit au poisson salé, soit encore à la viande boucanée, avec la pâte d'arachide. Le plat qui en est issu porte l'appellation familière de << trois pièces>> **2.** Une gaulette flexible utilisée dans la confection d'un piège. MUREELA ava vaanga si fuumbu. *Le chasseur fait des gaulettes de piège*. **3.** Anneau de liane très flexible entouré de feuilles de bananier. MWANA anavwaata lu fuumbu otsi muleli. *L'enfant porte un foumbou sous le pagne*. **Encycl**. Par le passé, on enfilait autour du pénis après la circoncision pour empêcher tout contact douloureux avec les cuisses.

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Text example 2: Article fuumbu

fumbu 1. Vegetable from a small creeping plant. MAAMA atselaamba Mother has cooked fumbu vegetable. Encycl. Very rich in iron, this vegetable is common food across the Congo. To cook it, one can mix it with smoked fish, salt fish or meat blended with peanut butter. The dish that comes from it carries the familiar appellation of "three pieces". 2. A flexible "gaulette" used in the making of a trap. MUREELA ava vaanga si fuumbu. 3. Ring of very flexible creeper encircled with leaves of banana tree. MWANA anavwaata lu fuumbu otsi muleli. Encycl. In the past, it was put around the penis after circumcision in order to prevent any painful contact with thighs. MWANA anavwaata lu fuumbu otsi muleli. The child is wearing a fumbu under his loincloth.

English translation of Text example 2: Article *fumbu*

Note that in Yilumbu, like in most African languages, cultural items are hardly ever polysemous. Therefore, it is very unlikely to find polysemous lemma for an encyclopaedic dictionary in an African language. However, the planned encyclopaedic dictionary will not only focus on cultural items; it will also include lemmata representing non-cultural lexical items.

The proposed encyclopaedic dictionary will contain some background encyclopaedic data given in integrated, short paragraphs explaining the history or the origin of the cultural item referred to in the lemma. This encyclopaedic data can be beneficial to the intended target groups of the proposed encyclopaedic dictionary. Lexicography has much to contribute to the information and knowledge society. The very essence of lexicography is its capacity to provide quick and easy access to data from which information needed by different types of user in different social situations can be retrieved.

Accessibility is a key concept in any lexicographic theory maintaining to be user oriented. However, it could be claimed that any data included in any text are accessible to anyone who takes the time to read the text through from beginning to end. Other tools, especially the encyclopaedic slot connected to the articles, also provide easy access to relevant data and easy access to the specific types of data that can cover a specific user's specific information needs in a specific type of extra-

lexicographic situation. While reading students need to acquire additional encyclopaedic knowledge in order to understand the text.

Therefore, polysemous lemma articles will treat the polysemy of the lemma in the planned Yilumbu encyclopaedic dictionary according to the type of microstructure adopted for the planned dictionary, as shown subsequently in the dissertation. Note that most linguistic dictionaries address the polysemy of lemmata following the principles of either a non-integrated microstructure or an integrated microstructure.

Text example 3 below displays a certain treatment of lemmata representing a polysemous lexical item from the perspective of an integrated microstructure.

Mabandzi cl.6 [mábà:ndʒi] n. 1. pl. Kgotla (cf. dibandzi). YONU baghetu ba tsiyine mabandzi o dibandzi di seefu bwaala. Last night, women danced their secret society dance at the chief's courthouse place. 2. Secrete society for women. BWANGA akota Mabandzi. Bouanga is a Mabandzi initiate. 3. (By ext.) Ritual dance performed at ceremonies of the secrete society called Mabandzi. MABANDZI muyisi baghetu. Mabandzi is a women's ritual.

Text example 3: Article Mabandzi

7.3.5 The recommended microstructure

The microstructural programme, in other words the plan regarding the different data categories to be included in the treatment of the lemmata and the typical article slots allocated to these categories of the encyclopaedic dictionary, is a second issue to receive attention in the general preparation phase. The lexicographic treatment also includes the transfer of a number of types of semantic data; the lemma functions as guiding element of each dictionary article and the microstructure orders the entries included as part of the treatment of the lemma in such a way that the article displays a definite structure. The compilation of an encyclopaedic dictionary is also correlated with factors external to lexicographic work.

The general preparation phase of the dictionary has to give attention to the microstructural programme because it influences the selection of data categories to be included in the microstructure during the lexicographic process. As Gouws (2001:68) notes, a further value of an early identification of the microstructural programme is to

assist lexicographers during the early phases of the compilation process to focus on those data categories that will be included in the encyclopaedic dictionary. On the other hand, by indicating the existence or the non-existence of an article slot to be reserved or not for a specific data category, the microstructural programme allows the editorial staff to avoid dealing with matters in which they do not have expertise.

The functions and goals of the proposed encyclopaedic dictionary are that the linguistic properties of a specific lexical item must be described with as much detail as students at the relevant learning stage need. The emphasis in the proposed encyclopaedic dictionary is moving towards mother-tongue education at school level, a decision that will create a more urgent need for comprehensive guidance in school, geared towards non-mother-tongue students.

The source language item in Yilumbu, described by means of the paraphrase of meaning, will have a translation equivalent in French. The microstructure recommended in the model makes provision for the comprehensive treatment of lemmata by presenting a variety of data types. Furthermore, user-friendly articles are devised in order to make provision for successful information retrieval within the comprehensive treatment of a given lemma.

The proposed encyclopaedic dictionary with the planned microstructural programme will include various types of data category that can be helpful to the target user. One regards an integrated, non-integrated and semi-integrated microstructure as appropriate types for a dictionary. However, not all but only two types of microstructure are often used and will be used in the proposed microstructural programme, namely an integrated and a semi-integrated microstructure because these are used when dealing with wide-ranging articles including a diversity of data types and search zones.

However, this type of microstructure demands examples positioned in distinct types of article slots within the article of a polysemous item. Yet, the lemma signs to be included in the proposed model are not all representing polysemous lexical items. The inclusion of encyclopaedic data is urgently needed in order to enhance users' knowledge of special fields as well as the culture in which the special-field terms are used. This inclusion of encyclopaedic data would have to be relevant to the needs of the intended target users of the proposed encyclopaedic dictionary.

The presentation and ordering of the co-text entries in the relevant text block are done in such a way that the relation between a given co-text entry and the item at which it is addressed is clearly marked and the skilful user should have little difficulty in pairing the co-text entries with their relevant addresses. A non-integrated microstructure presupposes the occurrence of co-text entries presented in a systematic way in a separate text block. In 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.

The microstructure that will be employed is a hybrid type that displays a very good micro-architecture layout. In this type of microstructure, the different data types are clearly and distinctively organised and presented. The obligatory microstructure component will also display the explanatory data, in other words paraphrase of meaning of the lemma in Yilumbu, that form the core of the comment on semantics.

The proposed encyclopaedic dictionary with the planned microstructural programme will display the translation equivalent of the lemma in French, followed by illustrative examples presented as co-text entries in Yilumbu to illustrate the typical use of the word. It will include data on the plural form of the noun immediately after the treated lemma sign. The articles of prepositions will display the obligatory microstructure whereas the articles of nouns will display an extended obligatory microstructure. The dictionary will display additional explanatory features or cultural data related to the Gabonese languages. See Text example 4 below.

Bwaala cl.14 [bwà:là] *n.* **1.** Village. MAAMBI bwaala bu nena. *Mambi est un grand village*. pl. **Maala**. **2.** *Loc*. Chez soi. TATI anaweenda o bwaala bwaandi. *Tati est rentré chez lui*. **3.** (*Ext*.) Repos, simplicité. BISE ifuumba ayi bane mukalu bwaala. *Les gens de cette famille vivent simplement*. **Encycl**. Ce village fut fonde par deux personnes: *BATU BWAALI*

Text example 4: Article Bwaala

Bwaala cl.14 [bwà:là] *n.* 1. Village. MAAMBI bwaala bu nena. *Mambi is a big village*. pl. **Maala**. 2. *Loc*. Home. TATI anaweenda o bwaala bwaandi. *Tati went home*. 3. (By ext.) Rest, simplicity. BISE ifuumba

ayi bane mukalu bwaala. *People of this family live a life of simplicity*. **Encycl**.: The setting up of a village. *BATU BWAALI*

English translation of Text example 4: Article *Bwaala*

The extended obligatory microstructure makes provision for the inclusion of those additional data categories and items or more comprehensive treatment within a given search area that differentiate a complex article from a single article. This addition can be done by means of, for example, article-internal inserted inner texts, boxes with lexicographic commentary or a treatment characterised by a stronger encyclopaedic approach in the comment on semantics to assist users in specific situations of dictionary use. (Gouws & Prinsloo 2005:142). An extended obligatory microstructure does not necessarily imply a complex article, but all complex articles display an extended microstructure because the extended obligatory microstructure makes provision for the inclusion of additional data categories, such as article-internal inserted inner texts, boxes with lexicographic commentary or a treatment characterised by a stronger encyclopaedic approach in the comment on semantics to assist users in specific situations of encyclopaedic dictionary consultation.

7.4 The data

7.4.1 Introductory remarks

The microstructure can be regarded as the second main part of the central list. All data entries presented in an article as part of the lexicographic treatment of a lemma have microstructural status. This includes the description of meaning, translation equivalent, morphological data, illustrative examples, pronunciation guidance as well as the spelling of a lexical item and the stress indication. Additional prominent data types to be included in the proposed encyclopaedic dictionary should concern the encyclopaedic notes, grammatical data and a limited lexicographic treatment as well as pictorial illustrations.

The viewpoint developed by Gouws (2003) and Wiegand (1989b427) corroborates the first classification in the sense that Gouws (2003:35) proposes that within an article, the items can be classified in terms of their function in conveying data regarding the treatment unit. This classification has a direct influence on the structure of the article. Each article can be divided into two main components that are determined by the type of comment different items offer with regard to the treatment unit.

The microstructural programme orders the entries included as part of the treatment of the lemma in such a way that they can be divided into two major article components, namely the *comment on form* and the *comment on semantics*.

7.4.2 Comment on form

The comment on form deals with various aspects regarding the form of the lemma sign. The most typical entries accommodated in the comment on form are the data conveying information regarding the morphology and the pronunciation of the lexical item presented by the lemma as well as certain grammatical features. The comment on form includes the orthographic representation of the lemma sign.

Spelling guidance is included in the comment on form if the lexical item included as lemma has spelling variants. The way in which the entries are presented in the comment on form should also be determined by the reference skills of the intended target users (Gouws 2001:71). In the proposed encyclopaedic dictionary model, the

orthographic representation of lemmata will be given and spelling guidance will indicate to the user how Yilumbu lexical items are pronounced.

However, people often need orthographic guidance and their dictionary consultation procedure may only go as far as finding the lemma and retrieving the necessary spelling information from the lemma sign.

In what follows, we shall first deal with pronunciation and orthographical issues before focusing on other microstructural aspects.

Concerning Yilumbu entries with a stronger oral orientation, it is in the interest of the proposed encyclopaedic dictionary to provide pronunciation data in the form of phonetic transcription.

7.4.2.1 Pronunciation and stress-related issues

The transcription system used to represent pronunciation is that of the International Phonetic Alphabet (IPA), developed in the late 19th century as a system, based on the Roman alphabet. This system could be used for transcribing the speech of any Gabonese language and as an aid in learning the pronunciation of a sister language.

Currently, planned Gabonese-language dictionaries are based on this principle. These dictionaries have proven themselves to be a platform for implementation of the alphabet recently adopted for the orthography and spelling of the Gabonese languages. In the proposed encyclopaedic dictionary Yilumbu pronunciation should be transcribed in such a way that its interpretation does not depend on the reader's accent. The purpose is to help users, mother-tongue speakers or non-mother-tongue speakers, to acquire a good command of Yilumbu.

For this end, broad transcriptions of the IPA should be used. For foreign pronunciations, a phonetic transcription is normally used and for pupils and students in particular a relative degree of familiarity with special IPA characters will be assumed. We will therefore use the writing system of the IPA, except for the symbol [y] that has the value of the Scientific Alphabet of Gabon (SAG). This is because the special IPA character for [y] is [j]. However, in the SAG, [j] represents the special IPA character for [dʒ], which is predominantly used in Yipunu (a sister speech form of Yilumbu). In order to avoid confusion among Balumbu readers (who are also

literate in Yipunu), the symbol [y] has been chosen to transcribe the special IPA character [j].

The value of special IPA characters will be apparent to specialists, but they are also addressed at learners of Yilumbu as well as native speakers of this language. Nowadays, it is a well-attested fact that even a monolingual dictionary, devised to be used by adult native speakers of a given language, necessitates a pronunciation guide. As a matter of fact, a person learning Yilumbu as a foreign language will necessarily need such a guide, but the native speaker might also need the same guide given that the number of words with which people usually experience pronunciation problems is higher than what people generally imagine.

7.4.2.2 The writing system to be used in the planned encyclopaedic dictionary

It has been discussed in Chapter 6 that the spelling system to be used in the planned encyclopaedic dictionary is the one that was adopted at the *Séminaire sur la Standardisation de l'Orthographe des Langues Gabonaises* (Seminar on the Standardisation of the Orthography of Gabonese Languages) organised by the National Ministry of Education in April 1999.

The *Orthographe des Langues du Gabon* (OLG) (Gabonese Languages Orthography) seems to be a compromise between the missionaries' system and the one proposed by the scientific committee of linguistic academics.

7.4.2.3 Part of speech indications

The proposed encyclopaedic dictionary, which targets both mother-tongue and non-mother-tongue speakers of Yilumbu, must present comprehensive data on the part of speech of each lexical item that is lemmatised. Moreover, this data type is also part of the comment on form. In grammar, common part of speech categories include *noun* and *verb*, among others. When talking about *lexical categories* (also referred to as *word classes*, *lexical classes*, or in traditional grammar *parts of speech*) linguists distinguish between open word classes, which constantly acquire new members, and closed word classes, which acquire new members infrequently, if at all. It is important to mark words as belonging to one part of speech or another.

Svensén (1993:81) indicates that data on part of speech are especially useful in decoding look-up situations. He adds that data on part of speech are particularly vital in monolingual dictionaries that include, as part of their target user group, "persons whose native language is not the language of the dictionary". He concedes that despite data on part of speech not being as relevant "in monolingual dictionaries in the user's native language", such data are still "indispensable if the word concerned can belong to more than one part of speech".

7.4.2.4 Presentation of spelling variants

Spelling is the writing of a word or words with all the necessary letters and diacritics present in an accepted standard order. Uniformity in the spelling of words is one of the features of a standard language in modern times. When dealing with orthographic issues, the lexicographer should be aware of the fact that spelling is one of the elements of orthography and a prescriptive element of language. While some words have multiple spellings, some spellings are clearly incorrect and they should thus be labelled as misspellings. A misspelled word can be a series of letters that represents no correctly spelled word of the same language at all (such as nsangu (news) for tsaangu or muana (child) for mwaana). Spelling can also be a matter of opinion when variant spellings are accepted by some and not by others. In the case of there being two different standards for a single language, the lexicographer should choose the most appropriate. The frequency of usage of a lexical item should determine the choice, in other words the most popular item in the speech community. In the Dictionnaire français-vipounou/vipounou-français of the Église Évangélique du sud-Gabon (CMA, 1966), compilers have chosen to write the sound [nz] by the digraph "ns". Compare the following examples in this regard:

Bunsonsi instead of bunzonzi (wisdom)Nsambi instead of Nzambi (God)Nsighu instead of nzighu (chimpanzee)

In the same line of argumentation, Mavoungou (2002b:101), has also emphasised that the phonetic sounds [nz] and [nts] are in free variation in 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. In the following example, I present the lexicographic treatment of the lemma *mukonzi*:

mukonzi/mikonzi cl. 3/4 [mùkónzì] n. (aussi mukontsi). Uranoscope (poisson des palétuviers). Mukonzi tuvamuyi, ali nana monaanga kala. Le poisson des palétuviers est comestible et a le goût du crabe. Mukontsi ke atsighughaka o munu, tsimfwaanga. Si quelqu'un se fait mordre par un poisson palétuvier au niveau de la bouche, c'est le signe qu'un grand malheur qui va s'abattre sur sa famille. Tala miisu nana mukontsi! Tu t'es regardé avec tes yeux globuleux, saillants, comme un poisson des palétuviers! Note encycl.: Les uranoscopes, de la famille Uranoscopidae, sont des poissons perciforme qui ont des yeux au dessus de leurs têtes (d'où le nom). La famille inclut environ 50 espèces de 8 genres, tous marins et trouvés dans le monde entier dans des eaux peu profondes. En plus des yeux montés de sommet, les uranoscopes ont aussi une grande bouche vers le haut faisant face dans une grande tête. Leur habitude typique est de s'enterrer dans le sable et relever vers le haut pour prendre en embuscade les proies (les poissons benthiques et les invertébrés) qui passent au-dessus. Les uranoscopes sont venimeux; ils ont deux grandes épines de poison placées derrière l'opercle et au-dessus de fins pectoraux. Ils peuvent aussi causer des décharges électriques. PIC.

Text example 5: Article *mukonzi* **Illustrative picture 1**



(*Uranoscopus sulphureus*. **Source**: www.wikipedia.org)

mukonzi/mikonzi cl.3/4 [mùkśnzì] *n.* (also mukontsi). Stargazer (Mangrove fish). Mukonzi tuvamuyi, ali nana monaanga kala. The mangrove fish is edible and has the taste of crab. Mukontsi ke atsighughaka o munu, tsimfwaanga. If a stargazer bites someone at the level of the mouth, it is a sign that there is a big misfortune coming onto the family of this person. Bruised miisu nana mukontsi! Get lost, with your prominent big eyes like a mangrove fish! **Encycl**.: The

stargazers are of the family **Uranoscopidae** or perciform fish that have eyes on top of their heads (thus the name). The family includes about 50 species in 8 genera. All are marines and found worldwide in shallow waters. In addition to the top-mounted eyes, stargazers also have a large upward-facing mouth in a large head. Their usual habit is to bury themselves in sand and leap upwards to ambush prey (benthic fish and invertebrates) that pass overhead. Stargazers are venomous; they have two large poison spines situated behind the opercle and above the pectoral fins. They can also cause electric shocks. **PIC**.

English translation of Text example 5: Article *mukonzi*

Of interest in this article given as Text example 5 is the entry *mukontsi* following the lemma sign *mukonzi*. Thus, *mukonzi* and *mukontsi* are orthographical variants.

Another area where the lexicographer will have to choose the most appropriate is the spelling of all the words starting with yi- (class prefix 7) as opposed to i-.

Examples

yikoola	ikoola	(school)
yikutu	ikutu	(shirt)
yibaamba	ibaamba	(white man)
yibadaangu	ibadaangu	(duck)
visalu	isalu	(work)

All the members in the above list are legitimate variants in Yilumbu. If all the words belonging to gender 7/8 are included in the dictionary under the letter i or y, some partial article stretches will be overcrowded and others nearly empty and vice versa. A consideration of earlier lexicographic work (in Yipunu and in Civili, to list but a few) could be helpful and a balance should be maintained between the two letters of the alphabet.

In fact, it is not easy for the lexicographer to eliminate strictly one or the other word. If all these forms are to be part of the lexicon, the treatment should primarily be done on the most used form. The second form can be referred to in the same dictionary as variant or treated separately. If so, in this case a clear cross-reference to the alternative form should be given.

7.4.2.5 Grammar

Together with other data, grammar data need to be treated if the proposed encyclopaedic dictionary is to fulfil its educational and knowledge goals and functions. Grammar is part of the proposed encyclopaedic dictionary and care should be taken in the dictionary to include those aspects of grammar that are relevant to students in this pivotal learning stage. The proposed encyclopaedic dictionary can meet the educational needs of the target user by presenting the necessary grammar points.

This is important because although the planned encyclopaedic dictionary is primarily aimed at aiding the Yilumbu user with regard to text production and text reception in his or her mother tongue, it should also assist non-mother-tongue speakers in their Yilumbu-learning process.

The aspects of language standardisation that have been problematic in the Gabonese languages relate to orthography, vocabulary and idiomatic expressions, among others. This dissertation elaborates on grammatical issues for the sake of focus. The Gabonese languages are experiencing grammatical terminology problems in the sense that up to now there has been no language body that coordinates and regulates term creation for various grammatical concepts in the Gabonese languages. The teaching of the Gabonese languages has been influenced by French grammar. Consequently, some grammatical realities are misunderstood since African Bantu languages such as the Gabonese ones are radically different from European languages and one of the areas in which they differ is the grammatical construction of the words. The lack of reference books on the Gabonese languages, especially on grammar, is a big problem. There is, therefore, a serious need for grammar books written in the Gabonese languages, books that can be used in the teaching of Yilumbu grammar at school level. It is very important to master the grammar of a language in the learning process, for the mother-tongue speaker or anyone who would like to acquire the grammatical rules of a specific language. Yilumbu in particular and the rest of the Gabonese languages in general need to focus on the development and teaching of their grammar in the educational system. That will help the speech community of each language to improve the number of speakers of a given language since French has taken an important place by becoming the first language of most Gabonese youngsters.

A theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu

In the teaching of the Gabonese languages, good examples can be taken from African languages and European and other languages that have experience in the language teaching tradition. That will be beneficial for both learners and educators.

For instance, in the teaching of specific grammatical points English grammarians can make use of different methods. Lexicographers dealing with the presentation of grammatical data must do it in a very user-friendly way because this data is relevant to the user. The traditional model and the communicative competence model for teaching the English past tense can be advised in the context of the Gabonese languages:

Traditional: grammar for grammar's sake

- Teach the regular *-ed* form with its two pronunciation variants.
- Teach the doubling rule for verbs that end in d (for example, wed-wedded).
- Hand out a list of irregular verbs that students must memorise.
- Do pattern practice drills for *-ed*.
- Do substitution drills for irregular verbs.

Communicative competence: grammar for communication's sake

- Distribute two short narratives about recent experiences or events, each one to half of the class.
- Teach the regular *-ed* form, using verbs that occur in the texts as examples. Teach the pronunciation and doubling rules if those forms occur in the texts.
- Teach the irregular verbs that occur in the texts.
- Students read the narratives and ask questions about points they don't understand.
- Students work in pairs in which one member has read Story A and the other Story B. Students interview one another; using the information from the interview, and then write up or orally repeat the story they have not read.

Given such a background, it will be noted that in the compilation of the proposed encyclopaedic dictionary in Yilumbu lexicographers will give careful consideration to the inclusion of certain data categories. The reasons, the goals, the characteristics, the needs and the problems of the users, the typology and the genuine purpose – all these parameters that steer the compilation of the proposed encyclopaedic dictionary request the inclusion of grammatical guidance.

The English example presented above could be used as a guideline that presents the priorities in the teaching of important grammatical points. When dealing with nouns, verbs, adjectives or another grammatical feature, the teacher or the language body will focus on the important steps that will help to express the concept explicitly. The proposed encyclopaedic model will help to achieve these objectives by containing the different grammatical situations that a specific phenomenon could present in different contexts.

In order to achieve this, the grammatical phenomena of the language need to be identified and standardised since they should be the starting point. Right now, these are still problems that the lexicographer will have to deal with. This goes along with the standardisation of Yilumbu as a language. I urge lexicographers to solve these weaknesses for a better and easier compilation of grammatical data in the proposed encyclopaedic dictionary in Yilumbu that would strongly assist the users in their daily tasks.

a) Yilumbu grammar

It was mentioned that the proposed encyclopaedic dictionary will use the cognitive approach as well as some features of the communication-orientated approach. This dictionary will differ widely in terms of length, nature and structure from the standard encyclopaedic dictionaries. The model presupposes the inclusion of at least as much grammatical information as in LGP dictionaries. Further, the grammatical use of the proposed encyclopaedic dictionary will differ from the traditional general language use. As far as the proposed encyclopaedic dictionary with a bilingual dimension is concerned, it must be considered whether the grammar should cover both the source language and the target language.

Grammar is central to the teaching and learning of languages. It is also one of the more difficult aspects of language to teach well. One cannot deal with the grammar of a language in one single dictionary or book. As a language is dynamic, I believe that its evolution can also affect some of its grammatical categories in the course of time. This means that grammar should be adjusted accordingly.

The term *grammar* is sometimes misunderstood and misinterpreted by many people including language teachers. When people hear the word *grammar* they think of a fixed set of word forms and rules of usage. They associate 'good' grammar with the prestige forms of the language, such as those used in writing and in formal oral presentations, and 'bad' or 'no' grammar with the language used in everyday conversation or used by speakers of no prestige forms. In this regard, good grammar in a dictionary or in any important book will help users to better understand the usefulness of grammar.

Good language teachers would be in favour of the conception that focuses on grammar as a set of forms and rules. They teach grammar by explaining the forms and rules and then drilling students on them. This often results in bored, disaffected students who can produce correct forms in exercises and tests but consistently make errors when they try to use the language in context.

Other language teachers, influenced by recent theoretical work on the difference between language learning and language acquisition, tend not to teach grammar at all. Believing that children acquire their first language without overt grammar instruction, they expect students to learn their second language in the same way. They assume that students will absorb grammar rules as they hear, read and use the language in communication activities. This approach does not allow students to use one of the major tools they have as learners: their active understanding of what grammar is and how it works in the language they already know (cf. Louw 2004:126).

The communicative competence model balances these extremes. The model recognises that overt grammar instruction helps students to acquire the language more efficiently, but it incorporates grammar teaching and learning into the larger context of teaching students to use the language. Instructors using this model teach students the grammar they need to know to accomplish defined communication tasks.

The focus of this part is on the provision and presentation of grammatical data in the encyclopaedic dictionary. It is worthwhile to emphasise that the presentation of grammatical categories and the need for grammatical information in encyclopaedic dictionaries are very important for the users. The Gabonese languages are then used as a case study to show how the community can benefit from the encyclopaedic dictionary and make use of grammatical data in teaching Yilumbu grammar at school level. The model implies the preparation of a so-called differential grammar, in other words a grammar describing the special grammatical features whereby a certain variety differs from general-language usage. Different grammatical categories can then be covered and identified in order to satisfy the needs of the target users.

Grammatical data in the outer texts give an overview of a language. It may perform a cognitive function by providing grammatical information about that language. It may also perform a text production function by showing how words inflect or combine to form sentences. This information may also be given in a central list, constituting a transtextual approach to lexicographic functions.

Two things have to be taken into account in this regard: first, the types, amount, quality and relevance of the grammatical information fixed in the encyclopaedic dictionary items and, second the principles according to which these grammatical features are structured, connected and presented in order to facilitate their accessibility in the microstructure. The data on grammar contained in an encyclopaedic dictionary can be of two different types, namely function-related

grammar that provides solutions to the problems that originally gave raise to consultation and use-related grammar that provides information on the encyclopaedic dictionary and assistance in using it.

Both types of grammatical data are important in order to generate a quality product and can be split up and structured in separate component parts. In fact, a preliminary knowledge of the grammar of the Gabonese languages concerned is recommended. Sometimes users are required to study the grammatical sketch and to master the codes provided in the introduction before using the encyclopaedic dictionary.

b) Grammatical data in an encyclopaedic dictionary

The provision of grammatical data in dictionaries has been a subject of debate for both practicing lexicographers and metalexicographers (Béjoint 2000; Cowie 1983; Landau 1984). Reviewing the first two decades of the publication of *Lexicographica Series Maior*, Hartmann (2004:362) also notes that grammar in the dictionary is another recurring theme that embraces such specialties as morphology and syntax. The recurrence of the theme of grammar in dictionaries has been partly due to the controversy over what should be the subject of grammarians as opposed to that of lexicographers.

It is obvious that grammar has to do with the description of the form of words and their stringing together in phrases, clauses and sentences while lexicography deals with dictionaries. In spite of this simplistic understanding, the dividing line between the lexicon and the grammar seems to be blurred. In many languages some linguistic forms tend to overlap in the space occupied by grammar on the one hand and lexis on the other. The present work should regard grammatical data as microstructural entries and not the controversy between grammar and lexis. Let us consider the examples of Yilumbu given below.

- i. mŭtu, bătu 'person(s)'
- ii. Bátu baami 'My people'
- iii. Batsiwé na mútu ghúna o bwâla. 'They went with that man to the village.'
- iv. (Prov.) Mútu vhâna mútu. 'A person is a person.'
- v. Musênga avábúyi bátu. 'The pin parasol heals people.' (Men)

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vi. Diweela dína utsíwiítsa pwéela bătu. 'A lot of people came to that wedding.'

All the nouns in the above examples share the same stem -tu. The prefixes mu-, ba-

and di- may be regarded as grammatical units in the sense that they determine the

concords in their respective sentences. On the other hand, prefixing them to the same

stem yields words of different denotational meanings. Given such a scenario, how

does one classify linguistic units such as noun prefixes among other formatives and

morphemes in Yilumbu and other Gabonese languages? A clear-cut distinction

between grammar and lexis is therefore difficult.

At all proficiency levels, learners produce language that is not exactly the language

used by native speakers. Some of the differences are grammatical while others involve

vocabulary selection and mistakes in the selection of language appropriate for

different contexts

In responding to student communication, teachers need to be careful not to focus on

error correction to the detriment of communication and confidence building. Teachers

need to let students know when they are making errors so that they can work on such

weaknesses in order to improve their performances. Teachers also need to build

students' confidence in their ability to use the language by focusing on the content of

their communication rather than the grammatical form.

Teachers can use error correction to support language acquisition and avoid using it in

ways that undermine students' desire to communicate in the language by taking cues

from the context.

When students are performing structured output activities that focus on

development of new language skills, use error correction to guide them.

Example

Student (in class): I buy a new car yesterday.

Teacher: You bought a new car yesterday. Remember, the past tense of buy is bought.

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When students are engaged in communicative activities, correct errors only if they interfere with comprehensibility. Respond by using correct forms but

without stressing them.

Example:

Student (greeting teacher): I buy a new car yesterday!

Teacher: You bought a new car? That's exciting! What kind?

In respect of the above, it is equally difficult for lexicographers to avoid grammar in their dictionaries. As a result "the dictionary contains many statements about form, and the grammar . . . cannot escape considerations of meaning" (Béjoint, 2000:28).

Commenting on grammar and dictionaries, Béjoint goes on to note that they are both metalinguistic descriptions with a didactic purpose, designed to facilitate linguistic

communication. Both are necessary for the acquisition of a language.

The goal of grammar instruction is to enable students to achieve their communication

purposes. This goal has three implications:

Students need overt instruction that connects grammar points with larger

communication contexts.

Students do not need to master every aspect of each grammar point, only those

that are relevant to the immediate communication task.

Error correction is not always the instructor's first responsibility.

In the microstructure, grammatical data will then identify the specific grammatical

features of the lemma, which may be described in more detail in the systematic

grammatical section.

It should be mentioned with no hesitation that grammatical data are one of the reasons

why most target users consult dictionaries. That makes grammatical data one of the

most important data types in the dictionary. The lexicographer should deal with

grammatical data in a way that does not confuse the users by giving a clear indication

and explanation of a given feature. Countable nouns should be clearly distinguished

from noncountable ones. The definition and citation examples used in the dictionary

article should accurately help to convey the distinctive features of these two

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phenomena. The situation in treating grammatical data in dictionaries is such that the lexicographer should be aware of the fact that in some instances, any verb participle can be used adjectivally and this does not mean that such grammatical functions should be included as separate entries.

One would rightfully believe that the purpose of including grammatical information in the dictionary is to indicate the morphosyntactic peculiarities and systematic features of a lexical item. However, all the grammatical details of a lexical item cannot be provided in a single dictionary. The lexicographer has a responsibility to give only the morphologically and syntactically important data in the dictionary article for the treatment of a specific item. Grammatical data can also be considered as a clue in the entry to understand the meaning and function of the word.

It is clear that both the dictionary functions and the dictionary typology should be taken into consideration when dealing with grammatical data. The treatment will also depend on the nature of the grammatical category.

Given the lack of standard grammatical textbooks and other reference books in Yilumbu, the importance of grammatical data in the proposed encyclopaedic dictionary cannot be emphasised strongly enough. It is not a mere marketing strategy that Hadebe (2004:95) says, "This is very useful information for language teachers" in reference to grammatical information.

The data presented in the proposed encyclopaedic dictionary will meet the requirements of the school syllabi on Yilumbu grammar. Grammatical terms and formatives in the metalanguage are a representation of the grammatical concepts that the language realises. Entering and defining them in the main text goes a step further to clarify the concepts and their individual grammatical roles. The data are therefore relevant in presenting the language as a system of rules governing its structure and its use. All this is relevant in the study of Yilumbu grammar at school level as part of the requirements of the school syllabi at the examinable ordinary and advanced levels.

c) Grammatical instruction

The envisaged dictionary should present grammatical data through the different data types needed by the users to answer their questions about the use and the functions of specific grammatical categories. This should also play an important role in assisting

language teachers in their grammatical lessons. The lexicographer should clearly explain the way teaching should be done in additional notes provided at the beginning of the grammar points in the front matter text. The teaching of a language should not be done haphazardly and clear instructions should be given with regard to the methodological principles that have to be followed in order to achieve the goal. Even if it will sound like a textbook, the lexicographer should advise briefly and explicitly how teaching should be done in order to achieve its objectives.

Adult students appreciate and benefit from direct instruction that allows them to apply critical thinking skills to language learning. Instructors can take advantage of this by providing explanations that give students a descriptive understanding (declarative knowledge) of each point of grammar.

An important part of grammatical instruction is providing examples. Teachers need to plan their examples carefully around two basic principles:

- Be sure that the examples are accurate and appropriate. They must present the language appropriately, be culturally appropriate for the setting in which they are used and be to the point of the lesson.
- Use the examples as teaching tools. Focus examples on a particular theme or topic so that students have more contact with specific information and vocabulary.

Perhaps one distinction between a grammar book and a dictionary is the primary focus and the starting points of the two in their view of language. The treatment of grammar in a dictionary like the model proposed here will benefit the different users in the production of texts needed in specific situations for specific purposes. For this reason, the lexicographer should be aware of grammatical rules and their syntactic applications of language he or she is dealing with to better serve the needs of the potential users of the dictionary that will be compiled.

As such, it would be difficult for lexicographers to totally avoid the form of language in their explanation of language. However, it should be noted that the way in which lexicographers handle grammatical data would be different for each type of dictionary and the type of grammatical data needed.

The amount of grammatical data provided in dictionaries would vary among dictionary types and the purposes they are meant to serve. Language dictionaries usually provide more grammatical data than scientific or technical dictionaries. The former furnish users not only with the words but also with the rules that govern the form and use of the words while the latter equip users with the technical language needed for communication within specialised fields. The target users of the dictionary also determine the amount of and need for grammatical data in dictionaries. According to Landau (1993:88), "Grammatical information is more essential for a person who is trying to speak or understand a foreign language than for a native speaker." Cowie (1983) also associates grammatical data with pedagogical dictionaries meant to assist foreign-language learners. This goes along with the belief that mother-tongue speakers need little grammatical help while second-language learners need to be equipped with the basic grammatical rules regarding compounding, derivation and word order.

Béjoint (2000) indicates that the move to lexicography for encoding has allowed a shift towards more grammatical data in dictionaries. This includes general-purpose dictionaries (GPDs) for first-language speakers. Citing Sherman (1978:100), Béjoint notes that the so-called grammatical information in most GPDs is much too limited and that much linguistically important data never find its way into grammars or dictionaries. Dictionaries have the greater capacity to absorb and organise.

The above view is likely to remain contestable as long as there is no collaboration between lexicographers and grammarians. Lexicographers should always know what types of grammatical data are expected, in what amounts and in what forms of presentation, considering their target users. In any case, the principle of space economy in dictionary making will always affect the presentation of grammatical data, among other data categories. While the lexicographer may be aware of the need for grammatical guidance in the encyclopaedic dictionary, considering the encyclopaedic dictionary culture and some linguistic needs in the community, space economy would limit the inclusion of data and maybe affect its explicit presentation due to the use of lexicographic symbols.

Nevertheless, the lexicographer should make provision for the inclusion of grammatical data in encyclopaedic dictionaries when planning the microstructural

programme of the dictionary. The limitation of space in the dictionary will impose practical choices so that the lexicographer will deal with the most important grammatical basic points and rules. The presentation of grammar cannot effectively be done if it is divorced from the form of words and the effects of rules that govern their combinations and use in communication. It remains at the dictionary maker's discretion, considering the encyclopaedic dictionary culture and linguistic needs of the community, to include this or exclude that type of grammatical data within the confines of lexicographic principles.

In such a spirit, lexicographers should opt for a user-oriented perspective, considering both the lexicographic and linguistic needs of their communities, when contemplating what data to include in an encyclopaedic dictionary. According to Tarp (2000:193) (after Wiegand 1989b), dictionaries are utility products produced in order to satisfy certain human needs. The assessment dictionaries macrostructure, microstructure, access structure and so on becomes an irrelevant discussion if they are compiled in a way that induces lack of interest for users. This applies to the provision of grammatical data in dictionaries.

d) Grammatical data in the encyclopaedic dictionary

Grammatical information in a dictionary has the function of especially helping the user in the text production situation. The presentation of grammatical information should not be done haphazardly but in way that will assist the users in retrieving the needed information from specific data.

In this regard, three ways in which grammatical data are presented in the encyclopaedic dictionary are explored:

- The grammatical outline of the language.
- Grammatical terms in the metalanguage list.
- Grammar in the main text.

In the front matter of the proposed encyclopaedic dictionary, a grammatical outline of Yilumbu should be presented. The outline will cover the basic aspects of Yilumbu morphology, posing as a mini-grammar within the encyclopaedic dictionary. Word categories that constitute the language should be presented in a manner that presents the language as a system.

The systematic approach is further used to show different morphemes such as prefixes, stems, concords, suffixes and other formatives that combine in the formation of words of different categories. It is demonstrated how these different morphemes are combined in the construction of word categories in which they are involved.

Through the mini-grammar, one is able to see the language as a system of rules governing the combination of different morphemes that form words that, in turn, combine to form sentences. As Al-Kasimi (1977:50) states, such a mini-grammar "should outline the morphology and syntax of the language" and must "present the user with guidance regarding both the regular and irregular aspects of the grammar of the specific language".

The metalanguage list in an encyclopaedic dictionary is necessary as part of the guide to the use of the dictionary as it clarifies the specialised language employed in the dictionary. This is also true of the proposed encyclopaedic dictionary of which the metalanguage list should contain terms that are not used in everyday language. Among those terms are grammatical terms and their formatives. These will be listed against their contractions or abbreviations on the one hand and their French equivalents on the other.

Listing grammatical terms against their abbreviations helps users understand the abbreviations used in the main text while listing them against their French equivalents. This is necessary since there are no standardised grammatical terms in Yilumbu. The importance of the grammatical terms in the metalanguage list cannot be overemphasised. This language is needed for technical understanding of the structure of Yilumbu and the rules that govern its structure and its use in writing or speech. The metalanguage should be consistent in order not to confuse users when consulting the dictionary. For instance, the use of the terms should be clearly explained in a language that will easily be understood by the dictionary users. The use of cross-references to link all the elements in all the different grammatical components will have to be done in a user-friendly way.

The main text of the proposed encyclopaedic dictionary will provide grammatical data in a number of ways. All grammatical terms and formatives listed in the metalanguage should be entered and defined as part of the macrostructure. Listing the terms in the main text is a way of integrating them into the general language and making them accessible to any user who has an interest in the study of Yilumbu grammar. Defining the terms explains the concepts that they represent and clarifies their grammatical functions in the language as a system.

All lemmas in the proposed encyclopaedic dictionary should be specified for part of speech or class, in other words whether a word is a noun, a verb, a copulative, an adverb, and so on. This data relate to a lemma with a category of words similar to it structurally and playing a similar syntagmatic role in the language. Abbreviations, for example for (noun) for (verb) and so on, will be used in the dictionary to economise on space. The abbreviations and their full forms should then be listed as part of the metalanguage list.

Given the provision of all this data, among other types, it may be noted that the users of the proposed encyclopaedic dictionary should have at their disposal a reference resource for any information to assist in language learning. Ramagoshi (2004) demonstrates well how African language dictionaries could be used in the light of language teaching and learning (cf. Nkomo 2005:9).

Most dictionaries give a range of grammatical data:

- The word class of the lemma is given noun (and possibly gender), adjective, verb, preposition, adverb, conjunction, pronoun, determiner, and so on.
- Data on common and irregular inflection of words are given how a word changes in the plural if it is a noun or perhaps in the past tense if it is a verb.
- There are usually data as to whether a noun is countable or uncountable or whether a noun is commonly used in the plural rather than the singular. Compare the English *information* with the French *les informations*.
- An indication of whether a verb is transitive or intransitive is given.
- There may be an indication of word order or the sort of clause that can follow a certain word, for example *to ask somebody to do something*.

More elements of grammatical information are not indicated here. The purpose here is not to elaborate on the benefit of grammatical data in dictionaries but simply to refer to certain points.

e) Uses in Yilumbu grammar teaching

Yilumbu grammar is taught and examined at the ordinary and advanced levels of secondary school as a compulsory section of the syllabi. The syllabi require students' knowledge of the structure of the language as a system of rules and the use of the language as governed by those rules. The focus is mainly on various word classes, the morphemes constituting them, the phonological processes involved in word formations and their stringing together to form sentences.

Given the desperate situation of the Gabonese languages, the use of Yilumbu texts is more than necessary but it should be done with great caution considering the differences between Yilumbu and Yipunu

Language teachers and language learners are often frustrated by the disconnection between knowing the rules of grammar and being able to apply those rules automatically in listening, speaking, reading and writing. This disconnection reflects a separation between declarative knowledge and procedural knowledge.

- Declarative knowledge is knowledge *about* something. Declarative knowledge enables a student to describe a rule of grammar and apply it in pattern practice drills.
- Procedural knowledge is knowledge of how to do something. Procedural knowledge enables a student to apply a rule of grammar in communication.

For example, declarative knowledge is what you have when you read and understand the instructions for programming a DVD player. Procedural knowledge is what you demonstrate when you programme the DVD player. This resembles the operative function, in other words giving instructions in the way they should be used to better understand the grammatical rules of the language.

Procedural knowledge does not translate automatically into declarative knowledge; many native speakers can use their language clearly and correctly without being able to state the rules of its grammar. Likewise, declarative knowledge does not translate automatically into procedural knowledge; students may be able to state a grammar rule but may consistently fail to apply the rule when speaking or writing. To address the declarative knowledge/procedural knowledge dichotomy, teachers and students can apply several strategies.

The differences are notably minor, but the dogmatic use of texts renders the grammar taught to Yilumbu students difficult. While using Yipunu texts teachers need to take note of these minor variations and explain them to their students. It still remains imperative to develop reference and teaching materials that can be used to teach Yilumbu grammar in a way that will distinguish the language from Yipunu. The grammatical data in the proposed encyclopaedic dictionary will make the target user aware of the existence and the usefulness of the grammar as powerful tool that supplements the immediate information transfer found in the microstructure.

The encyclopaedic dictionary should display an important educational function that allows it to meet the specific type of need in a specific type of knowledge-related user situation.

f) Use of the encyclopaedic dictionary grammar

As much as an encyclopaedic dictionary is not a grammar textbook, reference to grammar must be accurate enough to complement the efforts of the teacher and the textbook.

The need for accuracy in the presentation of any data type in any dictionary cannot be disputed; it is vital. Thus, this dissertation proposes the use of the encyclopaedic dictionary in teaching Yilumbu grammar since the grammatical data provided are relevant.

Hence, some recommendations are made in consideration of grammar teaching and grammatical rules. The grammatical outline may not give detailed information on the morphological processes involved in the construction of words, lemmatising and defining grammatical terms. However, the conventional alphabetical ordering of items in dictionaries would make the use of the dictionary for class-teaching purposes difficult since the presentation of data on a topic would be done according to the principles of dictionary making, which do not provide for its use as a textbook.

Grammatical marking of dictionary entries answers the typical examination questions that ask students to identify the grammatical classes in which words fall. This again poses a problem highlighted in the preceding paragraph, which implies that the user moves back and forth from one dictionary text or entry to the other to verify data that

would be provided elsewhere. Béjoint has this to say about a grammar in contrast with a dictionary:

A grammar has a running text that is not divided into unconnected paragraphs and it can be read, not only consulted; it does not have a coded arrangement of entry heads. It is meant for a narrower public than a dictionary (Béjoint 1994:28).

Gouws and Prinsloo (1998) express a related sentiment on the real problems experienced by dictionary users. They maintain that the conventional dictionary structure is based on tearing concepts from different bodies of knowledge or linguistic items from their mother contexts and re-arranging them, which results in decontextualisation. In light of this, the mediostructure becomes a mechanism of reestablishing the natural relations among the concepts of knowledge or items of language.

The main problem with the use of the proposed encyclopaedic dictionary in teaching Yilumbu grammar at school level therefore lies with the general structure of dictionaries, which dictates that they cannot be read like a book but should rather be consulted. Consulting a dictionary requires reference skills that enable one to decode the information provided in it. As long as Yilumbu dictionary users lack the required skills, current and possible future dictionaries in the language are likely to be underutilised until users have developed appropriate reference skills.

In the same vein, without the relevant reference skills, the encyclopaedic dictionary cannot be used in the teaching of Yilumbu grammar. By looking at the mini-grammar in the front matter, teachers and students lacking reference skills are likely to dismiss the dictionary, thinking that it is too shallow to solve their problems. However, with adequate reference skills, they should by reading the front matter be able to realise that the encyclopaedic dictionary contains all the relevant data and they should manage to decode it for their use.

The model proposes ways of improving dictionary skills in Yilumbu to ensure that maximum utilisation of encyclopaedic dictionary data and ultimately the development of a dictionary-using culture are attained. The teaching of Yilumbu grammar at school level is also likely to benefit from some, if not all, of the methods proposed in this work.

For instance, language experts should organise workshops, and researchers such as those involved in lexicography work at CENAREST (Gabon's National Research Centre) with Gabonese languages teachers across the country can promote awareness on how the proposed encyclopaedic dictionary could be used in the teaching of Gabonese languages grammar.

Teachers can be trained during such workshops on how to decode grammatical information presented in the proposed encyclopaedic dictionary and bring it together in preparing class notes. Without funding specified for this purpose, this might be difficult for lexicographers but it can also contribute to the marketing of the dictionary. The proposed model can be employed as reference source to assist the compilation of textbooks and study material, which will sustain the programmes in higher education institutions, such as ENS (Gabon's College of Education for secondary and high schools' teachers), ENI (Gabon's College of Education for primary schools' teachers), and so on, that are in charge of the training in different types of teaching careers in Gabon.

It is notable that as a standard book, the encyclopaedic dictionary can be used maximally at schools only if approved by the relevant governmental body. If advised by the language experts on the contributions that the dictionary can make in the teaching of Gabonese languages grammar, these authorities can commission textbook writers to write modules and comprehensive grammar textbooks based on it. The CENAREST can include dictionary editors themselves, university and college lecturers in the Gabonese languages, lexicographers, teachers of the Gabonese languages and publishers. With adequate funding, such people should be able to come up with a comprehensive grammar written in the Gabonese languages within a given period.

If such efforts could be made to make use of the encyclopaedic dictionary in the teaching of Gabonese languages grammar at school level, there are obvious gains that could be realised with regard to the development of the language. One primary gain would be the improvement of the teaching methods that are used at present. The current situation and the methods used in the study of Gabonese languages grammar have long-term and detrimental effects on language development.

Research into Gabonese languages grammar and other aspects of linguistic studies continues to lag behind, affecting the documentation and development of these languages for advanced communication in the education and other specialised domains. Improving the teaching of Gabonese languages grammar through the use of the encyclopaedic dictionary will therefore improve the production of reference material in the Gabonese languages such as dictionaries, glossaries and textbooks. Such a comprehensive presentation will aid users who use the encyclopaedic dictionary for encoding and decoding tasks.

7.4.3 Comment on semantics

In bilingual lexicographic work, the paraphrase of meaning is usually the most salient entry in the comment on semantics. The nature and extent of the comment on semantics are determined by the type of dictionary. This comment contains all the entries reflecting various aspects of the meaning of the lemma as well as the pragmatic values of the lemma. Items on the meaning of a polysemous lemma sign are always given in a subcomment on semantics, thus they always follow one of the items giving polysemy. For each sense the subcomment on semantics includes the paraphrase of meaning and the relevant co- and context entries. One can distinguish at least four types of definition to present the paraphrase of meaning within descriptive dictionaries, namely genus-differentia definition, synonym definition, circular definition and definition by example.

7.4.3.1 Paraphrase of meaning by means of genus-differentia definition

According to Svensén (1993:122) a paraphrase of meaning by means of genus-differentia definition is composed of a genus term, *genus proximum*, indicating the superordinate class to which the definiendum belongs and one or more *differentiae specificae*, typical features of the definiendum that distinguish it from other concepts belonging to the same superordinate class. Svensén (1993:120) describes this type of definition as being 'intentional', expressing a generic conceptual relationship whereby concepts are arranged in classes according to similarities and differences noted between them. Consider the following example:

maghena cl.6 [máyènò] *n. See* ikuumbu. Predator, leopard (*Panthera pardus*, Fam. Felidae) of the cat family smaller than a lion or tiger, and with spots. (In tales) Yiboonga avhyoghila maghena dyeela. *The tortoise is shrewder than the leopard*. Maghena ana bubaalu! *The leopard is fierce!*

Text example 6: Article maghena

In the example above, the genus 'predator' is identified for *leopard* while the differentia ('spots') helps to fully distinguish it from other types of predator. According to Gouws and Prinsloo (2005:145), this type of definition consists of distinguishing a semantic category/class or superordinate to which the lemma belongs (the genus) and then listing a number of specific characteristics of the lemma that differ from other members of this category or class (the differentiae).

As far as the present model is concerned, the use of the paraphrase of meaning by means of the genus-differentia definitions will emphasise the semantic relation already indicated by the macrostructural position of the lemma. This could be useful in the sense that it will make a valuable contribution to conveying the meaning of different lexical items. This also could have a positive impact on the arrangement of concepts into semantic classes.

However, more focus would be placed on encyclopaedic features in the differentiae. These features include among others dialectal and regional differences as well as etymological or historical reconstructions.

7.4.3.2 Paraphrase of meaning by means of synonym definition

A synonym is a word with the same or nearly the same meaning as another word or other words in a language. Synonyms are generally treated in dictionaries through the so-called 'synonym definition'. In such a definition, the lexicographer instead of defining the lemma sign refers the reader to its synonym, for example "[a] synonym [...] is given instead of a full explanation" (Gouws & Prinsloo 2005:145).

Synonym definition plays an important role in the article of the dictionary. Landau (1984:270) has pointed out that "synonym definitions are not necessarily a mark of lazy or inept editing; they may be the best solution to the problem of too little space". It however requires ensuring "that the latter lemma is indeed included and treated in the dictionary" (Gouws & Prinsloo 2005:145).

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Consider, for instance, words such as *kweeri* and *ikwaata*, which are synonyms. Text example 7 below gives the entire definition of the lemma *ikwaata* with an indication of its synonym *kweeri*.

ikwaata/bikwaata cl.7/8 [ìkwáːtə] *n*. Sea fish of the Sparidae family (gray sea bream or *Sparus cantharus*). Ikwaata anyeevha uyi. *The gray sea bream is very delicious*. Ikwaata bavamutela o fwaala mandaros. *The gray sea bream is referred to in Gabonese French as mandaros*. See **kweeri**

Text example 7: Article *ikwaata*

Knowledge of the meaning of the synonym in Text example 7 above and successful information retrieval by the user will help him or her to fully understand and comprehend information in the lemma treatment illustrated in Text example 8 below.

kweeri cl.9 [kwe:ri] n. ikwaata

Text example 8: Article *kweeri*

In this example, the comment on semantics of the lemma *kweeri* is limited to giving the synonym *ikwaata*. The meaning of the lemma is not explained, but a cross-reference is given to a lemma, *ikwaata*, that is defined more comprehensively. By means of a cross reference *ikwaata* should be related to *kweeri* to indicate to the user the semantic relations that exist between these two synonyms. *Ikwaata* is going to be presented in a separate article as a lemma on it own.

7.4.3.3 Paraphrase of meaning by means of circular definition

In a circular definition, the paraphrase of meaning contains a part of a lexical item represented by the lemma or a derivation or root word of the lemma or even the lemma itself. In lexicographical practice, the use of this type of definition is subjected to the following two considerations: It must lead to a more economic presentation of information and that part of the paraphrase of meaning that is a derivation, root or part of the lemma must appear and be explained elsewhere. Consider the following example:

Jump act of jumping

In the example above, the lemma sign *jump* is simply linked to *jumping*. That will be of no use to the user of the dictionary unless he or she knows the meaning of *jumping* or consults the article of the latter. Once again, it is imperative that a full treatment of *jumping* be given in the appropriate article stretch (cf. Ekwa Ebanega 2007:314).

The decision is to make meaning very explicit to the users. Circular definition, as illustrated above, cannot help in the goals assigned to the encyclopaedic dictionary. The solution will be to explain the lemma in simple language.

7.4.3.4 Paraphrase of meaning by means of definition by example

Defining words is one of the most difficult tasks lexicographers have to face. In fact, it is not always possible to provide a descriptive definition for every word. The paraphrase of meaning by means of definition consists of an example of the entry to which the definiendum refers. Consider the following modified examples of the lemmata *fruits* and *reptiles* taken from the *Via Afrika Learner's Dictionary* (VIALD, cf. Manser 1984) as cited in Ekwa Ebanega (2007:316):

fruits [...] e.g. apple, banana, avocado, fig, gourd, grape, mango, lemon, orange, melon, orange, peach, pear, pineapple, plum, raspberry, strawberry are fruits. (VIALD)

reptiles [...] e.g. alligator, cobra, turtle, snake, crocodile, lizard, tortoise are reptiles. (VIALD)

These examples provide the user with representative examples of the lemmata *fruits* and *reptiles*. These lists of examples could help the user to understand these words. The examples should then be lemmatised.

With regard to the paraphrase of meaning types, the decision is to make meaning very explicit to the target users of a given dictionary. I exclude the paraphrase of meaning by means of circular definition because it does not help in the goals assigned to the planned dictionary.

A limited number of paraphrases of meaning by means of definition by example may be used in the proposed dictionary. As a matter of fact, lexicographers could better define the word by an example that reveals the meaning in the context of usage in everyday communication. However, priority must be given to descriptive definitions, the so-called paraphrase of meaning by means of the genus-differentia definitions. The paraphrase of meaning by means of synonym definition will also be relevant for the present model. The decision for the planned encyclopaedic dictionary is that when synonymy occurs, a treatment is given for each synonym.

7.4.3.5 Cultural data

In an encyclopaedic dictionary intended for a linguistically and culturally diverse environment where the comprehensive and sensitive treatment of cultural items is a high priority, the lexicographer must pay attention to the so-called culture-bound lexical items. The treatment and the presentation of cultural data in the envisaged dictionary should be fully/primarily done in the central list. These lexical items should be selected with care and should be representative of the culture of the speakers and the reality that the speakers are confronted with on a daily basis. For example, for a lexical item such as *mangumba* (a type of dance in the Yilumbu culture), the lexicographer using this model must undertake exhaustive surveys in order to obtain the full cultural content of the lexical item.

As a matter of fact, this dance is only executed during funerals after the burial. The particular characteristic of this ceremony lies in the obscene character of the songs and dances performed in this case. Usually, the Balumbu are extremely decent. The private parts of the body are taboo and one speaks about them only by the use of metaphors, euphemisms and other stylistic devices. It is obvious that the presentation and the treatment of such data by the lexicographer in the dictionary articles can help potential users not only in the retrieval of the information but also in the clear and objective understanding of the culture of the source language speech community.

In the same line of argumentation, the lexical item *mutulitsi* (blacksmith) obviously has something to do with *butali* (iron) but most importantly metallurgy is associated

with power, traditional pharmacopoeia and magic.²¹ These are but a few of the many cultural aspects the lexicographer must make sure to include when dealing with such a lexical item. The option of the thematic presentation of the different lexical items will allow the lexicographer to accommodate several data types for the treatment of a given lexical item. That treatment should take into consideration the inclusion of a comprehensive explanation of the cultural events, ceremonies, arts and way of living of the specific speech community the dictionary is compiled for in general and in particular the Balumbu people in this case. The dictionary user when dealing with a given lexical item should be able to come across the needed data and the necessary knowledge about the message conveyed by the data in the dictionary article.

In the treatment of lexical items such as the ones presented above, users will have to be informed about what *mutulitsi* and *butali* refer to, the way the activity is carried out, the purpose of doing, the different stages of the development of the activity, who is qualified to execute the job and the different functions that the tool and the executor play in the cultural activities of the community. I must make it clear that the treatment provided here is not exhaustive; the lexicographer will have to make use of the maximum data available to him or her and make good use of it in order to facilitate the users' consultation process. Furthermore, the way in which this data will be distributed within the article is of great importance to the level of retrievability of the data.

One cannot treat all the cultural aspects of a community in a single dictionary. The limitation of the number of pages, the purpose and the target users of the dictionary will help the lexicographer to make practical choices with regard to what to leave out and what to include in a given volume. One could envisage the treatment of cultural data types in different *specialised encyclopaedic dictionaries* in which a variety of culture-bound data can be combined.

The lexicographer should decide subjectively on which data types to be included in one or the other encyclopaedic dictionary. The decision should be made on the ground of suitability, the users' reference skills and the dictionary functions. In fact, each

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²¹ Very respected by people, blacksmiths were often kings, chiefs and traditional healers.

dictionary's microstructural programme should guide the nature and the extent of the treatment of the data in the dictionary article.

With regard to this, Gouws writes as follows:

Due to the hierarchical character of the microstructure the prominence of the first entries gives them a position of major focus while the last entries receive far less focus. This should influence the organisation of data in the dictionary. Being familiar with the specific typological criteria, a lexicographer knows what the priority of his dictionary is and which entry should receive the most emphasis (Gouws, 1993:37).

Compare the following article in this regard:

ubuka cl.15 [ùbúkè] v. 1. Prendre l'écorce d'un arbre (pour des soins); entailler. Ngaanga atsibuka muvhidisi mughulughisi ibeedu. Le devinguérisseur a pris des écorces du Newbouldia laevis pour faire vomir le malade. Bavabuka vaandi miiri. On fait également des entailles sur les arbres. (Par ext.) 2. Récolter du miel (sur un arbre). Atsyebuka nyosi. Il est allé récolter du miel. Baboongu bavayaaba ubuka nyosi. Les pygmées sont passés maîtres dans l'art de récolter le miel. 3. Recueillir la sève d'un arbre (l'hévéaculture). Ubuka ndiimbu. Culture d'hévéa. 4. Citer un proverbe. Ubuka noongu, uvhindigha noongu abaamba na yighuma. En situation d'énonciation, chaque proverbe que l'on donne doit être accompagné d'une explication. Note Encycl: Ye buku dibal mu usi ifulu. Va prendre l'écorce du parasolier pour faire un bain de vapeur

Text example 9: Article ubuka

ubuka cl.15 [ùbúkè] v. **1.** To take the bark of a tree (for medication); to slash. Ngaanga atsibuka muvhidisi mughulughisi ibeedu. *The healer took barks of the Newbouldia laevis to make the patient vomit.* Bavabuka vaandi miiri. *Trees can also be slashed.* (By ext.) **2.** To harvest honey (on a tree). Atsyebuka nyosi. *He went to harvest honey.* Baboongu bavayaaba ubuka nyosi. The pygmies master the art of harvesting the honey. **3.** To collect the sap of a tree (heveaculture). Ubuka ndiimbu. *Heveaculture.* **4.** To quote a proverb. Ubuka noongu, uvhindigha noongu abaamba na yighuma. *When making a statement, every proverb mentioned must be followed with an explanation.* **Encycl**: Go fetch a bark of the tree to prepare a steaming bath

English translation of Text example 9: Article *ubuka*

In the article of a polysemic lemma, the different distinctions in meaning should not be arranged arbitrarily. In the example above the most generally used distinction in meaning of the lemma that links to the field of pharmacopoeia makes it first into the list followed by the less frequent ones.

In terms of coverage (cf. Mavoungou, 2002:195), it is worth emphasising that in all existing bilingual dictionaries of the Gabonese languages, coverage focuses on traditional crafts (fishing, hunting, weaving, pottery, wood-carving, etc.). This has led to good lexicographic practice in dictionaries of the Gabonese languages. It is part of my editorial policy to follow in the footsteps of these lexicographers. The coverage of both Yilumbu and Civili toponyms (place-names) represents an interesting aspect of the lexicon since it is related to the fauna and flora of Gabon. Compare the following article in this regard:

maambi cl.6 [màmbi] n. 1. Nom d'oiseaux échassiers. Maambi mavakala vha mughulu mabola. Les oiseaux de l'espèce « mambi » affectionnent les endroits humides. (Par ext.) 2. Village situé sur la rive droite de la lagune Banio: Mambi. Selon toute vraisemblance, ce nom aurait été donné à cause de la grande abondance, autrefois, d'oiseaux échassiers dans cette zone. GHITEMBU aburu o Maambi. GHITEMBU est née à Mambi. Tshivili tshi Maambi. Le civili de Mambi. N'taandu maambi (plaine de Mambi) est le toponyme vili pour désigner le village sur la rive gauche de la lagune Banio.

Text example 10: Article maambi

maambi cl.6 [màmbi] n. 1. Name of seabirds referred to as waders or shorebirds. Maambi mavakala vha mughulu mabola. The type of birds "mambi" are fond of the humid places. (By ext.) 2. Town situated on the upright shore of the lagoon Banio: Mambi. This name would have been given because of the massive presence of wading birds in this zone in the past. GHITEMBU aburu o Maambi. GHITEMBU was born in Mambi. Tshivili tshi Maambi. The Civili of Mambi. N'taandu maambi (plain of Mambi) is the Vili place-name to indicate the village on the left bank of the Banio lagoon.

English translation of Text example 10: Article maambi

N'taandu-N'bana cl. 9 [thai:ndù bána] n. comp. Nom d'un quartier de Mayumba. Bisa N'taandu-n'Bana ba be vota yoonu. Les populations de N'taandu-N'bana ont voté hier. Note encycl.: La traduction littérale de ce toponyme (plaine de Bana) suggère une occupation progressive par les populations d'un site qui était jadis un habitat naturel pour la faune et la flore de la région de Mayumba.

Text example 11: Article *N'taandu-N'bana*

N'taandu-N'bana cl.9 [thai:ndù bána] *n. comp.* Name of an area of Mayumba. Bisa N'taandu-n'Bana ba be vota yoonu. The populations of N'taandu-N'bana voted yesterday. **Encycl.**: The literal translation of this place-name (*plain of Bana*) suggests a progressive occupation by the populations of a site that was formerly a natural habitat for the wildlife and the flora of the region of Mayumba.

English translation of Text example 11: Article *N'taandu-N'bana*

In the text examples presented above, it is worth noting that village names are sometimes borrowed from nature. They often refer to the fauna, the flora as well as mineral or natural phenomena. As far as the fauna is concerned, these names generally indicate the common animals of the equatorial drill. With regard to names borrowed from the flora, they mostly refer to the usefulness of some plants valued for their edible fruits.

The presentation of cultural data relates to what has been called *communication-directed function* versus *cognitive function*. According to Bergenholtz and Tarp (2002), communicative-directed functions are meant to assist users in solving problems that might occur during the communication process. As such, they can be referred to as both the production and reception of texts (what is described as decoding and encoding functions by some authors). Cognitive functions provide the user with explanations of meaning related to knowledge. Central to these functions is the culture that underlies the language.

Kakamueka cl. 9 [kákèmwè:kè] *n. comp.* Nom d'un village situé sur la rive droite du fleuve Kouilou (Congo). Kakamueka bwala bu ke ku Kongu. *Kakamueka est un village du Congo*. **Note encycl.:** La traduction littérale de ce toponyme vili, Kakamoeka (*aïeul commun*), suggère un lieu de rencontre et surtout de départ des émigrants vers différentes directions (Mabiala 1992:139–149).

Text example 12: Article *Kakamueka*

Kakamueka cl.9 [kákèmwè:kè] *n. comp*. Name of a village located on the right bank of the river Kouilou (Congo). Kakamueka bwala bu ke ku Kongu. *Kakamueka is a town in Congo*. **Encycl.**: The literal translation of this Vili place-name, Kakamoeka (common grandfather), suggests a meeting place, especially a stopover for emigrants on their way towards various directions (Mabiala 1992:139–149).

English translation of Text example 12: Article *Kakamueka*

Of interest in this article given as Text example 12 is the encyclopaedic note given as a strategy of explication. In fact, the lemma sign, decomposed into the monomorphemic units Kaka (aïeule) and Moeka (Unique, seul, même), clearly shows the meaning of the toponym.

7.4.3.6 Lexicographic labels

The lexicographer should make provision for the inclusion of a number of other types of data that play an important role in both the cognitive and the communicative-oriented function to ensure achievement of the genuine purpose of the dictionary via the comment on semantics. Lexicographic labels are markers of data types. In this regard, Rey-Debove (cited in Hausmann & Wiegand, 1989:341) points out that in a dictionary restriction of usage is represented by a label or mark.

There are temporal (diachronic) labels, regional (diatopic) labels, labels for borrowing, labels for marking style and situation, labels indicating use in a special field of activity (technical, field and group labels), labels for frequency (referring to the corpus), labels for attitude, labels for connotation (attitudinal labels, e.g. derogatory) and labels for usage (normative labels). All these labels play an important role in the transfer of meaning of the different lexical items at both the macro- and the microstructural levels. One of the values of the labels can also be seen in the use of what Mayoungou refers to as markers of temporal expansion.

A lexicographer must use markers for temporal expansion to let the users know whether a word or an expression is 'obsolete' or not. Labelling is frequently employed

in the comment on semantics to give explicit contextual guidance. As pragmatic markers labels are used to relate an item in a dictionary to the world outside the dictionary, and they can be used to mark either a macro- or a microstructural item in a dictionary article (cf. Gouws & Prinsloo, 2005).

An example of the use of a marker of temporal expansion can be found in Mavoungou (2006:137):

malámu (+ lámu) [màlámù] n. (cl.6) < *-dámù		
1 ♦ Dingiba di yilu	1 <f> Vin récolté sur un</f>	1 <e> Palm wine obtained from</e>
(⇒ malámu ma yĭlu)	palmier non abattu.	a palm tree that has not been
•		felled.
$\sum $ Nge malamu	< F > Es-tu soûle ?	<e> Are you drunk?</e>
utsinu?		
2 wootsu ke dingiba	2 < F > N'importe quel	2 <e> Any kind of intoxicating</e>
nana malamu	type de boisson	drink such as wine or whisky.
mabeenga vho malamu	alcoolisée tel que le vin	
mangolu.	ou le whisky.	
$\sum $ Mi sabenu	<f> J'ai arrêté de boire.</f>	<e> I have stopped drinking.</e>
malamu.		
3 (peta) (Ghâ <u>ng</u> .)	3 (Ancien.) <f> Danse</f>	3 (archaic) <e> Dance held at</e>
Muyinu bakaata	organisée à l'occasion	funerals to pacify the spirit of
bayinanga mu teemu	des funérailles pour	the deceased. ⇒ Yip. ikooku.
dufu (<i>Men.</i>) Muyinu bivhuunda bayinaanga	pacifier l'esprit du défunt	
mu dufu.	(ou de la défunte) ⇒ Yip. ikooku.	
$\sum (Gh\hat{a}ng.) \text{ Vho}$	F Autrefois, on dansait	E> In ancient time people
teemu ighulu	$malamu (\Rightarrow \mathbf{V}).$	danced <i>malámu</i> ($\Rightarrow \nabla$).
bayinaa <u>ng</u> a malamu	maiama (→ V).	danced matama (> V).
(<i>Men</i> .) Vho ighoomba		
ighaala bayinaanga		
malamu (⇒ ▼).		
(cf. 2) (Men.) malamu	<f> Vin de palme récolté</f>	<e> Palm wine obtained from a</e>
ma mbari (aussi/also	sur un palmier abattu.	palm tree that has been felled.
$\mathbf{ditutu}) (\Rightarrow (Gh\hat{a}\underline{n}g.)$		
mbula) Malamu		
bavaboonga mu		
diba/mbari ili vhotsi.		
$ \Sigma $ (Men.)	<f> Il est en ce moment</f>	<e> It is now difficult to find</e>
	1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	l a .
Ubentsuroomba	difficile de trouver du vin	palm wine.
	difficile de trouver du vin de palme.	palm wine.

(cf. I) malamu ma		<e> Palm wine obtained from a</e>	
yilu (⇒ tsaamba)	palmier non abattu.	palm tree that has not been	
Malamu bavaboonga		felled.	
mu diba/mbari ili vho			
yilu.			
$ \Sigma $ Yisyeeli	<f> Le malafoutier vend</f>	<e> The malafoutier is selling</e>	
avasumbisi malamu	le vin de palm récolté sur	the palm wine obtained from a	
ma yilu.	un palmier non abattu.	palm tree that has not been	
-		felled.	
▼ (Ghâng.) Vho teemu ighulu bayinaanga malamu. A Mutrafu. Batelaanga dina di			
mughisi a Mutrafu. Vho yilu malamu ika mangumba. Vho yilu mangumba ke kwagha			
<f> Au temps des ancêtres, on dansait <i>malamu</i>. <i>Mutrafu</i> était le nom du génie. Après</f>			
malamu vint mangumba et ensuite kwagha <e> In the ancestors' time the mangumba</e>			
was danced. Mutrafu was the name of the spirit. After the malamu came the			
mangumba and thereafter the $kwagha \Rightarrow dingumba$.			

Text example 13: Article malamu

myeenga <F> Vin de palme frais. <E> Fresh palm wine

■yisyeeli yi malamu (\Rightarrow yisyeeli); mulaangi malamu (\Rightarrow mulaangi); malamu Mutrafu (aussi/also malamu ma muvhyaanga) (\Rightarrow V); (cf. II) malamu ma

From the data presented in this article given as Text example 13, Mavoungou (2006) has emphasised that the user can retrieve a great deal of information. With regard to the issue of labelling, the temporal label (*Ancien/archaic*) actually tells the user that although the lexical item *malamu* 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. Another lexical item now refers to the matter to which it used to refer (funeral dance): *dingumba* (pl. *mangumba*).

In addition, one has to bear in mind that the use of labels in dictionaries is beneficial to the user in the sense that the lexical items are all placed into context of usage. The user can easily capture the sense and the degree of applicability of the labelled lexical item. This is why the lexicographer must be able to make use of labels in a way that will distinguish the extent and the restriction of a lexical item. Lexical items are taken from various fields, cultural activities, areas, and so on.

The lexicographer should use labels in a way that renders the origin of the lexical item in the dictionary and he or she should be committed to a system of labelling. It is important to bear in mind that the lack of a label in a dictionary is just as important as

its presence. The non-usage of a label conveys the information that the specific lexical item belongs to the standard variety in the language. It is the lexicographer's responsibility to make sure that the transfer of information takes place in a pure and unambiguous way.

Labels are placed in a focal position in dictionary articles and are responsible for the explicit and immediate transfer of information. This is why it is essential that the lexicographer use them in a manner that will assist the dictionary users to interpret these microstructural elements correctly.

For the envisaged encyclopaedic dictionary, the emphasis will be on the use of the following types of label:

- Geographical labels in order to trace the area in which the lexical item is used or has originated.
- Temporal labels to mark the particular period or time when a given cultural event or activity first took place or was developed.
- Field labels to attach the lexical item to a specific area or subject in which it is used or applied.

In a very clear note provided in the front matter text, the lexicographer should not only explain the use of each label but should also give explanations that determine the distinctive features and functions of its use.

7.4.3.7 The presentation of, selection of and motivation for illustrations

In the introduction of the book entitled *L'exemple lexicographique dans les dictionnaires français contemporains*, the editor (Heinz, 2005:5–8) emphasises that illustrations are lexicographic units that can take many forms (authentic examples, constructed examples, quotations, sentences, syntagms, pictures, etc.). They can be good or bad and they give a dictionary its character and soul.

Illustrations should be used in dictionaries for specific purposes and not merely for decoration. As far as the proposed dictionary is concerned, illustrations (authentic examples, constructed examples, quotations, sentences, syntagms, pictures, etc.) have been planned to serve two main functions:

- The function of a production dictionary for Balumbu speakers by enabling them to use the appropriate constructions in language production.
- A reception or decoding function for the target users, enabling them to understand Yilumbu texts.

a) The use of illustrative examples

An illustrative example is any phrase or sentence that illustrates the use of the item defined or translated. The purpose of this encyclopaedic dictionary is to provide different types of data, including verbal illustrations, quotations, citations, and so on. The very first purpose of examples is to show concretely that a lexical unit exists in the language with a particular meaning.

The above-presented situation is more applicable to linguistic dictionaries in the sense that illustrative examples help to present sentences that a Yilumbu speaker would spontaneously produce upon hearing a given word, its typical collocations, sense discrimination of polysemous words, the differentiation of synonyms, and so on. Moreover, illustrative examples help knowing the grammatical categories and the stylistic peculiarities of a given lexical unit. Consider the following example in this regard:

dikuumbi/makuumbi cl.5/6 [dìkú:mbì]. n. 1. Bateau; navire. BIBAAMBA biteti bayitsaanga na makuumbi. Les premiers occidentaux abordèrent les côtes africaines en bateaux. MUSAAVHU atsyeboonga dikuumbi o Port-Mikaandi mu uweenda o Lambarini. Moussavou a embarqué à Port-Gentil sur le bateau devant le conduire à Lambaréné. DIKUUMBI divavhyoogha bwaatu utola. Un bateau est plus grand qu'une pirogue. ALI mu dikuumbi. Il est sur le bateau. 2. (Par ext.) Avion. DIKUUMBI difunobotugha o Mayumba. L'avion vient de décoller de Mayumba. DIKUUMBI di maamba ditsivhyoogha dikuumbi di yilu utola na utsira. Un bateau est plus large et plus lourd qu'un avion. Dikuumbi difunovhyoogha o yilu. Un avion vient de passer au dessus de nos têtes. 3. (Par ext.) Véhicule (terme générique). VHAVHA Puungu ke usana dikuumbi pasi. A Libreville, si tu n'a pas de véhicule il est difficile de se déplacer.

Text example 14: Article dikuumbi

dikuumbi/makuumbi cl.5/6 [dikú:mbì] n. 1. Boat; vessel. BIBAAMBA biteti bayitsaanga na makuumbi. The first Westerners approached the African coast (ribs) by boats. MUSAAVHU atsyeboonga dikuumbi o Port-Mikaandi mu uweenda o Lambarini. Moussavou embarked in Port-Gentil on the boat that must take him to Lambaréné. DIKUUMBI divavhyoogha bwaatu utola. A boat is bigger than a dugout. ALI mu dikuumbi. He is on the boat. 2. (By ext.) Airplane. DIKUUMBI difunobotugha o Mayumba. The plane has just taken off from Mayumba. DIKUUMBI di maamba ditsivhyoogha dikuumbi di yilu utola na utsira. A boat is wider and heavier than an airplane. DIKUUMBI difunovhyoogha o yilu. A plane has just passed above our heads. 3. (By ext.) Vehicle (generic term). VHAVHA Puungu ke usana dikuumbi pasi. In Libreville, if you do not own a car it is difficult to move around.

English translation of Text example 14: Article *dikuumbi*

In this article of the lemma sign *dikuumbi*, representing a polysemous lexical item, the different distinctions in meaning are presented on historical and frequency grounds. Sense 1 (ship) is the primary sense used in the language; therefore, it is placed first in the article. Sense 2 (airplane) is the second sense that the lemma took in the course of time and is the most used nowadays, and sense 3 (car) is used by extension.

Some basic questions are to be considered while dealing with illustrative examples in an encyclopaedic dictionary:

- Which words (if any) are to be given without examples?
- Which lexical units require more illustrative examples?
- What should the length of examples be?
- Should the lexicographer give constructed examples or quotations from written texts only?
- Should quotations be given with citations or without citations?

Most importantly (cf. Heinz, 2005:5), I will deal with the question of knowing the following:

- What is a good example?
- What is a useful example?

• How can exampling in dictionaries be improved?

Answers to these questions depend on the type of the dictionary and the type of the lexical unit. A good and useful example is the one that best illustrates the specific context to which the lemma refers. The first step in finding ways to improve exampling in dictionaries is to make provision for the inclusion of examples for every lemma sign. As a matter of fact, no lexical unit should be given without illustrative examples.

With regard to the extent of a sentence, it is always better to keep examples as simple and concise as possible. However, relatively long sentences may be used by the lexicographer, especially when they are used to help in a certain way to capture the sense(s) and the context of usage of the lexical item. Examples should enable users to become familiar with authentic spoken language. It is a well-attested fact that Yilumbu is not a language with a strong written tradition. Whenever possible, existing citations in Yilumbu literature should be used by the lexicographer, especially when they better illustrate the use of the lexical item represented by the lemma sign. The following are examples taken from Blanchon (1984), illustrating the use of the lexical item ngwaamba (the absence of meat in homes):

Bwá:là búbu ngwa:mba : mbitsi yisâ:ndi. Bátu yi biyûyi na biyûyi. (page 11)

Translation: Here in the village there is a lack of meat. People are eating food without any meat.

Ha: dibáyəló ti : mînu ngana yíbulu. Mî yébókə ngê:le:ngi áyi. Yétu, ngwaamba tuvâ:fu na yífu:mbə. (page 11)

Translation: "Ah," said the man, "I found my game. I will kill this squirrel. We are starving at home."

Nyúmfu. Úba:nga:ngə nyúmfu ayénéro:mbə tsímbitsi. Nzala. Ngwa:mbə.

Translation: A vulture. There was a vulture that was looking for food. It was starving.

In these (authentic spoken Yilumbu) examples taken from Blanchon (1984), the user has both decoding and encoding language material in order to improve his or her knowledge of the language. Users will perform well in both the communicative-oriented function and the cognitive function, depending on the situation in which the lexical item is needed and applied. The illustrations provided by Blanchon (1984) are good examples in the sense that they best illustrate the use of the word *ngwaamba*, both in terms of contents and situation.

With regard to the question, "what makes a good lexicographic example?", it can be mentioned that it is one that clearly conveys the different contexts in which a lexical item is used in order to help in sense disambiguation. It is also one that is concise and simple. Illustrative examples should be chosen according to the following criteria, designed by Chun and Plass (1997), Hupka (1989), Mayer (1999) and Schriver (1997):

- Illustrative examples should be used systematically and consistently. Each separate sense of every article should be illustrated by at least one citation.
- Illustrative examples should be translated into the user's native language.
 Otherwise, they will become useless or time consuming because they very probably will contain some other words whose meaning is unknown to the user.
- Illustrative examples should be selected to reflect the culture of the speakers of the target language.
- Illustrative examples should be brief and informative.

As in the case of lexicographic examples, however, we are still in need of the following:

- Theoretically motivated analyses of how the data provided in illustrations relate to and are linked to the information provided in lexicographic definitions.
- Experimental evidence on what constitutes a good lexicographic illustration (for what aspects of the meaning of lexemes and for what word classes).

Illustrations may interact with the encyclopaedic dictionary text in different ways:

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- They stand alone, speaking for themselves.
- They may elucidate the data provided in the dictionary articles, the text being structured as supplementary encyclopaedic data that can be useful to students during their language-use process.
- An explanation of the illustration may be given.
- An illustration may also serve to clarify and further the encyclopaedic note.
- There may be an overlap between text and illustration, the encyclopaedic information being provided in both linguistic and visual form.

All the above-mentioned elements and criteria can be applied to encyclopaedic dictionaries to some extent. However, encyclopaedic dictionaries in principle differ from linguistic dictionaries in the cognitive function that they aim to fulfil in order to better satisfy the needs of different potential target users of such dictionaries. The examples used in encyclopaedic dictionaries are not meant to illustrate the usage of a lexical item or assist the user in the text production situation. They rather help the lexicographer to convey the denotations of the lexical items, in other words things to which concepts, names, abbreviations, and so on refer when spoken about. In this regard, the illustrative examples in the envisaged encyclopaedic dictionary should be used to do the following:

- Contextualise the concept, in other words give the historical picture of when the event took place or the object was used and how it developed.
- Indicate the cultural environment and context in which a given action is performed.
- Refer to a historical event in which certain famous people took part.
- Refer to a different area where a given concept can be applied.

These criteria will help the lexicographer to provide the users with the needed information on a specific lemma in the dictionary article of an encyclopaedic dictionary. The data types provided will differ from one dictionary article to another, depending on the material available. Some lemmas will display a cross-reference

article in which the treatment of the item will be cross-referred to another item in the dictionary where the concept has already been fully treated.

This will be supported when possible with a well-selected pictorial illustration in order for the user to better understand the concept or the lexical item in context. Text example 15 below shows illustrative examples of each lemma. Each illustrative example is given in both Yilumbu and French (and in both Yilumbu and English for the Yilumbu-English translation needed in this dissertation).

Ifumu/bifumu cl.7/8 [ifúmù]. *n*. **1.** ventre, abdomen. MUSAAVHU ana ifumu yi neni. *Moussavou a un gros ventre*. **2.** (*Ext*.) grossesse. MWAANA mughetu ali mu ifumu. *La jeune fille est en grossesse*. **3.** (*Ext*.) Estomac. IFUMU ina funzugha. Litt. *L'estomac s'est troublé*.

Text example 15: Article ifumu

Ifumu/bifumu cl.7/8 [ífúmù]. *n*. **1.** belly, womb. MUSAAVHU ana ifumu yi neni. *Moussavou has a big belly.* **2.** (*By ext.*) pregnancy. MWAANA mughetu ali mu ifumu. *The young girl is pregnant.* **3.** (*By ext.*) Stomach. IFUMU ina funzugha. Litt. *The stomach became flustered*.

English translation of Text example 15: Article *ifumu*

The use of pictorial illustrations should be planned in accordance with the needs and reference skills of the target users of the proposed encyclopaedic dictionary. However, because of the great semantic importance of pictorial illustrations in modern dictionaries and the explicitness that can be achieved by using pictorial illustrations, thus enhancing the retrieval of information, a new approach to pictorial illustrations in the proposed encyclopaedic dictionary in the Gabonese languages is necessary.

b) The use of pictorial illustrations

Stein (1991:106) distinguishes four main types of illustration in dictionaries:

• Illustrations showing common animals, objects and plants.

A theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu

- Illustrations showing things that are not easily explained in words, such as shapes, complex actions or small differences between words that are similar but not the same.
- Illustrations depicting groups of related objects with a view to explaining the
 differences between similar objects, showing the range of shapes and forms
 covered by a particular word and serving as an important aid to vocabulary
 expansion.
- Illustrations showing the basic or physical meaning of words commonly used in an abstract or figurative way.

To a certain extent the above classification of pictorial illustrations can be applied to encyclopaedic dictionaries as long as they are essentially used to help the target users. They should help the user to have an idea of the image the lexical item represents. For the encyclopaedic dictionary as such the picture will be used based on a specific lemma, the cognitive function of the dictionary and the reference skills of the target users. It is clear that not all the lemmas will need pictorial illustrations, or rather pictorial illustrations will be used when they are available. Since encyclopaedic dictionaries and other dictionaries contain different data types, encyclopaedic dictionaries in particular will provide pictorial illustrations as a supportive element, as suggested by Singh (1982:144–145).

With regard to illustrations showing common animals, objects and plants, the green parrot of Gabon (see picture below) is an icon in almost all Gabonese cultures.

Illustrative picture 2



Source: Magazine Mbolo d'Air Gabon

The green parrot was the emblem of the former Gabonese national airline Air Gabon. As far as lexicographic treatment with an encyclopaedic function is concerned, it should be noted that the Gabonese African green parrot (*Psittacus erithacus*) is a very talkative, intelligent and sensitive bird. It may be the best talker of all birds, easily learning hundreds of words and other sounds. The green parrot can easily be tamed as a pet.

According to Smit (1996), pictorial illustrations help the dictionary user to understand and remember the content of an accompanying verbal equivalent (in particular) because they motivate him or her, reinforce what is read and symbolically enhance and deepen the meaning of the verbal equivalent. The illustrations that are chosen have to be considered in the light of this dual requirement: Where pictures or diagrams more easily explain things than words, illustrations should be used to help in reaching the definition of the lemma in question.

Verbal input represents the symbolic structures of a language and it is processed sequentially to form, first of all, prepositional mental representations of the meaning of the lexicographic input. The prepositional representations are then mapped onto a mental model of the information that is presented. Visual input, on the other hand, conveys information by means of visio-spatial structure (i.e. spatial arrangements of the components of an image) and the information is encoded in parallel or simultaneously. The comprehension of an image requires establishing an analogy between the picture and a corresponding mental model. Image comprehension thus bypasses the prepositional representation of information and is, therefore, assumed to be language independent (cf. Svensén 1993:167).

The general-purpose encyclopaedic dictionary is much more than an instrument providing answers to linguistic questions. As far as this point is concerned, a number of scholars have mentioned what follows:

- (i) Illustrative pictures are given along with the verbal definitions, examples and so on to further clarify the meanings of the lexical units.
- (ii) Zgusta (1988) states that since the dictionary is a text couched in natural language, it possesses pragmatic aspects itself.
- (iii) Fleming (1967:247) defines pictorial illustrations as those configurations of line, dot or area and any combination of these three resembling events or objects (persons, places and/or things) either as perceived or as generally conceived.
- (iv) Al-Kasimi (1977:77) comments that the definition should be expanded to include such borderline cases as number lines, geometric figures, structural chemical formulas, curves, graphs and time lines.
- (v) Putter (1999:51) regards the use of illustrations in dictionaries as a type of definition that is known in lexicography as ostensive definition. It is normally a type of definition that is used to augment and to elucidate a verbal definition.

As in the case of illustrative examples, some basic questions are to be considered while giving pictorial examples: How many pictures can be given per article? What are the lexical units that require pictures for definitions?

Due to the limited space in a dictionary, the answer to this question should be determined by the target user profile. It is also worth noting that pictorial illustrations (in colour) are very expensive to print. Given the encyclopaedic nature of the planned dictionary, a reasonable number of pictorial illustrations should be presented.

It is easily understandable that no general dictionary can give pictures for all its lexical units. Moreover, cultural data are a type of data that merits the inclusion of illustrations in encyclopaedic dictionaries. In itself it may be regarded as a type of encyclopaedic data. Illustrations may serve as vehicles to clarify and/or disambiguate the meanings of culture-specific words. Lexicographers also came to realise that the criteria for inclusion of illustrations in different types of dictionary might differ on the basis of the cultural differences between encyclopaedic dictionary users and the

culture in which the target language is embedded. However, only a few objects can be illustrated by pictures.

With regard to the use of pictorial illustrations, one could also ask: What are the lexical units that require pictures for definitions?

The defining of flora and fauna is a big problem. In spite of all the verbal description of this class of words, the user of the encyclopaedic dictionary may not be able to form a clear and concrete picture of the object defined. It is useful to give a picture of the object along with the definitions. This will reinforce the image created by the verbal definition and help the reader to understand the object more clearly.

In addition, cultural objects require pictures. For example, different types of net are used for fishing. Any verbal description may not be adequate to describe all of these. If pictures are given the reader may clearly understand the object. Pictures could also be given for unfamiliar objects in the culture of the language community, in other words objects pertaining to Balumbu history. Newly introduced objects in the culture such as scientific and technical items may also be accompanied by pictures to enable the reader to form a concrete picture of these. Furthermore, pictures can help in understanding lexical units whose definitions may not be adequate to describe them. Different articles of daily use, words related to sports, clothing, household goods and various other materials and articles might therefore be accompanied by pictorial illustrations.

Pictorial illustrations or ostensive definitions can be utilised fruitfully in the defining process, especially in cases where it is difficult to clearly explain the meaning of a lemma by means of the descriptive definition. Pictorial illustrations will also complement or expand the semantic value in the Yilumbu culture: for example, the use of pictures saves words and long explanations. These pictures reinforce learning, and a picture may often, quite differently from a definition, appeal to the reader's previous experience of the world and enable her or him to achieve fresh insights. Anyone who has turned the pages of an illustrated encyclopaedic dictionary has probably noticed that it is mainly nouns, and in particular those denoting concrete objects, that are described by means of illustrations. Consider the following in this regard:

Illustrative picture 3



Source: Larousse Children's Dictionary French

The pictorial illustration above may portray the kind of animals and birds that are found in Gabonese forests. It is part of my editorial policy to attach significant importance to pictorial illustrations because they have the capacity to complement the meaning of any given lexical item. In the Yilumbu situation, pictorial illustrations will help to represent specific animals, plants as well as newly introduced objects in particular. These pictures could be individually chosen for inclusion in the central list of the encyclopaedic dictionary to illustrate a relevant lemma. Consider the following picture in this regard:

alreadt is a machine that flies in the sky. Life sky.

Illustrative picture 4

Source: Scholastic Children's Dictionary

The pictorial illustration above displays the aircraft side of an airport. It can be used to illustrate airport activities as well as various types of aircraft.

With regard to the positioning of ostensive illustrations, large pictures will be employed in the back matter; small pictures will be included as microstructural items addressed at selected lemmas. In the proposed encyclopaedic dictionary, the pictorial illustration will be placed in the dictionary article next to the lemma sign when possible. After the items giving the illustrative example, the items giving the ostensive illustration will be provided. The use of pictorial illustrations has to be planned in accordance with the needs and reference skills of the target users of the proposed encyclopaedic dictionary.

7.5 Etymological notes

The proposed encyclopaedic dictionary with the planned microstructural programme will also include etymological notes as microstructural items in fixed article positions, usually at the end of the article or at the end of the specific sense to which the etymological notes applies.

This will mainly concern loanwords. General guidelines concerning the need for etymological notes are uniform when a dictionary is at the same time intended for text reception and for introducing the dictionary subject matter. The function of etymological notes is to assist the user with the origin of the word in her or his search for lemmata or choice of equivalents.

Etymological notes should always be prepared with the intended user in mind, in terms of both contents and scope as well as of style.

7.6. Conclusion

This chapter has presented a microstructural model for the planned encyclopaedic dictionary in Yilumbu. The model falls within the concept of microstructure as presented by Hausmann and Wiegand (1989). In the enumeration of the different types of article to be included in the microstructure, this dissertation advocates more hybrid article types that will suit the planned dictionary according to its specificities. Data to be included in the microstructure of the Yilumbu encyclopaedic dictionary also have been introduced in the chapter. The chapter further reviews microstructural categories such as parts of speech indications and spelling variants that are also important for selection for the planned dictionary.

Encyclopaedic dictionaries are real utility products supplying a number of specific needs, depending on the linguistic and lexicographic community in which they are compiled. This being the case with the proposed encyclopaedic dictionary, there is a need to go beyond the concept when consulting a dictionary. Given certain problems in the teaching of the grammar of the Gabonese languages at school level, the proposed encyclopaedic dictionary will be a tool that can be employed to curb these problems.

CHAPTER 8: ACCESS STRUCTURE

8.1 Introduction

Encyclopaedic dictionaries are very rich mines of data on languages. As is the case with real mines, specific techniques are necessary in order to extract the riches that one knows are hidden inside.

Gouws (2001:101) asserts that dictionary consultation procedures often fail because the structure of the dictionary prevents the user from gaining sufficient access to the data. Metalexicography has identified the access structure as an important structural component of the dictionary. The access structure determines the search route a user follows to reach the required data in order to retrieve the necessary information. Its main purpose is to assist the user to find the information needed.

This chapter discusses the notion of access structure and the related concepts, namely outer access structure, inner access structure and search zones. The effectiveness and success of any dictionary is measured, among other things, by the accessibility and retrievability of the desired information. The chapter is arranged as follows: Section 8.1 contains an overview of the concept of access structure. Section 8.2 deals with the outer access structure. Section 8.3 presents the inner access structure. Section 8.4 focuses on the rapid access structure. Section 8.5 deals with the mediostructure as a way of gaining access to data. Section 8.6 contains the conclusion of the chapter.

8.2 Access structure

According to Gouws and Prinsloo (2005:165), the search path a dictionary user follows to reach the required data does not begin inside the book but begins at the entries on the cover of the dictionary and goes to the lemma sign presented in the macrostructure and then to the required microstructural entry.

The access structure is, however, not a singular entity. It encompasses certain substructures, of which the outer and inner access structures are the most important. In this chapter the access structure will be treated and suggestions will also be made, as

motivated by specific needs and users, for selecting the proper type for the proposed encyclopaedic dictionary to solve a specific problem. The success of an encyclopaedic dictionary will depend largely on the success that the typical target user achieves during a normal encyclopaedic dictionary consultation procedure.

The access structure is realised by those component parts of the overall design of an encyclopaedic dictionary that allow the user to search for a particular item. The access structure provides the search route the user follows during a consultation procedure and it correlates directly with some actions taking place during the consultation process. The consultation process therefore affects the access structure of an encyclopaedic dictionary. According to Béjoint (1994:155), the following actions take place when the user consults a dictionary:

- (i) Choose the correct dictionary according to the problem.
- (ii) Identify the problem area, word or phrase.
- (iii) Determine the most likely place in the dictionary where the word or phrase is treated.
- (iv) Guess which form of the word is listed as lemma.
- (v) Guess where the word is placed in the alphabetical order of the dictionary. Here capital letters, geographical words, abbreviations, and so on play a role.
- (vi) Find the word where it is placed as entry or subentry.
- (vii) Interpret the information given in the entry.

By implementing elements of the outer access structure, the user can find entries in the macrostructure, while the inner access structure leads the user to specific entries in the microstructure.

The search route of a typical user starts with the choice of a given encyclopaedic dictionary on account of the title of that encyclopaedic dictionary as it is presented on the cover. Moreover, the prototypical external or outer access structure in the general dictionary follows the alphabetical order of lemmas.

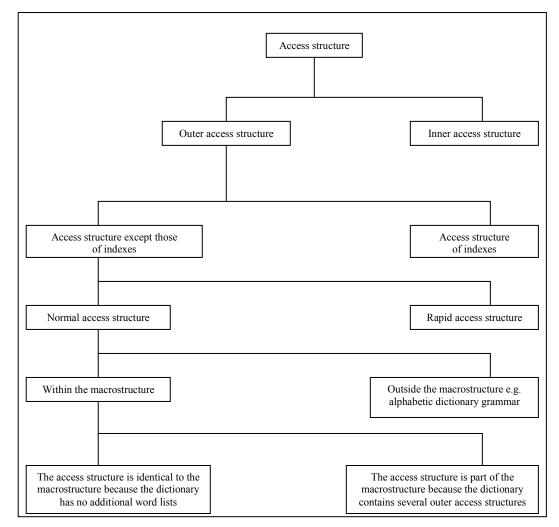


Figure 8.1: Typology of access structures

Source: Hausmann and Wiegand (1989:339)

Access structures account for most of the dictionary's user-friendliness and hence its success as a helpful dictionary. If information cannot be retrieved easily, the encyclopaedic dictionary is most likely to fail in fulfilling its intended purpose and function. With regard to the inclusion of items in the proposed encyclopaedic dictionary I suggest that the data on offer should be presented in such a way that the target user can easily access it in order to retrieve the information she or he is looking for.

Access to the encyclopaedic dictionary may be achieved through its thematic structure. Thematic presentation of lemmata will prevail in the envisaged encyclopaedic dictionary and elements included in the front matter, the central list and the back matter text will have to be cross-referenced to clearly indicate the relation between the different elements treated in each text of the dictionary. This implies that the emphasis is placed on the semantic relationship of themes, enabling the user to find data within the encyclopaedic dictionary at both the level of themes and the level of the lemmata included in each theme.

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 data 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, font sizes and typographical formats (e.g. bold print and capital letters), to list but a few. To assist a user in a fast and effective way, an adequate access structure is needed.

A well-planned outer access structure will guide the user to the item from the field of knowledge a given encyclopaedic dictionary intends to cover. The outer access structure consists of various indicators directing the user from the cover to the lemma, while the inner access structure is the structure of the indicators directing the user to the required data inside the dictionary article (Bergenholtz & Tarp 1995).

The access structure can be viewed as the search route to the content. Without different search routes, data presented and arranged in the macro-, micro-, frame and distribution structure cannot be accessed and employed by the user. According to Gouws (2001:102), rapid and unimpeded access of users to the relevant data presented in the dictionary has to be regarded as a prerequisite for a successful lexicographic product in a user-driven approach. The ease with which macro- and microstructural data are located and retrieved determines the quality and accessibility of the presentation.

8.3 Outer access structure

According to Gouws (2001:88),

the 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.

Almind and Bergenholtz (2000) have made a detailed study of the aesthetic dimension of the dictionary where the outer access structure includes, for instance, the type and amount of information, as well as the presentation on the back and front pages of the dictionary. Practically, and depending on his or her needs and encyclopaedic dictionary using skills, a user may begin and end the search at the dictionary title; in other words, by consulting the dictionary title the user might find it unnecessary to consult the dictionary, assuming that it does not contain the needed data or does not deal with the domain of knowledge he or she is looking for.

In some cases the data provided on the cover of the encyclopaedic dictionary immediately help the prospective user to decide whether or not the dictionary will grant access to the data he or she is looking for. Therefore, user-friendliness is one of the most important focus points in current metalexicography. Ways in which the lexicographer can help the user to decode data more easily and quickly are consequently emphasised.

On the structural level, changes can be made to access structures to ensure that they act as more effective guides to the user in his or her search for the desired information. To guide the user along the outer search path (that is the search up to the desired lemma), there should be a well-defined, easily understandable outer access structure.

The new conception of outer access structure would be based on an elaborated method of how to find partial texts of encyclopaedic dictionaries and textual segments of dictionary articles based on theoretical principles (cf. Hausmann & Wiegand

1989:330–333). The outer access structure will provide the routes that guide the user in accessing the data in a dictionary (it is presumed in this case that he or she has a query on a lemma that is treated in a dictionary with an access route via both thematic and alphabetical ordering) to the entries: title, volume number and the letter of the article stretch covered in that particular proposed encyclopaedic dictionary. Further entries constituting the outer access structure provided as search paths include the title page and the table of contents, which set the user on the encyclopaedic dictionary internal search route.

The proposed encyclopaedic dictionary should provide an innovative and creative outer access structure to facilitate the outer search route for the users. This is possible once again if the user-driven approach is taken into consideration; it includes the target users, their needs and reference skills, and the dictionary functions. Decisions regarding the outer access structure must be explained and illustrated in the front matter. Lexicographers have various options in improving the outer access structure of the encyclopaedic dictionary. Gouws (1996b:21) sums it up as follows: "On the one hand, the lexicographer could add special entries or alter the presentation of macrostructural elements and on the other hand, the lexicographer could include additional access structures to create a poly-accessible dictionary." With regard to the encyclopaedic dictionary with the proposed microstructural programme, the suggestion is that the data on offer will be presented in such a way that the target user can access it in order to retrieve the information he or she is looking for.

It is also important to keep in mind the importance of the macrostructure with regard to the accessibility of the encyclopaedic dictionary. In fact, the macrostructure of an encyclopaedic dictionary determines the position and ordering of the lemma signs. If a given dictionary presents only one macrostructure, it coincides with the outer access structure, according to Gouws (2001:88). The use of a thumb index is more advantageous in dictionaries with an alphabetic macrostructure. However, it can also be used in dictionaries presenting a thematic macrostructure. In these dictionaries it will give a clear indication of the thematic division of the dictionary components. These comprehensive texts will present a thematic arrangement; they will also be presented in the target language of the word list.

The outer access structure ends at the exact point where the lemma sign being searched for is found. The lemma sign, which in most cases is distinguished from the next entry by a typographical structural marker (e.g. bold), introduces the dictionary article, simultaneously signalling that the lemma sign is now ready for lexicographic treatment (cf. Gouws & Prinsloo 2005:171). Given the fact that the Gabonese community in general and the Balumbu community in particular are not very familiar with using encyclopaedic dictionaries, the use of structural indicators should have to be planned in accordance with the needs and reference skills of the target users of the encyclopaedic dictionary with the planned microstructural programme.

Encyclopaedic dictionaries create great access problems for the intended target users. Therefore, it is the lexicographer's responsibility to compile a dictionary by taking into account the user needs. In order to have a user-friendly product, the access structure of the encyclopaedic dictionary discussed here should be planned very carefully to enable unskilled encyclopaedic dictionary users to benefit maximally from using the dictionary.

In keeping with the user perspective, an encyclopaedic dictionary should be convenient, efficient and helpful to the different users. The search route in the central list of a dictionary must lead the user to the required lemma sign, but for many users this route goes via different lexicographic road signs that form part of the outer access structure. One of these road signs is the alphabetical letter indicating the beginning of a new article. Taking the first names of birds as a keyword, this point is illustrated in the following examples:

Table 8.1: Checklist of a few birds in Gabon

Species	Birds Common Names	Noms Communs d'Oiseaux
Alopochen aegyptiacus	Egyptian Goose	Ouette d'Égypte
Anas querquedula	Garganey	Sarcelle d'été
Anas sparsa	African Black Duck	Canard noirâtre
Buccanodon duchaillui	Yellow-spotted Barbet	Barbican à taches jaunes
Campethera cailliautii	Green-backed Woodpecker	Pic à dos vert
Campethera caroli	Brown-eared Woodpecker	Pic à oreillons bruns
Campethera nivosa	Buff-spotted Woodpecker	Pic tacheté
Coturnix delegorguei	Harlequin Quail	Caille arlequin
Dendropicos elliotii	Elliot's Woodpecker	Pic d'Elliott
Dendropicos goertae	Grey Woodpecker	Pic goertan
Dendropicos pyrrhogaster	Fire-bellied Woodpecker	Pic à ventre de feu
Dendropicos xantholophus	Golden-crowned Woodpecker	Pic à couronne d'or
Dendrocygna viduata	White-faced Whistling-Duck	Dendrocygne veuf
Gymnobucco bonapartei	Grey-throated Barbet	Barbican à gorge grise
Gymnobucco calvus	Naked-faced Barbet	Barbican chauve
Gymnobucco peli	Bristle-nosed Barbet	Barbican à narines emplumées
Indicator exilis	Least Honeyguide	Indicateur menu
Indicator minor	Lesser Honeyguide	Petit Indicateur
Lybius dubius	Bearded Barbet	Barbican à poitrine rouge
Melichneutes robustus	Lyre-tailed Honeyguide	Indicateur à queue en lyre
Nettapus auritus	African Pygmy-Goose	Anserelle naine
Numidia meleagris	Helmeted Guinea fowl	Pintade de Numidie
Peliperdix lathami	Forest Francolin	Francolin de Latham
Plectropterus gambensis	Spur-winged Goose	Oie-armée de Gambie
Pogoniulus atroflavus	Red-rumped Tinkerbird	Barbion à croupion rouge
Pogoniulus bilineatus	Yellow-rumped Tinkerbird	Barbion à croupion jaune
Prodotiscus insignis	Cassin's Honeyguide	Indicateur pygmée
Pteronetta hartlaubii	Hartlaub's Duck	Canard de Hartlaub
Pternistis squamatus	Scaly Francolin	Francolin écaillé
Sarkidiornis melanotos	Comb Duck	Canard à bosse
Trachyphonus purpuratus	Yellow-billed Barbet	Barbican pourpré
Tricholaema hirsuta	Hairy-breasted Barbet	Barbican hérissé
Turnix sylvatica	Small Buttonquail	Turnix d'Andalousie
Turnix nana	Black-rumped Buttonquail	Turnix nain

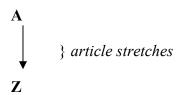
Table 8.2: Checklist of a few mammals in Gabon

Genus	Species	English	French
Arctocebus	aureus	Golden Angwantibo	potto doré
Aonyx	congicus	Zaire Clawless Otter	Loutre à joues blanches du cons
Atilax	paludinosus	Marsh (African Water) Mongoose	Mangouste des marais
Bdeogale	nigripes	Black-legged Mongoose	Mangouste à pattes noires
Cercopithecus	pogonias	Crested Mona Monkey	Pogonias
Cercopithecus	solatus	Sun-tailed Monkey, Guenon	Cercopithecus de soleil
Cercopithecus	neglectus	De Brazza's Monkey	Cercopitheque de barraza
Cephalophus	callipygus	Peters' (Gabon) Duiker	Cephalophe de Peters
Civettictis	civetta	African Civet Cat	Civetted d'Afrique
Crocuta	crocuta	Spotted Hyena	Hyène tachetée
Dendrohyrax	dorsalis	Western Tree Hyrax	Daman de beecroft
Felis	silvestris	Common Wild Cat	Chat forestier
Genetta	servalina	Servaline Genet	Servaline
Genetta	tigrina	Large-spotted Genet	Trigine
Gorilla	gorilla	Gorilla	Gorille
Helogale	parvula	Dwarf Mongoose	Mangouste noire du sud, Mangouste naine, Hélogale
Herpestes	ichneumon	Egyptian Mongoose	Mangouste ichneumon, Mangouste d'Egypte
Herpestes	naso	Long-snouted Mongoose	Mangouste à long museau
Hyemoschus	aquaticus	Water Chevrotain	Chevrotain aquatique,Tragulide d'eau Africain, Hyémosque
Ichneumia	albicauda	White-tailed Mongoose	Mangouste à queue blanche
Leptailurus	serval	Serval	Serval
Lophocebus	albigena	Grey-cheeked Magabey	Mangabey
Loxodonta	africana	African Elephant	Eléphant d'afrique
Lutra	maculicollis	Spotted-necked	Loutre de rivière africaine,

		Otter	Loutre à cou tacheté.
Mandrillus	sphinx	Mandrill	Mandrill
Mellivora	capensis	Honey Badger, Ratel	Ratel
Nandinia	binotata	Two-spotted (African) Palm Civet	Nandinie à deux taches, Nandinia
Neotragus	batesi	Bate's Pygmy Antelope	Antilope de bates, néotrague de bates
Pan	troglodytes	Common Chimpanzee	Chimpanzé
Panthera	leo	Lion	Lion
Panthera	pardus	Leopard	Leopard, Panthère commune
Potamogale	velox	Giant Otter Shrew	Grand potamogale, Musaraigne d'eau
Syncerus	caffer	Cape (African) Buffalo, Bushcow	Buffle d'afrique, buffle du Tchad

The different items presented in Table 8.1 and Table 8.2 above, dealing respectively with birds and mammals, can be alphabetically grouped in sub-themes. The search route needed to find any item will be the same as in many common dictionaries. For instance, a thumb index can be used on the open outside. This would give an indication of where the different thematic stretches take place. This would be done in such a way that the users will be guided to a specific theme, which in turn will direct them to a specific letter at the right place and page in a dictionary at a finger point. The article stretches will be the subsection of each theme, as shown in the schema below.

$\textbf{Animal kingdom}^{22}$

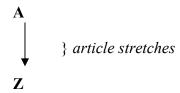


The theme Animal kingdom includes among other the following sub-themes:

Birds (subsection)



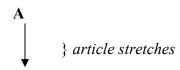
Insects (subsection)



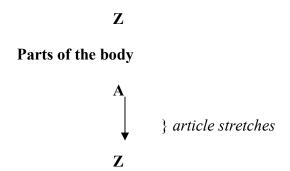
Chief food plants



Kinship terminology



²² Recall that the proposed dictionary is an encyclopaedic dictionary. As such, it assumes that the target users have a certain linguistic competence (knowledge). Such knowledge should allow them to determine that a specific word would fall under a specific theme/category. E.g. that a barbet is a bird and not a plant.



Gouws and Prinsloo (2005) indicate that the thumb index markers form part of the rapid outer access of the dictionary and they give users a quick orientation within the central list regarding the relative position of the article stretch within which the target lemma falls. When consulting the dictionary from the front matter text or the back matter text, the final destination, in other words the place where the needed data are treated comprehensively, is the central list. This is why, in accordance with Gouws and Prinsloo (2005), I agree that the lemma sign is the final destination of the outer access structure.

8.4 Inner access structure

The role of the outer access path is not only to guide the user to the lemma but it is also the first part of the complete search path. The second part, which completes the user's reference act, is the inner access structure. The inner access structure is described by Bergenholtz and Tarp (1995:219) as the different ways to direct the user.

Svensén (1993:16) describes the internal search route of the user as follows:

When the right entry word has been found, the user also has to find the right section within the entry and within that section the material is grouped in a certain order and presented according to certain conventions, which can be fairly difficult to learn.

Typically, these conventions include the use of structural markers. Two kinds of structural marker are used: typographical structural markers and non-typographical structural markers

- Typographical structural markers are the different typefaces, for example roman, italic and bold, and the use of capitals, small caps, and so on in an encyclopaedic dictionary. The function of these markers is to indicate specific search zones or data categories. For the proposed encyclopaedic dictionary I will adapt this model and the users will find the lemma sign to be given in bold, the paraphrase of meaning in roman and illustrative examples in italics.
- Non-typographical structural markers are symbols and signs, for example coloured, blocks, diamonds, triangles, squares and brief headings, used to mark the beginning of a certain zone or data category. The function of these markers is to indicate specific search zones or data categories.

The principal role of the inner access structure is to ensure that "the user reaches the specific information categories within the dictionary article" Gouws (1996b:16). The inner search path starts at the lemma sign and proceeds through the dictionary article. For Gouws (2001:89) the inner access structure leads a user within an article to a required entry.

Provision has to be made for including a small number of clear, simple and friendly typographical structural indicators that must interact with the micro-architecture of the article and therefore will add to the user-friendliness. The main lemmata and guide words will be given in bold and colour.

The approach to the use of non-typographical structural indicators within the proposed encyclopaedic dictionary is similar to the one regarding the use of typographical structural indicators. They all represent effective methods to ensure a successful consultation process by means of a clear article-internal search route.

As mentioned earlier, a dictionary may offer several search routes, although it may only have one macrostructure. As far as this point is concerned, note the inserted inner text given in the following examples, as presented in Mayoungou (2002a:221):

dikasa (-kasa) [dìkás $\hat{\theta}$] 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 atsíw<u>ě</u>nda ó <E> Mum went to the Mont- <F> Maman est allée au dikása di Mont-Bouët. Bouët market place. marché de Mont-Bouët.
- $\Sigma \mid\mid \text{Dik\'asa}$ di Mont-Bouët <E> Mont-Bouët market <F> Le marché de Mont-dimán $\acute{\text{eng}}$ a. place was burnt to ashes. Bouët a été réduit en cendres.

dikasa

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 <u>bridge</u>, <u>breakwater</u>, has become <u>market</u> 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 16: Article dikasa

The user seeking for the meaning of *dikasa* 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, according to Hausmann and Wiegand (1989:338). From this primary search path, the user will obtain 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 or she will have to consult the inserted inner text. In this 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. This type of text is also part of the inner access structure and serves as an effective way for the lexicographer to draw the user's attention to a certain piece of data. According to Hausmann and Wiegand (1989),

inserted inner texts belong to the so-called middle matter and they are usually characterised by their occurrence between the two sections of the dictionary, but they could also be attached to an article. 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, for example in boxes or tables (Gouws 1996b:25).

For Gouws (2001:89) a well-devised inner access structure is characterised by the use of lexicographic conventions to assist the user on the search route. The success of a consultation process is linked to rapid access to the needed data. The knowledge that the user has about the language leads him or her to consult the encyclopaedic dictionary in an intuitive way.

In this model, the inserted inner texts will differ from the inserted inner texts used in some other dictionaries in at least two ways. Some inserted inner texts will appear between the articles of two specific lemmata and some will not.

The chosen system of presentation of the dictionary article at both the macro- and microstructural levels will have to be planned in a way that participates in the achievement of effective retrieval of the needed information. The use of non-typographical structural indicators or typographical structural indicators should be explained clearly in the front matter text in a manner that does not confuse the users during the consultation phase. The use of text in the above-presented article displays a user-friendly micro-architecture. For this model, the use of a full micro-architecture will be beneficial in the sense that the sub-comments on semantics will be displayed from top to bottom and it will increase accessibility.

8.5 Rapid outer access structure

The need to take the user to the lemma as quickly as possible requires a strictly pragmatic approach from the lexicographer. For example, this approach requires an

initial alphabetical listing of lemmata. An elementary thumb index indicating the start of article stretches in the central texts of the encyclopaedic dictionary may improve the accessibility of the initial thematic listing. The thumb index is a part of the rapid outer access structure that could be employed in the proposed encyclopaedic dictionary.

Other vital elements of the rapid outer access structure should be employed on the search path from the start to the lemma, namely running heads (Hausmann & Wiegand 1989:338). These words indicate the first and last lemmata to be found on each page. The user's knowledge of alphabetical listing is relied upon. Users must be able to gauge immediately whether the lemma they require can be found on the relevant page, for example:

Theme/lemma

- Birds/dove
- Birds/Swan
- Insects/bee

Encyclopaedic dictionaries should be devised in a way that presents few access problems to users. That is why one of the challenges facing lexicographers is to devise a user-friendly access structure, enabling inexperienced encyclopaedic dictionary users to maximally benefit from using a particular encyclopaedic dictionary.

In addition and with reference to Wiegand's (1989b) concept of microarchitecture, each new data type should start on a new line. Such a foundation is likely to greatly improve the access structure of the proposed encyclopaedic dictionary because the user perceives each data type clearly. To be effective, these metalexicographic procedures must be reflected on in the compulsory users' guide of a particular encyclopaedic dictionary.

8.6 Mediostructure

The proposed encyclopaedic dictionary, like any dictionary, should make room for some interaction between the central list and the outer texts in order to guide the user in a more efficient way to the required data.

The mediostructure is the system of cross-referencing employed in a dictionary to lead the user from one entry to another (cf. Gouws 2001:91). The compilers of the proposed encyclopaedic dictionary should facilitate the cross-referencing process by means of markers. The fact that the marked items are already treated in the central list is indicated through the use of either * or italics so that the user only has to find the location of the lexical item in question.

This cross-referencing procedure may be restricted to the specific article or it may exceed the boundaries of the article. Cross-referencing is presented in Tarp (1999:116) as a method to connect and interrelate different knowledge elements or items included in the dictionary. This methods elaborates on ways in which the lexicographer directs the encyclopaedic dictionary user from one position in the dictionary to another by establishing a relation between positions that can be explored in order to optimally satisfy the user's needs.

The cross-reference or mediostructure typology differs from one dictionary to another or even from one lexicographer and/or metalexicographer to another. For the proposed encyclopaedic dictionary, a combination of cross-reference markers such as a double arrow, single arrow, and so on with a system of cross-referencing based on the page number could be used. The connections of the central list interacting with the back matter text may be beneficial to the proposed encyclopaedic dictionary in the sense that it will help to convey more cultural data to the user who is keen to know more about a specific subject or to find some other sources of related subjects in the field of culture. The back matter text will contain additional data such as drawings, further exemplification or just complementary information that the user needs to know in order to have a sound concept of the phenomena described in the central word list. The double face of the arrow means that there is a mutual relation between the treated

lexical item and the one given as reference address. The double face will be used as a cross-reference marker in order to give users access to additional relevant lexicographic data.

The use of this system will allow establishing a cross-reference relation between the cross-reference entry and the cross-reference address. In the article where a given lemma sign is used as the cross-reference position of another lemma, in other words the separate macrostructural entry to which the user is cross-referred, the second lemma is the cross-reference address. In this regard, the cross-reference entry can consist of two separate text segments, namely the entry marking the cross-reference relation and the entry indicating the cross-reference address. Gouws and Prinsloo (2005) remark that a cross-reference does not necessarily link one entire article with another entire article but it often happens that a specific entry in an article is linked with a specific entry in another article.

The lexicon of a language consists of a network of semantic relations between different lexical items, and application of mediostructural procedures is one of the ways to help the encyclopaedic dictionary user to become aware of the links between these items. According to Blumenthal, Lemmitzer and Storrer (1987), a cross-reference should have at least four important elements: the cross-reference symbol relation, the cross-reference address, the cross-reference item and the cross-reference relation.

Gouws (1999), referring to the dictionary structures of the *Woordeboek van die Afrikaanse Taal* (WAT), makes a comment on intertextual mediostructural connections between the central word list and the outer texts. From the suggestion made by Gouws (1999b:4), one can count the external mediostructural connections: the relationship between the central word list and the front matter texts, the relationship between the central word list and the back matter texts and the relationship between the central word list and the inner structures. This approach leads the metalexicographer to consider the point of view expressed earlier in Blumenthal *et al.* (1987) as presenting some characteristics that will prove profitable for the proposed encyclopaedic dictionary.

Cross-referencing in dictionaries is used for accessibility, which leads users to an unambiguous retrieval of the information presented on both the macro- and the microstructural levels. This is possible if the lexicographer devices strategies that will help to enhance the way in which the target users can identify the data they are looking for in order to retrieve the necessary information and to utilise it in receptive and productive ways. In order to achieve this, the proposed encyclopaedic dictionary will have to use three important cross-referencing systems:

• The internal cross-referencing address, whereby an article-internal mediostructural relation will assist the users to relate various microstructural entries employed in the same article. This type is used to ascertain coherence between different microstructural entries in one article. See the following example:

Mutsietsi. cl.3 [múts¹é:tsì] n. 1. Traditional hunt-fly. SEEFU bwaala avha ghanga mutsietsi. *The village chief holds a traditional hunt-fly*. pl. Mitsietsi. 2.a. [SYMBOL] Chieftaincy. BATSI muve mutsietsi bwaala. *He was given the village traditional hunt-fly*. b. Chief. MUTSIETSI una yidma. Litt. *The traditional hunt-fly has fallen* (see 1). Styl. *The chief is dead*. (see 2.a).

Text example 17: Article Mutsietsi

• The external cross-referencing address: Contrary to the first system, here the cross-reference exceeds the boundaries of the article and two domains can be identified. The external address can be located either elsewhere in the central list, for example another lemma sign or a specified microstructural element in another article or in a separate text outside the central list. See the example below:

Tshibanga. [tʃibâ:ŋgə] *n.* Main city of Gabon's Nyanga province. Admin: **Tchibanga**. NDELA avha kala o Tshibanga. *Ndela libes in Tchibanga*. See **Masanga**.

Text example 18: Article Tshibanga

• The dictionary-external cross-referencing address, which links a text segment in a dictionary to a source outside the dictionary. This will be of great interest

in the envisaged model since the back matter text of the dictionary will present additional data such as bibliographical sources in which more information regarding the terminology treated in the dictionary can be found. It will also be beneficial in the sense that many articles could contain condensed bibliographical references that could lead the user to the bibliography in the back matter to constitute the cross-reference position from where the user is guided by means of a complete reference to the specific source.

8.7 Conclusion

The lexicographer faces the challenge of providing the target users with a dictionary that combats decontextualisation or dead cross-references, in other words giving a cross-reference entry cross-referencing the user to a cross-reference address that does not exist. The proposed model will have a golden opportunity to utilise a system of cross-referencing that is effective, especially where a clear potential cross-reference exist.

Consultation of the dictionary cannot be done successfully if the dictionary conceptualisation process is not planned in a manner that facilitates access to and retrieval of the information needed in the dictionary by the users. The use of a mediostructure as the system of cross-referencing in this model should make provision for guiding the user between the central list and the outer texts.

CHAPTER 9: CONCLUSION

9.1 Introduction

The present chapter concludes this research on devising a theoretical model for an

encyclopaedic dictionary of Yilumbu. The main aim was to develop

metalexicographic criteria for the compilation of encyclopaedic dictionaries in the

Gabonese languages. The Yilumbu language has served as reference for

exemplification and for fundamental metalexicographic decisions.

This chapter commences with a summary of each chapter of the dissertation in

Section 9.2. Section 9.3 outlines the contribution of the research findings to

lexicographic research, to the emerging Gabonese lexicography and to the fuller

promotion of the Yilumbu language. Section 9.4 provides conclusions and formulates

suggestions for further research.

9.2 Summary

The research work contained in this dissertation has been presented in eight chapters.

Chapter 1, General introduction, contains the specific aims and purpose of the study.

It provides the motivation and a demarcation of the research problem. The potential

impact of the study is also briefly discussed as well as the methodological approach

adopted. For the sake of defining the research object, the chapter also gives an

overview of the socio-linguistic situation of the studied language as well as the

reasons and the position of the target language.

Chapter 2, Dictionary typology and the proposed model, presents a typological

framework for the planned encyclopaedic dictionary. The chapter introduces various

dictionary typologies and contrasts encyclopaedic lexicography with general

lexicography. The typological profile of the planned encyclopaedic dictionary for

Yilumbu is discussed in this chapter, which at the end also contains an outline of

specific principles of the proposed model for an encyclopaedic dictionary.

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Chapter 3, Encyclopaedic lexicography in Gabon, commences with defining the notions of *encyclopaedia* and *encyclopaedic lexicography* before providing a literature review of lexicographic surveys in the Gabonese languages. In this review it is observed that encyclopaedic lexicography in Gabon is given insufficient attention, though some encyclopaedic works in Gabon do exist, as presented in the chapter. The review further observes recent trends in Gabonese lexicography in view of comprehending the situation of encyclopaedic lexicography in Gabonese lexicographic studies. Consequently, the chapter posits the need for encyclopaedic research in the Gabonese languages while introducing at the same time the advantages of encyclopaedic research for Yilumbu lexicography.

Chapter 4, Target users and lexicographic functions, focuses on the target users of the planned encyclopaedic dictionary and its lexicographic functions. The chapter starts with a broad outline of target users and of the whole concept on its own. A certain distinction is made between the target users of the planned encyclopaedic dictionary and the target participants of the ongoing study. The chapter also outlines user characteristics and presents lexicographic functions.

Chapter 5, The frame structure of the planned dictionary, states that studies of frame structures for the sake of structures can easily lead to a mere listing of different types of structure. As a book, all the texts included in the encyclopaedic dictionary contain relevant data. Accessibility of data is not only determined by the use of a well-defined access structure, leading the user to a venue within the word list structure of the encyclopaedic dictionary, but it is also determined by a functional positioning of the data within the word book structure of the encyclopaedic dictionary by employing different texts in the encyclopaedic dictionary to explain and explicate the contents of the encyclopaedic dictionary. The frame structure plays an important role in the accommodation of cultural and encyclopaedic data.

Chapter 6, Macrostructure, dealing with the major parts of the dictionary's central list, first presents an overview of generalities on the concept of macrostructure. Then it introduces the dictionary basis and the selection of the lemma candidate list as well as various macrostructural issues regarding the planned dictionary.

Chapter 7, Microstructure, focusing on a number of contributions and different aspects, discusses the microstructure. It explains the concept of microstructure according to Hausmann and Wiegand (1989), whose understanding is borrowed in this work. Different types of article to be included in the microstructure are then enumerated and the data to be included in the microstructure are presented as well. The chapter outlines microstructural categories such as parts of speech indications and spelling variants and the importance of illustrations in the planned encyclopaedic dictionary.

Chapter 8, Access structure, explains that the access structure functions as primary structure in guiding the user during the consultation process. The access structure represents the search route a user follows to reach the required data in order to retrieve the necessary information. The user's search problem can be solved swiftly and easily if the access structure of an encyclopaedic dictionary responds to the needs of the user.

Chapter 9, Conclusion, concludes the dissertation.

9.3 Research findings contribution

Language is the thread holding together the pearl necklace of culture and tradition. It is the carrying vehicle. Once we lose that, we lose our culture and tradition; there is nothing to hold on to, and the scattered pearls fall away gradually. An encyclopaedic dictionary should play a big role in Gabonese society and keep alive the Gabonese languages. Thus, this dissertation has advocated an encyclopaedic lexicography within the Gabonese lexicography.

The history of lexicography and lexicographic research in the Gabonese languages is marked and dominated by research output from non-mother-tongue speakers of the languages. Common examples can be found in the numerous dictionaries in each Gabonese language today. All compilers are non-mother-tongue speakers and in some cases mother-tongue speakers are co-compilers.

These mother-tongue co-compilers did not have any knowledge of the principles of lexicography and of metalexicography in particular. Throughout this dissertation, it

has been indicated that a lexicographer should compile an encyclopaedic dictionary in accordance with the needs of the proposed target user and the demands of the environment that the dictionary is intended for. It has pointed out that an encyclopaedic dictionary intended for students should take into account this specific target user group.

The main purpose of metalexicography is to establish a theoretical basis for the compilation of encyclopaedic dictionaries. That purpose is motivated by the desire to be as closely in touch with the needs of encyclopaedic dictionary users as possible. Thus, the present project provides a theoretical model that can be used and applied for the compilation of encyclopaedic dictionaries in Yilumbu.

An encyclopaedic dictionary should help the user to understand the culture of the target language speech community in order to be able to understand target language texts and speech, and an encyclopaedic dictionary should enhance the user's knowledge of the target language culture in order to be able to communicate in the target language. When a lexicographer is planning an encyclopaedic dictionary the aim and purpose of this dictionary is one of the first things that should be determined. Non-mother-tongue speakers fulfilled an important function in the development of the Gabonese languages, but it is important that mother-tongue speakers now redouble their efforts and commitment and make it their task and obligation to compile encyclopaedic dictionaries in their respective languages. The present project also aims to demonstrate the role that an encyclopaedic dictionary can play as academic tool.

9.4 Conclusion

An encyclopaedic dictionary is a linguistic tool used for the development and preservation of languages. It may be regarded as an indispensable tool in the process of knowledge transfer at the targeted education or training levels and for promoting effective communication.

According to Wiegand (1984a:14–15), one of the components of a general theory of lexicography is the theory of organisation. This includes all activities leading to the drawing up of a plan that has to precede the compilation of every encyclopaedic dictionary. The model should also serve as basis for the compilation of encyclopaedic dictionaries involving the Gabonese languages.

The main objective of this research was attained by efforts made to formulate a model for an encyclopaedic dictionary for the Gabonese languages with exemplifications on Yilumbu. Efforts were mainly to establish the metalexicographic criteria of such a dictionary, especially at the macrostructural and microstructural levels.

The study is the first of its kind in the Gabonese languages. It not only enhances the domain of encyclopaedic lexicography in the fast-growing and emerging Gabonese lexicography but also provides a further step in Yilumbu lexicography.

To conclude, while many questions are still open and a considerable amount of research has to be conducted on relevant issues left out in this dissertation, the work reported here shows that encyclopaedic research can provide interesting insights into a people and its culture and at the same time can aid the conservation of that culture for younger generations.

References

- Afane Otsaga, T. 2004. *The standard translation dictionary as an instrument in the standardisation of Fang*. Unpublished DLitt dissertation. Stellenbosch: University of Stellenbosch.
- Alberts, M. 1995. The importance of a business plan when planning a lexicographical project. *Lexikos*, 9:188-197.
- Alberts, M. 2003. E-terminology. *Lexikos*, 12:90–104.
- Al-Kasimi, A.M. 1977. Linguistics and bilingual dictionaries. Leiden: E.J. Brill.
- Almind, R. & Bergenholtz, H. 2000. Die ästhetische Dimension der Lexikographie. In U. Fix & H. Wellmann (Eds.). Bild im Text und Bild. Heidelberg: C. Winter. 259–288.
- Arnar, A.S. (Ed.). 1990. *Encyclopedism from Pliny to Borges*. Chicago: University of Chicago Library.
- Atkins, B.T.S. 1985. Monolingual and bilingual learner's dictionaries: A comparison.

 In R. Ilson (Ed.). *Dictionaries, lexicography and language learning*.

 Oxford: Pergamon Press. 15–25.
- Atkins, B.T.S. 1991. Building a lexicon: The contribution of lexicography. *International Journal of Lexicography*, 4(3):167–204.
- Atkins, B.T.S. 1992/93. Theoretical lexicography and its relation to dictionary-making. *Dictionaries, Journal of the Dictionary Society of North America*, 14:4–43.
- Atkins, B.T.S. 1996. Bilingual dictionaries past, present and future. In M. Gellerstam,
 J. Jarborg, S.-G. Malmgren, K. Norén, L. Rogstrom & C. Rojder Papmehl
 (Eds.). Euralex 96 proceedings. Göteborg: Göteborg University. 515–546.
- Atkins, B.T.S. & Varantola, K. 1998. Language learners using dictionaries: The final report on the EURALEX/AILA research project on dictionary use. In B.T.S. Atkins (Ed.). *Using dictionaries: Studies of dictionary use by*

- *language learners and translators.* (Lexicographica. Series Maior 88). Tübingen: Max Niemeyer. 83–122.
- Barnhart, C.L. 1962. Problems in editing commercial monolingual dictionaries. F.W. Householder & S. Saporta (Eds.). *Problems in lexicography, Report of the conference on lexicography held at Indiana University, November 11-12, 1960.* Bloomington: Indiana University. 161-181.
- Béjoint, H. 1994 *Tradition and innovation in modern English dictionaries*. Oxford: Clarendon Press.
- Béjoint, H. 2000. Modern lexicography. Oxford: Oxford University Press.
- Bergenholtz, H. & Tarp, S. (Eds.). 1995. *Manual of specialised lexicography*. Amsterdam: John Benjamins.
- Bergenholtz, H. & Tarp, S. 2002. Die moderne lexikographische Funktionslehre: Diskussionbeitrag zu neuen und alten Paradigmen, die Wörterbücher als Gebrauchsgegenstände verstehen. *Lexicographica*, 18:253–263.
- Bergenholtz, H., Tarp, S. & Wiegand, H.E. 1999. Datendistributionsstrukturen, Makro-und Mikrostrukturen in neueren Fachwörterbüchern. In L.H. Hoffmann, H.E. Kalverkämper, H.E. Wiegand, C. Galinski & W. Hüllen (Eds.). Fachsprachen: Ein internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschft/Languages for special purposes: An international handbook of special-language and terminology research. Berlin/New York: De Gruyter. 1762-1832.
- Blanchon, J.A. 1984. Présentation du yilumbu dans ses rapports avec le yipunu et le civili à travers un conte traditionnel. *Pholia*, 1:7–35.
- Blanchon, J.A. 1989. *Dictionnaire informatisé du pounou-français*. Unpublished manuscript. Lyon: Université Lumière de Lyon.
- Blumenthal, A., Lemmitzer, L. & Storrer, A. 1987. Was ist eigentlich ein Verweis? Konzeptionelle Datenmodelierung als Voraussetzung computergestutzter Verweisbehandlung. In G. Harras (Ed.). *Das Wörterbuch Artikel und*

- Verweisstrukturen: Jahrbuch 1987 des Instituts für Deutche Sprache (Sprache der Gegenwart 74). Dusseldorf: Schwann. 351–373.
- Bonneau, J. 1956. *Grammaire pounoue et lexique pounoue-français*. Brazzaville: Institut d'Etudes Centrafricaines.
- Bounguenza, E.D. 2008. *Dictionnaire des gabonismes*. Libreville: L'Harmattan-Gabon.
- Carpentier de Changy, H. & Voltz, M. 1990. Alphabet scientifique des langues du Gabon: Liste alphabetique. *Revue Gabonaise des Sciences l'Homme*, 2:113–115.
- Chun, D.M. & Plass, J.L 1997. Research on text comprehension in multimedia environments. *Language Learning and Technology* 1(1): 60-81.
- Collison, R. 1966. *Encyclopaedias: Their history throughout the ages*. New York/London: Hafner Publishing Company.
- Cowie, A.P. 1983a. English dictionaries for the foreign learner. In R.R.K. Hartmann (Ed.). *Lexicography: Principles and practice*. (Applied Language Studies 5). London/New York: Academic Press. 135–144.
- Cowie, A.P. 1983b. On specifying grammatical form and function. In R.R.K. Hartmann (Ed.). *Lexicography: Principles and practice*. (Applied Language Studies 5). London/New York: Academic Press. 99–107.
- Crystal, D. 1999. *The Penguin dictionary of language*. London/New York: Penguin Books.
- Crystal, D. 2003. *A dictionary of linguistics and phonetics*. London: Blackwell Publishing.
- Daintith, J. 2008. Oxford dictionary of chemistry. Oxford: Oxford University Press.
- D'Alembert, J. le R. 1995. *Preliminary discourse to the encyclopedia of Diderot*.

 Translated by R.N. Schwab, with the collaboration of W.E. Rex. Chicago:
 University of Chicago Press.

- Darnton, R. 1985. Philosophers trim the tree of knowledge. In his *The great cat massacre and other episodes in French cultural history*. London: Penguin.
- De algemeene Nederlandsche encyclopedie voor den beschaafden stand 1865-1868.

 Woordenboek van kunst, wetenschap, nijverheid, landbouw en handel/General Dutch encyclopedia for the civilized classes1865-1868.

 Dictionary of the arts, sciences, industry, agriculture and commerce.
- De Tollenaere, F. 1961. *Onze woordenschat: Het Woordenboek der Nederlandsche Taal*. Amsterdam: Stichting IVIO.
- Delamare, J. 2001. French to English and English to French dictionary of medical terms: Dictionnaire français-anglais et anglais-français des terms techniques de medecine. Maloine: French & European Publications.
- Deschamps, H. 1962. Traditions orales et archives au Gabon. Paris: Berger-Levrault.
- De Schryver, G.M. & Kabuta, N.S. 1998. An article for the lemma sign green in a decoding English-Ciluba dictionary for advanced speakers of Ciluba. Unpublished paper presented at the Afrilex- Salex 98 Tutorial, University of Pretoria, 11 September 1998.
- Devapala, S. 2004. *Typological classification of dictionaries*. A paper presented at the Asia Lexicography Conference, Chiangmai, Thailand, 24–26 May 2004.
- Diderot, D. & J. le R. d'Alembert (Eds.). *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers*. 17 vols. of text (1751–1765), 11 vols. of plates (1762–1777), 4 supplemental vols. of text, 1 supplemental vol. of plates, and 2 supplemental vols. of index. Paris: Briasson, 1751–1765; 1776–1780. Reprinted in 34 vols., Stuttgart-Bad, Cannstatt: Frommann, 1966–1967.
- Djordjevic, S.P. 2004. Dictionary of medicine. Dictionnaire de médecine. French-English with English-French glossary. Français-anglais avec glossaire anglais-français. Rockville, Maryland: Schreiber Publishing.
- Doke, C.M. & Cole, D.T. 1963. *Contribution to the history of Bantu linguistics*. Johannesburg: Witwatesrand University Press.

- Dolezal, F. & McCreary, D.R. 1996. Language learners and dictionary users: Commentary and an annotated bibliography. *Lexicographica*, 12:125–65.
- Dolezal, F.T. & McCreary, D.R. 1999. *Pedagogical lexicography today*. Tübingen: Max Niemeyer.
- Doneux, J.L. 1967. *Questionnaires d'enquête linguistique* (Greenberg-Tervuren-Welmers). Dakar: Université de Dakar.
- Dubois, J. 1981. Models of the dictionary: Evolution in design. *Applied Linguistics*, II(3):236–249.
- Dubois, J. 1994. Dictionnaire de linguistique et des sciences du langage. Paris: Larousse.
- Dubois, J. & Dubois, C. 1971. *Introduction à la lexicographie*. Paris: Librairie Larousse.
- Du Chaillu, P.B. 1863. *Voyages et aventures dans l'Afrique equatoriale*. Paris: Michel Levy.
- Ducrot, O. & Schaeffer, J.M. 1995. *Nouveau dictionnaire encyclopedique des sciences du langage*. Paris: Le Seuil.
- Ekwa Ebanega, G-M. 2007. A microstructural programme for dictionaries in Fang.

 Unpublished doctoral dissertation. Stellenbosch: University of Stellenbosch.
- Ella, E.M. 2007. A theoretical model for a Fang-French-English specialized multivolume school dictionary. Unpublished doctoral dissertation. Stellenbosch: University of Stellenbosch.
- Emejulu, J.D. 2000. Lexicography, an economic asset in multilingual Gabon. *Gabonese Journal of the Languages Sciences*, 1:51–69.
- Emejulu, J.D. 2001a. Lexicographie multilingue et multisectorielle au Gabon: Plannification, stratégie et enjeux. J.D. Emejulu (Ed.), *Eléments de lexicographie gabonaise*. Tome 1: 38-57. New York: Jimacs-Hillman Publishers.

- Emejulu, J.D. (Ed.). 2001b. *Eléments de lexicographie gabonaise*. Tome 1. New York: Jimacs-Hillman Publishers.
- Emejulu, J.D. 2003. Challenges and promises of a comprehensive lexicography in the developing world: The case of Gabon. In W.F. Botha (Ed.). *Man wat beur: Huldingingsbundel vir Dirk van Schalkwyk*. Stellenbosch: Bureau of the WAT. 195–212.
- Emejulu, J.D. & Nzang-Bie, Y. 1999. *Initial language development. Explaining multilingual education: Information on some tough questions*. Grand Forks, North Dakota, UNDSIL Multilingual Education Seminar.
- Emejulu, J. & Pambo Loueya, F. 1990. Yilumbu. *Revue Gabonaise des Sciences de L'Homme*, 2:197–201.
- Encyclopaedia Britannica. 1771. United Kingdom: Encyclopaedia Britannica.
- Feinauer, A.E. 2002. The treatment of semantic information in dictionaries.

 Stellenbosch: Department of Afrikaans and Dutch, University of Stellenbosch.
- Findlen, P. 1994 *Possessing nature: Museums, collecting, and scientific culture in early modern Italy.* Berkeley: University of California Press.
- Fleming, M. 1967. Classification and analysis of instructional illustrations. *AV Communication Review*, 15:246–258.
- Gairns, R. & Redman, S. 1986. Working with words: A guide to teaching and learning vocabulary. Cambridge: Cambridge University Press.
- Galisson, R. 1983. Image et usage du dictionnaire chez les etudiants (en langue) de niveau avance. *Etudes de Linguistique Appliqué*, 49:5–88.
- Gallardo, A. 1980. Dictionaries and the standardisation process. In L. Zgusta (Ed.). Theory and method of lexicography: Western and non-Western perspectives. Columbia, SC: Hornbeam Press. (59–69).
- Galley, S. 1964. Dictionnaire Fang-Français et Français-Fang, suivi d'une grammaire Fang. Neutchate: Henri Messuiller.

A theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu

- Gangla-Birir, L. 2005. The use of pictorial illustrations in African language dictionaries. *Lexikos* 15:38-51.
- Garnier, A. 1897. *Katesisa i gheghe nesi ma loghi ma dzambi mu mbembu i-lumbu*. Loango: Imprimerie de la Mission.
- Garnier, A. 1900. Syllabaire i-lumbu keti mi ganda mio mi teti mi ranganga mu mbembo i lumbu. Loango: Imprimerie de la Mission.
- Garnier, A. 1903. Mumbembo kivili ki Mayumbe. Loango: Imprimerie de la Mission.
- Garnier, A. 1904. *M'ambu ma nzambi mo make mu katesisa*. Loango: Impremerie de la Mission.
- Geeraerts, D. 1984. Dictionary classification and the foundations of Lexicography. *I.T.L. Review*, 63–37.
- Geeraerts, D. 1986. Woordbetekenis: Een overzicht van de lexicale semantiek. Leuven: Acco.
- Geeraerts, D. & Janssens, G. 1982. Wegwijs in woordenboeken: Een kritisch overzicht van de lexicografie van het Nederlands. Assen: Van Gorcum.
- Genouvrier, E., Désirat, C. & Hordé, T. 1997. *Dictionnaire des synonymes*. Paris: Larousse.
- Gimson, A.C. 1973 Phonology and the lexicographer. In R.I. McDavid Jr. & A.R. Duckert (Eds.). 115–121.
- Goetz, P.W. 1986. *The new Encyclopaedia Britannica*. Chicago: University of Chicago.
- Gouws, R.H. 1986. Afrikaans lexicography. In R.R.K. Hartmann (Ed.). *The history of lexicography*. Amsterdam: John Benjamins. 75–83.
- Gouws, R.H. 1989. Leksikografie. Cape Town: Academica.
- Gouws, R.H. 1991a. Review. In F.J. Hausmann, O. Reichmann, H.E. Wiegand & L. Zgusta (Eds.). Wörterbücher. Dictionaries. An international encylopedia of lexicography. *Lexicographica*, 7/1991:268–290.
- Gouws, R.H. 1991b. Toward a lexicon-based lexicography. *Dictionaries*, 13:75–90.

A theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu

- Gouws, R.H. 1993. Afrikaans learner's dictionaries for a multilingual South Africa. *Lexikos*, 3:29–48.
- Gouws, R.H. 1994. Ostensiewe adressering in vertalende woordeboeke. *Lexikos*, 4:61–85.
- Gouws, R.H. 1995. *Dictionaries and the dynamics of language change: Cultures, ideologies and the dictionary.* Tübingen: Max Niemeyer.
- Gouws, R.H. 1996a. A sequence for meeting lexicographic needs: Lexicography as a financial asset in a multilingual South Africa. Pretoria: Department of Arts, Culture, Science and Technology.
- Gouws, R.H. 1996b. Bilingual dictionaries and communicative equivalence for a multilingual society. *Lexikos*, 6:14–31.
- Gouws, R.H. 1997. *Lexicographic planning*. Lexicographic Consultative Meeting, 16–22, PanSALB, Holiday Inn Johannesburg International Airport, 31 October 1997.
- Gouws, R.H. 1999a. A theoretically motivated model for the lexicographic process of the national lexicographic units. Unpublished Report Submitted to the Pan-South African Language Board.
- Gouws, R.H. 1999b. *The general theory of lexicography*. Unpublished Textbook for MPhil in Lexicography. Stellenbosch: University of Stellenbosch.
- Gouws, R.H. 2000a. *Enhancing the access structure of translation dictionaries*. Asialex 2001 proceedings. Seoul: Yonsei University.
- Gouws, R.H. 2000b. Strategies in equivalent discrimination. In J.E. Morgensen *et al.* (Eds.). *Symposium on lexicography IX*. Tübingen: Max Niemeyer. 99–111.
- Gouws, R.H. 2000c Toward the formulation of a metalexicographic founded model for national lexicography units in South Africa. In H.E. Wiegand (Ed.). *Wörterbucher in der Diskussion 4*. Tübingen: Max Niemeyer. 109–133.
- Gouws, R.H. 2001. Lexicographic training: Approaches and topics. In J. Emejulu (Ed.). *Elements de lexicographie gabonaise*. Tome I. New York: Jimacs-Hillman Publishers. 58–95.

A theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu

- Gouws, R.H. 2002a. Equivalent relations, context and cotext in bilingual dictionaries. *Hermes*, 28:195–209.
- Gouws, R.H. 2002b. The outer texts in the De Gruyter Wörterbuch Deutsch als Fremdsprache. In H.E. Wiegand (Ed.). *Perspektiven der pädagogischen Lexicographic des Deutschen II*. Tübingen: Max Niemeyer. 609–619.
- Gouws, R.H. 2002c. Using a frame structure to accommodate cultural data. J.D. Emejulu (Ed.). *Elements de lexicographie gabonaise*. Tome 2. New York: Jimacs-Hillman. 54–69.
- Gouws, R.H. 2003. Types of articles, their structure and different types of lemmata. In P.G.J. van Sterkenburg (Ed.). *A practical guide to lexicography*. Amsterdam/ Philadelphia: John Benjamins. 34–43.
- Gouws, R.H. 2004a. Monolingual and bilingual learner's dictionaries. *Lexikos*, 14:264–274.
- Gouws, R.H. 2004b. Outer texts in bilingual dictionaries. *Lexikos*, 14:67–88.
- Gouws, R.H. & Prinsloo, D.J. 1997. Lemmatisation of adjectives in Sepedi. *Lexikos*, 7:47–57.
- Gouws, R.H. & Prinsloo, D.J. 1998. Cross-referencing as a lexicographic device. *Lexikos*, 8:17–36.
- Gouws, R.H. & Prinsloo, D.J. 2005. Left-expanded article structures in Bantu with special reference in isiZulu and Sepedi. *International Journal of Lexicography*, 18: 25–46.
- Gove, P.B. 1961. Preface. Webster's third international dictionary of the English language. London/Springfield: G. Bell & Sons/G& C Merriam.
- Grand Larousse illustré. 2005. Paris: Larousse.
- Guthrie, M. 1948. *Classification of the Bantu languages*. London: Oxford University Press for the International African Institute.
- Hadebe, S. 2004. Teaching dictionary skills in Ndebele. *Lexikos*, 14:90–103.
- Haiman, J. 1980. Dictionaries and encyclopedias. *Lingua*, 50:329–357.

- Hanks, P. 1979. To what extent does a dictionary definition define? In R.R.K.
 Hartmann (Ed.). Dictionaries and their users: Proceedings of the 1978
 BAAL Seminar on Lexicography, 32–38, Exeter, University of Exeter.
- Hanks, P. 1996. Contextual dependency and lexical sets. *International Journal of Corpus Linguistics*, 1:75–98.
- Hanks, P. (Ed.). 2000. *The new Oxford thesaurus of English*. Oxford: Oxford University Press.
- Harras, G. 1989. Zu einer Theorie des lexicographischen Beispiels. In F.J. Hausmann, O. Reichmann, H.E. Wiegand & L. Zgusta (Eds.). 607–613.
- Hartmann, R.R.K. 1983. (Ed.). *Lexicography: Principles and practice*. London: Academic Press.
- Hartmann, R.R.K. 1987. Four perspectives in dictionary use: A critical review of research methods. In A.P. Cowie (Ed.). *The dictionary and the language learner*. (Lexicographica. Series Maior 17). Tübingen: Max Niemeyer. 11–28.
- Hartmann, R.R.K. 1989a. Contrastive linguistics and bilingual lexicography. In F.J.
 Hausmann et al. (Eds.). Wörterbücher. Dictionaries. Dictionnaires.
 International encyclopaedia of lexicography. Berlin: W. de Gruyter. 2854-2859
- Hartmann, R.R.K. 1989b. Sociology of the dictionary user: Hypothesis and empirical studies. In F.J. Hausmann *et al.* (Eds.). *Wörterbücher. Dictionaries. Dictionnaires. International encyclopaedia of lexicography.* Berlin: W. de Gruyter. 102–111.
- Hartmann, R.R.K. 1990. (Ed.). *Lexicography in Africa*. Exeter Linguistics Studies 15. Exeter: Exeter University Press.
- Hartmann, R.R.K. 1992. Lexicography, with particular reference to English learner's dictionaries. *Language Teaching*, 25:151–159.
- Hartmann, R.R.K. 2004. Two decades of Lexicographia Series Maior. *Lexikos*, 14:359–368.

- Hartmann, R.R.K. & James, G. (Eds.). 1998. *Dictionary of lexicography*. London: Routledge.
- Hausmann, F.J. 1977 Einführung in der neufranzösischen Wörterbücher. Tübingen: Niemeyer.
- Hausmann, F.J. 1986. Les Dictionnaires du Français hors de France. In L. Boisvert et al. (Eds.). La Lexicographie Québécoise. Bilan et perspectives Langue Française du Québec. 2ème section. Vol 8. Québec.
- Hausmann, F.J. 1989. Wörterbuchtypologie. In F.J. Hausmann *et al.* (Eds.). *Wörterbücher. Dictionaries. Dictionnaires. An international encyclopedia of lexicography*. Berlin: De Gruyter. 968–981.
- Hausmann, F.J. & Werner, R.O. 1991. Spezifische Bauteile und Strukturen zweisprachiger Wörterbücher. In F.J. Hausmann *et al.* (Eds.). 2729–2769.
- Hausmann, F.J. & Wiegand, H.E. 1989. Component parts and structures of general monolingual dictionaries: A survey. In F.J. Hausmann *et al.* (Eds.). *Wörterbücher. Dictionaries. Dictionnaires. International encyclopaedia of lexicography*. Berlin: De Gruyter. 328–360.
- Heinz, M. (Ed.). 2005. L'exemple lexicographique dans les dictionnaires français contemporains. Actes des Premières Journées Allemandes des Dictionnaires (Klingenberg am Main, 25 27 juin 2004). Tübingen : Max Niemeyer Verlag. 2005. Lexicographica Series Maior 3-484.
- Heltai, P. 1988. Contrastive analysis of terminological systems and bilingual technical dictionaries. *International Journal of Lexicography*, 1:32–40.
- Hensyl, W.R. (Ed.). 1990. *Stedman's medical dictionary*. Baltimore/Hong Kong/London/Sydney: Williams and Wilkins.
- Herbst, T. 1990. Dictionaries for foreign language teaching: English. In F.J.
 Hausmann *et al.* (Eds.). *International encyclopedia of lexicography*. Vol.
 2: 1379–1385. Berlin: Walter de Gruyter.
- Hine, R. 2008. Oxford dictionary of biology. Oxford: Oxford University Press.

- Hombert, J.M. 1990a. Problèmes phonétiques et phonologiques rencontrés dans les langues du Gabon. *Revue Gabonaise des Sciences de l'Homme*, 2:97-103.
- Hombert, J.M. 1990b. Présentation de l'alphabet scientifique des langues du Gabon. Revue Gabonaise des Sciences de l'Homme, 2:105-111.
- Householder, F.W. & Saporta, S. (Eds.). 1962. *Problems in lexicography*. Report of the Conference on Lexicography held at Indiana University, November 11–12. Bloomington: Indiana University/The Hague: Mouton.
- Howarth, P.A. 1996. *Phraseology in English academic writing: Some implications for language learning and dictionary making.* Tübingen: Max Niemeyer.
- Howarth, P.A. 1998. The phraseology of learners' academic writing. In A.P. Cowie (Ed.). 161–186.
- Hubert, J. & Mavoungou, P.A. (Eds.). 2009. *Ecriture et standardisation des langues gabonaises*. Stellenbosch: Sun Press.
- Hunt, A. 1999. Dictionary of chemistry. Oxford: Oxford University Press.
- Hupka, W. 1989. Die Bebilderung und sonstige Formen der Veranschaulichung im allgemeinen einsprachigen Wörterbücher. In F.J. Hausmann, O. Reichmann, H.E. Wiegand & L. Zgusta (Eds.). An International Encyclopedia of Lexicography / Encyclopédie internationale de lexicographie / Ein internationales Handbuch zur Lexikographie. Berlin/New York: Walter de Gruyter 1989: 704–726.
- Idiata, D.F. 2002. *Il était une fois les langues gabonaises*. Libreville: Fondation Raponda-Walker.
- ILALOK (Institut des Langues Locales au Kouilou). 2008. *Dictionnaire vili–français*. Paris: L'Harmattan.
- Illingworth, V. 2001. *The Penguin dictionary of physics*. London/New York: Penguin Books.
- Issacs, A. 2003. A dictionary of physics. Oxford: Oxford University Press.

- James, J.S. 1971. *Stroud's judicial dictionary of words and phrases*. London: Sweet and Maxwell.
- Jarosova, A. 2000. Problems of semantic subdivisions in bilingual dictionary entries. *International Journal of Lexicography*, 13(1):12–28.
- Johnson, K. & Johnson, H. 1998. Encyclopaedic dictionary of applied linguistics: A handbook for language teaching. Blackwell.
- Kafker, F.A. (Ed.). 1981. *Notable encyclopedias of the seventeenth and eighteenth centuries: Nine predecessors of the encyclopédie*. Studies on Voltaire and the eighteenth century, vol. 194. Oxford: Voltaire Foundation.
- Kafker, F.A. (Ed.). 1994. *Notable encyclopedias of the late eighteenth century: Eleven successors of the encyclopédie*. Studies on Voltaire and the eighteenth century, vol. 315. Oxford: Voltaire Foundation.
- Kammerer, M. & Wiegand, H.E. 1998. Über die textuelle Rahmenstruktur von Wörterbüchen: Präzisierungen und weiterführende Überlegungen. Lexicographica, 14:224–238.
- Kaplan, S.M. 1998. Wiley's chemistry dictionary: English/Spanish–Spanish/English. Hoboken/New Jersey: Wiley-Interscience.
- Kavanagh, K. 2000. Words in a cultural context. *Lexikos*, 10:99–118.
- Kavanagh, K. et al. 2005. South African concise Oxford dictionary. Oxford University Press Southern Africa.
- Kennedy, G. 1998. *An introduction to corpus linguistics*. London/NewYork: Longman.
- Koren, S. 1997. *Quality versus convenience: Comparison of modern dictionaries from the researcher's, teacher's and learner's points of view.* TESL-EJ 2.3 [Online]. Available: http://www.kyoto-su.ac.jp/information/tesl-ej/ej07/a2.html (2000, 13 April).
- Kromann, H.P., Riiber, T. & Rosbach, P. 1984. "Active" and "passive" bilingual dictionaries: The Shcherba Concept revisited. In R.R.C. Hartmann (Ed.).

- LEXeler '83 proceedings. (Lexicographica Series Maior 1). Tübingen: Max Niemeyer. 207–215.
- Kromann, H. P., Riiber, T., Rosbach, P. 1991. Principles of Bilingual Lexicography, in F. J. Hausmann, O. Reichmann, H. E. Wiegand & L. Zgusta (Eds). 2712-2728.
- Kromhout, J. & Kritzinger, M.S.B. 1998. *Mini Afrikaans-Engels woordeboek/Mini English-Afrikaans dictionary*. Cape Town: Pharos.
- Kwenzi-Mikala, J.T. 1987. Contribution à l'inventaire des parlers Bantou du Gabon. *Pholia*, 2:103–110.
- Kwenzi-Mikala, J.T. 1988. L'Identification des unités-langues Bantou Gabonaise et leur classification interne. *Muntu*, 8:54–64. Libreville/Paris: CICIBA/Présence Africaine.
- Kwenzi-Mikala, J.T. 1989. Contribution à l'analyse des emprunts nominaux du yipunu au français. *Pholia Revue du Laboratoire de Phonétique et Linguistique Africaine*, 4:157–170.
- Kwenzi-Mikala, J.T. 1990. Quel avenir pour les langues gabonaises? *Revue Gabonaise des Sciences de l'Homme*, 2:121–124. Libreville: LUTO/Université Omar Bongo.
- Kwenzi-Mikala, J.T. 1998. Parlers du Gabon: Classification du 11.12.97. In A. Raponda-Walker (Ed.). *Les langues du Gabon*. Libreville: Editions Raponda Walker. 217–220.
- Landau, S.I. 1984. *Dictionaries: The art and craft of lexicography*. Cambridge: Cambridge University Press.
- Landau, S.I. 2001. *Dictionaries: The art and craft of lexicography*. 2nd ed. Cambridge: Cambridge University Press.
- Largeau, V. 1901. Encyclopédie pahouine: Eléments de grammaire et dictionnaire français-pahouin. Paris: Ernest Leroux.
- Larousse de poche. 1988. Paris: Librairie Larousse.

- Larousse children's dictionary French. 2005. Paris Larousse.
- Laufer, B. & Hadar, L. 1997. Assessing the effectiveness of monolingual, bilingual and bilingualised dictionaries in the comprehension and production of new words. *The Modern Language Journal*, 81.2:189–196.
- Laufer, B. & Kimmel, M. 1997. Bilingualised dictionaries: How learners really use them. *System*, 25.3:361–369.
- Leech, G.N. 1992. Corpora and theories of linguistic performance. In J. Svartvik (Ed.). 105–122.
- Le grand Robert de la langue française. 2000. Paris: Editions Le Robert.
- Lervad, S. 1995. Presentation du dictionnaire multilingue du developpement local et regional. In G. Budin (Ed.). *Multilingualism in specialist communication*. Vienna: International Institute for Terminology Research. 1031–1040.
- Lipka, L. 1990. An outline of English lexicology. Tübingen: Max Niemeyer.
- Lombard. F.J. 1994. Lexicographer, linguist, dictionary user: An uneasy triangle? *Lexikos*, 4:204–214.
- Lombard, F.J. 2000. *Course in general and computer lexicography*. Unpublished training course notes. Stellenbosch: Stellenbosch University.
- Longman dictionary of the English language. 1984. Harlow, Essex: Longman.
- Louw, P.A. 1999. Access structure in a standard translation dictionary. *Lexikos*, 9:108–118.
- Louw, P.A. 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.
- Louw, P.A. 2004. *Criteria for a multifunctional, monolingual dictionary in junior secondary education*. Unpublished DLitt dissertation. Stellenbosch: University of Stellenbosch

- Mabika Mbokou, L. 2006. A model for the macro- and microstructure of a Yipunu-French school dictionary. Unpublished DLitt dissertation. Stellenbosch: University of Stellenbosch.
- Malkiel, Y. 1967. A typological classification of dictionaries on the basis of distinctive features. In F.W. Householder & S. Saporta (Eds.). *Problems in lexicography*. Bloomington: Indiana University. 3–24.
- Malkiel, Y. 1980. The lexicographer as a mediator between linguistics and society. In L. Zgusta (Ed.). *Theory and method in lexicography*. Columbia: Hornbeam Press. 43–58.
- Mann, M. 1990. A linguistic map of Africa. In R.R.K. Hartmann (Ed.). *Lexicography in Africa: 1–7*. Exeter: University of Exeter Press.
- Manser, M.H. (Ed.). 1984. Via Africa learner's dictionary. London: Macmillan.
- Matthews. P.H. 1997. *Oxford concise dictionary of linguistics*. Oxford/New York: Oxford University press.
- Maurin, M. (Ed.). 1993. Dictionnaire de la langue française. Paris: Hachette Livre.
- Mavoungou, P.A. 2000. *A frequency list of the Yilumbu language*. Stellenbosch: University of Stellenbosch.
- Mavoungou, P.A. 2001a. La mondialisation et la lexicographie trilingue ou plurilingue au Gabon. In J.D. Emejulu (Ed.). *Eléments de lexicographie gabonaise*. Tome I: New York: Jimacs-Hillman Publishers. 160–183.
- Mavoungou, P.A. 2001b. Macro- and microstructural issues in Mazuna lexicography. *Lexikos*, 11:122–138.
- Mavoungou, P.A. 2002a. *Metalexicographical criteria for the compilation of a trilingual dictionary: Yilumbu-English-French*. Unpublished DLitt dissertation. Stellenbosch: University of Stellenbosch.
- Mavoungou, P.A. 2002b. Synopsis articles in the planning of a trilingual dictionary: Yilumbu-English-French. *Lexikos*, 12:181–200.

- Mavoungou, P.A. 2002c. Vers un dictionnaire du français du Gabon. In J.D. Emejulu (Ed.). *Eléments de lexicographie gabonaise*. Tome 2. New York: Jimacs-Hillman Publishers. 230–262.
- Mavoungou, P.A. 2004. L.J. van der Veen et S. Bodinga-bwa-Bodinga: *Gedandedi sa Geviya/Dictionnaire Geviya-Français*. *Lexikos* 14: 440-448.
- Mavoungou, P.A. 2005. R. Mickala Manfoumbi: Lexique pove-français/français-pove. *Journal of Education*, 4(1):79–86.
- Mavoungou, P.A. 2006. A trilingual dictionary Yilumbu-French-English: An ongoing project. *Lexikos* 16: 121-144.
- Mavoungou, P.A., Afane Otsaga, T. & Mihindou, G-R. 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, organised by the Dictionary Unit of South African English, Rhodes University (Grahamstown), 8–10 July 2002.
- Mayer, R. 1990 Histoire de l'écriture des langues du Gabon. *Revue Gabonaise des Sciences de l'Homme*, 2:65–91.
- Mayer, R. 1999. Research-based principles for the design of instructional messages:

 The case of multimedia explanations. Document Design (1)7-20. The cambridge handbook of multimedia learning. Cambridge University press
- McArthur, T. 1986. Thematic lexicography. In R.R.K. Hartmann (Ed.). *The history of lexicography: Papers from the Dictionary Research Centre at Exeter, March 1986*. Amsterdam: John Benjamins. 125-127.
- Mel'cuk, I. 1992. Lexicon: An overview. In W. Bright (Ed.). International encyclopedia of linguistics. Oxford: Pergamon.
- Metegue N'nah, N. 1984. Lumière sur points d'ombre (contribution à la connaissance de la société gabonaise). Langres: Imprimerie Guéniot.
- Mickala Manfoumbi, R. 2004. *Lexique pove-français/français-pove*. Libreville: Editions Raponda-Walker.

A theoretical model for an encyclopaedic dictionary for the Gabonese languages with reference to Yilumbu

- Microsoft. 2001. Encarta encyclopedia standard. Dublin: Microsoft Ireland.
- Mihindou, G.R. 2001. Apports des missionnaires à la lexicographie gabonaises: dictionnaires bilingues fang-français/français-fang; français-yipounou/yipounou-français; français-mpongwe. In J.D. Emejulu (Ed.). *Eléments de lexicographie gabonaises*. Tome 1. 7–37. New York: Jimacs-Hillman Publishers.
- Mihindou, G.R. 2006. A theoretical model for a Yipunu-English-French explanatory dictionary of medical terms. Unpublished DLitt Dissertation. Stellenbosch: University of Stellenbosch.
- Mills, J. 1998. Lexicon-based critical tokenisation: An algorithm. In T. Fontenelle *et al.* (Eds.). 213–220.
- Mitchell, B.M & Salsbury, R.E. 1999. *Encyclopedia of multicultural education*. Westport, Connecticut/London: Greenwood Press.
- Moon, R. 1989. Objective or objectionable? Ideological aspects of dictionaries. *English Language Research*, 3:59–94.
- Moon, R. 1998. Fixed expressions and idioms in English: A corpus-based approach.

 Oxford: Clarendon Press.
- Moussirou Mouyama, A. 1984. Langue française au Gabon: Contribution sociolinguistique. Unpublished doctoral thesis. Paris: Université René Descartes (Paris V).
- Moussirou Mouyama, A. 1986. L'introduction de la langue française au Gabon.

 Annales de l'Université Omar Bongo du Gabon: Série Lettres, Droit,

 Sciences et Médecine, 55–63.
- Naudé, J.A. 2000. Translation studies and Bible translations. *Acta Theologica*, 20:127.
- Ndinga-Koumba-Binza, H.S. 2004. *Le statut socio-politique du français et la promotion des langues locales au Gabon*. Unpublished paper presented at the 18th International Conference of the Association of French Studies in Southern Africa (AFSSA) held by the French Section of the Department of

- Modern Foreign Languages at the University of Stellenbosch, 4–11 September 2004.
- Ndinga-Koumba-Binza, H.S. 2005a. Considering a lexicographic plan for Gabon within the Gabonese language landscape. *Lexikos*, 15:132–150.
- Ndinga-Koumba-Binza, H.S. 2005b. Politique linguistique et éducation au Gabon: Un état des lieux. *Journal of Education*, 4(1):65–78.
- Ndinga-Koumba-Binza, H.S. 2006. Lexique pove-français/français-pove. Mickala Manfoumbi: Seconde note de lecture. *Lexikos*, 16: 293–308.
- Ndinga-Koumba-Binza, H.S. 2007. Gabonese language landscape: Survey and perspectives. *South African Journal of African Languages*, 27(1):97-116.
- Ndinga-Koumba-Binza, H.S. 2009. Alphabet et écriture: Aproche historique et cas des langues gabonaises. In J. Hubert & P.A. Mavoungou (Eds.). *Ecriture et standardisation des langues gabonaises*. Stellenbosch: Sun Press. 35–73.
- Ndinga-Koumba-Binza, H.S. & Roux, J.C. 2008. *Issues in writing Gabonese languages*. Paper presented at the First International Conference on African Languages and Literature, University of Botswana, Gaborone, 26–28 June 2008.
- Nielsen, S. 1994. *The bilingual LSP dictionary: Principles and practice for legal language*. Tübingen: Gunter Narr Verlag.
- Nkwenti-Azeh, B. 1995. The treatment of synonymy and cross-references in special-language dictionaries (SLDs). *Terminology*, 2:325–350.
- Nkwenti-Azeh, B. 1998. Information mediation: The interface between terminology and translation. In A. Kent (Ed.). *Encyclopedia of library and information science* 62. New York: Marcel Dekker. 157–170.
- Nsuka-Nkutsi, F. 1980. Quelques réflexes du proto bantu en punu. In F. Nsuka-Nkutsi (Ed.). *Eléments de description du punu, CRLS*. Lyon: Université de Lyon II. 193–245.

- Nyangone Assam, B. 2006. Dictionaries as teaching instruments for mother-tongue education: The case of Fang in Gabon. Unpublished DLitt thesis. Stellenbosch: University of Stellenbosch.
- Nyangone Assam, B. & Mavoungou, P.A. 2000. Lexicography in Gabon: A survey. *Lexikos*, 10:252–274.
- Nyangone Assam, B. & Ndinga-Koumba-Binza, H.S. 2008. *Lexicography and the French language in Gabon*. Paper presented at the 13th International Conference of AFRILEX, Bureau of the WAT, Stellenbosch, 1–3 July 2008.
- Nzang-Bie, Y. 2001. Vers une education multilingue au Gabon: Première approche.

 Revue Gabonaise des Sciences du Langage/Gabonese Journal of the

 Language Sciences, 2:17–29.
- Ogden, J. 1984. French in Gabon. Contemporary French Civilization, 8:339–348.
- Opitz, K. 1979. Technical dictionaries: Testing the requirements of the professional user. In R.R.K. Hartmann (Ed.). *Dictionaries and their users*. (Exeter Linguistic Studies 4). Exeter: University of Exeter.
- Opitz, K. 1995. Familiar problems, unorthodox solutions: How lexicography can aid LSP application. In G. Budin (Ed.). *Multilingualism in specialist communication*. Vienna: International Institute for Terminology Research. 1079–1091.
- Pambou, J.A. 1998. Le français au Gabon: Une langue à multiples statuts. *Iboogha*, 2: 127–149.
- Pedersen, P. 1995. The identification and selection of collocations in technical dictionaries. *Lexicographica*, 11:60–73.
- Pliny the Elder. 1974. *Natural history 10 vols*. Translated by H. Rackham.. London: W. Heinemann.
- Prinsloo, D.J. 1992. Lemmatisation of reflexives in Northern Sotho. *Lexikos*, 2:178–191.

- Prinsloo, D.J. 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.
- Prinsloo, D.J. 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.
- Prinsloo, D.J. 2003. *The compilation of electronic corpora, with special reference to the African languages*. Unpublished paper presented at the University of Stellenbosch.
- Putter, A.M. 1999. *Verklaringsmeganismes in kinderwoordeboeke*. Unpublished MA thesis. Potchefstroom: University of Potchefstroom.
- Ramagoshi, R.M. 2004. The use of dictionaries in the light of language teaching methods. *Lexikos*, 14:253–263.
- Raponda-Walker, A. 1932. Alphabet des idiomes gabonais. *Journal de la Société des Africanistes*, 3(2):305–314.
- Raponda-Walker, A. 1993. *Dictionnaire étymologique des noms propres gabonais*. Versailles: Classiques Africains.
- Raponda-Walker, A. 1995. *Dictionnaire français-mpongwe*. Versailles/Libreville: Classiques Africains/ Editions Raponda-Walker.
- Raponda-Walker, A. 1998. Les langues du Gabon. Libreville: Editions Raponda-Walker Multipress.
- Raponda-Walker, A. & Sillans, R. 1961. Plantes utiles: Essai d'inventaire et de concordances des noms vernaculaires et scientifiques des plantes spontanées et introduites du Gabon. Paris: Lechevalier.
- Reisch, G. 1503. Margarita philosophica. Freiburg: Joanne Schottu Argen.
- Rey, A. (Ed). 1988. Le micro Robert de poche: Dictionnaire d'apprentissage du français. Montréal: Editions Le Robert.

- Rey-Debove, J. 1971. Etude linguistique et sémiotique des dictionanaires français contemporains. Approaches to Semiotics 13. The Hague: Mouton.
- Richards, J.C. & Schmidt, R. 2002. *Longman dictionary of language teaching and applied linguistics*. London: Longman/Pearson Education.
- Riggs, F.W. 1989. Terminology and lexicography: Their complementarity.

 *International Journal of Lexicography, 2:89–110.**
- Rittaud-Hutinet, C. 1980. Lexique. In F. Nsuka-Nkutsi (Ed.). *Elements de description du punu*., Lyon: PUL. 193–245.
- Roberts, R.P. 1999. *Recent developments in lexicography*. Paper read at the VIII Curso Superior de Traduccion Ingles/Espanol. Valladolid: Universidad de Valladolid.
- Roberts, R.P. & Montgomery, C. 1996. The use of corpora in bilingual lexicography. In M. Gellerstam *et al.* 1996:457–464.
- Rossner, R. 1985. The learner as lexicographer. In R. Ilson (Ed.). *Dictionaries, lexicography and language learning*. (ELT Documents 120). Oxford: Pergamon Press and the British Council. 89–95.
- Roulet, G. 1866. La rivière Como au Gabon et les populations riveraines: Annales des voyages. Tome IV. Paris: E. Larose.
- Rundell, M. 1998. Recent trends in English pedagogical lexicography. *International Journal of Lexicography*, 11.4:315–412.
- Rundell, M. 1999. Dictionary use in production. *International Journal of Lexicography*,

 12.1:35–54.
- Rundell, M. et al. (Eds.). 2002. Macmillan English dictionary for advanced learners.

 Oxford: Bloomsbury Publishing.
- Salerno, L. 1999. Grammatical information in the bilingual dictionary: A study of five Italian-French dictionaries. *International Journal of Lexicography*, 12:209–222.

- Sandro, N. 1999. Mediostructures in bilingual LSP dictionaries. *Lexicographica*, 15, 90–113.
- Saphou-Bivigat, G. 2000. *Les emprunts du yilumbu au français: Mémoire de maitrise*. Unpublished MA thesis. Libreville. Université Omar Bongo.
- Saphou-Bivigat, G. 2002. Le dictionnaire encyclopédique: Théorie et modèle dans les langues gabonaises. In Emejulu (Ed.).p 174-186.
- Saphou-Bivigat, G. 2005. *Illustrations and functions in an encyclopaedic dictionary*. Workshop in metalexicography, Department of Afrikaans and Dutch, University of Stellenbosch.
- Saphou-Bivigat, G. & Ella, E.M. 2006. Les articles synopsis dans les langues gabonaises. *Lexikos*, 16: 270-279.
- Schaeder, B 1987. Germanistische lexikographie. Tübingen: Niemeyer.
- Schofield, P. 1982. Using the dictionary for comprehension. *TESOL Quarterly*, 16:185–194.
- Schofield, P. 1999. Dictionary use in reception. *International Journal of Lexicography*, 12.1:13–34.
- Schriver, K. 1997. Dynamics in document design. New York: John Wiley.
- Shcherba, L.V. 1940. Opyt obshchei teorii leksikografii. *Izvestiia Akademii Nauk SSSR*, Otdelenie literatury i iazyka 3:89–117. Translated by D.M.T. Cr. Farina (1995) as Towards a general theory of lexicography. *International Journal of Lexicography*, 8.4:314–50.
- Sherman, D. 1978. Special purpose dictionaries. Cahiers de lexicologie 32(1): 82-102.
- Silva, P. (Ed.). 1966. A dictionary of South African English on historical principles.

 Oxford: Oxford University Press, in association with the Dictionary Unit for South African English.
- Sinclair, J. (Ed.). 1988. Looking up: An account of the COBUILD project in lexical computing. London: Collins.

- Singh R.A 1982. *An introduction to lexicography*. Mysore: Central Institute of Indian Languages.
- Smit, M. 1996. Wiegand's metalexicography as a framework for multilingual, multicultural, explanatory music dictionary for South Africa. Unpublished DLitt thesis. Stellenbosch: University of Stellenbosch.
- Smit, M. 2000. Using frames in special-field lexicography: An ethnomusicological case study. *Lexikos*, 10.
- Sorensen, R. 1997. Review of Sandro Nielsen, 1994: The bilingual LSP dictionary: Principles and practice for legal language. *Lexicographica*, 13:303-305.
- Stark, M. 1990. *Dictionary workbooks: A critical evaluation of dictionary workbooks* for the foreign language learner. Dictionary use and needs of ESP students. Exeter: University of Exeter.
- Stein, G. 1984. Towards a theory of lexicography: Principles and/vs. practice in modern English dictionaries. In R.R.K. Hartmann (Ed.). 1984: 124–130.
- Stein, G. 1991. Illustrations in dictionaries. *International Journal of Lexicography*, 4(2):99–127.
- Stockley C., Oxlade C., Wertheim J. & Tomlins K. 2007. *The Usborne illustrated dictionary of physics*.
- Strevens, P. 1987. The effectiveness of learner's dictionaries. In R. Burchfield (Ed.). *Studies in lexicography*. Oxford: Clarendon Press. 76–93.
- Svensén, B. 1993. *Practical lexicography*. Oxford: Oxford University Press.
- Swain, M. 1995. Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.). *Principles and practice in applied linguistics*.Oxford: Oxford University Press. 125–144.
- Swanepoel, P.H. 1994. Problems, theories and methodologies in current lexicographic semantic research. Sixth International Euralex Congress held at the Free University of Amsterdam. 30 August 3 September 1994.

- Swanepoel, P.H. 2003. Dictionary typologies: A pragmatic approach. In P. van Sterkenberg (Ed.). *A practical guide to lexicography volume 6*. Amsterdam: Philadelphia. 44–69.
- Tarp, S. 1998. Leksikografie pa egne ben Fordelingsstrukturer og byggedele I et brugerorienteret perspective. *Hermes, Journal of linguistics*, 21:121–137.
- Tarp, S. 1999. Theoretical foundations of the so-called cross-reference structures. *Lexicographica 15*: 114-137.
- Tarp, S. 2000. Theoretical challenges to practical specialised lexicography. *Lexikos*, 10:189–208.
- Tarp, S. 2002. Basic elements of lexicographic theory. In Emejulu (Ed.). Jimacs-Hillman Publishers. 7-20.
- Tickoo, M.L. 1989. *Learner's dictionaries: State of the art.* (Anthology Series 23).

 Southeast Asian Ministers of Education Organisation. Singapore: RELC.
- Tollefson, J.W. 2000. Policy and ideology in the spread of English. In J.K. Hall & W.G. Eggington (Eds.). *The sociopolitics of English language teaching*. Clevedon: Multilingual Maters. 7–21.
- Tomaszczyk, J. 1984. *The culture-bound element in bilingual dictionaries*. Lexeter 83 proceedings. Tübingen: Max Niemeyer.
- Tomba Moussavou, F. 2007. *Metalexicographic criteria for a monolingual descriptive dictionary presenting the standard variety of Yipunu*.

 Unpublished doctoral dissertation. Stellenbosch: University of Stellenbosch.
- Tono, Y. 1989. Can a dictionary help you read better? In G. James (Ed.). *Lexicographers and their works*. (Exeter Linguistic Studies 14). Exeter: University of Exeter. 192–200.
- Tono, Y. 1996. *Using learner corpora for L2 lexicography: Information on collocational errors for EFL learners*. Lexicos 6 [Online]. Available from http://www.lancs.ac.uk/postgrad/tono/userstudy/lexicos6.html (2001, 29 Jan.).

- Van der Meer, G. 1999. Metaphors and Dictionaries: the Morass of Meaning, or How to Get Two Ideas for One. *International Journal of Lexicography* 12.3: 195-208.
- Van Wyk, E.B. 1995. Linguistic assumptions and lexicographic traditions in the African languages. *Lexikos*, 5:82–96.
- Waldron, S. 1962. Book reviews: Les plantes utiles du Gabon: Essai d'inventaire et de Concordance des Noms Vernaculaires et Scientifiques des Plantes Spontanées et Introduites, Description des Espèces, Propriétés Utilisations Économiques, Ethnographiques et Artistiques. *American Anthropologist*, 64(2):431–432.
- Walton, J., Barondess, J.A. & Lock, S. 1994. *The Oxford medical companion*. Oxford/New York/Tokyo: Oxford University Press.
- Watch, G. 1993. *Institut du Christ-Roi Souverain Prêtre*. Paris: Maison Bienheureux Daniel Brotier.
- Whitcut, J. 1986. The training of dictionary users. In R. Ilson (Ed.). Lexicography: An emerging international profession. Manchester: Manchester University Press. 111–122.
- Whitfield, J. 1993. Dictionary skills is not a four-letter word. *English Journal*, 82.8:38–40.
- Wiegand, H.E. 1983a. "Synonyms Appearing in Major Alphabetical Dictionaries of Contemporary German". Wiegand, Herbert E. 1999:113-138.
- Wiegand, H.E. 1983b. Überlegungen zu einer Theorie der lexikographischen Sprachbeschreibung: Germanistische Linguistik. In K. Hyldgaard-Jensen & A. Zettersten (Eds.). *Symposium zur Lexikographie/Symposium on lexicography*. Hildesheim: Georg Olms. 35–72.
- Wiegand, H.E. 1983c. Was ist eigentlich ein Lemma? Ein Beitrag zur Theorie der lexikographischen Sprachbeschreibung. Studien zur Neuhochdeutsheen Lexikographie III, Germanistische Linguistik, 1–4:401–474.

- Wiegand, H.E. 1984a. On the structure and contents of a general theory of lexicography. In R.R.K. Hartmann (Ed.). LEXeter 83 proceedings.Tübingen: Max Niemeyer. 13–28.
- Wiegand, H.E. 1984b. Prinzipien und Methoden historischen Lexikographie. In W. Besch et al. (Eds.). Sprachgeschichte: Ein Handbuch zur Geschichte der deutschen Sprache und ihrer Erforschung. Berlin: Handbücher zur Sprachund Kommunikationswissenschaft 2.1. 557–620.
- Wiegand, H.E. 1988. Was eigentlich ist Fachlexikographie? In H.M. Munoke *et al.* (Eds.). *Deutsche Wortschatz: Lexikologische Studien*. Berlin: De Gruyter. 729–790.
- Wiegand, H.E. 1989a. Aspekte der Makrostrutur im allgemeinen einsprachigen Wörterbücher: Alphabetische Anondnungsformen und ihre Probleme. In F.J. Hausmann *et al.* (Eds.). *International encyclopedia of lexicography*. Volume 1: 371–409. Berlin: De Gruyter.
- Wiegand, H.E. 1989b. Der Begriff der Mikrostruktur: Geschichte, Probleme. F.J. Hausmann *et al.* (Eds.). *International encyclopedia of lexicography*. Volume 1: 409–462. Berlin: De Gruyter.
- Wiegand, H.E. 1990. Printed dictionaries and their parts as texts: An overview of more recent research as an introduction. *Lexicographica*, 6:1–126.
- Wiegand, H.E. 1995. Lexikographische Texte in einsprachigen Lernerworterbuchern. Kritische Uberlegungen anlaslich des Erscheinens von Langenscheidts Grosworterbuch Deutsch als Fremdsprache. In: Popp, H. (Ed.). Deutsch als Fremdsprache. An den Quellen eines Faches. Festschrift für Gerhard Helbig zum 65 Geburtstag. Munchen: Iudicium, 463-499.
- Wiegand, H.E. 1996. A theory of lexicographic texts: An overview. *SA Journal of Linguistics*, 14(4):134–149.
- Wiegand, H.E. 1998. Wörterbuchforschung: Untersuchungen zur Wörterbuchbenutzung, zur Theorie, Geschichte, Kritik und Automatisierung der Lexikographie. Band 1. Berlin: De Gruyter.

- Wiegand, H.E. 1999. Semantics and lexicography. Selected studies (1976–1996). In (Eds.). Wörterbücher. Dictionaries. Dictionnaires. International Encyclopaedia of lexicography. Berlin/ Tübingen: de Gruyter Immken, A & Wolski, W Tübingen /Max Niemeyer.
- Wiegand, H.E. & Kučera. 1981. Brockhaus-Wahrig: Deutsches Wörterbuch auf dem Prufstand der praktischen Lexikologie. II. Teil: 1 Band (A-BT): 2. Band (BV-FZ). Kopenhagener Beiträge zur Germanistischen Linguistik, 18:94–217.
- Yeo, R. 2001 Encyclopaedic visions: Scientific dictionaries and enlightenment culture. Cambridge, U.K./New York: Cambridge University Press.
- Zedler, J.H. *Grosses vollständiges Universal-Lexicon aller Wissenschaften und Künste*. 64 vols [Online]. Available:

 http://www.askoxford.com/asktheexperts/jargonbuster/d/dictionary?view=
 uk (2006, 25 May).
- Zgusta, L. 1971. *Manual of lexicography*. The Hague: Mouton.
- Zgusta, L. 1980. *Theory and method in lexicography: Western and non-Western perspective*. South Carolina: Hornbeam Press.
- Zgusta, L. 1987. Translation equivalence in a bilingual dictionary. *Dictionaries* 9: 1-47.
- Zgusta, L. 1988. Lexicography today. Tübingen: Max Niemeyer.
- Zgusta, L. 1989. The role of dictionaries in the genesis and development of the standard. In: F.J. Hausmann *et al.* (Eds.). *International encyclopedia of lexicography*. Volume 1: 70–79. Berlin: De Gruyter.

APPENDIX A: Extract of Yilumbu General Wordlist

Yilumbu	French	English	
dikuumbi	Bateau	Boat/plane	
diweela	marriage Wedding		
Dukueku	Plage, océan Beach, ocean		
iliighu	Nourriture food		
ililulu	Lieu où l'on mange place where one eats		
Mabale	Masculin Male, masculine		
Mayombe	Forêt dense Dense forest		
Maghetu	Feminin Female, feminine		
mbuumba	génie de l'eau water genius		
mikaandi	Noix de plame	palm nuts	
Mongu	Colline, montagne	Hill, mountain	
mutulitsi	Artisan	blacksmith	
muyaama	Arc-en-ciel	rainbow	
ndiimbu	caoutchouc	rubber	
puungi	ivoire	ivory	
uyirugha oneself	se transformer to cha	ange into, to transform	
ulila	pleurer	to cry, to weep	
ulilila	pleurer	to cry, to weep	
uyi	manger	to eat	
uyina	dancer to dance		
wanda	sous, en bas, en dessous	under, below, beneath	

■<mwâna dyânga°; mwâna mbáátsi°; mwâna múndumba°; mwâna múrima°; mwâna Nzâmbi°> <(Ghâng.) mwâna díkaata°, mwâna ívhunda°> <(Ghâng.) mwâna ilétsi°, (Men.) mwâna ghééyi°, mwâna (múyééyi), mwâna káli°> <mwâna myóoghu°, mwâna muvhĭgha°; mwâna úbura°> <mwâna mútu°; mwâna íbulu°> <mwâna íbeedu°; mwâna ngânga°> <mwâna mvúbu°, mwâna nzághu°> <(Ghâng.) mwâna ngânda°, (Men.) mwâna vhéélu°> <(Ghâng.) mwâna bwâla°, (Men.) mwâna dĭmbu°; mwâna ífumba°; mwâna mâmbu°> <mwâna mvûmbi°, mwâna tsyaana (also/aussi yísyaana°) > <(Men.) mwâna mángala°, (Ghâng.) mwâna dyâmbu°>■

APPENDIX B: Samples of Place names (towns, villages & areas) in Yilumbu

Vemo (nom officiel, vili), muvheemu (en yilumbu) sens "blanc, immaculé, sans tache"

Pembi, sens "kaolin, argile blanche"

Mongo (officiel), moongu, sens "endroit surélevé"

Ditouba (nom officiel), Dituba, sens "Nzaambi adituba, Dieu l'a dit"

Ngoumba (nom officiel), nguumba, sens "porc-épic"

Moulongo (nom officiel), muloongu, "cf. peut être uloonga, conseiller"

Douigny (nom officiel), dwiinyi, nom d'un cours d'eau"

Moukengue (nom officiel), mukenga, sens ???

Mambi (nom officiel), maambi, "matières fécales"

Sanga (nom officiel), saanga, cf. peut être usangama être couché sur le dos

Kaki, "la foudre"

APPENDIX C: Samples of Yilumbu Phrases and Sentences

Yilumbu Nata **muluumbu** Bring the bucket! (container)! Mi Muluumbu I Mulumbu am (ethnic group) speaker. Biika (verb) baana Leave children these ba ngana! alone! Nata biika Bring some seats! (noun)! Kala (verb) Seat here! vhana! Ivhyoogha kala Forget about it! (it (adjective)! belongs to the past) Avayi kala He eats crabs.

bighuyi bi potsi 'nyuru: To feel a sense of peace; to sleep peacefully (Litt.:"food of cold body").

(noun).

biliighu bivavhakama vho divhuvhu *To choke with food* (Litt.: "food that is blocking your throat").

O dukueku west	A l'ouest	To the
O mabale right	A droite	To the
O mayombe	A l'est	To the east
O maghetu	A gauche	To the left
O mongu north	Au nord	To the
O wanda south	Au sud	To the

uboka na biseengu: To be well and truly insulted (Litt.: "to kill with insults"). **ukutula biluuntsi:** To inspire, to open the mind (Litt.: "to untie the spirits").

APPENDIX D: Wordlist of Flora Vocabulary

DIBALA(5), MABALA(pl). = Parasclier(5)

DIBÉLA -> DIBÓLA (MWIRI) = Fr?; arbuste diszmes

DIBOGHA: Arbuste sacré qui pousse [fumides.

frincipalement au GABON. L'écorce des racines
est utilisée par les BWITISTES comme stupefiant pendant leurs rituels.

DIFÍRIOU DIFYDORU (PUNU); MUBUSSI (LUMBU) = oignon indigene; L'ecorce et les fruits de cet arbre Aauvage sont utilisés dans l'assaisonnement des mets.

DIFITSI DIGHEMBI: Mousse du fruit DIGHEHBI, cetili-See par nos ancêtes pour laver le linge. La monsse de l'e même fruit DIGHEMBI servait à tuer les prissons des rivières, et également comme vomitif.

DIKON 1216) MAKOND21(pl) = anamas. (LUMBU)

DILANGA DI FUBU = Anamas (PUNU).

MALANGA(P)

DILANGA, = Tarot(s) (tubercule). (PUNU + LUMBU).

DILENGI(s), MALENGI(pl) = citronille(s) (PUNU + LUMBU).

DILIMAGHU(s) MALIMAGHU(pl) = citron(s).

DIALI(s) MARLI(pl). | = citron(s). (PUNU).

DIRAMBA ...?

Disisi(s), MASISI(pl) = plante herbacee assimilée à la eanne saurage; plante médicinale s'galement pour les soins des rhumes, otites, conjonctivites, plaies.

DIVOKA(S), MAVOKA(pl) (PUNU) ? Avocat(S).
DUVOKA(S) MAVOKA (pl) (LUHBU)

W)

DIÝOMBU(S), MAYOMBU(pl): sorte de plante réréalière produisant de petits fruits consommés par les oiseaux. DONGILA (PUNU), DUNGWENA(LUMBU) = Caméléon -DUGHEERI (PUNU); TEERI (LUMBU) grains de courge. DUNUNGU(S), NUNGU(pl) PUNU (DUSAFU, TSISAFU (LUMBU) = ATANGATS). DUVHINDA (S), TSI PINDA (pl) = Arachide(S). LUTBU DUVHINDA(S) PINDA(pl) = Arachide(S) DUVHUNGA(S), TSI PUNGA(PI). LUMBU = arbustedont l'écorce est utilisée pour faire des fibres textiles -DYALISAAGHU (S), MALISAAGHU (WMBU) = CITRON(S) MUGHUMA(S), BIKWANGA(pl) ?- (LUMBU)
MUGHUMA(S) MIGHUMA (pl) J BATON(S) demanioc (ponu ILEMBI I NGUTI, I MAXAKA = } feuille de manior. NDIMBU (LUMBU), NDAMBU (PUNU) = arbuste ne produisant pas de tubercule. NGUTI, MAYAKA (LUMBU) = at arbuste produisant des tubercules de manioc.

TTEBI(5), BITEBI

DIGHONDI(S), MAGHONDI(pl) Just Bananier(s); aussi bienque
regime(s) de bananes et le

doigt de banane (le dright de banane enfunu =
nupala)

- MALÉLENGA = 1/1/100 Presto, très vite, très urgemment. LENGA = fais vite - déféche-toi-
- MA VASA. MAVA SUGHULA DUNYURU. = Feuilles
 en forme de cœur qui p dont la liane pousse en
 for brousse. Elles sont comestibles et sont utilisées
 pour : laver les juneaux; enterrer les juneaux;
 la ver le ventre et le corps.
 - MARIKU, MADESU = Havicot toutes varietes. L(français) L (Portugais?).
 - .- DITOONBI(S), MATOOMBI(pl). mwiri Latabassa :
 sortier de palmier des zones la gunaires qui donne
 la paille utilisée pour la converture des toits.
 - MBAKA (MIXIRI) = arbre fournissant du Latex (Sève).
 - DUBAMBA(s), TSIMBAMBA(pl) = le rotin matériau de vannerie.
 - MBASU TSI PEYHI (O YI Vharama = Yîmbi.) Ava Vha Lula KAFI : Epreuve du feu permetant de juger la femme accusée d'adultère.

& The 2 to be exceleted to marion (for over)

- MBIGHA: MWIRI OBENCA BAVASUGHULANGA DUNYURU: arbre rouge utilisé pour laver le corps, pombe puritier.

- 3) MUKUMI (5), MIKUMI : arbre de forêt equatoriale. Essence très exploitée pour l'exportation, et pour la fabrication de planches, contreplaqués et membles.
 - TIUKUMU: ? TIUPITU? Torche faite avec de la resine?

 MUKUMU: Apport matériel et financier auprès de la future belle famille. Cet apporte précède celui qui consacre les françailles.
 - MUKWISI(S), MIKWISI(pl) = DISISI(S), MASISI(pl) = Canne
 sauvage extenti

 nom scientifique: AFROMAMUM -
 - MULOMBA(S), MILOMBA(pl) = arbre au bois tendre, sorte de pin parasol dont on se sert pour faire des planches éclatées.
 - MULONDU AVYAKANA NA DIBOGHA = MULONDU est

 différent du DIBOGHA
 MULONDU : Liane dont les racines sont pulpeuses

 et sucrées ; elles sont consommées avec la Kola

 on le DIBOGHA -

MUMANGA, MIMANGA = arbrellet fruit(s) = mangue(s), manguier(s).
TÂNGA?

MUPOGHU(S), MIPOGHU(pl) = légume(s) toutes variétés.

MUVENI, MIVENI (mbitsi) = poisson d'eau salée à chaire tendre, avec beaucoup d'arêtes. Voisin de la béaune.

MUVÉNZA. MIVENZA (MWIRI) = arbre de la forêt dont l'écorce est utilisée comme purgatif et vernifuge.

MUVHIGHA, BANHIGHA = Esclave(s).

MUVHIGHA, MIVHIGHA (MWIRI) = anbre?

MUVHINDI, MIVHINDI = mollet(s).

MUVHINDU, MIVHINDU (MWIRI) = arbre(s) grosse essence de la forêt exploitée comme bois divers.

MUVHORA, MIVHORA = Avocatier(s).

MUVINDU DIMBU: (YIP) MUVINIDISI = arbre, espèce plantée?

MWEMA, MYÉMA = paletuvier(s).

MWIBA, MIBA(MWA)= Anacardier(s). of 7 MUDIKA-(anbre)

2l produit une sorte mangue dont la pulpe
est comestible et le noyau sert à faire l'odika

TSIPOGHA au lieu de TSIPOGHASI = fruits d'un certain arbre, rond de la forme et la taille du fruit à pain. Les graines sont utilisées pour faire des sauces.

NAAMA? Cela pourrait signifier: Coller, s'agripper infinitif: & GHU NAAMA

N-B. GHU en LUMBU et PUNU = TO (Anglais); ER, IR.

NDUNGU, TSINDUNGU (MWIRI): arbre de la forêt qui a de grosses épines. Il est exploite pour faire des planches.

(5), POGHA: vir plus haut.

Ρόκυ, ΤΩΡόκο: ?

SEVA: AVAIIGHU (au lieu de AVALIILA) nana muspoghu Se prepare comme du legume.

GHU SEVA = rire.

SHANTÂNYA, TSISHANTÂNYA (emprunt) = châtaigne(s).

Tiyi : ?

TOBU? DI TOBU, MATOBU: poisson d'eau salée pouvant peser plus de 100kgs = MEROU.

TÔMBI = jus du palmier à paille; ce palmier pousse dans les jones lagunaires

TO'OBU : ?.

TOODU (MWIRI) --- ?

TSANGALOMBA ?

TSIKEFU TSI TSOLI = petit priment.

YAGHA, BYAGHA? (MWIRI): MILUNDA MYANDI MIVABUGHA IFUMU.

MIVASUGHULA IFUMU = arbre dont les fruits sont utilisés

pour calmer les maux de ventre; et pour lavement.

NB: Des points d'Interrogation appelleut de plus amples informations et precisions.

@ Les mots soulignes out appele des rectificatifs.

(2)

- KOROSOOLA:

DUKOROSCOLA (S), MIKOROSCOLA = fruit (s) du corossolier -

MUKOROSOOLA(S), MIKOROSOOLA = Corossolier (s)-

- _ KÚTA: arbuste très dur des zones de plaine_ __ INGASALEVA:?
- _ MAGHAYI MA LANGA = Les femilles de Taro +. DIGHAYI(S) DI DILANGA. La femille de Taro.
- MAGHAYI MA MUVINDISI, MAGHAYI MA MUKÔNDO,
 TSI KEFU TSI MBALA NA DIYUYURA, UKUROSI,
 MAVABUGHA YIKOTSULU:
 Les femilles de MUVINDISI, du Cotonnier, le gingembre et bound la canne sauvage (DISISI); tout
 cela bomilli, le jus sent à soigner la toux.
- MAGHAYI MA NGUNGU: grandes femilles sauvages servant à allacher la préparation du manive et des bâtons de manive.
- MAGNAGHALA MA MBOMA = Les écarlles de BOA. DIGHAGHALA(S)
- HADILALANDZI(S/, MALALANDZI = Le(S) orange(S)
- MALEENDI MA BWITI_MUSOGHU(S), MISOGHU(pl) U/MA

 DIBA/MABA BA VABONGA = Accessoires

 d'accordinement de BWITISTE à partir des jeunes rameanx de palmier.

MBÜNDU. MWIRI MBUNDU U KATSE GHAMBU NA MUSOMFI VHO BURLA BWALA.

L'arbre MBUNDU ne doit jamais manquer à la femme qui vient d'acconcher.

- -MUBADAME = Le badamier (emprunt).
- MUBUBE (MWIRI). : arbre de la forêt.
- MUDIKA : CHOCOlat indigène. Fruit de l'anacardier dont on écrase le noyau après sechage. Cette ponche est utilisée pour faire des sauces "ODIKA".

D. Designe une ceinture de raphia, on de coquillages portée par les danseuses on danseurs.

- MUGHALA NGANGA: arbre dont l'éconce sechée sert de matériau de construction (les murs des cases).
 - MUGHANA (MWIRI) = arbre dont le bois est apprecie comme de bois de chauffage - L'arbuste sert à faire des clôtures des champs.
 - MUGHOHA (MWIRI) = antone apprécie comme bois de chauffage-
 - MUGHUMALANGA: MWIRI MUNENI. AVABURA MIKÔNDU:

 KAPOKIER. Il produit un du
 vet vegetal utilise pour rembourrentes coussins.
 - TUKOKA (S), MIKOKA (pl) :/emprunt) = cocotier(s).
 - MUKONGO SULI = oiseau : fauvette.

****3/

MUPOGHU BI TUDI = legume - aubergine.

- MUSAASA, MISAASA (MWIRI) = et arbre dont l'évorce et la Seve sont jaunes. Son bois est tendre.

MUTSAFU(S), MITSAFU(A) PUNU = Z MUSAFU(S), MISAFU(pl) = Atangatier(S).

MUNDZENGA(S), MINIDZENGA(PI) = DIKONTSI(S), MAKONITSI(PI) = MUNDZENGA(S) MID

MUSUUNGU TÂNGA : Canne à sucre-

MUSUNGU = le jus de canne à sucre et la boisson obtenue après fermentation de ce jus-

MUSENGA(S), MISENGA(pí) = DIBALA(S), MABALA(pl) = parasolier(s)-

DIBALA(S), MABACA(pl) = planche(s).

MBOLOKU = Siège constitué de deux planches (dossier et fiège) on se détendent les vieux.

MBOLDONGU = aubergine (les petites).

- MUTELI (MWIRI): arbre des génies fréquente par les perroquets qui y construisent leurs mids.
- DITOMBI(S), MATOMBI(pl) LUMBU = Nervure(s) frincipale(s) de la palme du palmier qui produit la paille.
- ... MUTOMBU (s), MITOMBU (pl) LUMBU = Poisson = BECUNE
- MUVEENGI (S), MIVEENGI (pl) (mwiri ubenga) = arbre en bois rouge, arbre des génies andécorce lisse.
- MUVÊNGA (MWIRI) = arbre de la forêt, arbre des génies repère des perroquets.

NEFA: DONGU DONGU (MUPOGHU) = légume; GOMBO.

Ses feuilles et ses gousses (jeunes) sont comes.

tibles.

NFUGA, TSINFUGHA = Liands) asseg grosse(s) de la forêt.

She donc Certaines espèces donnent un sue
buvable; d'antres produisent du Latex.

' Latex = NDIMBU-

NDÂMBU = boule de latex, baller, pelote.

NDÂMBU = nouvriture, plats offerts à une personne chia

NGATSI, TSINIGATSI = noix de palme. fruits de DIBA, HABA.

NYÉLI (MWIRI) = arbre produisant des fruits comestibles arbre de la forêt.

NYOKI (MWIRI) = arbre de la forêt dont les écorces sont utilisées comme vomitif.

NYONDO (MULUNDA) = fruits en grappes de la forêt.

PAVA, TSIPÁVA (MWIRI): MULUNDA NDI ANA TSITSENDI NANA MULUNDA MUSHANTANYA - = arbre de la

forêt, cultive dans les villages également dont le fruit est reconvert de une peau rugueuse, tou. me celle da la châtaigne.

PWEBI ou lieu de PEVHI: arbre dont l'écoree est utilsee comme médicament contre les mans de ventre, comme vouitif et purgatif.