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A Microstructural Programme for Dictionaries in Fang

By

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Dissertation presented for the **Degree of Doctor** in Literature (**Lexicography**)

Promotor: **Prof. Rufus H. Gouws**

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Declaration

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

Stellenbosch, December 2007

Summary/Opsomming

English

This dissertation focuses on *a microstructural programme for dictionaries in Fang*. The author uses the theoretical framework of the German metalexicographer H.E. Wiegand as basis to devise a model for the investigation of different kinds of microstructures, articles, data and items to be considered for future dictionaries in Fang, directed at the specific needs and reference skills of the target users. This model makes provision for assistance with other components of the dictionary, i.e. data distribution, outer texts, dictionary functions, access structure, addressing structure and mediostructure to organize the microstructural data within the dictionary article. The dissertation is structured as follows:

Chapter 1 presents the problem statement. This chapter gives a description of the linguistic situation of the Gabonese languages, a presentation of Fang dialects, an inventory of the work done on Fang, the lexicographic aspects, the aims and objectives of the research, and the research hypotheses.

Chapter 2 gives a brief overview of Wiegand's general theory of lexicography. In his work, Wiegand discusses a number of topics relevant to this research, namely dictionary structures, access structure, addressing structure, data distribution structure, macrostructure, microstructure, microarchitecture, outer texts, frame structure, dictionary functions, dictionary typology, needs, reference skills of the user, etc.

Chapter 3 concentrates on the corpus and the microstructure. The use of a corpus is of great importance in the compilation of the microstructure of a dictionary. The discussion deals with the identification of microstructural elements (sense distinction, translation equivalents, authentic examples, collocations, idioms, etc.) by means of a corpus.

Chapter 4, treating dictionary functions, focuses on aspects such as the genuine purpose of the dictionary, characteristics of the users and users' needs. These aspects have an impact on the contents of the dictionary, i.e. the data to be included in the dictionary article.

Chapter 5 deals with the major structures of the dictionary. The different structures of a dictionary, i.e. data distribution, central list, macrostructure, microstructure, access structure, addressing structure, mediostructure and outer texts are briefly discussed.. This chapter also focuses on data to be included in the front and back matter texts in the dictionary with the planned microstructural programme.

Chapter 6 treats different types of articles and lexical items to be included in the dictionary. The focus is on single articles, complex articles, synopsis articles, lexical items, sublexical items and multiword lexical items.

Chapter 7 concentrates on the nature of the microstructure and the different types of microstructure. The type(s) of microstructure used in the dictionary enhance the retrievability of the information on the part of the users. For example, in the planning of a dictionary, the lexicographer(s) has (have) to decide between different types of microstructures, i.e. an integrated, unintegrated or semi-integrated microstructure.

Chapter 8 focuses on the comment on form. A discussion is given of those data types reflecting on the form of the lemma sign, i.e. phonetics, pronunciation, spelling and grammar.

Chapter 9 concentrates on the comment on semantics. Under discussion are those data types reflecting the semantic and pragmatic features of the lexical item represented by the lemma, i.e. paraphrase of meaning, equivalents, antonymy, polysemy, hyponymy, etymology, pictorial illustrations, usage notes and glosses.

Chapter 10 focuses on the guide structures of the dictionary and aspects like access structure, addressing structure and mediostructure are treated. These aspects are necessary for the dictionary consultation procedure. For example, by means of these guide structures the user can have rapid access to the desired data. In this chapter, aspects like front matter text, back matter text, minigrammar etc. are discussed.

Afrikaans

Hierdie proefskrif fokus op die mikrostrukturele program vir woordeboeke in Fang. Die skrywer gebruik die teoretiese raamwerk van die Duitse metaleksikograaf H.E. Wiegand as basis om 'n model te ontwerp vir die ondersoek van verskillende soorte mikrostrukture, artikels, data en items wat oorweeg moet word vir toekomstige woordeboeke in Fang, gerig op die spesifieke behoeftes en naslaanvaardighede van die teikengebruikers. Hierdie model maak voorsiening vir hulp met ander komponente van die woordeboek, d.w.s. dataverspreiding, buitetekste, woordeboekfunksies, toegangstruktuur, adresseringstruktuur en mediostruktuur om die mikrostrukturele gegewens binne die woordeboekartikel te orden. Die proefskrif is soos volg gestruktureer:

Hoofstuk 1 gee die probleemstelling. Hierdie hoofstuk bied 'n beskrywing van die taalkundige toestand van die Gabonese tale, 'n behandeling van die Fangdialekte, 'n opgawe van die werk wat oor Fang gedoen is, die leksikografiese aspekte, die doelstellings en oogmerke van die navorsing, en die navorsingshipoteses.

Hoofstuk 2 gee 'n kort oorsig van Wiegand se algemene teorie van die leksikografie. In sy werk bespreek Wiegand 'n aantal onderwerpe wat ter sake is vir hierdie navorsing, naamlik woordeboekstrukture, toegangstruktuur, adresseringstruktuur, dataverspreidingstruktuur, makrostruktuur, mikrostruktuur, mikroargitektuur, buitetekste, raamstruktuur, woordeboekfunksies, woordeboektipologie, behoeftes, naslaanvaardighede van die gebruiker, e.s.m.

Hoofstuk 3 gee aandag aan die korpus en die mikrostruktuur. Die gebruik van 'n korpus is van groot belang by die samestelling van die mikrostruktuur van 'n woordeboek. Die bespreking behandel die identifikasie van mikrostrukturele elemente (betekenisonderskeiding, vertaalekwivalente, oorspronklike voorbeelde, kollokasies, idiome, e.s.m.) deur middel van 'n korpus.

Hoofstuk 4, wat gaan oor woordeboekfunksies, fokus op aspekte soos die werklike doel van die woordeboek, eienskappe van die gebruikers en gebruikers se behoeftes. Hierdie aspekte het 'n uitwerking op die inhoud van die woordeboek, d.w.s. die data wat in die woordeboekartikel ingesluit moet word.

Hoofstuk 5 behandel die hoofstrukture van die woordeboek. Die verskillende strukture van 'n woordeboek, d.w.s. dataverspreiding, sentrale lys, makrostruktuur, mikrostruktuur, toegangstruktuur, adresseringstruktuur, mediostruktuur en buitetekste, word kortliks bespreek. Hierdie hoofstuk fokus ook op die data wat in die voor- en agterwerktekste in die beplande mikrostrukturele program ingesluit moet word

Hoofstuk 6 gaan oor verskillende soorte artikels en leksikale items wat in die woordeboek ingesluit moet word. Die fokus is op enkelvoudige artikels, komplekse artikels en oorsigtelike artikels, leksikale items, subleksikale items en meerwoordige leksikale items.

Hoofstuk 7 gee aandag aan die aard van die mikrostruktuur en die verskillende soorte mikrostrukture. Die soort mikrostruktuur (-ture) wat in die woordeboek gebruik word, verhoog die herwinning van die inligting aan die kant van die gebruikers. Byvoorbeeld, by die beplanning van 'n woordeboek moet die leksikograaf (-we) besluit tussen die verskillende soorte mikrostrukture, d.w.s. 'n geïntegreerde, ongeïntegreerde of semigeïntegreerde mikrostruktuur.

Hoofstuk 8 fokus op die vormkommentaar 'n Bespreking word gegee van daardie datasoorte wat gerig is op die vorm van die lemmateken, d.w.s. fonetiek, uitspraak, spelling en grammatika.

Hoofstuk 9 gee aandag aan die semantiese kommentaar. Onder bespreking is daardie datasoorte wat gerig is op die semantiese en pragmatiese eienskappe van die leksikale item wat deur die lemma verteenwoordig word, d.w.s. parafrase van die betekenis, ekwivalente, teenoorgesteldheid, polisemie, hiponimie, etimologie, illustrasieprente, gebruiksnotas en glosse.

Hoofstuk 10 fokus op die gidsstrukture van die woordeboek en aspekte soos die toegang-struktuur, adresseringstruktuur en mediostruktuur word bespreek. Hierdie strukture is nodig vir die woordeboekraadplegingsprosedure. Byvoorbeeld, deur middel van hierdie gidsstrukture kan die gebruiker vinnige toegang verkry tot die gewenste gegewens. In hierdie hoofstuk word aspekte soos voorwerkteks, agterwerkteks, minigrammatika, e.s.m. bespreek.

Dedication

I would like to dedicate my work to the EBANEGA family, particularly my Dad Rémy-Anicet EBANEGA EKWA, Moms EBANEGA Jacqueline and EBANEGA Marie-Yvonne, and Sister BILOGHO-Bi EBANEGA Léa-Pulcherie. Thank you Dad, mothers and sister for encouraging and supporting me to pursue my doctoral studies. Without you, I would not have had the opportunity to study at the Stellenbosch University.

Table of contents

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I thank God for enabling me to achieve all that I have achieved, and I thank my parents for their long-distant support to whom I dedicate this dissertation.

Abbreviations & Symbols

Abbreviations

(COBUILD) Collins Cobuild English Language Dictionary

(CULD) Chambers Universal Learners' Dictionary

(COHFD) Concise Oxford Hachette French Dictionary: French-English/English-French

(DSAE)Dictionary of South African English on Historical Principles

(GR) Grand Robert de la Langue Française

(GW) Groot Woordeboek/Major Dictionary

(GDXEA) The Greater Dictionary of isiXhosa: *IsiXhosa-English-Afrikaans*

(HAT) Verklarende Handwoordeboek van die Afrikaanse Taal

(HCFED) Harrap's Concise French and English Dictionary

(HWDG) Handwörterbuch der Deutschen Gegenwartssprache (Concise Dictionary of Present-day German)

(LASD)Longman Active Study Dictionary

(LDEL) Dictionary of the English Language

(LDOCE) Longman Dictionary of Contemporary English

(MR) Micro Robert: Dictionnaire d'apprentissage du Français

(OALD) Oxford Advanced Learner's Dictionary

(OALDCE) Oxford Advanced Learner's Dictionary of Current English

(OALED) Oxford Advanced Learners Encyclopedic Dictionary

(ODEP) Oxford English Dictionary of proverbs

(OHFD) Oxford-Hachette French Dictionary

(OID) The Oxford Italian Dictionary Italian-English/English-Italian

(POD) Pocket Oxford Dictionary

(SADJS) Chamberrs-Macmillan South African Dictionary Junior Secondary

(SAOSD)The South African Oxford School Dictionary

(TAW) Tweetalige Aanleerderswoordeboek / Bilingual Learner's Dictionary

(TLFi) Trésor de la Langue Française informatisé

(VIALD) Via Africa Learner's Dictionary

(WAT X) Woordeboek Van Die Afrikaans Taal. Deel X

Symbols

1/2,3/4 ...noun classes 1 &2, 3 & 4,etc.

1. 2. .. indicate polysemous senses of the word

1.2... differentiate homonyms

. full stop, placed at the end of entry, item, sentence, abbreviation.

, introduces a translation equivalent

( ) introduces labels

[...] symbolizes pronunciation

{... } symbolizes a reference entry to the author and year of publication

´ ` high tone and low tone

/ separating different genders of classes

- indicates the verb as lexical item to be included as lemma.

— indicates the verb stem as lexical item to be included as lemma

□ indicates the definitions and their translations equivalents

⊙ indicates the examples or collocations and their translation equivalents

◈ indicates idioms and their translation equivalents

⊳ indicates proverbs and their translation equivalents

+ indicates cultural data and their translation equivalents

→ indicates cross-reference

// indicates opposing/contrasting

⇒ indicates the pictorial illustration

‹ indicates the origine of the word

* indicates the proto form of the word

◊ indicates the quotation

Chapter 1: Introduction and contextualisation of the research

1.1 Introduction

The present situation of lexicography in Gabon encompasses a description of the linguistic situation in and the language policy of Gabon. The preliminary literature review reveals a wide range of lexicographical reference books. Most of them are directed at teaching Gabonese languages and at communicating with indigenous people. The pioneers in the compilation of dictionaries in Gabonese local languages were missionaries or colonial administrators. The existing dictionaries produced by them are bilingual dictionaries. In fact, the main weak point of those works was that they were hardly ever based on sound lexicographic principle. The situation with regard to existing dictionaries within the Gabonese local languages does not, lexicographically speaking, bear witness of sophistication. These dictionaries fail to provide the users with any useful information, such as pronunciation, parts of speech, word classes, equivalents and definitions. Faced with this complexity, many users find these dictionaries difficult to use; they no longer try to understand what is going on in them.

Herbert Ernst Wiegand of Heidelberg, Germany, is one of the most respected and best-known theoretical lexicographers of our time. His theory is reconstructed and applied in this thesis. The theory of HE Wiegand will be combined with insights from the work of Tarp with regard to dictionary functions, and with the work of Gouws and Prinsloo, who apply the general theory of lexicography to the African lexicographic environment. The theory of Wiegand will be applied to the Gabonese milieu in order to respond to the needs of the intended target users. Hausmann and Wiegand (1989) have proposed a theoretical model for the component parts and structures of dictionaries, with a focus on the macrostructure, the microstructure, the access structure, the addressing structure, the mediostructure and the outer texts.

In this work, I will focus on one of the component parts of a dictionary, i.e. the **microstructure**. Other component parts of dictionaries will form part of this thesis, but only so far as their links to the microstructure are concerned. The ***microstructural programme for dictionaries in Fang*** is the title of this research project. The aim of this work is to provide the users of Fang with a microstructural programme that will be useful for any dictionary so that the speakers of Fang can empower their own language. This will help the users of Fang to access what they are looking for in the dictionary and to fulfil their real needs. As one of the most important ordering structures of a dictionary, the microstructure is regarded as an instrument to help achieve the genuine purpose of a dictionary. When compiling a dictionary, lexicographer(s) must be aware of decisions regarding the type of microstructure and types of data to be employed in the dictionary. Yet again, the typological classification of the dictionary, the users, their needs and reference skills, the situation in which the dictionary is used and the function(s) of the dictionary should influence these decisions.

The main reasons that led me to decide on this topic are firstly that lexicography, as a discipline aimed at compiling dictionaries, is not well known in Gabon. Secondly, the first dictionaries compiled in Fang were bilingual or translation dictionaries and these dictionaries failed in their presentation and selection of microstructural data. Thirdly, these dictionaries do not reflect sound lexicographical principles. Fourthly, there is not a culture of dictionary use in Gabon; certain reference skills are missing among the users of Fang. Fifthly, Gabon, as the majority of African countries, is a country where children begin and pursue their education in a foreign language, which is a result of colonisation. Therefore some indigenous Gabonese languages are threatened by extinction and people distance themselves from these languages in favour of international languages (English, French, Spanish, Portuguese, etc.). The sixth and last reason for choosing this topic is the role played by any dictionary in everyday life. The reason for choosing dictionaries in Fang results from the fact that knowledge of a language is available through dictionaries. To study a language, one needs a dictionary. A dictionary tries to explain what happens in the language.

The development of a country is possible through tourism and trade and the dictionary establishes a bridge between tourism and trade. Dictionaries give the community the possibility to evaluate their language. A dictionary also is a container of language, which reflects the culture. Dictionaries give support to the communication process. They play a part as functional instruments of language empowerment within three areas of knowledge related to literacy studies: communication, literacy and language learning.

Gabonese people in general and Fang people in particular live in a culturally and linguistically diverse society with more than 40 languages. In this regard, lexicography and bilingual dictionaries can make a vital contribution to the process of building a nation out of the diverse speech communities and cultures in Gabon.

The qualitative method will be used in developing the planned microstructural programme. The aim is to investigate the type(s) of microstructure(s) and the types of data to be included in dictionaries in Fang. A questionnaire was used among Gabonese students at the University of Stellenbosch and the Cape Peninsula University of Technology to establish their knowledge of and needs for typical data to be included in the dictionary.

This research will not give different microstructural programmes for different dictionaries. The focus is on a microstructural programme with reference to hybrid dictionaries. This programme will include different types of data so that it can be used for other dictionaries. Therefore I am discussing one comprehensive programme, i.e. a programme that includes different types of data and, from this one programme, different programmes for individual dictionaries can be drawn.

Hybrid dictionaries provide the models for the planned microstructural programme. The planned dictionaries will have features of both monolingual and bilingual dictionaries.

The hybrid type will play an extremely important role in a Gabonese environment in general and in Fang groups in particular; it can be perceived as the key instrument in the communication between different groups and speech communities. In this regard, the planned microstructural programme will focus on providing data such as pronunciation, orthography, paraphrase of meaning, translation equivalents, etc.

Fang, which is our concern within the framework of this research, is not separated from these facts. The Fang community counts 243 365 members. As in the case of most of the Gabonese languages, Fang faces rural depopulation towards urban areas. A total of 62.5% of Fang people live in urban areas, which differs from the situation in countries like Mali, Burkina-Faso and Cameroon, near to Gabon, where most of people stay attached to rural areas. As a result, most of the Gabonese languages, and Fang in particularly, are endangered languages. The exodus to the cities has serious consequences that benefit French, which is Gabon's official language, and the only language used in the social, political and economical domains.

Like the majority of languages that have regional varieties, Fang also has several varieties. According to the geographical-administrative classification proposed by Kwenzi-Mickala (1998), Fang has six dominant varieties. These are spoken in five provinces in Gabon, namely Estuaire, Moyen-Ogooué, Ogooué-Ivindo, Ogooué-Maritime and Woleu-Ntem, and predominantly in the following regions: Lambaréné, Ndjolé (Fang-Atsi), Libreville, Kango, Port-Gentil (Fang-Mekè), Minvoul (Fang-Mvai), Cocobeach, Mitzic, Medouneu (Fang-Okak), Oyem, Bitam (Fang-Ntumu), Makokou, Oven (Fang-Nzaman); the dialect Fang-Ntumu, spoken in the ninth province of Gabon, is the strongest and the one dialect that has succeeded in conserving linguistic homogeneity by withstanding colonial influences. It is necessary to note that, in the nine provinces in Gabon, Fang is spoken in five, with evidence of dialectal variants. In the other provinces, Estuaire for example, one notes that the Fang used here was in contact with Mpongwé of Libreville in the 19th century and, at present, it shows numerous linguistic and colonial influences. Evidence of this same phenomenon is also found in the other provinces, such as Moyen-Ogooué, Ogooué-Ivindo and Ogooué-Maritime.

Of all the Fang varieties, Fang-Ntumu has the biggest collection of research and scholarly works, e.g. grammars and phonological descriptions.

In addition to the foregoing, there is mutual understanding between these varieties. However, it is not always directed. In fact, one can note that speakers from the centre of Gabon will hardly be able to communicate with those from north and vice versa, while those from the east will easily communicate with those from the north or vice versa. These sub-variations, which are always noticeable, affect grammatical and lexical aspects without unsettling the global structure of the language.

On the whole, the Fang community is regarded as a dynamic group in the practice of their language. From a sample of 1 000 children, Idiata (2003) notes that:

- around 660 (66%) speak their mother tongue fluently;
- about 220 children (22%) speak their mother tongue imperfectly;
- only 120 children (12%) declare that they do not use their mother tongue in certain communication situations.

From the global sample of more than 1 200 speakers distributed among the six varieties of Fang, Nzang Bié (2004) shows that more than 70% declare that they speak their mother tongue fluently. So, the lack of lexicographical reference works reflecting sound lexicographical principles could not be justified by "linguistic lethargy". Fang is a language that is also spoken in other central African countries, namely Equatorial Guinea, Cameroon, Congo and the Republic of Central Africa.

In this research project, a model will be formulated for a dictionary with Fang and French as language pair. It will be a monoscopal dictionary with Fang as source language. The term *monoscopal* will be used as in Gouws (2001a). According to Gouws, a dictionary can be monoscopal with one range or direction (from language A to language B), or biscopal with two ranges or directions (from language A to language B and from language B to language A). If a monoscopal dictionary is

compiled (A > B) in a systematic way, it could help the lexicographer to make another dictionary containing the second direction (B > A). The compilation of a monoscopal dictionary is the ideal situation, which implies that, for a given language pair, a polyfunctional dictionary should have two volumes and each volume should be monoscopal (Gouws, 2001a). The way Hausmann and Werner (1991) use the terms *monoscopal* and *biscopal*, should not be confused with *mono-* and *bidirectional.* According to them, *mono-* and *bidirectional* refer to the targeted dictionary user. A dictionary therefore is monodirectional when it is targeting only one category of users (mother-tongue speakers of the source language, for instance) and bidirectional when it is targeting two categories of users (mother-tongue speakers of the source and the target language). However, in the common usage, mono- and bidirectional are synonyms for *mono-* and *biscopal.*

The choice to use Fang as source language results from the fact that the Fang community is regarded as a dynamic group in the practice of their language and the majority of Fang fluently communicate in their mother tongue (cf. Idiata, 2003; Nzang-Bié, 2004). Consequently, it will be easy for speakers of Fang to translate their knowledge into French. The use of French as target language results from the status of French in Gabon. French is the only official language stipulated by the Gabonese constitution. French is used as the exclusive language of the public authorities (politics and economics) and in important institutions. It is the language of writing, e.g. in educational systems, newspapers, correspondence, relations between enterprises or administrations, and in the mastery of modern technology (Mekui Missang, cited in Afane Otsaga, 2004).

The target users of these dictionaries are defined; on the one hand varying from adults and senior high school students to academics, who have Fang as first language and a relatively good command of French, and on the other hand students who want to improve or learn Fang as second language.

The planned dictionaries should be addressed at advanced learners for essentially two reasons. Advanced learners usually get what they need in monolingual dictionaries.

As the planned microstructural programme intends to be descriptive, the target users will have enough skills to find what they need in the dictionary.

The use of French as target language also results from the fact that most existing dictionaries compiled in Fang are translating dictionaries biased toward French. The Gabonese population is very accustomed to French dictionaries. These works are useful for the description, comprehension and understanding of Gabonese languages. In this research, French will be used as metalanguage as far as the use of labels is concerned.

Although French is the only language with vernacular status, many Gabonese students do not have a good command of French and lack basic skills in French. In addition, the number of young Gabonese people with French as mother tongue is increasing in various cities in Gabon, while French remains the second vernacular language. In spite of recent trends, Dodo-Bouguendza (2000) says that the Gabonese languages remain the most widely spoken languages.

The dissertation will be divided into 10 chapters. Chapter 1 presents the problem statement. In this section, I present the linguistic situation of the Gabonese languages and the Fang dialects, the inventory of works that have been done on Fang, the lexicographic aspects, the aims and objectives of the research, and the research hypotheses.

Chapter 2 provides a brief view of the most productive contribution towards the formulation of a general theory of lexicography, which comes from the German scholar Herbert Ernst Wiegand. In his work, Wiegand discusses a number of topics relevant to this research, namely dictionary structure, access structure, addressing structure, data distribution structure, macrostructure, microstructure, micro-architecture, outer texts, frame structure, dictionary function, dictionary typology, needs, reference skills of the user, etc.

Chapter 3 concentrates on the corpus and the microstructure. The use of a corpus is of great importance in the compilation of a dictionary's microstructure. The identification of microstructural elements (sense distinction, translation equivalents, authentic examples, collocations, idioms) by means of a corpus will be discussed.

Chapter 4, on *function typology*, focuses on aspects such as the genuine purpose of the dictionary, characteristics of the users and the users' needs. These aspects have an impact on the content of the dictionary, i.e. data to be included in the dictionary articles.

Chapter 5 focuses on the major structures of a dictionary. A brief discussion of the different structures of a dictionary, i.e. data distribution, central list, macrostructure, microstructure, access structure, addressing structure, mediostructure and outer texts will be presented. This chapter also focuses on data to be included in the front and back matter texts in the planned microstructural programme.

Chapter 6 focuses on different types of articles and lexical items to be included in the dictionary. The focus will be on single articles, complex articles, synopsis articles, lexical items, sublexical items and multiword lexical items.

Chapter 7 concentrates on the nature of the microstructure and on different types of dictionaries. The type(s) of microstructure used in the dictionary enhances the retrievability of information by the users. When planning a dictionary, the lexicographer(s) has to decide between different types of microstructures, i.e. an integrated, unintegrated or semi-integrated microstructure.

Chapter 8 focuses on the comment on form. Those data types that reflect the form of the lemma sign, i.e. pronunciation, spelling and grammar, will be discussed.

Chapter 9 concentrates on the comment on semantics. Those data types that reflect the semantic and pragmatic features of the lexical item represented by the lemma, i.e.

paraphrase of meaning, equivalents, antonymy, polysemy, hyponymy, etymology, pictorial illustrations, usage notes and glosses, will be discussed.

Chapter 10 focuses on the guide structures of the dictionary and aspects like access structure, addressing structure and mediostructure will be discussed. These aspects are necessary for a successful dictionary consultation procedure. By means of these guide structures the user can have rapid access to the desired data. This chapter will also discuss aspects such as front matter text, back matter text and mini-grammar.

1.2 Contextualisation of the research

1.2.1 Gabonese language situation

1.2.1.1 The inventory and classification of Gabonese languages

The inventory and classification of Gabonese languages constitute one of the main issues of Gabonese linguistics. Indeed, since the work done by the first investigators from, among others Du Chaillu (1869), Wilson (1879), to the works by Raponda-Walker (1931, 1932, 1933, 1936) and those of Guthrie (1953), Jacquot (1978), Kwenzi-Mikala (1987, 1988, 1990, 1998) and Idiata (2002, 2003, 2005), the question of the number of Gabonese languages and their classification is still far from being answered.

As far as classification is concerned, there are many studies that focus on Gabonese languages. Guthrie, Jacquot, Raponda-Walker, Kwenzi-Mikala and Idiata group Gabonese languages into different language groups.

1.2.1.1.1 Guthrie

In his work regarding the Bantu languages of Western Equatorial Africa, Guthrie

groups Bantu languages into entities covering the concept of language group. According to his classification, one can distinguish the following groups:

1. Bube-benga: A30
2. Yaunde-Fang: A70
3. Makaa njem: A80
4. Myene: B10
5. Kele: B20
6. Tsogo: B30
7. Shira-punu: B40
8. Njabi: B60
9. Mbede: B60
10. Teke: B70

However, Guthrie's classification does not determine the number of Gabonese languages. Moreover, some Gabonese languages are used in Cameroon and Equatorial Guinea (see groups 1 and 2 below). The figure below shows Guthrie's referential Bantu classification.

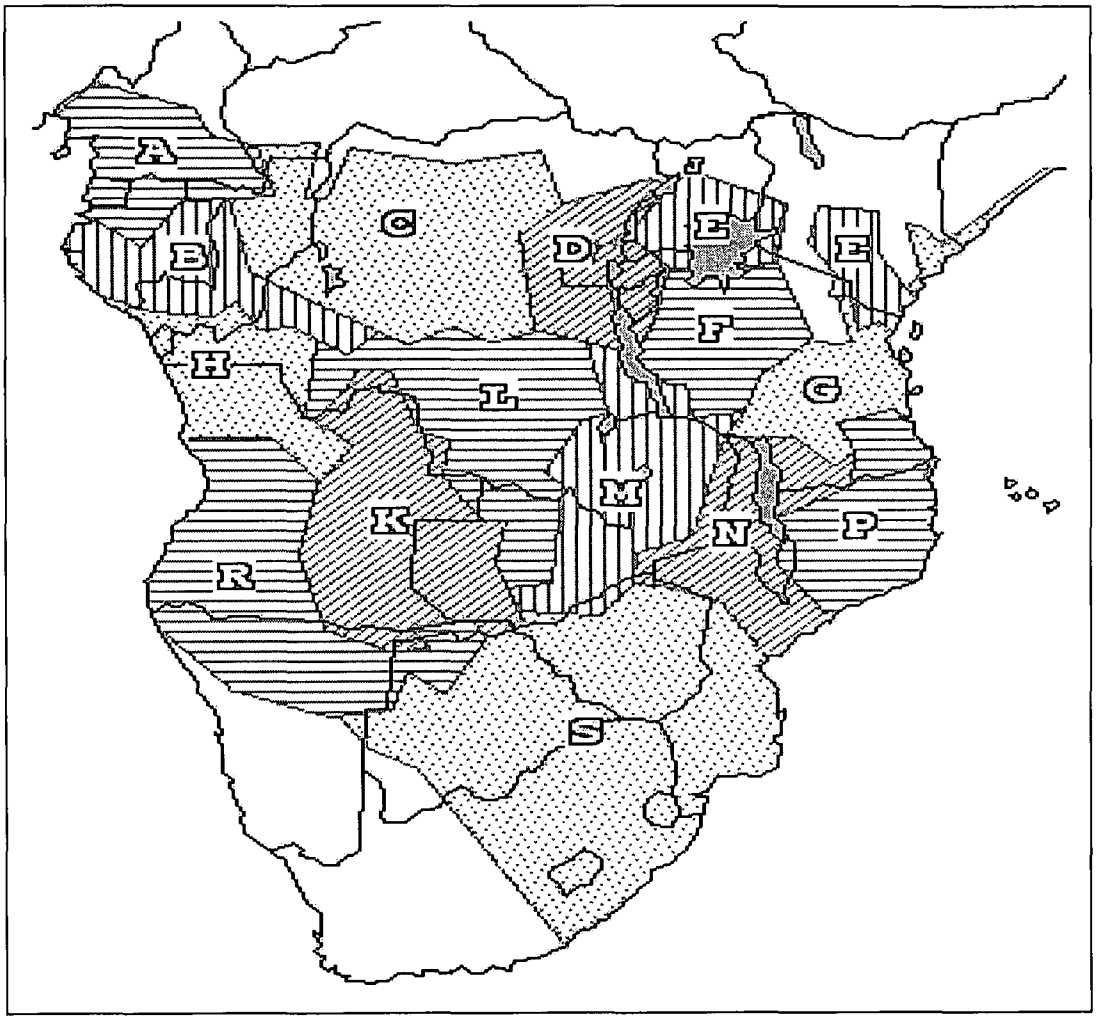


Figure 1.1: Bantu classification

1.2.1.1.2 Jacquot

Jacquot (1978) updates Guthrie's (1953) listing. This is a genetic or geological inventory. The author identifies six Gabonese language groups, as follows:

1. Bube-benga: A30
2. Ewondo: A70
3. Myene: B10

4. Kele:	B20
5. Tsogo:	B30
6. Shira:	B40
7. Njebi:	B50
8. Mbede:	B60
9. Teke:	B70
10. Civili:	H10

Jacquot's classification is based on criteria of intercomprehension. One of the major weak points of this classification is that it does not determine the number of languages spoken in Gabon.

1.2.1.1.3 Raponda-Walker

Raponda-Walker (1998) groups Gabonese languages into six groups, divided into subgroups. This classification is as follows:

Group 1: Ngwe-Myene

a.	**b.**
Mpongwe	Okandé
Galoa	Apindji
Nkomi	Mitsogo
Orungu	Simba
Adyumba	Bavové
Enénga	Evia

Group 2: Fang	**Group 3:**
Bétsi	Bakélé
Ntum	Bangomo
Bule	Bantomboli
Ewondo	Shaké

Fang
Nzamane
Mekè
Bakwélé

Dambomo
Mbanhu
Bawhumpfu

Group 4

a.

Eshira
Masango
Bavarama
Bavungu
Bapunu
Balumbu
Ngowé
Mindasa
Bassihu

Group 5

b.

Bénga
Bapuku
Kombé
Banoko
Batanga
Bakota
Manongwé
Bushamay

Béséki
Balengui

Group 6

Baduma
Bavili
Banzabi
Bawandji

Batsayi
Mindumu
Ambèdè
Ambamba

Atègè
Akaninhi

1.2.1.1.4 Kwenzi-Mikala

The following classification is drawn from Kwenzi-Mikala's research. Kwenzi-Mikala's (1988, 1998) classification is one of the most recent classifications of Gabonese languages. The author (1988: 57) grouped the 62 heritage speech forms ("parlers", including language and dialects) into eight language groups (a group of different speech forms that are mutually comprehensible), and thereafter (Kwenzi-Mikala, 1998) into 10 language groups. In order to establish these language groups, the author used the criteria of mutual intelligibility (also referred to as

intercomprehension) and the opening greeting formality, "I say that". His classification is as follows:

- The Mazuna group: Fan-Atsi, Fan-Make, Fang-Mvaï, Fan-Ntumu, Fan-Nzaman and Fan-Okak;
- The Myene group: Enenga, Ghalwa, Mpongwe, Nkomi, Orungu and Okoa;
- The Mekana-Menaa group: Akele, Ungom, Lisighu, Mbanwe, Metombolo, Seki, Tumbidi, Shake, Wumpfu and Lendambomo;
- The Mekona-Mangote group: Ikota, Benga, Shamay, Mahongwe, Ndasha and Bakola;
- The Membe (or Okande-Tsogho) group: Ghetsogo, Ghepinzi, Kande, Ghevhovhe, Ghehimbaka, Ghevhiya, Ebongwe and Koto-a-Kota;
- The Merye group: Ghisira, Ghivharama, Ghivhungu, Yipunu, Yilumbu, Yisangu, Ngubi, Civili, Yirimba and Yighama;
- The Metye group: Yinzebi, Yitsengi, Yimvhele, Yivhili, Liduma, Liwanzi and Yibongo;
- The Membere group: Lembaama, Lekanini, Lindumu, Lateghe and Latsitseghe;
- The Makaana group: Bekwil, Shiwa (or Makina) and Mwese;
- The Baka group: Baka.

However, some criticism has been directed at this classification because of its geographical-administrative nature (cf. Hombert, 1990: 30; Idiata, 2002, 2005; Nyangone Assam & Mavoungou, 2000: 253). In fact, the sociolinguistic criterion of intercomprehension used by the author does not distinguish between languages and dialects (Nyangone Assam & Mavoungou, 2000: 254).

Idiata (2002, 2005: 7) criticises Kwenzi-Mikala's classification as being not very rigorous and also confusing at many stages:

1) Kwenzi-Mikala provides no information about the measurement of

mutual intelligibility between the components of language units (Idiata, 2002: 42, 2005: 7). "*This information would have been determinant in solving the debate on the number of native languages of Gabon*" is Idiata's (2002: 42, 2005: 7) point of view.

2) Kwenzi-Mikala mixes, at the same level, those languages that one can describe as groups of languages (for example group "Merye", which is not different from Guthrie's group B40) and those that one can admit as dialectal variants of the same language (for example, group Mazuna, which is the only Fang language).

3) Associating Bantu languages and pigmy languages under the same paradigm is innovative but, without any solid argument; this information has no relevance (Idiata, 2005: 8).

4) The criterion of intercomprehension used by Kwenzi-Mikala is too general to reach the objective of a pertinent grouping of languages from the point of view of intercomprehension. It is known that a classification based on intercomprehension necessitates a more complex methodology, which involves, among others, the analysis of word lists, texts and questionnaires.

As far as the word lists are concerned, some lexicostatistic analyses have been undertaken for three Gabonese groups of languages: the B30 group (Van der Veen, 2003), the B40 group (Blanchon, 1999) and the B50 group (Mouélé, 1997). The B30, B40 and B50 groups of Guthrie are similar to the Membe, Merye and Metye groups of Kwenzi-Mikala respectively.

1.2.1.1.5 Idiata

The most recent classification is that of Idiata (2003). His classification is based on existing classifications of Gabonese languages, and is as follows:

Group A: Fang	**Group B: Myene**	**Group C: Kota-Kele**	
Məkɛ	Galwa	Akele	Tumbidi
Mvai	Mpongwe	Ungom	Shake
Okak	Enenga	Lisigu	Wumbu
Nzaman	Ajumba	Mbangwe	Lendambomo
Ntumu	Nkomi	Metombolo	Ikota
Atsi	Orungu	Seki	Shamayi

Group D: Tsogo-Apindji		**Group E: Sira-Punu**	
Tsogo	Mahongwe	Gisir	Ngubi
Apindji	Ndasa	Isangu	Ngowe
Okande		Varama	Yirimba
Pove		Vungu	
Simba		Yipunu	
Geviya		Yilumbu	

Group F: Nzebi-Duma	**Group G: Mbede-Teke**
Inzɛbi	Lembaama
Liduma	Lekaningi
Itsengi	Lindumu
Liwanzi	Teke
Imwele	Latsitege
Ivili	

Group H: Other Bantu languages	**Group I: Pygmy languages**
Benga	Baka
Civili	Bakoya
Shiwa	Bakuyi
Bekwil	Babongo

Referring to his findings, Idiata (2003) states that, among Gabonese language groups, Myene and Fang can be considered as homogeneous groups. All the speech forms are

variants of the same language.

1.2.2 Status and categories of various languages

The question of the status of languages refers to their knowledge, i.e. their access to a certain number of functions. The functions of a language refers to the various roles a language can assume, i.e. what it is used for (cf. Fishman, 1991).

To determine the overall strength of Gabonese native languages and the degree of their depreciation and/or loss, Emejulu and Nzang-Bié (1999a, 1999b) have observed that all these domestic languages are easily classifiable into either stage 8, stage 7 or stage 6 of Fishman's (1991) eight-stage theoretical framework for determining or reversing language loss:

Table 1.1: Fishman's eight-stage planning theory to strengthen or determine the loss of local languages

Stage 8: The language is spoken by a few isolated older people. It is close to extinction.
Stage 7: There are cultural events and ceremonies.
Stage 6: Children learning language from parents, neighbourhood and communities.
Stage 5: There is local literacy in the community, literacy programmes in native languages.
Stage 4: The language is in school.
Stage 3: The language is in the work sphere.
Stage 2: The language is in the local mass media, local government.
Stage 1: The language exists at the highest levels in government, universities and national media.

In fact, the vernacular languages do not have a legal status other than the fact of

belonging to a community, since each language is an ethnic language confined to the community. With regard to the various categories of languages, one can distinguish the regional vehicular and domestic languages, i.e. languages limited to and used in families.

1.2.2.1 Regional languages

If there is not any vernacular language that has the status of a common language on a national scale, some languages have the status of vehicular language on a regional level. For example, in the North of the country, from the Woleu-Ntem province to Bifoun in the Moyen-Ogooué province, Fang assumes the role of vehicular language. In the Ogooué Maritime province, particularly in Port-Gentil to the borders of the lakes near Lambaréné, Omyene assumes the role of vehicular regional language. In the Haut Ogooué province, particularly in Franceville, Lembaama is a vehicular regional language. This is also true for Ipunu in the Ngounié and Nyanga provinces, particularly in regions like Mouila, Ndendé, Moabi and Tchibanga. Inzebi is also regarded as a vehicular regional language in regions such as Lébamba, Mbigou, Koula-Moutou, Moanda and Mounana.

1.2.2.2 Domestic languages

Apart from the above-mentioned cases, other vernacular languages are domestic languages, which are those languages used in families by the members of the same ethnic group. In the whole, these are endangered languages in the sense that they are spoken less and the number of speakers continues to decline. Idiata (2003), in his research on the "linguistic dynamic of children in urban areas", provides the following reasons for these languages being endangered:

1. the non-return to the sources (villages);

2. the fact that the parents (both father and mother) are of different ethnic groups and different languages;

3. schooling only in French;
4. the reduction in the functions of Gabonese vernacular languages, such as their non-existence in daily conversations between children and their various interlocutors.

1.2.2.3 Data sources on Gabonese languages

What follows is a brief overview of the situation of Gabonese languages. Four large information types will be given, namely (i) a detailed listing of languages, (ii) the country where one can encounter these varieties of languages, (iii) an evaluation of the number of speakers of each language and (iv) the condition of these languages in terms of vitality.

The table below summarises the six levels of scale to allow an understanding and evaluation of the state of vitality of Gabonese languages.

Scale	**Number of subjects per ethnic group**	**State of the language**
1	From 100 000 to 300 000 subjects	Good degree of vitality
2	From 80 000 to 99 000 subjects	Quite good degree of vitality
3	From 30 000 to 79 000 subjects	Language in danger
4	From 10 000 to 30 000 subjects	Endangered language
5	From 1 000 to 10 000 subjects	Language facing extinction

6	Fewer than 1 000 subjects	Language in the process of extinction in short term

Table 1.2: Scale to evaluate the vitality of Gabonese languages

Table 3: General situation of Gabonese languages (Idiata, 2005)

Detailed list of spoken languages	**Countries where these languages are spoken**	**Phylogenetic classification**	**Estimation of the number of persons who speak these languages**	**State of these languages in terms of vitality**
1. Akele	Gabon	Bantu B20	10 743	Endangered language
2. Apindji	Gabon	Bantu B30	2 788	Language in the process of extinction
3. Bekwil	Gabon, Congo and Cameroon	Bantu A80	6 198	Language in the process of extinction
4. Benga	Gabon, Equatorial Guinea	Bantu A30	1 685	Language facing extinction
5. Civili	Gabon, Congo	Bantu H10	14 829	Endangered language
6. Fang	Gabon, Cameroon, Equatorial Guinea and Congo	Bantu A75	256 467	Good degree of vitality
7. Getsogo	Gabon	Bantu B30	19 100	Endangered language
8. Gevove	Gabon	Bantu B30	9 034	Language

				facing extinction
9. Gevia	Gabon	Bantu B30	497	Language in the process of extinction in short term
10. Gisir	Gabon	Bantu B40	36 857	Language in danger
11. Ikota	Gabon and Congo	Bantu B20	25 183	Endangered language
12. Ilumbu (Yilumbu)	Gabon and Congo	Bantu B40	20 026	Endangered language
13. Inzebi	Gabon and Congo	Bantu B50	96 475	Quite good degree of vitality
14. Ipunu (Yipunu)	Gabon and Congo	Bantu B40	28 437	Good degree of vitality
15. Isangu	Gabon	Bantu B40	28 437	Endangered language
16. Itsengi	Gabon	Bantu B50	969	Language in the process of extinction in short term
17. Ivili	Gabon	Bantu B50	83	Language in the process of extinction in short term
18. Latege 19. (Teke)	Gabon, Congo, RDC	Bantu B70	32 545	Language in danger
20. Lekaningi	Gabon	Bantu B60	5 143	Language in the process of extinction
21. Lembaama	Gabon and	Bantu B60	37 684	Language in

	Congo			danger
22. Liduma	Gabon	Bantu B50	7 397	Language in the process of extinction
23. Lindimu	Gabon	Bantu B60	4 214	Language facing extinction
24. Lisigu	Gabon	Bantu B20	254	Language in the process of extinction in short term
25. Liwanzi	Gabon	Bantu B50	7 529	Language in the process of extinction
26. Mahongwe	Gabon and Congo	Bantu B20	8 196	Language in the process of extinction
27. Mbanwe	Gabon and Congo	Bantu B20	2 536	Language facing extinction
28. Myene	Gabon	Bantu B10	45 837	Language in danger
29. Ndambomo	Gabon	Bantu B20	1 386	Language facing extinction
30. Ndasa	Gabon and Congo	Bantu B20	66	Language in the process of extinction in short term
31. Ngubi	Gabon	Bantu B40	1 284	Language facing extinction
32. Okande	Gabon	Bantu B30	511	Language in

				the process of extinction in short term
33. Sekyani	Gabon	Bantu B20	1 245	Language facing extinction
34. Shake	Gabon	Bantu B20	8 781	Language facing extinction
35. Shami	Gabon	Bantu B20	Cf. Shake	Language in the process of extinction in short term
36. Shiwa	Gabon	Bantu B80	2 134	Language facing extinction
37. Simba	Gabon	Bantu B30	555	Language in the process of extinction in short term
38 Ungom	Gabon	Bantu B20	Cf. Akele	Language in the process of extinction in short term
39. Varama	Gabon	Bantu B40	2 616	Language facing extinction
40. Vungu	Gabon	Bantu B40	10 898	Endangered language
41. Wumvu	Gabon and Congo	Bantu B20	Less than 5 000	Language facing extinction
42. Yesa	Gabon	Bantu B20	??	Language in

				the process of extinction in short term
43. Baka	Gabon and Cameroon	Pygmy	Pygmy group estimated at 3 534	Individual languages in the process of extinction in short term
44. Bakoya	Gabon	Pygmy		
45. Bakola	Gabon	Pygmy		
46. Bakuyi	Gabon	Pygmy		
47. Babongo	Gabon	Pygmy		
48. Irimba	Gabon	Pygmy		

1.2.2.4 The status of French in Gabon

Gabonese languages coexist with French. According to Kwenzi-Mikala (1990: 123), the language policy of Gabon is dependent on the one inherited from the colonial era. Indeed, in the revised constitution it is stipulated that "The Gabonese republic adopts French as the official language. Furthermore, she endeavours to protect and promote the national languages" (République Gabonaise, 1994, article 2, paragraph 8). With this official status, French has a privileged situation. Moussirou Mouyama and De Samie (1996: 608–609) provide a summary of the situation of French in Gabon. According to them, French is used as the exclusive language of:

- Political power;
- Financial and economic power, in the structures of large dimension;
- Written power: school system, press, correspondence, etc.

According to these authors, the local languages are used exclusively as languages of tradition, in worship, ritual, etc.

In Gabon, everybody speaks French fairly well, not only because of its status as a language learnt at school or in the community (e.g. in the case of non-educated people), but rather because of its official status. In addition, Mba-Nkoghe (1981: 23) says that in Gabon French is the language of knowledge and science, the language of

power, the language of outspokenness and rights, and the language of the right to social promotion.

1.3 Demographic and geographical aspects

Fang is a language spoken by 1,5 million people in Gabon (cf. figure below), Equatorial Guinea and Cameroon. According to statistics obtained from the population census in 1993, Fang is the home language of 29% of the population (258 601 people). The language is spoken in five of the nine provinces of Gabon, namely Estuaire, Moyen-Ogooué, Ogooué Ivindo, Ogooué-Maritime and Woleu-Ntem. According to Kwenzi Mikala (1998: 217), Fang-Atsi is spoken in Lambaréné and Djolé, Fang-Mekè in Libreville, Kango and Port-Gentil, Fang-Nzaman and Fang-Okak in Makokou-Ovan-Booué and Medouneu-Cocobeach-Mitzic, Fang-Ntumu in Oyem and Bitam, and Fang-Mvai in Minvoul.

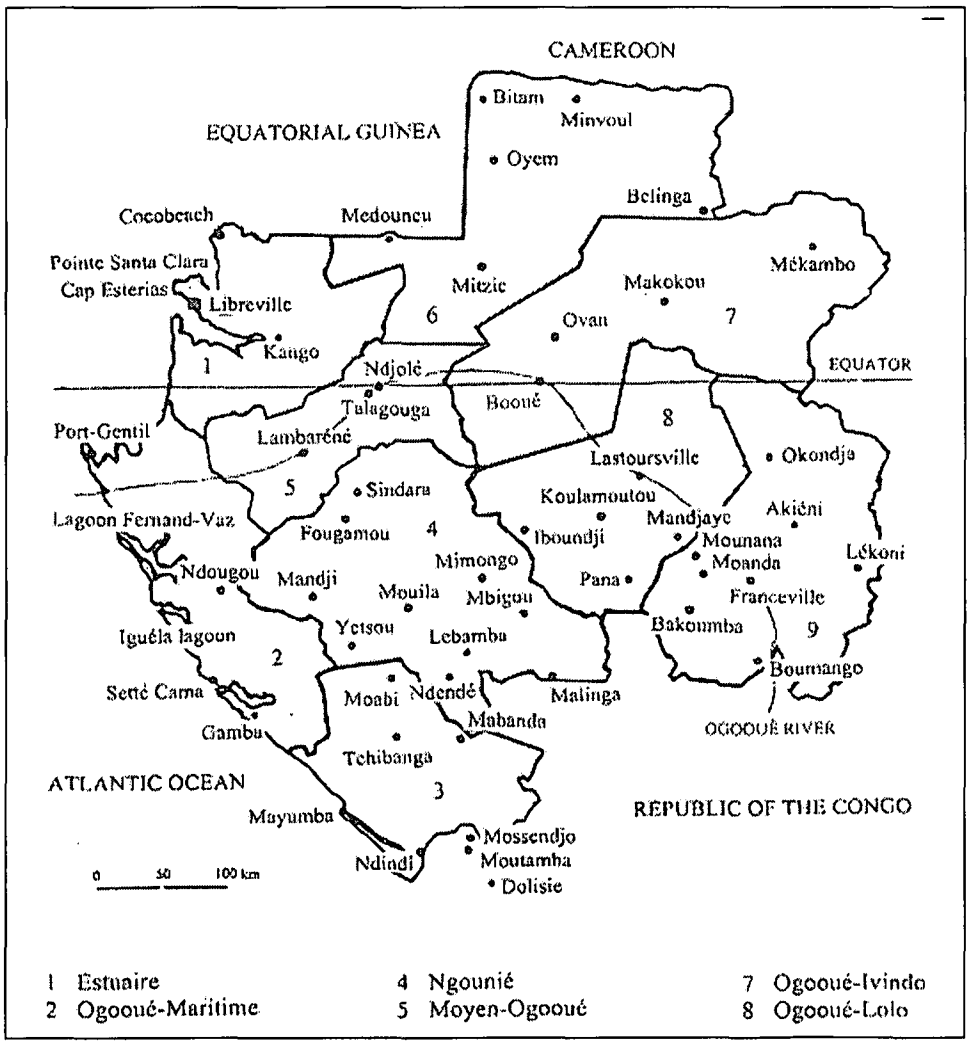


Figure 1.2: Gabon

1.4 Dialectological aspects

Up to now, the dialectological works that have been published on Gabonese languages deal with Fang (Hombert, 1991; Medjo-Mvé, 1997b). Fang remains the Gabonese language on which most dialectological research has been done. This research has led to conclusive results, including in work done by Jean-Marie Hombert and Peter Medjo-Mvé, whose area of comparison is the phonological system.

Hombert's works divide the Fang language into six subgroups (Mekè, Nzaman, Ntumu, Okak, Mvaï and Atsi). This classification is impressionistic and linguistic. According to Hombert, the Fang dialectological system is based on two distinct dialectal regions (North and South). Hombert's classification, illustrated in a geolinguistic map, is based on a lexicon with morphophonological criteria and on an analysis of data collected, not only in the field but also elsewhere. In his thesis on Fang panchronical phonology, Medjo-Mvé (1997a) sketches an investigation of different dialects of the language, going back into linguistic history. This approach, says Medjo-Mvé, is a way to supplement the lack of historical and comparative reconstruction. He confirms the two dialectal regions of Hombert (1991) in his thesis on Fang panchronical phonology and, in a sense, revises the Fang linguistic map established by Hombert. On this basis, the six variants of the Fang linguistic group compose, in different ways, the two identified dialectal zones, as represented in the following figure:

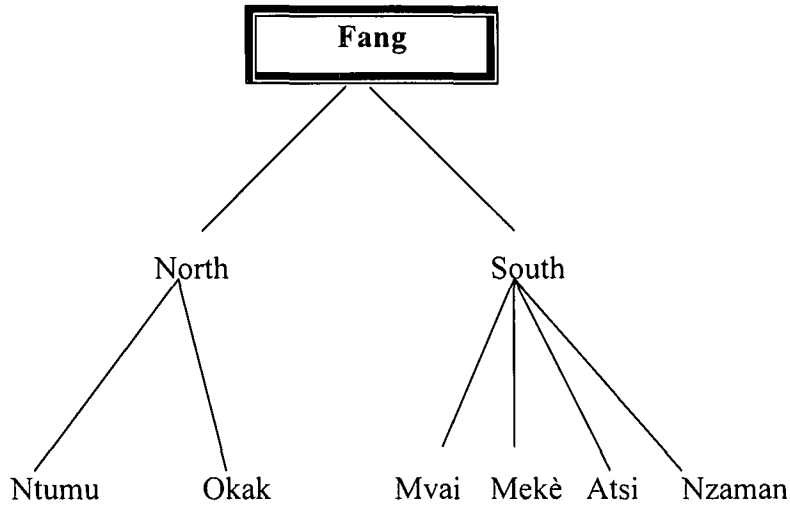


Figure 1.3: Fang dialectal composition according to Hombert (1991) and Medjo-Mvé (1997).

In Gabon, dialectology is based on this work, meticulously done on a scientific level. Besides its historical and sociological conception, this work also shows the dialectal situation of one of the Gabonese languages.

1.4.1 Presentation of Fang dialects

The following discussion of Fang dialects will be directed at those dialects spoken particularly in Gabon. A more comprehensive account can be found in Afane Otsaga (2004).

1.4.1.1 The Fang-Atsi dialect

Fang-Atsi is spoken by the Betsi population in three regions of Gabon: Lambaréné, Ndjolé and Bifoun. Fang-Atsi lexicography started with the publication of a monoscopal bilingual dictionary, *Dictionnaire fang-français*, by RP Marling in 1872.

This work was followed some years later by another monoscopal bilingual

dictionary, *Dictionnaire fang-français*, by RP Lejeune (1872), which consists of 347 pages divided into two parts. The first part contains an overview of Fang grammar; the second part is the dictionary itself, which presents different lemmas in French followed by the translation equivalents in Fang.

One of the most important works on Fang-Atsi was compiled by the colonial administrator V Largeau (1901). It is the *Encyclopédie pahouine*, which contains about 4 996 articles covering 699 pages (Nyangone Assam & Mavoungou, 2000). This book is the only encyclopaedia ever written in a Gabonese language. According to the author, the objective of this work was to give all colonial administrators working in Fang areas the opportunity to communicate directly with the Fang population without an interpreter.[1] The book is presented in three main sections.

The first section is a cultural overview of Fang people (ritual, value system, mythology, origin, etc.), especially the Fang-Atsi speakers in Lambaréné, Ndjolé, Bifoun and even Libreville and Kango. The second part contains the user's guidelines and the mini-grammar of the encyclopaedia. Some indications are provided of the pronunciation system, the orthography system and the punctuation system, and some morphological data, such as the parts of speech, word formation and the conjugation system of Fang are also provided. The third and last part is the central list itself, which presents lemmas in French, in alphabetical order, followed by a description of the meaning of the lemmas, also in French, and then the translation equivalents of the lemmas in Fang, sometimes illustrated with examples.

Pastor Samuel Galley compiled the most important work in Fang. It is a biscopal bilingual dictionary entitled *Dictionnaire fang-français et français-fang* (1964). This work, edited by Henri Messeiller and published after the death of Galley, consists of about 13 925 articles covering 588 pages (Nyangone Assam & Mavoungou, 2000). It is the result of input from the Société des Missions

[1] According to history, interpreters sometimes provided very bad translations that caused many problems between administrators and the local population.

Évangéliques de Paris in Gabon through its station at Talagouga in the Ndjolé region.

Apart from these dictionaries, some works were also written in Fang-Atsi, particularly in the religious field. Examples are *Nten fan osua: Premier livre de lecture en Fan*[2] (1912), *Yesu: essai d'hamonisation des 4 Evangiles* (1908) and *Nten bya bi fan = Cantiques en langue fang*[3] (1910), produced by the Protestant Mission of French Congo, the French Protestant Mission and the St François Xavier Mission respectively. The latest research on Fang-Atsi has been done by J Mba Nkoghe (1979). It is a linguistic work presenting some phonological and morphological aspects of Fang. The data used for the production of this work were collected in the Fang-Atsi areas (Ndjolé, Lambaréné).

The majority of lexicographical works in Fang have been produced in the Fang-Atsi dialect. But these works are unknown to the greater part of Fang people, even Fang-Atsi speakers. This is either because they are only used in specific fields (religious texts), or because they are not available to a large public. Dictionaries, for instance, are more readily available in European libraries (particularly in France) than in Gabon. That is why, despite all the important works published in Fang-Atsi, this dialect has not really influenced the use of Fang in the rest of the country.

1.4.1.2 The Fang Mekè dialect

Fang-Mekè speakers can be located at the other side of the Komo River, in the Metek ma vii chinchoua zone (on the western side of the Estuaire River) and in the area of Lalala (on the eastern side of the Estuaire River). Fang-Mekè speakers are also called *mekè me Nkoma*[4] because they were the group of Fang people who decided to leave and cross the Komo River when they reached the Estuaire. The name Mekè comes from the Fang term "meke" (or mekè), which means "departure". Today, this

[2] Qualified by the authors as the first reading book in Fang.
[3] Hymn book in Fang.
[4] Those who went to Nkoma or the Komo River.

term designates all Fang speakers in the Estuaire area, even those who did not cross the Komo River.

Fang-Mekè is recognised as the Fang dialect in which the most religious works have been published. Indeed, the Bible and some of its parts (particularly the Gospels) were translated into Fang-Mekè (particularly by the Catholic religion). This situation can be explained by the fact that Fang-Mekè is spoken in the province of Estuaire (Libreville, Kango, Ntoum and Foulenzem), which was the first Gabonese region to be in contact with European missionaries and colonists. As far as the Catholic Church is concerned, because Libreville is the seat of the clergy, most religious texts translated into Fang were done in the dialect spoken in this area.

The most famous work known in Fang-Mekè is the translation of the Bible by the first Gabonese Catholic Archbishop, François Ndong (1962), under the title of *Ntem Wam*. Until today, this book is still used in Fang Catholic Churches all over Gabon. Archbishop F. Ndong, who was a Fang-Mekè speaker, also influenced the compilation of various works in this dialect.

Some important religious works have also been produced in the translation of the Gospels into Fang-Mekè. In fact, *Évangile de Jean: traduction dans la langue des Fan* (1910), *Évangile de Luc: traduction dans la langue des Fan* (1910) and *Évangile de Matthieu: traduction dans la langue des Fan* (1902) are the Fang translations of the Gospels of John, Luke and Matthew respectively.

Similarly, *Catéchisme Fan* (1932), *Récits de l'Ancien et Nouveau Testament = Nten nzamoe* (1936) and *Syllabaire Fan* (1925) were compiled by the Catholic Mission of Libreville in Fang-Mekè for teaching the Gospel in Fang. It was also with the help of the Catholic Mission of Libreville that H. Trilles produced several works in Fang-Mekè, e.g. *Ntèn wa tar'éyé gele fang'ne fala étén nélang = exercices de lecture et d'écriture en pahouin et en français* (1898), *Livre de prières = NTEN WAM minkobe ma nè ge kobe né nzame* (1898), *Katesism Nten wa vegele Fang Nsong*

Katolik = Catéchisme de la Doctrine Catholique (n.d.). All these works also concern the teaching and reading of the Gospels in Fang.

The latest work in Fang-Mekè was compiled by Nzang-Obame (2001), namely *Esquisse d'un dictionnaire fang-Mekè*. In this research project she presents a theoretical model of a dictionary outline in Fang-Mekè. According to Nzang-Obame, the aim of this work was to compile a sample of a Fang-Mekè dictionary with all the features of a complete dictionary.

All the above illustrations show that numerous works (particularly religious ones) have been made in Fang-Mekè. But the influence of Fang-Mekè on the use of Fang is only perceptible in the religious field, specifically the Catholic one.[5] This influence does not go beyond that. One reason could be that Fang-Mekè does not have many speakers in comparison to the other Fang dialects.

In informal discussions, speakers from other Fang dialects always say that Fang-Mekè has so many external influences because of its early cohabitation with other languages and cultures in the Estuaire region.[6] They think that Fang-Mekè is no longer pure Fang. My feeling is that, because of this "sentiment of impurity" concerning Fang-Mekè, the other Fang speakers are, unconsciously, rejecting this dialect. This could explain why Fang-Mekè has not imposed itself beyond the religious fields.

1.4.1.3 The Fang-Mvaï dialect

Fang-Mvaï is the sole Fang dialect spoken in only one region of Gabon, namely the Minvoul or Haut Ntem region. Three works are inventories that were produced in this dialect.

The first work is a linguistic dissertation by N. Mba Nzué (1981), entitled *Esquisse*

[5] The Protestant religion in Gabon is under the influence of the Bulu, one of the Fang varieties in Cameroon.

[6] In the Estuaire region, Fang-Mekè cohabits principally with Myénè and French, but also with languages from Gabonese and non-Gabonese people living in the capital (Libreville) and surrounding towns.

phonologique du mvaï (parler de Minvoul). In this work, the author describes the phonemes that he has identified in Fang-Mvaï and the contexts in which these phonemes combine. The second and third works in Fang-Mvaï, produced by JE Mbot (cited in Afane Otsaga, 2004), are the beginning and continuation of the same research. In *Ebughi bifia, un mode de connaissance de la langue fang*, the author tries to show how the use of Fang in some specific ways could play a role in the acquisition of knowledge in Fang. In *Ebughi bifia, "démonter les expressions". Enonciations et situations sociales chez les fang du Gabon*, Mbot draws a parallel between the use of the language and the social status of the user.

The region of Minvoul served as the main field of investigation for these works. Some people view Fang-Mvaï as a less mixed dialect of Fang, while some view Minvoul as the region where the real[7] Fang is still spoken. But none of these allegations has been proven scientifically. The small number of speakers and the fact that only a few works have been produced in Fang-Mvaï have not given this dialect the opportunity to influence the use of Fang beyond Minvoul.

1.4.1.4 The Fang-Ntumu dialect

Fang-Ntumu speakers are the most important community of Fang in Gabon. This dialect, located in Oyem and Bitam, covers the largest Fang area in the country. A considerable portion of the work compiled in Fang-Ntumu is linguistic studies. Ndong Menini (cited in Afane Otsaga, 2004) produced the first phonological analysis in Fang-Ntumu, entitled *Esquisse phonologique du ntumu.*[8] Some years later, during a seminar of experts on the Scientific Alphabet of Gabonese Languages, Voltz (1990) presented an important study done by him in Fang-Ntumu. This work included historical and cultural aspects of Fang, as well as a classification, location and, in particular, phonetic, phonological and morphological aspects of Fang-Ntumu.

[7] They qualify this dialect as Fang-Fang, which means Fang from original Fang.
[8] Phonological outline of Ntumu.

The most important linguistic work ever compiled in Fang-Ntumu was done by Ondo Mebiame (1992) in his doctoral dissertation, *De la phonologie à la morphologie du fang-Ntumu parlé à Aboumezok*[9] *(langue Bantu A.78)*. This work, in two volumes, provides more details about the functioning of Fang in general, and Fang-Ntumu in particular. Phonemes, syllables, morphemes and supraphenomenal elements of Fang are treated with an unprecedented precision.

The work by Voltz and Ondo Mebiame also form an important part of the database for the current study. Some interesting linguistic works related to Fang-Ntumu and released by students have been done or are currently in progress at Omar Bongo University. These include the following:

- *Etude contrastive des pronoms relatifs en Français et en Ntumu* (Ella, 2000). This research project, which is a contrastive study of relative pronouns in French and in Fang (Ntumu), tries to demonstrate whether or not relative pronouns exist in Fang-Ntumu according to criteria such as the structure, morphology or syntax of relative pronouns in both languages (French and Fang). This work also tries to show the difficulties that young speakers can encounter in a situation of bilingualism.

- *La présence des faits suprasegmentaux du fang ntumu dans l'utilisation du français pour les enfants âgés de 10 à 12 ans* (Mekui Missang, 1998). In this work, the researcher identifies the occurrence of supraphenomenal features from Fang-Ntumu in the use of French, as well as the cause of these interferences. Young speakers aged from 10 to 12 years that have Fang as first language and French as second language were used as a test group in this study.

- *Etude des compétences narratives chez les enfants bilingues Fang-Ntumu-Français d'Oyem (Psycholinguistique): Etude transversale sur le*

[9] From phonology to morphology of Fang-Ntumu spoken in Aboumezok.

développement de la temporalité et de la connectivité chez des sujets âgés de 7 à 12 ans (Bibang Meye, 2001). In this research, which has a psycholinguistic approach, the author tries to find out how tools that allow the production of coherent narrations in Fang-Ntumu and in French develop among bilingual children and how the development of both linguistic systems manifest themselves in these children. Young Fang-Ntumu speakers aged seven to 12 were the target group of this work.

- In *Analyse rhétorique du discours de mariage chez les Fang Ntumu (Oyem)*, Ekwa Ebanéga (2000) examines marriage through the Fang discourse produced by the sender (the boy's parents) and the receiver (the girl's parents). The author also studies the conditions of marriage (friendship between the boy's parents and the girl's parents, dowry, dating) and the elements of discourse such as the sender, receiver, place, time, proverbs, songs, figures of speech, etc.

Beside linguistic works, there have also been works in Fang-Ntumu in other fields, e.g. *Le mvet, genre majeur de la literature orale des population pahouines (bulu, fang, ntumu)* by G. Towo-Atangana (1965), which is about oral literature in Fang culture. This work was written in French. This is also the case with *Sagesse et Initiation à travers les contes, mythes et legends fang* by Mvé Ondo (1991). In the audiovisual media, Fang-Ntumu is the most used dialect in the presentation of news in the Gabonese national media (radio and television). Even some religious films, like *Jésus de Nazareth*,[10] have been translated into Fang-Ntumu.

In economic, educational and social plans, Fang-Ntumu has occupied and still occupies an important place in the activities of Fang people in the Woleu-Ntem province. More than half of the Fang people in Gabon are from this province. Woleu-Ntem is the only monolingual[11] province in Gabon, and has five main

[10] Jesus of Nazareth.
[11] It is the sole province in the country where there is only one language. In the rest of the provinces, many languages are used together.

regions (Minvoul, Bitam, Oyem, Mitzic, Medouneu). Because of this homogeneity, all interaction between people is in Fang. A lot of people from the rest of the province are leaving their original regions, going to Oyem and Bitam to study, solve administrative problems, do shopping, do business, work, etc. Those two regions of the province offer more facilities as far as these activities are concerned. Because of this situation, Fang-Ntumu influences the use of Fang in the whole province. The most visible illustration in this regard comes from some families where the parents speak Fang-Mvaï, for example, but their children speak Fang-Ntumu because they were born in Ntumu areas, or they were still young when their parents moved into those regions.

1.4.1.5 The Fang-Okak dialect

Located principally in the Mitzic, Medouneu and Cocobeach regions, Fang-Okak is possibly[12] the sole dialect of Fang in which no linguistic or lexicographical work has been produced. I believe there are two reasons for this situation. The first is the small number of speakers, and the second is its geographical situation. In fact, Fang-Okak is encircled to the North by Fang-Ntumu and Fang-Mvaï, to the South by Fang-Atsi, to the East by Fang-Nzaman and to the West by Fang-Mekè. Because of this position, Fang-Okak is the only dialect of Fang in Gabon that is in permanent contact with all the other dialects. This means that Fang-Okak is the most influenced dialect of Fang. The differences between Fang-Okak and the other dialects (especially Fang-Atsi, Fang-Mekè and Fang-Nzaman) are difficult to identify.

1.4.1.6 The Fang-Nzaman dialect

Fang-Nzaman is located in the regions of Makokou, Koumaméyong, Booué and Ovan. I inventoried two works on this Fang dialect, i.e. linguistic research done by Andeme Allogho (1980) and Cinnamon (1990). Both of them compiled phonological outlines, with some cultural and historical aspects of the dialect. The

[12] I did not find or even hear about any work written in this dialect.

most recent work in Fang-Nzaman was done by Mekina (cited in Afane Otsaga, 2004). It is a morphophonological study of terms that Fang-Nzaman has borrowed from French.

1.5 General works in Fang

In this section, the focus will be on general works in Fang. A more detailed discussion can be found in Afane Otsaga (2004).

Apart from works compiled in different dialects, some general research has also been done in Fang. Bancel (cited in Afane Otsaga, 2004), the author of *Etude comparée des langues du groupe fang pour la création d'une base de données Bantu*, undertook a comparative study of all Fang dialects. The goal of this work was to include Fang data in a database of Bantu languages. One of the earliest works on Fang was produced by Bennet (1899), who established some *Ethnographical notes on the Fang*. Balados Carter (n.d.) produced *Elementos de la gramática pamue* in Spanish. This work presents some of the grammatical elements of Fang. Chamberlin (n.d.), provided a new interpretation concerning *The migration of Fang into Central Gabon during the 19th century*. Echegaray (n.d.) tried to shape the harmonisation of Fang spelling by proposing a typical orthographical system for the writing of this language in *Hacia la unification orthográfia de la lengua pamue*. With his publication, *Introduction to Fang, a Bantoïd language*, Harding (cited in Afane Otsaga, 2004) compiled a kind of introductory history of Fang. Some years later, Kelly (1974) did research on *close vowels* in Fang. Ndongo Esono (1956), Osorio (n.d.) and Tardy (n.d) (cited in Afane Otsaga, 2004) have also done work on Fang: *Gramática pamue*, *Vocabulary of the fan language in Western Africa* and *Contribution à l'étude du folklore bantou: fables, devinettes et proverbes fang*, respectively. These works focus on grammar, vocabulary and proverbs, riddles and fables in Fang. In *Essai sur la phonologie panchronique des parlers fang du Gabon et ses implications historiques*, Medjo Mvé (1997a) did a phonological study of Fang by comparing all dialects and showing the historical implications in the

phonological differences in Fang. The Raponda-Walker Foundation has published the most recent works on Fang. The first one, *Rapidolangue* (1998) is a learning book presenting five Gabonese languages, namely Fang, Yipunu, Yinzédi, Lembaama and Omyénè, plus English and French. The second, *Les langues du Gabon* (1998), is a comparative study of some Gabonese languages, including Fang.

1.5.1 Phonetic aspects

With regard to the phonetic aspects of Fang, some works have been written by Mba Nkoghe (1979), who presented an inventory of phonemes as an introduction to his studies on the Fang nominal class. The variety of Fang dealt with in his study is the Fang-Atsi spoken in the urban areas of Ndjolé and Lambaréné. Another work that has been recorded with regard to the phonetic aspects of Fang was written by Mba Nzué (1981). In this work, the author also presents an inventory of phonemes that he has identified in Fang Mvaï and the contexts in which these phonemes combine. The work by Ondo Mébiame (1992) will be important for the present discussion. A summary discussion follows below.

1.5.1.1 Vowels

In Ondo Mébiame (1992), one finds that Fang is a language with nine vowels, namely i, e, ɛ, y, ∂, a, u, o and ɔ. The author classifies the vowels of Fang in terms of three main articulatory dimensions: the degree to which the mouth is opened (closed vs. open); the position of the highest part of the tongue (front vs. back); and the position of the lips (rounded vs. spread, or unrounded). The descriptions of the sounds of Fang done by Ondo Mébiame (1992) are based on the International Phonetic Alphabet (IPA).

1.5.1.2 Consonants

Ondo Mébiame (1992) points out that Fang is a language with several consonants, namely p, b, m, n, t, d, k, g, f, v, s, z, ʃ, l, r, kp, gb, mb, nt, nd, mv, mf, ns, nz, nts, ntz,

nl, etc. In Fang, consonants fall into several categories. They may be voiced or voiceless, oral or nasal, stops or plosives, fricatives, etc. Ondo Mébiame (1992) also classifies the consonants according to their point of articulation: the lips, the teeth, the alveoli, the palate, the velum, the uvula, the pharynx and the glottis.

The phonetic aspects of Fang are discussed only briefly here; a more comprehensive account can be found in Chapter 10 of this dissertation.

1.5.2 Orthographic aspects

Fang can be regarded as a language with an oral tradition. As with other languages of most former European colonies (with the exception of some Asian colonies), Fang has been considered by Westerners as being without a writing system. However, some of these languages do have historical writing systems that were ignored or deemed unsatisfactory by the colonial and post-colonial powers-that-be (cf. Murphy, 1996: 47).

Most orthographies developed in Africa in general and in Fang in particular have been based on Roman graphs. According to Murphy (1996: 47), this choice of graphs is rarely questioned or challenged in orthographic literature, which raises many practical and ethical questions. Furthermore, during the colonial era, in order to evangelise indigenous populations and communicate with them, commissionaires and colonial administrators viewed the Roman alphabetisation of indigenous languages as the means by which to introduce their religion to the indigenous people. This sentiment is echoed by Lepsius (1863: v), who points out that, "in the case of Africa, [use of a standard system based on Roman graphs is necessary, for] in this way only can we hope for Evangelization of that vast continent".

1.5.3 Aspects of pronunciation

It has already been noted that, in Gabon, the compilation of dictionaries and lexicons of Gabonese languages, and of Fang in particular, goes back to the early days of

evangelisation. This practice of compiling dictionaries started in the year 1800 with the missionaries Bessieux and Marling. Some dictionaries were compiled before the advent of theoretical lexicography. These dictionaries compiled by missionaries were to serve as a pedagogic support for the reading of Gabonese languages. According to Mavoungou (2001b), their works attempted to achieve communication with the indigenous people. They should deserve the credit for starting work where nothing had ever existed. Of these lexicographical works produced by missionaries and administrators, only the *Dictionnaire Fang-Français/Français-Fang* and the *Encyclopédie Pahouine* are relevant for the present research.

At the level of spelling, these dictionaries present certain situations of intonation and accentuation. However, in these dictionaries one notes the phenomenon of accentuation representing tonal manifestations. In the *Encyclopédie Pahouine* there are three different realisations of «a»: a, ā, â. Without accent, this «a» is similar to «a» in French, for example as in *ami* (friend). The form «ā» is described as a sound having the same quantitative level as the previous «a». The one with circumflex «â» increases equally well at qualitative level and at quantitative level. This application is made for other sounds, such as «e» and «o».

Largeau was a colonial administrator and not a trained linguist or lexicographer. He confused intonation, accentuation and tones. The different descriptions he gives correspond to low, high, medium and descending tones, as found in work done by Andeme Allogho (1980), Voltz (1990), Cinnamon (1990) and Ondo Mebiame (1992).In the *Dictionnaire Fang-Français/Français-Fang*, compiled by Galley (1964), tones are not marked on the segments, but in brackets next to them.

1.5.4 Grammatical aspects

It goes without saying that grammar comprises all the structural aspects, namely morphological, syntactical and phonological rules. Typical aspects such as class number, compound nouns and loan words can be regarded as parts of grammatical

aspects. The grammatical aspects of Fang will not be discussed in this section; a more comprehensive account will be given in Chapter 8.

1.5.6 Cultural aspects

Fang society is a male-dominated/patrilinear society, and therefore strongly patriarchal. Lineage is defined by the father. After marriage, a woman moves onto her husband's farmstead, a patrilocal living arrangement, which requires her to leave her own family and settle in the new one – that of her husband.

However, although the Fang society is strongly patriarchal, matrilinearity is not unknown. It manifests itself particularly in the case of children of unmarried mothers, where the child is an integral part of his/her mother's family. The members of the mother's family exercise their authority over the child. The maternal uncle, usually the oldest, acts as the father.

Fang society is similar to the typical segmentary societies, where lineage relationships play an important role. They can be presented in order of ascending complexity:

- The nuclear family, "nde̱ e bo̱t" (house of people).
- The group of "mə nde̱ mə bo̱t" (set of houses of people).
- The group called "mvo̱k" (subclan), referred to by the name of the common ancestor.
- The clan "ayo̱n" is the most significant unit, patrilinear and exogamic maximal lineage.
- The tribe: it can be regarded as an extended family. It is linked to territory occupancy and recognises itself particularly as opposed to its neighbours. It also corresponds to a matrimonial exchange circuit, i.e. marriages are not entered into between members of the same tribe, but between members of different tribes.

All the cultural aspects of Fang are not discussed here because the aim of this section is primarily to show the importance of cultural aspects as valuable sources of information.

1.6 Lexicographic aspects

1.6.1 The early Fang dictionaries: General background

The history of Fang lexicographic reference works in Gabon started in the year 1800 with the missionaries and colonial administrators. These people, in their preoccupation with evangelisation and communication with the Gabonese population, produced lexicographical works. The dictionaries compiled by the missionaries and colonial administrators were bilingual dictionaries and were produced to give non-native speakers of Gabonese languages access to the foreign language. Among the main lexicographical works compiled by missionaries and colonial administrators are those by Lejeune, Martrou and Galley. The main weak points of those dictionaries are that they were not based on sound lexicographical principles. They were non-profit enterprises with limited resources of time and staff, and the authors were not native speakers of the language.

In addition, the first dictionaries compiled in Fang would have been compiled by a single person, for instance a missionary or colonial administrator visiting Fang communities over many years, either as a part or by-product of their research projects. Lexicography of this kind receives acknowledgement only from a few specialists; in most cases, neither linguists nor the public take any notice. Furthermore, these dictionaries were not directed at specific target users of Fang; they did not serve the needs of Fang speech communities. The compilers did not identify the prospective users of the dictionary or for what they would use the dictionary. In fact, they compiled dictionaries and chose dialects without knowing any of the criteria for selecting of the variety of language. For example, they did not know which dialect was the most widespread and used in the greatest range of speech situations among

the varieties of Fang. This will hopefully change now. Thanks to the growing awareness of the endangerment of languages and cultures, language documentation projects have been initiated by research institutions, and lexicographic work will form part of language documentation.

1.6.2 Taking cognizance of the advances of metalexicography in Gabon

In Gabon, lexicography, its objectives and its perspectives have been described and discussed by Ekwa Ebanega (2002: 188–205); Tomba Moussavou (2002: 159–173); Ekwa Ebanega and Tomba Moussavou (2005, 2006); Ella E-M (2002: 305–325); Nyangone Assam (2001: 187–205, 2002: 292 & 304, 2006); Mabika Mbokou (2001: 206–222, 2002: 36–53; 2006); Afane Otsaga (2001, 2002a: 137–159, 2002b: 206–229; 2004); Mavoungou (2001a, 2001b: 230–262, 2002); Nyangone Assam and Mavoungou (2000); Emejulu (2001, 2002: 366-381) and Gouws (2001a, 2002a). On the basis of the abovementioned, lexicography can be regarded as a new discipline, differing from linguistics, which is growing in the Gabonese context. For instance, Gabonese students attend lexicography courses at the University of Stellenbosch (South Africa). This could lead to the creation of a department of lexicography and 10 lexicographic units if one takes into account the classification by Idiata (2003), who groups the Gabonese languages of Gabon into ten language units. These lexicographic units would be as follows: **Fang Lexicography, Myene Lexicography, Kota-Kele Lexicography, Tsogo-Apindji Lexicography, Sira-Punu Lexicography, Nzebi-Duma Lexicography, Mbe-Teke Lexicography, Bantu Languages Lexicography, Pygmy Languages Lexicography** and **French Lexicography**. The latter lexicographic unit would focus on the French of Gabon, which is a variety of French in Africa.

Gabon has also experienced important developments in the lexicographical field. A Seminar on the Lexicography of Bantu held by the International Center of Bantu Civilization (CICIBA) was held in Libreville in 1997. Participants came from six African countries (Cameroon, Central Africa, Gabon, Equatorial Guinea, Rwanda and

São Tomé and Principé). During this seminar, Dr DJ van Schalkwyk (Editor-in-Chief) and Dr FJ Lombard (Co-editor) of the *Woordeboek van die Afrikaanse Taal*[13] (WAT) shared their knowledge of metalexicography and the lexicographical praxis in Africa and the rest of the world with their African colleagues. A cooperative agreement binding the GRELACO (Group of Research in Languages and Oral Cultures) of the University of Omar Bongo (Gabon) and the Bureau of the WAT was signed on December 6, 1999. As a result of this agreement, two Gabonese students went to the Bureau of the WAT in 1999 for training and for doctoral study in Lexicography at the University of Stellenbosch under the supervision of Prof. RH Gouws. Three further students went to South Africa in 2000, and they were followed by five others in 2001. The WAT gave them pilot training in general lexicography, data processing in lexicography and the planning of lexicographical projects.

The Ninth International Conference of the African Association for Lexicography (AFRILEX) was held in Libreville from 18 to 23 July 2004. The theme of this conference was related to the problems of dictionaries, the development of languages and the organisation of lexicographical centres. The goal is to seek the zones of convergences between the dictionary and the language and, on this basis, to propose a dynamic strategy for the development of the Gabonese Lexicography to manage the movement of knowledge of the contemporary world through the plurality of the languages and cultures of Gabon.

It should be said, however, that dictionaries are used very little in the Gabonese environment. One would generally consult a dictionary to seek the meaning of a word or to check its orthography. Dictionaries do not form part of the current sources to consult, and are thus arranged in the category of occasional works. Dictionaries in the Gabonese languages do not have outlets such as bookshops, general libraries, and school and university libraries. It is thus of primary importance that a dictionary culture is established in Gabon, i.e. the aptitude of the users for using the dictionary well and the degree of familiarity of the user with the dictionary. This culture is

[13] Dictionary of the Afrikaans Language.

generally acquired through the practice of regularly consulting a dictionary. In Gabon, this dictionary culture has to be established through the education system. It is important that a dictionary culture is established among teachers, who in turn will transmit their lexicographical knowledge to the pupils and to students. Lexicographers have the responsibility to convey this dictionary culture. Institutes such as the Teacher Training School (ENI), the Higher Teacher Training School (ENS) and the University of Omar Bongo (UOB) are equipped to act as vehicles of lexicographical knowledge transfer to train teachers.

1.7 Theoretical model

This research will be based on Wiegand's theory. Wiegand is one of the lexicographers who have made a large contribution to the formulation of a general theory of lexicography with regard to monolingual dictionaries as well as translation dictionaries. The theory of lexicography, also known as metalexicography, can be defined as a study of the principles underlying existing dictionaries, leading to a formulation of suggestions on how to produce better dictionaries. Wiegand (1984a) distinguishes several components in the field of metalexicography:

- Research on dictionary use
- Research on the criticism of dictionaries
- Research on the history of language lexicography
- Research on the general theory of language lexicography

Wiegand's theory will not be discussed in this section, as a more comprehensive account can be found in Chapter 2.

1.8 Dictionary typology

Dictionary typology is a very important aspect of lexicography, with a direct practical significance for the preparation of dictionaries (cf. Singh, 1982: 11). Singh (1982)

states that "the entire work of dictionary making [...] is largely governed on the basis of which the dictionary is classified". Dictionaries differ from one another in several respects, including their aims, their scope and the subject they cover. These differences coincide with the typological variations within the broader category of dictionaries.

In a dictionary, a lexicographer presents a part of the lexicon of a language. The material presented is selected in terms of linguistic and typological principles. Dictionaries consequently differ from one another in their presentation and in the treatment of these lexical items.

Because a great variety of dictionaries have already been produced, metalexicographical criteria have been formulated in the course of time in order to classify dictionaries typologically. In drawing up a typology, the approach should focus on the users of the dictionary and their specific needs. Dictionary typologies should therefore be defined in terms of the users' profile. Y et it is not easy to ascertain the nature of the users' needs and this is why dictionary classification is often undertaken in terms of different norms and requirements. In placing dictionaries typologically there can often be overlapping of the categories used for the classification. It is difficult to present a method of classification that is entirely satisfactory.

When compiling a dictionary, the lexicographer should work with the idea that the structure of each dictionary should be determined by the users and their needs and reference skills, and by the functions and the situation of use. The microstructure of a dictionary will be codetermined by its typology, e.g. the structure of a learner's dictionary may differ from the structure of a comprehensive dictionary. It is important to look at the way in which the function and the user influence the structure. Structure should be an instrument for the lexicographer to achieve the genuine purpose of the dictionary.

The nature and extent of the microstructural entries and items to be included in the dictionary must be determined by the type of the dictionary. The microstructural programme orders the entries included as part of the treatment of the lemma within the type of dictionary. In a monolingual dictionary, paraphrase of meaning usually is the most salient entry, whereas translation equivalents have this function in a bilingual dictionary.

In the following section the focus consequently will be on the most common types of general dictionaries. A more detailed explanation can be found in Scerba (1940), Zgusta (1971), Al-Kasimi (1977), Gouws (1989: 65-72) and Hartmann and James (1998).

1.8.1 Scerba's typology

The Russian linguist Scerba was one of the first to make a study of the typology of dictionaries. His classification is based on the structural characteristics of dictionary types. According to Scerba (1940, cited in Al-Kasimi, 1977), dictionaries may be characterised in terms of typological contrasting pairs:

1) A normative dictionary, which dictates norms, vs. a reference dictionary, which adopts a descriptive approach.
2) An encyclopaedia vs. a dictionary. The contrast here is based on the function of proper names in language. According to Scerba, proper names are part of language and should not be excluded from the dictionary.
3) An ordinary dictionary (such as a defining dictionary or translating dictionary) vs. a general concordance, in which all the words are listed along with all the quotations that can be found in texts, as in the concordance of a dead language).
4) A usual dictionary (such as a defining dictionary or a translating dictionary) vs. an "ideological dictionary", which groups ideas or subjects.
5) A defining dictionary (e.g. a monolingual dictionary) vs. a translating dictionary (such as a bilingual or multilingual dictionary).

6) A historical dictionary vs. a non-historical dictionary. Scerba points out that the purpose of the historical dictionary is "all the meanings of all words that belong, and have belonged, to a given national language during all of its existence" (Scerba, quoted by Al-Kasimi, 1977: 12-13). A dictionary would be a historical one in the true sense of the word if it gave the history of all words during a given period.

As far as the above-mentioned typology of dictionaries is concerned, Burkhanov (1999: 34) says that these dichotomies should not be regarded as distinctive features, but rather as classes of lexicographic work. The immediate advantage of this approach is that one and the same reference book may be assigned to several classes of lexicographical tradition.

A more comprehensive account of Scerba's typological classification can be found in Al-Kasimi (1977: 12-13).

1.8.2 Malkiel's typology

The first attempt to describe lexicographic works in terms of distinctive features was made by Malkiel (1967, cited in Al-Kasmi, 1977), who proposed a classificatory scheme based on three key variables: (1) range, (2) perspective and (3) presentation. Each of these includes a set of parameters.

1) Range: dictionaries are divided by: (a) density of entries, which may be measured by the breadth of coverage and by the depth of coverage; (b) number of languages involved: accordingly, there are mono-, bi-, tri- and multilingual dictionaries; and (c) extent of concentration on lexical data. Malkiel (1959: 7–15) distinguishes encyclopaedic data by the inclusion of proper names and by a prodigality of comments that are more than a sober definition needs.
2) Perspective: dictionaries can be classified according to: (a) the fundamental dimension, i.e. the dictionary is either synchronic or diachronic; (b) three

contrasting patterns of arrangement; alphabetic, semantic, or casual; and (c) three contrasting levels of tone: the tone of a dictionary may be detached, perceptive or facetious.

3) Representation: according to this, dictionaries are classified in the light of their (a) definitions, (b) exemplifications, (c) graphic illustrations (including maps), and (d) special features (localisation in territorial terms).

1.8.3 Hartmann and James's typology

Another classification can be found in the *Dictionary of Lexicography* compiled by Hartmann and James (1998). According to them, a dictionary should be compiled by taking into account linguistic and cultural needs. This must be done by also taking into account changes occurring during the process of communication. According to this typology there basically are four categories of dictionaries:

1. The first category, the phenomenological typology, is based on formal features that take into account compositional characteristics such as size (e.g. pocket dictionaries, abridged dictionaries and concise dictionaries) or coverage of the content of the work (e.g. general dictionaries and specialised dictionaries).

2. The second category, the presentational or tectonic typology, focuses on the format (e.g. alphabetical, classified and thematic) or medium (e.g. manuscript, print and electronic) of the dictionary.

3. The third category, the functional typology, is based on the contextual uses of the dictionary, and focuses on the data categories provided (e.g. pronunciation, spelling and etymology), and the way these are presented (e.g. explanatory, pedagogical and terminological) within the perspective of the target user (e.g. scholarly, learner's and translator's).

4. The fourth and last category, the linguistic typology, focuses on the language(s) of the dictionary (e.g. monolingual, bilingual and bilingualised).

A well-known classification of dictionaries is that done by Zgusta (1971); this classification is probably used most frequently. Gouws (1999a, 2000) follows Zgusta's footsteps by adopting this classification and clarifying some aspects.

1.8.4 Zgusta and Gouws's typology

1.8.4.1 Encyclopaedic and linguistic dictionaries

When planning a dictionary, one of the first distinctions to be found is that between encyclopaedic and linguistic dictionaries. Encyclopaedic dictionaries or non-linguistic dictionaries (Zgusta, 1971: 197–199) are concerned with realia or denotata (things) and are called encyclopaedias or thing books (cf. Singh, 1982: 13–14). Devapala (2004: 1) goes even further by asserting that they are similar to dictionaries only in their alphabetical arrangement of words denoting the realia. Anyhow, the aspects of the realia, which are called encyclopaedic features and include elements such as descriptions, photos and diagrams, are given in certain types of dictionaries to add to the utility of the dictionary.

Linguistic dictionaries, on the other hand, focus on the linguistic treatment of lexical items. Zgusta (1971) and Gouws (1999c) agree that, when dealing with linguistic dictionaries, one has to make a distinction between general and restricted (special) dictionaries.

1.8.4.2 General dictionaries

The term *general dictionary* is an opposite of the term *restricted dictionary* and refers to dictionaries dealing with a broad selection of lexical items, i.e. not only items taken from one specific field. They offer a treatment aimed at different linguistic and pragmatic features of the lexical items in question (Gouws, 1999c: 31). General dictionaries try to contain all the words, whereas restricted dictionaries do not (cf. Zgusta, 1971: 204). There are three important types: (1) standard descriptive

dictionaries, (2) overall descriptive dictionaries and (3) academic dictionaries (cf. Zgusta, 1971: 209–213).

1.8.4.3 Restricted/special dictionaries

Restricted dictionaries are dictionaries in which the words and phrases listed have been selected from only a certain part of the total lexicon of a language. "The restriction can be based on any perceivable (or only supposed or postulated) variation of language, on any classification of its texts, or any principle or combination of principles determined by the author of the dictionary" (Zgusta, 1971: 204).

1.8.4.4 Diachronic and synchronic dictionaries

In terms of Ferdinand de Saussure's research, "synchrony" is the Saussurean technical term for a theoretical perspective in which a (linguistic) sign system is seen as a self-contained structure not subject to change. The subject of linguistic change was relegated by Saussure to "diachronic" linguistics. Zgusta (1971: 200) follows Saussure's footsteps by making a distinction between diachronic and synchronic dictionaries.

1.8.4.4.1 Diachronic dictionaries

Diachronic dictionaries are concerned with the development or change in form and meaning that the lexical stock of a language undergoes during the course of its history. Three types of dictionaries are included among diachronic dictionaries. They are historical, etymological and comparative dictionaries (cf. Zgusta, 1971: 200-202).

1.8.4.4.2 Synchronic dictionaries

In synchronic dictionaries the interest is in the lexicon of a language at a specific time in its development. This "specific" time is usually the present time, but a synchronic

dictionary can also be compiled for a well-defined period from the past (Gouws, 2001a: 74). A synchronic dictionary also deals with the information that belongs to one point in time. In this context, Zgusta makes two points to explain the term *synchronic*.

1) The concept is not synonymous with "contemporary". It stands for any given point of time in the development of language. For example, "Grassman's Dictionary of the Rig Vedic Sanskrit is a synchronic dictionary though the language it deals with is certainly not a contemporary one" (Zgusta, 1971: 202).

2) "It is impossible to interpret for practical linguistic and lexicographic purposes, the term synchronic as if we were concerned with the state of a language at one point of time" (Zgusta, 1971: 202). Nobody can make a full, detailed investigation of a language in one day or in one week or in one month. Therefore, for practical purposes, 'point of time' should be taken as a given "period of time".

A restricted synchronic dictionary represents a well-defined subsection of the lexicon of the given language, e.g. the lexicon of a specific hobby or special field. This type of dictionary can be either bilingual or monolingual. In contrast to this approach used for a restricted dictionary, the general synchronic dictionary accommodates a selection of lexical items representing the full lexicon, and the lexicographic treatment leads to the presentation of a variety of information categories. Three prominent subcategories can be distinguished, namely comprehensive dictionaries, standard dictionaries and pedagogical dictionaries. In the last two categories, a further distinction makes provision for descriptive and translation dictionaries.

1.8.4.5 Comprehensive dictionaries

Comprehensive dictionaries are aimed at recording and treating the vocabulary in its broadest possible range. Specialist terms that have penetrated (or are starting to

penetrate) the general vocabulary are also included and explained. Such a dictionary may be seen as an authoritative linguistic guide and usually covers the present as well as the past. It presents a great deal more than just standard language. A comprehensive dictionary thus has an informative function in addition to a normative function.

1.8.4.6 Standard descriptive dictionaries

Standard descriptive dictionaries can be regarded as standard or desk dictionaries that aim to provide a reflection of standard language. Such a dictionary is usually focused on the present and the future and has a much stronger normative character than a comprehensive dictionary.

1.8.4.7 Pedagogical dictionaries

Pedagogical dictionaries refer to teaching methods. They can be divided into two subcategories, viz. school dictionaries and learner's dictionaries.

1.8.4.7.1 School dictionaries

School dictionaries are as old as lexicography. One example is a textbook called *The English Schoole-Master*, compiled in 1596 by Edmund Coote, master of Freeschool at Bury St Edmunds. Its aim was to teach children (and illiterate adults) to read and give them their first reference skills. The modern dictionary also owes its existence to the efforts of another schoolmaster to teach his pupils the meanings of "hard words". In 1604, Robert Cawdrey compiled *A Table Alphabeticall*. This was an alphabetical list of hard words. In this sense, school dictionaries are as old as lexicography. But dictionaries for children, as we know them today, are aimed at scholars who are mother-tongue speakers (cf. Gouws, 2001a: 74). School dictionaries can be seen as a kind of reference book. The lexicographer who works on these dictionaries accomplishes a twofold task: he or she could be a grammarian because of the normative aspect, or a linguist due to the descriptive aspect.

In a lexicographic study it is important to be well aware of the fact that no single dictionary can be everything to everybody. There is an extended dictionary family and one has to realise where each dictionary fits into the typological structure and according to which criteria a dictionary has to be evaluated when determining its typological status. Dictionary research has led to the formulation of different typological models for the classification of dictionaries. The model used in this work is based on the work done by Zgusta (1971), although his original model has been adapted in various ways.

1.8.4.8 The new version of dictionary type: bilingualised dictionary or hybrid dictionary

A bilingualised or hybrid dictionary can be viewed as a new type of dictionary. It can be placed midway between monolingual and bilingual dictionaries. The only characteristic of this variety may effectively be seen in the manner of its semantic description. The bilingualised dictionary takes into account the meaning of the target language with translation equivalents. This dictionary should fulfil the needs of foreigners who want to learn another language and those who find that monolingual dictionaries are not sufficient in their treatment. These dictionaries are regarded as the most successful type in terms of satisfying the total needs of the users. The bilingualised dictionary could bridge the gap between monolingual and bilingual dictionaries.

The bilingualised dictionary arises when one is faced with the problem of deciding which type of dictionary is the better one – monolingual or bilingual. Some people prefer monolingual dictionaries, while others prefer bilingual dictionaries. Against this background of monolingual and bilingual dictionaries, a new type of dictionary has recently appeared. It is called "bilingualised" or semi-bilingual (cf. Hartmann, 1994). It is usually translated from a monolingual learner's dictionary into the intended user's mother tongue. It differs from monolingual dictionaries because it supplies translation equivalents, and from bilingual dictionaries because it provides semantic equivalents (definitions) of the original texts.

Atkins (1985: 22) has offered a very concrete view of the new "hybrid dictionary". Combining the best features of monolingual and bilingual dictionaries, she suggests two types of dictionaries.

In the first type, starting from a monolingual dictionary, L1 equivalents could be inserted at the beginning of each semantic category (sense); the metalanguage or even the definition could be in L1; the fixed phrases might not only be explained and exemplified in L2, but also translated into L1. The list of possibilities is endless.

In the second type, starting from a bilingual dictionary, a number of monolingual features could be introduced. One could, for example, not translate phrases exemplifying straightforward use of the headword. The headwords, or better still the semantic categories (senses) of the headword, could be classified from the point of view of frequency, and entries for the less frequent items could contain a higher proportion of monolingual material.

At present there is a variety of 'bilingualised' versions of English monolingual learner's dictionaries, which are both semasiological and onamosiological (cf. section 5). Reif (1987) explains in detail the project on the 'bilingualisation' of the Oxford Student's Dictionary of Current English (hereafter OSDCE) for Hebrew speakers. Hartmann (1994) lists ten 'bilingualised' learner's dictionaries. However, the list does not exhaust the works of this new genre.

1.8.4.9 The model for dictionaries using the planned microstructural programme

The proposed microstructural programme is concerned with features of monolingual dictionaries and some characteristics of bilingual dictionaries. As a result, it will constitute a programme for bilingualised or hybrid dictionaries (cf. Gouws, 1999c: 39). As far as monolingual features are concerned, the planned microstructural programme will provide the user with a paraphrase of meaning of the lemma in the source language (Fang). It will have bilingual and translation features, because the

lemma will be supplied with translation equivalents. These dictionaries will be descriptive in the sense that they will describe the meanings of Fang words in the source languages and will provide translation equivalents in the target language (French). They will include linguistic data, as they will be concerned with the meaning of the lexical units in Fang. However, encyclopaedic data will also find a place in these dictionaries because of the differences in the cultural and geographical settings of Fang. The encyclopaedic data can also be effective, for example where there are semantic differences between Fang and French, and pictorial illustrations can contribute towards bringing out the meaning.

Regarding the dimension of time as far as the distinction between synchronic and diachronic dictionaries is concerned, the dictionaries based on the microstructural programme are concerned with the languages used in the present time. As far as Fang is concerned, the dictionaries based on the microstructural programme will have a historical component. They intend to reflect changes in the form or meanings of words.

The dictionaries within the planned microstructural programme could be comprehensive because they will cover some linguistic, encyclopaedic needs. In this regard, the paraphrase of meaning can be enlarged for the compilation of a comprehensive version of the dictionary.

On the basis of the dimension of coverage of the vocabulary, they are general dictionaries as they are not concerned with only a certain part of the lexicon of the language but are concerned with all the variations of Fang.

On the basis of the scope, the dictionaries with the planned microstructural programme will be monoscopal, as they will present only one direction of the relation between the language pair (from Fang to French). These dictionaries will be monoscopal in the treatment presented in the central list, because items from only one language will be lemmatised (cf. Gouws, 2001a: 81)

On the basis of the number of languages, they are bilingual dictionaries, because they will present Fang items with their translation equivalents in French. The target users of the dictionary are those mother-tongue speakers of Fang who have a good knowledge of French and want to improve their knowledge of Fang. They will also be a help for those users who have some knowledge of French and want to obtain information in Fang. In this regard, the dictionaries will cover both languages – Fang and French. Fang will be the source language because it will contain the meaning or the description of words, and it will be translated into French, thereby giving the dictionaries a bilingualised or hybrid character.

1.9 Research methods, hypotheses and objectives

1.9.1 Research methods

As far as this research is concerned, fieldwork on spoken language was undertaken on various occasions (April 1999, April 2000, November 2002, November 2003 and November to December 2005). The research was done in Oyem, Libreville (Gabon) and Stellenbosch (South Africa).

Further research was carried out during the academic year in January to April 2006. The objective was to draw a profile of Gabonese students as dictionary users by finding out their knowledge, opinions and habits of use. The survey was conducted among 100 Gabonese students studying at the University of Stellenbosch in Stellenbosch and the Cape Peninsula University of Technology in Cape Town. Data was collected through the use of a questionnaire, which included 33 questions. The participants were asked questions about types of dictionaries, frequency of use, difficulties of use, instruction on dictionary use, etc.

The questionnaire cannot be regarded as an exhaustive empirical study of the needs of the target users of the dictionary with the microstructural programme, but should rather be seen as a pre-study to the comprehensive, empirically justifiable study of

user needs and expectations. Bearing the results of this questionnaire in mind, we hope eventually to move to further research by administering similar questionnaires to a more representative sample of Gabonese students in order to gain knowledge of their general profile.

The unabbreviated questionnaire is provided as Addendum 15 of this dissertation, followed by the abbreviated results (Addendum B-1), which list, in order, the results from the whole test group of participants. Only the answers to questions directly pertaining to the structural profile of dictionary use are included in these result pages and the results will be referred to at appropriate points in the body of the dissertation.

The techniques used to collect material for this study are discussed below. Firstly, the material for use in this work was collected as audio recordings and transcriptions. From ongoing research, the corpus is based on audiocassettes that represent words, sentences, songs, stories and proverbs in Fang. Some of these cassettes have been transcribed and partially computerised. For the transcription, we used the *Orthographe des Langues Gabonaise* (OLG). The data collected thus far has been the object of a frequency study conducted at the Bureau of the WAT.

Secondly, a large number of dictionaries were consulted during the compilation phase. A considerable amount of the information used in this research is drawn from the following publications:

- Chambers-Macmillan South African Dictionary Junior Secondary (SADJS)
- The South African Oxford School Dictionary (SAOSD)
- Dictionary of South African English on Historical Principles (DSAE)
- Collins Cobuild English Language Dictionary (COBUILD)
- Oxford Advanced Learner's Dictionary (OALD)
- Handwörterbuch der deutschen Gegenwartssprache (HWDG) (Concise Dictionary of Present-day German)

- Concise Oxford Hachette French Dictionary: French-English/English-French (COHFD).
- Chambers Universal Learners' Dictionary (CULD)
- Verklarende Handwoordeboek van die Afrikaanse Taal (HAT)
- Dictionnaire du Français Contemporain (Larousse)
- Longman Active Study Dictionary (LASD)
- Woordeboek van die Afrikaans Taal, Part X (WAT X)
- Oxford English Dictionary of Proverbs (ODEP)
- The BBI Combinatory Dictionary of English
- Pocket Oxford Dictionary (POD)
- Oxford Advanced Learner's Encyclopedic Dictionary (OALED)
- Oxford Advanced Learner's Dictionary (OALD)
- Micro Robert: Dictionnaire d'apprentissage du Français (MR)

Until now there has only been limited literature in Fang. However, some works are available and were used, such as the works of clergy and scientists, namely Mba-Nkoghe (1979), Andeme Allogo (1980), Mba-Nzué (1981) and Ondo Mébiame (1992). Literature on religion includes works by Lejeune (1895) and Raponda-Walker (1995). Their works are based on grammar. As far as scientific literature is concerned, there are the works by Hombert (1991) and Medjo-Mvé (1997a, b, c). Their works contain useful information regarding the dialects of Fang. The work done by Ondo Mébiame (1992) contains a lot of information regarding the phonetics, morphology and phonology of Fang (Fang-Ntumu, spoken in Oyem, the ninth province of Gabon).

1.9.2 Research hypotheses

In this research, several ideas or hypotheses are discussed. The first hypothesis states that good dictionaries increasingly base the compilation of their microstructures on corpora. In this research, the focus is on a corpus as the key to improve the quality of microstructural elements in the treatment of lemma signs.

The second hypothesis states that the data categories to be included are usually determined on the basis, among others, of the function of the dictionary. In this research, attention will be focused on the dictionary function or the reference skills and needs of the users. A group of intended users must be determined in order to detect their needs and decide on the corresponding data to be included in the dictionary.

The third hypothesis states that data in the central list can be supplemented by additional texts, situated either before and/or after the central list. In this dissertation, the focus is on texts that accommodate lexicographic data.

The fourth hypothesis is that the type of microstructure(s) to be employed has an impact on the retrievability of the information by the users. In this research, attention is paid to the different type(s) of microstructure(s).

The fifth hypothesis states that the data categories to be included are usually determined on the basis of the type of dictionary. In this dissertation, attention will be devoted to the different types of data. Specific type(s) of data will be relevant for specific type(s) of dictionary.

The sixth hypothesis states that the accessibility and availability of data types will have an effect on how data will be included the dictionary.

1.9.3 Research objectives

The aim of this research is to provide mother-tongue speakers of Fang with different types of data items that can be useful for dictionary articles in Fang.

The objective is also to help the members of the Fang community who do not have a good command of Fang to become empowered in their own language. This is true if one takes into account that the teaching of Gabonese languages can be done through teaching material such as dictionaries.

A further objective is to help mother-tongue speakers of Fang and speakers of Fang who do not have a good command of Fang, but have a good knowledge of French, to bridge the gap between these languages. This microstructural programme will assist them to transfer their knowledge from Fang to French.

In accordance with the aim of a monolingual dictionary, which is to describe a particular language, this programme must help users of Fang to understand the word; it must show how to produce sentences and how to use words in sentences, how to connect words with other words. By means of numerous microstructural data types (pronunciation, etymology, paraphrase of meaning, equivalents, etc.), which expand the articles, this dictionary should provide a rigorous inventory of and detailed instructions on how to use words.

1.10 Concluding remarks

This chapter has dealt with the *introduction and the contextualisation of the research.* Particular attention has been paid to the situation of Gabonese languages through several inventories and classifications of these languages, done by Guthrie (1953), Jacquot (1978), Raponda-Walker (1998), Kwenzi-Mikala (1988, 1998) and Idiata (2003). The inventory and classification carried out by Idiata (2003) is the most recent one and is based on existing classifications. The inventory of Idiata, which includes more speech forms (60 speech forms grouped into 10 language units), is used in this dissertation. These speech forms coexist with French, the only official language in the country, and the only language used in the social, political and economical domains.

In this dissertation, the focus will be on Fang, which is a language with several varieties, namely Fang-Ntumu, Fang-Okak, Fang mekè, Fang-Nzaman, Fang-Mvai and Fang Atsi. Fang will be used as source language. The decision to use Fang as source language is based on the fact that the Fang community is regarded as a dynamic group in the practice of their language and the majority of Fang communicate fluently in their mother tongue. The speakers of Fang can be considered

as homogeneous groups, and all the speech forms are variants of the same language. French will be used as the target language because of its status in Gabon.

The formulation of the microstructural programme, i.e. the different data categories to be included in the dictionary's articles, is always a big challenge faced by the lexicographer. The lexicographers of the dictionaries with the planned microstructural programme have the responsibility to record all the varieties of Fang and the changes due to the contact between Fang and French, which have an impact on the spelling, pronunciation, grammar and morphology of Fang.

This chapter has also dealt with *dictionary typology*. When compiling a dictionary, lexicographer(s) must be aware of the decision regarding the type of data to be employed in the dictionary. The typological classification of the dictionary should influence these decisions. The proposed microstructural programme is concerned with features of monolingual dictionaries and some characteristics of bilingual dictionaries; consequently, it will constitute a programme for bilingualised or hybrid dictionaries. The planned microstructural programme will focus on providing data such as pronunciation, orthography, paraphrase of meaning and translation equivalents.

This chapter reveals that a lot of work has been done on Fang. Relevant research has been done in fields such as lexicography, spelling, phonetics, phonology, grammar, etc. Most of these works have been directed at serving linguistic purposes and are unfortunately not accessible to the users of the language. It is proposed, in this present dissertation, that an in-depth study be done on the formulation of the microstructural programme. The purpose of this study would be to explore and describe the various data to be included in the articles of future dictionaries in Fang. This will respond to the needs of the users, who want to improve their knowledge, skills and ability to use the dictionaries.

Chapter 2: A brief overview of some aspects of Wiegand's theory

2.0 Introduction

Gouws (1999e) points out that lexicography has been established and witnessed its important development in a pretheoretical milieu. However, one of the most characteristic features of modern-day lexicography is the growth and development of its theoretical component and the interaction between theory and practice. Good dictionaries display a sound theoretical basis. The most productive contribution towards the formulation of a general theory of lexicography comes from the University of Heidelberg in Germany where HE Wiegand and his colleagues in the Department of Germanic Studies focus their research on this topic. Wiegand is one of the lexicographers who has written widely on the theory of lexicography. Gouws (1999e) continues by stating that "*the theory developed by Wiegand is often regarded as extremely complex. However Wiegand knows that there is nothing as practical as a good theory.*"

The purpose of this chapter is to present some aspects of Wiegand's theory. These aspects will be relevant not only for the compilation of the proposed dictionary, but also for the compilation of future dictionaries in Fang in particular, and in Gabonese languages in general.

2.1 Recent developments in the theory of lexicography

Modern-day metalexicography has been dominated by the work of the German scholar Herbert Ernst Wiegand. In his early work, he emphasised time and again the importance of the formulation of a general theory of lexicography (cf. Wiegand (1983a; 1983b; 1983c, 1984a, 1984b, 1984c, 1984d). Linguists and lexicographers

hold different views regarding the status of lexicography, and are not clear on whether it is a science, a craft, a special technique or an art. According to Wiegand (1989a: 248), lexicography is not a science but a scientific practice. Where scientific activities are aimed at producing theories, this is not true of lexicographic activities. The one common feature of all lexicographic activities is their aim to produce dictionaries that can be used as practical instruments. According to Hausmann *et al.* (1989: XVII), lexicography as practice and the theory of lexicography have a common goal, namely to foster the effective use of dictionaries. Lexicography is a practice aimed at the production of dictionaries. This forms the basis of another practice, viz. the cultural practice of dictionary use. Although linguistic theories influence the lexicographic practice, these theories are not primarily aimed at lexicography. For decades, lexicographers had to analyse and interpret existing linguistic theories in order to find something applicable to lexicography. This situation has emphasised the need for a general theory of lexicography that can assist lexicographers with the necessary theoretical input. One of the exciting developments of the last two decades, according to Gouws (1999a), has been the establishment of metalexicography as a fully-fledged discipline, and the inclusion of a general theory of lexicography as one of the important components of metalexicography. This has had numerous implications for the lexicographic practice.

On the basis of the understanding of dictionaries as utility products (Wiegand, 1988, 1989a), and the development of the modern functional theory of lexicography (Bergenholtz 1996, 1998; Bergenholtz & Tarp, 2002; Tarp 1992, 1994, 1995, 1998, 2000, 2002a, 2002b), it was claimed increasingly that, for lexicography to be developed further as a theory and a practice, it had to be considered as an independent science. Wiegand (1983c, 1984a, 1984b) argues that lexicography is not a part of so-called **linguistics**. He regards linguistic lexicography as a scientific practice aimed at the production of reference works on language. Although Wiegand recognises the importance of linguistics in lexicography, the object of lexicography is not language but dictionaries. Consequently, lexicography cannot be regarded as a branch of

linguistics, although it does overlap with various disciplines in the field of linguistics (cf. Gouws & Prinsloo, 2005a: 5).

Lexicography is not a branch of lexicology and lexicography is by no means theoretically determined by lexicology (cf. Wiegand, 1984c: 13–15). This does not mean that lexicology is not important for lexicography. Ideally, lexicology should produce the structure and the function of the lexicon of a language. Lexicographers and lexicologists must, therefore, study more intensively the question of how dictionary users reconstruct word meaning. Lexicography has to rework the results of lexicology. Wiegand calls this type of activity practical lexicology.

Innovative and profound developments in metalexicography have compelled lexicographers not only to take cognisance of the relevant theoretical issues, but also of the practical implications thereof. Today there is no reason why any practising lexicographer should fail to comply with the criteria laid down by a general theory of lexicography for the specific dictionary being compiled.

One of the biggest and most important challenges confronting present-day lexicographers is to use a dictionary as a basis and continue with the formulation of a coherent theory of lexicography. This can be done by generalising the theoretical issues relevant to each individual article in dictionaries to compile a comprehensive set of principles and criteria as a basis for the final formulation of the coherent lexicography. A result of such a theory will be that the lexicographers interested in, the treatment of pronunciation or the presentation of morphological data in dictionaries, for example, can turn to the general theory of lexicography for assistance instead of having to interpret linguistic theories not directed at dictionaries.

2.2 Major components of metalexicography

The term **metalexicography** refers to the field of study aimed at improving our knowledge of lexicographic reference work (which can be distinguished from non-

lexicographic reference works such as telephone directories and bibliographies) (Wiegand, 1989a: 258). However, the compilation of a dictionary is not the only or the last and crucial goal of lexicography. Dictionaries are compiled to be consulted as practical tools. The publication of a dictionary introduces a new activity, i.e. the cultural activity of dictionary use (cf. Wiegand, 1998). Wiegand (1984c: 15, 1989: 252) provides an exposition of the four most important components of metalexicography, i.e. systematic dictionary research (this is the general theory of lexicography), and research on the history of dictionaries, dictionary use and dictionary criticism (see Figure 2.1). Systematic dictionary research includes topics such as the purpose of dictionaries, the relation between lexicography and other disciplines, the organisation of lexicographic activities, lexicographic language research (e.g. research on the collection and processing of data as well as computer lexicography) and the theory of the lexicographic description of language (e.g. dictionary typology and the structure of lexicographic texts) (see Figure 2.2).

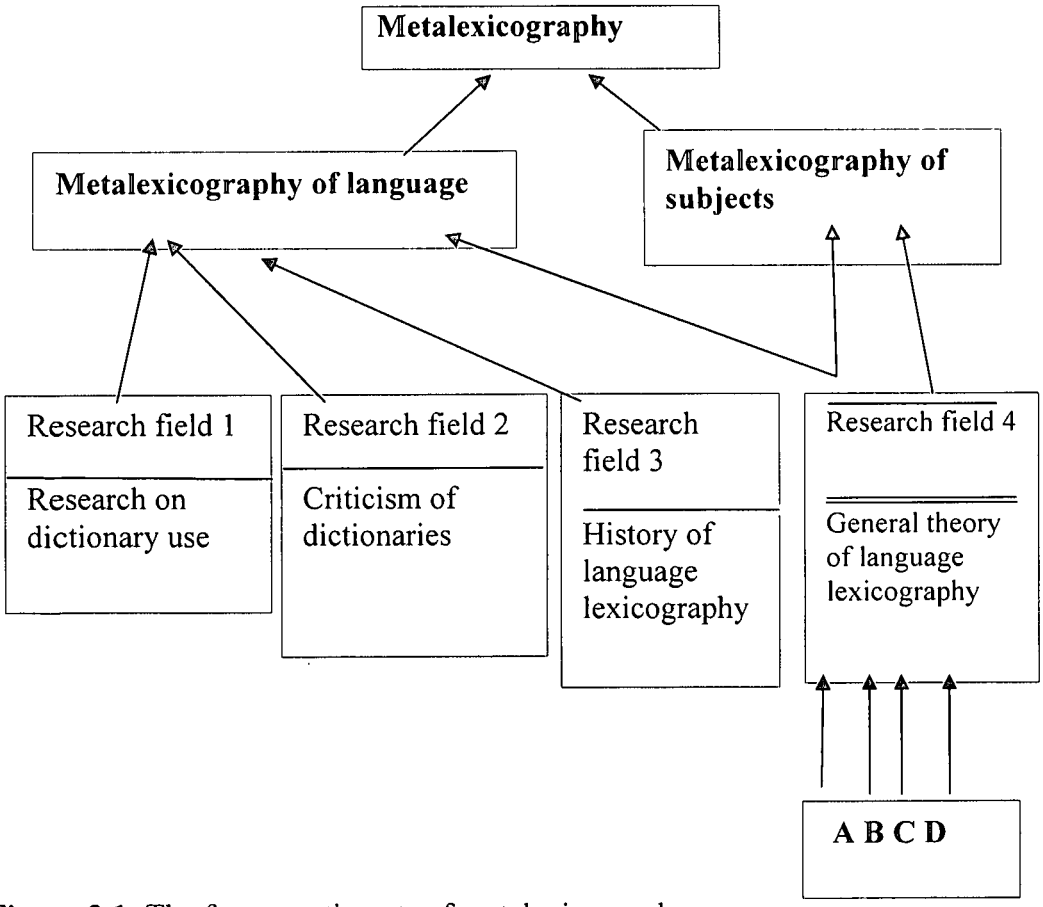


Figure 2.1: The four constituents of metalexicography

1989a: 279). According to Wiegand, these users look for information on linguistic expressions.

When Wiegand started working on the formulation of a general theory of lexicography, research about actual dictionary use was infrequent, and studies on dictionary use were limited. Wiegand (1987: 180) maintains that research on dictionary use is the youngest and the least developed research area of all research areas in metalexicography.

According to Hartmann (1989: 102), Wiegand was the first to plead for a sociology of dictionary use. If one wants to compile a better dictionary, one needs to make real empirical studies of users. Wiegand notes that the weak point of some earlier dictionaries was that they were never oriented towards sociological empirical studies. One cannot take these dictionaries into account for research about user needs and user behaviour.

2.2.1.1 Survey of dictionary use

According to Haas (1962: 48), a good dictionary is one in which you can find the information you are looking for. If one assumes agreement on the basic tenet that the dictionary user must be an important consideration in dictionary-making, one has to bear in mind a list of topics about dictionary use (dictionary awareness in Hartmann's terminology) and empirical studies of dictionaries. According to Hartmann (1999), to investigate dictionary awareness, a questionnaire survey is necessary. Hartmann (1999: 38-41) chooses to concentrate on the following 14 topics to investigate dictionary awareness:

1. General personal details (question 1): Dictionary makers have to determine the relative proportions between speakers (older, younger, students, male, female, native speakers and foreigner speakers) and find out whether their opinions on dictionary use show significant differences in these respects.

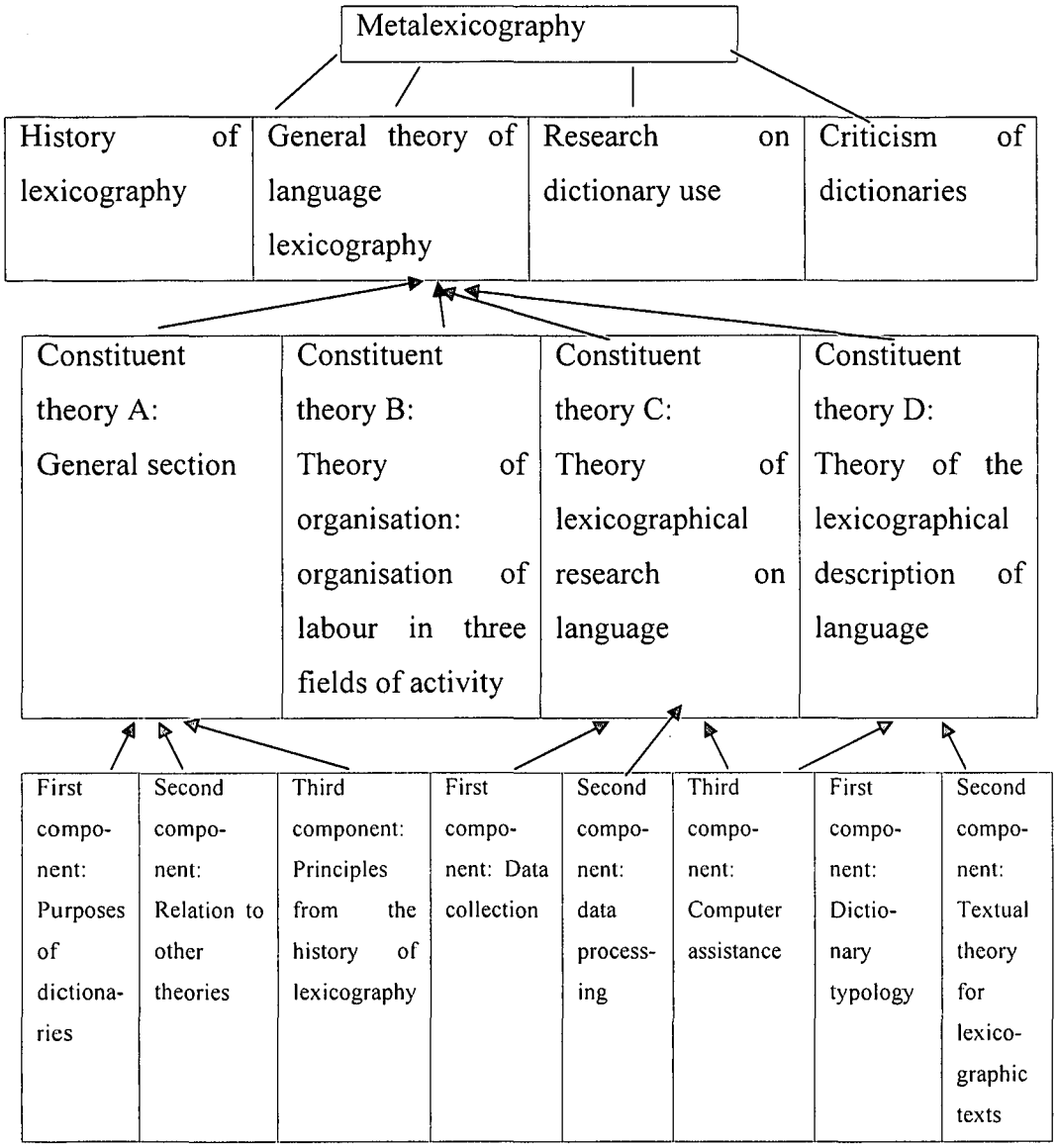


Figure 2.2: The four constituents of metalexicography and some subcomponents

2.2.1 Research on dictionary use

It is a well-attested fact that the genuine purpose of a particular dictionary should be identified prior to the compilation phase and provision should be made to fulfil the real needs and recognise the reference skills of the intended target users (Wiegand,

2. Foreign language(s) studied (questions 2 and 3): Lexicographers would want to know whether there are further differences between individual foreign languages studied (e.g. French vs. English) or between the specialisation in modern languages and other subjects studied (e.g. French vs. English vs. Engineering).

3. Level of study and subject(s) taken (questions 4 and 5): Specifically, lexicographers want to know whether there is a tendency for dictionary ownership and reference skills to rise as students progress through the university, from first-year undergraduate studies to postgraduate research level, and whether there is any variation in the perceived dictionary image.

4. Start of dictionary use and ownership (questions 6 and 7): There are no longitudinal studies of prototypical modes of dictionary use throughout a young person's maturation, from nursery and primary school to further and higher education. It is hypothesised that dictionary use is normally associated with reading and writing in primary school (practically nothing is known about children's dictionaries at kindergarten and in the family home before that), and that it progresses and expands gradually along the educational hierarchy. Given the vagaries of personal memory, questionnaires may not be completely reliable records of early use and first ownership of reference works, but they can illustrate tendencies based on a large sample.

5. Type(s) and number of dictionaries owned (questions 8 to 10): Distinctions such as monolingual vs. bilingual dictionaries, general vs. specialised dictionaries and alphabetical dictionaries vs. thematic thesauruses are often discussed in the literature, but their respective appreciation among various users has not been adequately surveyed. The interest of the lexicographer is in the whole range of reference works, including electronic types, their ownership and (in combination with data elicited by other questions) their use among different user groups.

6. Type(s) and titles of dictionary used most frequently (questions 11 to 13): Several researchers have remarked on the striking ignorance displayed by users about the contents of their dictionaries, even their inability to remember the correct titles of the ones they consult regularly. Lexicographers would want to pursue this line of enquiry, with particular reference to specific user groups, and to determine, in addition, the extent to which electronic dictionaries are known.

7. Conditions of dictionary purchase (questions 14 and 15): In a pioneering study that combined group interviews with questionnaires, lexicographers asked user groups about their familiarity with and evaluation of their dictionaries. The following order of rank emerged for their priorities of dictionary purchase: recommendation by specific tutors, usability in examinations (where only monolingual dictionaries were permitted), personal preference, etc. Monolingual dictionaries were apparently bought after bilingual ones, and the price was given as the main reason why a purchase was resisted.

8. Awareness of appendices and user guidance (questions 16 and 17): The literature is generally sceptical (but also relatively vague) about the average dictionary user's (in)competence regarding front-matter and back-matter information. Lexicographers would want to establish whether and to what extent students are familiar with several types of appended information and whether or not they bother with the explicit instructions provided in the preliminary sections of their dictionaries.

9. Contexts and frequency of dictionary use (questions 18 to 21): Lexicographers suspect that there would be differences in dictionary use according to the occasion (in class or examinations, study at home or in the library), activity (reading or writing, work or play) and motivation (look up or ask others), as well as the particular information type sought

(meaning, grammar, encyclopaedic fact, etc.). They expect work-based and written activities to dominate over entertaining and oral interchanges, but keep an open mind on the possible breakdown of these by such factors as proficiency level, native language and subject specialisation, the latter topic never having been investigated before.

10. (Dis)satisfaction with the dictionary (questions 22 and 23): Whether or not users are satisfied with their dictionary. Lexicographers wonder whether it would be possible to obtain more specific data on the specific users' own ability to use a dictionary and, conversely, their frustration at any unsuccessful searches.

11. Difficulties of use (questions 24 and 25): If lexicographers are willing to admit that the user perspective is worth exploring as much as the compiler perspective, they are faced with the problem of topicalising the process of dictionary consultation. Is it straightforward, or is it difficult? Is it a singular or complex act? Are the difficulties inherent in the material sought, or are they dependent on the users' navigational skills? Lexicographers must decide to subdivide the question into two, namely 'problem words' and 'sources of difficulty'. They have to know if there would be differences in the way students from different countries rank 'general words', 'technical terms', 'common words in technical fields' and 'idioms and phrases' as motivating dictionary searches. Do native speakers have more (or less) trouble with technical vocabulary or idiomatic expressions than foreign learners? And, if difficulties of navigation arise during a search, are these due to the users' relative inexperience or the nature of the dictionary text? Indeed, in view of the inconclusive evidence of previous research, is it sensible to attach a blame to either inadequate user skills or inadequate dictionary design?

12. The joys of dictionaries (questions 26 and 27): Is there a popular folklore about dictionaries, and where in any case do people's opinions about the

dictionary come from? Lexicographers want to find out more about the reactions of specific user groups to a range of statements about the nature and personal benefits of dictionary use.

13. Instruction in dictionary use (Questions 28 and 29): The most 'practical' part of the questionnaire was concerned with an issue that has troubled many authors of research papers on the theme of dictionary use: whether (and how) to provide deliberate instruction in the required reference skills. Lexicographers believe that dictionary skills must be taught, carefully and thoroughly, if users are to extract from their dictionaries the information that lexicographers have put into them. Teachers will be better able to carry out such teaching if they are fully aware of exactly what their students are doing with their dictionaries, what they expect from them, and how easily they are satisfied during the process of consultation.

14. Other (open) points (question 30): Most questionnaire surveys include 'open' questions with the intention of encouraging respondents to use their own words on one of more aspects of the field investigated.

Hartmann (1999: 41-49) has drawn up an inventory of questions that are related to the aforementioned 14 topics:

1. Gender

2. Age

3. What is your native language? Which foreign language(s) have you studied?

4. Which level of study are you?

5. Which subject(s) are you studying?

6. When did you start to use a dictionary?

7. If you own a dictionary, when did you first acquire it?

8. What type(s) of dictionary do you own?

9. Do you own any electronic dictionaries?

10. How many dictionaries do you own?

11. Which type(s) of dictionary do you use most frequently?

12. If you remember, can you provide the following information about this dictionary: title, editor, publisher, year of publication, the number of entries included, size, colour?

13. If you USE an electronic dictionary, which type is it?

14. When you last bought a dictionary, what was the reason?

15. What is your priority when you buy a new dictionary?

16. Do you ever use information contained in the appendices?

17. If you are aware of the user guidance notes at the front of the dictionary, do you study them? Do you find them user-friendly? Do you manage without them?

18. When do you use a dictionary?

19. Do you use a dictionary while you read newspapers and magazines, textbooks, academic journals, a book for entertainment? Do you use a dictionary while working on written assignment, translation equivalent, play word games?

20. What do you do when you notice a new or difficult word while reading?

21. How often do you use a dictionary?

22. Are you, on the whole, satisfied with your ability to use a dictionary?

23. Do you ever consult a dictionary without being able to find the information you need?

24. What type of information is most difficult to find?

25. What do you think are the causes of these difficulties?

26. In your opinion, is using dictionaries easy, difficult, exciting, etc.?

27. Based on your experience, which of the following statements do you agree with? Using dictionaries for improving reading, writing? Using dictionaries for helping speaking, performing better in studies?

28. Have you ever been taught how to use a dictionary?

29. Do you think it is important for users in your subject to be taught how to use dictionaries?

30. Add any other points you want to make about your experience with dictionaries.

2.2.1.2 About a model of dictionary use

With regard to research on dictionary use, Bogaards (2003: 28) proposes a model of dictionary use (see Figure 2.3 below) if the lexicographer(s) want to bring the dictionary close to the user. He or she has to take into account several steps concerning the study of that user.

1. The first step is to determine the nature of the problem: is it conceptual, syntactical, lexical or are other types of linguistic knowledge implied?

2. The second step is to know the differences between types of dictionaries.

3. The third step is to determine the word that causes a problem

4. The fourth step consists of establishing the chosen word.

5. The fifth step is to select the word.

6. The sixth step consists of selecting the entry.

7. The seventh step is to extract the relevant information from the dictionary

8. The eighth step consists of adapting the data to the specific context.

9. The ninth step is the final question, which relates to the success of the whole operation.

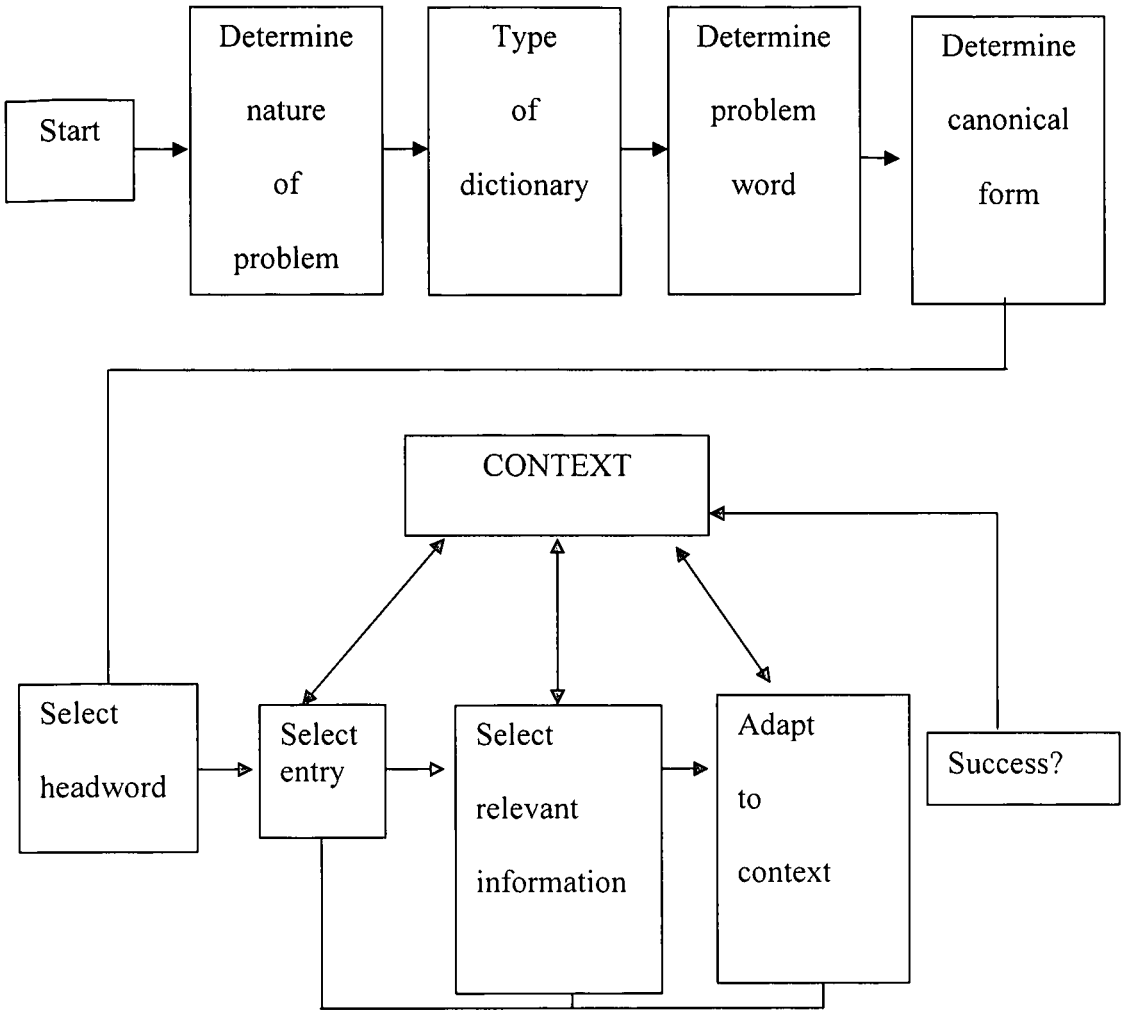


Figure 2.3: A model of dictionary use

According to Bogaards (2003: 31), the goal of this model is to serve as a point of departure for further research on dictionary use, in which the dictionary can be used as an instrument that is handled by the user in order to find a solution to his problem.

2.2.1.3 Typology of problems

Wiegand (1998, 2001) has drawn up a typology of problems that can be solved in general by consulting any dictionary. These problems will mainly fall within the following situations faced by the users in situations of language use.

2.2.1.3.1 Situations of passive language use

Wiegand (1998) explains the first situation that a user faces as the first type of conflict, the so-called word meaning interference when reading a text. This occurs when a reader does not know a particular word in a particular language L, even though the reader knows that language. The problem arises when the reader does not discern the usage of the word, even though he may know other usages of that word. Such a reader could ask himself or herself what the word means. Another option is that the user could consult a dictionary. This is when a situation of dictionary use evolves. Wiegand (cited in Smit, 1996) determines this situation type as an individual word gap when reading a text. This situation can be subdivided into numerous types.

1. When the reader does not know a particular word, there may be a so-called word gap as simplex gap.
2. A reader may not know the usage of a specific word, even though he might know other usages.
3. A reader may not know a particular derivation of a word, even though he might know the derivative morpheme and the word formation pattern that occurs. Then a derivative gap occurs.
4. A reader may know both components of a compound, but the meaning of a compound or its usage may be unknown. This results in a compound gap.
5. A reader may be unsure of the usage of a particular word. Even though the reader has read or heard a word somewhere before, and does have a faint notion of what the word may mean, he may still look up its meaning. This results in a foreign word gap.
6. A reader may know two particular words, but in the text, the difference between the meanings of these two words is not clear. A word discrimination gap occurs. Wiegand calls this type of gap a lexical-semantic structural gap.

7. There are even more types of gaps. For example, gaps may occur in idiomatic expressions and in the stylistic and pragmatic use of language.

Wiegand (cited in Smit, 1996) draws up an inventory of problem situations when certain types of information are omitted in dictionaries. These problems are as follows:

1. When one cannot fill a word gap, then a lemma gap exists in a dictionary.
2. When one cannot fill a word meaning gap, then paraphrase gaps or paraphrase errors occur.
3. When one cannot solve the uncertainty of word use, then a gap in the information on the semasiological structure and a synonym gap appear in a dictionary.
4. When one cannot fill a word discrimination gap, then an onomasiological gap exists in the dictionary.

These types of problems can be deciphered in practical lexicography.

2.2.1.3.2 Situations of active language use

According to Wiegand (cited in Smit, 1996), in a situation of active language use one may not find a particular word during the process of writing texts or when one wants to change a particular word. The problems which arise during the process of writing are:

1. The writer looks for a word that does not exist in that particular language.
2. The writer looks for a word that he does not know already, even if the word exists in that language.
3. The writer looks for a word that he knows already and uses in the situation of reading and hearing, but of which he does not know the usage in the specific writing situation at hand.

To decipher such writing problems, the writer would have to consult a dictionary, which leads to a situation of dictionary use. Wiegand (cited in Smit, 1996) illustrates this type of dictionary use as a problem of finding a word. Different subtypes of this type of problem can be identified:

1. Lexical-semantic generation: A writer would have to generalise a certain formulation.
2. Lexical-semantic specification: A writer would specify a certain formulation in more detail.
3. Lexical-semantic polarisation: A writer may express the opposite of a formulation already used.
4. Lexical-semantic meaning differentiation: A writer would express a very specific meaning.

2.2.1.3.3 Didactic situations of dictionary use

In this situation, one can use a dictionary in order to enlarge one's vocabulary, or use a dictionary to master a language by looking up certain words or to verify knowledge of particular words. This is the ideal type of situation.

2.2.1.3.4 Linguistic situations of dictionary use

This type of situation occurs when the linguist wants to study words of a particular language.

To sum up the classifications of situations of dictionary use, it occurs that in situations of passive language use, the user may come up against problems of gaps such as simplex gaps, the usage of specific words or meaning gaps, word gaps as derivative gaps, and word discrimination gaps. In situations of active language use, users may encounter problems of finding words. In didactic situations of dictionary use, the

users have to be well informed in order to use a specific special-field dictionary. The users may be trained to use the dictionary in the most proficient approach.

2.2.2 Research on the criticism of dictionaries

There are interesting themes in the development of lexicography. One such theme, which is particularly relevant in modern lexicographic theory, is that of the criticism of dictionaries. It has long been the fate of dictionary compilers to be criticised more extensively on matters that they would regard as being trivial than on the substance and method of their work (cf. Murray, 1977: 234). Dictionary criticism has thus been impoverished because the slow methodological evolution of the great historical dictionaries took place without real dialogue between dictionary makers on the one hand and the philologists and linguists on the other (Osselton, 1995: 148; Quemada, 1967: 16–17, 1972: 433). Osselton (1995: 148) notes this lack of depth in critical appraisal when looking at Johnson's historical *Dictionary of the English Language*.

2.2.2.1 The Pre-critical Period and Johnson

During the Pre-critical Period, there were a number of observations on dictionary criticism. Examples are:

1. Charges of plagiarism and erroneous definition occurring in the seventeenth century (cf. Starnes & Noyes, 1946: 51–53).
2. Redundancies and deficiencies in the word lists of rival dictionary makers became the staple of self-advertisement in eighteenth-century prefaces (cf. Starnes & Noyes, 1946: 71, 82, 100).
3. Johnson was criticised by Withers in 1788 for his circular definitions, such as *long* for "not short", *short* for "not long"; by *Critical Review* in 1783 for defining common words by means of erudite ones, as in *twisted* for "contorted"; by Webster in 1807 for the lack of order in his

definitions; and in particular by De Rivarol in 1797 for placing figurative meaning before the literal. He was blamed for excluding (and also for including) archaic and dialectal words by Maxwell in 1755 and Croft in 1788, as well as for his neglect of synonyms (by Adam Smith in 1755). He was acknowledged by Adelung to be strong on the written, literary language, but weaker in his coverage of common usage, idioms, phraseology, etc. (cf. Osselton, 1995: 149).

2.2.2.2 Dictionary criticism and dictionary research

With regard to historical dictionaries, the criticism of dictionaries shows a lack of interest in general principles; dictionaries were not based on sound lexicographical principles. In this regard, one can quote the quasi-absence of concern for semantic principles of definition, which is specially striking, and the topic of lemmatisation is seldom raised. User convenience is hardly an issue.

From the year 1980, however, there are important changes in the criticism of dictionaries. Firstly, like literary criticism, dictionary criticism is now in the process of becoming professionalised. Secondly, dictionaries cease to be only the object of criticism, but also become the object of research.

2.2.2.3 Dictionary criticism in modern lexicography

Recently, the criticism of dictionaries has again come to the fore in lexicographic research (cf. Wiegand, 1993). Research on the criticism of dictionaries is the second component of Wiegand's metalexicography. In this research, one can evaluate existing dictionaries and comment on and judge reference works. One can also determine limitations and advantages that allow lexicographers to produce better dictionaries to fulfil the needs of the users.

According to Smit (1996: 29), research on the criticism of dictionaries helps to establish methodological instruments with which it is possible to critically analyse them. Wiegand (1993: 2) distinguishes different types of critical investigations. These are:

1. Reviews, which include journalistic reviews and academic reviews.
2. Review articles, which can also be divided between journalistic and academic articles.
3. Review monographs.

In fact, the criticism of dictionaries should move ahead of existing dictionaries, the ones that are being reviewed, because it should firstly be beneficial and, secondly, it could help to create better dictionaries (Wiegand, 1993: 3).

If one wants to undertake a critique of dictionaries, one has to refer to these above-mentioned reviews because they give an explanation of the characteristics of these so-called dictionaries. According to Wiegand and Kucera (1981: 6), one has to consider the following aspects if one wants to undertake a criticism of dictionaries:

1. The history of the publishers: The first part of which contains a short story of the publishing firm.

2. The dictionary basis: All the linguistic material that forms the basis for the compilation of a language dictionary. The basis of a dictionary contains three components, as pointed out by Wiegand and Kucera (1981: 7). These three sections are: lexicographical corpus (primary sources), secondary sources and all the linguistic material that does not belong to the previous sections of the dictionary basis.

3. The macrostructure: As stated by Wiegand and Kucera (1981: 13), the

macrostructure is the sum of all the arrangement relationships between the different lemmata of a dictionary.

4. The microstructure.

According to Wiegand and Kucera (1981: 86), compilers who claim that they have included a great deal of special-field terminology must have the following:

1. Special-field terms: According to Wiegand and Kucera (1981: 86), the theory concerning the lexicon of special subject fields, based on specific theory of special-field terminology, provides rules for: (a) the choice of the lemmata on the level of morphemes, lexemes and word forms, as well as on the syntagmatic level and the level of sentences, within specific disciplines and interdisciplinary relationships, and international conventions of terminology; (b) spelling; (c) grammatical characterisation; (d) strategy of explication.
2. A comprehensive, topical corpus, with the internal relationships between terms worked out precisely.

To conclude this section, if one wants to compile better dictionaries in the future, one should know some of the limitations and advantages of existing dictionaries in order to evaluate them to determine whether they could fulfil the real needs of the potential users.

2.2.2.4 Dictionary criticism and modern lexicography: Its influence on the WAT

A more comprehensive account of the influence of dictionary criticism can be found in Gouws (1996a: 104–105). According to him, two examples give evidence of the influence that dictionary criticism has had on lexicographic practice. The *Woordeboek*

van die Afrikaanse Taal (WAT) has been the target of many a critic and the criticism had been directed at both the content and the editorial policy. Volumes VI and VII in particular have been criticised severely, although this criticism was not always completely valid or justified. In the front matter of volume VIII, reference is made to the Bureau of the WAT's strategic planning sessions and the resulting change in the editorial policy. It is said quite emphatically that the editorial system has been adapted to comply with the present-day standards of linguistics and lexicography. Reference is also made to the fact that the new system implements, as far as possible, the suggestions and comments made in the review of Volume VII. The front matter of Volume IX also refers to this strategic planning and the input of external experts in the revision of the editorial policy.

Volume VIII and especially Volume IX of the WAT have to be regarded as the best volumes produced by the Bureau until then. The incorporation of suggestions made in the reviews of earlier volumes in their strategic planning has helped the Bureau to enhance the quality of its products. The editors of the WAT were not only sensitive to dictionary criticism, but responded to it in such a way that their dictionary can now meet more of the needs of its users than ever before. This does not only prove the value of dictionary criticism as a component of metalexicography, but indicates the priority that should be given to dictionary criticism when compiling a sequence of lexicographic needs.

The changing needs of different user groups have altered the face of dictionary typology. In metalexicographic discussions, criticism has been directed at this typological void (cf. Otto, 1989). Lexicographers responded to the criticism and today dictionaries assist the language learner in the fulfilment of his/her lexicographic needs.

2.2.3 Research on the history of lexicography

Research on the history of lexicography is the third component of Wiegand's

metalexicography. Wiegand (1983b: 301) gives the following reasons for studying the history of lexicography:

1. the general perspectives, in which the history of lexicography becomes an object of scientific inquiry.
2. the criteria according to which selections are made from the historical facts.
3. the questions which should be raised with regard to the object, the dictionary, which is studied.

Wiegand (1990: 2101) distinguishes two relevant factors for studying the history of lexicography. These are the external and internal histories. The external history takes place when one concentrates on external factors with regard to lexicographic activity. When one focuses on the internal factors, one does internal history, the history in which one concentrates on the changes that took place with regard to the principles and methods applied (Smit, 1996: 39). These factors have the power to ensure or control the selection of the lemmata, the contents of dictionary articles, the form and the style of a dictionary.

According Wiegand (1990: 2102), four different external factors may exert an influence on the internal history of a dictionary. These are:

1. the relationship of the dictionary with various other lexicographical processes, for example older dictionaries may serve as secondary sources for newer ones.

2. the relationship of the dictionary with various other disciplines.

3. the relationship of the dictionary with social, political and cultural trends prevailing at the time of compilation: the need to compile a particular dictionary may be a result of such non-scientific reasons.

4. the relationship of the dictionary to the language it describes. This would lead to a history oriented towards linguistics, or a study oriented towards the history of language.

According to Wiegand (1990: 2102), one could determine the characteristics of dictionaries by studying the internal history of different dictionaries. The features looked at are the following:

1. which dictionaries serve as sources.
2. the changes that may have taken place in the microstructure of articles.
3. the development of and changes in the concepts regarding standardisation and text condensation.
4. changes in the style of the dictionary.
5. changes in the microstructure and access structure of the dictionary.
6. the relationship between the different dictionaries studied.

In Wiegand's view (1990: 2102), if one studies the internal history of different dictionaries, and compares the results or outcomes, one draws up a historical overview of a part of the entire history of lexicography.

2.2.3.1 History of historical dictionaries

Wiegand (1984d) classifies the different types of historical dictionaries as 1. etymological dictionaries, 2. diachronic dictionaries and 3. historical lexicography dealing with the works of authors.

2.2.3.1.1 Etymological dictionaries

According to Wiegand (1984d: 575), etymology is a historical discipline that scrutinises 1. diachronically, the provable history of a word, 2. by means of

comparative linguistic studies, the reconstruction of the proto-meaning of a word, and 3. synchronically, the motive for designation.

The compilers sometimes have a problem of making choices or do not know which items to include in their dictionaries. Wiegand (1984d: 572) identifies principles of selection that have to be followed. If these principles govern, they create selection problems that have to be solved. A method of selection has to be used that can be applied for the selection for specific lemmata. The method of selection consists of the criteria for selection that serve as an ordered list of prescriptions on how one could make choices from the total range of lexical items. If one wants to solve the problem of selection of lexical items, one could do it in the case of etymological dictionaries, as mentioned above.

Regarding the concept of etymology, one may distinguish three classes of etymological items that can serve for inclusion as lexicographical segments. These classes represent three lexicographical principles determined by the type of dictionary or the type of etymological dictionary. These principles are: 1. the principle of proving the history of a word; 2. the principle of reconstructing a proto-meaning of a word; and 3. the principle of stating the motive for designation. Each principle corresponds with one method, says Wiegand (1984d: 575).

According to Wiegand (1984d: 577), if one wants to plan new dictionaries, one should take into consideration the different propositions given below. They allow solving some lexicographical formulation problems in order to guarantee the formulation of dictionary articles. These propositions are:

1. One should make a distinction between researching the etymology, which is the history of a word, and the lexicographical presentation of that word according to lexicographical principles and by means of lexicographical methods in a dictionary.

2. The structure of articles may be organised in keeping with the type of lemma sign that is to be treated. This allows one to get different types of articles. For example, both loan words and new forms of words should be treated separately; one may use different methods to treat these words.

3. One should discern the real needs of users. One should know that users consult dictionaries for particular questions. One has to foresee these questions and take into consideration the outcomes of the so-called empirical research on dictionary use.

One may take into account the above-mentioned propositions of Wiegand if one collects etymological data and makes a microstructural programme for Fang. One will have to remember to incorporate such information in some dictionary articles where it is indispensable and accessible.

2.2.3.1.2 Diachronic dictionaries

In the case of diachronic dictionaries, one may consider the dictionary in accordance with the origin, history and development of the treated language. One also should question how the history of a word's meaning should be treated in a dictionary. Wiegand (1984d: 578) says that by taking into consideration the history of the meaning of a word, one makes the history of that word.

When Wiegand investigated certain diachronic dictionaries in German, he studied some dictionary articles with the aim of ascertaining the types of data contained in them. From this investigation, Wiegand (1984d: 478) deduced the following recommendations:

1. Formulate a synchronic explanation of meaning.
2. State the period of time.
3. Introduce one reference as a source.
4. Put the meaning explanations in chronological order.

5. Organise the chronologically structured text so that a coherent text appears.
6. Present lexicographical examples following each meaning explanation.
7. Mention similarities in the change of meaning by referring to the appropriate lemmata.
8. Add the lexical item which is currently used in the place of the lemma sign.
9. Give the reasons why there are changes in meaning.

Explaining the history of the meaning of the word, says Wiegand (1984d: 582), is to explain the changes in meaning of a word during a course of time. One should also give the reasons why a new form of the word was created during the course of time. One should give information on why some words had undergone particular changes in meaning.

Wiegand (1984d: 589–590) has also scrutinised some propositions in which future dictionaries should be advanced. One should bear in mind that users need dictionaries for usual reference work, and not merely as reading matter. The roles of new diachronic dictionaries should be follows:

1. A new diachronic dictionary might function as a way or as a means to preserve and maintain the users' basis of understanding.

2. A new diachronic dictionary might not focus on the explanation of the changes of meanings of a particular word during the course of time, but might rather focus on the history of the meanings of a particular word during the course of time.

3. A new dictionary should function as a way to determine historical knowledge of the framework of the present day. Knowing the changes in usage can relativise linguistic norms, and make one tolerant towards different semantic and pragmatic varieties.

2.2.3.1.3 Historical author lexicography

This lexicography, which, according to Wiegand (1984d: 590), constitutes a lexicography of authors, concentrates on methods of selection and types of meaning description. This type of lexicography shapes part of text lexicography. Wiegand (1984d: 590) defines text lexicography as a subdivision of language lexicography in which language reference works are compiled that specifically have a written text texts as a corpus. Wiegand (1984d: 598) identifies five different types of author lexicographic products. These are: 1) author vocabularies, 2) author glossaries, 3) author dictionaries, 4) author indexes and 5) author concordances.

2.2.4 Research on general theory of lexicography

According to Wiegand (1984c: 14–15), a general theory of lexicography must systematically process and explain the reasons for the knowledge required to enable lexicographers to carry out their work appropriately. In the first section below, general purposes for mono-, bi- and multilanguage dictionaries are given.

2.2.4.1 The genuine purpose of a dictionary and lexicographic functions

Dictionaries, as practical instruments, are compiled to be used by a specific target user group. In order to be functional instruments, dictionaries have to fulfil a specific purpose. In metalexicographical terms, this purpose of a dictionary is known as the genuine purpose (cf. Wiegand, 1998).

Taking the cue from Wiegand (1998), Gouws (2001a: 66) defines the genuine purpose of a dictionary as follows:

> *The genuine purpose of dictionary implies that a dictionary is produced so that the target user who uses the dictionary in a typical usage context will have an instrument to assist him in achieving a successful dictionary*

> *consultation procedure by reaching the goals that motivated the search. The genuine purpose of a dictionary should therefore be to ensure successful dictionary consultation procedures. A successful dictionary consultation procedure depends on the way in which the needed linguistic information can be retrieved.*

Gouws (2001a: 66) argues in favour of a genuine purpose of a dictionary, which is codetermined by, among others, its typological nature and its intended target user group. Gouws (2001a) and Gouws and Prinsloo (2005a: 7) convincingly point out that the aim of a genuine purpose is to transfer, by means of lexical data, information regarding the set of lexical items included as treatment units in order to ensure the linguistic empowerment of the intended target user.

One of the most important developments in modern-day lexicographic theory has been the focus on the functions of dictionaries. Scerba (1940), the Russian lexicographer, was the first lexicographer to introduce the concept of lexicographic functions. Some lexicographers followed Scerba's footsteps by pointing out that, for any given language pair, at least four and perhaps even eight bilingual dictionaries have to be compiled to meet the diverse needs of the users coming from both language groups. In this regard, a distinction has to be made between dictionaries targeting the active and passive use of source and target language users respectively (cf. Gouws & Prinsloo, 2005a: 7; Kromann *et al.*, 1984a, 1984b).

The needs of the intended users must be determined by the genuine purpose of the dictionary. This will have implications for the typological choice, as well as for the structure, contents and presentation of the intended dictionaries (cf. Gouws & Prinsloo, 2005a: 14).

2.2.4.2 Relationships to other theories

This section concerns relationship to other theories, constituent theories, descriptions

of concepts and tenets of a theory of language and communication. It includes, for example, a description of which concepts have been borrowed and which sections of conceptual systems have been used. In particular, it must be established which premises are taken over from a general theory, from a special lexicology (i.e. one related to an individual language) or from several such lexicologies. These relationships are:

1. The relationship of lexicography to semantics: One should first take into account the field of lexical semantics that can be used to do research by describing the meanings of linguistic signs that are considered as lexical items of the lexicon of a particular language; establish lexical structures, especially of paradigm semantic relationships of the lexical items with each other; and indicate the conditions under which lexical items can be combined.

2. The relation of lexicography to theories of special-field lexicography: A distinction is made between scientific language and everyday language. Wiegand (1992: 253), in his theory of non-specialised language, which could be applied to special-field lexicography, argues that technical terms in specialised vocabulary are treated somewhat differently. He differentiates between scientific terms and other kinds of language expressions. According to Wiegand (1979: 119), one should also take into account the standardisation of different fields, which prevents communication problems between those fields.

3. Principles from the history of lexicography: According to Wiegand (1984d: 561), these principles guide lexicographers in the activity of compiling dictionaries. The following aspects can be identified within lexicographical principles:

   - Identification of lexicographical principles: Here one states which principles have been valid for dictionary types in the past and why.

- The classification of lexicographical principles: Here one could identify, firstly, principles that have to be followed so that a dictionary can be compiled. These principles are: 1) the principle of data collection, i.e. a principle according to which data is collected when one has to make a language dictionary (Wiegand, 1984d: 562); 2) the principle of the medium, which is a principle according to which a medium is decided upon when one wants to compile a dictionary. This principle has to be followed when a dictionary is compiled (Wiegand, 1984d: 562); 3) the principle of data fixation, as the principle according to which one data-fixation system has to be used when a language dictionary is compiled (Wiegand, 1984d: 562); 4) the principle of arranging the data, as a principle according to which all carriers of the guiding elements have to be arranged by at least one method of arrangement when a language dictionary is compiled (Wiegand, 1984d: 563); 5) the principle of information, according to which information has to be given on lexicalised items when a language dictionary is compiled (Wiegand, 1984d: 564). Secondly, principles that have to be followed so that a dictionary of a specific type can be compiled. According to Wiegand (1984d: 517), all dictionaries belong to some type or other. The formulation of type-specific principles depends on the research done in the first component of Constituent theory D, namely dictionary typology. Thirdly, principles that have to be followed so that a dictionary of a specific type can have specific features. These principles are as follows: corpus principle, the principle of proving the source and the citation principle. According to Wiegand (1984d: 568), these principles are derived from historical factors, social needs and scientific demands.

2.2.4.3 The structure of dictionaries

Recent work in the field of metalexicography and dictionary research suggests that

dictionaries should be regarded as carriers of texts (cf. Wiegand, 1981, 1991, 1996a, 1996b). Each dictionary contains a range of different texts, which are functional components of the dictionary as a big text. To accommodate a variety of text types, modern dictionaries display a so-called frame structure, consisting of the central list (alphabetical section or dictionary proper), which is complemented by the front matter and back matter, functioning as outer texts.

2.2.4.3.1 The data distribution structure

The data distribution structure of a dictionary allows the lexicographer to accommodate the lexicographic data in more than one text (cf. Wiegand, 1999). Gouws (2001a: 82) goes further by stating that, during the conceptualisation phase of the dictionary-specific process, the lexicographer has to decide exactly where the different categories of lexicographic data should be accommodated. The data distribution structure determines the internal presentation of the articles and the different search zones to which data categories are allocated.

2.2.4.3.1.1 Outer texts

Wiegand (1999) makes a clear distinction between integrated and unintegrated outer texts. Unintegrated outer texts complement the central list and are not integrated into the genuine purpose of the dictionary. Integrated outer texts function in coordination with the central list and are integrated into the genuine purpose of the dictionary (cf. Gouws, 2001a). For example, Gouws (2001a) proposes that the data to be presented as part of the category of grammatical information can be allocated to different texts. The lexicographer could restrict the presentation of grammatical information in an article and give a comprehensive discussion of grammatical aspects in one of the outer texts. This implies that an outer text does not only complement the central list, but constitutes a functional part of the lexicographic treatment of lemmata, says Gouws (2001a: 84).

2.2.4.3.1.2 Central list

The central list can be regarded as the alphabetical section or dictionary proper (Gouws, 2003: 34). It has to be regarded as the text containing the most typical structural components of a dictionary. Research in the field of metalexicography has led to the identification of a number of structural components to be negotiated in the central list of a dictionary, e.g. the macrostructure, microstructure, access structure, addressing structure, mediostructure, etc. (there are more components but they will not be discussed in this work.)

2.2.4.3.1.3 Macrostructure

The macrostructure is the first major component of the central list. All lemmata included as part of the central list have macrostructural status. Different types of lemmata encompass different types of lexical items, namely lexical lemmata, subword lexical items as sublexical lemmata, and multiword lexical items as multilexical lemmata.

2.2.4.3.1.4 Microstructure

The microstructure can be regarded as the second main part of the central list. All data presented in an article as part of the lexicographic treatment of a lemma has 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.

2.2.4.1.5 Access structure

The access structure is the search route followed by a user to reach a specific lemma sign or data category. A distinction is made between the outer and the inner access structure:

- Outer (external) access structure: The search route leading the user to the relevant lemma sign.
- Inner (internal) access structure: The internal search route in the article leading the user to the relevant data entry.

2.2.4.1.6 Addressing structure

The relation between an entry and the treatment unit at which it is directed is known as the addressing structure (cf. Gouws, 2001a). Different addressing procedures can be identified:

- Lemmatic addressing structure: The lemma is the address of a given entry.
- Non-lemmatic addressing structure: Another microstructural element in the article is the address of a given entry.

2.2.4.1.7 Mediostructure

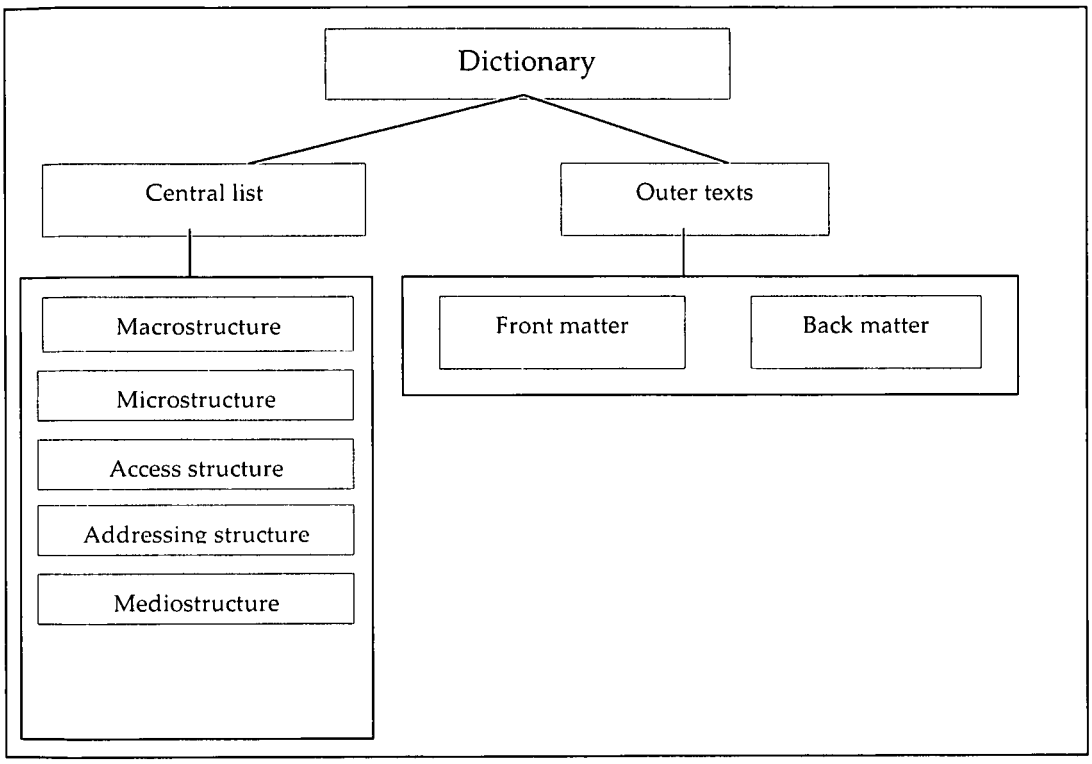
The mediostructure is the system of cross-referencing that leads a user from a reference position to a reference address (cf. Gouws, 2001a; Gouws & Prinsloo, 2005a). Different mediostructural procedures can be identified:

- The internal cross-reference address works within the boundaries of an article.
- The external cross-reference address refers a user to an entry in another article or other text in the dictionary.
- The dictionary external cross-reference address links a text segment in a dictionary to a source outside the dictionary.

The abovementioned components, namely macrostructure, microstructure, access structure, addressing structure and mediostructure, will not be discussed in this section.

The abovementioned structures are there to order the data and to function as tools in the hand of the lexicographer (Gouws & Prinsloo, 2005a: 64). In a user-driven approach to lexicography, dictionary structures should be devised and implemented to assist the dictionary user and to help the lexicographer to compile a better dictionary, says Gouws (1999d). Figure 5 below illustrates the structure of a dictionary.

Figure 2.5: Dictionary structure



2.2.4.1.8 Structure of dictionary articles

The structure of dictionaries is discussed in the section *structure of dictionaries*. The section below will focus on article and lemma types. The prevailing discussion follows from the work done by Wiegand in his endeavour to formulate a general theory of lexicography (cf. Wiegand, 1984, 1988, 1989a, 1989b, 1998).

As stated above, the dictionary is a range of texts and the texts in a dictionary can be

accommodated in three major areas, namely front matter, central list and back matter. The central list includes all the article stretches, i.e. the articles included under one alphabet letter, e.g. articles that start with A, B, ... Z, in that order. Each article constitutes a partial text in the central list in his own right (cf. Wiegand, 1989b: 425). Each article contains a lemma sign entry functioning as the guiding element of the article. A distinction is made between articles with a main lemma as guiding element and articles with a sublemma as guiding element (cf. Gouws, 2003: 36). For a more detailed discussion, refer to Chapter 6.

2.2.4.1.8.1 Different types of articles

When planning and compiling a dictionary, the lexicographer(s) must focus on the different types of articles presented in the central list to accommodate the lexicographic data. Gouws and Prinsloo (2005a: 85) state clearly that it is extremely important that the lexicographers have to be very familiar with the reference needs and the reference skills of the intended users of the dictionary, the function of the dictionary and the different types of usage situations where the specific dictionary will be consulted as a source of knowledge. They add that decisions regarding the different types of articles need to be made with this user perspective and usage perspective in mind. This leads to the distinction between single articles and synopsis articles. The distinction between single and synopsis articles will be discussed in Chapter 6.

2.2.4.1.8.2 Entry in an article

According to Wiegand (1989b: 427) and Gouws (2003: 35), the entries presented in an article can be divided into two distinct categories, viz. items and structural indicators. The distinction between these two classes can be motivated in terms of their genuine purpose (cf. Gouws, 2003). Traditionally, items are those entries that are regarded as representing the different data categories in the article (Gouws, 2003).

The genuine purpose of an item is to enable the user to retrieve lexicographic information regarding the treatment unit, typically the lemma. Within this category, one can find items giving grammatical, pronunciation, orthographic, semantic or etymological data.

The genuine purpose of structural indicators is to assist the user in identifying and distinguishing the different items and in finding them as quickly as possible. These entries can be divided into two subtypes, namely typographic and non-typographic structural indicators. Typographical structural indicators are formed by using different graphical aids, e.g. italics and bold (cf. Wiegand, 1989b: 428). Non-typographical structural indicators are signs like the asterisk, parenthesis or punctuation marks used to find, identify and interpret items.

2.2.4.1.8.3 Items in the dictionary

According to Gouws (2003: 35), 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, which are determined by the type of comment the different items give with regard to the treatment unit. Items reflecting on the orthography, pronunciation and morphology of the lemma, for example, comment on the form of the lemma. They can be grouped together as part of the comment on form of the article. Items giving a paraphrase of meaning of the lemma or indicating the typical co-text or context are grouped together in what is known as the comment on semantics of the article. The lemma sign is the only compulsory entry in a dictionary article and functions as the guiding element of an article. Consequently, the lemma sign entry can be regarded as part of the comment on form of the article. This implies that a dictionary will always contain a comment on form but not necessarily always a comment on semantics (Gouws, 2003: 35).

The following figure is an example of two immediate textual constituents of the article, i.e. comment on form (CF) and comment on semantics (CS), drawn from Hartmann and James (1998: 94).

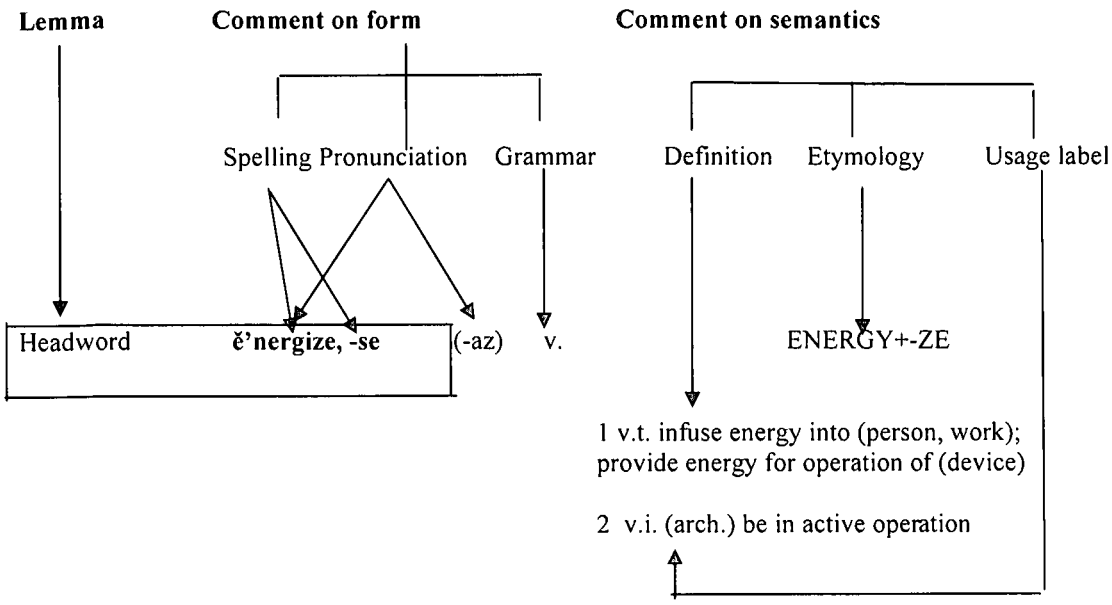


Figure 2.6: CF and CS of the article **energize**

2.2.5 Concluding remarks

The first dictionaries in Fang were compiled by missionaries and colonial administrators. One of the main weak points of these works is that they were not based on sound lexicographical principles. Innovative and profound developments in metalexicography have compelled lexicographers not only to take cognisance of the relevant theoretical issues, but also of the practical implications thereof (cf. Gouws, 2000). Today there is no reason why any practising lexicographer should fail to comply with the criteria laid down by a general theory of lexicography for the specific dictionary being compiled.

The proposed microstructural programme has to be governed by metalexicographic principles and the persons involved must be theoretically well-equipped. The

compiler(s) of the planned dictionary has to be familiar with general metalexicographic issues in order to fulfil the lexicographic needs of the intended target user. The compiler(s) of the proposed microstructural programme has to be aware of the fact that a dictionary is a practical instrument in the hand of a well-defined target user. His work must be preceded by research on dictionary use, focusing on the user, and the user's needs and research abilities. His work depends on the history of lexicography, focusing on the knowledge of early dictionaries. Lexicographer(s) of the proposed dictionaries should also pay attention to the dictionary criticism, focusing on evaluating existing dictionaries in order to determine a sequence of lexicographic needs. The compiler(s) of the proposed microstructural programme should pay attention to a general theory of lexicography focusing on basic issues like the purpose of a dictionary, data collection and dictionary typology.

In this research, the focus will be on the microstructural programme of the dictionary, i.e. the different data categories to be included in the treatment of the lemmata. The compilers of the proposed dictionaries should not only adhere to the demands directed at the nature, extent and presentation of data categories in the microstructure, but also to the selection of a representative macrostructure. This is important, but the user-perspective, so prevalent in modern-day metalexicography and which compels the lexicographer to identify the target user of the dictionary and to compile the dictionary with the needs and reference skills of that target user in mind, has to dominate lexicographic procedures. Likewise, lexicographers have to take cognisance of the emphasis on the structure of dictionaries and the different structural components identified in the textual approach to dictionaries, namely access structure, addressing structure, and mediostructure.

All the aspects of Wiegand's theory have not been discussed in this chapter, as the aim was to discuss aspects relevant to the proposed dictionary. In this work, attention will be given to one of the structural components of Wiegand's theory, namely the microstructure of the dictionary. Other structural components identified in

the structure of dictionaries will also be discussed in terms of the relation between them and the microstructure of the dictionaries.

Chapter 3: Corpus and the microstructure

3.0 Introduction

A corpus is defined as the primary source of the dictionary basis. A dictionary basis (cf. Wiegand, 1998: 139), can be described as the total of the source language material for the specific lexicographic process.

A corpus is defined as a body of written text or speech that can be used as the basis for an analysis and for linguistic description (Kennedy, 1998: 4). It also constitutes an empirical basis, not only to identify the structural elements and models that compose the systems that we use in the language, but also to configure our use of these systems (Kennedy, 1998: 4). Some authors, like Landau (2001), consider that when one speaks of a corpus in lexicography, it mainly refers to an electronic corpus, often one containing a vast number of words from many different sources.

The compilation of a dictionary is a difficult and time-consuming task and needs a sense of balance. To reach this objective as far as possible, lexicographers nowadays use facilities that assist them in various lexicographical tasks, including the preparation of lexicographical evidence from many sources, the recording in a corpus of the relevant linguistic data, the editing of lexicographical entries and the dissemination of lexicographical products (cf. Zampoli *et al.* 1994: 4). In modern lexicography, the corpus plays a very important role in the successful compilation of dictionaries.

An early identification of the corpus enables the lexicographer(s) to apply a well-directed material collection policy, which in turn allows a more rapid macrostructural selection. Although it is true that the microstructural programme orders data within the article of the dictionary, the corpus enables the lexicographer to rapidly identify microstructural data to be included in the dictionary.

In general, one can consider the works done by missionaries and colonial administrators as important sources for lexicographical research on the Gabonese languages, and Fang in particular. They compiled dictionaries and books of religious doctrine, and translated the Bible and catechisms in order to communicate with the indigenous people. Their objectives were to allow them to store a maximum of linguistic data reflecting the language of the local populations.

According to the social, cultural and linguistic policy of Gabon, a new approach in the realisation of the corpora of Gabonese languages is essential. My remarks will be directed accordingly and will look at proposing a way of compiling a corpus. This approach will start with the functions of a lexicographical corpus, the representative lexicographical corpus, the balanced lexicographical corpus, the typology of a lexicographical corpus, the lexicographical corpus and the macrostructure, and the lexicographical corpus and the microstructure. More attention will be paid to the discussion on what the corpus can do for the microstructural data to be included in the dictionary.

This section focuses mainly on the selection of corpus applications at the microstructural level. Microstructural applications receive by far the most attention at dictionary conferences (Atkins & Rundell, cited in Prinsloo, 2000a) and in the literature:

> *Corpora can be used to identify the various senses or uses of particular types and their relative frequencies (Kennedy, 1998: 91). Corpora are increasingly used in lexicography in order to provide good evidence for dictionary statements [...] The principal benefit for lexicography is that corpora provide convenient evidence of the formal usage of lexical items: the associated syntactic structures, phraseological patterns, and collocations; contexts of use; frequencies and distributions in terms of variety, genre, register; and, where diachronic corpora are available, evidence of changes in currency and usage* (cf. Moon, 1998: 347).

The aim of this contribution is to show to which extent the corpus can participate in the compilation of dictionaries. As the microstructure is the subject of this section, the focus is on the corpus as the key to improve the quality of microstructural elements in the treatment of lemma signs.

3.1 A short outline of the history of lexicographical corpora

In the past, the term "corpus" was only used with reference to printed (sometimes written) texts. Nowadays, it always implies the additional feature of "machine readable". Machine-readable corpora have a number of advantages over other forms of storage. Firstly, and most importantly, machine-readable corpora may be searched and manipulated in ways that are simply not possible with the other formats. Secondly, machine-readable corpora can be swiftly and easily enriched with additional information.

According to Dubay (2004), the first corpus compiled for lexical studies was that of Thorndike. It listed 10 000 words by frequency of use, published as the *Teacher Word Book* in 1921. This corpus was enlarged one decade later to a corpus of 20 000 words by frequency of use. Based on texts of magazines and school works, it consists of several lists of words showing their relative frequencies. The book was intended for teachers; it consists of determining the most current words that are necessary to use on the level of particular social categories. On the level of linguistic findings, the *Brown University Standard Corpus of Present-Day American English (Brown Corpus),* considered as the first electronic corpus, is an enormous electronic corpus of one million words (Francis & Kucera, 1964). From 1964 until the end of 1970, the average of words for electronic corpora increased to a million words. The first lexicographical mega-corpus is the *Collins Birmingham University International Language Database* (COBUILD), which is added to unrelentingly. In 1998, the *British National Corpus* (BNC) counted approximately 320 million words. This moment marks an important revolution in the realisation of massive corpora.

In the frame of African languages, there is the *ALLEX* project (African Languages Lexicon) (Mavoungou, 2001a: 176). Started around 1990, the *ALLEX* project was born from a partnership between the researchers of the Department of African Languages and Literature of the University of Zimbabwe and those of the Departments of Lexicography of the Universities of Göteborg (Sweden) and Oslo (Norway), and Swedish and Norwegian businessmen (Mavoungou, 2001a: 176). Other important corpora in African languages are the *Pretoria Sepedi Corpus* (PSC) and the *Corpus Kiswahili*. The PSC was assembled during the last 10 years by DJ Prinsloo and G-M de Schryver. It consists of 5.8 million words in Sepedi.

The corpus of Swahili is currently the most important databank of African languages, with more than 10 million words. This corpus is assembled by the Institute of Asian and African Studies of the University of Helsinki in Finland, directed by Professor Arvi Hurskainen.

3.2 The objective of a lexicographical corpus

The objective of a corpus is to allow lexicographers, linguists and researchers to undertake their research by taking into account linguistic realities arising in the language of the target users. At present, dictionaries are compiled with the assistance of electronic corpora that are useful for the lexicographer not only for the identification of the lemma candidates, but also for the lexicographical treatment in the microstructure. In Gabon, the corpus is an important source allowing researchers to work permanently on Gabonese languages. So, this set of texts in Gabonese languages will supply researchers with access to scattered data. According to the facility of collecting data and new possibilities of treatment, this corpus will allow different approaches in terms of research on Gabonese languages. The final aim of such a corpus is to place Gabonese languages in the lexicographical research of the 21st century.

The objective of the aforementioned Allex Project is the establishment of a lexicographical database for making monolingual dictionaries in Shona languages.

Projects like Allex will serve as an aid for the development of Gabonese languages. To be more precise, a large-scale corpus such as PSC or Allex will have numerous implications in many domains, namely linguistics, lexicography, anthropology, etc. From a lexicographical and linguistic point of view, the handling of data is likely to allow the following processes:

1. tn exhaustive linguistic analysis of each word of the corpus.
2. the identification of the macrostructural forms (lemmata) of each word.
3. the identification of examples for each word of the corpus.

The first point has very important implications for the linguistic analysis model, especially for aspects such as syntax. In fact, it is well known that there is a lack of syntactical descriptions of African languages in general and Bantu languages in particular, although research has been undertaken on phonology and morphology. For instance, the use of the corpus can offer the lexicographers or linguists the frequencies of words within phrases. This facilitates the researcher's work tremendously. An example is that the Yilumbu word *bwâla* (village) counts for 1,10% (394 occurrences) and, in the Yilumbu corpus, it is predominantly preceded in phrases by the locative prefix class 17 «o» (0, 67%, or 237 occurrences in the corpus). *Bwâla* can be used to a lesser extent with possessive pronouns utilised with names.

The abovementioned types of data can be useful for the linguist and the lexicographer. For the first (the linguist), the regular occurrence of the connective "o" in combination with *bwâla* would make it possible to envisage in advance the syntactic configuration of the sentences of Yilumbu in which it appears. For the second (the lexicographer), the data presented above already provides good indications of the examples most adapted to illustrate the lemma *bwâla* in the dictionary.

3.3 The functions of lexicographical corpora

Why are corpora necessary? According to Bergenholtz and Schaeder (1979: 359), a

text corpus has the following important functions or purposes:

- It forms the material that one can use to formulate the assumptions of the field of the object.
- It is used as a basis of data for grammatical and lexical description. It is also an empirical-descriptive and complex act. This empirical act consists of observation, comparison of phenomena in a language, segmentation and classification.
- It provides the material for grammatical argumentations.
- It gives matter on which one can confirm or refute the assumptions to test the adequacy of the conclusions that were drawn from certain assumptions.
- It can be used as a collection, which illustrates certain uses of words or syntagms.

In the case of our languages, the lexicographical corpus plays a paramount part in linguistic research. It thus is necessary to give an important and meticulous place to this issue, on which several other aspects depend in research on the compilation of lexicographical reference works.

3.4 The compilation of lexicographical corpora

Once the functions of a corpus have been ascertained, it is possible to work out the compilation of lexicographical corpora. Bergenholtz and Schaeder (1979: 356) characterise a text corpus as a finite set of texts in natural language collected for the purpose of linguistic or literary research. The texts in such collections could, for example, be:

- systematically collected and ordered;
- in one language or more languages;
- selected according to diachronic or synchronic points of view;
- containing examples of standard language or examples of other varieties;

- written or spoken.

There has been a great deal of debate on the collection of natural language. Researchers in linguistics do not agree on this matter. On the one hand there are those, like Chomsky (cited in Schaeder, 1981: 71), who believe that linguists must be in a special position to form judgements on language. On the other hand there are others, like Bierwisch (1966: 99) and Bergenholtz and Schaeder (1978: 117), who argue against introspection of the linguist forming judgement on language. Bergenholtz and Schaeder (1978: 117) give the following arguments against introspection:

1. It is possible that intuitive judgements may have an idiolectical character.
2. Nobody has proven that intuitive judgements on linguistic data are spontaneous judgements on language use. They could simply be grammatical prescriptions by the linguists.
3. Isolated sentences are tested for grammaticality. Sentences that are judged to be ungrammatical may be grammatical when put into certain contexts.
4. It is hardly possible to make intuitive judgements on unclear cases, for example when there are possibilities of variation within a language.
5. The empirical-descriptive[1] approach cannot do without an appropriate text corpus if it wants to describe language use properly.

In addition to the foregoing, the corpus is not only limited to be used with a predetermined specific goal. If a corpus of texts is available in electronic form, it is easier to have access to the data that one needs for a specific objective.

On the lexicographical level, the nature of the lexicographical corpus will be determined by the type of dictionary to be compiled on the basis of collected text.

[1] See Schaeder (1981: 45-54) for a description of the "notion empirical descriptive". According to him (1981: 48), this scientific method consists of the following activities: observation, comparison of the phenomena within the language under observation, identification, delimitation or segmentation, and classification of phenomena.

This idea is similar to that of Mentrup (1978: 200), who points out that the size and the nature of the dictionary determine the content of its lexicographical corpus. For this reason, Mentrup (1978: 201) insists on the need for the corpus in electronic form. He takes into account the following aspects:

- the complexity of the subject treated in the dictionary;
- the types of information supplied by the dictionary;
- the complexity of the search operations directed at the corpus;
- different publications and presentation forms, which may result from the same dictionary project and which are possible in accordance with different user needs;
- the rapid changes in special-field languages and the resulting rapid dating of a corpus.

Even the comprehensive dictionary cannot contain all the facts of the language existing in the corpus, as pointed out by Bergenholtz and Schaeder (1978: 119). Thus, if one needs the material for the description of the use of the lemmas and the sources in which they are used, it is necessary to establish a corpus which contains sufficient occurrences of these lexemes according to the various ways in which they are used. Bergenholtz and Schaeder (1978: 166) suggest that, in the lexicographical field, one can also use a corpus that represents specific fields. This corpus could include all the types of texts of the literature, pedagogy, etc. This is why Opitz (1990: 1628) recommends that lexicographers dealing with special-field language should not only consider early lexicons when they compose their corpora. They should also take into account topical sources, such as journal articles, newspapers, books and advertisements (such as catalogues and leaflets).

In the case of Gabon, I estimate that all the above-mentioned criteria must be taken into account in the process of the compilation of a corpus. The application of certain criteria will depend on factors that only the practice and the reality in the field will determine.

3.5 Balanced corpora versus representative corpora

Apart from the issue of the compilation of a corpus, corpus compilers should also focus on the nature, types and quantities of material collected and included in their corpora. This generally revolves around two major concepts, i.e. balanced corpora versus representative corpora. The discussion regarding these two concepts is well summarised by Gouws and Prinsloo (2005a):

- A general corpus is typically designed to be balanced, by containing texts from different genres, including spoken and written (cf. Kennedy, 1998: 20).
- For a corpus to be representative there must be a clearly analysed and defined population from which to take the sample (cf. Kennedy, 1998: 52).
- Questions associated with representativeness and balance are complex and often intractable (cf. Kennedy, 1998: 62).
- The idea of representativeness has been central to thinking about the structure of the corpus. It is believed that, unless the corpus is representative, it is ipso facto unreliable as a means of acquiring lexical knowledge. The answer to the question: representative of what? would be representative of the standard language in a very general sense, not restricted to a regional variety or a narrow range of texts. What is meant by representative covers what is judged to be the typical and central aspects of the language, providing enough occurrences of words or phrases for the lexicographers to believe that they have sufficient evidence from the corpus to make accurate statements about lexical behaviour (cf. Summers, 1993: 186, 190).
- To be representative of general language is a bold ambition, which some say is impossible to fulfil (cf. Summers, *s.d.* [1995–1998]: 6).

- Lexicographers traditionally aim at a representative or balanced corpus, that is, the corpus should be appropriate as the basis for generalisations concerning the language as a whole (cf. Kruyt & Dulith, 1997: 230).

Figure 3.1 provides an example of the design of the Longman Lancaster English Language Corpus drawn from Summers.

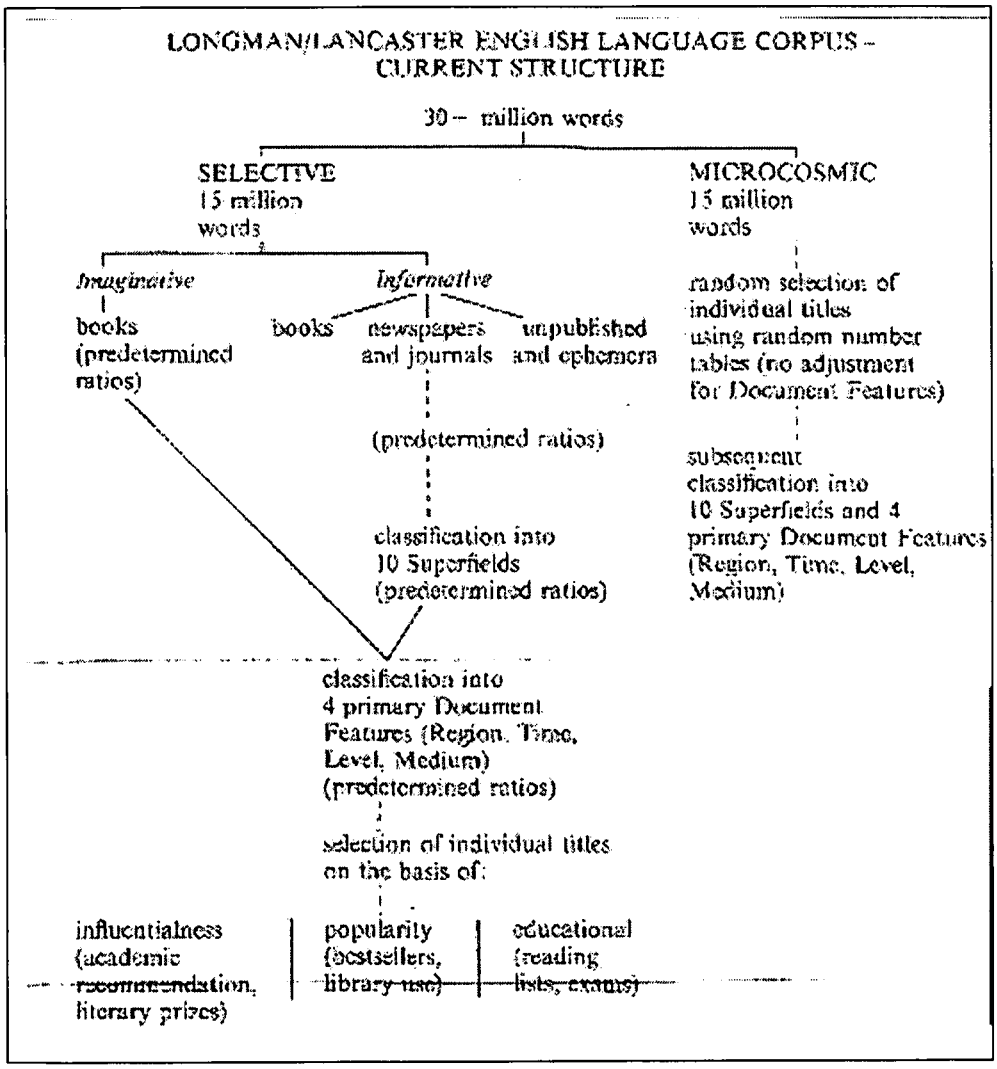


Figure 3.1: Design of the Longman Lancaster English Language Corpus drawn from Summers (cited in Gouws & Prinsloo, 2005a)

With regard to lexicographical work in Gabon, I recommend that corpus compilers should be sensitive to all of these aspects, i.e. to build, as far as possible, corpora that are big enough, well balanced and representative so that valid conclusions can be drawn for lexicographic purposes.

3.6 Material planning

According to Gouws (2001a: 67), a model for the compilation of dictionaries cannot be complete without a well-devised organisation plan in terms of which the material acquisition is accommodated. The dictionary conceptualisation plan plays an important part in the compilation process of any dictionary. The microstructure varies according to the material to be collected. According to Wiegand (1998a: 151), one can divide the dictionary conceptualisation plan into five subdivisions, as follows:

1. the general preparation phase;
2. the material acquisition phase;
3. the material preparation phase;
4. the material processing phase; and
5. the publishing preparation phase.

The present discussion will be directed mainly at the general preparation phase of the dictionary conceptualisation plan, which offers the foundation for the structure, contents and presentation of the final product (cf. Gouws, 2001a: 97). The general phase constitutes one of the subdivisions of dictionary conceptualisation in which one can find the first assignment necessary for lexicographers for the dictionary compilation plan. The compilation of a lexicographic instruction book or lexicographic style guide (Gouws, 2002a; Bergenholtz, 1990), is regarded as one of the first assignments lexicographers have when commencing with the general preparation phase. The instruction book should contain a comprehensive description of the system applied in the dictionary, says Gouws (2002a: 67). The future of the dictionary basically depends on the instruction book. It is the most important instrument in the hands of staff members to ensure a consistent and systematic

presentation and treatment in the compilation process. The quality of the instruction book is reflected in the quality of dictionary; if the instruction book ends in failure, then the dictionary is qualified as a chaotic dictionary. Bergenholtz (1990) proposes typical issues to be dealt with in the instruction book, namely:

- the lemmatisation process (with reference, for example, to the influence of initial capital letters, diacritics, the order of word and stem form);
- the use of typographical and non-typographical makers in the articles;
- the marking of different senses of lemmata;
- the use of abbreviations in the metalanguage of the dictionary;
- the positioning and marking of new search zones in the article, etc.

According to Gouws (2001a) and Gouws and Prinsloo (2005a), a microstructural programme can be regarded as the second issue to receive attention in the general preparation phase of the dictionary conceptualisation phase. They state that, during the compilation process, lexicographers should be aware of the microstructural programme of the dictionary, i.e. the different data categories to be included in the treatment of the lemmata. No dictionary should be compiled without paying attention to the microstructural programme of the dictionary. Gouws and Prinsloo (2005a) explain that if the dictionary is compiled without attention to its microstructural programme, lexicographers could decide to include a certain data category in a specific article and omit it from the next. This implies, according to them, that the dictionary cannot adhere to the predictability criterion and that it functions in an unsystematic way. According to Gouws and Prinsloo (2005a), the formulation of the microstructural programme is a vital component of the planning of a dictionary compiled according to the norms and criteria of a well-devised model.

A third issue to be dealt with in the general preparation phase, according to Gouws (2001a) and Gouws and Prinsloo (2005a), is the planning of the frame structure of the dictionary. A more comprehensive account of the frame structure of the dictionary will be given in Chapter 6. It is important that the frame structure should be planned

well in advance so that the lexicographers know which texts and what kind of data should be included in the front and back matter texts.

A fourth issue to be dealt with in the general preparation phase, according to Gouws (2001a) and Gouws and Prinsloo (2005a), is the dictionary basis, i.e. the total source of language material for the specific lexicographic process. This includes all the possible sources that accommodate such material, as well as informants and mother-tongue speakers of the language. The following section will focus on three important sources within the research field of lexicographical corpus, namely informants, spoken sources and written sources.

3.7 Corpus and microstructure

On the microstructural level, the objective of the lexicographer consists of guiding the user with respect to the features of the lemma sign. Laufer (1992: 71, cited in Prinsloo, 2000a, 2000b, 2000c; Prinsloo and De Schryver, 2000) announces the basic aim of the lexicographer as follows:

> *Knowing a word would ideally imply familiarity with all its properties [...] When a person knows a word, he/she knows the following: the word's pronunciation, its spelling, its morphological components, if any of the words are morphologically related to it, the word's syntactic behaviour in a sentence, the full range of the word's meaning, the appropriate situations for using a word, its collocational restrictions, its distribution and the relation between the word and other words within a lexical set.*

In this case, the aim of the lexicographer is to present microstructural components in order to allow the user to know the word, its distribution, and its relation to other words. The question is to know how the use of corpora can help to accomplish this task.

The development of corpus analysis was greatly influenced by the lack of capacity to handle the amount of data. Until the emergence of computerised analysis tools, such as *Wordsmith Tools*, lexicographers were hindered in their advancement as a result of their ability to extract and handle large amounts of data effectively using manual tools. The new-generation tools allow lexicographers to identify the relevant translation data from corpora using non-customised corpus analysis tools and then to utilise it (cf. Bam, 2005: 49). *Wordsmith Tools* is an integrated suite of programs that is ideal for corpus analysis relating to how words behave in texts, as it can handle large corpora and can be used to analyse and compare texts lexically. According to Prinsloo (2000c), analysis tools, such as *Wordsmith Tools*, are the first requirement for corpus-based dictionaries. These tools must be able to provide at least two basic outputs, namely word frequency counts and concordance lines, and must have the capability of analysing problematic contexts. Concordance lines culled from the living-language sources supplement and support the lexicographer's intuition. They take him or her to the heart of the actual usage of words through the display of the word(s) in context, allowing the lexicographer to see up to several dozens of contexts at a glance. Word frequency counts can be used to decide which data to include and how to include those data. When utilising word-frequency counts, says Prinsloo (2000c), the lexicographer should consider:

1. the rank or position of items in ordered frequency lists;
2. overall counts, being the total number of occurrences of items in the entire corpus; and
3. the distribution of those items across the different sub-corpora or sources

In order to illustrate this interaction between corpus queries and the compilation of the dictionary's microstructure, the section that follows will be structured according to (1) corpora as an aid in sense distinction, (2) corpora as an aid in finding typical collocations, (3) corpora as an aid in pinpointing clusters and choosing better examples of usage, and (4) corpora as an aid in studying idioms.

3.7.1 Corpora as an aid to sense distinction

Sometimes, according to Prinsloo and De Schryver (2000), the lexicographer is in doubt whether he/she has covered all the relevant senses of a lemma in the definition or in selecting a translation equivalent paradigm. A corpus helps him or her to ascertain whether all relevant senses of a particular lemma have been covered. What follows are a few examples of corpora.

You have to	crawl	along these tunnels.
Exhausted fugitives	crawl	from the lake.
Too tired even to read, he	crawled	into bed.
A two-mile tail-back	crawled	towards the auditorium.
...as if a gigantic spider had just	crawled	across the table.
You've got little brown insects	crawling	about all over you.
The whole kitchen was	crawling	with ants.
East Germany is	crawling	with spies and traitors.
Angela Morgan's car was being	crawled	over inch by inch by a forensic team.
Let's stop trying to get women to support us by	crawling	to them.

Figure 3.2: English corpus of **crawl**, cited in Atkins *et al.* (1997).

Example 3.1: corpus lines of **asu** (Fang-Atsi) (cf. Nzang-Bié *et al.*, 2004).

Mə nga non ***asu*** *tarə*, "j'ai le visage de mon père"
asu *n'gil*, "masque de danse traditionnelle"
asu *n'kukh*, "masque de danse traditionelle fan"
asu *dam*, "devant moi".
asu *nda*, "le devant de la maison, terrasse, véranda, devanture"

asu *ntum*, "extrémité de la canne, celle qui touche le sol"

asu *eto*, "bord d'une étoffe déchirée ou coupée"

Example 3.2: corpus lines of **avwe** (Fang-Atsi) (cf. Nzang-Bié *et al.*, 2004).

Medzim mɔnɔ	***avwe.***	"L'eau est froide"
Mon etɔ anɔ	***avwe.***	"Cet enfant est lent, nonchalant"
Ese enɔ	***avwe.***	"Le travail est lent il n'avance pas"
Awulɔ	***avwe.***	"Il marche lentement"
okelekh byɔ	***avwe.***	"Tu vas nous laisser un sentiment de vide"
Dzal enɔ	***avwe.***	"Le village manque de vie"

On the basis of the abovementioned, it is clear that, by studying corpus lines as in the oversimplified examples (1) for **crawl,** (2) for **asu** and (3) for **avwe**, the various senses of **crawl** ('moving on hands and feet', 'slow-moving traffic', 'time passing slowly', etc.), **asu** ('visage', 'masque', 'veranda', etc.) and **avwe** ('froid', 'lent', 'vide', etc.) can be identified easily.

The following example comes from the British National Corpus.

```
ɔngs to an audience bent on destruction and rev
: local politicians bent on development at almo
 social engineers , bent on disarming honest ci
: him his liberty , bent on doing Isambard 's w
ɔange , and plainly bent on driving home . Then
ɔon wave of nasties bent on ending your quest t
ɔder the CNAA , and bent on ensuring that the c
ard-pressed teacher bent on entertaining . Remer
ɑason , who was too bent on escaping the touch
abour-dominated and bent on excluding nationali
ll her thought were bent on finding where to go
ɔese hundreds , all bent on getting home with t
 former seemed hell bent on giving them a hard
ddy said . " She 's bent on going . Nothing 'll
chnologies Inc , is bent on hammering out his i
 a dangerous animal bent on her destruction . .
 upstart who seemed bent on humiliating him at
```

Example 3.3: Concordance lines of *bent on.*

The concordance lines tell us that *bent on* can be followed by a noun or noun phrase, or by a verb + *-ing*. The lines also show clearly that many of the things somebody is bent on or bent on doing have something in common, i.e. they are often negative (destroying, destruction, creating hell on earth). Below is the article entry in the *Oxford Advanced Learner's Dictionary* that uses this information:

> **bent** /bent/ *adj., noun*—see also BEND, BENT, BENT
> ■ *adj.* **1** not straight: *a piece of bent wire* ◊ *Do this exercise with your knees bent* (= not with your legs straight).—picture at CURL **2** (of a person) not able to stand up straight, usually because of old age or disease: *a small bent old woman* ◊ *He was* ***bent double*** *with laughter.* **3** (*BrE, informal*) (of a person in authority) dishonest IDM **be 'bent on sth/on doing sth** to be determined to do sth (usually sth bad): *She seems bent on making life difficult for me.*—see also HELL-BENT
> ■ *noun* [usually sing.] ~ (**for sth**) a natural skill or interest in sth: *She has a bent for mathematics.*

Gouws and Prinsloo (2005a: 33) comment on the corpus lines as follows:

> Such corpus lines assist the lexicographer in respect of sense distinction, deciding on translation equivalents, retrieval of typical collocations, pinpointing frequent clusters and selection of representative, authentic examples to be included in the dictionary [...] Without a corpus the lexicographer is always in doubt whether he or she has covered all the senses of a lemma sign in the definition or in setting up a translation equivalent paradigm.

3.7.2 Corpora as aid in finding typical collocations

Corpora can also be regarded as an aid to extract typical collocations. Collocations are combinations of words that occur more often than not in the neighbourhood of a

specific word (cf. Prinsloo & De Schryver, 2000). Another definition of collocations can be found in Heid (1998: 302):

> Collocations involve two lexemes [...] plus grammatical words, such as determiners, prepositions, etc. [...] For ease of reference, we adopt Hausmann's distinction between base and collocate [...] The two items participate in a well-formed grammatical construction; with respect to the categories of the items involved, we distinguish noun-noun, noun-verb, noun-adjective, verb-adverb, adjective-adverb combinations (in Hausmann's terms in italics).

The following figure provides an example of collocations with the base of ***makə,*** "I go".

makə oʃin	"I go to the river"
makə miyən	"I go to the fields"
makə asikol	"I go to school"
makə adza	"I go the village"
makə nkoloyo	"I go up"
makə dzobə gə si	"I go to sleep"
makə lwe	"I go to call"
makə nsom	"I go to hunting"
makə alok	"I go to fish"
makə bo	"I go to do"
makə abin	"I go to catch"
makə lə ran	"I go to accompany"
makə sil	"I go to ask"
makə non	" I go to take"

Figure 3.3. Fang (collocations of **makə**, "I go"), drawn from Ekwa Ebanega (2002: 201)

From the preceding table, one notes that the collocates of the base ***makə*** that collocate immediately to the right are the following: *makə ofin, makə miyən, makə asikol, makə adza, makə nkoloyo, makə dzobəgə si, makə lwe, makə nsom, makə alok, makə bo, makə abin, makə ləran, makə sil, makə non.*

With regard to the treatment of collocates, Prinsloo (2000c: 12) is aware of the fact that "it should not come as surprise that the treatment (or lack of treatment) of collocations in manually compiled dictionaries reflects under/ill-treatment". If one wants to treat collocations in a dictionary, one possible way to do so is to heed Heid's (1998: 302) suggestion:

> *To distinguish typical (i.e. dictionary-relevant) collocations from trivial combinations [...] is sometimes hard [...] in the lexicographer's daily task of selecting dictionary-relevant items; we tend, here, to follow Bergenholtz and Tarp (1994: 407), who suggest that frequency in a corpus is usable as an important piece of additional information in this decision process.*

3.7.3 Corpora as an aid in pinpointing clusters and choosing better examples of usage

A lexicographic corpus allows identifying the best examples. Since the Collins/COBUILD revolution, a corpus has been used for selecting examples of usage, and stormy discussions have followed on the advantages and disadvantages of a corpus or some authentic examples compiled by the lexicographer. I We will not go into the details of this conflict, but merely point out the advantages of typical and natural examples as formulated by Fox (1987: 141):

> *Our first and foremost requirement for examples is typicality: that they should show the way in which people actually use the word they are*

exemplifying. [...] naturalness [...] is the well-informedness of sentences not in isolation but in text.

Fox (1987: 141, 143) continues by stating that "with isolated examples, we have much more meaning". The following examples, taken from Prinsloo (2000c) and Ondo Mébiame (1992), illustrate the concordance of the typical three-word clusters **swanetše go šoma** (Sepedi) and the word **na** (Fang).

...sa setšhaba se a tsomega. Re	**swanetše go šoma**	mmogo go...
...kolong bana ba lapile gomme ba	**swanetše go šoma**	mešomo ya...
...mo Lebowa motho mang le mang o	**swanetše go šoma**	ka maatla...
...e laetša gore barutiši ba	**swanetše go šoma**	ka maatla....
...Moswana o re mong le mong o	**swanetše go šoma**	goba...
...di sa lemoge gore di	**swanetše go šoma**	gammogo ka...
...ye e tlilego le nna ya gore o	**swanetše go šoma** ...	
...Ka ntle go be go	**swanetše go šoma**	badiredi ba...

Example 3.3: Concordance of the word *swanetše go šoma*

... bədzo mə	**na**	məlum minəŋa...
abum məmbəgə di məyəm	**na**	Ndze enə mə abum
...wə	**na**	....
...ambə	**na**	enə zame aŋgadədaŋ...
... aga bo	**na**	...
... kaga	**na**	...
... mawok	**na**	dzam eziŋ enə bo okon...
... aŋgazwa byalə abe	**na**	male mazu...
... dayilə	**na**	ndapyarə abyeaŋ ŋgon...
... ayəmaŋ fə	**na**	ndapyara abyeaŋ...
...akə dzo ebor adze	**na**	abyeaŋ mon...
...Zame ni	**na**	a yə wu...
...akar ne na	**na**	biyə mbəba mon ə fam...
...anə fogo və	**na**	edzar di...

...bor bəziŋ bəyəbə fogo	**na**	bəlwye ndapyarə...
...ebo bam ebə bəbo ni bə	**na**	emon ndapyarə...
...kə	**na**	alu ebo...
...wakomə	**na**	atobə adze... veux pas que"
...aso aŋgaso	**na**	aŋgasoaŋ ekira məyaŋ...1
...Kikiri abe	**na**	nanɔ̃ komɔ̃ŋe...

Example 3.3: Concordance of the word *na*

However, an in-depth study of the use of **swanetše** or **na** reveals a much more interesting/problematic situation. In cases such as these, where it is quite tough to find typical uses at a first glance, the lexicographer can zoom in on the word in order to detect vital co-occurrences with words which are not immediately preceding or following the word in question. Indeed, any mother-tongue speaker of Sepedi can tell immediately that **swanetše** is always followed by **go**. Any mother-tongue speaker of Fang can tell immediately that **na** is always preceded by the verbs *-dzo* "to say", *bo* "to do", *-yəm* "to know", *-kom* "to want", *-wok* "to understand" *-so* "to arrive", *-kar* "to inform" and *-yilə* "to mean", or by the pronoun *wə* "you", *ni* "him or her".

If one looks at the corpus drawn from Ondo Mébiame (1992), which stands at ± 1 800 words, the results show that the most frequent two-word cluster with **na** is **ni na**, which occurs 24 times in the corpus, followed by the inflected conjugated form of the verbs *-dzo* "to say" and **na**, which occurs nine times.

Consider the following examples with the adverb **ane** "then" drawn from the Bible in Fang (United Bible Societies, 2005), showing the context in which the adverb **ane** occurs. **Ane** is always followed by nouns (*David*, *ako*, etc.) and personal pronouns (*be*, *a*, etc.)

Ane David a nga zô akôa Israël na ...
Ane David a nga sula Israël ase ...
Ane ba nga so, ve yarbe abare Beréphaïm ...
Ane beprêtre ye Belévite be nga tabe myè akal e ke ye Arche Yavé é Nzame Israël ...

Ane	be nga nyinle Arche Nzame …
Ane	ako da tsina ye mine …
Ane	David ba b'ayon ese be nga bulé e Jérusalem …
Ane	Yavé a nga lôm ebuebue ôkon afan Israël …
Ane	a nga zo Zébach na Tsalmuna na ….
Ane	Jephté a nga yoé ye bobenyan ve ke tobe afan Tob…
Ane	samson a nga ke bi minzôl sin é lal …
Ane	Nzame a nga zô na …
Ane	Lot a nga bere mir, ve yen abare ese e ya nsakh Jourdain ye ke ku Tsoar …
Ane	Abraham a nga burbe e si …

Example 3.4: Concordance of the word *ane*

Going to the preceding lines for **swanetše go šoma** (Sepedi), **na** and **ane** (Fang), one can chose authentic examples to illustrate these words.

As shown in the tables above that illustrate the concordance lines of the three word clusters **swanetše go šoma**, **na** and **ane**, it is clear that, by using a corpus, one can easily select a typical or natural example of usage for inclusion in a dictionary. Potter (cited in Prinsloo, 2000c: 25) claims:

> Learners are best served by carefully chosen corpus examples, not only because these represent the language as it is actually spoken and written, but also because learners can rely on the validity and accuracy of the information which the examples contain.

With regard to the proposed dictionary, I propose that the lexicographer(s), by means of an available corpus, must be able to select typical examples of usage for inclusion in the dictionary by simply glancing at the output of concordance lines.

3.7.4 Corpora as aid in studying idioms

It is true that the corpus is an aid to finding typical collocations or examples, and it

can also be used to study idioms. Gouws and Prinsloo (2005a: 35) and Prinsloo and De Schryver (2001) aptly state that even relatively small corpora can be successfully used to study idioms for lexicographic purposes. Consider the following table (in Figure 3.3; cf. Gouws and Prinsloo, 2005a: 36) of the Sesotho sa Leboa idiom *monna ke nku, o llela teng* "A man is like a sheep, he does not show his feelings (he cries inside)". The number of occurrences, according to these authors, correlates with the size of the subsection in the relation of the full corpus, as indicated by " √ ".

			Phase 1	Half 1	Half 2	Sum
mo dutšego mogolong. O no re	monna ke nku, o llela teng	. A di rumilego bjalo, le tsena tša	✓	✓		✓
! Monna ga se a swanela go lla!	monna ke nku o llela teng	. Ge o ka bona monna a ediša dik	✓	✓		✓
apo go sekhumola. "Tiša thaka,	monna ke nku o llela teng	." "... ba boletše ... ba boletše, mot	✓	✓		✓
sa mmone. Ee! Baswana ba re	monna ke nku, o llela teng	, fela ge e le Thogorogo yena o il		✓		✓
ba iteile lešepa ka thoka ge ba re	monna ke nku, o llela teng	. gomme a bona ba ocile kgomo l		✓		✓
a. Fela ka gore bagologolo ba re	monna ke nku, o llela teng	. o ile a no ikgata pelo a tšwela pe		✓		✓
na ba be ba no šita kgang, ba re	monna ke nku o llela teng	. Ba be ba fetogile difahlegong, b		✓		✓
jo bo rogo ke metlae ge go thwe	monna ke nku o llela teng	. Ba ile go falela ka mola mphom		✓		✓
ta. Ee, ke thoroso. Sesotho se re	monna ke nku, o llela teng	. Fela le ge se reslo, leo morwa' H		✓		✓
megokgo, motho a lebetše gore	monna ke nku o llela teng	. Ge se thaka ya mošemane go go		✓		✓
olo o ile a mo homotša ka go re:	monna ke nku, o llela teng	. Ka go a be a lemogile gore ga se		✓		✓
ela gore ga se nnete ge go thwe	monna ke nku o llela teng	. Le go llela teng ga nnete go tleg		✓		✓
ela gore ga se nnete ge go thwe	monna ke nku o llela teng	. O ile a bokolela ka pelobohloko		✓		✓
ela bjang, goba ke gona ge ba re	monna ke nku, o llela teng	? Gape taba ke ngwana wa rena w		✓		✓
ore a tle a imologe. Bao ba rego	monna ke nku,	o hwa natšo goba mosadi o fogoh		✓		✓
2l tee fela (bjalo ka seema se,	monna ke nku, o llela teng	, monna le nku di llela teng			✓	✓
šha phefo ganong a lebetše gore	monna ke nku o llela teng	. Ka yoo nako ke ge madira ale a			✓	✓
a ngwana a itiliwe, a lebala gore	monna ke nku o llela teng	. O be a sa itiriše ka gore le go m			✓	✓
tše go di dula ka marago ka gore	monna ke nku.	Aretso, ee, monna ke nku. Mošate			✓	✓
mola lapeng a lebetše gore ba re	monna ke nku.	Basadi bale ba bego ba le moo le			✓	✓

Figure 3.3 : Occurrences of *monna ke nku* in Sesotho sa Leboa (Prinsloo & De Schryver, 2001: 110; Prinsloo & De Schryver, as cited in Gouws & Prinsloo, 2005a: 37)

Now consider the following table of the Fang idioms **ku éti** "tomber dedans", **ku e si** or **ku o si** "tomber par terre" and **ku e yô** "tomber en haut".

Mfakh ébi émyen a ke **ku éti** …
Ngi é môr a lere nlem a ke **ku** bizim **eti** …
Bi ke kubé be enye a ne éfôp za **ku e si**.
E môr a fakh ébi a ne **ku eti**; émôr a bukh mfin mekokh a ne lôé nyo.
Mônga a ga zu **ku** mbi **e si** e do é môr a nga nyinle nnôm
Ekan ésil fore zé **ku** dia **o si**, toghe ba Nzame be vagha bo ésè é zô di.
Ntya Yahvé ane ényin, kan ésil nyu mon zé **ku** dia **o si**.
Bemyè afane be nga yané na nyôl é via nye vur, ngi e tem a **ku e si** ve yie …
Beyin be na beke **ku eti** …
Émôr a ke **ku** akokh di **e yô** a ke bughé
E môr Yavé a ya ye nye a ke **ku éti**.
… émôr ki akokh di e ke **ku e yô** a ke fire
Atiti e ke **ku e si**, é mam menen me ne e yô ve fokh.
….ngi bô bebi be ke **ku éti**.
A nga nen ye ke **ku** abal **e** ya **yô** …
O ke **ku** afan **éti** …
E sôsôe môr a sôsô é nyie dia nye a lu ke **ku** abi **éti** …
O ke **ku** minkôl Israël **e yô** mine be mebal mia mese ye meyon me ke tabe é ngam zia.

Figure 3.4: Occurrences of the words *ku éti*, *ku e si* and *ku o si*.

A quick glance at the corpus immediately shows the use of the verb ku "to fall" in **ku éti** "tomber dedans", **ku e si** or **ku o si** "tomber par terre" and **ku e yô** "tomber en haut".

3.8 Concluding remarks

In the course of this study, it became evident that the corpus plays an important role in the selection of data to be included in a dictionary. It is the first step in the compilation of any dictionary, whatever its typology. The lexicographers must provide users and researchers with data (corpus), and this will allow them to compile

dictionaries in such a way that language development is effective. During the compilation process, lexicographers should be aware of the microstructural programme of a dictionary, i.e. the different data categories to be included in the treatment of the lemmata. No dictionary should be compiled without paying sufficient attention to the microstructural programme of the dictionary. At the microstructural level, the corpus assists the lexicographer in respect of sense distinction, retrieval of typical collocations, and pinpointing typical examples to be included in the dictionary. A corpus requires some scientific criteria, i.e. functional, representative and balanced. It is also vital to know the informants and sources of a corpus, either oral or written.

The compilation of the corpus for the planned dictionary is an enormous issue to be solved by lexicographers. The representative corpus will be an ideal source for future dictionaries in Fang. The lexicographers should be aware of the possible size of such a corpus. This choice will not be easy for the compilers of the planned dictionary and will demand a large number of texts being available in Fang. One of the big challenges the lexicographers of the planned dictionary will face is the analysis of data. Modern lexicographers make use of widely available corpus analysis tools (e.g. *WordSmith Tools*) to analyse data. Since the planned microstructural programme aims to indicate the different data to be included in the dictionaries, this corpus analysis could help to identify typical definitions, examples, collocations, idioms, etc.

Chapter 4: Dictionary functions

4.0 Introduction

Many researchers have dealt with the "functions of dictionaries" and have tried to define the function of a dictionary. Hartmann and James (1998: 60) define the function(s) of a dictionary as the purpose(s) for which a reference work is designed or used. Research into dictionary use has revealed that there can be a discrepancy between the functions intended by the compiler and the actual look-up practices in specific situations of use, or indeed the images users have of the dictionaries. Another definition, by Tarp (2000: 196), states that the function of the dictionary 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. The functions of dictionaries can be defined if one knows the purpose of the dictionary, the group of users, the user's characteristics, the user situations and the needs of the users beforehand.

In relation to bilingual dictionaries, Nielsen (2002: 173–194) points out that when specifying the functions of a dictionary, the lexicographers should begin by placing the dictionary in a typological framework, as this provides them with a useful point of departure, which has two elements that together constitute a whole. First, the basic functional needs of the user are determined on the basis of a dichotomy between text-dependent and text-independent functions. Text-dependent functions include the reception of the texts in the user's own language or a foreign language, the production of texts in the user's own language or a foreign language, and the translation of a text into the user's own language or a foreign language. Text-independent functions include the acquisition of encyclopaedic and/or linguistic knowledge. This dichotomy enables lexicographers to compile multifunctional dictionaries that are intended to fulfil a plurality of functions (Bergenholtz & Kaufmann, 1997: 98–99).

Tarp (2002a: 67) goes beyond this by introducing a so-called "methodology" for planning, making or reviewing a dictionary that is aimed at compiling a typology of

potential users, user situations, and problems that might arise for each type of user in each type of user situation. On this basis, the lexicographer can determine which of the problems can be solved by a dictionary, what are the corresponding items to be included in the dictionary, and how they should be presented in order to satisfy a user's needs.

The following section contains a brief overview of dictionary functions. A more comprehensive account can be found in Tarp (2000: 190–200).

4.1 The genuine purpose of a dictionary

Dictionaries have been used as practical linguistic instruments since before the existence of a theory of lexicography. These reference works, as any other products of this sort, are produced in order to satisfy certain human needs. Wiegand calls lexicographic reference works utility products that are produced for a specific purpose (Tarp, 2000: 193). This is why he introduces, in metalexicography, the concept of the "genuine purpose" of dictionaries. The concept of the genuine purpose of dictionaries, according to Wiegand (1999: 299), should be identified prior to the compilation phase and provision should be made to fulfil the real needs and reference skills of the intended target users, among others so that "it can be used to obtain information from its lexicographic data about the respective subject of the reference work" (Tarp, 2000: 193). Tarp (2000: 198) provides an alternative definition of the "genuine purpose" of dictionaries, which he believes is more operational when planning a concrete product that has to be used in specific circumstances to solve specific problems. This definition states:

> The dictionary covers this or that area and is conceived to assist users with these or those characteristics in this or that situation in order to solve problems of this or that sort.

Following Wiegand's (1998) footsteps, Gouws (2001a: 66) defines the genuine purpose of a dictionary as follows:

The genuine purpose of a dictionary implies that a dictionary is used so that the target user who uses the dictionary in a typical usage context will have an instrument to assist him in achieving a successful dictionary consultation procedure by reaching the goals that motivated the search. The genuine purpose of a dictionary should therefore be to ensure successful dictionary consultation procedures. A successful dictionary consultation depends on the way in which the needed linguistic information can be retrieved.

Hartmann (1980: 103, 104) emphasises the importance of a user-driven approach in modern dictionary compilation. According to him, "an analysis of user's needs should precede dictionary design" and "[t]he design of any dictionary cannot be considered as realistic unless it takes into account the likely needs of various users in various situations".

The genuine purpose of dictionaries should take into account the users and their characteristics, their situations and their needs, which are discussed below.

4.2 User typology

According to Tarp (2000: 194), the characteristics of the user group constitute only one aspect of what should be taken into account when conceiving a dictionary. The users' characteristics must be determined on the basis of the following parameters or variables in terms of their language for general purposes (LGP), language for special purposes (LSP), cultural, special subject field, translation, and lexicographic competencies:

1. Which language is their mother tongue?
2. At what level do they dominate their mother tongue?
3. At what level do they dominate a foreign language?
4. What is the level of their general cultural and encyclopaedic knowledge?
5. At what level do they dominate the special subject field in question?

6. At what level do they dominate the corresponding LSP in their mother tongue?
7. At what level do they dominate the corresponding LSP in the foreign language?
8. How is their experience in translation between the languages in question?

9. How are their experiences in dictionary use?

The target users of the proposed dictionary should clearly be distinguished prior to the compilation phase. The users of the dictionary being planned here encompass students (from high school to university) who have Fang as first language and a relatively good command of French and, on the other hand, pupils and scholars who are willing to improve or learn Fang as a second language. Because there is a range of ability within these two main target groups, they can each again be subdivided into different subcategories. Within the category of senior high school pupils and academics, one will find people that have Fang as their first language (in the sense that they are able to use Fang successfully with only a little assistance), whereas others would clearly find major difficulties in understanding and speaking Fang.

In relation to the first question, one can say that, in this case, the mother tongue is Fang. It concerns whoever has Fang as first language. With regard to the question of level of mother tongue and foreign language, the Fang group is regarded as a dynamic group in the practice of language. From a sample of 1 000 children, Idiata (2003) found that:

- around 660 (66%) speak their mother tongue fluently;
- about 220 children (22%) speak their mother tongue imperfectly;
- only 120 children (12%) declared that they did not use their mother tongue in different communicational situations;

In a global sample of more than 1 200 speakers distributed among the six varieties of

Fang, Nzang-Bié (2004) shows that more than 70% declare that they speak their mother tongue fluently.

According to research done by Afane Otsaga (2000), 80% of young people communicate and think in French, but have passive knowledge of Fang because it is the language of their parents or elderly people. Fang is not the medium of instruction[1] in school nor a school subject. However, given the fact that more than 70% of Fang people speak their mother tongue fluently, they have strong knowledge, competence and performance in Fang. In this regard, Fang can be used as their source language and French as the target language.

As far as the second and third points are concerned, in the Gabonese context one finds users who dominate their mother tongue and other who have strong knowledge of the foreign language. This is the case among those who have Fang as mother tongue, French as mother tongue and those students who are competent and efficient in French. In addition to the foregoing, one can say the users who are in a good situation are those who dominate in the foreign language (French). These users can speak and write in French. This is not the case for those who have a good command of their mother tongue, Fang; they can only speak in their mother tongue but they cannot write in their language. As a result, the target users of the planned dictionary vary from adults, senior high school students and academics who have Fang as first language and a relative good command of French on the one hand, to students who want to improve or learn Fang as second language on the other hand.

With regard to the question of the level of the foreign language (beginner, experienced or advanced learner) it can be said that the proposed microstructural programme should be addressed at the advanced learners for essentially two reasons. Advanced learners usually get what they need in monolingual dictionaries. As the planned microstructural programme intends to be descriptive, the target users will

[1] "The situation was even worse during the colonial era: on the ground of the French language assimilation policy, in public schools, pupils were not allowed to speak their vernacular language. Where they did speak it, they were identified as offenders and had to carry a symbol indicating their offence. The last to bear the symbol was unquestionably punished at the end of the day", (Kwenzi-Mikala, 1990:123, cited in Mavoungou, 2003: 51).

have enough skills to find what they need in the dictionary. In fact, at this stage no monolingual dictionary exists in Fang and the fact that Fang is a language without a strong written tradition and that it is still in the process of standardisation should be a motivation for directing the dictionary at the advanced learners.

Regarding the fourth question, one can discern the general culture of the intended target users if one takes their specific education level into consideration. As far as the monolingual dictionary is concerned, the target group engages young adults. It goes without saying that, in the Gabonese context, old people have good knowledge of Gabonese languages in general and Fang in particular. However, it is necessary to provide help for those who have only some knowledge. As far as the general culture is concerned, the target group also encompasses young students from a variety of backgrounds, namely primary school, high school, university and college. It goes without saying that the information provided by them will be different according to their specific level. The ones who have strong knowledge will provide more data on what should be included in the dictionary than those who have a lower level of knowledge. As far as this point is concerned, the intended microstructure will include some characteristics of an encyclopaedia. However, the model is not aiming at producing an encyclopaedic dictionary.

In relation to the fifth question, the target group encompasses those who have strong knowledge in their specific language. As far as Fang and the Gabonese situation are concerned, old people have strong knowledge in the specific domain with regard to their culture. In the case of French, the target group includes students and those foreign who have good knowledge in that language. The latter can provide more information on their particular domain of study (young) and the others can be contacted for additional information.

As far as questions 6 and 7 are concerned, one could say that the problems faced by Gabonese local languages are twofold: they are languages with oral tradition and they are not used in administrative and educational domains. Consequently, the target groups of Fang have a problem to read and write in their own language. As a result, the aforementioned users could not dominate in any LSP in their native language.

This is not the case with French. Given the fact that French is the official language, the language spoken and written in every Gabonese milieu, the target groups that have French as native language can be empowered in their native language: they can speak and write. As result, they can dominate in any LSP in their native language.

With regard to question 8, for the target groups who have Fang as mother tongue the translation between languages will not be the same compared to the target groups who have French as native language. These latter groups may have more experience in translation than those target groups of Fang speakers. When the non mother-tongue speakers of Fang have problems of translating between languages, the mother-tongue speakers of Fang will assist them to solve the complex of problems they run into in the translation from Fang into French. When the mother-tongue speakers of Fang have problems of translating from their native language into French, the mother-tongue speakers of French will assist them to solve the complex of problems that they run into in the translation from French into Fang.

As far as the final question is concerned, the focus is on **dictionary culture** in Fang.

4.2.1 Dictionary culture and the improvement of reference skills

Traditionally, the lexicographer was concerned with his working problems rather than the user's reference needs (for this tradition, see Zgusta, 1971). But now the emphasis is on the requirements to satisfy the multifarious demands of dictionary users. In other words, until a few decades ago, lexicography dealt with a complete description of a word as its primal objective, but now it focuses its attention on the user and looks at dictionary-making from the point of view of the user's needs and reference skills. As far as Fang dictionary users are concerned, the focus is on research on lexicography in Fang. By doing that, one needs to concentrate on the dictionary culture in Fang. According to Hartmann and James (1998: 41), dictionary culture is the critical awareness of the value and limitations of dictionaries and other reference works in a particular community. The focus is on the **user perspective**, which investigates the reference skills and reference needs of dictionary users (Béjoint 2000: 140; Hartmann 2000: 11; 2001: 81; Svensén 1993: 13). The user perspective in lexicography is a

user-driven approach to dictionary-making and dictionary research. **Reference skills** are the abilities required on the part of the dictionary user to find the information being sought (cf. Harmann & James, 1998: 117), while reference needs are the circumstances that drive individuals to seek information in reference works such as dictionaries (cf. Harmann & James, 1998: 116).

Research on lexicography in Fang is still in its early stages. Actually, no research on Fang lexicography had been done until the establishment of the Groupe de Recherches en Langues et Cultures Orales (GRELACO) at the Omar Bongo University in Libreville. Consequently, researchers on Fang lexicography are taking cognisance of the needs of dictionary users and the user perspective in dictionary studies.

Lexicographers in general are attempting to produce dictionaries that are user friendly, in other words, that are accessible to their users. Béjoint (2000: 140) states:

> Lexicographers in many countries have recently felt the need to go beyond empirical observations on the use of a general-purpose dictionary, 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.

One of the main weak points of existing dictionaries in Fang is that these dictionaries are not user friendly, and user friendliness is difficult to attain where reference skills are low and dictionary culture is non-existent. So, to improve future dictionaries in Fang, one needs to establish a dictionary culture and identify the user needs in Fang; this is also true for all Gabonese languages. There are several ways of developing dictionary skills and establishing a dictionary culture. The culture would be enhanced in the Fang community if teachers are also targeted. The importance of teaching dictionary skills is echoed in the literature:

- *Make a more user-friendly dictionary, which in positive connotations must mean to develop a more readable format, better examples, better organisation, etc., and in negative*

connotations must mean to dumb-it-down; and teach students reference skills (Dolezal & McCreary, 1999: XVIII).

- *Teachers have rarely been offered the training needed to judge the benefits and limitations of particular dictionaries, or to instruct their students in the reference skills appropriate to guarantee successful consultation: hardly ever are they in touch with lexicographers or dictionary researchers* (Hartmann, 2001: 26).

- *The habit of using a dictionary is formed early in life, and if the skills to use it are neglected, the students may never be comfortable using dictionaries* (Landau, 2001: 26).

- *School dictionary lexicographers have been trying to encourage the teaching of dictionary activity and dictionary use in the classroom* (McKean, 2000: 82).

- *The biggest area of improvement does not seem to be in the dictionary, but teacher training* (McKean, 2000: 87).

The results of the questionnaire distributed show that, with regard to the question 'have you ever been taught how to use dictionaries in Gabon?', 38% of the participants responded "a little", 32% said "yes" and 27% responded "never". This is explained by the fact that the teaching of dictionary skills in Gabon has not yet been established.

In addition to the foregoing, one can note that the successfulness of a user-friendly dictionary is partly dependent on the reference skills of the user (Svensén, 1993: 16). Furthermore, the literature mentioned above advocates the teaching of reference skills to students. The need to teach students about dictionaries is also noted by McKean (2000: 82), who states that "school dictionary lexicographers have been trying to encourage the teaching of dictionary activities and dictionary use in the classroom". Fortunately, the results of the questionnaire reveal that 64% of the participants

indicated that it is very important for students in Gabon to be taught how to use a dictionary.

Once again, with reference to what is mentioned above, the choice of focusing on teacher training is justified. To improve the lexicographic situation in Gabon in general and in Fang in particular, the teaching of reference skills should first target the teachers themselves, for example teachers at ENS (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 dictionaries and reference books and impart this knowledge to students in any high school. The teachers are in a better position than other researchers or even lexicographers to assess the students' lexicographic needs. If teachers gain competence in dictionary skills and pass on the skills to students, a dictionary culture could grow in the community.

To introduce dictionaries and dictionary-using skills to these people (for example teachers), Gouws (1996a: 107) suggests that nongovernmental organisations could be employed to give newly literate and other literate people access to the dictionary culture. Dictionaries are compiled by lexicographers, but published and distributed by publishing houses. These people should have the necessary expertise. Their assignment therefore is not only to distribute the dictionaries, but also to provide information on the optimal use of these word books. Publishing houses should co-operate with practical and theoretical lexicographers, says Gouws (1996a: 107). The lexicographic planning for Fang should have to take cognisance of this suggestion of Gouws.

The massive need for lexicographic training in Gabon led to the Gabonese Government sending two students to South Africa. They came to the Bureau of the WAT for in-service training and postgraduate study in lexicography at the University of Stellenbosch under the guidance of Prof Gouws, coordinator of the Programme for Lexicography (PROLEX) in the Department of Afrikaans and Dutch at the University. PROLEX focuses on lexicographic research and training and endeavours to fulfil its role in meeting a variety of lexicographic needs in South Africa. It is not a

language-specific programme and its training courses are aimed at the full spectrum of lexicographic problems and interests. A further three students came in 2000 and they were followed by another five. The Bureau of WAT oriented them with regard to general lexicography, computer lexicography and the planning of lexicographic projects.

Another approach to improve dictionary skills is the teaching of aspects of lexicography. One has to initiate teachers in the use of reference books of different types, such as dictionaries, thesauri and encyclopaedias, and provide them with basic training in dictionary structure, dictionary typology and lexicographic data (grammatical data, spelling, pronunciation, meaning, vocabulary, etc). There is also a need to teach according to their level (beginner-intermediate-advanced). As there are not many types of reference works in Fang, studying some aspects of English and French lexicography is inevitable. Looking at problems of dictionary use in French could be regarded as a way of approaching problems that are likely to face the dictionary user in Fang.

In addition to the foregoing, teachers need to get used to the history of the lexicography of African languages in general and Fang in particular. Missionaries and colonial administrators were the first to compile dictionaries in Fang. There are similar examples from other African countries (cf. Mpofu, 2001: 244); Mavoungou, 2001a: 123; Hadebe, 2001: 244). Furthermore, the teachers have to explain to the users the motivations of existing dictionaries. For example, with regard to external motivation, the teachers can state that existing dictionaries in Fang were not directed at specific speakers of Fang. As far as internal motivation is concerned, the teachers must explain to the users whether the dictionary is directed at promoting language or focusing on linguistic issues. In relation to existing Fang dictionaries, the teachers can explain to the users that these dictionaries were not directed at mother-tongue speakers of Gabonese languages. The aim of these dictionaries was the establishment of French in Gabon.

Knowing the history of the lexicography of Fang (types of existing dictionaries, their different motivations, etc.) will help the users to appreciate their own reference works.

In order to empower their knowledge, students and adults need to have information on the following data.

4.2.1.1 Grammatical data

There is no comprehensive grammar book in Fang. In this regard, existing dictionaries in Fang and recent works on Fang grammar (Mba-Nkoghe, 1979; Andeme Allogo, 1980; Mba-Nzué, 1981; Ondo Mébiame, 1992) could be useful for studying grammar. For example, one can learn from the *Dictionnaire Fang-Français/Français-Fang* compiled by Galley that, apart from a grammatical outline of the language in the back matter, the word category is given in each entry. Entries are marked as nouns, pronouns, verbs, adverbs, prepositions, etc. Noun classes are also indicated, while one can distinguish different types of verbs and verb tenses. Users need such information in order to empower themselves.

4.2.1.2 Orthography

Fang has not been standardised. This poses serious problems for those teachers who are going to teach students how to spell. However, teachers should tell the users about the existing orthographies, the varieties of Fang, etc. Nzang-Bié's works regarding the standardisation of Fang could be useful. This will permit the users not only to have concrete elements, allowing a written realisation of their language, but will also make them aware of the benefits of these existing orthographies, to spell words correctly. Unfortunately, Nzang-Bié's work is still in progress.

4.2.1.3 Pronunciation

Along with orthography comes the importance of pronunciation in dictionaries. One needs to spell words correctly and pronounce them correctly. The teachers must help the users become familiar with the International Phonetic Alphabet (IPA, revised in 1993, updated in 1996) and the alphabet of the *Orthographe des Langues Gabonaises* (OLG) or that published by the International Africa Institute (IAI). The use of tone should also be taken into account because of the change of meaning it brings. The

tone also makes a distinction between homographs, i.e. words with exactly the same spelling. With the aid of phonetic transcription, the users could succeed in pronouncing words correctly.

4.2.1.4 Semantics

The teachers must teach the users how to use words in context. The meaning of a word depends widely on the context in which it is used. Guessing the meaning of a word from its use in context requires an understanding of semantic properties, register and collocation. It makes the users aware of one important feature of vocabulary, namely that context determines the meaning of words. The teachers must teach the users the types of context clues that can help them infer the meaning of a new word, namely synonym, antonym, hyponym, definition, equivalent, example, punctuation, etc.

4.2.1.5 Data on lexis

Given the fact that a dictionary is one of the more reliable sources for enhancing vocabulary growth (Hadebe, 2004: 96), the teachers must teach the users to be familiar with the lexis of Fang in order to develop their ability to use Fang for real communication. The teachers have to focus their attention on lexical items, namely words, multiword and subword items, and different types of co-text entries.

4.3 Typology of user situations

If one wants to consider dictionaries as utility products with the purpose of satisfying certain human needs, one has to know in which situation the user is going to use the dictionaries. According to Tarp (2000: 195), there are two different kinds of general user situations. Firstly, the user consults the dictionary in order to facilitate an existing or future communication. Secondly, the user consults the dictionary in order to obtain knowledge about a special subject or, in very rare cases, in order to learn and study a foreign language. The above-mentioned types of user situations are known as communication-orientated and knowledge-orientated. Figure 4.1 shows Bergenholtz's (1998) classification of lexicographical reference works according to function:

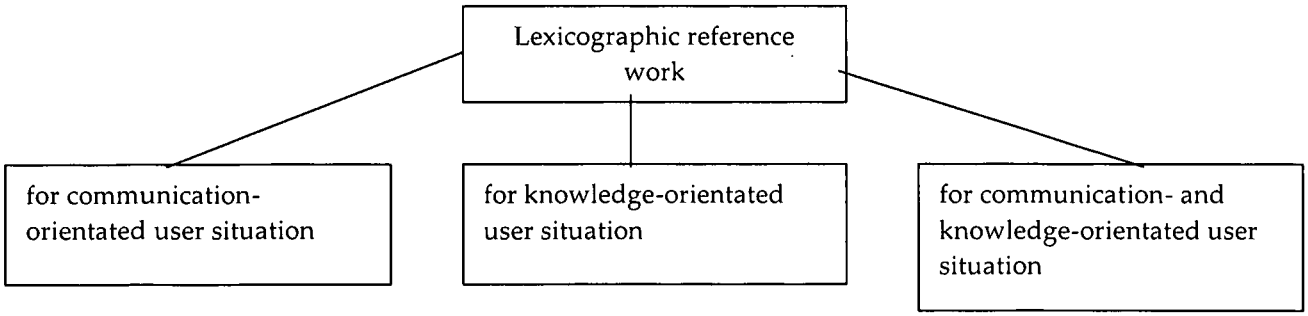


Figure 4.1: Classification of lexicographic reference works according to function.

Bergenholtz and Tarp (2003) distinguish two main groups of user situations. The first group corresponds to types of situations where the user, for one reason or another, wants to obtain additional information on some topic, e.g. general cultural and encyclopaedic information, specialised information regarding a scientific discipline (biology, geology etc.) or information about a specific language related to the language-learning process (for example the learning of a foreign language). It is then up to the lexicographers to study the special needs for information in each case and in terms of each type of user so that they can decide which of these needs might be satisfied by consulting a dictionary and which are then the corresponding data to be included in the dictionary. The above-mentioned types of user situations are called knowledge orientated. In these situations, the only communication taking place is between the lexicographer – as author of the dictionary – and the users of this dictionary. The users want knowledge and the lexicographers provide it, nothing more.

There is, however, another main group of user situations where there is an existing – or planned – written or oral communication going on between two or more persons and where the lexicographer only intervenes indirectly (through the dictionary) when some kind of communication problem may pop up that can be solved by consulting a dictionary. This group of user situations is called communication orientated. According to Tarp (1998, 2000), there are basically six different types of communication-orientated user situations:

- Reception of text in mother tongue

- Production of text in mother tongue
- Reception of text in foreign language
- Production of text in foreign language
- Translation of text from mother tongue into foreign language
- Translation of text from foreign language into mother tongue

With regard to this section, the so-called reception of text in mother tongue, the target groups include mainly those who have Fang as mother tongue. The situation of the target users is to understand the text. Then, the target groups need information to understand the text, the phrases, words, collocations, idioms, proverbs, etc. The users consult the dictionary in order to solve any problem of understanding.

In this section (production of text in mother tongue), the situation of the users is to produce or reproduce a correct and adequate text in the mother tongue and the above-mentioned target groups want to obtain knowledge about collocations, idioms, proverbs, synonyms, antonyms and gender, etc.

As far as reception of a foreign language text is concerned, the target groups include those who have French or Fang as foreign languages, and the situation might be to translate from French into Fang or Fang into French. The users need mother-tongue equivalents. This is the main information that the users need in such situations. Other information can be added, namely explanations that can support mother-tongue equivalents.

With regard to the production of text in a foreign language, the target groups encompass those who have these above-mentioned languages as foreign languages. This situation is not different from text production in the mother tongue. The users need information on orthography, grammar, pragmatics, collocation, idioms, proverbs, synonyms, antonyms, etc.

As far as the translation of text into the mother tongue is concerned, the target groups include those who have Fang as mother tongue and the situation is to transfer the text

from Fang into French; the target groups also encompass those who have French as mother tongue and would like to translate from Fang into French. One could provide equivalents for a word, collocation, idiom, proverb, etc. In the case of partial equivalence, the dictionary can also and is required to provide information about any difference of meaning between the words, collocations, etc. in the source language and their equivalents in the target language in order to enable the translator to find the right or best equivalents.

With regard to the translation of texts from a foreign language into the mother tongue, the situation is similar to that when transferring a text from the mother tongue into a foreign language. The same is the case for the lexicographic data to be incorporated in order to solve their needs.

4.4 Typology of problems

The factual and linguistic competences of the user play an important role, because a user will consult the dictionary in connection with different functions, depending on the different types and levels of competence. The lexicographers therefore need general guidelines for their project and some of the recent literature on lexicography distinguishes between three general user groups: experts, semi-experts and laypeople (Bergenholtz & Kaufmann, 1997: 98–99; Nielsen, 1990: 131). This trichotomy provides an appropriate basis for an LSP dictionary, but cannot stand alone.

In order to combine the functions of the dictionary and the needs and competences of the user, the lexicographers must make a user profile of the intended user group. The user profile specifies the lexicographical needs of the intended user group, and those will be the needs the dictionary has to fulfil on the basis of the factual and linguistic competences (both in L1 and L2) of the user group.

The range of target users of the proposed dictionary varies firstly from senior high school pupils to academics that have Fang as first language and a relative good knowledge of French and, secondly, pupils and scholars who are disposed to improve

or learn Fang as a second language. Because there is a range of ability within these two main target groups, they can each again be subdivided into different subcategories. Within the category of senior high school pupils and academics, one will find people who have Fang as their first language (in the sense that they are able to use Fang successfully with only a little assistance), whereas others would clearly find major difficulties in understanding and speaking Fang. They are the Fang, and French dominates their linguistic performance. They have a passive knowledge of Fang because it is the language of their parents, but they are more proficient in French than in Fang. This applies particularly to pupils and academics from urban areas. As far as this point is concerned, and in quite a significant number of cases, French is the medium of communication in the homes and children are not exposed enough to Fang. Given the fact that school is an extension of education in the home, children have very little chance to learn Fang simply because, at this stage, the latter is not the medium of instruction nor a school subject. Within the category of pupils and scholars who are willing to improve or learn Fang as a second language, one can follow Mavoungou (2003) and ask the following questions:

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

To answer the first question, it can be said that the learner may be someone living in Gabon or abroad. These two potential learners will obviously have different needs and reference skills. In fact, the learner living in Gabon and the prime target group (senior high school pupils and academics) will have the same or many of the same references. With the learner living abroad, the references (linguistic system, world view, etc.) may be different. This will require some attention on the part of the lexicographer as far as this particular area is concerned. The situation is likely to be complicated if one takes into account the fact that the potential learners will be both children and adults. With regard to the question of the level of foreign language (beginner, experienced or advanced learner) it can be said that the planned dictionary should be addressed at

advanced learners. The reasons for this choice have already been explained in the preceding section.

It should be noted that a user consults a dictionary in order to get certain information that allows the user to solve a specific problem. The following are some of the major data categories that may be needed by the users of the planned dictionary.

4.4.1 Phonetics and orthography

In an evaluation of the existing dictionaries in Fang, it is clear that these dictionaries fail to provide an indication of tone in the written transcriptions of oral productions (cf. Nyangone Assam & Mavoungou, 2000). Another inconsistency found in existing dictionaries in Fang is that the orthographies of these dictionaries have been modelled on the International Phonetic Alphabet (IPA).

This type of data is important for the users of the proposed dictionary, i.e. high school pupils and academics who do not have a good command of Fang. It is important for this target group to be familiar not only with the International Phonetic Alphabet (IPA), but also with other existing alphabets, namely the *Alphabet des langues du Gabon* (ASG), the *Orthographe des Langues Gabonaises* (OLG) and the "Africa Alphabet" published by the International African Institute (IAI). This data is important because it confirms that the user has found the right word and it provides indications for the production of oral text (cf. Tarp, 2004: 313). Tarp's observation is particularly relevant to the users because distinctions in tone between homographs (words that have exactly the same spelling) usually result in a difference in meaning.

4.4.2 Morphology

The inflection capacity in the morphosyntactic structure of Bantu languages in general and Fang in particular creates a major problem on how to determine what should be identified as a lemma in a dictionary and what should not. As Bwenge (1989: 5) has observed:

> *The central problem is particularly the method of arranging the nominal and verbal items of the language, emanating from the complex morphological structure common to Bantu languages, of a morphological classification system categorising nouns by means of prefixes and verbal derivation system forming new verbs by means of derivational affixes.*

On the basis of the aforementioned, it should be noted that the presentation of morphological data (indication of what are the prefix, the stem and the class number) for each lemma sign may be a bit complicated for the learner at beginner level (or even for the L1 speaker) to understand. The users of the planned dictionary expect that the lexicographer will provide them with morphological data, as it is a means of identification in order to reassure the users that they have arrived at the right word. The dictionary should also provide some basic or general information on semantics, the inflection paradigm and syntactic properties (cf. Tarp, 2004: 313). By taking into account Tarp's description of data on parts of speech, the users of the planned dictionary expect that the lexicographer(s) will explain his/her decision to enter nouns followed by stems, class numbers, etc. The decision regarding what to include or exclude regarding data on parts of speech must be done according to the needs and the reference skills of the users.

4.4.3 Semantics

Gouws (1990: 53–55) points out that African languages display a lack of comprehensive monolingual lexicographical description. Important aspects like semantics, syntax and pragmatics are neglected because the scope of translation dictionaries only allows a restricted treatment of these categories. In this regard, Gouws notes two types of uneven information coverage. First, it can be shown that dictionaries for the different language groups do not exhibit a similar degree of lexicographical sophistication and variety. Second, the dictionaries of one specific language group do not treat all information categories alike, and within one dictionary an unbalanced presentation of information categories can often be identified. In the

critical evaluation of existing dictionaries in Fang, it is clear that one of the main weak points of these dictionaries is that explanations of meaning are always given in French. As a result, the mother-tongue speakers of Fang could have problems to understand the semantic context in which expressions are used. In this regard, Tarp's (2004: 313) judgement regarding data on semantics is valid:

> Data on meanings are exclusively provided with the purpose of confirming the users that they are about to use the right word. Users are already supposed to have an idea of what they want to express, i.e. they already know the meaning and just need to put words to it. As such it is evident that the dictionary should expose all the different meanings and senses of the word in order to satisfy the user's needs in any user situation.

The lexicographers of the planned dictionary should treat data on semantics according to the needs of the users. The users of the proposed dictionary expect that the compiler(s) will include all the possible information categories or treat them on an equal basis in order to empower Fang. The best way to empower the speech community is to make provision for the incorporation of an explanatory or descriptive equivalent for each lemma in the source language. The inclusion of a short explanation of the meaning also has a lot of implications for the choice of metalanguage in the planned dictionary.

4.4.4 Cultural data

The presentation of cultural data in dictionaries constitutes one of the fundamental challenges confronting lexicographers today. In the critical evaluation of existing dictionaries in Fang, one can note some inconsistencies, particularly in relation to the fact that any dictionary should reflect the lexicon of the language being treated. In the existing dictionaries compiled for the Gabonese languages, one finds various terms referring to cultural taboos (particularly about sex and some parts of the body). Under normal circumstances, Gabonese are extremely decent. The secret parts of the body

are taboo and one speaks about it only in metaphors, euphemisms and other rhetorical expressions.

Gouws (1990: 55) states that "by restricting the linguistic scope of the dictionary, the lexicographer also restricts its value as a linguistic tool, because there is less information to be exploited by the user". However, the compilers of the planned dictionary have the responsibility to provide linguistic data and cultural data equally. Furthermore, it is part of the responsibility of the lexicographers to identify taboo terms and to warn the user against their uncivil nature.

4.5. Lexicographic needs

4.5.1 Need for various types of dictionaries

It is clear that Fang still lacks many types of dictionaries that are necessary for its development and empowerment. I shall now proceed to look at some of the dictionaries that need to make their appearance in Fang.

Bilingual dictionaries are mainly useful to French speakers who want to learn Fang and vice versa. Monolingual dictionaries, which Fang lacks, would also be useful for Fang speakers who want to communicate in their own language. The reasons for the urgent need for monolingual dictionaries are firstly that no monolingual dictionaries exist in the Gabonese languages in general and Fang in particular and, secondly, that the expressive level of the language is greatly enhanced when concepts are explained in Fang itself.

Bilingual dictionaries are urgently needed, firstly because, although the first dictionaries compiled in Fang were bilingual dictionaries, their main weak point was that they did not reflect sound lexicographical principles, and a new bilingual dictionary is therefore necessary. Secondly, Gabon is a multilingual country and the people of the country have opted for a policy of multilingualism. It is therefore necessary to have bilingual dictionaries. Thirdly, a bilingual dictionary deals with two or more languages and, among other data categories, also provides translation

equivalents. A bilingual dictionary quite often has to be an instrument that can fulfil more than one function. There has to be a correlation between the needs of the users and the functions the dictionaries can fulfil. According to Hausmann *et al.* (1991: 2712), bilingual dictionaries are useful aids to travel abroad and for communication in foreign languages, necessary tools in the commercial world and public administration, and indispensable for secretaries dealing with foreign language correspondence, translators and interpreters. They add that, regardless of the diversity of translation purposes they can serve, bilingual dictionaries have a common function in that they are involved as tools in the action where the user makes a translation from a foreign language into his mother tongue, or from his native language into a foreign one.

Fourthly, considering the situation in Gabon, with its diverse speech communities, the bilingual dictionary is the only instrument that can meet the lexicographic needs of the speakers. The bilingual dictionary will be able to satisfy the needs of both the mother-tongue speakers of Fang and those of the speakers of French who want to learn Fang. This will make the planned dictionary polyfunctional (Gouws, 1996a: 15). Lastly, the results obtained through the questionnaires show that 64% of students showed preference for bilingual dictionaries and it should be the type of dictionary to begin with in the Gabonese languages.

4.5.2 Need for phonetic and orthographic data

There are inconsistencies in the existing Gabonese dictionaries, particularly the lack of indication of tone and the use of the IPA to describe the Gabonese languages (see 4.4.1.) The proposed dictionary will include information on tone and make use of the IPA, the "Africa Alphabet" and existing alphabets in the Gabonese languages (ASG, OLG). As far as the users of the proposed dictionary are concerned, phonetic transcriptions will help them to pronounce Fang words correctly. The unpublished work done by Nzang-Bié regarding the codification efforts in Fang orthography will also form part of this dissertation.

4.5.3 Need for morphological data

The existing dictionaries fail in their presentation of morphological data, e.g. they fail to arrange the verbal stem, and the noun according to the primary and secondary classification (Gouws, 1989). There are different morphological data types that the planned dictionary needs to take into account in its their presentation: noun classes, pre-prefix, prefix, suffix, noun, adverb, adjective, preposition, conjunction, etc. These morphological data types have to be relevant to the needs of the intended target users of the planned dictionary.

4.5.4 Need for semantic data

Because Gabon has such diverse speech communities and most existing dictionaries fail in their presentation of semantic data, the planned dictionary could provide the following semantic data intended for the mother-tongue speakers of Fang and those users of French who do not have a good command of Fang: items providing paraphrase of meaning, synonyms, antonyms, etc. for those mother-tongue speakers of Fang who want to communicate with each other; and translation equivalents for those mother-tongue speakers of Fang who want to communicate with users of French who do not have a good knowledge of Fang. This will facilitate communication between mother-tongue speakers of Fang and between mother-tongue speakers of Fang and those speakers of French who want to have a good knowledge of Fang.

4.5.4 Need for an awareness of variant forms

Fang is a language used in many geographical areas in Gabon, with many dialectal varieties, namely Fang-Ntumu, Fang-Nzaman, Fang-Mvaï, Fang-Okak, Fang-Atsi and Fang-Mekè. The proposed dictionary should reflect the standard variety of Fang and provide variant forms of Fang. It will thus provide the users with one dialect as the standard form. In relation to the present study, Fang-Ntumu has been chosen as the standard variety. The reasons for this choice can be found in Chapter 8.

4.5.5 Need for linguistic and encyclopaedic data

Dictionaries providing users with linguistic and encyclopaedic data are urgently needed in order to enhance the users' knowledge of special fields as well as the culture in which the special-field terms are used. The proposed dictionary consequently will be a typological hybrid. It will be descriptive in the sense that it has to describe the Fang language by means of items giving the paraphrase of meaning and data on parts of speech, phonetics, phonology and orthography. It will be translatory in the sense that items giving the paraphrase of meaning will be translated into French. It will also be explanatory, in the sense that it will provide additional data reflecting the users' areas or areas around the world.

4.5.6 Need for cultural data

Existing dictionaries fail in their presentation of cultural data. In the planned dictionary for mother-tongue speakers of Fang and mother-tongue speakers of French, cultural data has to be more implied. There are different types of data that could be treated in the planned dictionary. The following represent a selection of cultural data that the planned dictionary would need: idioms and proverbs, pictorial illustrations depicting aspects of daily life, a list of the names of villages, maps, etc. These different types of cultural data would have to be relevant to the needs of the intended target users of the planned dictionary.

4.5.7 Need for dictionary culture and lexicographic training

The potential users of the planned dictionary need to be educated in the use of the dictionary. Training should not only be aimed at lexicographers. To establish a dictionary culture in Gabon, the whole community needs to be educated in the use of the dictionary. The cultivation of the habit of using a dictionary can only enhance effective communication and develop a sense of satisfaction in the language. It could contribute immensely to the development of the language to meet modern challenges and opportunities.

4.6 Lexicographic assistance of the dictionary with the planned microstructural programme

Another element that is of importance when discussing the purpose of dictionaries is to determine the functions they should have. The planned dictionary will have both communication-directed functions and knowledge-orientated functions. Gouws (2003) points out that communication-orientated functions should assist the user in solving problems in the sphere of communication, whereas knowledge-orientated functions aim to increase the user's knowledge regarding a specific topic. The communication-orientated functions of the planned dictionary are discussed below.

If the mother-tongue speaker of Fang wants to understand another mother-tongue speaker of Fang or to communicate in Fang, he or she would need a monolingual dictionary containing information regarding linguistic aspects of Fang. If the mother-tongue speakers of French want to comprehend mother-tongue speakers of Fang or to communicate in Fang, they would need a bilingual dictionary containing information regarding linguistic aspects of Fang. The planned dictionary will fulfil the needs of both mother-tongue speaker of Fang and mother-tongue speakers of French.

If the mother-tongue speakers of Fang and non-mother speakers of Fang want to reproduce or produce spoken communication in Fang, the planned dictionary will assist them by means of phonetic data. This will allow the users to know the Fang sound systems and they will learn how to pronounce Fang words and sentences correctly. By means of orthographic data, the planned dictionary will assist them by providing the Fang writing system and standard spelling so that they will be able to write words correctly and choose the correct standard form.

If mother-tongue speakers of Fang from different dialects do not understand each other, the planned dictionary will assist them by providing standard Fang, which will be a dialect chosen so that they can communicate easily.

If mother-tongue speakers of Fang and non-mother speakers of Fang have problems to understand the structure of Fang words, the planned dictionary will assist them by

providing the items with a paraphrase of meaning, data on parts on speech, synonyms, examples, collocations, etc. This will help the users to have a good knowledge of their own language.

The knowledge-orientated functions of the planned dictionary include the following:

If non-mother tongue speakers of Fang want to know about the culture of Fang, e.g. the names of villages, the proposed dictionary will assist them by providing a list of the names of villages. This will also help the users to find out about the origins of the Fang people, their habits, beliefs, etc. The planned dictionary will provide the users with cultural data in pictorial illustrations, for example if the users need information regarding the lemma *basket* in Fang, the dictionary will provide examples illustrating different types of baskets in the Fang area. If the users want to know the names of cities and languages in Gabon, the planned dictionary will provide them with a map of Gabon showing the names of cities and the places where the different languages are spoken.

To improve on the fact that most existing dictionaries in Fang were compiled by single persons with unsophisticated lexicographical skills, the planned dictionary will be the work of many people educated in the use of dictionary skills.

4.7. Concluding remarks

The lexicographers of the proposed dictionary must take into account important user's characteristics determined on the basis of the parameters or variables in terms of their language for general purposes, language for special purposes, cultural, special subject field, translation, and lexicographic competencies, in order to detect possible needs that can be satisfied by means of a dictionary. These characteristics must be linked to the group of Fang people and the specific situation. Lexicographers, therefore, have to draw up a profile of the intended user group and a typology of the user situations where problems or needs may arise that can be solved by providing lexicographic data in a dictionary. On this basis, the functions and genuine purpose of a dictionary can be determined.

For a particular dictionary there may, of course, be other relevant types of characteristics, but the above-mentioned characteristics are the most important in order to draw up a profile of a specific user group. Determining the characteristics of the user is the first step the lexicographer has to take to determine the needs of the user. These, however, are not abstract but related to concrete situations. Therefore, these situations should be detected, distinguished from each other and analysed in order to determine which type of needs a specific type of user may have in each type of situation.

The functional theory of lexicography distinguishes between two main groups of user situations. The first group corresponds to types of situations where the user, for some reason or another, wants to obtain additional information on a topic, e.g. general cultural and encyclopaedic information, specialised information regarding a scientific discipline (biology, geology, etc.) or information about a specific language related to the language-learning process (for example the learning of a foreign language). It is then up to the lexicographers to study the special needs for information in each case and in terms of each type of user so that they can decide which of these needs might be satisfied by consulting a dictionary and which are then the corresponding data to be included in the dictionary.

Chapter 5: Major structures of a dictionary

5.1 Introduction

When planning and compiling a dictionary, the lexicographer(s) has to know or decide in which part of the dictionary each type of data should be located. This leads to the identification of the different component parts of the dictionary, which are functional components of the dictionary as a "big" text (Gouws & Prinsloo, 2005a).

The dictionary, as any other system, is represented by its two major structural components, namely the macrostructure and the microstructure. The aim of this chapter is to present some component parts of the dictionary in terms of the data distribution structure in the central list and in the outer texts of the dictionary. Other structural components, namely access structure, addressing structure and mediostructure, will also be taken into account. This chapter will provide a discussion of the macrostructure and the microstructure of existing dictionaries in Fang. The data to be included in the front matter and back matter will also be discussed.

5.2 Data distribution structure

During the phase of dictionary conceptualisation, the microstructural programme is not the only programme that deals with lexicographical data, and the data distribution programme can be regarded as one of the main phases in the conceptualisation of the dictionary. The data distribution programme is also considered as one of the steps in the phase of material processing. It organises the distribution of all the lexicographic data between the outer texts and the central list (Gouws & Prinsloo, 2005a). In a dictionary with a fixed ordering of articles, e.g. according to alphabetical ordering, with the lemmata functioning as guiding elements of the articles, the distribution of data displays a structure. Although the data distribution programme remains an important step during the dictionary conceptualisation phase, the data distribution

structure of a dictionary determines the specific position for each data type in the dictionary as a so-called carrier of text types.

Once the lexicographical data have been identified, the lexicographer(s) is in a position to know in which part of the dictionary each type of data should be placed or where the different categories of lexicographic data should be accommodated. The aim of the data distribution structure of a dictionary (cf. Bergenholtz *et al.*, cited in Gouws, 2001a), in this regard, is to determine the specific position of each data type in the dictionary. It determines the internal presentation of the article and the different search zones to which data categories are allocated. Some data will be included in the texts accommodated in the front and the back matter, while other data will be included in the articles, the texts constituting the central list of the dictionary.

Gouws and Prinsloo (2005a) distinguish two types of data structure, i.e. a simple data distribution structure and an extended data distribution structure. Where the central list is the only target for the data distribution, the dictionary displays a simple data distribution structure. Where the outer texts are employed to accommodate data as part of the procedure of data distribution, the dictionary displays an extended data distribution structure (cf. Bergenholtz *et al*1995, cited in Gouws & Prinsloo, 2005a). In this section, a discussion will be provided concerning the distribution of the data categories in the main parts of the dictionary. Particular attention will be paid to parts of the central list, i.e. the macrostructure, the microstructure, the addressing structure of existing dictionaries in Fang, as well as the outer texts (front and back matter of the dictionary).

5.2.1 Data distribution in the central list

The central list has to be regarded as the text containing the most typical lexicographic treatment (Gouws, 2003: 34). The central list contains all the article stretches and each article stretch includes a variety of articles, which function as texts in their own right. The central list hosts the most salient structural components of a dictionary. A model for any new dictionary and any dictionary-specific lexicographic

process will necessarily have to ensure that these structural components are established and used in a functional way (Gouws, 2001a). Gouws (2001a) states that the research field of metalexicography has led to the identification of at least five structural components to be negotiated in the central list of a dictionary, i.e. the macrostructure, the microstructure, the access structure, the addressing structure and the mediostructure. With regard to the relationship between the data distribution and the central list, only aspects related to the macrostructure, the microstructure and the addressing structure will be discussed. The access structure and the mediostructure, which are not part of the data distribution structure, will not be discussed in this section. However, they will receive attention in Chapter 10.

5.2.1.1 Macrostructure

The macrostructure is the collection of lemmata included as part of the central list. It is the macrostructure that determines under which lemma the lexicographical item is to be found. As far as this dissertation is concerned, the focus is on the microstructure, and not that much on the macrostructure. However, it should be noted that there is a strong relationship between the macrostructure and the microstructure. The macrostructure deals with the different lemmata functioning as guiding elements of the articles, the different types of lemmata presented in the central list and the different procedures of ordering the lemmata – both main and sublemmata.

5.2.1.2 Addressing structure

According to Gouws (2001a), the relationship between an entry and the treatment unit at which it is directed is known as the addressing structure. Different addressing procedures can be identified.

> Lemmatic addressing structure: The lemma is the address of a given entry.
> Non-lemmatic addressing structure: Another microstructural element in the article is the address of a given entry.

As far as the relationship between data distribution and the addressing structure is concerned, the data distribution structure allows the lexicographer(s) to make provision with regard to the specific data type(s) that will or will not be addressed at the lemma. The lexicographer(s) has to decide on different data types, such as pronunciation, part of speech, paraphrase of meaning, equivalents and examples. The addressing structure will not be discussed in this section. A more comprehensive account will be given in Chapter 9.

Although the central list remains an important and compulsory text, data can also be presented in the outer texts, i.e. the texts preceding and the texts following the central list. The data to be included in the front and back matter of the planned dictionary will be discussed in the following section.

5.2.1.3 Microstructure

On the basis of what has been mentioned above, it should be noted that the microstructure focuses on the article structure and the different types of data categories to be presented in the dictionary articles. As far as the relationship between the data distribution structure and the microstructure is concerned, the data distribution structure will allow the lexicographer(s) to make provision with regard to the different search zones within the dictionary articles. For instance, if some data categories (e.g. pronunciation, paraphrase of meaning and translation equivalents) have to be included, the lexicographer has to make provision for article slots or search zones in the dictionary articles. This leads to the concept of micro-architecture (for a discussion, see Chapter 9) (cf. Gouws & Prinsloo, 2005a; Wiegand, 1996c). The microstructure will not be discussed in detail in this section, and a more comprehensive account can be found in Chapters 7 and 8. However, the microstructure of existing dictionaries in Fang will be presented, after a brief discussion of lexicographical works on Fang.

5.2.1.3.1 Inventories of lexicographical works

Among the lexicographical works compiled by missionaries, the first dictionary to be

compiled in Fang was the bilingual *Dictionnaire Fang-Français* by Marling (1872), a missionary of the *Congragation des Pères du Saint Esprit* (Nyangone Assam & Mavoungou, 2000: 257). It consists of 3 431 articles covering 137 pages and is divided into two parts. Part 1 presents the outline of Fang grammar, while Part II deals with the lexicon itself.

This work was followed by another bilingual dictionary, The *Dictionnaire Français-Fang*, which was compiled by Lejeune. The work has two sections. The first section contains an overview of Fang grammar, while the second section is the dictionary itself. Another contribution was the publication in 1901 of the *Encyclopédie pahouine* by Largeau, the colonial administrator. With its 4 996 articles, the book is the only encyclopaedia ever compiled in a Gabonese language. The book is divided into two parts. The first part is a cultural overview of the Fang people. In this section, one can read about the origin of the Fang people and other anthropological issues pertaining to rituals, the value system and mythology. The second part, which contains the encyclopaedia itself, starts with a lexicographical chapter. This chapter contains the user's guidelines and the mini-grammar of the encyclopaedia. It provides the user with a relevant discussion of the microstructural aspects of Fang. This will be discussed in the section on the microstructure of the *Encyclopedie pahouine*.

The most important Fang dictionary comes from the Genevan pastor, Samuel Galley, entitled *Dictionnaire Fang-Français/Français-Fang*. It is a bilingual dictionary consisting of 13 925 articles and is divided into three parts.

The first part of the dictionary contains the title, the name of the author, the source of publication, the name and place of printing, the preface and the foreword. The second part of the dictionary presents the dictionary arranged in alphabetical order, divided into two parts. The first presents the lemmas in order from A to Z, from Fang to French, with Fang as the source language. The second part presents French as the source language and Fang as the target language. As in the first part, the lemmas are arranged in alphabetical order. The third part concentrates on Fang grammar,

including aspects such as spelling, phonetics, classes of names, adjectives, verbs, adverbs, prepositions and conjunctions.

The following section will focus on the macrostructure and the microstructure of lexicographical works in Fang. A more comprehensive account can be found in Mihindou (2001), Mavoungou (2001a) and Afane Otsaga (2004).

5.2.1.3.1.1 Macrostructure and microstructure of the *Dictionnaire Fang-Français/Français-Fang*

5.2.1.3.1.1.1 Macrostructure of the *Dictionnaire Fang-Français/Français-Fang*

The *Dictionnaire Fang-Français/Français-Fang* has a biscopal character. It can be regarded as a dictionary with a double macrostructure: the first macrostructure of the dictionary is in Fang (i.e. the Fang-French section) and the second one (the French-Fang section) is in French. The macrostructure is presented in strict alphabetical order and lemmata are entirely in bold and capital letters (e.g. **BANA**, **BANE** and **BA-NYE**). As far as the selected lemmata are concerned, the compiler included words used in daily language, such as geographic names, plant and animals names, proper names and expressions.

5.2.1.3.1.1.2 Microstructure of the *Dictionnaire Fang-Français/Français-Fang*

The dictionary presents various data types, namely class number, translation equivalents, meaning explanation as well as cross-references. Galley did not specify the orthographic system he used for the transcription of the lemmata in Fang, but nevertheless tried to take into account the phenomenon of tones in this language. After each lemma sign in Fang there follows, in parenthesis, the indication of the tone **BARA** (b), **BEBEE** (h), **BEBEBE** (m), etc. The lemma, the most important part of

the article, is immediately and systematically followed by a tonal indication. The following examples of articles are taken from the dictionary:

- First section: Fang-Français

ABA (m) n.4, pl. *meba*. Derrière du chimpanzee durci par l'usage. *Aba wagha*. Il ya deux *meba*, un à chaque fesse. Voir *ñgor*. Pour les autres singes, on dit *abañ* ou *atabe*.

ABA (h) n.4, pl. *meba* (dialecte Atsi). Corps de garde où se tiennent les homes. Syn. abe*ñy (h)*

A-BA (h) abrév. de *bîaba*,.Moi et toi. A-ba-bîa ke, nous allons toi et moi.

- Second section: Français-Fang

BRUN *mvel* (b). Se dit pour les oiseaux bruns. Passereaux à dos brun et ventre blanc, *mvel-kum* (bb). Poule brune, *mvel é ku* (bh). Cette poule est brune, *é ku nyi é ne mvel* (b)

DAVANTAGE *nda* (bm) (vb aux.). J'en veux davantage, *ma kôme nda noñ*.

HABITUDE accoutumance, *éveba* (h), *éyenba* (bm). Habitude, coutume, loi, manière, *éyem* (h), *tum* (b). Habitude de mordre, melôa (h). Ce chien mord habituellement, *é mvu nyi é ne melôa* (vb *lôa*).

In the treatments mentioned above, the author, Galley, follows the following approach:

1. The lemma as guiding element and unit of treatment differs from the other entries in the article by the fact that it is in bold and in capital letters. Therefore, identified through the application of typographical markers

2. Tonal indications:
    a. (m) indicates medium tones
    b. (h) symbolises high tones
    c. (b) indicates low tones
    d. (bm) shows that the vowel of the first syllable has a low tone, whereas the second opts for a medium tone
    e. (hb) shows that the vowel of the first syllable has a high tone, whereas the second has a low tone

3. The author provides some characteristics concerning the part of the speech. For example: ***ABA*** *n.4* means that the lemma is a noun of class 4.

4. Grammatical features follow immediately after the part of speech: *pl. meba* is the plural of *aba*.

5. Dialectal indications: In the second reference to ABA, the author mentions dialectal aspects in the sense that this lemma has another sense in the Atsi dialect.

6. The sense is always in French. One wonders about the role of Fang in this dictionary, as well as the public for which it was intended.

7. The author provides examples that do not inform enough about the different usages of the lemma.

8. With regard to the treatment of polysemy, lemmas such as **ABA**, showing a number of senses, are treated separately as if they were different lemmas.

Consider also the following example of the lemma **EBOLE**:

> **EBOLE** (h) n.5, pl. *bibole* (vb) *bo* h). Terrain repose, rivière reposée. *Afan ebera bo ebole,* une forêt dans laquelle on n' a pas chasse pendant un certain temps est devenu giboyeuse. *Osvi o berana bo ebole,* une rivière où l'on n'a pas péché depuis longtemps est redevenue poissoneuse. *Avu e berana bo ebole,* une ancienne plantation restée en friche est redevenue fertile.

The different syntagms that are used reveal polysemic expansions of the meaning of the lemma **EBOLE** ("Terrain repose"), contained in the syntagm *Afan eberana bo ebole*. Another interesting feature of the dictionary is the treatment of polysemic terms (lexical items with more than one sense), as each sense is treated in a separate subcomment on semantics, and these subcomments on semantics are marked by means of numbers functioning as polysemy markers. Consider the treatment of the lemma **EBA:**

> **EBA** (h) n.5, pl. *biba*. 1. Ecaille (vb barbe h). *Eba e e ko,* écaille de poisson. *Eba e ka,* écaille de pangolin, *Eba e ngan,* écaille de caiman, ...- 2. Nuage, nuée. *Eba e zo,* pl. *biba bi zo,* les nuées du ciel, ...-3. *Eba e yo,* parcelled de mica dans le sable (on croit que ces parcelles sont tombées du ciel).-4. Eba e ngwi, chenille *ngwi* dure à canneaux et plate (genre de mille pattes). Chaque anneau est comme une écaille. -5. Gros sujet de rancune. *Biebe-bo bi ne biba,* nous leur avons fait du tord, et ils veulent se venger. -6. Tout se qui s'écrise sur la planche avec la boule *asôl* (ntsip, *ôwôn, ñgon, ndokh*) ressemble à une écaille...

In the article on the lemma **EBA** "scale" above, Galley provides the users with data categories accommodated in sections of the articles, i.e. the comment on form (CF) and the comment on semantics (cf. Hausmann & Wiegand, 1989: 353). The lemma sign **EBA**, the tonal pattern (b), class number (n.5) and plural indication (*biba*), which

appear in the left core structure of the dictionary article, are part of the CF, while the rest of the entries on the right core structure of the article belong to the CS (cf. Hausmann & Wiegand, 1989: 353–354). In addition, the user can regard the lemma **EBA** as representing a polysemous lexical item. Each sense is introduced by structural indicators or markers [1, 2, 3, ...], which form part of the inner access structure of the dictionary (cf. Hausmann & Wiegand, 1989: 354–356)

With regard to the lemma **EBA,** one should be aware of the existence of the principles of arrangement. In fact, the arrangement lies in the primary and secondary distinctions of the meaning. The arrangement is done according to the principle of conjunction and the distinctions in meaning.

Senses 3 to 6, in which the figurative meaning does not refer directly to the first comment on semantics, could have been introduced later in the listing. Furthermore, another principle of arrangement could also have been used by the compiler, viz. the principle of empirical arrangement in which distinctions in meaning are determined on the basis of frequency counts.

In addition, the article **ABA** draws attention to some features of the presentation of compounds, which exposes inconsistencies in the dictionary. For example, *Eba e ko, Eba e ka, Eba e zo* and *Eba oyo* are compounds with the structure noun plus (connective) noun and are all written without a hyphen. However, some lemmata presented with the structure noun-connective have a hyphen. These are **KUM-KOLE**, **NDEN-ABO**, **OYEM-O-NZE**, etc.

In this dictionary there also are deficiencies regarding the way the homonyms are presented. Consider the following example of the lemmata **NKWE**.

NKWE (b) (bf) n.2, pl. minkwe. Célibataire homme ou femme …
NKWE (h) (bf) n.1, pl. minkwe. Pannier, rongeur, rat de canne à sucre …
NKWE (h) (bf) n.1, pl. … arracheur de dents; celui qui fait avorter …

In this example, the last two lemmata have the same tonal pattern (h); these lemmata can be regarded as homonyms. One of the main weak points of this dictionary is that the compiler fails to distinguish this pair of homonyms. Lexicographers usually use superscripts to differentiate them. They should be presented as follows: **NKWE**[1], **NKWE**[2] or **1. NKWE**, **2. NKWE**. These inconsistencies can be found in the treatment units of all the members of homonym paradigms in the dictionary.

5.2.1.3.1.2 Macrostructure and microstructure of the *Encyclopédie pahouine* of Largeau

5.2.1.3.1.2.1 Macrostructure of the *Encyclopédie pahouine* of Largeau

Largeau's work has a monoscopal character. French is the source language of the dictionary and lemmata are presented in that language. Lemmata written in small capital letters (only the first letter is a normal capital letter) are presented according to the lemmatisation principles established in the European tradition, e.g. verbs are lemmatised under their infinitive forms or under the first person singular of the present indicative, whereas nouns are entered under their complete forms (cf. Mavoungou, 2001b: 124). Different types of lemmata from different fields (e.g. ethnology, religion, oral literature, metallurgy and astrology) and multiword lexical items (e.g. *tout à coup*, *tout à l'heure* and *arc-en-ciel*) are also included. Several of these lexical units do not reflect the everyday conversations of Fang people, but the linguistic habits of the target users (i.e. the French colonial administrators).

5.2.1.3.1.2.2 Microstructure of the *Encyclopédie pahouine* of Largeau

Microstructural entries include translation equivalents and parts of speech. The lemma is always presented in small capitals, followed by its translation equivalents (in italics) and the examples in French (in Roman) and Fang (in italics). The microstructural treatment has to be regarded as valuable knowledge with regard to the treatment of lemmata. Since the work has an encyclopaedic characteristic, it is important that the *Encyclopédie pahouine* should offer a comprehensive treatment of lemmata, especially with regard to cultural terms. This can be motivated on various grounds. Firstly, as an encyclopaedic dictionary, the *Encyclopédie pahouine* presents data with a strong ethnographical focus. From the perspective of the dictionary user, it is significant to find such a variety of information regarding the lifestyle, value system and beliefs, in brief, the world vision, of the Fan people. The strong inclination towards ethnographical data qualifies the encyclopaedia to be classified in the subtype of the ethnographical dictionary. According to Zgusta (1987: 14, cited in Mavoungou, 2002), 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.

In general, three types of microstructural treatment can be observed in the encyclopaedia (cf. Afane Otsaga, 2004).

- The first type of treatment, the most simple and the less frequent, shows the equivalent item of the lemma in Fang and then the plural form of that equivalent item in Fang. In some cases the compiler also gives the synonym(s) of the equivalent item and its plural form. No examples or illustration are provided.

  Consider the following article of the lemma **Animal**:

Animal. tsit. Pl. betsit.

- The second type of treatment gives the meaning of the lemma, in French, the translation of that meaning in Fang (sometimes in parentheses), the synonym(s) of the lemma in French, and the equivalent item(s) of the synonym(s) in Fang, the plural form of the lemma in French and its equivalent items in Fang. When necessary, the compiler also gives different contexts of use of the lemma and its equivalent by providing illustrations.

  Consider the following example of the lemma **Anguille:**

> **Anguille**. Intermédiaire entre poisson et serpent, un mètre long. Elle a des dents. (*ezang kos ya nyo, ayap. Ebëlë mësong*). Syn. Poisson à dent. *Emvonye.* Pl. Anguilles. *Mimvonye.*

- The third and last type of treatment, the most frequently used, is also the most complex because it includes aspects already present in the first and second types of treatment and combines them with new features. This kind of treatment particularly concerns lemmata with more than one sense. Thus, a number (e.g. 1, 2 or 3) introduces each sense in French, followed by the equivalent item in Fang. The plural form of the lemma is also given.

  Consider the following example of the article of the lemma **Ver**:

> **Ver**. *etum* pl. vers. *bitum* 1. Qui mange des corps en decomposition (*da ve na byëm bi sun*). 2 Jeune enfant de 2 à 5 ans. (*emon abele mimbu bibeny ya mimbu mitan*). Syn. Asticot. *Endekh.* Pl. Asticots. *Bindekh.*

Largeau uses two kinds of fonts in the treatment of lemmata: normal font (not bold or italics) for all data written in French and italics for data written in Fang. The compiler does not specify the part of speech and the gender of the lemmata in order to allow the user to know, for instance, if the lemma is a verb, a noun or an adjective or if it is

feminine or masculine. In general, data presented in the articles are strongly related to the ethnographical and cultural aspects of the Fang people, such as lifestyle, value system and beliefs. This could explain why the compiler called this work an "encyclopaedia".

5.2.1.3.1.3 Macrostructure and microstructure of the *Lexique Fan-Français* of Martrou

5.2.1.3.1.3.1 Macrostructure of the *Lexique Fan-Français* of Matrou

In Martrou's work, lemmata are arranged in straight alphabetical order and written in bold and small characters and only the first letter is a capital letter (e.g. **Asara**, **Asas and Asè**). In the front matter texts, the compiler specifies that the orthographical system applied to the transcription of lemmata in Fang have been established according to the principles expounded by Sarcleux in *Essai de Phonétique*. Using this spelling system, he tried to write out the phenomenon of tones in Fang by using diacritics signs (e.g. **Efõn**, **Ekènœ** and **Ekœ'rœbœ**). Different categories of lemmata are included in the macrostructure (e.g. nouns, verbs, adjectives and pronouns). Most of the words selected as lemmata come from the fishing and hunting spheres. This could be explained by the fact that the Fang people (i.e. Fang-Atsi) from whom the data was collected are mainly active in these fields.

5.2.1.3.1.3.2 Microstructure of the *Lexique Fan-Français* of Matrou

The lexicon contains lemmas in Fang with French translation equivalents. The use of typographical markers, such as the printing of the lemma in bold as the running heads, has relatively improved the access structure. The orthography employed in the lexicon is based on the principles expounded by Sarcleux in his book *Essai Phonétique*. The fact that the book presents data on stress in the lemmas shows the lexicographer's awareness of the necessity to give an account of the pronunciation of the language.

In general, the following types of treatment can be found in the *Lexique Fan-Français*:

- Consider the following example of the article of the lemma **Alusœ**.

Alusœ. Voir. *Alu*

The first type of treatment, the most simple and the less frequent, shows that no translation equivalent is given, only an explicit cross-reference to *Alu*. By means of the treatment marker, the user is guided to the lemma sign *Alu*, where an exhaustive treatment of this lexical item is given. In addition to the foregoing, the article of the lemma **Alusœ** functions as a cross-reference article, with only the lemma **Alusœ** and the cross-reference *voir* "see" entry in the article.

- Consider the following example of the article of the lemma **Alla**.

Alla. Viscosité, glaire. *Asen mella*. Il a des glaires dans ses selles. Adj. Visqueux, gélatineux, mou. *Eko ania e nœ alla*. La peau du silure électrique est gélatineuse.

The second type of treatment gives the translation equivalent paradigm, which appears immediately after the item, giving the form of the lemma (**Alla**) in French, and the translation equivalents (*viscosité, glaire*) of that meaning in Fang. After the translation equivalents, the user is provided with the co-text entry (italics) *Asen mella* and its translation equivalent *Il a des glaires dans ses selles* (Roman). One can also note the part of speech *Adj.*, which is not addressed at the lemma but has a non-lemmatic address. In lexicographic terms, the address is when an entry is directed at the lemma. The item *Adj.* is addressed at the translation equivalents "*visqueux, gélatineux, mou*".

- Consider the following example of the article of the lemma **Nlẽm:**

> **Nlẽm**. Coeur. Partie intérieure. *Nlẽm eli*. Coeur de l'arbre....—*Knlœ a nœ ne nlẽm*. Un tel a un bon ceur...— Disposition morale, volonté *A se nlẽm evœ mur dzũm*....—Connaissance, intelligence. *Dzimelœ nlẽm*. Perdre son intelligence...

In the above-mentioned treatment of the lemma **Nlẽm**, the translation equivalents are given after the item giving the form of the lemma. However, when looking at the treatment of the article of the lemma **Nlẽm**, one notes some inconsistencies. Firstly, no morphological status is given to the lemma. The user could be uncertain whether the lemma **Nlẽm** is a noun or a verb. Secondly, in the treatment of a lemma with more than one meaning, the compiler distinguishes different paraphrases of meaning with a dash. However, he should preferably have employed structural markers (1, 2, 3, ...) to indicate the different co-texts in which the lemma sign **Nlẽm** can possibly occur. These structural indicators are not to be seen as markers of polysemy, but are part of the rapid inner access structure (cf. Hausmann & Wiegand, 1989: 356). They should not be presented in a haphazard way but according to a predetermined set of criteria accounted for in the relevant front matter text. These criteria should include the usage frequency as well as other principles of arrangement.

With regard to the *Dictionnaire Fang-Français/Français-Fang*, the microstructure contains a lot of useful entries. But no metalexicographic discussion is provided in the user's guide to make it accessible to the target reader. Special-field lexical items are treated in a satisfactory way in the sense that the metalanguage used is accessible for nonspecialist users. Descriptions of medicinal and medico-magical plants are of importance for the user to understand the richness of Fang culture.

The *Encyclopedie pahouine* provides the user with different font types (italics, small capitals, etc.), the bilingual presentation of articles divided into search areas set apart typographically, and special articles focusing on cultural data introduced by the intra-structural marker *Encyclopédie*, and the systematic use of literal translations addressed at the translation equivalents and competence examples have drastically improved the quality of the work. Ordering devices are provided as a visual aid for the

users, whereas contextual data in the form of word-by-word translations help them to disambiguate the different senses of the lexical items that are treated. Competence examples and comments with a strong cultural load make the *Encyclopédie* a valuable reservoir of knowledge.

As far as the *Lexique Fan-Français is concerned*, the microstructure of the work provides the users with various data categories: paraphrase of meaning, translation equivalents, competence examples, etc. However, the lexicographer too often fails to provide the users with a useful entry: the item giving the part of speech of the lemma sign.

The benefit of having existing lexicographic work is that the lexicographer will not have to start from the very beginning. The existing dictionaries in Fang can be regarded as a valuable contribution to future dictionaries in Fang. On the microstructural level, existing dictionaries in Fang present various data types, namely tonal indications, paraphrase of meaning, translation equivalents, parts of speech, co-text entries, etc. There are some inconsistencies in the field of phonology, e.g. the lack of tonal indication and stress indication; in the field of morphology, e.g. lack of morphological status in the treatment of the lemmas; and in the field of semantics, e.g. unclear indication of polysemous items.

After this brief discussion of the structures of the dictionary and presenting the macrostructure and the microstructure of existing dictionaries in Fang, the following discussion will focus on the front and the back matter. The focus will mainly be on the data to be included in the front matter and the back matter.

5.2.2 Data to be included in the front and back matter of the dictionary with the planned microstructural programme

Lexicographers of the dictionary with the planned microstructural programme should be aware of the fact that all the microstructural data cannot be found in the article of

the dictionary. One possible way to do that is to include an extensive account of the microstructural data. As an option, the lexicographers of the dictionary with the planned microstructural programme could limit the presentation of the microstructural data in the articles of the dictionary and include comprehensive and systematic discussions of microstructural data in the outer texts (front and back matter texts). The target users of the planned dictionary would expect the lexicographers to give them complete details of the microstructural data so that they can achieve optimal retrieval of information. As stated in Chapter 1, the aim is to help the target users enhance their own language. Also, the outer texts include a number of data types that supplement the microstructural data in the articles of the dictionary. What follows is a number of data types that can supplement the microstructural data in the articles of the planned dictionary.

5.2.2.1 Data to be included in the front matter of the dictionary with the planned microstructural programme

5.2.2.1.1 Background data

The planned dictionary will contain some background data in the front matter, i.e. the thoughts of the lexicographer on different metalexicographical issues concerning dictionaries and the presentation of data (cf. Gouws, 2002a: 76). Short paragraphs explaining the history of the Fang people, the history of their language and the major ideas that have guided previous researchers could also be included.

5.2.2.1.2 Data section

In the critical analysis of existing dictionaries in Gabonese languages in general, and in Fang in particular, it has been clearly shown that one of the weak points of those lexicographic works was the lack of a data to be included in the dictionaries. It is well accepted that the data included in the table of contents gives quick and easy access to most data sections or texts of the dictionary and occasionally to parts of these texts. It provides the user with an easy means to quickly review what is contained on the page

as well as to move immediately to the data of the page they are interested in. Unfortunately, the existing dictionaries in Fang fail to provide the users with the data section. In the planned dictionary, the data section will be included in the front matter.

5.2.2.1.3 Data system

The data system included in the user's guide can be regarded as obligatory data to be included in the front matter. As obligatory data, it gives the user access to the system adhered to in the dictionary. Any good dictionary is characterised by the consistent application of a well-developed system, and this system has to be explained in the front matter. In this regard, Gouws (2004: 69) aptly states that the user's guide text included in the front matter of a dictionary is not a user's guide to the front matter, but a user's guide to the dictionary as a whole. It is a functional component of the dictionary and not of the front matter and therefore it is a textual constituent, says Gouws (2004).

The lexicographers of the dictionary with the planned microstructural programme should include the data system in the user's guide. It will be great help for the users of the planned dictionary. The aim will be to make the data more accessible to the users. This data system will present the layout and content of data in the planned dictionary and show how to use them in composing a complete core data set. In the planned dictionary, the data core will be a section that will list the specific data. For each aspect of the data there will be a reference description, and there also will be guidelines to assist the users to retrieve information. The data system of the planned dictionary will provide explanations of conventions and procedures employed therein.

5.2.2.1.4 Grammar

It goes without saying 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). It can be said that, from a data-

distribution perspective, it would be difficult to present all the grammatical data in the microstructure. One possible way is to give a comprehensive and extensive discussion of some of the relevant data categories. Users can be referred from the article to a mini-grammar in the front matter texts. In the *Dictionnaire Fang-Français/Français-Fang*, the compiler gives a comprehensive discussion of the relevant grammatical categories in a back matter text, although there unfortunately is no code to be used as a cross-reference entry guiding the user to the mini-grammar in the back matter text. A typical example can be drawn from the *Longman Dictionary of Contemporary English,* which offers scant grammatical data in the articles of the central list. The verb *refine*, for instance, is marked as a verb and this entry is followed by an entry giving the code [T1]. The well-informed dictionary user will interpret this code as a cross-reference entry guiding him/her to the relevant section in the back matter text. A mini-grammar is therefore a functional constituent that adds to an efficient transfer of data in the microstructure.

The compilers of the dictionary with the proposed microstructural programme could meet the needs of their target users if the mini-grammar is planned carefully. As an outer accessory text, this grammatical data, linked by means of cross-references, has to be treated in such a way that it can present the relevant data more economically and more efficiently. A model that could be considered could include a mini-grammar in the front matter. This mini-grammar should contain the following data:

- prefixes, e.g. nominal prefixes, verbal prefixes and pronominal prefixes (see Addendum 2);
- noun classes, e.g. singular prefixes and plural prefixes 9 (see Addendum 3);
- pronouns, e.g. personal pronouns, reflexive pronouns, neuter or connective pronouns and adjective pronouns (see Addendum 4);
- adjectives, e.g. possessive adjectives, indefinite adjectives, interrogative adjectives and numeral adjectives (see Addendum 5);
- adverbs, e.g. adverbs of place, quantity, affirmation, manner or comparison, doubt and negation (see Chapter 8);

- conjunctions, e.g. coordinating conjunctions and subordinating conjunctions; and
- prepositions, prepositions of place and time (see Chapter 8).

The lexicographer(s) of the planned microstructural programme should preferably include tables presenting the different types of prefixes, pronouns, adjectives, adverbs, conjunctions and prepositions mentioned above in the mini-grammar. However, the lexicographer(s) of the planned microstructural programme should be aware that the presentation of this morphological data for each lemma sign could be complicated to understand at the learner's level (cf. Mavoungou, 2003). However, this data will be necessary for the target users of the planned microstructural programme. Their presentation in the mini-grammar will display a communication-orientated function, because the aim is to help the users in the production and reception of texts in Fang. Tables illustrating the adverbs, prepositions and conjunctions also will be necessary in the front matter.

The planned dictionary with the microstructural programme will include a cross-reference marker, i.e. a text segment or reference entry facilitating access to lexicographic data that can be found elsewhere in the dictionary. In the planned dictionary, the cross-reference marker will facilitate access to the specific lemma where more information can be retrived, with an exhaustive treatment of this lexical item being given in the front matter of the planned dictionary.

5.2.2.1.5 Conjugation of verbs

The conjugation of verbs is complex and takes much space in a dictionary. This is the reason why the positioning and placement of verb tables in the front matter or back matter solve many problems for the compiler of a bilingual or monolingual descriptive dictionary. For the sake of convenience, the lexicographer(s) provide the user with a structural indicator that often guides him or her to the appropriate form of the conjugation or verb tables (for a discussion, please see Chapter 8).

All the forms of conjugation are not presented in existing dictionaries in Fang. Consequently, in the proposed dictionary the different forms of conjugation distinguished by Ondo Mébiame (1992) will be taken into account. For the discussion of verbs in Fang, see Addendum 6, which provides an example of the different conjugated forms of the verb ***bo*** "to do".

Given the fact that the planned microstructural programme will have a communication-orientated function, the back matter will include an explanation of the microstructural treatment of verb conjugations. It will take into account the conjugation of verbs in Fang. The explanation of these different conjugated verbs will play a communication-directed function because the aim is to help the user with the production of texts in Fang. This type of information in the back matter texts is motivated by target-user situations. In fact, the target users of the proposed dictionary need to communicate in the language not only among themselves, but also with other people who do not have a good command of Fang. The front matter of the proposed dictionary will intervene indirectly when they have a communication problem in terms of constructing sentences. Verbs are essential elements in sentences. Knowing them or how they have to be conjugated in different environments can solve many problems of communication for users.

The lexicographers should preferably use a cross-reference marker, which would refer the users to the conjugation of the specific verb in the front matter of the planned dictionary. The discussion regarding the positioning of verbs in the planned dictionary with a microstructural programme will be given in Chapter 8.

5.2.2.1.6 Pronunciation

On the one hand, the fact that the potential target users of the planned microstructural programme range from adults and senior high school students to academics makes it possible for the lexicographers to include pronunciation in the back matter. On the other hand, since all the data on pronunciation cannot suffice in the central list of the

dictionary, the lexicographers of the dictionary with the planned microstructure should make provision for an extensive discussion of data on pronunciation in the front matter. For the senior high school students to academics, tables presenting all the sound systems of the International Phonetic Alphabet (IPA), Orthographe des Langues du Gabon (OLG) and Nzang-Bié are necessary (for more information regarding the different sound systems, see Chapter 9). The lexicographers of the dictionary with the planned microstructural programme should have to explain in detail the specificities of each alphabet presented in the front matter. In addition to the foregoing, the information on pronunciation has to provide an explanation of both syllabic and tonal structures. The presentation of this data will also play a communication-directed function, because the objective consists of helping the users with the production and reception of texts in Fang. The discussion on the different data types on pronunciation will be given in Chapter 8.

5.2.2.1.7 Phonology

One of the main problems of existing Gabonese dictionaries in general, and existing dictionaries in Fang in particular, is the lack of texts explaining the specificities of the Fang phonological data in the outer texts. Very often, lexicographers compiling dictionaries for African languages have been guilty of ignoring this basic component of the phonological analysis of the language (cf. Mavoungou, 2001b).

The phonological data is important for both L1 and L2 users of the proposed dictionary. As a matter of fact, within the primary target user group are pupils and students who attend schools and universities where foreign languages such as English, Spanish, German, Italian, Portuguese and Arabic are taught on third language level. For those pupils and students, a relative degree of familiarity with the phonological data will be assumed. The compiler(s) of the planned microstructural programme should preferably provide explanations of the specificities of Fang phonological data (see Addendum 7).

The Gabonese community in general, and the Fang community in particular, are not very familiar with dictionary-using skills. The use of phonological data should be planned in accordance with the needs and reference skills of the target users of the proposed dictionary. Consequently, the lexicographer(s) of the planned dictionary have to make a greater effort by using such 'phonological data'. The phonological data must clearly be explained in the front matter of the planned dictionary with the microstructural programme.

5.2.2.1.8 Alphabet

The presentation of the alphabet will be one of the types of data to be included in the front matter of the planned dictionary. Much research has been done with regard to the alphabet in Gabonese languages. Among this research are Raponda Walker's alphabet, the 1999 alphabet, the Rapidolangue's alphabet and Nzang-Bié's alphabet. These works will be discussed and presented in Chapter 8. In the front matter of the dictionary with the planned microstructural programme, the model of presentation will be drawn from Nzang-Bié's presentation of the alphabet, because Nzang-Bié presents the French equivalents along with the Fang forms, and the shapes of the letters of the alphabet used by Nzang-Bié reflect phonetic or phonological principles of Fang. For the presentation of Nzang-Bié's alphabet, see Chapter 8. The presentation of this data in the front matter will play a communication-orientated function because it will help the target users of the planned microstructural programme, composed of advanced adults and students who have Fang as mother tongue and those students who want to learn Fang as second language, with text production.

5.2.2.2 Data in the back matter of the dictionary with the planned microstructural programme

5.2.2.2.1 Pragmatic data

Given the fact that the planned dictionary also has a knowledge-orientated function, the back matter texts will provide pragmatic data, e.g. data regarding the origin of

names of villages in Fang. These texts will be names from nature, names from society, names from the history of migration, and names from physical reality (Addendum 8). Apart from the names of villages, other names will be added, e.g. the names of days (Addendum 9), the names of months (Addendum 10), the names of seasons (Addendum 11), the names of countries (Addendum 12), and the names of Gabonese cities (Addendum 13).

Given the knowledge-orientated function of the planned dictionary, the lexicographer(s) could have problems with presenting all the data in the central list and the target users would not have access to these names as groups. From the data distribution, the lexicographer(s) of the planned microstructural programme could place this data in the back matter texts. Wiegand (cited in Gouws, 2004) introduces the concept of a relation of thematic progression, i.e. coherence between the central list and these back matter texts.

The variety within the intended target user groups has many implications as far as the treatment of this data is concerned. In fact, for the treatment of names, the advanced students who want to learn Fang as a second language may need this data more than the mother-tongue speakers of Fang, who are assumed to be familiar with this data. The aim of back matter texts is to add to thematic progression and to an efficient transfer of data (Gouws, 2004). The back matter texts will also be linked to the central list by means of cross-references.

5.2.2.2.2 Proverbs

The lexicographers of the dictionary with the planned microstructural programme could face problems in presenting all the proverbs within the central list of the dictionary and the users would not have access to these proverbs as a whole. Fang people hold proverbs in high esteem because they are regarded as constituting the wisdom of the society. This is attested to by Opoku (1975), who says, "Proverbs express the wisdom of the people and are a key to the understanding of ways of life in the past and in the present".

It can be concluded that proverbs are important data to be included in the dictionary. With regard to the planned dictionary, the proverbs will be included and grouped according to useful themes in the back matter. This data can be beneficial for the intended target groups of the planned dictionary.

5.2.2.2.3 Bibliographical data

In the planned dictionary, the back matter will contain those sources referred to in the articles of the central text, i.e. the bibliographical sources. The bibliographical sources are one of the texts found in the back matter and contain a complete list of sources from which the central list quotations in the dictionary have been taken. According to Gouws (1999a), the central list quotations can also be called source-directed reference entries. The bibliographical sources of the planned microstructural programme will contain the full title of the source, complemented by entries indicating the place where the book was published and the year of publication. The target users should have to follow the reference to the back matter texts and find the needed bibliographical data. The lexicographer(s) of the planned dictionary should be aware of the high degree of textual condensation the interpretation of sources quoted in the central list can demand from the user who needs to retrieve the full text version from the back matter. However, the target users of the planned microstructural programme will have sufficient dictionary skills to follow the reference to the back matter text. This data is important for the target users of the planned dictionaries because it can be interpreted as a further reference instruction, giving the user access to the external source (cf. Gouws, 1999a).

5.3 Concluding remarks

In this chapter, the most important structures of the dictionary have been discussed. It can be concluded that the data distribution is a programme that organises the distribution of all the lexicographic data between the different texts presented in the dictionary. As a programme, it works in parallel with the microstructural programme

by determining the way in which data types are presented and different texts are positioned in the dictionary. Two types of distribution structures have been identified, namely a simple data distribution structure and an extended distribution structure. Where the central list is the only target for data distribution, the dictionary displays a simple data distribution structure. Where the outer texts are employed to accommodate data as part of the procedure of data distribution, the dictionary displays an extended data distribution structure. Regarding the central list, a brief discussion of its structure has been presented, relating to aspects such as macrostructure, microstructure, access structure, addressing structure and mediostructure.

This chapter discusses the macrostructure and the microstructure of existing dictionaries in Fang, and the conclusion that can be drawn is that these works make a valuable contribution to future dictionaries in Fang. On the microstructural level, existing dictionaries in Fang present various data types, namely tonal indication, paraphrase of meaning, translation equivalents, part of speech, co-text entries, etc. There are some inconsistencies in the field of phonology, e.g. the lack of tonal indication and stress indication; in the field of morphology, e.g. the lack of morphological status in the treatment of the lemmas; and in the field of semantics, e.g. unclear indication of polysemous items.

This chapter also discussed the front matter and the back matter of the planned dictionary, with the focus being on the data to be included in the front matter and the back matter. It has been said that all the microstructural data could not be included in the central list of the dictionary. The usual way in which lexicographers deal with this is to include an extensive account of microstructural data. As an option, the lexicographers of the dictionary with the planned microstructural programme could limit the presentation of the microstructural data in the articles of the dictionary and include comprehensive and systematic discussions of the microstructural data in the outer texts (front and back matter texts). The front matter will include data such as background data, which will provide the users with a history of Fang, the origin of their language. The data section in the table of contents will give access to most of the

texts and occasionally to parts of these texts. The data section will also give access to most of the data of the outer texts. The data system in the user's guide to the dictionary with the planned microstructure must provide explanations of conventions and procedures employed therein. A comprehensive and extensive discussion of some relevant grammatical data categories is provided. The grammatical data will form part of the mini-grammar, including data like prefixes, pronouns, adjectives, adverbs, conjunctions, prepositions, tables containing the conjugation of verbs, pronunciation and the alphabet(s). The back matter will include additional data like the names of villages, the names of seasons, the names of days and the names of countries. The back matter of the dictionary with the planned microstructural programme will include the bibliographical data as important data. Consequently, it will contain a complete list of sources from which the central list quotations in the dictionary are taken.

The lexicographers of the planned dictionary should use cross-referencing to guide the users to the specific lemma where an exhaustive treatment of this lemma sign is given.

Chapter 6: The Different types of articles and lexical items

6.1 Introduction

It has already been stated that the microstructure is represented by all the data categories included in a dictionary article as part of the treatment of the lemma sign. The planning of a dictionary should make provision for the inclusion of more than one type of article in the dictionary. According to Gouws (2003), one can distinguish different types of articles: articles with a main lemma, articles with a sublemma, single articles and synopsis articles. The lemma signs represent all the lexical items to be included in the dictionary. There are different types of lexical items, e.g. words, items smaller than words and items consisting of more than one word. These lexical items are presented as different types of lemmata, i.e. lexical lemmata (words), sublexical lemmata (items smaller than words) and multilexical lemmata (multiword lexical items).

During the compilation of the dictionary, one of the problems faced by the lexicographer(s) is the selection of lexical items to be included in the dictionary. A decision regarding the different types of the articles and lexical items needs to be made according to the needs and reference skills of the users.

In this chapter, particular attention will be paid to the types of articles and lexical items to be included in the dictionary with the microstructural programme.

6.2 Different types of articles

In Chapter 2, a brief discussion of the different types of articles was given, and it was indicated that differences between articles can lead to the distinction between articles with a main lemma as guiding element and articles with a sublemma as guiding element. It was also shown that there are articles displaying a single structure, a complex structure, a synopsis structure and a cross-reference structure.

6.2.1 Articles with a main lemma versus articles with a sublemma

According to Gouws and Prinsloo (2005a: 36), articles with a main lemma can be ordered vertically and, if horizontally ordered, the distinction is made between main lemmata and sublemmata. Articles with a main lemma as the guiding element typically display a more comprehensive lexicographic treatment compared to articles with a sublemma as the guiding element (cf. Gouws, 2003: 36). The *Dictionnaire Fang-Français/Français-Fang* compiled by Galley, a dictionary in which the article stretches are characterised by a straight alphabetical ordering with a vertical arrangement, contains the following articles with main lemmata:

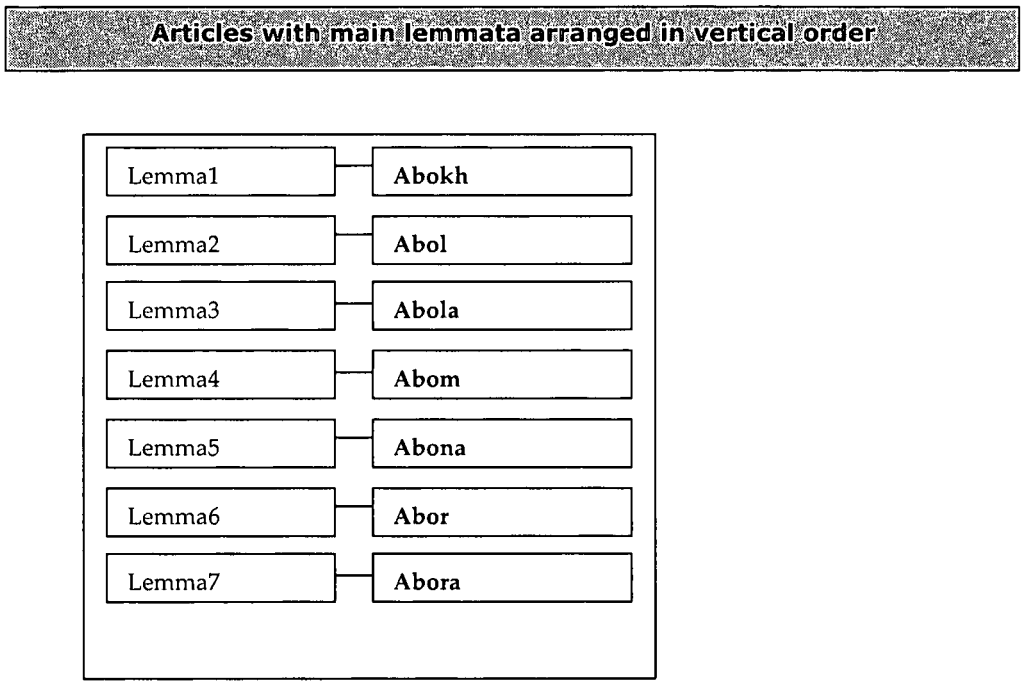


Figure 6.1: Articles with main lemmata in the *Dictionnaire Fang-Français/Français-Fang*

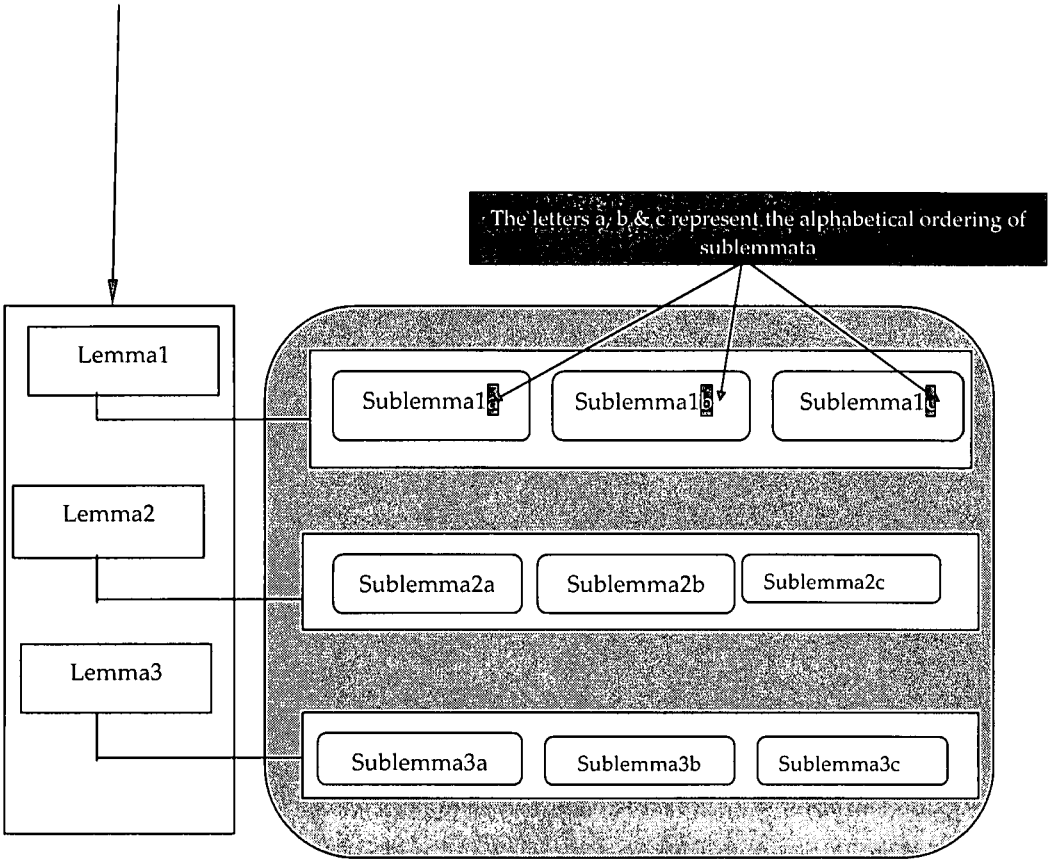
The lemmata **abokh** to **abora** are ordered vertically. Each lemma is the guiding element of an article. The following discussion concerns articles with a sublemma. The use of horizontal ordering of lemmata results from the application of procedures of textual condensation (cf. Wolski, cited in Gouws, 2003: 37) that can be regarded as

important space-saving strategies. Gouws states further that the treatment of articles introduced by sublemmata is of a much more restricted nature compared to the treatment of articles introduced by main lemmata. Where articles with a sublemma are presented, a further distinction has to be made between niched articles and nested articles.

Niched articles have a strict alphabetical clustering that may or may not be semantically related. Nested articles have a clustering or listing of lemmata or articles, which stretches the rules of strict alphabetical ordering in order to exhibit morphosemantic relations between words (Hausmann & Wiegand, 1989: 336). Hausmann and Wiegand (1989: 336) confirm this by saying that the macrostructure may be presented differently within the two dimensions that are available so that we can distinguish different designs. The common feature of all these designs is the orientation from top to bottom, which is conditioned by the writing system. In straight-alphabetical dictionaries, this orientation is strong and the lemma file is arranged vertically. Elsewhere we find sinuous lemma files. This is the case in niched and nested articles. In most dictionaries, these sublemmata are also given in bold, as in the following schemas[1]:

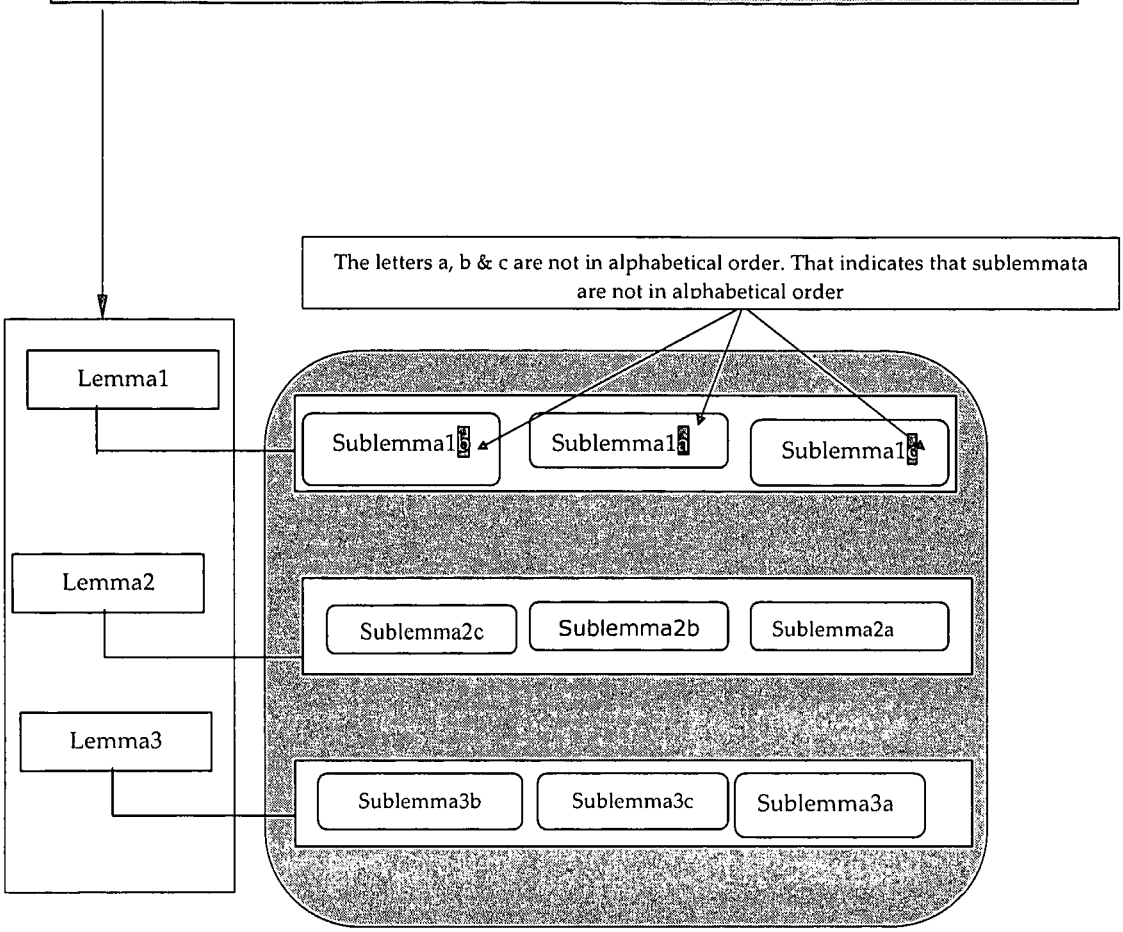
[1] The following modified schemas have been drawn from Afane Otsaga (2004).

Figure 6.2: Schema of articles with sublemmata: a *niching* ordering



In the niching ordering, sublemmata are arranged in alphabetical order; however, these sublemmata may be or may not be semantically related.

Figure 6.3: Schema of articles with sublemmata: *nesting* ordering



In the nesting ordering, sublemmata are arranged in both alphabetical and non-alphabetical order; however, these sublemmata are arranged according to their morphosemantic proximity.

The following example from the *Verklarende Afrikaanse Woordeboek* (VAW), taken from Gouws and Prinsloo (2005a: 95), illustrates a cluster of niched articles:

> **baga'sie. 1.** Reisgoed (koffers, handsakke, ens.). **2.** Voorade en uitrusting van'n leër (verrouderd); oortollige bagasie dra, te vet wees; **bagasiebewys; bagasieburo; bagasiedraer; bagasiekaartjie; bagasiekantoor; bagasieruim; bagasiewa.** (VAW)

The horizontally-ordered articles, introduced by the lemmata **bagasiebewys** to **bagasiewa**, can be regarded as a cluster of niched articles displaying a strict alphabetical ordering. Those horizontally-ordered that are given in full, i.e. without a lemma part omitted through a process of textual condensation, e.g. lemmata like *bagasiebewys; bagasieburo, bagasiedraer; bagasiekaartjie; bagasiekantoor; bagasieruim* and *bagasiewa*, are main lemmata.

Compare the lemmata in the above-mentioned example, taken from *A Concise English-Swahili Dictionary* (CESD), with those in the next example:

> **accept** *vt* pokea. ~ bride pokea rushwa. 2. kubali, kiri. ~ a fact kubali ukweli. ~ **able** *adj.* ~ **ability** *n* ukubalifu. ~ **ance** n kukubali, ridhaa.

The example of nested articles given above is also a cluster of horizontally-ordered articles, but it deviates from a strict alphabetical ordering. Those horizontally-ordered lemmata presented as partial lemmata due to the application of a process of textual condensation that has led to the omission of the lemma part, e.g. *~able*, *~ability* and *~ance*, are regarded as sublemmata.

6.2.3 Single articles/ synopsis articles

Bergenholtz *et al.* (1999) make a distinction between single and synopsis articles. According to Gouws and Prinsloo (2005a: 92), synopsis articles with encyclopaedic data in dictionaries dealing with languages for special purposes do not only include

data relevant to the lexicographic treatment of the lexical item represented by the lemma sign of the specific article, but also include data relevant to lemma signs of some single articles in the specific dictionary. Due to additional data on offer in synopsis articles, they can be regarded as a subtype of complex articles. The complex articles will be discussed in Section 6.2.4. Single articles can be regarded as the default article in both general dictionaries and technical dictionaries (Gouws, 2003: 39). These articles display the standardised structure and microstructural data categories. Gouws and Prinsloo (2005a: 91) point out that a single article will always display at least an obligatory microstructure. A single article includes a number of specific zones where specific data types can be allocated, e.g. a zone for items giving the pronunciation, for items giving morphological data, for items giving a paraphrase of meaning or the translation equivalents (see Figure 3).

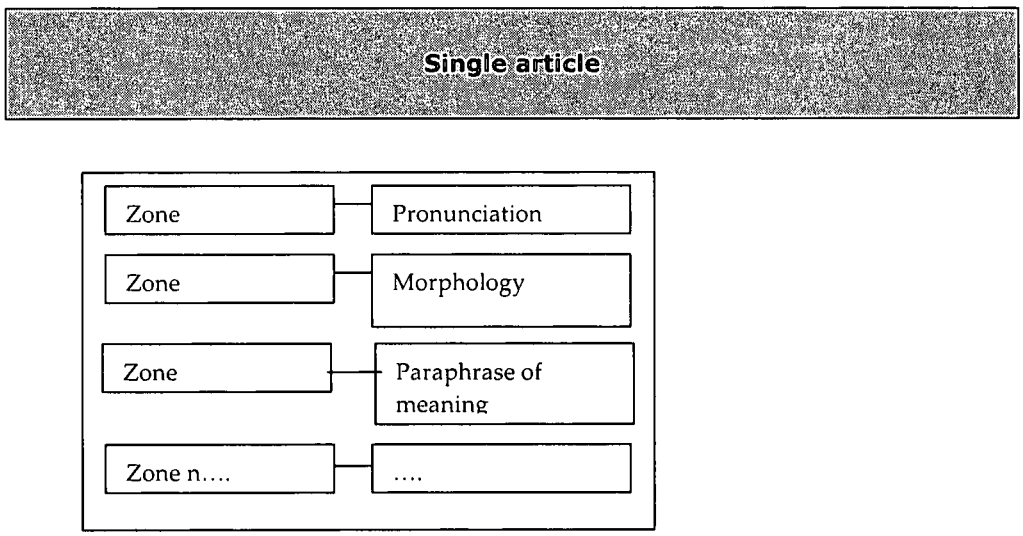


Figure 6.4: Single articles displaying a standardised structure and microstructural data categories

6.2.4 Complex articles

A complex article is characterised by the inclusion of additional data categories or search fields or by a more comprehensive treatment of a specific aspect of the lexical item represented by the lemma sign. In this regard, the usual way followed by lexicographers is the inclusion of procedures to convey the additional data. In some

dictionaries, usage notes can be regarded as this type of convention, which leads to complex articles. The following figure illustrates the structure of the complex articles in a dictionary.

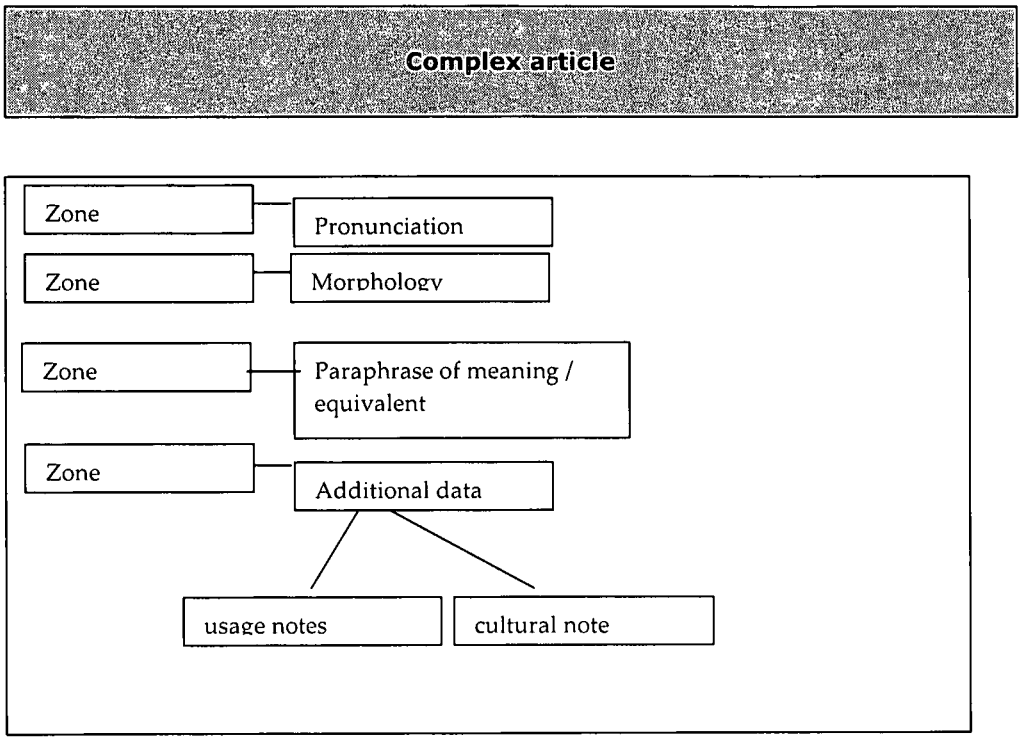


Figure 6.5: Complex articles

Consider the following examples 6.1 and 6.2 of the modified articles of the lemmas **dumu** and **eboga** taken from the *Dictionnaire Fang-Français/Français-Fang*.

These can be regarded as examples of complex articles focusing on the field of pharmacopoeia. After the items giving the paraphrase of meaning (introduced by the structural marker (□)) and its translation equivalent, the co-text entries (introduced by the symbol (●) and its translation equivalent, and the proverb, introduced by the structural marker (▶), the user is provided with the structural marker (+) used to mark a specific article or search zone in which the user is provided with additional data of an encyclopaedic or extra-linguistic nature. After the presentation of additional data, the item giving the quotation, introduced by the structural marker (◊), is given. The use of the structural marker (+) enables a user who is not interested in the etymological and morphological aspects of the lemma signs **dumu** and **eboga** to jump

immediately to the structural marker (+). So the user does not have to read everything until he or she comes to the data on the plant.

dumu [dùmù] < *duma n. cl. 3/4 pl. mum.
□ *Ele ebələ fufuk*, arbre appelé fromager, dragonnier ou kapockier et fournissant le kapock.
⊙ *Sur e dum*, coton du fromager ou du kapokier.
▶ Prov: *Dum da wu be mvik-mvige*, une grande chose est tuée par unr toute petite
+ (Med. trad) *Eyon o va bye e mwan a nə tok, onon fwin dum, o fur mə e ve e na məndzim ete. Eyon te wa fur mwan mendzim mə tə ete. Eyon tə mwan tə a yə bo nən. Mendzim məte ma yie nə ki bol mwan no a kal na no osa nən.* Si tu mets au monde un enfant chétif, prends des écorces du fromager que tu deposes dans une cuvette. Fais prendre au bébé un bain et il grossira. Toute fois le danger de ce bain se situe au niveau de la tête de l'enfant avec l'eau du bain de peur que l'enfant ne grossisse de façon disproportionnée. ◊ **Cit.** Le tronc du fromager sert parfois à faire des pirogues. Le kapok est vendu dans le commerce. Chez les indigenes, il sert à garnir les cousins et les matelas ou bien il est filé pour en faire des sacs de voyage. L'écorce des jeunes arbres, débarrassée des épines, est située pour faire des cloisons de cases. La decoction de l'écorce est employee comme vomitif ou comme lavement. Les feuilles sont emollients ou calment les névralgies. On tire de l'huile de ses graines. Ce vegetal géant est considéré par les Noirs comme un arbre sacré. Lorsqu'on voit sur l'emplacement des anciens villages deux pieds de Ceiba côte à côte, c'est l'indice que là, autrefois sont nés deux enfants jumeaux. On le plante aussi comme arbre principal du fétiche-protecteur ou sur les tombes. C'est au pied de ces arbres que l'on depose les offrandes faites aux mânes des ancêtres ou aux genies titulaires, cf. **Raponda-Walker et Sillans (1961: 106)**

Example 6.1: Article of the lemma **dumu**.

eboga [ébògà] < *buga < galwa n. cl. 5 pl. biboga
□ *Ele da və nae mor adzi edo a ku məlan* , plante qui, quand elle est magée donne des hallucinations.
● *Ma ko e mwan nina won a kal na adzi eboga*, j'ai peur de cet enfant car il mange l'iboga..
● *Eboga da və nə na a ten,* l'iboga lui fait tourner.
+ (Med. trad) Arbrisseau des sous-bois de la forêt, l'ibogha fait partie des produits réputés de la pharmacopée traditionnelle gabonaise. Il possède un double usage, méducal et magique. Les râpures d'écorce ainsi que les raciness de l'abrisseau se consomment comme fortifiant, aphrodisiaque ou encore comme coupe-faim. A faible dose les raciness combattent efficacement les coliques. Les vertus magiques de l'iboga sont connues des populations locales depuis longtemps. Mais ce n'est que dans ce qu'il convient d'appeller la région du Bwiti que l'iboga est place en haute estime. En effet, c'est l'arbre sacré des adeptes de cette regions. ◊ **Cit.** D'un point de vue scientifique, l'iboga est utilisé comme stimulant neuro-musculaire (depressions et asthénies physiques et intellectuelles); antitoxique (convalescence des maladies infectieuses, intoxications). [...] C'est surtout dans les pratiques fétichistes que les indigenes en font usage de l'iboga. C'est en effet la plante magique par excellence des adeptes du bouïti. Elle sert principalement pour la cérémonie rituelle d'initiation à cette société secrete. L'absorption des râpures d'écorces ou du bois de la racine determine une société d'ébriété, d'hébétude, de torpeur dans les facultés intellectuelles. A doses massives, l'iboga fait perdre la raison, provoque des hallucinations et parfois la mort. L'état de léthargie dû à l'usage immodéré de l'iboga dure 4 à 5 jours pendant lesquels le patient ne prend aucune nourriture, cf. **Raponda-Walker et Sillans (1961: 90)**

Example 6.2: Article of the lemma **eboga**.

6.2.5 Cross-reference articles

Contrary to single articles that display at least an obligatory microstructure (for a discussion of single articles see 6.2.3 above), the cross-reference article occurs when the user is referred to a limited treatment of the lemma. In this case, the lemma is a lesser used member of a synonym group and the treatment is primarily directed at a cross-reference entry (cf. Gouws and Prinsloo, 2005a: 94), as seen in the following example taken from *Pocket Oxford Dictionary* (POD):

funeral director *n*. undertaker.

According to Gouws and Prinsloo (2005a: 94), the cross-reference article also occurs where the user is cross-referred to a lemma sign representing a spelling variant or a plural/female form of the lexical item represented by the guiding element of the article with the limited treatment, as in the following example drawn from the POD:

actress *n*. female actor. **dean**[2] var. of DENE **god-daughter** *n*. female godchild. **men** pl. of MAN

Some cross-reference articles contain only the lemma sign and the cross-reference entry, as seen in the following examples from *Larousse*:

cafouillis. V. cafouillage **caftan.** V. caftan

The aim of this section was to discuss a cross-reference as a type of article of the dictionary. Various aspects of cross-referencing will be discussed in Chapter 10.

Contrary to single articles, complex articles, synopsis articles or cross-reference articles, which are determined on the basis of microstructural criteria, niched and

nested articles are determined on a macrostructural basis.

6.2.6 Types of articles in the dictionary with the planned microstructural programme

It is true that many dictionaries contain articles with main lemmata arranged in a vertical ordering, while others include articles with sublemmata arranged in a horizontal ordering. In this project I propose the use of articles with vertically-ordered main lemmata, as that arrangement demands lesser dictionary skills. Therefore, the dictionary with the planned microstructural programme will not include articles with sublemmata in order to avoid confusing the user, and so that the lexicographer can provide a complete treatment of each lemma.

In the dictionary with the planned microstructural programme, I propose the use of single articles and complex articles. As far as single articles are concerned, the dictionary with the planned microstructural programme will encompass a number of specific zones where specific data types can be allocated, e.g. a zone for items giving the pronunciation, items giving morphological data, items giving a paraphrase of meaning, items giving a translation equivalent, and items giving an illustrative example. With regard to the complex articles, the proposed dictionary will include additional data categories.

In the dictionary with the planned microstructural programme I also propose the inclusion of cross-reference articles. The limited treatment will be used when the lemma is a lesser-used member of a synonym group, and the treatment will be directed at a cross-reference entry guiding the target users to the lemma that represents the most frequently used synonym. Therefore, the dictionary with the planned microstructural programme will not include cross-reference articles representing a spelling variant or a plural form, as the lexicographers will give the complete treatment of the lemma in the comment on form.

After identifying different types of articles within a dictionary, it is also necessary to categorise the different types of items selected for inclusion as lemmata, as the microstructure deals not only with articles but also elements within the dictionary articles. The discussion of this aspect below will indicate the different types of items selected for inclusion as lemmata.

6.3 Different types of lemmata as dictionary entries

When dealing with microstructural data, the first issue the lexicographer(s) has to deal with is the lemma as treatment unit. Dictionaries have to be compiled in such a way that their macrostructure can accommodate all the different types of lexical items of the given languages. Gouws (1991) mentions that lexical items selected for inclusion as lemmata can be entered as either main lemmata or sublemmata. According to him, a main lemma is the only guiding element in a specific text block, whereas a sublemma is one of a collection of at least two or infinitely more guiding elements presented in a single text block. Gouws (1991; 1989: 85–86) distinguishes between three types of lemmas, namely lexical lemmata, subword lexical items as sublexical lemmata, and multiword lexical items as multilexical lemmata.

6.3.1 Lexical lemmata

6.3.1.1 Nouns and pronouns

Nouns, pronouns and adjectives (for a discussion of pronouns and adjectives, see Addendum 4 and Addendum 5) in Bantu languages also fall victim to the tradition of alphabetical listing of lemmata due to their complex morphological structure. In Bantu, nouns and pronouns are grouped into classes based on the prefixes they carry and the concordial agreement they manifest. Each noun class or pronoun class has two specific prefixes: one indicating a singular form of the word and one indicating a plural form of the word. The examples below illustrate a few nouns from *Dictionnaire Fang-Français/Français-Fang* and *Lexique FAN-FRANÇAIS*.

Fang nouns in *Dictionnaire Fang-Français/Français-Fang*

Singular	Plural
môr	bôr
tsir	betsir
afan	mefan
ékon	bikon
ésa	bésa

Fang nouns in *Lexique FAN-FRANCAIS*

Singular	Plural
môr	bôr
mbi	mimbi
ônon	anon
éli	bili

Fang nouns and prefixes are different from their verbs (see section on verb stems). They carry different prefixes, as exemplified in the examples mentioned above. At this level, they seem to be unproblematic in terms of lemmatising them, as they can be easily distributed into different article stretches. However, a problem arises with their singular and plural forms. The aforementioned examples show that singular and plural forms of the same noun take different prefixes. This means that, although they are semantically related, they will have to be entered different article stretches.

In order to solve such problems, lexicographers have to adopt a convention. In most dictionaries of Bantu languages, singular forms are entered as lemmata. Immediately after the lemma, the appropriate plural prefix is shown.

Lexicographers also have to use a variety of microstructural strategies. Wiegand (cited in Gouws & Prinsloo, 2005b) has introduced the notion of left-expanded microstructures to account for a procedure where data typically presented in a microstructural slot to the right of the lemma sign can be moved to a position where

they precede the lemma sign but still have the lemma sign as their address. The advantage of left-expanded microstructures consists of attaching prefixes to the lemma as guiding element of the article so that the user is able to recognise the orthographic word which (s)he encounters in the actual language usage (cf. Gouws and Prinsloo, 2005b). Below is an example in Fang taken from Ondo Mébiame (1992):

n**tum**	"stick"
m**ot**	"man"
m**o**	"hand"
n**de**	"house(s)
d**ob**	"navel"
dz**is**	"eye"

By employing a left-expanded article structure, the major difficulty regarding stem identification of nouns in class 9 can be simplified substantially. This is beneficial especially for the inexperienced user, and the presentation will acknowledge both knowledge-directed and communication-directed functions. The presentation as suggested in the above-mentioned example will be of value for users consulting the dictionary for text reception and also for text production purposes.

6.3.1.1.1 Nouns and pronouns in the dictionary with the planned microstructural programme

In the planned dictionary with the microstructural programme, I propose the use of a variety of microstructural strategies, like the left-expanded microstructure. These strategies allow the lexicographer(s) to attach prefixes to the lemma as guiding element of the article so that the user is able to recognise the orthographic word which (s)he encounters in Fang. In addition, I also propose lexical items such as nouns, and pronouns for inclusion as lemmata. Only the singular form will be taken into account when entering them as lemmata. This choice is motivated by the fact that (1) most Gabonese people are familiar with the singular form and (2) in Fang, plural forms are

irregular. Their inclusion in the planned dictionary could be problematic and the users could become frustrated when having to select different forms.

The lexicographers of the dictionary with the planned microstructural programme acknowledge the fact that two major strategies can be used in positioning nouns and pronouns in the dictionary. The first strategy admits the prefixes attached to the lemma. This strategy is called left-expanded microstructure. The second one admits only the stem. I propose that the strategy "left-expanded microstructure" be retained in the planned dictionary. This is motivated by the fact that (1) the compilers of existing dictionaries in Fang attach the prefixes to the lemma; and (2) this strategy avoids the problem of irregular forms of the nominal prefixes.

6.3.1.2 Verbs

The verb, in Bantu languages in general and Fang in particular, consists of the stem, to which is added one or more prefixes, with the exception of the imperative (as shown in Addendum 6). The examples below show the verb stem, to which is added a prefix "**a**", indicating the infinitive form of the verb.

Examples of infinitive verbs in Fang:

Abo "to do"	**a**ku "to fall"
abye̱ "to give birth"	**a**lom "to send, fetch"
adzi "to eat"	**a**nyu "to drink"
adzighə "to burn"	**a**zu "to come"
adzogh " to let"	**a**sil "to ask"
akə "to go"	**a**swi "to pour"
avə "to give"	**a**ye̱ "to suck"
avilə "to suck"	**a**yo "to vomit"
awulə "to walk"	**a**ve "to wake up"
ayələ "to fly"	

The verbal prefix has a syntactical function: it indicates a singular form of the verb, e.g. ***ma**dzi* "I eat" and ***a**dzi* "(s)he eats". It also indicates the plural form of the verb

biadzi "they eat" (see Addendum 2 for a discussion of the verbal prefix). In Fang, the verbal prefix relates to person and classes, as shown in Addendum 2.
The verbal suffixes relate to person, mood, tense, etc. Suffixes added to certain stems can form nouns and verbs, especially of a derivational nature. For a discussion of the conjugated form of the verb in Fang, see Addendum 6.

The question one should ask, is: which form of the verb will the lexicographers of the dictionary with the planned microstructural programme use to present the verb as the guiding element of the article? Are they going to attach prefixes to the stem or are they going to choose the verb stem as the lemma? Which macrostructural strategy will the lexicographers use to present the verb in the dictionary? The lexicographers of the dictionary with the planned microstructural programme have the responsibility of ensuring that the users have the necessary knowledge and skills to understand the strategy employed. A discussion of the indication and positioning of the verb in Fang will be given in 8.5.1.11.1 and 8.5.1.11.2.

6.3.1.2.1 Verbs in the dictionary with the planned microstructural programme

The lexicographers of the dictionary with the planned microstructural programme are aware that there are various strategies to enter the verb in the dictionary. These strategies were discussed in 6.3.1.1.1.

Some lexicographers attach the prefixes to the stem. This strategy has the advantage of the user seeing the full form of the infinitive. Other lexicographers enter the verbs on their stem forms. The advantage of this strategy is that, (1) unlike nominal prefixes, verbal prefixes are regular in form; and (2) it avoids the inclusion of all the verbs of a language in a single article stretch, i.e. the single article stretch introduced by **A** (in Fang, for example). In the dictionary with the planned microstructural programme, I recommend that the verbs are entered on their verb stems. This is the usual approach followed by the compilers of existing dictionaries in Fang. The lexicographers will refer to this as entering the infinitive form of the verb and will offer for **dzi**, for example, an infinitive translation equivalent "to see" as if translating the full form **adzi**. The lexicographers should preferably enter the verb under the first

letter of the stem, namely as **dzi** "to eat", **kə** "to go"and **yələ** "to fly", in the article stretches **D**, **K** and **Y** respectively. The lexicographers of the dictionary with the

planned microstructural programme are aware of the fact that such a strategy will not be problematic for the users, as it demands less effort for them to look up infinitive forms on the full form minus the verbal prefix ***a***. In the dictionary with the planned microstructural programme, the verb-stem will be preceded by the non-typographical structural marker the dash (–). This has to be explained consistently in the user's guide of the dictionary.

6.3.1.3 Adjectives

Fang adjectives, as most of Bantu adjectives, take the nominal prefix of the noun they are modifying, according to De Schryver and Prinsloo (2001: 379), there are basically two ways in which one can enter adjectives in Bantu dictionary. In a so-called *stem-based dictionary,* De Schryver and Prinsloo (2001) continue, only the stem will be entered (preferably preceded by '-' to indicate that a prefix should be attached to the stem). This stem then functions as the *canonical form.* Yet, in a so-called *word-based dictionary* all the possible forms of the adjective are entered, at which point there is no need to enter the stem. One could however deviate from the latter and only include the most frequent forms, or one could deviate from the former and include, besides the canonical form, also the forms with *sound strengthening.* In Fang, possessive adjectives, qualificative adjectives, numeral adjectives and indefinite adjectives take the nominal prefix of the noun they are modifying. Ordinal adjectives dot not carry prefixes; they are invariable words (See section, 6.3.1.3). Consider the following Table 6.1 showing the possessive adjectives in Fang (Addendum 5):

Personnes / Classes	1st sing. pers	2nd sing. pers	3rd sing. pers.	1st plur pers.	2nd plur pers.	3rd plur pers.
1	ewom	ewye	ewen	ewe	ewenan	ewoba
2	ebam	ebwye	eben	ebe	ebenan	eboba
3	ewom	ewye	ewen	ewe	ewenan	ewoba
4	emyam	emwye	emyen	ewye	emyenan	emyoba
5	edam	edwye	eden	ede	edenan	edoba
6	emam	emwye	emen	eme	emenan	emoba

7	edram	edrwye	edren	edze	edzenan	edzoba
8	ebyam	ebwye	ebyen	ebye	ebyenan	ebyoba
9	edram	edrwye	edren	edze	edzenan	edzoba
10	edram	edrwye	edren	edze	edzenan	edzoba
15	ewom	ewom	ewen	ewe	ewenan	ewoba

The table 6.1 mentioned above shows that possessive adjectives in Fang are always preceded by the prefix ***e***, the question one could ask is: which form the lexicographers are going to choose to enter the adjectives in the dictionary with the planned microstructural programme?

Consider the following table 6.2 showing the treatment of adjective **tokh** in the *Dictionnaire Fang-Français/ Français-Fang*:

Class	"small"
1	n**tokh**
2	be**tokh**/ mi**tokh**
3	**tokh**
4	a**tokh**/ me**tokh**
5	é**tokh**/ bi**tokh**
6	n**tokh**/ a**tokh**
7	n**tokh**/ me**tokh**

From the table 6.2. it is clear that the compiler chooses the stem to enter the adjective in Fang. The compiler is aware of the inclusion of all the forms of the adjectives in Fang can be problematic for the users.

6.3.1.3 Adjectives in the dictionary with the planned microstructural programme

The treatment of verb (see section 6.3.1.2.1) in the dictionary with the planned dictionary can also be applied to the possessive adjectives. As a result, the lexicographers of the dictionary with the planned microstructural programme should preferably enter the qualificative adjectives, possessive adjectives under the first letter of the stem, namely, **ewye** "yours", **wom** "mine" in the article stretches **E**, **W** respectively.

The lexicographers of the dictionary with the microstructural programme should preferably choose the stem form to enter the adjectives in the dictionary, as firstly it demands less effort for them to look up adjective forms on the full form minus the nominal prefix and secondly, the compilers of existing dictionaries in Fang choose the stem to enter the adjectives. In the dictionary with the planned microstructural programme, the hyphen (-) will be used to indicate the adjective-stem. The use of adjective-stem should have to be explained consistently in the user's guide of the planned dictionary.

6.3.1.4 Ordinal adjectives, adverbs, prepositions, conjunctions and interjections

In the back matter of *Dictionnaire Fang-Français/Français-Fang*, Galley (1964: 586–588) distinguishes four categories of invariable words. These are ordinal adjectives, adverbs, prepositions, conjunctions and interjections. One of the main problems faced by the compiler is making a difference between adverbs, nouns and prepositions. As some nouns are used as adverbs, other adverbs play the role of prepositions, as pointed out by Galley (1964: 587), contrary to Ondo Mébiame (1992), who makes a distinction between different categories of invariable words. In his work, the invariable words are:

- Ordinal adjectives, e.g. osua (first) and bẹ (second)
- Adverbs, e.g. *avə* (why) and *anə* (like, then)
- Prepositions, e.g. *yə* (and, with)
- Conjunctions, e.g. *amu* (because)

These invariable words have one common denominator: they do not carry prefixes, says Ondo Mébiame (1992: 708).

6.3.1.4.1 Ordinal adjectives, adverbs, prepositions, conjunctions and interjections in the dictionary with the planned microstructural programme

In the planned microstructural programme, I propose the inclusion of lexical items such as ordinal adjectives, adverbs, prepositions, conjunctions and interjections as lemmata. As they do not carry prefixes, their lemmatisation is not a difficult task.

6.3.1.5 Compound lexical items

The term "compound" is used to refer to a lexical item formed by compounding, i.e. by a word-formation process in which a one-word lexical item is made by combining

two or more bases, i.e. roots or stems. As far as Fang is concerned, one can distinguish several types of compounds. These are as follows:

1. Compound nouns having the structure noun + noun. For example: *Ko metekh* (black bird) (cf. *Dictionnaire Fang-Français/Français-Fang*).
2. Compound nouns having the structure noun + verb. For example: *Mbən dan* "The beauty exceeds".
3. Compound nouns having the structure adverb + adverb. For example: *foghe-foghe* "certainly" (cf. *Dictionnaire Fang-Français/Français-Fang*).
4. Compound nouns having the structure noun + connective +noun. For example: *Ko e si* "black bird" (cf. *Dictionnaire Fang-Français/Français-Fang*).
5. Compound nouns having the structure adjective + noun. For example: *Mvel kume* "A little bird with brown back" and *Mvel oken* "medium knife" (cf. *Dictionnaire Fang-Français/Français-Fang*).

After identifying the different compound nouns in Fang, the task of the lexicographers of the dictionary with the planned microstructural programme is to know if these compound nouns should be treated in the same way as single-word or hyphenated compound nouns, because, according to Schnorr (1991: 2815), despite the blank, these compounds will be identified as one concept and therefore one base form.

Sometimes, lexicographers are inconsistent with regard to the hyphens. It is the task of lexicographers to know whether compounds should be hyphenated or not, and whether they should be one word or two words.

6.3.1.5.1 Compound lexical items in the dictionary with the planned microstructural programme

As far as English compound nouns are concerned, Béjoint (1999: 81) distinguishes three forms, namely XY, X Y and X-Y, which can be applied to compound nouns like *paper clip*. He continues by stating that this makes the automatic extraction of compounds particularly difficult in English. The compiler of the dictionary should evidently not have problems identifying those compounds of the type XY or X-Y and considering them for lemmatisation or sublemmatisation, but those of the type X Y can be a more challenging prospect.

Due to the fact that Fang has not yet been standardised and the dictionary has to reflect what is going on in the language, it is difficult to draw any conclusion as to the form that can be applied in the dictionary with the planned microstructural programme.

6.3.2 Subword lexical items

6.3.2.1 Prefixes and suffixes

In some dictionaries, subword lexical items such as prefixes, suffixes and infixes are included as lemmata (cf. Afane Otsaga, 2004: 152). With regard to the dictionary with the planned microstructural programme, prefixes and suffixes will be proposed for inclusion as lemmata. The lexicographer(s) of the dictionary with the planned microstructural programme have to be aware of the fact that their inclusion could be time-consuming and could force the lexicographer(s) to undertake a specific study of the language in order to find out which morphemes individually carry meanings (cf. Afane Otsaga, 2004: 152–153). It should be noted that the motivation for proposing these subword lexical items for inclusion as lemmata is that it can assist the target

group to improve its competence in Fang. Prefixes and suffixes will be discussed extensively in Chapter 10.

6.3.3 Multiword lexical items

Multiword lexical items can be defined as lexical items that consist of more than one word (cf. Gouws and Prinsloo, 2005a: 88). With regard to the present discussion, particular attention will be on the "idiom".

6.3.3.1 Idioms as multiword lexical items

Idioms, according to Gouws and Prinsloo (2005a), are a part of the lexicon of a language and the idioms are to be regarded as single lexical items. Their inclusion in the dictionary is often problematic, cf. Gouws and Prinsloo (2005a: 88) and Mabika Mbokou (2006: 163). In the present discussion, "idiom" will not be discussed here, a more comprehensive account will be found in Chapter 9.

6.3.3.2 Collocations

The second edition of the 1986 *BBI Combinatory Dictionary of English* was published in 1997 with the slightly different title, *The BBI Dictionary of English Word Combinations*. Significantly, the word "collocation" does not appear in the title of either edition, even though it is specifically defined in the Introduction and divided at microstructural level into the subcategories of "lexical" and "grammatical" collocations. One of the main problems that face lexicographers is the classification of "collocations", which affects the criteria for the selection and treatment of both lemmas and their collocates. A comprehensive account regarding the classification of collocations in Fang and the criteria for their selection will be given in Chapter 9.

6.4 The lemma sign as a microstructural element

According to Gouws (1989: 75), the lemma sign represents the collection of lexical items that should receive treatment and that functions as the guiding element of the

article. Hence, the lemma sign can also have microstructural functions. According to Svensén (1993: 64), the lemma signs as data categories have several functions. This data can also be relevant for the target users of the dictionary with the planned

microstructural programme: "They give information about the spelling. They also show the use of small or capital initial letters. They can also show the recommended way(s) of dividing a word at the end of a line. In certain cases, the pronunciation is shown by the headwords themselves" (see Chapter 8, section 8.3.2.3).

The success of the microstructural and other treatment of the lemma depends on how the user seeks, finds and retrieves the required information during the dictionary look-up procedures. The task of the lexicographers is to make sure that the lemma sign, as primary address, can easily be found and be clear and comprehensible.

6.5 Concluding remarks

It can be concluded that many dictionaries contain articles with a main lemma arranged in a vertical ordering, while others include articles with a sublemma arranged in horizontal ordering. The planned dictionary with the microstructural programme will make use of articles with vertically-ordered main lemmata, as this arrangement demands lesser dictionary skills. Therefore, the dictionary with the proposed microstructural programme will not include articles with a sublemma in order to avoid confusing the user, but also so that the lexicographer can give a complete treatment of each lemma.

In the planned microstructural programme, I also propose the use of single articles and complex articles. As far as single articles are concerned, the planned microstructural programme will encompass a number of specific zones to which specific data types can be allocated, e.g. a zone for items giving the pronunciation, items giving morphological data, items giving a paraphrase of meaning, items giving a translation equivalent, and items giving an illustrative example. With regard to the complex articles, the proposed dictionary will include additional data categories, as this will demand a more comprehensive treatment of a specific aspect of the lexical item represented by a lemma sign.

In the dictionary with the planned microstructural programme, I also propose the inclusion of cross-reference articles. The limited treatment will occur when the lemma is a lesser-used member of a synonym group, and the treatment will be directed at a cross-reference entry guiding the target users to the lemma, which will represent the most frequently used synonym. Therefore the dictionary with the planned microstructural programme will not include cross-reference articles representing a spelling variant or a plural form, as the lexicographers will give the complete treatment of the lemma in the comment on form.

One of the main challenges facing lexicographers is the choice of lexical items to be included as lemmata in the dictionary. The identification and classification of lexical items such as nouns, pronouns, adjectives and collocations affect the criteria for the selection and treatment of the lemmas in the dictionary. This choice has to be based on a few macrostructural and microstructural strategies. The macrostructural procedure requires entering the lemmata on their stem forms. The prefixes are isolated from the stem where applicable. The microstructural strategy, also called the left-expanded microstructure, necessitates giving the prefix with the stem, so that the user can see the full form of the lemma. In the dictionary with the planned microstructural programme, the nominal prefixes will be attached to the stem forms with regard to the inclusion of nouns. The prefixes will be separated from the stem form with regard to the inclusion of adjectives and verbs. Lexical items like ordinal adjectives, adverbs, prepositions, conjunctions and interjections are invariable words. They do not carry prefixes and their inclusion is not problematic.

Chapter 7: Microstructure: nature and different types of microstructure

7.0 Introduction

It has already been stated in Chapter 2, regarding Wiegand's theory, that the microstructure can be regarded as the set of ordered data or entries in the dictionary article that follow the lemma. All data presented in an article as part of the treatment of a lemma has microstructural status. When planning a dictionary, one should take heed that, as one of the most important ordering structures of a dictionary, the microstructure should be seen as an instrument to help achieve the genuine purpose of the dictionary (cf. Gouws & Prinsloo, 2005a). These authors also state that the typological classification of the dictionary, the users, their needs and reference skills, the situation of dictionary use and the function of the dictionary should influence the decisions.

According to Wiegand (1989c, 1989d, 1996a, 1996b, 1996d), one should negotiate the results of dictionary research that have led to the identification of different types of microstructures when planning the microstructure of a dictionary. Before discussing the different types of microstructures, a brief overview regarding two conceptions of the microstructure will be given.

7.1 Classical conception

One has to bear in mind that there are at least two conceptions of the microstructure: the classical conception and a new one. The classical conception comes from Rey-Debove (1971). According to Rey-Debove (cited in Hausmann & Wiegand, 1989: 340), the microstructure of a dictionary is the total set of linearly ordered information items following the lemma. When making a dictionary article, a lexicographer has to adhere to a "well-established microstructural information programme that consists of

linearly ordered information types" (Hausmann & Wiegand, 1989: 340). One could add typography, abbreviations, etc. within this type of information. Concerning a lemma sign that has one sense or meaning, the lexicographer follows this information programme once.

If one notes that, during the lexicographic presentation of certain data, for example the data-type synonym, there is no representative of this data which can be discovered, one could consider this as zero degree of data. In addition to the foregoing bearing zero information, one could regard all dictionary articles as isomorphous regarding their concrete linear microstructures. In addition, Rey-Debove considers this as a concrete microstructure of the dictionary (cf. Hausmann & Wiegand, 1989: 341). These authors present Rey-Debove's theory in the figures below.

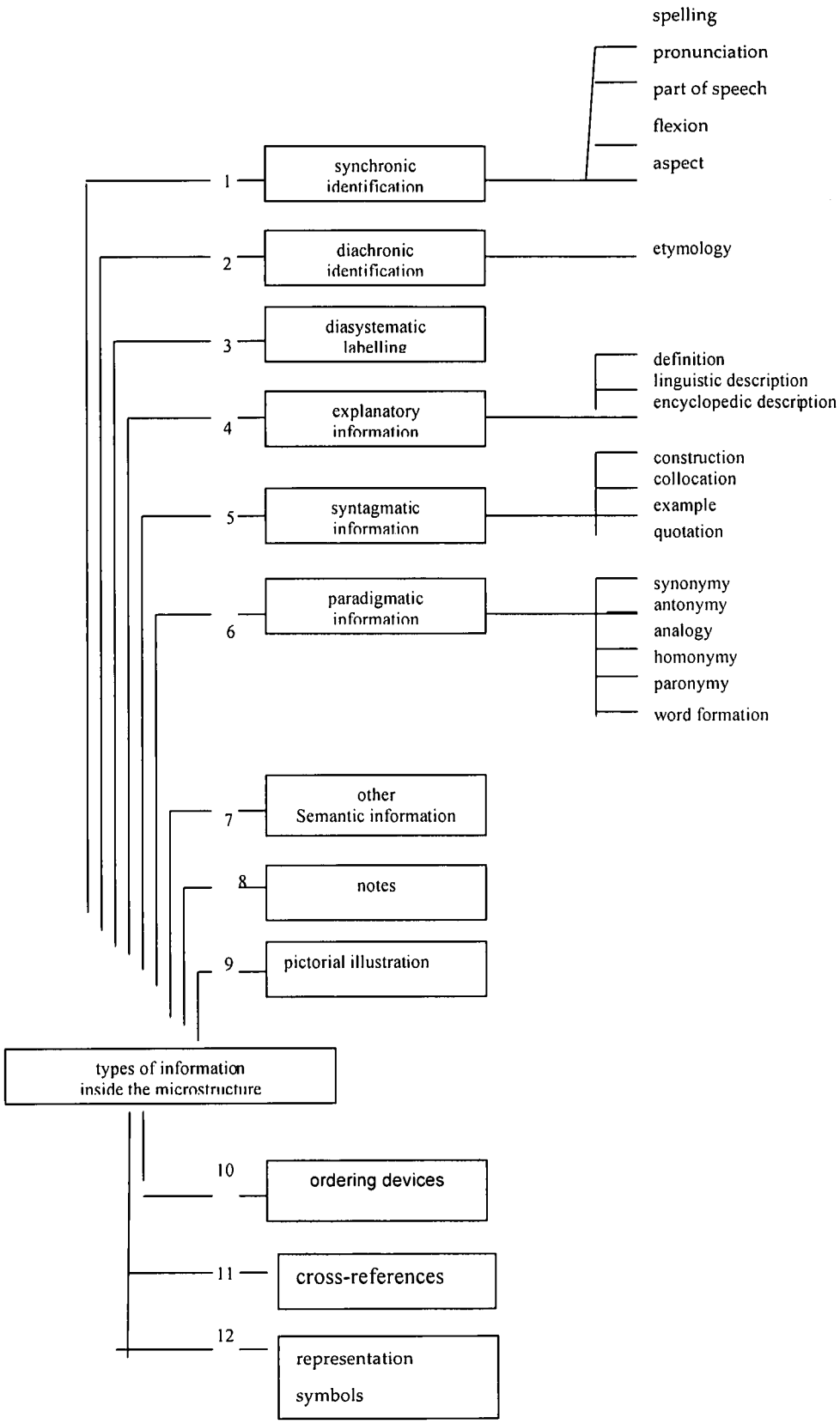


Figure 7.1: Types of data inside the microstructure (from Hausmann & Wiegand, 1989: 343).

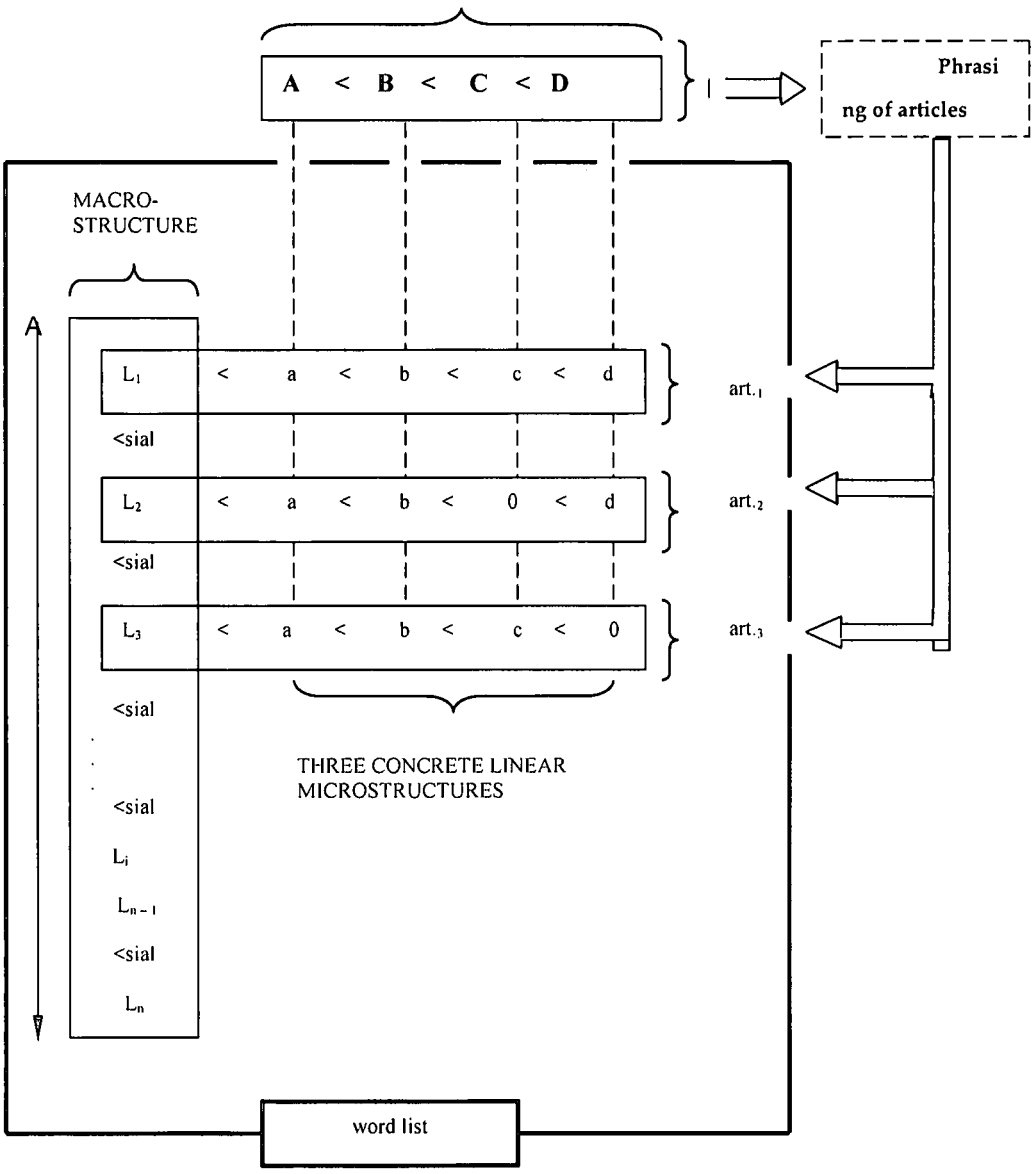


Figure 7.2: Visualisation of the classical conception of the microstructure for monosemous lemma signs (according to Rey-Debove, 1971, as cited in Hausmann & Wiegand, 1989: 340)

A = parts of speech

B = definition

C = synonym

D = homonym

The small letters a, b, c and d denote the corresponding concrete information.

0 = zero data

L = lemma

"<" means comes before

The vertical broken lines indicate the isomorphous relations between all microstructures.

Rey-Debove draws the inventory of data types, which are elements of the abstract linear microstructure. These data types are examined below.

1) Synchronic identifying data

According to Rey-Debove (Hausmann & Wiegand, 1989: 341), this data helps to identify the form of the lemma sign and its morphological paradigm. For example, data on spelling, pronunciation, stress, parts of speech and inflection can be found within this type of data. Rey-Debove (Hausmann & Wiegand, 1989: 341) says that synchronic identifying data may be placed in the lemma position; the lemma position, however, does not belong to the microstructure of the article, which it precedes.

2) Diachronic identifying information

According to Rey-Debove (Hausmann & Wiegand, 1989: 341), this type of information relates to etymological information.

3) Diasystematic labelling

Rey-Debove (Hausmann & Wiegand, 1989: 341) points out that this 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 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).

4) Explanatory data

The definition can be found in this type of information. It includes other types of explanatory texts, namely linguistic or encyclopaedic description.

5) Syntagmatic data

Data on construction and on collocation prevail within this type of data. This may be given in the form of any type of example, including citations.

6) Paradigmatic data

This type of data consists of synonyms, antonyms, analogues, homonyms, paronyms and word formation. Synonyms can be seen as part of definitions.

Explanatory, syntagmatic and paradigmatic data form the central part of the microstructure if one considers the framework relating to the classical conception. In addition to the foregoing, Hausmann and Wiegand (1989: 342) illustrate these data as in the example below:

	Janitor [...]
I.	A person hired to take care of a building or offices; caretaker:
II.	*The janitor swept the floors and locked up the building each night.*
III.	SYN: costodian

Example 7.1: The core of the microstructure (I: definition; II: example; III: synonym)

7) Different kinds of semantic data

These data types complete the definition and prove that the article structure depends on the supposed meaning structure of the lemma sign, say Hausmann and Wiegand (1989: 342). As an example, entries such as the numbers (I, II, III) figuratively or metaphorically help to structure the article and mark the semantic process that a particular sign has undergone. Additional information

belonging to this category is the definition-like statements that mark individual structural positions in the highly structured article.

8) Notes

Hausmann and Wiegand (1989: 342) define usage notes as texts of normal readability, contrasting markedly with the characteristic density of the lexicographical text. Hausmann and Wiegand illustrate usage notes as in the example below:

ball[1] (bɔ:l) n 1 a round or approximatively round sphere or mass. 2 such a sphere used in a game or sport. 3 the rounded, slightly raised part at the base of a thumb or big toe.
◎ vb make or gather into a ball. Ball-bearing n a bearing with a small, hardened, steel balls; one of these balls.
Ball-cock n an automatic valve with a floating ball that controls the level of water in a cistern. Ball-point n also ball-point pen a pen with a small, metal ball as its writing-point. < Old Norse böllr. SEE PANEL.
ball[2] n a large, formal, social gathering for dancing. Ballroom n a large hall for dancing. Have a ball (informal) enjoy

spot the ball
Those who are on the ball when it comes to idioms will be familiar with the following expressions:

on the ball alert and informed: Jake's really on the ball as far as computer technology is concerned.
Play ball to co-operate (with others): Some unions have decided not to play ball with the management in their efforts to streamline production.
Set the ball rolling to start an activity, discussion etc.

Example 7.2: usage note from Wordmaster, 47 (cf. Hausmann & Wiegand, 1989: 230)

9) Pictorial illustrations

This type of data enhances the user's visual understanding of the lexical items defined in the definitions.

10) Ordering devices

These types of indicators allow the user(s) to interpret, within ordering devices, symbols such as figures, letters bracket, punctuation marks and symbols. By using these, one can make the structure of the article clear (Hausmann & Wiegand, 1989: 344).

11) Cross-references

According to Hausmann and Wiegand (1989: 344), cross-references open search paths, which end inside the dictionary. References, frequently of a bibliographical nature, open search paths, which end outside the dictionary.

12) Representation or repetition symbols

Hausmann and Wiegand (1989: 344) claim that the tilde (~) normally can be regarded as this type of symbol. The repetition symbols are substitution instructions.

The following section provides a discussion of "a new conception" of the microstructure.

7.2 A new conception of microstructure

A new conception of the microstructure, as explained by Hausmann and Wiegand (1989: 344), is fundamentally based on the classical conception. It tries to elucidate all the empirical findings not taken into account by the classical conception because of its small empirical basis, claim Hausmann and Wiegand (1989: 344). This new

conception of the microstructure is part of a theory towards the so-called lexicographical texts (Hausmann & Wiegand, 1989: 344).

The new conception of the microstructure considers a lemma sign as a part of different semantic and pragmatic types. The typology of lemma signs is based on language theory and determined by the information goals. Hausmann and Wiegand (1989: 344) claim that expressions as different as compound verb phrases, connectors, speech act markers, set phrases, expressions from political vocabulary, expressions of emotion and hedges are treated in different ways. If these lexicographical descriptions and explanations are to be adequate, the article structure, and specifically the microstructures of the articles, has to be different. As a result, a different abstract (hierarchical) microstructure is assigned to each different type of lemma sign. This means that a dictionary with *n* types of lemma signs has exactly *n* abstract (hierarchical) microstructures.

When looking at this new conception, it is noted that the microstructure of a dictionary is only one of the possible structures in articles. Despite the fact that the classical conception focuses mainly on monolingual dictionaries, the new one tries to construct the theoretical basis to go beyond the traditional scheme of articles. Hausmann and Wiegand (1989: 344) point out that, in fact, the theory is constructed so as to put at the lexicographer's disposal the complete structure design for each clearly stated information goal of a polyinformative dictionary. A discussion of the different types of microstructures is given in the following paragraphs.

7.2.1 Different types of microstructures

Within the new conception, which goes back to Wiegand (1989c, 1989d, 1996a, 1996b, 1996c), provision is made for the identification of different types of microstructures. According to Wiegand (cited in Gouws & Prinsloo, 2005a), when planning the microstructure of a given dictionary one should negotiate the results of dictionary research that have led to the finding of different types of microstructures. When planning a dictionary, the lexicographer(s) has to decide on the type(s) of microstructure that would be best for the planned dictionary. According to Gouws and Prinsloo (2005a), the typological classification of the dictionary, the users, their needs

and reference skills, the situation of dictionary use and the function of the dictionary should influence the decisions. The microstructure of any given dictionary should be a factor of all these features.

According to Wiegand (1989, 1996a), when looking at dictionary research issues, lexicographers should be aware of the existence of the different types of microstructures. The decision regarding these types of microstructures coincides with the decision regarding the typological classification of the dictionary (cf. Gouws, 2001a: 87). According to Haussmann and Wiegand (1989: 354), one can distinguish four types of microstructure, i.e. integrated microstructure, partially or semi-integrated microstructure, unintegrated microstructure and rudimentary microstructure.

7.2.1 Integrated microstructure

According to Hausmann and Wiegand (1989: 246), in monolingual dictionaries, simple microstructures may be called integrated when all items within the article which do not belong to the comment on form are located in the scope of a certain semantic item and belong to the same semantic subcomment to which the semantic item also belongs. Gouws (2002a: 87) follows Hausmann and Wiegand's footsteps in a more explicit way. According to him, an integrated microstructure presents a relation of direct addressing between a paraphrase of meaning/translation equivalent and its co-text entry/entries. Each paraphrase of meaning/translation equivalent is immediately followed by the co-text entry illustrating the typical usage of the lexical item in question. 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 co-text entry and paraphrase of meaning/translation equivalent ensures optimal retrieval of information. This is the microstructure suited to monolingual and bilingual pedagogical, desk/college and standard dictionaries.

The lemma sign *Grat* is interpreted as two times polysemous, so that the structural figure for simple integrated microstructures given in the figure below is also valid for the article **Grat**. Consider the following dictionary article for the lemma **Grat** from the HWDG (cf. Hausmann & Wiegand, 1989: 247):

> **Grat**, der; -(e)s, -e 1. *schmale Kammlinie eines Gebirgsrückens*: ein scharfer, steiler G.; den G. Entlangwandern- 2. Tech. *durch Stanzen, Gießen entstandene Unebeheit an Rändern von Werkstücken*: die Grate abfeilen, -schleifen

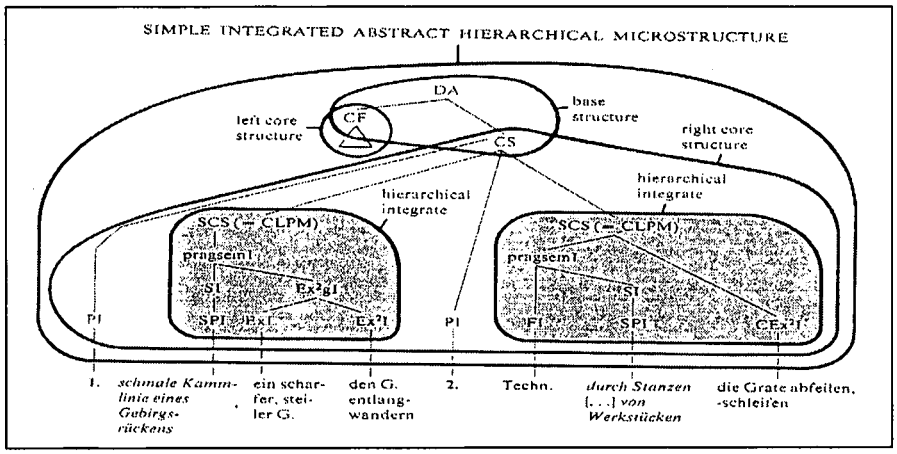


Figure 7.3: Example of a simple integrated microstructure of a lemma sign two times polysemous.

Abbreviations:

CLM = Comment on lexical meaning

CLPM = Comment on lexical partial meaning

comEx²I = Example item based on competence, giving two examples

Ex²gI = Example-group item, giving two examples

PI = Polysemy item

ScoC = Semantic comment on context

SCS = Semantic subcomment

FI = Special field item

SPI = Semantic paraphrasing item

Consider the following example of the lemma of the article **birth** (from OALD, 2000: 149-150).

> **birth** /b3:T{ b3r/ n 1 [C;U] the act or time of being born, of coming into the world esp. out of the body of a female parent: *the birth of a child□birth, marriage, and death□Last year there were more births than death. □She weighed 8 pounds at birth* **2** [U;(C)] the act or fact of producing forth young (often in the phr. give birth to): *She gave birth to a fine healthy baby.□Birth need not to be unpleasant for the mother* **3** [U] family origin: *of noble birth□French by birth* **4** [C] beginning; start; origin: *the birth of a new political party.*

The compilers of the OALD have interpreted the lemma sign *birth* as four times polysemous. The article above displays an integrated microstructure. Each paraphrase of meaning is immediately followed by the appropriate illustrative example. In this article, typographical structural markers and non-typographical structural indicators are also used to achieve a meta-communicative function. The lemma appears in bold type, whereas illustrative examples are in italics. Typographical and non-typographical structural indicators also include the use of big letters and square brackets. Capital letters *C* and *U* in square brackets stand for "nouns that can be counted" and "uncountable nouns" respectively.

Consider the following example of an integrated microstructure for the article **AKUBE** taken from the *Dictionnaire Fang-Français/Français-Fang*:

> **AKUBE** (h) n.4, pl. mekubé (vb kubé h). 1. Chavirement, renversement. *Akubé byal,* chavirement de pirogue.- 2. Action de se jeter sur quelqu'un. *Akubé beyin,* attaque ennemie.

Here, each polysemous sense of the lemma **AKUBE** is treated in a separate article slot called an "integrate". In each article block, the subcomment on semantics is given by the translation and a paraphrase of meaning, followed in turn by an example sentence illustrating the usage of each sense.

Consider the following example of the lemma úkw.**anyísà** drawn from the *Greater Dictionary of IsiXhosa: IsiXhosa-English-Afrikaans* (GDXEA).

úkw.**anyísà** nzs/v caus (dlul/perf-anyísì; nzl/ap ukwanyísèlà, nzw/pass úkwanyíswà)

1 ukuvumela ithole akanye usana lwanye; ukuncancisa: *unina wamanyisa umntwana: ...*

1 suckle;
the mother suckled the child...

1 soog;
die moeder het die kind gesoog; ...

The dictionary article above is user-friendly because the compilers have given the typographical presentation of the lexicographic text in such a way that it is clearly perceived by the user. Each paraphrase of meaning is immediately followed by the appropriate illustrative example.

7.2.2 Unintegrated microstructure

According to Hausmann and Wiegand (1989: 248), a dictionary has an unintegrated microstructure when all semantic items that are addressed at the lemma appear in the first semantic subcomment of the article, so that this is a comment on lexical meaning (CLM). In the same way, Gouws (2002a) points out that an unintegrated microstructure displays a distant addressing between a co-text entry and the relevant paraphrase of meaning/translation equivalent. Gouws and Prinsloo (2005a) go further by stating that an unintegrated microstructure presupposes the occurrence of co-text entries presented in a well-systematised way in a separate text block. In the case of a lemma sign representing a polysemous lexical item, a bilingual dictionary will give all the translation equivalents and then present the co-text entries. Gouws (2001a: 87)

makes a clear distinction between integrated microstructure and unintegrated microstructure. This distinction is as follows (also see figures 4 and 5 below):

> *The difference between these types of microstructure is made in accordance with the proximity and the directness of the relation between each entry representing a paraphrase of meaning (in monolingual dictionary) or each entry representing a translation equivalent (in a bilingual dictionary) and the supporting cotext entries representing illustrative examples. The distinction is made on the basis of a direct or a distant addressing procedure between the cotext entries and the respective core entry of each subcomment on semantics, i.e. the paraphrase of meaning/translation equivalent given for each polysemous sense of the lemma sign.*

Figure 7.4: Schema of an unintegrated microstructure in a monolingual dictionary

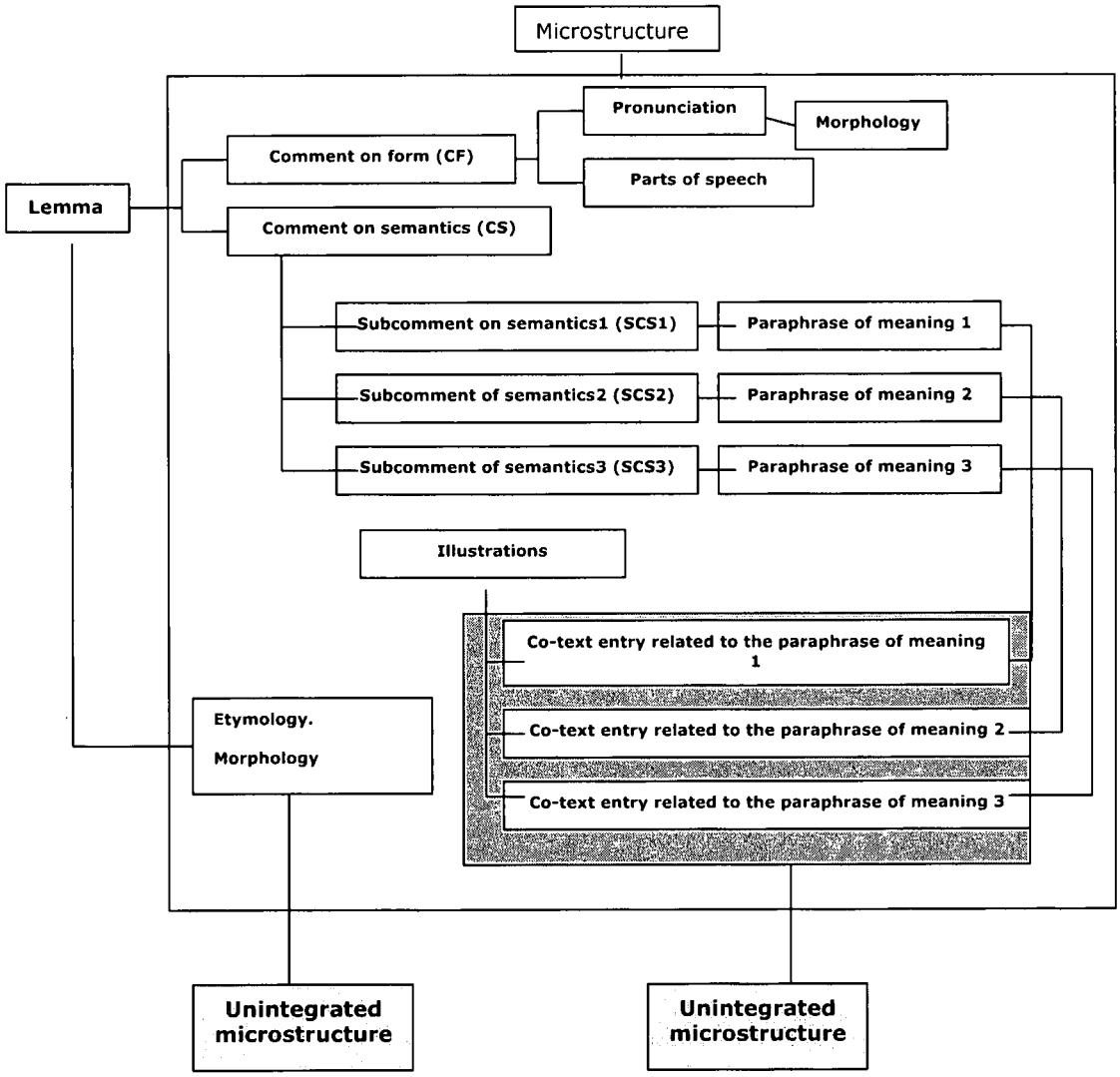
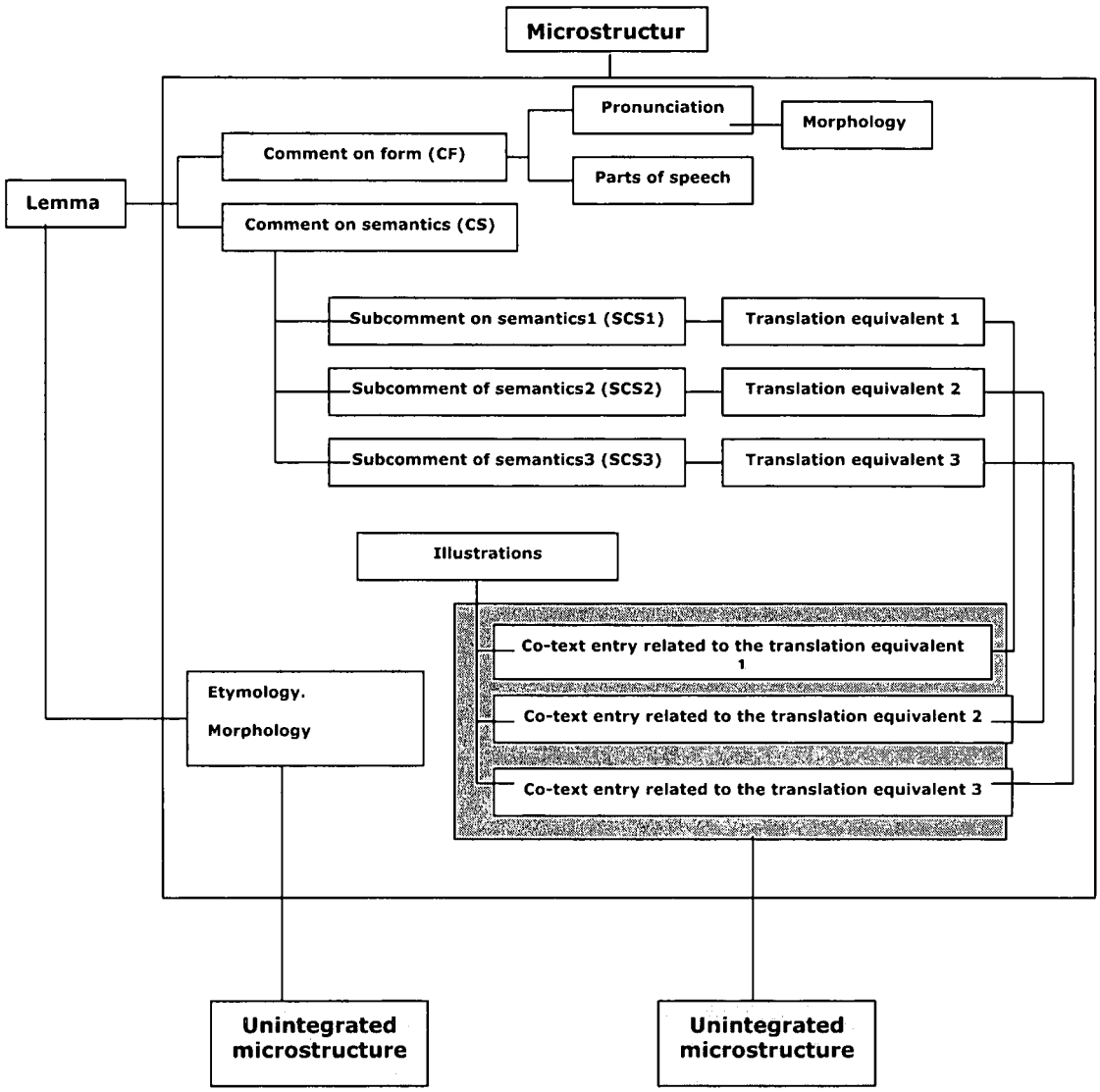


Figure 7.5: Schema of an unintegrated microstructure in a bilingual dictionary



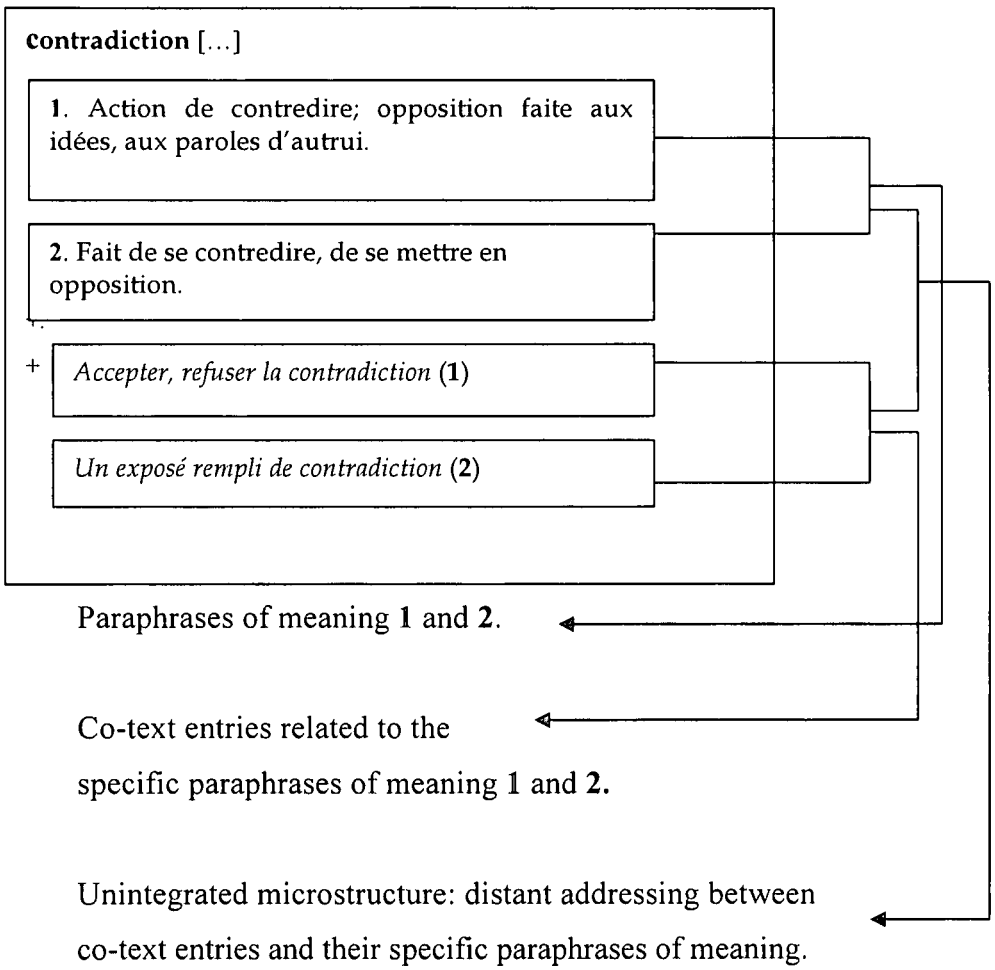
Consider now the following example of an unintegrated microstructure, given by Hausmann and Wiegand (1989: 248) from Wahrig-DW:

> **Griff** {m.l} 1 Vorrichtung zum Anfassen, wie Stiel, Kurbel, Henkel (koffer~), Klinke, Knopf (Tür~), Heft, Knauf (Messer~, Degen~); Hals der Geige, Gitarre; das Greifen, Zupacken, Art des Greifens; {Mus.} das Greifen, Anschlagen von Akkorden, Tönen; {Jägerspr.} Klaue, Kralle (der Raubvögel); {Mil.} bestimmte Bewunge der Hände zum Handhaben von Goräten; {web.} die struktur von Gwebe beim Anfühlen 2 ~e kloppen {soldatenspr.} Gewehrgriffe üben; ein paar ~e maschen (auf dem klavier); einen guten ~ tun {fig.} eine gute Wahl treffen; auf einem Musikinstrument ~ üben 3 das war ein falscher ~ {Mus.}; der stoff hat einen harten, weichen ~ sick am ~ festhalten; etwas la ~ haben {fig.} etwas geschickt, geübt handhben; einen tidfen ~ in den Beutel tun {fig.} groβzügig bezhalen; einen ~ in die Ladenkasse tun {fig.} Geld aus der Kasse stehlen; mit einem einzigen ~ hatte es ihn am Boden; das ist mit einem ~ getan Schnell, leicht fertigzumachen; etwas mit ein paar raschen, geübten ~ en tun [< ahd. Grif, engl. Grip; zu greifen]

Hausmann and Wiegand (1989: 249), regarding the above-mentioned example from Wahrig-DW), note that the unintegrated microstructure of the article **Griff** shows the differences from the integrated microstructure. The article **Griff** contains four semantic subcomments, each of which begins immediately after the structural indicators 1, 2 and 3. A well-informed user therefore uses this sequence of numbers as a rapid inner access structure (cf. Wiegand, 1989c), an approach that is not impossible in the case of polysemous items. The comment on lexical meaning consists of semantic items, which are labelled (e.g. Mus.) or specified by a compound item (e.g. Tür~). In the following semantic comments, the idiom items and example items are ordered according to context partners: in the second semantic subcomment, and

consequently in the first semantic comment, the lemma sign occurs with verbs (ScoC.V), in the next one it occurs with adjectives (ScoC.A), and in the last one it occurs with prepositions (ScoC.P). At the end of the article, and outside the semantic comments, there is a post-comment containing the etymological item. Hausmann and Wiegand (1989: 249) conclude by stating that the unintegrated microstructure is right-expanded.

Consider also the example of the modified article of the lemma **contradiction** taken from Larousse:



In this article, the treatment of the polysemous lemma **contradiction** makes provision for two paraphrases of meaning. This text block with the different subcomments on semantics is followed by a next text block that contains all the co-text entries. Each co-text entry is followed by a number which relates it to one of the paraphrases of meaning. From an addressing perspective one could say that there is a distant

addressing between each co-text entry and the paraphrase of meaning at which it is addressed, as is the case in the integrated microstructure.

In the following section, the semi-integrated microstructure will be discussed.

7.2.3 Semi-integrated microstructure

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

Gouws 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 (see figures 7.6 and 7.7 below).

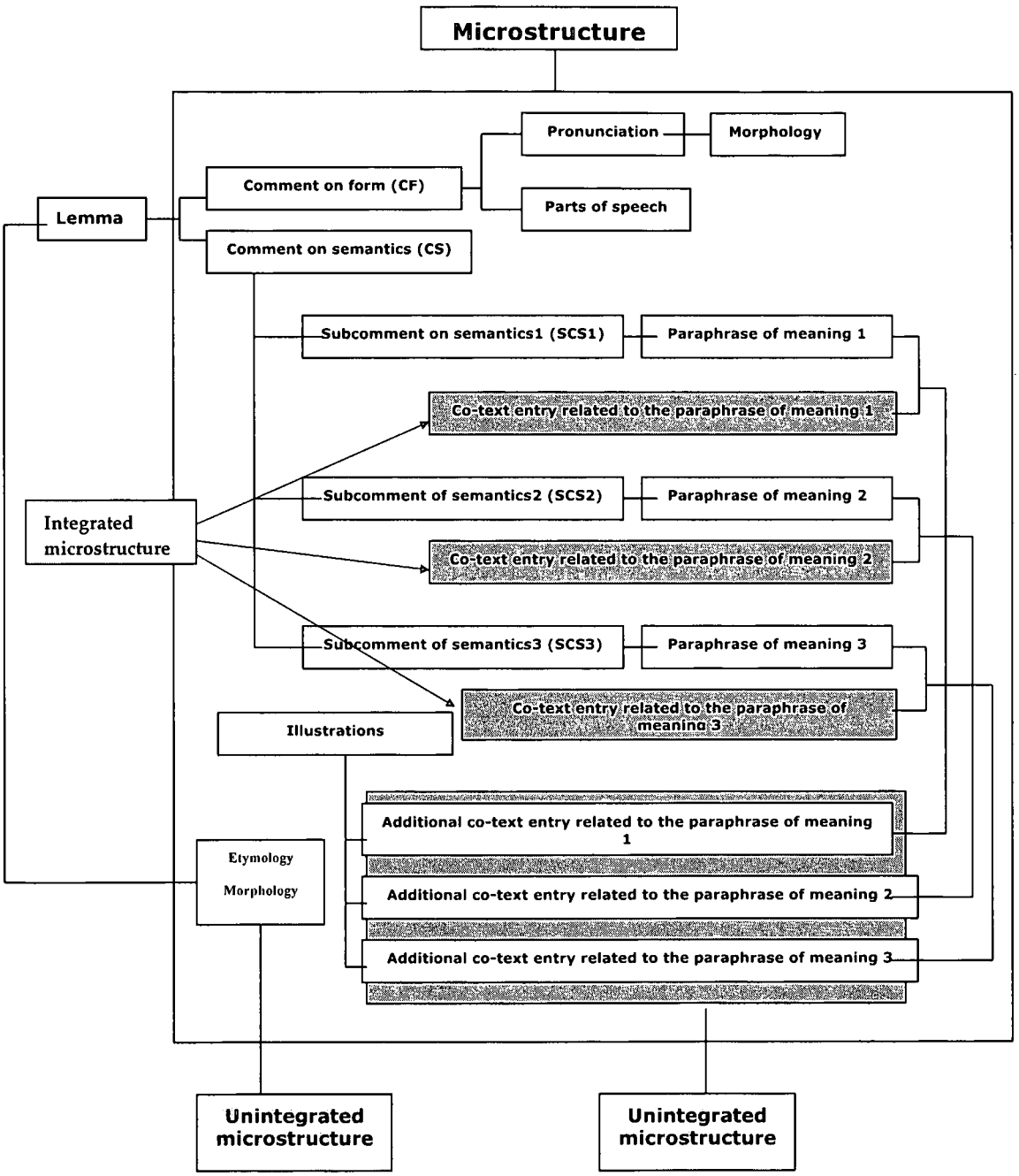


Figure 7.6: Microstructure with a semi-integrated component in a monolingual dictionary.

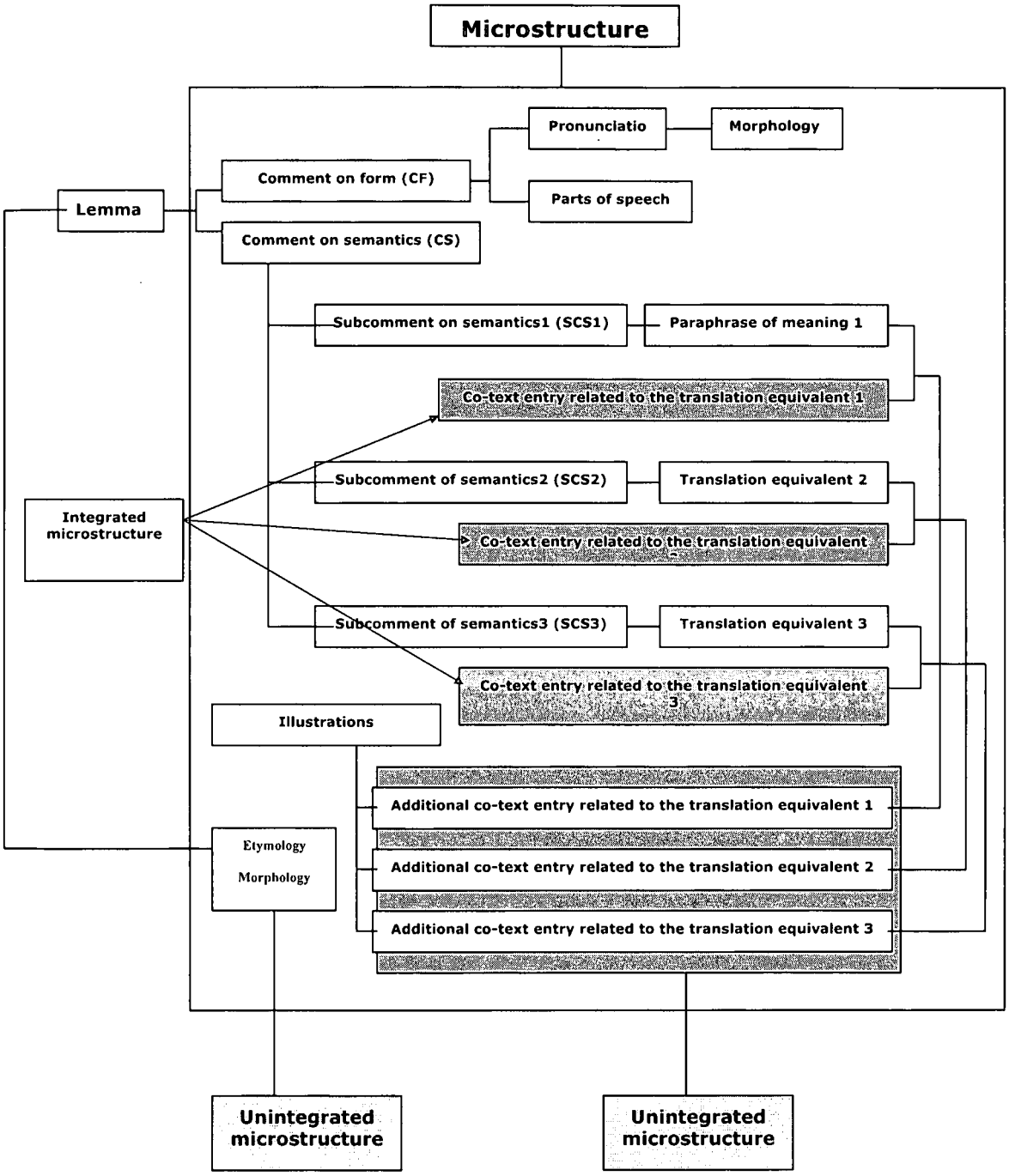
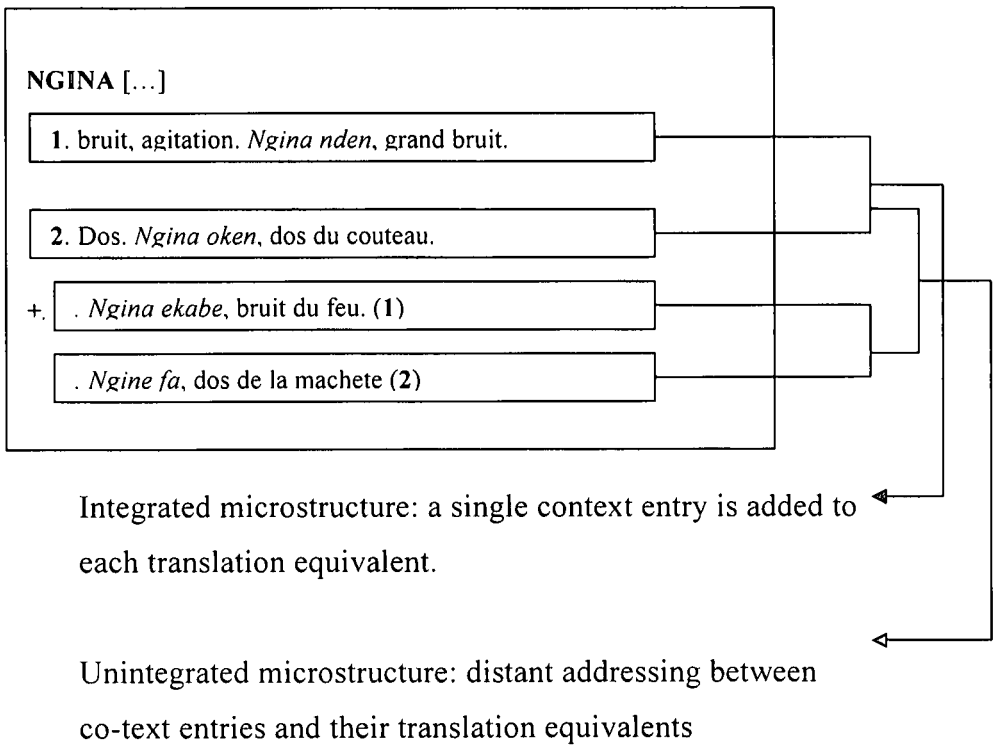


Figure 7.7: Microstructure with a semi-integrated component in a bilingual dictionary.[1]

[1] Figures 7.6 and 7.7, taken from Afane Otsaga (2004), have been modified from their original versions. Some changes have been added to the figures on the basis of detailed discussions with Prof. Gouws.

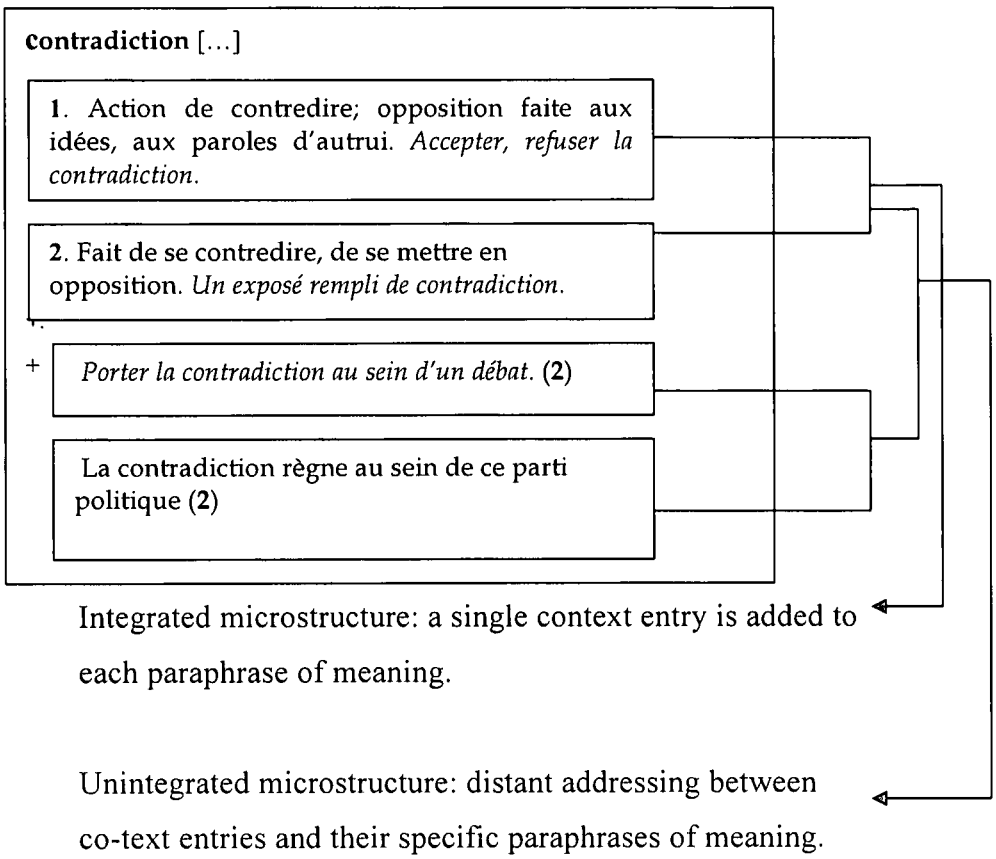
Consider the following modified article of the lemma **NGINA** taken from the *Dictionnaire Fang-Français/Français-Fang*:



In the above-mentioned article of the lemma **NGINA**, the treatment is directed at a lemma representing a polysemous lexical item. With regard to the search area starting with Arabic numerals, one notes a system of direct addressing between the translation equivalents (*bruit* and *dos*) and their co-text entries "*Ngina nden,* grand bruit" and "*Ngina oken*, dos du couteau".

The search area starting with the symbol (+) introduces additional co-text entries (followed by the numbers, e.g. **1**, **2**, which relate it to the specific translation equivalents) that the user can apply to the lemma. One also notes that these co-text entries display an unintegrated microstructure due to the distant addressing prevailing between these lexicographic data and their translation equivalents.

Consider also the example of the modified article of the lemma **contradiction** taken from Larousse:



The lemma **contradiction** can be interpreted as being polysemous with different senses. With regard to the search area starting with Arabic numerals, one notes a system of direct addressing between the paraphrases of meaning (*Action de contredire; opposition faite aux idées, aux paroles d'autrui* and *Fait de se contredire, de se mettre en opposition*) and their co-text entries "*Accepter, refuser la contradiction*" and "*Un exposé rempli de contradiction*".

The search area starting with the symbol (+) introduces additional co-text entries (followed by the numbers, e.g. **1**, **2**, which relate it to the specific translation equivalents) that the user can apply to the lemma. One also notes that these co-text entries display an unintegrated microstructure due to the distant addressing prevailing between these lexicographic data and their the paraphrases of meaning.

7.2.4 Rudimentary microstructure

In dictionaries, lemmata are not always treated at the same level. Indeed, in some dictionaries lexicographers also use a lexicographical procedure called a **rudimentary microstructure**. According to Wiegand (1990: 56), a rudimentary microstructure prevails when the dictionary article is restricted to the comment on form. Thus the comment on semantics is substituted by a cross-reference entry. One also finds rudimentary microstructures in the case of lemma signs representing abbreviations. Where abbreviations are included as lemmata in the central list, their treatment is usually restricted to an entry indicating the full form of the abbreviation (cf. Gouws, 1999c: 45). Consider the following example of a rudimentary microstructure for the article **Hirte** from the WDG:

> **Hirt**, der: -en, -en jmd., der beruflich alle Arbeiten zur Versorgung einer Herde von Haustieren verichtet: der H. weidet die Schafe; der Hund des Hirten
> **Hirte**, der; -n, -n s. Hirt

Here the article **Hirte** is restricted to the comment on form. The comment on semantics is restricted to a cross-reference entry.

Consider the following example of a rudimentary microstructure for the article **AKÎL-KON** from the *Dictionnaire Fang-Français/Français-Fang*:

> **AKÎL-KON** (h) n.4, pl. mekîl-kon. Voir akîl ékon.

In this article, the treatment of the lemma **AKÎL-KON** is restricted to the comment on form. The comment on semantics is restricted to a cross-reference entry *akîl ékon*.

Consider the following example of the *Dictionnaire Fang-Français/Français-Fang*:

> **MBEKH** (h) n.1, pl. *bebekh* (vb *bekh*)...celui qui maudit, qui blesse.

The example of the article of the lemma **MBEKH** contains no less than two subcomments on semantics, with a single translation equivalent in each one of these subcomments (separated by a comma "**,**"), indicating that the word represented by the lemma sign has two polysemous senses. This article does not display an integrated microstructure because none of the integrates contain any co-text entries. This article also does not display an unintegrated microstructure because, as already stated above, a non-integrated microstructure presupposes the occurrence of co-text entries. This example from the *Dictionnaire Fang-Français/Français-Fang* demonstrates a rudimentary microstructure, i.e. a microstructure that contains less than the minimum entries to make the retrieval of information successful. Such a rudimentary microstructure forms the basis for the formation of either an integrated or an unintegrated microstructure (cf. Gouws & Prinsloo, 2005a).

Consider the following example from the *Dictionnaire Fang-Français/Français-Fang*:

> **WU** (h) (bf) vb. plumer un oiseau, *wu ônon*. Arracher la barbe, les cheveux, *wu nzêl, wu ésil* [...]

In this article, the treatment of the polysemous word **WU** makes provision for two translation equivalents. Illustrative examples, presented as co-text entries, are provided to illustrate the typical use of the translation equivalents. Unfortunately, the compiler does not provide the user with numerical indicators to separate each sense treated in its own slot. This can confuse the user, who could ask whether it is a polysemous word or not. This article also provides only limited help to the user and can be considered as a primitive microstructure (cf. Gouws, cited in Gouws & Prinsloo, 2005a).

With regard to the different types of microstructure, a distinction should be made between obligatory microstructures and extended microstructures.

7.2.5 Obligatory microstructures and extended obligatory microstructures

There are three types of obligatory microstructures:

1. The obligatory microstructure of the dictionary
2. The absolutely obligatory microstructure of the dictionary
3. The complete obligatory microstructure of the dictionary

Mavoungou (2003) distinguishes between the absolutely obligatory microstructure and the obligatory microstructure. According to him, this distinction lies in the fact that the former comprises the set of information categories that has to be treated obligatorily for each type of lemma sign. The obligatory microstructure may be derived from the absolutely obligatory microstructure in the sense that it includes data types from the obligatory microstructure plus other information categories that are not necessarily relevant for each lemma sign. Hausmann and Wiegand (1989: 346) provide the best example for illustrating this distinction. They cite the case of antonymic items, because not all the lemma signs have antonyms. Hausmann and Wiegand (1989: 346) also emphasise the twofold microstructure, viz. the obligatory microstructure and the absolutely obligatory microstructure, which give a little information about all the types of lemma signs, all item classes and their distribution in the whole dictionary. The complete obligatory microstructure includes the above-mentioned obligatory microstructure and absolutely obligatory microstructure. This lies in the fact that, according to Haussmann and Wiegand (1989: 348), the complete obligatory microstructure provides information about all the types of lemma signs of the dictionary as well as about all items classes and their distribution in the whole dictionary. In addition, the complete obligatory microstructure may provide certain information, such as the following:

a) The set of all item classes occurring in a dictionary
b) All item classes that are obligatory for all types of lemma signs, as well as all sets of those item classes that are obligatory only for special types of lemma signs
c) All types of lemma signs
d) All microstructures (abstract) assigned to the lemma signs

The obligatory microstructure of dictionaries presents twofold elements. These are:

a) Substructure, which is common to all articles
b) Structures that differ from these above-mentioned substructures

As a result, the absolutely obligatory microstructure provides data categories that one may find for any lemma sign. On the basis of this difference between absolutely obligatory microstructure and complete obligatory microstructure, Gouws (1999a: 45) attempts to provide explanations in a more comprehensive approach:

> *In terms of Hausmann and Wiegand (1989: 346), lexicographers should identify beforehand the* ***obligatory microstructure****, i.e. the structure which is common to all articles. This obligatory microstructure contains those data categories, which have to be treated obligatory for each lemma sign. In a general monolingual dictionary the article of each lemma sign should contain a part of speech indicator and some form of semantic description – either a meaning paraphrase or a synonym. However, all articles do not include e.g. an entry representing an antonym of the lemma sign. An article slot for antonyms will only be utilised in articles where something more than an obligatory microstructure prevails. This constitutes an extended obligatory microstructure because it includes more data categories than the prescribed minimum.*

Following Gouws closely, it becomes apparent that he makes a distinction between the obligatory microstructure and the extended obligatory microstructure. The obligatory microstructure includes the set of data categories to be treated obligatorily for each type of lemma sign. As an example, Gouws and Prinsloo (2005a) quote an obligatory microstructure in a monolingual dictionary, which includes, for example, the lemma sign, the item giving the part of speech, a paraphrase of meaning presented as lexicographic definition for each one of the polysemous senses of the word represented by the lemma sign, and the illustrative example presented as a co-text entry to illustrate the typical use of the word. In a bilingual dictionary, an obligatory microstructure encompasses, for example, the lemma sign, the item giving the part of speech, a translation equivalent for each one of the polysemous senses of the word represented by the lemma sign, and the illustrative example presented as a co-text entry to illustrate the typical use of the word. Gouws and Prinsloo (2005a) call this type of microstructure an obligatory microstructure. One can find this type of microstructure in the single articles in a dictionary.

Where the microstructural presentation in an article includes more than the default categories, such an article displays an extended obligatory microstructure. As an example, Gouws and Prinsloo (2005a) quote the microstructure of a lemma sign representing a preposition, which will differ from the microstructure in the article of the lemma sign representing a noun. Consider the following article of the lemmas **EBE** and **KEKE** taken from the *Dictionnaire Fang-Français/Français-Fang*:

EBE (m) prep. Vers, contre, sur, à. *Nzakh ebe me,* viens vers moi.

KÎKÎ (h) n.3, pl. *bekîkî*. Etincelle de feu. *Kîkî ndôa*, petit reste de feu sur un tison éteint [...]

The first example of the treatment of the article of the lemma **EBE** contains the lemma sign, an item giving the tonal indication, an item giving the part of speech (prep. = preposition), and translation equivalents for the word **EBE**, followed by co-text entries.

The second example of the treatment of the article of the lemma **KÎKÎ** contains the lemma sign, an item giving the tonal indication, items giving the part of speech (n.= noun and the numerical indicator 3, which is the noun class), and a translation equivalent for the word **KÎKÎ**, followed by the co-text entries.

Regarding the treatment of the lemmas mentioned above, it should be noted that the data types included in the article of the preposition **EBE** are found in the treatment of the article of the noun **KÎKÎ**. The article of a lemma sign representing the preposition **EBE** displays an obligatory microstructure because it contains data that are similar in both articles mentioned above, whereas the article of the lemma sign representing the noun **KÎKÎ** displays an extended obligatory microstructure because it contains data on the part of speech, which is extended to allow the inclusion of additional data missing from the article on the preposition **EBE,** the noun class; and data on morphology, i.e. the plural form of **KÎKÎ**.

As an example of an article of a dictionary that displays an extended obligatory microstructure, Gouws and Prinsloo (2005a) quote a complex article. According to them, an extended microstructure makes provision for the inclusion of those additional data categories, items that differentiate a complex article from a single article. Gouws and Prinsloo (2005a) point out that a single article also displays an extended microstructure because, in some articles, data such as part of speech can be extended to the inclusion of additional data. For example, both the articles of a lemma representing the preposition **EBE** and a lemma representing the noun **KÎKÎ** are single articles displaying an obligatory microstructure. But only the article of the lemma **KÎKÎ** is qualified as an extended obligatory microstructure.

Gouws and Prinsloo (2005a) go further by stating that 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 those additional data categories, i.e. 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 the users in specific situations of dictionary consultation. The following example is a modified article of the lemma **meyokh** displaying an extended obligatory microstructure:

meyokh [...] Alcool, eau-de-vie distillée, liqueur fermentée. *kü meyokh*, être ivre. *Meyokh m'alen*, vin de palme. *Meyokh bikon*, vin de banane.

Le vin de banane s'obtient en mettant des morceaux de banana mûre dans une feuille. Dans un ou deux jours, ce sera liquéfié et fermenté et on le boira.

Text block, presented as article-internal inserted texts as part of the comment on semantics.

With regard to the treatment mentioned above, after the lemma **MEYOKH**, the compiler provides the user with the translation equivalents followed by their co-text entries. After the co-text entries, there is a text block presented as an article internal inner text, which give the user a better understanding of the word represented by the lemma. However, the lexicographer must make sure that the inclusion of this additional data will not make the articles unnecessarily complex (Gouws, 2002a).

7.3 Microstructure types in the dictionary with the planned microstructural programme

The dictionary with the planned microstructural programme will include all types of data categories that can be helpful for the target user. Two types of microstructures will be used in the planned microstructural programme, namely the integrated microstructure and the semi-integrated microstructure. The integrated microstructure for the dictionary with the planned microstructural programme will display close proximity between a co-text entry and the relevant paraphrase of

meaning. The source language item in Fang, described by means of the paraphrase of meaning, will have a translation equivalent in French. The co-text entries (in Fang and translated into French) will be presented as immediate neighbours of the translation equivalents within the same subcomment on semantics. The semi-

integrated microstructure will display close proximity between a co-text entry (Fang-French) and the relevant paraphrase of meaning. The source language item in Fang, which will be described by means of the paraphrase of meaning, will have a translation equivalent in French. The co-text entries will be presented as immediate neighbours of the translation equivalents within the same subcomment on semantics. Some additional co-text data will be added at the end of the article, according to the treated lemma. However, the lexicographer must make sure that the inclusion of this co-text data will not make the articles unnecessarily complex (Gouws, 2002a).

Practically, the microstructure for the model I propose will be divided into three major components, two obligatory and one optional:

- The first obligatory component will essentially display the following data: the phonetic pronunciation and the part of speech, which form the comment on form. Hausmann and Wiegand (1989) call these data the so-called synchronic identification of the lemma. This obligatory component will also display the explanatory data, i.e. paraphrase of meaning of the lemma in Fang, which form the comment on semantics.

- The second obligatory component of the dictionary with the planned microstructural programme, entirely in French, will display the equivalent of the paraphrase of meaning, followed by illustrative examples presented as a co-text entry (Fang/French) to illustrate the typical use of the word.

- The third component in Fang will make provision for additional items and data categories that will be extremely necessary in the treatment of certain lexical items in the dictionary with the planned microstructural programme. It will include data on the plural form of the noun. It will also include entries giving the synonym, antonym, etc. It will display additional explanatory features or cultural data related to the French equivalent item,

such as encyclopaedic or ethnological data. This addition will be done by means of 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 the target users in specific situations of dictionary use.

The lexicographers of the dictionary with the planned microstructural programme would have to anticipate any problem that the target users could encounter in the retrieval of the information; the target users will have to be helped by an entry clearly indicating which sense of the lemma could be applied to a specific co-text example.

7.3 Concluding remarks

In this chapter, I have discussed the nature of the microstructure and microstructure types. It was said that the microstructure can be divided into several types, namely the integrated microstructure, unintegrated microstructure and semi-integrated microstructure. Two types of microstructures will be used in the planned microstructural programme, namely the integrated microstructure and the semi-integrated microstructure. The integrated microstructure will display close proximity between a co-text entry and the relevant paraphrase of meaning. The source language item in Fang, described by means of the paraphrase of meaning, will have a translation equivalent in French. The co-text entries (in Fang and translated into French) will be presented as immediate neighbours of the translation equivalents within the same subcomment on semantics. The semi-integrated microstructure will display close proximity between a co-text entry (Fang-French) and the relevant paraphrase of meaning. The source language item in Fang, which will be described by means of the paraphrase of meaning, will have a translation equivalent in French. Some additional co-text data could be added at the end of the article according to the treated lemma. However, the lexicographers of the dictionary with the planned microstructural programme must make sure that the inclusion of this co-text data will not make the articles unnecessarily complex. In order to anticipate any problem in the retrieval of the information sought by the target user, the latter will be helped by an entry indicating which sense of the lemma applies to a specific co-text example.

Chapter 8: Comment on form

8.1 Introduction

In Chapter 2 it was stated that, according to Gouws (2001a: 70), a dictionary structure can be divided into two major article components, i.e. the *comment on form* and the *comment on semantics*. Every data category included in the microstructural programme belongs to one of these components. In the present section, attention will be paid to the comment on form, as it includes the orthographic presentation of the lemma, i.e. the lemma sign. The lemma sign as part of the comment on form conveys data regarding the spelling of the treatment unit. Additional spelling guidance is included in the comment on form if the lexical item included as lemma has spelling variants. The most typical other entries accommodated in the comment on form are data conveying information regarding the morphology and the pronunciation of the lemma, as well as certain grammatical features, says Gouws (2001a). Gouws (2001a) also points out that to ensure the systematic retrieval of the information presented in the comment on form, it is essential that one prescribes a fixed ordering of the data types and subtypes. In the treatment of a lemma representing a noun, the comment on form may include, where applicable, entries indicating morphological data, such as the plural and diminutive suffixes.

Gouws (2001a: 71) goes further by stating that the way in which the entries are presented in the comment on form should be determined by the reference skills of the users. Lexicographers often employ a system of textual condensation in the comment on form in an attempt to save space. This leads to a presentation characterised by place-keeping symbols, complex abbreviated entries and markers to indicate the non-occurrence of derivation.

In the previous chapter, we discussed different types of microstructures, and the compilers of the dictionary with the planned microstructural programme must choose between an integrated, unintegrated, semi-integrated and rudimentary

microstructure as the main type of microstructure to be constructed. Both the integrated and semi-integrated types have been chosen as being significant to this study because, in an integrated microstructure, what belongs together is grouped together throughout. In the previous chapter, I briefly discussed different types of data to be found in the microstructure, i.e. the most important data types identified by Hausmann and Wiegand (1989: 341) that should appear in any monolingual dictionary. These types of data are mostly relevant for the construction of articles for bilingual dictionaries. In keeping with the data to be found in the microstructure, we tend to follow Hausmann and Wiegand (1989) as far as possible with regard to this point. Yet it will be shown that data on pronunciation, orthography and grammar should be presented in the dictionary with the planned microstructural programme. This data has to fulfil its communicative-orientated functions, i.e. it should be presented in such a way that it satisfies both the needs of encoding as well as decoding.

From the perspective of the dictionary user, it is significant to find such a variety of data categories in the articles. It is necessary that the proposed microstructural programme should offer a comprehensive treatment of lemmata.

8.2 Data on phonetics

As far as spelling is concerned, it is vital to mention that some data on orthography and pronunciation are based on phonological and phonetic principles. Orthography demands a certain knowledge of phonetics and phonology. This is due to the fact that "most of the spelling systems are phonemic in principle [... and] most of the writing systems in the world attempt to record the segmental phonemes; [...] they overlook the suprasegmental phonemes", according to Al-Kasimi (1977: 36). In relation to what has been said above, a discussion of phonetics and phonology in Fang will be given first.

One can define "phonetics" as the science that deals with the sound aspects of a language. Phonetics deals with the description and transcription of the sounds of the

language precisely in the way they are pronounced. Furthermore, the choice of transcriptions based on a phonetic alphabet leads to a further question: should the transcription be phonetic or phonemic in nature?

With regard to the dictionary with the planned microstructural programme, the compiler(s) must choose between phonemic transcription and phonetic transcription as the main type of transcription to be used. For the purposes of this dissertation, a brief discussion of phonemic and phonetic transcription is relevant. As will be shown in the rest of this chapter, the compiler(s) should consider employing the phonetic transcription as being the most ideal one.

A distinction between phonemic transcription and phonetic transcription can be found in Al-Kasimi (1977: 37-38). According to him, in a phonemic transcription, the symbols give the sounds, which form contrast in the language, disregarding varieties, which do not form contrasts. On the other hand, a phonetic transcription takes care of all or most varieties of sounds. A phonemic transcription represents the phonemes of the language, whereas a phonetic one records the allophones of the language. A phonemic transcription is limited to those distinctive differences or contrasts that are capable of distinguishing one meaning from another in the language, such as /adu/ "to close, to soak" and /azu/ "to come" in Fang; whereas a phonetic transcription records all the non-distinctive differences. After discussing both the phonemic and phonetic descriptions, it is vital to identify the one which could be used in a dictionary. Some theoreticians, such as Bloch and Trager (cited in Al-Kasimi, 1977: 38) support the position of phonemic rather than phonetic description. Their point is as follows:

> *The reason for preferring a phonemic to a purely phonetic description, then, is wholly practical. By organising the countless details of pronunciation into a small number of distinctive units, the student not only simplifies the learning process, but actually achieves better practical command of the language than he could by another method in the same amount of time. This statement does not rest on theory; it is*

> *borne out by the experience of all students who have used the phonemic approach in their study of a foreign language.*

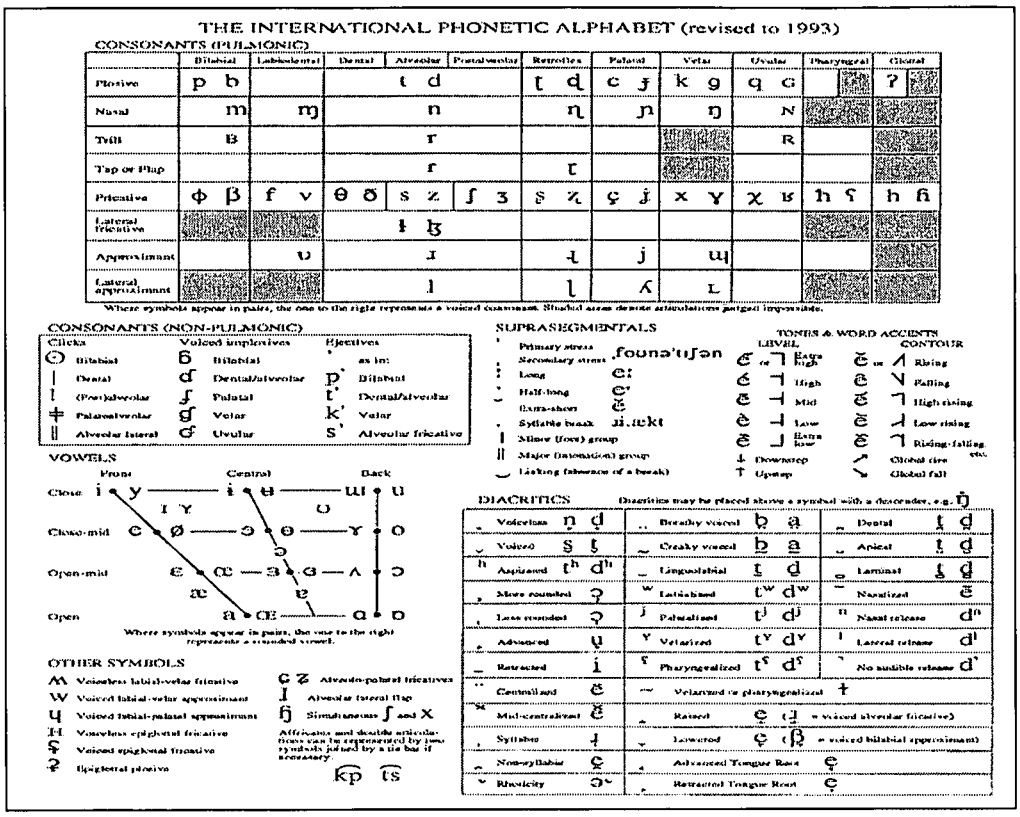
Other theoreticians, such as Kemp Malone (cited in Al-Kasimi, 1977) and Gouws (1989), are in favour of a phonetic description. Kemp Malone (cited in Al-Kasimi, 1977) expresses the view that, since the use of the right allophones distinguishes native from foreign speakers, and since the foreign language learner should aim at approximating native speech, the bilingual dictionary should present a phonetic description of the language. In this regard, Gouws (1989: 259) aptly states that

> *A comparison of the advantages and disadvantages of these types of transcriptions proves that a phonetic transcription provides the linguistically most satisfactory results, especially because it represents a true phonological rendition of the true use of language.*

On the grounds of Gouws's judgement, a strict phonemic transcription is therefore not practical. The phonemic transcription allows us to use the same transcription symbol for all variants of a given phoneme, whereas the phonetic transcription allows us to use one symbol for each sound. According to Wells (1996), the simplicity principle tells us to use the simplest phonetic symbol, which is based on a phonetic alphabet.

The twentieth century has seen progress in the standardisation and harmonisation of transcription through the introduction of the International Phonetic Alphabet (IPA) by the International Phonetic Association (Association Phonétique Internationale) in 1888. The IPA is illustrated below:

Figure: 8.1: IPA



The IPA is not the only phonetic transcription system in use. There are extended versions of the IPA, for example the African Reference Alphabet (ARA), which was developed through a series of conferences in Niamey, Nigeria with the support of the International African Institute (IAI) and UNICEF. Devised in 1978 and revised in 1982, the ARA includes 60 graphs, many of them Roman, Roman-derived or Greek, and many of which exist in the IPA and are given phonetic values similar to those of IPA. The figure below shows the corpus of graphs in the ARA.

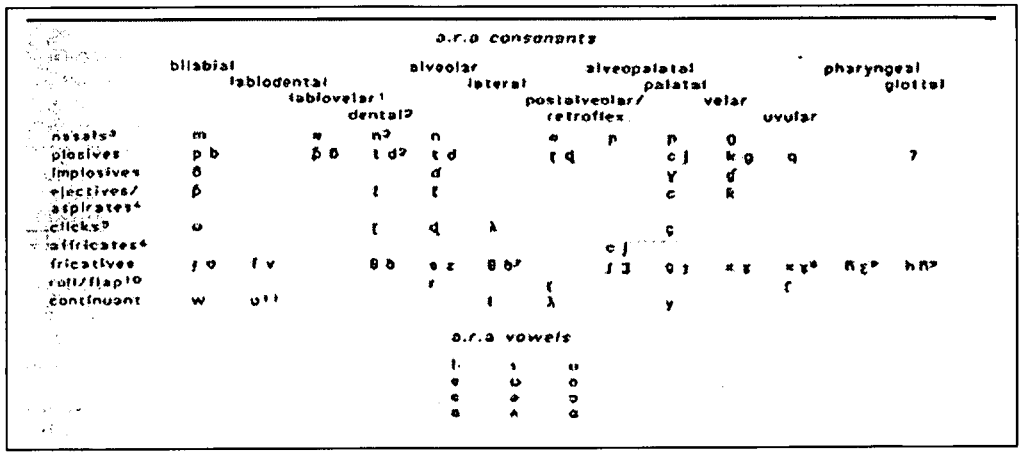


Figure 8.2: ARA

8.2.1 Data on phonetics for the dictionary with the planned microstructural programme

The transcriptions of sounds are always based on a phonetic alphabet, particularly those dictionaries aimed at native speakers. This is also the case for the dictionary with the planned microstructural programme and displaying both monolingual and bilingual characteristics. The choice of transcription based on the IPA is stimulated by the capacity of the data to meet the needs of the target users. The IPA is important for both advanced adults, high schools students and academics who have Fang as mother tongue, and for students who want to learn Fang as their second language. A relative degree of familiarity with the International Phonetic Alphabet (IPA, revised 1993, updated 1996) will be assumed for these students. However, because of the big difference between the sound systems of the African languages in general and Fang in particular, and those of the European languages, problems that are likely to arise in this particular area should be solved by introducing (e.g. in inserted inner texts or in the mini-grammar) explanations of the specificities of the Fang IPA symbols. The following tables, illustrating the Fang IPA symbols, will be used in the planned dictionary.

Table 1: Oral vowels in Fang

Lieu d'articulation / Aperture	ANTERIEURES				CENTRALES		POSTERIEURES	
	Non-arrondies		Arrondies		Non-arrondies[1]		Arrondies	
	brèves	longues	brève	longue	brèves	longues	brèves	longues
Fermées	i	i:	y	y:			u	u:
Mi-fermées	e	e:					o	o:
Moyennes[2]					ə	ə:		
Mi-ouvertes	ɛ	ɛ:					ɔ	ɔ:
Ouvertes					a	a:		

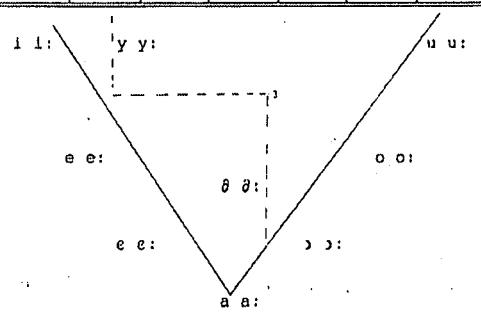


Table 2: Nasal vowels in Fang

Lieu d'articulation / Aperture	ANTERIEURES		CENTRALES	POSTERIEURES
	Non-arrondies	Arrondie	Non-arrondies	Arrondies
Fermées	ĩ	ỹ		ũ
Mi-fermées	ẽ			õ
Moyenne			ə̃	
Mi-ouvertes	ɛ̃			ɔ̃
Ouverte			ã	

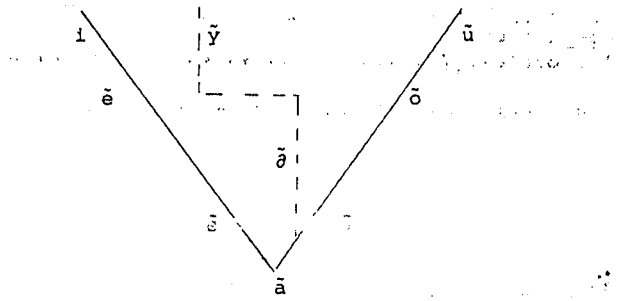


Table 3: Consonants in Fang

Lieu d'articulation		Bilabiales		Labio-dentales		Apico-dentales		Apico-alvéolaires		Palatales		Labio-/palatales	Vélaires		Labio-vélaires		Palato-liaées	Glottale
Mode d'articulation		sd	sn	sd	sn	sd	sn	sd	sn	sd	sn	sn	sd	sn	sd	sn	sd	sn
Occlusif	Nasales		m				n				ɲ			ŋ				
	Orales	p	b		ᵽ	t	d						k	g			kʸ (1)	ʔ
	Implosives (2)														kp	gb		
Fricatif				f	v			s	z	ʃ	ʒ			ɣ				
Affriqué								ts	dz									
Latéral									l									
Vibrant									r									
Continu											j	ɥ				w		
Son nasal prénasalisé	Occlusif: Orales		mb			nt	nd					ɲ	ŋk	ŋg			ŋkʸ	ʔ
	Occlusif: Implosives (3)														ŋkp	ŋgb		
	Fricatif			mf	mv			ns	nz		nɔʃ							
	Affriqué							nts	ndz									
	Latéral								nl									
	Continu										ŋj	ŋɥ						

These descriptions, which are drawn from Ondo Mébiame (1992), follow the conventions of API in the presentation of sounds. (For a discussion of the phonetic description of sounds in Fang, see Ondo Mébiame, 1992.)

The Gabonese community in general and the Fang community in particular are not very familiar with dictionary-using skills. The use of phonetic data should have to be planned in accordance with the needs and reference skills of the target users of the dictionary with the planned microstructural programme. Consequently, the lexicographer(s) of the planned dictionary have to pay more attention when using such "phonetic data".

8.3 Data on pronunciation

8.3.1 The importance of data on pronunciation

Data on pronunciation can be regarded as an essential part of the microstructure of the dictionary. This point is also covered by several empirical studies. In 1955, Barnhart (cited in Al-Kasimi, 1977) circulated 108 questionnaires in 99 American colleges concerning the types of information commonly provided in dictionaries. The results indicated that students considered pronunciation third in importance (after meaning and spelling). Campoy Cubillo (2002), in her study of the needs of English for Specific purposes (ESP) students, found that 84.7% of students demand data on pronunciation as a valuable type of data in their dictionaries, even though they have no idea how to interpret some unfamiliar symbols. It goes without saying that data on pronunciation would be of great interest in the dictionary with the planned microstructural programme, as it is targeted at those users who want to learn Fang as their second language and those who do not have a good command of Fang. In this regard, data on pronunciation should be a very important part of a lexical item's linguistic description, which users, particularly non-mother speakers of Fang, need to grasp. The above-mentioned users must be able to assume the encoding and decoding task, be capable to pronounce a lexical item and understand it at the same time.

8.3.2 Types of data on pronunciation

The dictionary with the planned microstructural programme should be compiled by taking into account different data on pronunciation, namely the transcription, the indication of tone and the syllable division. With regard to the existing dictionaries in Fang, there is a lack of relevant discussion on the pronunciation system. The presentation of the pronunciation system for the users of these dictionaries reveals a number of shortcomings (cf. Mavoungou, 2001a).

8.3.2.1 Transcription

Transcription can be regarded as an important type of data on pronunciation. It is used with reference to the graphic representation of a phonological word contained in the entry. Burkhanov (1998) shows clearly the major problems involved in adopting ready-made transcription systems, for instance IPA. Firstly, the intended user(s) does not know, and has no intention of knowing, any transcription alphabet. Secondly, using a complicated transcription alphabet will be difficult from a typographical viewpoint and will drastically increase the production costs. For these reasons, Burkhanov (1998) states that almost every dictionary implements its own transcription system or simplified version of a pre-existing transcription alphabet.

8.3.2.1.1 Positioning of items giving the transcription

After presenting the different data on pronunciation, the question should be: which addressing procedure should the item giving the transcription display and where is this item to be positioned in the article of the dictionary? Svensén (1993) and Gouws (1989) provide clear answers in this regard. For Svensén (1993: 69), the item giving the transcription of the lemma appears "immediately after the lemma". Gouws (1989: 257) confirms this by pointing out that "data on pronunciation is primarily addressed at the lemma and therefore preferably leads to a transcription of only the lemma".

Louw (2004) adds that the item giving the pronunciation usually appears in an overarching comment on form, and that different items giving data on morphology can appear in each of the next slots of the comment on form that correspond with the different parts of speech. Another way to position the item giving the pronunciation can be found in Al-Kasimi (1977). According to him, "not only the entry word should be transcribed but the illustrative examples as well" (Al-Kasimi, 1977: 23). The preceding statement by Al-Kasimi implies that some transcriptions have a non-lemmatic addressing and follow directly on the example. Al-Kasimi (1977: 44) reiterates by stating that

> *the illustrative examples can be chosen in such a way as to show the entry word under different stress levels, with various pitch patterns, as joined with a neighbouring word, and in a different positions in the sentence. In this way both segmental and suprasegmental phonemes of the sound system can be indicated in the phonological information provided in the dictionary.*

The lexicographers of the planned dictionary are aware of the space such an approach could take. Therefore, the transcriptions will be addressed only at the lemma. The aim is to help the users, mother-tongue speakers or non mother-tongue speakers, to have a good command of Fang. They must be able to pronounce lexical items as the native users pronouncing them, as suggested by Gouws (1989: 257) and Haas (1962: 48). It is also important for the users to be familiar with the code (e.g. IPA).

8.3.2.1.2 Transcription systems in Fang

One of the important decisions the lexicographer(s) dealing with description issues in Fang has to make is to decide which existing transcription systems fit the dictionary best. Before selecting the type of transcription system to be used in Fang, a presentation of the existing transcription systems in Fang is necessary.

Transcription has long been a problem in the promotion of African languages (Unesco, 1978). On the initiative of individual researchers, attempts have been made

to transcribe Gabonese languages in general and Fang in particular. Some transcription systems have been recorded. Among others, there are Raponda Walker's system, Rapidolangue's system and Nzang-Bié's system. The discussion of these three systems will allow me to choose the system that can be used for the microstructural programme for dictionaries in Fang. The reasons for this choice will also be given.

8.3.2.1.3 Raponda Walker's system (*Eléments de grammaire Fang*, 1995)

Vowels:

a, i, o	are pronounced as in French
e	is pronounced as the French *e* in *me*
é	is pronounced as the French *é* in *pré*
è	is pronounced as the French *è* in *près*
u	is pronounced as the French *ou*
ü	is pronounced as the French *u* in *lu*

Consonants

b, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, z, s are pronounced as in French;

c	is pronounced as the German *ch* in *ach* or the Spanish *j*;
h	is pronounced as the German *ch* in *sachen* or the French "grasseyé" *r*;
ng	is pronounced as the English *ng* in *dancing*
ñ	is pronounced as the French *ng* in *agneau*

Semi-vowels

W	is pronounced as the English *w* or the French *w* in *oui*
W	is pronounced as the French *ui* in *lui*
Y	is pronounced as the French *y* in *papaye*

The criticism that can be made of the system proposed by Raponda Walker is that one does not know if his system is phonetic, alphabetic or orthographic. One can also remark that no prosodic phenomenon is mentioned. Raponda Walker's alphabet is very close to the Latin one (Idiata, 2002: 50), as one can observe from the symbols c, k and q that represent the sound [k].

8.3.2.1.4 Galley's system

Vowels:

a, é, è, I	are pronounced as in French;
ü	is pronounced as *u* in French;
e	is pronounced the English *e* in *order* or the French *e* in *école*
o	is pronounced as the French *o* in *or*, *ordre*;
ô	is pronounced as the French *o* in *dos*, *beau*, *côté*;
u	is pronounced as the French *ou*;
î	is a sifflant when it is preceded with consonants *b*, *f*, *g*, *k* and *v*.

Consonants:

b, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, s are pronounced as in French;

gh	is pronounced as the French "grasseyé' *r*;
kh	is pronounced as the German *ch* in *nach*;
ny	is pronounced as the French *gn* in *pignon*;
ñ	is pronounced as the English *ng* in *singing*;
ñy	is pronounced as the French *ny*;
ny	these letters must be pronounced one after other;
z	is pronounced as *dz*;
z	is pronounced as the French *z* in *zèbre*
h	is found in some exclamations;

Semi-vowels:

y, w, and v

With regard to the system proposed by Galley, it is noted that this system seems orthographical, as there are orthographical rules.

8.3.2.1.5 Nzang-Bié's system

Vowels:

Pronunciation	Examples	
[i]	eki	"interdit"
[i:]	asii	"faire descendre"
[e]	ele	"arbre"
[e:]	evee	"soif"
[ɛ]	eyɛ	"lèvre"
[ɛɛ]	ngɛɛ	"son épouse"
[a]	aba	"dépecer"
[aa]	aay∂m	"il sait"
[ə]	akə	"aller"
[əə]	akəə	"donner"
[u]	olu	"Là-bas"
[uu]	luugə	"incline"
[o]	okə̲n	"couteau"
[oo]	akoo	"contaminer"
[ɔ]	ebɔn	"amant"
[ɔ]	atɔɔ	"il est assis"
[u]	asum	"commencer"
[uu]	nsuu	"poison"

Consonants

[b]	bot	"hommes"
[d]	aduk	"tromper"
[g]	ngɛɛ	"sa femme"
[t]	tan	"prix"
[k]	ekob	"peau"
[m]	etam	"puits"
[n]	enam	"bras"
[ŋ]	aŋu	"bouche"
[kp]	akpoo	"faire tomber"
[f]	fam	"homme"
[s]	asoŋ	"dent"
[v]	avak	"se réjouir"
[z]	zalaŋ	"tonnerre"
[l]	alat	"coller"
[r]	kara	"crabe"
[y]	oyəm	"langue"
[w]	awu	"mort"

With regard to Nzang-Bié's system, it seems that it follows the conventions of the IPA, e.g. the length of the vowels, which is represented by the reduplication of vowels.

As far as the systems mentioned above are concerned, my point is that the transcription systems used by missionaries and colonial administrators for the

transcription of Gabonese languages are too similar to French transcription, and the symbols used do not accurately take into account the realities of these languages. In my opinion, Nzang-Bie's system is the most appropriate system in the sense that it follows the convention of the IPA and represents all the sounds used in Fang. Taking into account all the differences, one can conclude that the microstructural programme for the dictionary should include Nzang-Bie's system.

8.3.2.1.6 Transcription of all the lexical items

The difficult decisions that need to be made when the lexicographer(s) construct an effective microstructural programme for a dictionary in Fang should be reflected in the careful consideration given to transcribing the lexical items. He or she has to decide if all the lexical items will be transcribed or not. The needs of the target users should play the decisive role in settling this issue. As the dictionary with the planned microstructural programme is descriptive in nature, targeting mother-tongue speakers of Fang and non-mother-tongue speakers of Fang, it is vital to give transcriptions at each source language lexical item. Unfortunately, none of the existing dictionaries in Fang provide transcriptions of the lemmas.

8.3.2.1.7 Pronunciation and spelling variants

Users often turn to a dictionary wanting to learn the exact pronunciation and spelling of a word, only to discover that the word may have several pronunciations and spellings, as in the case of *deity, economic, envelope* and *greasy*, among others. The inclusion of variant pronunciations and spellings disappoints those who want their dictionary to list one "correct" pronunciation. However, there can be no objective standard for correct pronunciation other than the usage of thoughtful and, in particular, educated speakers of the given language. Among such speakers one hears much variation in pronunciation. The dictionary with the planned microstructural programme will include pronunciation and spelling variants. In the planned microstructural programme, the pronunciation and spelling variants of the words will

be shown after the lemma. The pronunciation will be written using Nzang-Bié's alphabet. The lexicographer(s) should be careful when treating these pronunciation variants. He or she can give a microstructural treatment, including the main pronunciation at the most frequently used form (cf. Svensen, 1993). Such a method of frequency of use may be the ideal way to treat the pronunciation variants, but it should have to be tested empirically. Consider the following modified article of the lemma **abi** drawn from the *Dictionnaire Fang-Français/Français-Fang* showing how the pronunciation and spelling variants will be placed in the planned microstructural programme:

abi[ábì] *Ntumu* **abe** [ábè] ....

In the modified article of the lemma **abi**, the item of the lemma **abi** is provided, followed by the Ntumu spelling variant ***abe*** in bold and the pronunciation [ábè]. The label *Ntumu* tells the users of the existence of these pronunciation and spelling variants in Nutumu (one of the dialects of Fang).

8.3.2.1.8 Transcription in the dictionary with the planned microstructural programme

It has been shown that, for the dictionary with the planned microstructural programme, the phonetic transcription is more effective than the phonemic transcription, as the phonetic transcription provides the linguistically most satisfactory results. The transcription system of Nzang-Bié, based on the IPA system, will be used because it is more practical as it represents all the sounds used in Fang. As the dictionary with the planned microstructural programme is descriptive in nature, targeting mother-tongue speakers of Fang and non-mother-tongue speakers of Fang, it is vital to give transcriptions at each lexical item. The dictionary with the planned microstructural programme will also include pronunciation variants.

8.3.2.2 Syllable division

According to Landau (2001), the purpose of syllable division is to tell the user where a word can be divided. The lexicographer is confronted with the question: should syllable division be used in the dictionary? However, before discussing syllable division in Fang, it is necessary to offer an account of discussions of syllabification. With regard to lexicographic studies that have dealt with syllabification issues, one can roughly classify lexicographers' viewpoints into two approaches. Some, such as Landau, (2001: 113) believe that showing syllabification in the dictionary is not necessary as it takes up space that can be better used in other ways. He states that it can be confusing, because a word division within a word can be mistaken for a word space, and the user sees the entry as two words when it is in fact one. Others, such as Gouws (1989: 255), believe that the transcription of the full lemma gives the lexicographer the space and opportunity to present the syllable division of the lemma. I will follow Gouws's footsteps by using syllable division and the compiler(s) should preferably include it as an essential component of data on pronunciation. The following section will provide a discussion of syllable division in Fang.

8.3.2.2.1 Syllable division in Fang

Most phonologists attempt to deal with the syllable as a phonological unit. Each syllable consists of a vowel or a syllabic consonant or more consonants. According to Ondo Mebiame (1992: 133), syllables in Fang consists of a vowel (v), a long vowel (v:), a vowel preceded by one, two, three or four consonant(s) (cv; ccv; cccv; ccccv), a long vowel preceded by one or two consonants (cv:; ccv:), and a vowel preceded by one, two, three or four consonant(s) and followed by one consonant (cvc; ccvc; cccv; ccccv). The syllable also consists of a nasal consonant (N) and it can be found in word-initial position. The syllable structures boil down to the following formula (the elements between parenthesis are facultative):

- (c) (c) (c) (c) v (:) (c)
- N, N

With regard to the above-mentioned illustration, there are two types of syllables, namely an open syllable and a closed syllable. Consider the following examples taken from Ondo Mébiame (1992):

a. Examples of open syllables:

- Monosyllabic

CV	si	"earth"
CCV:	tsi:	"field"

- Bisyllabic

NCV	nkə	"The one who gives"
CVCV	kara	"crab"

- Polysyllabic

VCVCV	okala	"mat"
NCVCVCV	mbulugu	"dust"

b. Examples of closed syllables:

- Monosyllabic

CVC	m⊃n	"child"
CCVC	dzén	"nail"

- Bisyllabic

NCVC	ntət	"hundred"
CCV: CVC	mva: fan	"armpit"

- Polysyllabic

NCVCVC	nsisim	"spirit"
VCVCVC	otəten	"star"

Before discussing how the syllable will be included in the planned microstructural programme, it is vital to first discuss the presentation of syllable division in dictionaries.

8.3.2.2.2 The presentation of syllable division in dictionaries

Once the lexicographer(s) has decided to include syllable division in a dictionary, another problem encountered is: which convention could be used in order to present syllable division in the dictionary? In lexicographic research there are different approaches on how to present syllable division, e.g. syllable division can be explicitly indicated to the user by means of slashes (Lombard, cited in Louw, 2004). The indication of syllable division can also be done by means of hyphens or by raised stops (Burkhanov, 1998: 229). Dictionaries like the SAOSD present syllable division by means of dashes between the syllables, whereas SADJS uses full stops given mid-high in the line to indicate where line breaks can occur.

8.3.2.2.3 The presentation of syllable division in the dictionary with the planned microstructural programme

In the dictionary with the planned microstructural programme, I propose to present syllable division by means of full stops between syllables. The use of dashes may

confuse the users, as dashes are used to identify the verb stem. The use of hyphens is also problematic, as they are used to indicate the adjective stem. The use of slashes may also confuse the users, as slashes are used to indicate opposing/contrasting words. The lexicographer(s) of the dictionary with the planned microstructural programme could be confronted with the question: which type of lemma to divide? The compiler(s) should preferably divide all polysyllabic words, the aim being to present different syllables. Consider the following examples, where the lexical items given in bold indicate syllable division by means of full stops (as will be used in the dictionary with the planned microstructural programme):

a. Examples of open syllables

- Bisyllabic

NCV	**n.kə**	"the one who gives"
CVCV	**ka.ra**	"crab"

- Polysyllabic

VCVCV	**o.ka.la**	"mat"
NCVCVCV	**mbu.lu.gu**	"dust"

b. Examples of closed syllables:

- Bisyllabic

NCVC	**n.tət**	"hundred"
CCV: CVC	**mva.fan**	"armpit"

- Polysyllabic

NCVCVC	**n.si.sim**	"spirit"
VCVCVC	**o.tə.ten**	"star"

The lexicographer(s) of the dictionary with the planned microstructural programme should support the users by giving a detailed guide to the different methods used to indicate syllable division in the front matter of the dictionary. Consider the following modified article of the lemma **abi**, drawn from the *Dictionnaire Fang-Français/Français-Fang*, showing how the syllable division variant will be positioned in the dictionary with the planned microstructural programme:

a.bi[ábì] *Ntumu* **abe** [ábè] ....

In the modified article of the lemma **abi**, the item giving the syllable division of the lemma is positioned before the item giving the pronunciation of the lemma, which is followed by the item giving the pronunciation and spelling variant when it is necessary.

8.3.2.3 Stress indication

The stress can be regarded as an essential component of data on pronunciation. The lexicographer(s) of the dictionary with the planned microstructural programme should preferably present stress indication, as the transcription of the full lemma gives the lexicographer the opportunity to present the stress indication as well as the transcription. In the planned microstructural programme, the stress will be indicated by means of a vertical accent (as it is used in the SADJS). The lexicographer(s) of the dictionary with the planned microstructural programme is aware of the problem associated with the indication of tones and stress in the transcription of the lemma. This could mislead the user who would like to make a distinction between stress and tone(s). This idea is supported by Landau (2001: 113), who states as a possible solution that every decision lexicographers make affects the proportion of space their dictionaries will allot to each component.

8.3.2.3.1 Stress indication in the dictionary with the planned microstructural programme

Given the fact that some target users of the dictionary with the planned microstructural programme are advanced, it will not be problematic to indicate the stress and tone of the lemma, as the items giving the pronunciation will be explained in the user's guide in the dictionary.

Anyanwu and Goethe (2001) analysed the various ways in which stress is manifested in African languages. Their acoustic investigation shows that both pitch and intensity play a role in stress manifestation. The question is whether the stress is manifested by pitch or by length in Fang. In *Lexique Fang-Français*, Martrou points out that the stress in Fang can be manifested in vowel length. In this work, the compiler places the stress mark after the syllable that is stressed. With regard to the dictionary with the planned microstructural programme, the stress indicator will be placed before the transcription of the lemma after the syllable that is stressed. Consider the modified example of the article of the lemma **ako** taken from the *Dictionnaire Fang-Français/Français-Fang*:

a.ko' [àkóó] ...

8.3.2.4 Tones

One of the main problems of existing Gabonese dictionaries in general, and existing dictionaries in Fang in particular, is the lack of tones in the written transcription of oral productions (cf. Nyangone Assam & Mavoungou, 2000). Very often, lexicographers compiling dictionaries for African languages have been guilty of ignoring this basic component of the phonological analysis of the language (cf. Mavoungou, 2001b: 133).

One cannot discuss phonetics and phonology without mentioning the question of "tones", because tones play an important role. This point is supported by Matthews (1997: 379).

According to him, a tone is a phonetic or phonological unit belonging to a set of units distinguished or primarily distinguished by levels of or changes in pitch. For Baylon and Fabré (1990: 101), tones are used as distinctive units. Every work on Gabonese languages recognises the important part that tones play in these languages. It has already been stated that lexicographers compiling dictionaries for African languages have been guilty of ignoring this basic component of the phonological analysis of the language. In the *Dictionnaire Fang-Français/Français-Fang*, one can distinguish three tone heights, namely the high tone (h), the low tone (b) and the medium tone (m). Furthermore, one of the front matter texts gives an account of tonal features. The tonal indication is usually followed by a paraphrase of meaning in the target language, namely French (cf. Mavoungou, 2001b: 132). Up to now, the different descriptions of tones in the Gabonese languages are divided into three categories. These are main tones, intermediate tones and secondary tones.

8.3.2.4.1 Basic tones

Fang is a tone language with two distinctive tone levels, high (H) and low (L):

- High punctual tone: The highest point of the melodic curve with high-pitched sound (´). For example, one could have: *mvám* "generosity"

- Low punctual tone: The lowest point of the melodic curve with low-pitched sound (`). For example, one could have: *zùm* "bird"

8.3.2.4.2 Tone melodies

There are two tone melodies in Fang, a falling tone (HL) and a rising tone (LH):

- Rising tone: This melodic curve takes two successive lines. It goes down towards the lowest point before going towards the highest point. It is about an opposite circumflex and is noted as (ˇ), as in *àsǒ* "tooth"

- Falling tone, noted with the circumflex (ˆ). It is a melodic curve that takes two successive lines. It goes up towards the highest point before going down towards the lowest point, as in *èvîn* "the door"

8.3.2.4.3 Intermediate tones

Intermediate tones occur less in Fang than main tones. Their presence in the Gabonese languages is significant and relevant:

- Mid tone: noted with vertical line (ˈ). According to Hombert (1990: 102), these tones are realised at the lowest level, which is similar to medium tone, but, contrary to a real medium tone, cannot be followed by a higher tone, as in *áwiˈny* "to kill".

- Medium punctual tone: noted with a horizontal line. This point is situated in the middle of the melodic curve, between the lowest point and the highest point of the melodic curve [-], as in *āsōn* "tooth".

This inventory of tones in Fang is not exhaustive, because Fang is not yet fully described. But it helps to note that there are a great deal of tones and one should bear their presence in mind, as it is of importance in the description of this language.

8.3.2.4.4 Some suggestions on the notation of tones in dictionaries

It goes without saying that the previous dictionaries did not generally take tones into account. One could take as example some of the catechisms compiled by missionaries. These works are proof that they taught the word of God without understanding the pronunciation of these languages. The only problem of this so-called method used by missionaries and colonial administrators is that, when pronouncing certain Gabonese words, some Christians could feel disappointed. They did not know how to pronounce

some Gabonese words, hence this problem. This is proof that tonality is very important in Gabonese languages, and not indicating tonality could cause embarrassment.

8.3.2.5 Data on pronunciation in the dictionary with the planned microstructural programme

It has commonly been accepted that the item giving the transcription is addressed at the lemma. According to Svensén (1993: 69), this item is positioned immediately after the lemma. This is supported by Gouws (1989: 255), who asserts that data on pronunciation is primarily addressed at the lemma and therefore preferably leads to a transcription of the lemma only. In line with the work done by Svensén (1993: 69) and Gouws (1989: 255), the item giving the transcription will be positioned immediately after the lemma in the proposed dictionary.

The need and demand for data on pronunciation would also be great in the dictionary with the planned microstructural programme proposed in this dissertation. The results of the questionnaire showed that 41% of the respondents consulted the dictionary to find data on pronunciation. It could be postulated that the respondents are not aware of the importance of pronunciation in a dictionary on the fact that information on pronunciation can be retrieved from a dictionary. It could also be assumed that the questionnaire reflects the insufficient presentation of this data in dictionaries. The postulations mentioned above would need to be verified empirically.

The dictionary with the planned microstructural programme is directed at those users who do not have a good knowledge of Fang and those who would like to learn Fang as their second language. As the proposed dictionary has features of both monolingual and bilingual dictionaries, it will be entirely or partly for active use and will also be intended for passive use. The proposed microstructural programme will take into account the notation of tones. After the source language item, i.e. the lemma in Fang, the item giving the pronunciation will be provided. It will be displayed between brackets [ ]. Consider the following modified example of the article of the lemma **nlo** showing how the item giving the pronunciation should be placed in the planned dictionaries.

n.lo [nló] *tu . n. cl. 9/10. pl. minlo.

- *ekila nyol oyo ebele asu ye melo*, partie supérieure du corps comprenant le visage et les oreilles.

• *Okon nlo*, maladie de la tête

In the abovementioned article, the syllable division of the lemma (in bold) is provided by means of a full stop, followed by the tone indication of the lemma between brackets, which is followed by the item giving the etymological data and morphological data, etc. For a discussion regarding the etymological data and morphological data, please see Chapters 9 and 10.

In the dictionary with the planned microstructural programme, the stress will be placed before the transcription of the lemma after the syllable that is stressed, but it will also be given in the transcription.

8.4 Variations in language

The focus on language variation can be regarded as a microstructural issue. The purpose is to investigate different competing dialectal forms of Fang to be considered for inclusion in the planned dictionary. This microstructural issue has an implication for the data to be included in the dictionary.

In fact, there is no speech community where all speakers exhibit the same linguistic behaviour. No two individuals in the same speech community exhibit identical linguistic behaviour. Each individual has his own so-called idiolect (the totality of speech habits of a single person at a given time, cf. Hockett, 1958: 321).

The variation in the idiolects of the speakers of a language is sometimes minimal. As soon as this variation is larger in scope, varieties of a language and even dialects develop. When a word of any specific language has just been created and speakers of this particular language do not use it, it is not a word of this language. In this regard,

Martinet (1991: 35) says "nothing can be recognised as belonging to the language which is not common to many speakers".

8.4.1 Varieties and dialects

A variety of a language consists, just as a dialect does, of the sum of the idiolects of all speakers who speak the variety or dialect. The distinction between a variety and a dialect is to a certain degree artificial, as it is at the very least difficult, probably impossible, to distinguish between a variety and a dialect. Since a pejorative value is often given to the term *dialect*, the term *variety* is used in this dissertation.

8.4.2 Varieties of Fang

Apart from the fact that Fang is widely spread in Gabon (in four provinces and 17 regions), it is also spoken in neighbouring countries (i.e. Cameroon, Equatorial Guinea, the Republic of the Congo and Sao Tome). This means that the varieties of Fang spoken in these countries are also counted as varieties of that language. However, in this work I will focus primarily on Fang varieties spoken in Gabon.

There are six Fang varieties spoken in Gabon. These are:

- **Fang-Ntumu**: Fang-Ntumu speakers represent the most important community of Fang in Gabon. This variety, located in Oyem and Bitam, covers the largest Fang area in Gabon.
- **Fang-Okak**: Located principally in the Mitzic, Medouneu and Cocobeach regions.
- **Fang-Mvaï**: The sole Fang variety spoken in only one region of Gabon, namely the Minvoul or Haut Ntem region.
- **Fang-Mekè**: Fang-Mekè speakers can be located on the other side of the sea, in the Metek ma vii chinchoua zone (on the western side of the Estuaire River) and in the area of Lalala (on the eastern side of the Estuaire River).

Fang-Mekè speakers are also called *mekè me Nkoma* because they are the group of Fang people that decided to leave and cross the Komo River when they reached the Estuaire. The name Mekè came from the Fang term "meke" (or mekè), which means "departure". Today, this term designates all Fang speakers in the Estuaire area, even those ones who did not cross the Komo River.

- **Fang-Atsi**: Fang Atsi is spoken by the Betsi population in three regions in Gabon: Lambaréné, Ndjolé and Bifoun.
- **Fang-Nzaman**: Located principally in the Makokou and Oven regions.

8.4.3 Criteria for selecting a standard variety

A dictionary of which the objective is to describe the standard variety has to record the standard orthography of a lexical item where there are competing forms (Mdee 1990, 1998). A lexicographer should therefore decide which form is considered standard and which is not. In this regard, a standard dictionary should promote the standard variety.

It is a well-attested fact that the compilation of a standard dictionary can play a valuable role in the standardisation process of a particular language. Moreover, standard dictionaries must adhere to a certain set of criteria, as stated by Gouws (2001b: 76):

> *Standard dictionaries can be regarded as products resulting from a well-established lexicographic environment. These dictionaries are the most commonly used monolingual lexicographic instruments and display a wide range of lemmata and microstructural categories. Standard dictionaries usually are single volume products in which a synchronic and normative approach prevails. The macrostructure represents the standard variety of the treated language although a number of high usage frequency items from non-standard varieties will also be included. These items will be marked by*

lexicographic labels indicating stylistic, chronolectic, regional or other deviations from the standard variety. Standard dictionaries include a representative selection of macrostructural items and an extensive treatment of these items. These dictionaries consequently have a high data density.

Emejulu and Nzang-Bié (1999) argue that there is no specific scientific model for choosing a standard variety. According to them, Sadembouo (1980) listed 18 criteria for selecting a standard dialect that he classed under three headings: **fundamental, secondary** and **marginal** criteria:

- **Fundamental criteria**
  - High degree of declared understanding of the variety.
  - High degree of predicted understanding of the variety.
  - Numerical importance of the variety speakers.
  - Advantageous geographical position of the variety.
  - The location of the variety t at the centre of activity.
  - Variety prestige.
  - Pureness of the variety.
  - Mobility of the variety.
- **Secondary criteria**
  - The attitude of the government towards the variety.
  - Religious influence of the variety.
  - Socio-economic importance of the variety.
  - Written documents already existing in the variety.
  - Historical expansion of the language.
  - Expressed feeling on the ease of understanding and speaking of the variety.
- **Marginal criteria**
  - Availability of variety speakers ready to cooperate in the language development work.
  - Good working conditions for the researchers.

- Friendship relations between the researchers and a speaker of the variety.
- Social status of the variety speakers.

To these criteria proposed by Sadembouo (1980), Emejulu and Nzang-Bié (1999) add the following aspects:

- National languages of wider communication.
- Decentralisation of decision of choice of language to regions.
- Dominant regional languages.
- Choice left to the communities.
- Native tongue of the capital city.
- Presence of leaders engaged in the standardisation process.
- Presence of a committee concerned with standardisation.
- Endangered languages (varieties). This criterion will serve in preserving these languages. De Vries (1991: 51) cites the case of Swedish in Finland, which has been protected by a language law since the early years of the 20th century. This Swedish example can be taken as a model for protecting endangered languages (varieties).
- The mutual comprehension rate between varieties.
- Accepting the standardisation of a second variety if the varieties of the language are structurally wide apart with minimal mutual comprehension.

Emejulu and Nzang-Bié (1999a) rightly surmise that the most important and more practical criterion is the acceptability of the language community. The above-mentioned criteria are necessary for selecting the dialect. The fact that one speech variety is chosen for the compilation of the dictionary can make it the standard of the language, which certainly will have some impact on the future development of the language.

8.4.4 The choice of the standard variety in the dictionary with the planned microstructural programme

A further obstacle faced by lexicographers is the tendency of regional varieties (cf. Zgusta, 1989: 71). One of the main problems of existing dictionaries in Fang is that they fail to adhere to the standard language. Among the varieties of Fang, no variety has yet been chosen as standard variety. These dictionaries may confuse and mislead the users and would be condemned by users and reviewers.

The planned dictionary must be regarded as the authority on spelling, grammar, meaning and usage of the language. It must record the standard variety, reflecting the norm, and must include items of another norm or other varieties of Fang, and the social and geographical areas where each is spoken must be marked accordingly. Many studies have been done regarding the regional variety of Fang, including those by Nzang-Bié (2004), Afane Otsaga (2004) and Ekwa Ebanéga (2001). These authors give the following reasons for choosing Fang-Ntumu as the standard variety model:

- Fang-Ntumu is the most vital variety because of its number of speakers.
- Fang-Ntumu is the most homogeneous variety; it is found in the province (Woleu-Ntem) where Fang is the only language.
- Fang-Ntumu in the province of Woleu-Ntem does not coexist with other foreign languages, as is the case with Fang-Ntumu, which is found in Oyem, while Fang-Ntumu, which is spoken in Bitam, coexists with Haussa, a foreign language spoken in Cameroon.
- Fang-Ntumu plays an important economic, cultural and social role in the province of Woleu-Ntem. The main activities in this province take place in Oyem and Bitam, which are original regions of Fang-Ntumu. A lot of people from the other parts of this province and from neighbouring countries (Cameroon and Equatorial Guinea) go there to work, study and

do business. Fang-Ntumu is the language of communication between members of the Fang population in this part of Gabon.

- Of all the varieties of Fang, works published in Fang-Ntumu are more accessible to people today. Most of the works in the other varieties are not readily available in Gabon. For instance, dictionaries compiled in Fang-Atsi and Fang-Mekè cannot be found in any library in Gabon.
- Fang-Ntumu is the Fang variety used most in the audiovisual media (radio and television) in Gabon. Fang-Ntumu also is the first variety of Fang in which an entire movie has been made.

8.4.5 The positioning of variety variation in the dictionary

Once the standard language (Fang-Ntumu) and other varieties of Fang are known, the lexicographer(s) would have to pose the following question: how are these varieties of Fang going to be presented in the dictionary? The discussion of the positioning of variety variation in relation to the planned microstructural programme has been done in section 8.3.2.1.7 regarding the pronunciation and spelling variants.

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8.5. Orthographical data

Spelling, according to Gove (1961), is the art and technique of forming words by letters according to accepted usage as formulated by language planners. Catach (1989: 501) comments that, in spite of its importance and value, spelling is one of the data types most badly used or misused by users of dictionaries. The task of the lexicographer is very complex, especially with regard to spelling data, and this should be borne in mind during the compilation of the dictionary. Many sectors pose problems during this compilation, such as compound nouns, homonyms and polysemes. These problems on the macro- and microstructural level, according to Catach (1989: 507), not only lead to serious problems of comprehension of the information, but also to their mistreatment.

A dictionary whose objective it is to describe the standard dialect has to record the standard orthography of a lexical item where there are competing forms (Mdee, 1990). A lexicographer should therefore decide which form is considered standard and which is not. In this regard, a standard dictionary only has one mission: *to propagate the standard orthography.*

A dictionary is regarded as the authority on the spelling, grammar, meaning and usage of a language. It records the standard orthography of the norm and, if it includes items of another norm or other varieties of the same language, the social and geographical areas where each is spoken are marked accordingly. A dictionary shall command authority over its users if it convinces them that it is adhering to the standard. Otherwise it will lose credibility as an authoritative reference of the standard language.

The observation by Krum (1940: 3) regarding the orthography of Swahili that "the question of orthography of Swahili written in Roman characters is not yet definitely solved" is as valid today for Gabonese languages, and more precisely for Fang. As already stated, Fang is a language with regional varieties; these varieties result from geographical, historical and social factors. A variety of Fang affects all aspects of language, e.g. phonology, morphology, syntax and the lexicon. The matter of "varieties" is a tricky one, and the problem is worse when the language has not yet been standardised. With regard to the foregoing, this situation cannot be allowed to continue. Fang, for instance, should be standardised, even if the first dictionaries in Fang, compiled by explorers, missionaries and colonial administrators, prove this fact despite the efforts made by the experts of the Education Department to establish the spelling of Gabonese languages.

8.5.1 Writing systems in Fang

Fang, like most African languages, does not have a strong written tradition. In the past, culture, knowledge and languages were transmitted orally. By the beginning of nineteenth century, Roman script was introduced by European travellers and missionaries who

visited central Africa and started to learn Fang. They prepared Fang wordlists, conversation books, grammar books, teaching manuals and dictionaries.

8.5.3.2 Transcription of Fang in Roman characters

The first attempts to establish the orthography of Fang words were made by European visitors, explorers and visitors. It involved the transcription of Fang words in order to determine the Fang phonetic alphabet and establish spelling conventions for Fang words.

8.5.3.3 Early Fang wordlists in Roman script

	Martrou (1924)	Galley (1964)
(French)	(Fang)	(Fang)
Coeur	Nlẽm	NLEM
Maison	Nda	NDA
Enfant	Monœ	MON
Femme	Mfũm	MFUM

The Fang wordlist used by Martrou (1924) in the table above differs from this of Galley because the authors used the phonetic alphabets of their native language to establish the spelling of Fang words.

8.5.3.4 The writing system

8.5.3.4.1 The April 1999 system

From 8 to 10 April 1999, consultation sessions of experts were held in Gabon by the Department of Education and the national commission of UNESCO within the framework of establishing spelling for the Gabonese languages. During these sessions, the Gabonese people were advised to bear in mind the vowels and consonants given below:

Vowels

The experts proposed nine vowels: i, u̱, e, e̱, ə, a, o̱, o and u.

The length of these vowels is represented by the reduplication of the vowel.

Consonants

The experts retained monographs and diagraphs

Monographs:

b, c, d, d̲, f, g, h, j, k, l, m, n, n̲, p, r, s, t, v, w, y and z.

Diagraphs:

gh, jh, sh, vh, ny

Mid-nasal consonants and complexes with glides are spelled with the help of two or more letters.

The only criticism that can be made of the above proposition is the symbol *ə*. The question is: Which typographical structural marker the lexicographer(s) of the dictionary with the planned microstrural programme is going to use to aid or help fast and effective identification of all the lemmata? Will the words selected as lemmas in the dictionary with the planned microstructural programme be written with capital letters or a small letters? (For further discussion, please see the following section 8.5.3.4.2)

8.5.3.4.2 Nzang-Bié's system

Within the frame of the orthographic system, Nzang-Bié (2004) proposes 18 vowels in terms of the diagram below:

Small letter	Capital letter	Examples	
i	I	eki	"interdit"
ii	II	asii	"faire descendre"
e	E	ele	"arbre"
ee	EE	evee	"soif"
ɛ	ɛ	eyɛ	"lèvre"
ɛɛ	ɛɛ	ngɛɛ	"son épouse"

a	A	aba	"dépecer"
aa	AA	aay∂m	"il sait"
ə	ə	akə	"aller"
əə	əə	akəə	"donner"
u	u	olu	"Là-bas"
uu	uu	luugə	"incline"
o	O	okən	"couteau"
oo	OO	akoo	"contaminer"
ɔ	ɔ	ebɔn	"amant"
ɔɔ	ɔɔ	atɔɔ	"il est assis"
u	U	asum	"commencer"
uu	UU	nsuu	"poison"

Consonants

Small letters	**Capital letters**	**Examples**	
b	B	bot	"hommes"
d	D	aduk	"tromper"
g	G	ngɛɛ	"sa femme"
t	T	tan	"prix"
k	K	ekob	"peau"
m	M	etam	"puits"
n	N	enam	"bras"
ŋ	ŋ	aŋu	"bouche"
kp	KP	akpoo	"faire tomber"
f	F	fam	"homme"
s	S	asoŋ	"dent"
v	V	avak	"se réjouir"
z	Z	zalaŋ	"tonnerre"

l	L	alat	"coller"
r	R	kara	"crabe"
y	Y	oyəm	"langue"
w	W	awu	"mort"

With regard to Nzang-Bié's system, the only question one could ask is: how are the lexicographer(s) going to write the source language item? Are they going to use small or capital letters? If one takes the system proposed by Nzang-Bié, the only criticism that can be made relates to the symbols ə, ŋ, ɔ which are identical, whether written as small or as capital letters. This can be a problem for the lexicographer(s) of the dictionary with the planned microstructural programme, who have to write the words selected as lemmas either with small letters or with capital letters.

Considering that vowels and consonants are not identical when they are written as small or capital letters in the system proposed by Nzang-Bié, words selected as lemmas will be written with a small letter in the dictionary with the planned microstructural programme.

8.5.3.4.3 Spelling data in the dictionary with the planned microstructural programme

It can be suggested that the need and demand for spelling data would also be great in the dictionary with the planned microstructural programme. The results of the questionnaire show that 58% of the respondents consult a dictionary to look up spelling data. It could be postulated that the respondents are aware of the importance of spelling data in the dictionary.

As far as the alphabet is concerned, the model for the proposed microstructural programme will be the April 1999 alphabet because it is the one that involved so many experts (linguists, sociologists, anthropologists, etc.). In this regard, it deserves consideration and also has a chance to be considered by the entire Gabonese community. Furthermore, ongoing research uses the April 1999 alphabet, including that done by

Nzang-Bié (2004) for *la codification de l'orthographe Fang*, which has not yet been published. This also needs to be taken into consideration.

The model for the proposed microstructural programme will be explained in the front matter of the dictionary. All the vowels, consonants, digraphs and monographs will also be presented and discussed in this functional part of the dictionary.

nlo [nló] < *tu . n. cl. 9/10. pl. minlo.

- *ekila nyol oyo ebele asu ye melo*, partie supérieure du corps comprenant le visage et les oreilles.

∘ *Okon nlo*, maladie de la tête

The article of the lemma **nlo** (in bold) shows that the source language item, i.e. the lemma **nlo**, is written in small letters.

It is true that the Gabonese community in general, and the Fang in particular, is not very familiar with dictionary-using skills. The use of spelling data would have to be planned in accordance with the needs and reference skills of the target users of the planned dictionary. Consequently, the lexicographer(s) of the dictionary with the planned microstructural programme have to use such *spelling* data very carefully.

8.6 Data on grammar

Before proceeding with this section, it is important that a clear definition of *grammar* and what it involves be presented in this study. Many meanings have been applied to the term *grammar*. Even in linguistics, where a more specialised use of this term is employed, there still is variation in its precise usage. Some linguists use *grammar* to refer to all the structural aspects of language, including not only morphological and

syntactic but also phonological rules, while others apply it only to the set of syntactic rules that are believed to generate grammatical sentences.

According to McCorduck (1993), *grammar* can be defined as the morphological and syntactical attributes of individual words or classes of words, i.e. those not specifically semantic features that determine the range of constructions in which these words may occur in actual usage. For instance, dictionaries as a rule focus on actual usage in present-day language. In this work, the term is used in a more intermediate sense.

The incorporation of grammatical data has long been considered as a desirable feature of all dictionaries; for this reason, Henry Sweet (cited in Herbst 1984: 1) comments:

> *A thoroughly useful dictionary [...] ought to give full information about those grammatical constructions, which characterized individual words and cannot be deduced with certainty and ease from a simple grammatical rule. They thus ought to give full information about the prepositions by which verbs are connected with the words they govern.*

It goes without saying that dictionaries have for a long time included grammatical data in their articles for lemmas in order to assist users not only in comprehension (or decoding), but also in production (or encoding):

> *Much grammatical knowledge is necessary for translation. In recent years, it has also been shown that the need for grammatical information in dictionaries, including bilingual dictionaries, is greater than one might immediately assume* (Kromann *et al.*, 1991: 2722-2723)

Furthermore, grammatical data, like semantic data, are one of the most important components of the dictionary. Although the treatment of the different types of grammatical data presents a wide spectrum of difficulties and problems, lexicographers endeavour to present information categories and the users of dictionaries are often in

search of solutions to grammatical problems (Hartmann & James, 1998: 64). The WAT (2001: 34) states that grammatical data can be presented in several places in the dictionary. Grammatical data usually features as microstructural elements in the articles of lemmas. Some dictionaries present grammatical data in a separate section in the front (Webster) or the back (*Nasionale Woordeboek*). Grammatical data comprise syntactical and morphological data. Syntactical data will be treated under the section on morphological data because some grammatical data play both morphological and syntactical roles.

8.6.1 Data on morphology

It is a well-attested fact that items giving data on morphology can be regarded as forming part of the microstructure of a dictionary. An important decision that the lexicographer must take in pursuit of user-friendliness is how to present morphological data well. According to Mavoungou (2003: 55), the area where the lexicographer will have considerable problems incorporating the user aspect when compiling a dictionary is the presentation of morphological data. At this stage, according to Tarp (2002a: 75), some lexicographers fail to provide the user with lexicographic items in terms of gender, irregular inflection, syntactic properties, collocations, idioms, proverbs, etc.

The 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. In this regard, Lombard (1990: 150) adds that:

> *The compiler [...] has a big task regarding the presentation of data on morphology, in that it must be dealt with comprehensively, as morphology is truly relevant to the user/learner because it provides excellent insight into the structure of linguistic elements.*

8.6.1.1 Pre-prefixes

There are a few Bantu languages that have the pre-prefix phenomenon (also known as *augment*). Fang, for example, can be regarded as a language that has the pre-prefix phenomenon. In such languages, the pre-prefix manifests itself in nominal and verbal structures. The pre-prefix element is always a vowel, and varies due to vowel harmony. The examples below illustrate pre-prefixes found in Fang nouns (cf. Ondo Mébiame, 1992)

The pre-prefix phenomenon in Fang:

émor	édzom
émos	étsir
édzis	évom

With regard to the above-mentioned example, the question is: should nouns be entered by initial vowel prefixes (pre-prefixes)? If the lexicographer decides to enter nouns by pre-prefixes, all nouns carrying pre-prefixes in Fang would be listed under the vowel letters (e). This method has been used by Turvey (1977) in the *Kwanyama-English Dictionary*. All nouns are found under the letters 'O' and 'E'.

In order to solve this imbalance, other Bantu lexicographers decided to drop the initial vowel prefixes (pre-prefixes) and list the nouns by the first letter of the singular class prefix (cf. Benson, 1964). Therefore, in the above-mentioned example, the nouns could be entered as: *mor* (man), *mos* (day), *dzis* (eye), *vom* (place), *dzom* (thing) and *tsir* (animal). Although this method complies well with the alphabetical method of listing dictionary entries, it loses the pre-prefix data. In order to recover the pre-prefix data, *The Luganda English Dictionary* (Murphy, 1972) enters the initial vowel (pre-prefix) immediately after the lemma as part of the comment on form.

8.6.1.1.1 Pre-prefixes in the dictionary with the planned microstructural programme

Given the fact that two types of pre-prefixes have been distinguished in Fang, the treatment of pre-prefixes at the microstructural level will be done according to the primary and secondary classification of Gouws (please see the following discussion in the section 8.6.1.5. regarding the *noun*). This will lead to the identification of *prpréf.* (= Pré-préfixe) as primary classification and *prpréf. nom.* (= pré-préfixe nominal) and *pré-préf.verb*. (= pré-préfixe verbal) as secondary classification.

The lexicographers of the dictionary with the planned microstructural programme should preferably adopt the strategy of left-expanded microstructure with regard to the treatment of pre-prefixes at the microstructural level. For example, it would be problematic to include all the nouns carrying pre-prefixes in the single article stretch introduced by "e". The lexicographers of the planned dictionary should better ignore the pre-prefixes and enter the nouns by the first letter of the singular class prefix.

8.6.1.2 Prefixes

In most existing dictionaries in Gabonese languages, prefixes generally show an inconsistent lemmatization. Müller (1989: 867) points out that in German dictionaries one can note the existence of more frequent lemmatization of prefixes. The same applies to the proposed dictionary where lexicographic items as prefixes or class number should be included as lemmas and it should be based on sound linguistic principles.

8.6.1.2.1 Prefixes in the dictionary with the planned microstructural programme

Given the fact that three types of prefixes have been distinguished in Fang (for a discussion, see the table in Chapter 5 showing the types of prefixes found in Fang), the treatment of prefixes at the microstructural level will be done according to the

primary and secondary classification of Gouws (please see the discussion in section 8.6.1.5. regarding the *noun*). This will lead to the identification of *préf* (= Préfixe) as primary classification and *préf. nom.* (= préfixe nominal), *préf. pronom.* (préfixe pronominal) and *préf. verb.* (= préfixe verbal) as the secondary classification. The application of the left-expanded microstructure with regard to the treatment of prefixes has already been discussed in Chapter 6, section 6.3.1.1.

8.6.1.3 Noun classes

In the *Dictionnaire Fang-Français/Français-Fang*, there are some inconsistencies with regard to the number of noun classes identified by Galley (1964: 563). According to him, there are seven noun classes in Fang. In *Lexique FAN- Français*, Martrou distinguishes six noun classes. This is not supported by all the relevant research publications on Fang, e.g. Nzang-Bié (2004: 2) and Ondo Mébiame (1992), who distinguish 17 classes. According to Nzang-Bié (2004: 2), the most regular and productive classes are the classes 1 to 10. The classes are grouped in pairs representing the singular/plural contrasts. These pairs are termed genders. Classes 1, 2, 3, 4, 5, 7 and 9 are the singular classes. Classes 2, 4, 6, 8 and 10 are the plural classes (for a discussion, see Chapter 5 with regard to the table showing noun classes in Fang drawn from Ondo Mébiame (1992).

8.6.1.3.1 Noun classes in the dictionary with the planned microstructural programme

In the planned dictionary with the microstructural programme, noun classes will be grouped in pairs representing the singular/plural contrast. The following modified example of the article of the lemma **ETABLE** shows how the noun classes will be presented in the planned microstructural programme:

e.ta.ble [étàblé] <Fr.table. n.s. cl. 7/8 . pl. bitable

- *edzom batob ayo,* quelque chose sur la quelle on peut s'asseoir

∘ *ato etable ayo,* il ou elle est assis sur une table

In the article of the lemma **etable** after the item giving the syllable division, the item giving the pronunciation, items giving etymological data, the item giving the part of speech *noun*, the items giving the noun classes are provided. The abbreviated form *cl.* for the word "class" and the use of the slash " / ", which separates the two noun classes (7/8), have been considered for the presentation of items giving the noun classes.

Most lexicographers prefer the singular form of the words when they select them as lemmas. With regard to the dictionary with the planned microstructural programme, the singular form has been used for the presentation of the lemma and the plural form of the word is provided within the article of the dictionary. Consider the following modified example of the article of the lemma **ETABLE** showing how the plural form of the word should be presented in the dictionary with the planned microstructural programme:

e.ta.ble [étàblé] <Fr.table. n.s. cl. 7/8 pl. bitable

- *edzom batob ayo,* quelque chose sur la quelle on peut s'asseoir

∘ *ato etable ayo,* il ou elle est assis sur une table

In the article of the lemma **etable**, after the item giving the syllable division, the item giving the pronunciation, items giving etymological data, the item giving the part of speech *noun*, the items

giving the noun classes, the item giving the plural of the lemma is provided. The abbreviated form *pl.* of the word "plural" has been chosen for the identification of the item giving the plural form of the lemma.

8.6.1.4 Suffixes

The term *suffix* denotes a bound form, which can be added to the end of a root or stem. The suffix manifests itself in nominal and verbal structures. In the *Dictionnaire Fang-Français/Français-Fang*, the suffix receives lemma status. Consider the following example:

Fang suffix: the case of ***a***

> **A** Suffixe de formes verbales: 1. Forme *a* correspondant à notre passé indéfini: *me wula,* je suis parti (vb *wule*). - 2. Forme verbale qui imite notre participe passé: *nlôma,* envoyé (vb *lôm*). – 3. vb réciproque: *nyegha,* s'aimer (vb *nyeghe*). – 4. Impératif plur.: *kogba,* parlez (vb kobe). – 5. En comptant *mebola mebè,* deux auscultations (vb *bôle*).

This example shows that ***a*** is the suffix, which is added to the root or stem *wule* (to go), *lôm* (to send) and *kobe* (to talk). The suffix ***a*** is used to express the past, reciprocal and imperative forms. Unfortunately, the compiler does not give the lemma status to the suffix ***ba***, which is considered as suffix in the back matter of the dictionary.

Ondo Mébiame (1992) identifies nominal and verbal suffixes:

Nominal suffixes

a e.g. *dzoma* (anybody, somebody); *voma* (imprecise place) etc.

a e.g. *mor**a*** (big); *mbé**a*** (naughty) etc.

an e.g. *ndom**an*** (young man) etc.

Verbal suffixes

ə e.g. *bɔ̃kə* (to bring) etc.

a e.g. *eburug**a*** (cover, lid); *alug**a*** (honour etc.

i e.g. *adzig**i*** (to make something burn)

o e.g. *awog**o*** (to be listened, sensitive, perceptible)

u e.g. *abugu* (to break)

an e.g. *alug**an*** (to get married)

8.6.1.4.1 Suffixes in the dictionary with the planned microstructural programme

Given the fact that two types of suffixes have been distinguished in Fang, the treatment of suffixes on the microstructural level will be done according to the primary and secondary classification of Gouws (see the discussion in section 8.6.1.5. regarding *noun*). This will lead to the identification of *suf.* (= suffixe) as primary classification and *suf. nom.* (= suffixe nominal) and *suf.verb.* (= suffixe verbal) as secondary classification.

8.6.1.5 Nouns

In Fang, most nouns are characterised by the presence of one prefix, indicating the singular or plural form. Nouns belong to a *noun class*, which Indo-European speakers think of as something similar to a grammatical gender, but with prefixes instead of suffixes. Whereas Indo-European genders are "masculine", "feminine", etc., Bantu noun classes have no relation to sex. Noun classes are indicated by prefixes, which are added to a noun stem. With regard to the presentation of noun classes, see Chapter 5.

As far as existing dictionaries in Fang are concerned, for example *Lexique FAN-Français*, some examples contain plural forms, while others do not mention their existence. See, for example, **Abãm** in *Lexique FAN- Français*:

> **Abãm**. Urine (B). *enum abãm*, sentir mauvais[...] *Abãm nzalãn*, coup de tonnerre. *Abãm nzali*, coup de fusil, *Abãm nzoc*, barrissement d'éléphant.

In the treatment of the lemma *Abãm*, examples like *enum abam* (to smell bad), *Abãm nzalãn* (peal of thunder), *Abãm nzali* (gunshot) and *Abãm nzoc* (trumpeting of elephant) do not contain plural forms. The fact that the plural form does not exist can confuse the user, because the user expects to see both the singular and plural form of the lemma **Abãm**. This can be avoided by characterising the noun concerned as Sing (singular) or Pl (plural), a semantic distinction that tells us if the noun can take a plural or not.

As regards nouns in Fang, Ondo Mébiame (1992) says that we must make a distinction between simple nouns and compound nouns. Simple nouns can be preceded by one or numerous prefixes, e.g. *mvam* (goodness), and compound nouns are formed by adding two or more words that are used together, e.g. *ekar minsɔ̃n* (confession).

8.6.1.5.1 The indication and positioning of nouns in the dictionary with the planned microstructural programme

To indicate and position the part of speech on the microstructural level, the lexicographer(s) has two options, i.e. he or she could use the unabbreviated item giving the part of speech, e.g. *noun*, *verb*, *adjective*, etc., or the abbreviated item, e.g. *n* for *noun*, *v* for *verb*, and *adj* for *adjective*. Al-Kasimi (1977: 48) clearly states that the positioning of the item giving the part of speech is frequently not understandable enough. He continues that most dictionaries use the label *noun*, for instance, but fail

to indicate the subcategories of this class. For example, in Fang, Ondo Mébiame (1992) distinguishes simple nouns and compound nouns. This, in turn, leads Gouws (1989: 23) to distinguish two types of part of speech indication, i.e. a primary and a secondary lexical classification. According to him, a secondary lexical classification is a subclassification addressed at the primary classification, which should be read in unison with it. He agrees with Al-Kasimi by stating that the application of only a primary lexical classification leads, in the case of many lemmas, to a too broad classification.

With regard to the dictionary with the planned microstructural programme, I will follow Gouws's footsteps and propose the indication of two types of part of speech, i.e. a primary and a secondary lexical classification. Abbreviations, such as *n* for *noun*, will be considered as an item giving the primary lexical classification. The indication of the secondary lexical classifications for *noun* (*nom simple= n.s* and *nom dérivé= n.dér.*) will be abbreviated as well. The lexicographer(s) of the planned dictionary must explain abbreviations for both primary and secondary lexical classifications in the front matter. The following section will focus on the adjective in Fang.

8.6.1.6 Adjectives

From a morphological point of view, most adjectives in Fang are characterised by the presence of the prefixes indicating the singular or the plural form (cf. Ondo Mébiame, 1992: 407). From a syntactical point of view, the phenomenon of agreement between adjectives and nouns has been abolished. Most nouns are characterised by the presence of a prefix, which indicates the singular or plural noun. Adjectives are ordinarily placed after the nouns they qualify and agree with the nouns. Consider the treatment of the lemma **NTÔL** in the *Dictionnaire Fang-Français/Français-Fang*:

NTÔL (h) adj. Ancien, vieux [...] Nten ntôl, minten mitôl, le vieux livre, les vieux livres [...]

As far as the treatment of the adjective **NTÔL** (old, ancient) in this dictionary, and with reference to the examples given by the compiler, i.e. *Nten ntôl* (old book) and *minten mitôl* (old books), one can note that the adjective **NTÔL** is placed after the noun (*Nten*) it qualifies and agrees with the noun, i.e. it agrees with the noun when it is singular or plural.

In the *Dictionnaire Fang-Français/Français-Fang*, instead of adjectives, which are characterised by the presence of prefixes, one can distinguish other types of adjectives, namely numeral adjectives, e.g. *bè* (two), and ordinal adjectives, e.g. *ôsua* (first). According to Ondo Mébiame (1992: 512), these types of adjectives use prefixes only in the plural. In addition, one can also distinguish demonstrative adjectives, e.g. *nyi* (this), possessive adjectives, e.g. *wam* (me), indefinite adjectives, e.g. *mbokh* (other), and interrogative adjectives, e.g. *mbé* (which, what). Contrary to Galley, Ondo Mebiame (1992: 419) uses the term *referent*, which is similar to *pronoun* in most descriptive works in Bantu languages. According to him, the categories of referents include demonstratives, interrogatives, numerals, indefinites and possessives. The question is which of the different terminologies used by Galley and Ondo Mébiame would be suitable for the target users of the planned dictionary.

8.6.1.6.1 Adjectives in the dictionary with the planned microstructural programme

With regard to the dictionary with the planned microstructural programme, I will propose to indicate two types of part of speech, i.e. a primary and a secondary lexical classification. Abbreviations such as *adj.* for *adjective* will be considered as an item giving the primary lexical classification. The indications of secondary lexical classifications for *adjective,* e.g. *adjectifs demonstratifs* (*adj.demonst.*), *adjectifs possessifs* (*adj.poss.*), *adjectifs numerals* (*adj.num.*), and *adjectifs indéfinis* (*adj.ind.*) will also be abbreviated. The lexicographer(s) of the planned dictionary must explain the abbreviations for both the primary and secondary lexical classifications in the front matter.

8.6.1.7 Pronouns

In Fang, most pronouns are characterised by the presence of one prefix that indicates the singular or plural form. In the *Dictionnaire Fang-Français/Français-Fang*, one can distinguish personal pronouns, e.g. *wo* (him), *a* (he/she); reflexive pronouns, e.g. *emyen* (himself, itself); and neuter pronouns or connectives, which connect the verbs to the subjects, e.g. *môr a kobe* (the man speaks). Here the connective is *a*, which connects the verb *kobe* (to speak) to the subject *môr* (man). With reference to Ondo Mébiame (1992), the "pronouns" belong to the category of "referent" (see the discussion that follows).

8.6.1.7.1 The indication and positioning of pronouns in the dictionary with the planned microstructural programme

With regard to the dictionary with the planned microstructural programme, I will propose to indicate two types of part of speech, i.e. a primary and a secondary lexical classification. Abbreviations such as *pn* for *pronoun* will be considered as an item giving the primary lexical classification. The indications of secondary lexical classifications for *pronoun* will be abbreviated as well. The lexicographer(s) of the dictionary with the planned microstructural programme must explain abbreviations for both the primary and secondary lexical classifications in the front matter.

8.6.1.8 Adverbs

According to Galley (1964), the adverbs in Fang play a small part in the sentence. In the *Dictionnaire Fang-Français/Français-Fang*, the author distinguishes five types of adverbs, namely 1) adverbs of place, e.g. *vé* (where); 2) adverbs of time, e.g. *ému* (today); 3) adverbs of quantity, e.g. *abî* (a lot); 4) adverbs of manner or comparison, e.g. *kî* (aussi); and 5) adverbs of affirmation, doubt and negation, e.g. *foghe* (certainly), *ya* (yes), *koko* (no) and *ékôkh énzin* (maybe). A more comprehensive account of adverbs in the *Dictionnaire Fang-Français/Français-Fang* can be found in

the back matter of the dictionary. Contrary to the *Dictionnaire Fang-Français/Français-Fang;* the *Lexique FAN-Français* does not provide the users with the different types of adverbs. The users expect to get more information regarding the use of adverbs. Furthermore, Ondo Mebiame (1992) does not distinguish the different types of adverbs, but draws up an inventory of adverbs. For more detail on these points, see Ondo Mébiame (1992).

8.6.1.8.1 Adverbs in the dictionary with the planned microstructural programme

In the dictionary with the planned microstructural programme, I will also propose the indication of two types of part of speech, i.e. a primary and a secondary lexical classification. Abbreviations such as *adv* for *adverb* will be considered as an item giving the primary lexical classification. The abbreviations for secondary lexical classifications for *adverb*, e.g. *adverbe de manière* (*adv. de manière*), *adverbe de lieu* (adv. de lieu) and *adverbe de temps* (*adv. de temps*) will be abbreviated as well. The lexicographer(s) of the dictionary with the planned microstructural programme must explain the abbreviations for both the primary and secondary lexical classifications in the front matter.

8.6.1.9 Conjunctions

Within this category of words, the *Dictionary Fang-Français/Français-Fang* includes conjunctions like *ye*, *ba* and *ve* (and). Other conjunctions are *toghe* (because), *aboñ* (since, as), etc. The *Lexique FAN-Français* includes conjunctions like *ye* (and) and *togo* (because). Ondo Mébiame (1992: 711) makes an inventory of conjunctions, e.g. *amu* (because) and *avə* (since), *ngə* (if). Unfortunately, these dictionaries do not provide the users with the different types of conjunctions that are distinguished in Fang. For example, within the category of coordinating conjunctions, one can find *ye* (and), *ñgî* (but, or), etc., and within the category of subordinating conjunctions, one can find *avə*(since), *amu* (because), etc.

8.6.1.9.1 The conjunctions in the dictionary with the planned microstructural programme

With regard to the dictionary with the planned microstructural programme, I will also propose to indicate two types of part of speech, i.e. a primary and a secondary lexical classification. Abbreviations such as *conj* for *conjunction* will be considered as items giving the primary lexical classification. The indications of secondary lexical classifications for *conjunction,* e.g. *conjonction de subordination* (*conj. de sub*) and *conjonction de coordination* (*conj. de coord.)* will also be abbreviated. The lexicographer(s) of the dictionary with the planned microstructural programme should explain abbreviations for both the primary and secondary lexical classifications in the front matter.

8.6.1.10 Prepositions

The *Dictionary Fang-Français/Français-Fang* includes prepositions such as *e*, *a* (to, for), *ebe* (to) and *ke* (without). The *Lexique FAN-Français* also encompasses the prepositions, namely *a* (to, dans), *eboe* (to) and *ane* (since). Unfortunately, these dictionaries do not provide the users with the different types of prepositions that can be distinguished in Fang, for example, those within the category of 1) place, e.g. *a* (to), and 2) time, e.g. *ane* (since).

8.6.1.10.1 The prepositions in the dictionary with the planned microstructural programme

With regard to the dictionary with the planned microstructural programme, I will also propose to indicate two types of part of speech, i.e. a primary and a secondary lexical classification. Abbreviations such as *prep* for *preposition* will be considered as items giving the primary lexical classification. The indication of secondary lexical classifications for *prepositions, e.g. préposition de lieu* (*prép. de lieu*) and *préposition de temps* (*prep. de temps*) will also be abbreviated. The lexicographer(s) of the

dictionary with the planned microstructural programme must explain the abbreviations for both the primary and secondary lexical classifications in the front matter.

8.6.1.11 Verbs

In Bantu languages in general and Fang in particular, the basic natural forms of the verbs are the infinitive forms. These forms are formed by prefixing an infinitive marker to the verb stems. Lexicographers opt for a variety of strategies, such as left-expanded microstructures. In 6.3.2.1.1 a discussion regarding the left-expanded microstructure and its application in the treatment of verbs in Fang was presented.

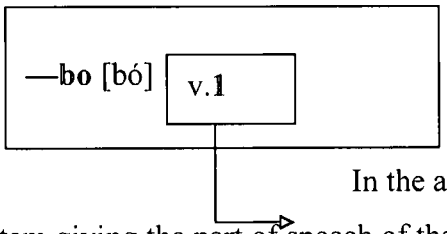
Different forms of the verbs can be regarded as microstructural data (Rey-Debove, 1971: 159). However, lexicographers often do not give all the forms of a verb, but the problem often lies in the competence of the user. The lexicographer would like to give all the data of the system, but this can make the dictionary less attractive. Dictionaries like PR (*Petit Robert*) and GR (*Grand Robert*) do not provide all the information to the user. This approach may be linguistically sound and of great educational value, but it is doubtful whether it can be consistently applied in the dictionary with the planned microstructural programme. The lexicographers should provide the users with all the forms of the verbs. This will help mother-tongue speakers of Fang to improve their knowledge of Fang; it will also be an aid to non-mother-tongue speakers to master the language at the level of mother-tongue speakers.

8.6.1.11.1 Indication and positioning of verbs in the dictionary with the planned microstructural programme

As far as the dictionary with the planned microstructural programme is concerned, I propose that the lexicographer(s) must provide the users with lists of irregular and regular conjugations, and categories of conjugation (statement, aspect, tense, mood,

etc.) in the front matter. The lexicographer(s) must also provide the users with all the conjugated forms in all tenses and modes (for a discussion of conjugated forms of verbs in Fang, see Addendum 6). This must be explained in the front matter of the dictionary with the planned microstructural programme. In addition, these lists of conjugations placed in the front matter will support the conjugated forms of the verbs in Fang in the central list of the dictionary.

On the microstructural level, after the item giving the part of speech *verb,* the lexicographer(s) will provide the user with the markers (1, 2...) for the different forms of the verbs chosen as the model of treatment presented in the front matter of the dictionary. These markers will be in bold in order to differentiate them from other markers indicating the different senses of the lemma, as in the example below.



In the article of the treatment of the lemma ***–bo***, after, the item giving the part of speech of the verb (v), the structural indicator (**1**) is given. This marker indicates the type number of the Fang verbs in the back matter of the dictionary. For example, the marker (**1**) represents the different forms of the verb *–bo* "to do" that the target user of the planned dictionary will find in the back matter. For a discussion of the different forms of the verb *-bo,* see Addendum 6.

8.6.1.2. Items giving the part of speech in the dictionary with the planned microstructural programme

The following example is a modified article drawn from *Dictionnaire Fang-Français/Français-Fang* illustrating how the presentation of morphological data could be undertaken in the dictionary with the planned microstructural programme. The presentation of *noun* as the type of lemma to obtain the morphological data in the dictionary with the planned microstructural programme is used.

e.ta.ble [étàblé] <Fr.table. | n.s. cl. 7/8. pl. bitable

□ *edzom batob ayo,* quelque chose sur la quelle on peut s'asseoir

• *ato etable ayo,* il ou elle est assis sur une table

After the item giving the syllable division, the item representing pronunciation data, the item representing etymological data (for a discussion of etymological data see Chapter 9) and the items representing part of speech are provided. With regard to the dictionary with the planned microstructural programme, I will follow Gouws's footsteps and propose to indicate two types of part of speech, i.e. a primary and a secondary lexical classification. Abbreviations such as *n* for *noun*, *prpréf* for *pré-préfixe*, *préf* for *préfixe*, *suf* for *suffixe*, *ad.* for *adjective*, *adv* for *adverb*, *prep* for *preposition* and *conj* for *conjunction* will be considered as items giving the primary lexical classification. The secondary lexical classifications for *noun* (*nom simple= n.s,* and *nom dérivé= n.dér.*), *pre-prefix* (*pré-préfixe nominal = prpréf.nom. pré-préfixe verbal= prpréf. verb.*) *préfixe* (*préfixe nominal = préf. nom.; préfixe pronominal= préf. pronom.* and *préfixe verbal= préf.verb.*), suffixe (*suffixe nominal=suf.nom.* and *suffixe verbal= suf.verb*) etc. will also be abbreviated. The lexicographer(s) of the dictionary with the planned microstructural programme must explain the abbreviations for both the primary and secondary lexical classifications in the front matter.

After the placement of the item giving the part of speech, the noun classes are provided. The abbreviated form *cl.* for the word "class" and the use of the slash " / ", which separates the two noun classes, will be used in the planned microstructural programme.

The lexicographer(s) of the dictionary with the planned microstructural programme could include in the front matter text a mini-grammar explaining to the user the entire scheme of the part of speech in Fang. Cross-references from the article to the mini-

grammar should also be entered, turning the mini-grammar into an integrated outer text.

8.7. Abbreviations for the word classes

Abbreviations can be regarded as microstructural data. As microstructural elements, they can be used to mark the part of speech, e.g. markers like n. (nom), v. (verbe), adj. (adjectif), adv. (adverbe), v. trans (verbe transitif), v. intransitif), dimin. (diminutif), fém. (féminin), masc. (masculin), n. fém. (nom féminin), n. masc. (nom masculin), n. masc. plur. (nom masculin pluriel), n. plur. (nom pluriel), n. pr. (nom propre), interj. (interjection), pron. (pronom), pron. pers. (pronon personnel), prép (préposition), prono. (pronominal), prov. (proverb), sing. (singulier), plur. (pluriel), loc. (locution), loc. v. (locution verbale), loc. conj. (locution conjonctive), loc. pré. (locution prépositive), loc. exclam. (locution exclamative), non-compt. (non-comptable), num. (numéral), conj. (conjonction), démons. (démonstratif), dériv. (dérivé), exclam. (exclamation), impers. (impersonnel), infin. (infinitif), interrog. (interrogatif), poss. (possessif), prop. (proposition), inv. (invariable), onomat. (onomatopée), ANT (antonyme), HOM (homonyme) and syn. (synonyme).

However, lexicographers constantly face the choice between giving the part of speech marker in an abbreviated form or giving it in an unabbreviated form. With regard to existing dictionaries, some markers indicate abbreviated forms, as in the following table from the *Lexique FAN- Français*:

Part of speech labels	Significations
Adj.	Adjectif, adjectivement
Adj.	V. adjectif verbal
Adv.	Adverbe, adverbialement
Cl.I.	Classe I, etc.
V. caus.	Verbe causatif
Fréq.	Fréquentatif
F.a.	Forme active

F.l.	Forme longue
F.b.	Forme brève
F.n.	Forme neutre
Imp.	Impératif
Ind.	Indéfini
Int.	Interrogatif
Irr.	Irrégulier
(Néol.)	Néologisme
P. pas.	Passif
Part.	Participe
Pl.	Pluriel
Pr.	Proverbe
Pron.	Pronom
Pron. dét.	Pronom déterminatif
Pron. obj.	Pronom objectif
Pron. subj.	Pronom subjectif
S.	Substantif
S.v.	Substantif verbal
Sing.	Singulier
Prép.	Préposition
V.Réd.	Réduplicatif.

Table 8.4: Part of speech labels in *Lexique FAN- Français.*

With regard to the above-mentioned table, there are minor inconsistencies (the French marker *Adj.* has three significations, namely *adjectif, adjectivement, adjectif verbal* and the part of speech label *Adv* has two variants. Some part of speech labels are also lacking, such as *n* (nom) in this dictionary. The main objection with regard to this dictionary is the absence of labels.

In the *Dictionnaire Fang-Français/Français-Fang,* objections can be made with regard

to the absence of parts of the abbreviations, as well as the lack of explanations in the user's guidelines.

8.7.1 Abbreviations for the word classes in the dictionary with the planned microstructural programme

Given the fact that most Gabonese people in general, and the Fang community in particular, are familiar with the French abbreviations, there would be no problems for the lexicographers of the dictionary with the planned microstructural programme to give the part of speech marker in abbreviated form.

8.8 Concluding remarks

It can be concluded that spelling data, data on pronunciation and morphological data can be regarded as microstructural data. Like other types of microstructural data, i.e. items giving the paraphrase of meaning/equivalent, etc., they fill an important place in the article of a dictionary.

Shortcomings relating to existing dictionaries in Fang include the absence of data that are part of the comment on form. The lexicographers of the dictionary with the planned microstructural programme will include spelling data, data on pronunciation and morphological data by means of the items giving the part of speech, such as noun (*n.*), verb (*v.*), class (*cl.*) and plural (*pl.*). These data could be used in either monolingual or bilingual dictionaries. The lexicographers of the dictionary with the planned microstructural programme should clearly explain the phonetic, orthographic and morphological systems in the front matter.

Dealing with variations in language is also a microstructural issue, and as far as the planned dictionary is concerned, it has been said that Fang is a language with several varieties, i.e. Fang-Ntumu, Fang-Nzaman, Fang-Okak, Fang-Mvaï, Fang-Mekè and Fang-Atsi. Fang-Ntumu has been chosen as the standard variety; it is the most

homogeneous variety that is found in the province (Woleu-Ntem) where Fang is the only language. It also has been said that this microstructural issue has an implication for data to be included in the dictionary, namely data on spelling and pronunciation.

Chapter 9: Comment on semantics

9.1 Introduction

It has already been stated in Chapter 8 that the article structure can be divided into two major article components, i.e. the comment on form and the comment on semantics. In this section, attention will paid to the comment on semantics, as it is the search area accommodating those data types that reflect on the semantic and pragmatic features of the lexical item represented by the lemma (Gouws & Prinsloo, 2005a: 125). The nature and extent of the comment on semantics are also determined by the type of dictionary, the dictionary user and the situations of usage. In the present discussion, the focus will be on semantic and pragmatic data.

9.2 Semantic data

The lexicographic treatment in general language dictionaries encompasses the presentation of semantic data. According to Gouws (2001b: 4), semantic data is the data type most commonly needed by the average dictionary user; it is often regarded as the most dominant microstructural category in general language dictionaries. As a result, this data category has a vital place in the articles of general language dictionaries. Gouws (2001b: 5) asserts that, as a central entry in the dictionary article, semantic data has to be presented in a way that promotes an interaction with the other microstructural entries.

The presentation of this category can be done in various ways, depending on the typological nature of the specific dictionary, meaning that a data category can even determine the structure of the dictionary. The fact that the nature, extent and presentation of semantic data can be decisive for the typological nature of a dictionary, means that the transfer of semantic data in any typological category will also have an influence on the position of and the way in which this data is presented in the dictionary.

9.2.1 Context and co-text entries

The context of a given word, according to Gouws and Prinsloo (2005a), can be regarded as the pragmatic environment in which it is typically used. They illustrate quite clearly that the context is usually indicated by means of glosses (for a discussion regarding "glosses", see section 9.6), i.e. a single word indicating something about the usage of the word, or by means of lexicographical labels. The co-text, according to them, refers to the syntactic environment in which a word is typically used. It is always presented by means of illustrative example material, such as collocations, phrases and sentences (for a discussion regarding illustrative examples and collocations, see section 9.9). They conclude that the context and the co-text entries play an important role in both monolingual and bilingual dictionaries.

Consider the following examples:

3. actif [aktif] n.m. **1**. Ce que l'on possède (terme financier) : L'actif de la société se compose d'immeubles, de matériel et de marchandises (contr. : PASSIF).– **2**. A son actif, au nombre de ses succès, de ses avantages, de ses actions : Il amis à son actif la réalisation de plusieurs cités ouvrières. Cette bande compte à son actif plusieurs agressions. (Larousse)

glaze² v.tr. I Vitrer (une fenêtre). 2. (s) Glacer, (une étoffe)...(HCFED)

'troppo a [..]pron too much; (plurale) too many; (troppo tempo) too long; (troppa genti) too many people ... (OID)

The above-mentioned lemma *actif* is treated as being polysemous with two different polysemous senses. Each sense is treated in a separate subcomment on semantics and these subcomments on semantics are marked by means of numbers (1,2). The

lexicographer regards it as necessary to indicate in one of these subcomments on semantics the typical context in which the word *actif* is used to activate that specific sense. The entry, given in parentheses (*terme financier*), gives the relevant context of the word. One could ask why the compiler(s) did not give similar contextual guidance in the other subcomment on semantics.

The lemma sign *glaze*, presented as the lemma sign *glaze*[2] because it represents the second member of a group of homonyms, is treated as a word with polysemous senses. Following the system used in *Harraps*, a translation equivalent is provided for each sense of the lemma, and the different subcomments on semantics are separated by means of a dot. Each translation equivalent is immediately followed by a single word given in parentheses to indicate the typical pragmatic environment in which the word "glaze" could be translated, with the specific translation equivalent. In terms of Gouws and Prinsloo (2005a), these context entries are known as glosses. These entries bring clarity to the users during the interpretation of the treated words.

In the article of the lemma *troppo*, the entry given in parenthesis (*plurale*), gives the relevant context of the word. The latter is followed by co-text entries, *troppo tempo* and *troppa gente*, which illustrate the way in which the specific word functions within the linguistic system of the language.

9.2.1.1 Co-text and context entries in the dictionary with the planned microstructural programme

The lexicographers of the dictionary with the planned microstructural programme should be careful when they include co-text and context entries in the dictionary. Problems associated with insufficient context and co-text assistance can be found in some dictionaries (cf. Gouws, 2002b). These entries will be relevant for the target users of the dictionary with the planned microstructural programme; the context entries will assist them in both text reception and text production. For the text production, the lexicographers of the dictionary with the planned microstructural

programme should provide the users with co-text guidance by giving illustrative examples and collocations to illustrate the way in which the specific word functions within the speech of the Fang community.

9.3.1 Lexicographical labels

Labels can be regarded as microstructural entries. As microstructural elements, labels are connected to formal aspects of the word and to its meaning.

Labels are often used to indicate the appropriateness of using a word in a given context, and are aimed at the assurance of communicative success when using the specific lexical item (Gouws, 1989: 200). Gouws (1989: 200) states that the use of labels is greatly influenced by the specific type of dictionary. For instance, in a prescriptive dictionary, labels will have more normative functions than in a descriptive dictionary. General dictionaries take standard language as their point of departure. A desk dictionary that concentrates on standard language will use fewer labels than a comprehensive dictionary, which reflects other lexicon items in addition to standard language.

In Gouws's point of view, the labels in a prescriptive dictionary will be focused more on censoring the use of lemmas than in a descriptive dictionary. Bergenholtz (2003) proposes an alternative to an exclusively prescriptive or descriptive approach. In his opinion, a combination of two approaches will be ideal for use in a bilingual dictionary. He calls this combination a proscriptive approach. Bergenholtz informs lexicographers that they should be selectively descriptive in the sense that they should not select all the offered options, but rather only those that would serve the aim of the dictionary, whether for text production or text reception.

Lexicographers should be aware of the importance of labels in the dictionary, and one way of concisely stating the subject field and register of words and expressions is to use labels, says Svensén (1993: 181). Svensén continues by stating that labels are most

important in bilingual dictionaries, particularly for the discrimination of meaning, and because they indicate style and usage, currency or temporality, frequency, specialised or technical terminology and attitude. The purpose of the labels is to alert the user that the term has a particular or specific meaning and function.

Labels play an important role in the dictionary and are responsible for an explicit and immediate transfer of information. This is why it is absolutely essential that dictionary users interpret these microstructural elements correctly.

9.3.1.1 Metalexicographers' approaches to labelling

With regard to lexicographic studies that have so far dealt with labelling issues, one can roughly classify lexicographers' viewpoints into three approaches. Some (cf. WAT, cited in Mavoungou, 2003: 71) believe that lexicographic labels may be divided into four main categories, namely stylistic, geographical, temporal and sphere of usage labels. Labels in the first category are used to indicate style levels, e.g. (*formal.*), (*pop.*), (*slang*), etc. The second category deals with the so-called diatopic or regional labels, such as (*American English*), (*British English*) or (*South African English*). Labels in the third category have a diachronic function. They are temporal labels, i.e. (*archaic*), (*historical*), (*obsolete*). Sphere of usage labels are labels indicating use in special fields of activity. Labels such as (*Lexicography*), (*Physics*) and (*Law*) fall into this category. Further types of labelling include labels indicating attitude or connotation (e.g. *derogatory, offensive, obscene*), labels indicating frequency (i.e. *seldom used*) and labels of borrowing (e.g. *loanword*). Landau (1991: 217-218) distinguishes eight groups of lexicographic labels, namely labels indicating currency or temporality (*old-fashioned, dated, archaic, obsolete, old use*), labels indicating regional or geographic variations (*US, British, Canadian, Australian, New Zealand, South African*, etc.), labels indicating technical or specialised terminology (*astronomy, chemistry, physics, sports*, etc.), labels indicating restricted or taboo sexual and scatological usage (*offensive, taboo, vulgar, obscene, rude*, etc.), labels for insulting terms (*offensive, insult, disparaging, derogatory, disproving, contemptuous,*

sexist, racist), labels for slang language (*slang*), labels indicating style (level), functional variety or register (*formal, written, informal, spoken, colloquial*, (now rarely used) *literary, historical, poetic, humorous, facetious, jocular, approving, euphemistic, baby talk* or *child's word*), and labels indicating status or cultural level (*nonstandard* or *not standard*).

Another group of lexicographers (cf. Benson *et al.* (1986:215-6) as cited in Norri (2000: 72, cited in Mavoungou, 2003: 72) indicates that labels under the heading 'stylistic labels' include, among others, *derogatory*, *pejorative* and *offensive*. This constitutes quite a different opinion compared to the WAT's approach, in which labels such as *derogatory*, *pejorative* and *offensive* appear under the heading 'labels indicating attitude or connotation'.

Norri (2000: 71-106, cited in Mavoungou, 2003) addressed the issue of labelling in some British and American dictionaries in an article entitled "Labelling of Derogatory Words in Some British and American Dictionaries". In this new approach, she grouped the 145 words of her corpus into seven headings, namely: (1) labelling of words for nationalities, (2) labelling of words denoting racial and cultural group, (3) labelling of words for people considered to be lacking in intelligence, (4) labelling of words for deceitful people, (5) labelling of words for sexual orientation, (6) labelling of some derogatory words for women, and (7) labelling of some derogatory words for men.

When discussing issues regarding the use of labels, Verkuyl *et al.* (2003: 308), in their survey of the use of labels, draw up a list of the problems occurring when a user wants to interpret such information. These problems are as follows:

- Many of the labels are abbreviated, and some of these abbreviations (but not all) are difficult to understand.
- Even if the users are able to complete the abbreviated label, some of them have problems interpreting its meaning.

- Finally, even if dictionary users understand the label, they are often insecure about what the relevance of this information is for the kind of decision they have to make about the text they are working on.

According to the research done by Verkuyl *et al.* (2003: 308), labels are hardly used in dictionaries. Just like other microstructural information such as definitions, labels have their place in the dictionary and have to be presented in a dictionary in such a way that the user consulting a dictionary is able to understand the abbreviated forms and interpret the meaning.

When discussing the advantages and limitations of some of the existing dictionaries in Fang with regard to labelling issues, it has been shown that these works do assist users with a well-devised set of labels, but fail to supply lists of labels in the outer texts of the dictionary. This example of a recurring and typical failing in a single dictionary may stand as an archetypal instance of a widespread lexicographic practice in most of the existing translation dictionaries in the Gabonese languages. In addition, problems relating to labelling also include the absence of a clearly defined and consistent policy on labelling. Attempts should be made to standardise labels across dictionaries (cf. WAT, cited in Mavoungou, 2003). The only solution to this problem is to study existing abbreviations indicating parts of speech, style levels, attitude or connotations, as well as labels with a diachronic function, labels used in special field of activity and labels of borrowing. In order to tackle the work, various dictionaries were consulted. However, this was by no means an exhaustive study. More research needs to be done on criteria for dealing with the standardisation of labels across dictionaries.

As far as French is concerned, the standardised set of abbreviations (in the form of labels) used in dictionaries include the following:

9.3.1.2 Stylistic labels

Stylistic labels are widely used in general dictionaries to mark deviations from the standard variety and neutral register and style of everyday language use (Gouws & Prinsloo, 2005a: 130). The following stylistic labels are used in French dictionaries

(primarily style labels and labels indicating frequency of usage): *Fam.* (*familier*), *pop.* (*populaire*), *cour.* (*courant*), *form.* (*formel*), *inform.* or *arg.* (*informel* ou *argot*), *sout.* (*soutenu*), *enfant.* (*enfantin*), (majoritairement utilisé à la forme singulier ou pluriel), *fréquent.* (*fréquent, fréquemment*), *irrég.* (*irrégulier, irrégulièrement*) et *rare*.

The following modified example from the *Dictionnaire Fang-Français/Français-Fang* contains the label "expansion or narrowing of the meaning":

zom [zóm]...(fam.) *emor bə nə ka kan, emor ba bian*, persone insignifiante.

After the lemma (in bold) and the item giving pronunciation data, the label (fam.) is provided. The user is informed about the familiar use of the lexical item **ZOM** (thing). In such a case, the term **ZOM** is used in everyday speech communication.

9.3.1.3 Geographical labels

Geographical labels mark the spatial distribution of lemmas and make provision for regional variations to be noted lexicographically (WAT, 2001: 12), linking a lemma or other entry to a particular area of usage. Gouws (1988: 30) says that when a dictionary makes use of labels like *(dial.)* (dialect) and *(gew.)* "gewestelik" (dialect) (regional), the examples included in the article should complement the labels. These labels do not have to be used for marking lemmata only; they can also have a non-lemmatic address. The *Major Dictionary/Grootwoordeboek*, for example, provides the user with geographical labels, which indicate the country of origin, i.e. (*It.*), or with the labels (*dial.*) with the English lemmata and (*gew.*) with Afrikaans lemma. The labels used in French dictionaries to mark region-bound lemmas are (regional) or (dialect).

In the *Dictionnaire Fang-Français/Français/Français-Fang*, one can distinguish some labels in this category that indicate the spatial distribution of the lemma:

DUM [...] vb. (Atsi). Tirer un coup de fusil. *Ma dum nzali.* [...]

The label (Atsi) appears immediately after the lemma sign (in bold) and the part of speech indicator, followed by the translation equivalent and illustrative example. Through the application of this label, the user is immediately informed about one of the Fang varieties (Atsi).

9.3.1.4 Temporal labels

Temporal labels inform the user about words that deviate from the standard language due to the fact that they are chronolectically marked (Gouws, 1988: 15). Temporal labels are used to indicate that the words belong to a specific period in time. These words are seen as old-fashioned, as speakers who use them are typically of an older generation. French labels like *(arch.)* "archaique" and *(obs.)* "obsolète" can be regarded as examples of temporal labels. "Archaique" refers to those words that are not used in the standard language and "obsolete" to those with little proof of present use. If a situation or object to which a word refers is obsolete, it does not mean that the word is obsolete.

9.3.1.5 Technical labels

Technical labels do not refer only to technical or academic matters, but to all other restricted disciplines, i.e. sport and hobbies. They play an important role in dictionary articles in which polysemic senses of a lemma and the specific technical use occur. These labels are aimed at the user who is a layperson and not an authority with regard to a specific discipline. The *Major Dictionary/Groot Woordeboek* includes labels like (*argeol.*) for "argeologie", (*chem*) for "chemie" and (*fot.*) for "fotografie". English labels include (*cr.*) for "cricket" and (*mus.*) for "music". In this category of labels one also finds botanical labels, which indicate botanical names. These are illustrated by the following example taken from *Lexique FAN-Français:*

Oyem. Langue (anatomie) *Dĕm*.

The user is automatically informed about the professional field to which the lemma belongs after the lemma sign in bold and the translation equivalent. With regard to the treatment of the article mentioned above, it is noted that the word **oyem** is labelled as belonging to the field of *anatomie* because it deviates from the default subject matter of the *Dictionnaire Fang-Français/Français-Fang* (cf. Gouws & Prinsloo, 2005a). When a term of a special-field dictionary is selected for inclusion in the macrostructure of a general dictionary, it will typically be labelled to indicate that it deviates from the default value of the dictionary, i.e. the general lexicon.

9.3.1.6 Labels indicating attitude or connotations

The following labels indicating attitude or connotations are well known in French dictionaries:

Dénigr. (par) (par dénigrement), iron. (ironique, ironiquement) or (antiphrase (par) (par antiphrase), vulg. (vulgaire, vulgairement), dérog. (dérogatif), péj. (péjoratif), mél. (mélioratif), triv. (trivial, trivialement), erron. (erronée), plais. (par) (par plaisanterie), plaisam. (plaisamment), obs. (obscène), poétiq. (poétique, poétiquement), pop. (populaire, populairement).

Unfortunately, the compilers of existing dictionaries in Fang, namely the *Dictionnaire Fang-Français/Français-Fang* and *Lexique FAN-Français*, do not provide the users with labels indicating attitude or connotations or sexual taboo and scatological usage. The question is: why do the compilers not provide the users with such lexicographical labels? Further research needs to be done in this regard.

In Africa in general and in Gabon in particular, sexuality has for long time been a taboo subject that no one wants to be associated with. The lexicographer(s) not only have to

treat articles containing sexual words, but must also include in their works labels indicating that the lexical item used is a taboo word. All taboo forms do not have the same degree of taboo and a dictionary should make provision for labelling items in terms of their position in a taboo hierarchy (Gouws & Prinsloo, 2005: 131). The use of labels like vulgar, obscene, derogatory and coarse and their relative taboo value should be explained in the user's guidelines. The following is an example of the label indicating that the word is *taboo* by means of the label (obs.). It is a modified article taken from *Lexique FAN-Français*:

> **e.bon** [ebon]... n.cl.7/8. sing. pl. *bibon.*
>
> -1. (obs.) *adzan minəga kə nə luk*, rapport sexuel entre l'homme et la femme avant le marriage.
>
> - Ndong *adzan minəga,* Ndong fornique avec la femme ...

In this example, after the item giving the syllable division of the lemma, the item giving pronunciation, the items giving the part of speech and the marker indicating the first sense of the lemma, the user is informed about the label *(obs. = taboo),* indicating that the lexical item **EBON** "to kiss"in this sense is a taboo word. After the label (*obs.*), the paraphrase of meaning and the translation equivalent are provided. In such a case, the user is warned not to use the word **EBON** in this sense in general conversation.

9.3.1.7 Labels indicating a special field of activity

Labels in this category identify the special area of knowledge to which a lemma or an entry applies. The following labels indicating special field of activity are well known in French dictionaries: *Littér.ora./liter.ora. (littérature orale), rélig.trad. (réligion traditionnelle), agric. (agriculture), astron. (astronomie), pharm. (pharmacopée),* etc.

The following is an example of the label (agric.) indicating *agriculture*, from a modified article taken from *Dictionnaire Fang-Français/Français-Fang*:

EFAK . [...] (agric.) *Vom ba ben bidzi,* Endroit où l'on plante la nourriture.

After the lemma sign (in bold), the user is automatically informed about the professional field to which the lemma belongs. The word **EFAK** (agricultural field) is labelled as belonging to the field of *agriculture*.

9.3.1.8 Labels of borrowing

The following table contains examples of labels of borrowing used in the *Dictionnaire Fang-Français/Français-Fang*.

Entries	**Labels**	**Source language form**	**Source language**
ETABLE	(Français)	Table	French
EFU	Galwa	éfu	Galwa
EFIRA	Galwa	mpira	Galwa
ESOBA	Galwa	ôsôvô	Galwa
EFORA	unknown	unknown	unknown
MYAŇA	Galwa	ômwaňga	Galwa
NDÔK	Galwa	ôdôkô	Galwa

Table 9.1: labels of borrowing used in the *Dictionnaire Fang-Français/Fraçais-Fang*

With regard to the system used in the preceding table, some inconsistencies are noted with regard to the treatment of labels indicating borrowing. One could ask why the compiler did not abbreviate the lexical item (Français) and *Galwa* indicating borrowing. All these items could at least be positioned inside the parentheses (...). This is not the case in the *Dictionnaire Fang-Français/Français-Fang*, where it is observed that some labels are entered between parentheses and others are not. The absence of parentheses could mislead the user who is likely to understand how labelling works and reconstruct the word in context. Objections can be made regarding the absence of labels

at entries such as **EFORA**, as well as the lack of explanations in the user's guidelines as far as the system applied by the lexicographer is concerned.

9.3.1.9 Lexicographical labels in the dictionary with the planned microstructural programme

French will be used as the metalanguage of the proposed dictionary. French labels will be regarded as part of the metalanguage used by the compilers to describe Fang. There are many reasons for using French labels for the dictionary with the planned microstructural programme. These include:

- For historical reasons, and because of the particular status of French as the official language in Gabon, the Gabonese population is accustomed to French, which is used in all official activities, namely, media, school, university and work.
- The first dictionaries compiled in the Gabonese languages used French labels. These works are useful for the description, comprehension and understanding of the Gabonese languages.

Unfortunately, French labels, once chosen, will be less instructive for Fang speakers than for French users, whose language will be utilised for the most part to reflect on the meaning of lexical items.

The lack of labels can mislead the user, particularly when it comes to geographical areas, regional variations and information about the register of the language. Their inclusion in the planned dictionary will be necessary to guide the user with regard to the particular use of the lemma in context. They will be positioned before the items giving the meaning paraphrase or after the marker indicating the polysemy sense. This positioning of labels is also used in *HAT (Verklarende Handwoordeboek van die Afrikaanse Taal)*, *Larousse* and *Hachette*.

The lexicographer has the choice of entering labels using typographical and non-typographical structural markers (italics, brackets, etc). He or she must make sure that the user can see them and can understand the message they convey. With regard to the planned dictionary, lexicographical labels will be entered in italics and parentheses. This procedure of entering lexicographical labels is used in dictionaries like *HAT* and *Larousse*.

The use of labels in some existing dictionaries, i.e. *Dictionnaire Fang-Français/Français-Fang and Lexique FAN-Français*, reveals some shortcomings. The compilers do not provide the users with lists of labels in the outer texts of the dictionaries, and some labels indicating the specific usage context of a particular lemma are missing, e.g. labels indicating sexual taboo or scatological usage

The following is an example showing how lexicographical labels will be positioned in the dictionary with the planned microstructural programme:

e.bon [ebon]... n.cl.7/8. sing. pl. *bibon*.

-1. (*obs.*) *adzan minəga kə nə luk*, rapport sexuel entre l'homme et la femme avant le marriage.

- Ndong *adzan minəga,* Ndong fornique avec la femme ...

After the marker (1) indicating the sense of a lemma or before the item giving the paraphrase of meaning, the label (*obs.*) is provided. In the dictionary with the planned microstructural programme, labels will be used when it is necessary to give clear contextual guidance.

It is true that the Gabonese community in general and the Fang in particular are not very familiar with dictionary-using skills. The use of labels should have to be planned in accordance with the needs and reference skills of the target users of the

dictionary. Consequently, the lexicographer(s) has to use such labels very carefully.

9.4.1 Items giving a paraphrase of meaning

9.4.1.1 The term *definition*

The term *definition* in the metalexicographic sphere is a bone of contention. When Wiegand (1994: 241) starts dealing with the notion *definition*, the question he asks is whether *lexicographic definition* is an adequate metalexicographical term. In order to demonstrate that the notion *definition* is not an adequate term in metalexicographical circles, Wiegand (1983a: 148, 1994: 253) pursues the following approach:

1. He offers terminology with which one can describe the different elements in the lexicographic transfer of meaning.
2. He replaces *lexical* and *lexicographic definition* with *lexicographic paraphrase*.
3. He knows that by avoiding *definition*, several of the terminological potholes, such as the differences between a nominal and a real definition, can be avoided.
4. A lexical paraphrase represents the denotative meaning of a lexical item, which is regarded as the rules of reference and predication for the use of (the lexical item) in habitual texts for (that specific lexical item).
5. He proposes the terminology *an item giving the meaning paraphrase* and refines it as *an item giving the paraphrase of meaning*.

For more detailed information with regard to the term *definition*, see the seminal article by Wiegand (1994) titled "Elements of a Theory Towards a So-called Lexicographic Definition", which was published in German and translated into

English. The following section will discuss the different types of definitions.

In this dissertation, I will not adhere to the term *definition*, because it is not used in Wiegand's most important work. Rather than using the term "definition", which is likely to be problematic and confusing, Wiegand prefers the term "paraphrase of meaning".

9.4.1.2 Different types of paraphrase of meaning

Several academic studies have underlined the variety of paraphrase of meaning types that can be used in monolingual dictionaries. Rey-Debove (1971: 211–229) categorises definitions of nouns and verbs as follows: 1) *inclusion*, 2) *analyse*, 3) *mot synonyme*, 4) *opposition* and 5) *definition en métalangue de signe*. Taking over Rey-Debove's classification, Rothe (2001: 88/89) includes *opposition* in *analyse* in the classification of noun definitions, but leaves them as individual groups in the categorisation of adjective definitions. She furthermore adds a new category, viz. *multiple-bite definition*, which comprises definitions consisting of several parts and various definition types. Similarly to Rey-Debove, Battenburg (1991: 46-47) discusses four methods of defining: 1) *synonym*, 2) *analytical*, 3) *synthetic* and 4) *rule-giving method*. Jackson (1994: 131-136, 2002: 95) and Heuberger (2000: 15-17) add a fifth category to Battenburg's classification, namely *typifying definitions*. They differentiate between 1) *analytical*, 2) *synonym*, 3) *typifying*, 4) *synthetic* and 5) *rule-based definitions*.

In contrast to the above categorisations, Svensén (1993: 116-117) distinguishes four types of definitions: paraphrases and synonyms or near-synonyms, true definitions, hybrid forms and descriptions of the headword's function and use. True definitions can be divided into intensional and extensional definitions, and hybrid forms comprise all combinations "consisting of a true definition or a paraphrase, followed by one or more synonyms or near-synonyms" (Svensén, 1993: 117). Similarly to Svensén's classification, Herbst and Klotz (2003: 33-37) differentiate five methods of defining:

1) *paraphrase*, 2) *synonyms or near-synonyms*, 3) *combinations of paraphrase and synonym*, 4) *pragmatic information* about the context in which a word is used, and 5) *encyclopaedic information*. They furthermore distinguish three types of definitions: *intensional*, *extensional* and *prototypical* or structural-semantic definitions.

Analytical or intensional definitions, which are based on Aristotle's analysis, express "a generic conceptual relationship whereby concepts are arranged in classes according to similarities and differences noted between them" (Svensén 1993: 122). They are 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, which distinguish it from other concepts belonging to the same superordinate class.

Before dealing with the different types of definition within descriptive dictionaries, a definition of the term *paraphrase of meaning* will first be given. Hartmann and James (1998: 35–36) define the term "definition" as follows:

> *A component part in the microstructure of a reference work, which explains the meaning of a word, phrase or term. The definition provides an essential function: it is the place where compilers locate and users find semantic information*

One can distinguish at least four types of definitions to present the paraphrase of meaning within descriptive dictionaries, namely genus-differentia definition, synonym definition, circular definition and definition by example.

9.4.1.2.1 Paraphrase of meaning by means of genus-differentia definition

Svensén (1993: 120) describes this type of definition as being "intensional", expressing a generic conceptual relationship whereby concepts are arranged in classes according to similarities and differences noted between them. 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 differentia) (Gouws & Prinsloo, 2005a: 145). Consider the following example:

Leopard predator, Panthera pardus (fam. Felidae), of the cat family, smaller than a lion or tiger, and with spots. (WAT, 2001: 23)

In this example, the genus "predator" is identified for **leopard**, while the differentia help to fully distinguish it from other types of predators. From here, Hartmann's suggestion (cited in Gouws & Prinslooa, 2005, 145) can be considered, i.e. that "the methodology of the lexicographer's semantic analysis is basically contrastive. In order to isolate, it is essential first to compare, to set up a range of lexical items that match exactly in many particulars across a spectrum of semantic features, so that areas of contrast are thrown into relief". Genus-differentia definitions make a valuable contribution to conveying meaning and are used very generally in dictionaries.

9.4.1.2.2 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, or other lexical items that do not clarify the meaning. Consider the following example:

Jump act of jumping (WAT, 2001: 23)

In the example, **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* should be given in the appropriate article stretch.

9.4.1.2.3 Paraphrase of meaning by means of synonym definition

The term *synonym definition* and the treatment of synonyms in general monolingual dictionaries have been problematic in lexicographic spheres. According to Louw (2004: 94), this type of definition has generally been accepted in metalexicographical circles, though with some reservations. These reservations have been targeted mainly at the inadequacy of lexicographic article-external cross-referencing between the "synonym definition" and corresponding reference address, as well as between the article where the "full definition" appears with the synonym mentioned and the article with the synonym definition, says Louw (2004).

The task of the lexicographer also consists of giving an account of meaning relationships such as synonymy. One of the ways of doing this is to use the "synonym definition". The WAT (2001: 23) distinguishes *synonym reference* and *synonym record*. The synonym reference refers the user to a synonym of the lemma under which the definition occurs. A synonym record provides a list of one or more of the lemma's equivalent or non-equivalent synonyms. *Synonym definition* plays an important role in the article of the dictionary. Landau (1984: 270) states 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". Consider the following example:

feeble adj. Faint **faint** adj. Lacking strength or vigour; feeble, WAT (2001: 23)

In this example, the comment on semantics of the lemma **feeble** is limited to giving the synonym *faint*. In such cases, the meaning of the lemma is not explained, but a cross-reference is given to a lemma **faint**, which is defined more comprehensively.

This means that, if the user knows the meaning of the synonym, successful information retrieval has taken place and, if not, the required information can be found in the article of the synonym, **faint** in this case. The task of the lexicographer(s) is to ensure that the synonym reference also receives full treatment in the dictionary.

9.4.1.2.4 Paraphrase of meaning by means of ostensive definition

Sometimes, it happens that the lexicographer(s) cannot define the meaning of the lemma by means of a descriptive definition (Gouws & Prinsloo, 2005a: 146). In such a case, pictorial illustrations (see Chapter 10) can be employed to illustrate a specific object that exists in the user's environment. Ostensive definitions or pictorial illustrations will not be discussed here, but a more comprehensive account can be found in section 9.5.5.10.

9.4.1.2.5 Paraphrase of meaning by means of definition by example

When the lexicographers cannot define the meaning of a lemma by means of descriptive definition, the word can be explained by giving a specific context. The definition by example is a type of definition that 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):

fruits [...] apple, banana, avocado, fig, gourd, grape, mango, lemon, orange, melon, orange, peach, pear, pineapple, plum, raspberry, strawberry are fruits. (VIALD)

reptiles [...] alligator, cobra, turtle, snake, crocodile, lizard, tortoise are reptiles. (VIALD)

The examples mentioned above provide the user with representative examples of the lemmata **fruits** and **reptiles**. These lists of examples could help the user to understand these words. All the examples should then be lemmatised.

9.4.1.3 Criteria for items giving the paraphrase of meaning

According to Wiegand (1994), the lexicographer must have substantial knowledge about the paraphrase of meaning as a necessary component of his dictionary. He distinguishes various criteria for the paraphrase of meaning. These include, according to Louw (2004), criteria meant to encourage "good defining practice" (Landau, 1984: 132), such as "priority of essence", "substitutability", "brevity" and "simplicity" (see Landau, 1984: 132–138 for a more comprehensive discussion of these criteria).

Wiegand (1994) is aware of the existence of numerous inconsistencies during the construction of the paraphrase of meaning, e.g. circularity, incompleteness, vagueness and redundancy. Wiegand (1994: 272) aptly comments that:

> *These albeit difficult problems with respect to definition theory are of only marginal importance for lexicography as scientific practice because every good lexicographer knows how to handle, for instance, circularity. Neither do these tasks relate to any tasks in dictionary research that are still of importance today.*

The task of the lexicographers is to avoid such inconsistencies during the construction of the paraphrase of meaning. As Louw (2004) states, this shows again the value of a well-designed dictionary plan in which scientifically sound structural guidelines (drawn up with the target user's needs in mind) form an integral part.

Apart from the criteria of paraphrase of meaning identified by Wiegand (1994), Lombard (1991) also presents a number of defining criteria that would result in good paraphrase of meaning, e.g. completeness, clarity, accuracy, consistency, independency, objectivity and neutrality. The criteria identified by Lombard will be discussed in the present dissertation, as they enhance the quality of paraphrase of meaning.

Completeness means that all details, features and characteristics necessary to understand what the words means should be given. In terms of Lombard (cited in

Gouws & Prinsloo, 2005a: 147), a definition is incomplete if it does not give enough information about the lemma. Lombard also warns lexicographers against incompleteness and over-specifying. Consider the following examples:

baseball [...] a game played with a bat and a ball between two teams of nine players who are positioned on a large field having four bases arranged in a square that mark the course a batter must run to score (LDEL)

baseball [...] national game of the USA, played with a bat and ball, by two teams of nine players on a field with four bases (OALD)

baseball [...] a game played by two teams of nine players, in which a member of one team hits a ball thrown by a member of the other. (VIALD)

A comparison of these three articles shows that core elements of the definition of **baseball** are *game*, *teams*, *players*, *field* and *bases*. How the players are positioned, the way a large field is arranged in a square, that the batter must run to score, that baseball is national game of the USA and that one team hits a ball thrown by a member of the other are extra-linguistic information that could be regarded as not essential to the paraphrase of meaning of *baseball*. Detailed specification of where baseball is played, the position of the players, etc. could be regarded as over-completeness.

As far as *over-specifying* is concerned, consider the following example:

basket [...] an open container, usually made from cane or reed, with a handle, for carrying things [...] (VIALD)

The above-mentioned example of the lemma **basket** is too specific, since some baskets are also made of materials like osiers and rushes.

With regard to *clarity*, Lombard (cited in Gouws & Prinsloo, 2005a) says that definitions should be less complicated, less detailed, and not repetitive.

As far as *accuracy* is concerned, Gouws and Prinsloo (2005a) point out that the lexicographer should ensure that the definitions are factually correct. Lombard (cited in Gouws & Prinsloo, 2005a) cites a number of interesting examples of incorrect definitions where this is not the case, such as the definition of *lion* that incorrectly states that it is the biggest catlike animal or that *malaria* is caused by a mosquito.

Regarding independency, Gouws and Prinsloo (2005a) say that it will not be necessary for the user to consult more than one definition to obtain the meaning of a specific lemma or sense. They cite the cross-reference, which helps the user to obtain more information about the lemma and not to accumulate enough information in order to understand what the lemma means. The cross-reference will be discussed in Chapter 10.

As far as objectivity and neutrality are concerned, Lombard (cited in Gouws & Prinsloo, 2005a) says that paraphrase of meaning should be without personal preferences and judgment by the lexicographer, and should not have ideological, racist, religious or sexist connotations.

9.4.1.4 Items giving the paraphrase of meaning in the dictionary with the planned microstructural programme

In the preceding sections, it was noted that 74% of the respondents consult a dictionary to look up the paraphrase of meaning/translation equivalents. It can be suggested that the need and demand for paraphrase of meaning would also be great in the dictionary with the planned microstructural programme, as indicated by the results of the questionnaire.

It was stated in Chapter 3 that the corpus could also be very useful for the lexicographers of the dictionary with the planned microstructural programme in the

writing of paraphrase of meaning. Concordance lines generated from the corpus could help the lexicographers of the dictionary with the planned microstructural programme to determine different senses of the word and to select appropriate examples to complement the definition in each case.

In the dictionary with the planned microstructural programme, items giving the paraphrase of meaning will be preceded by items giving the part of speech and the translation equivalent(s) will come after the paraphrase of meaning. With regard to the paraphrase of meaning types, the decision is to make meaning very explicit to the target users of the dictionary. The paraphrase of meaning by means of circular definition cannot help in the goals assigned to the dictionary with the planned microstructural programme. The purpose is to help the target users to enhance their own language skills and to assist those users who want to learn Fang as second language. The need for the paraphrase of meaning by means of the genus-differentia definitions and the paraphrase of meaning by means of definition by examples will be relevant for the dictionary with the planned microstructural programme. The lexicographers could better define the word by an example that reveals the meaning in the context of usage in everyday communication. The paraphrase of meaning has to be included and treated in a way that is accessible to the target users and that corresponds to their level of language skills. The need for the paraphrase of meaning by means of synonym definition will also be relevant for the dictionary with the planned microstructural programme, as the task of the lexicographers is to be sure that the synonym reference is indeed included and treated in the dictionary. The following example of the lemma **etable**, a modified article taken from the *Dictionnaire Français-Fang/Français-Fang*, shows how the item giving the paraphrase of meaning should be presented in the dictionary with the planned microstructural programme.

e.ta.ble [étàblé] <Fr.table . n. cl. 7/8. pl. bitable

- *edzom batob ayo*, quelque chose sur la quelle on peut s'asseoir

• *ato etable ayo*, il ou elle est assis sur une table

After items representing the part of speech of the lemma **etable**, the item giving the paraphrase of meaning *edzom batob ayo* is provided. It is preceded by the structural marker "-". After the item giving the paraphrase of meaning, the item giving the equivalent "quelque chose sur la quelle on peut s'asseoir" is provided.

The lexicographers of the dictionary with the planned microstructural programme have to take into account all the various criteria of the paraphrase of meaning as measures and countermeasures to employ and note in the compilation of lexicographic paraphrase of meaning.

9.4.2 Translation equivalents

The following section contains a discussion of translation equivalents. A more comprehensive account can be found in Zgusta (1971), Trautmann (1993), Gouws (1989, 1996b, 2000, 2002b) and Gouws and Prinsloo (2005a).

The main task of the lexicographer is to coordinate source language items with target language items that can be used to substitute source language forms in a translation (Gouws & Prinsloo, 2005a: 154). This leads to the identification of different types of equivalent relations. According to the complexity of the lexical meaning, Gouws (2000) points out that one can find three ways of classifying equivalence in dictionaries. These are absolute equivalence, partial equivalence and surrogate equivalence.

9.4.2.1 Absolute equivalence

Absolute equivalence or full equivalence, according to Gouws and Prinsloo (2005a: 154), prevails where a source language item, represented by the lemma sign, is coordinated with a single target language item, represented by a translation equivalent, and this one-to-one relation exists on both a lexical and a semantic level. To be more precise, when the source language item and the target language item have exactly the same meaning, function on the same stylistic level and represent the same register, such an equivalent is called an absolute equivalent. It requires that the target language item can be used as a translation equivalent of the source language item without any restrictions. For example, scientific words often represent this type of absolute equivalence, which is known as congruence or complete equivalence. By giving translation equivalents, the lexicographer empowers his/her users because he/she gets the necessary information to communicate in the target language within the same register as used in the source language (Gouws, 1996b, 72-73). This is illustrated in the figure below.

Demonstration

Equation: 1A = 1B ⟷ XA = XB

X = meaning

A = Source language

B = Target language

1 = Lexical unit

= ⟷ If and only if (when)

= is equivalent to

Explanation: The lexical unit in language A (i.e. source language) is equivalent to the lexical unit in language B (i.e. target language) if and only if the meaning of the lexical unit in language A is equivalent to the meaning of the lexical unit in language B and vice versa.

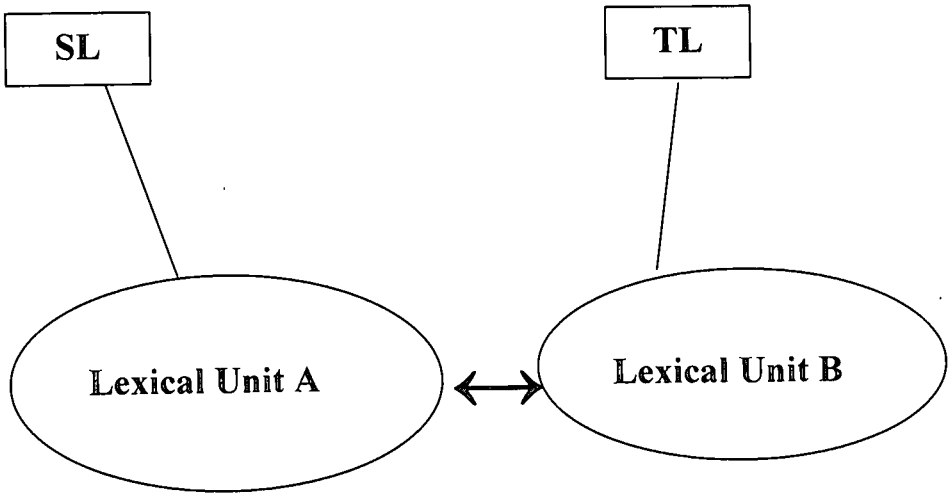


Figure 9.1: Relation of absolute equivalence. Abbreviations: SL = Source language; TL = Target language. ↔ means is absolutely equivalent to.

The following example from the *Dictionnaire Fang-Français/Français-Fang* illustrates such a relation of absolute equivalence:

SONA n.dimanche [...]

According to this presentation, the Fang word *SONA* can be translated with the French form *dimanche* in all occurrences.

9.4.2.2 Partial equivalence

Partial equivalence, according to Gouws and Prinsloo (2005a: 155), prevails where the source and target language items do not display a one-to-one relation. The partial equivalent covers only a part of the lexical meaning of its counterpart in the source language, irrespective of the context in which it is to be applied, if the lexical unit of the target language can or must be used only in a limited range of application. Such equivalence is known as bound equivalence (see the figure below).

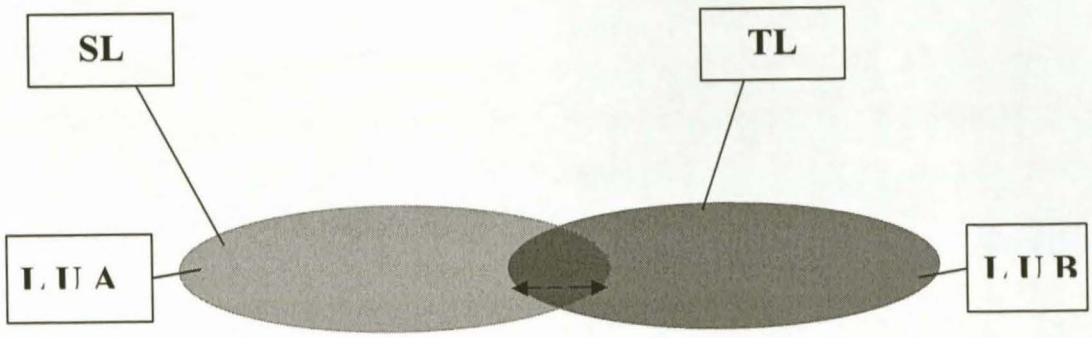


Figure 9.2: Relation of partial equivalence. Abbreviations: SL = Source language; TL = Target language; LUA = Lexical Unit A; LUB = Lexical Unit B; Notational convention: ←- - → means is partially equivalent to.

In the *Dictionnaire Fang-Français/Français-Fang*, the French lemma **PERLE** only has one translation equivalent, i.e. the Fang word *ôbon*.

PERLE, ôbon.

PERLE is a monosemous item and *ôbon* the Fang form that conveys the meaning of *PERLE*. The Fang form *ôbon* is not monosemous. This is clear from the treatment of this word in the *Dictionnaire Fang-Français/Français-Fang*:

Ôbon, collier, perle, verroterie, collier de perles.

Although the treatment of **PERLE** is done by means of a one-to-one relation, it does not represent a form of congruence, but rather partial equivalence.

9.4.2.3 Divergence

Divergence is characterised by a one-to-more-than-one relation between source and target language forms (Gouws & Prinsloo, 2005a: 156). For a given lemma, the

translation equivalent paradigm will contain more than one translation equivalent. Equivalence relations of divergence can be divided into different subtypes, i.e. *lexical divergence* and *semantic divergence*. *Lexical divergence*, according to Gouws and Prinsloo (2005a: 156), prevails where a monosemous lexical item, functioning as lemma sign, has more than one translation equivalent. These equivalents are usually partial synonyms in the target language and therefore constitute a relation of partial equivalence. Where these equivalents are absolute synonyms, they constitute a relation of full equivalence. Some dictionaries, like GW, use a comma as a non-typographical structural marker to separate these equivalents.

Semantic divergence, according to Gouws and Prinsloo (2005a: 157) prevails where the lemma sign represents a polysemous lexical item. Dictionaries like GW use a semicolon to separate translation equivalents representing different polysemous senses of the lexical item represented by the lemma sign.

In the article of the lemma *frère* drawn from the *Dictionnaire Fang-Français/Français-Fang*, where the word *frère* means the "brother of brother or brother of sister". This word has numerous equivalents in Fang: "*ndôm*" (brother of sister), "*monenya-foghe*" (the very brother), *nzime* (young brother), *nyandôme* (brother of mother) and *mo nane* (brother of the same mother).

9.4.2.4 Zero equivalence

Zero equivalence, or "no equivalence", occurs when the lexical units do not have a counterpart, i.e. a source language lexical unit with no designatum in the target language (Zgusta, 1971: 324). As a result, there is no translation equivalent. It is illustrated in the figure below.

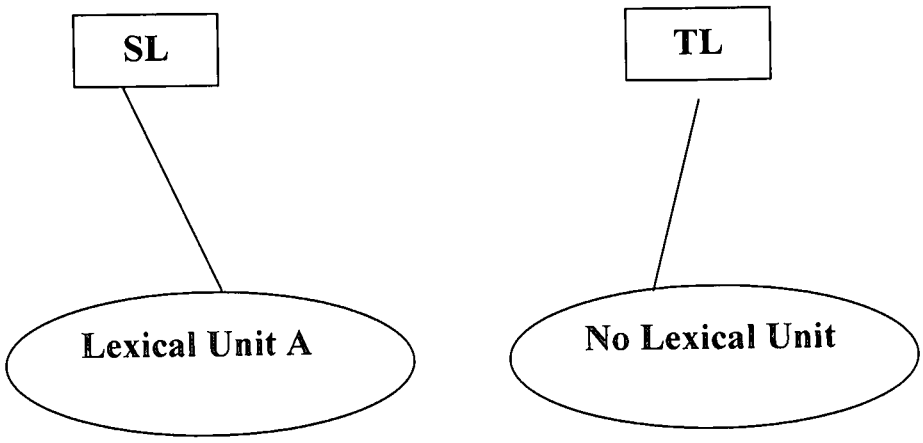


Figure 9.3: Relation of zero equivalence. Abbreviations: SL = Source language; TL = Target language.

Zero equivalence prevails where the target language has no item to be coordinated as a translation equivalent with a lemma representing a source language item (Gouws & Prinsloo, 2005a: 158). When one language acquires a word for a given concept, it does not imply that the next language will also acquire a word for that concept. In linguistics this phenomenon is known as lexical gaps.

According to Zgusta (1971), in order to avoid such inconsistencies, the lexicographer could coin a translational equivalent, either by borrowing the word from the source language or by coining a new expression.

There are examples of this category of words in the *Dictionnaire Fang-Français/Français-Fang*, e.g. *etable*, which is borrowed and built from lexical units in French such as *table*.

Another way to cover this lack or default of equivalents, according to Zgusta (1971: 324), is to solve it by trying to find an explanatory equivalent. By explanatory equivalent, he means an equivalent that is similar to a translational, insertible equivalent and can become, if stabilised, a lexical unit of the target language, whereas the explanation tends to be very similar to a lexicographic paraphrase of meaning and usually cannot aspire to become a lexical unit (Zgusta, 1971: 325). It goes without

saying that one can create some words because one does not have the so-called substances in one's culture, so one can name it because one has experienced some facts. Examples of this are words such as "cercueil" (ewala mbim = the box of death), "car" (zwa bíkjen = the iron elephant).

The task of the bilingual lexicographer is very complex, especially with regard to instances of zero equivalence treated and presented in a dictionary. According to Gouws and Prinsloo (2005a), these items may not be presented in a dictionary without a treatment that will enable the user to have a proper understanding of the source language item. Zero equivalence often leads to the relation of equivalence between the source and the target language. This relation is established in an article where the target language has no lexical item to be used as translation equivalent of the lemma (Gouws, 2001b: 21). The lack of suitable translation equivalents in the target language can indicate a cultural gap between the language pair. The absence of target language equivalents compels the lexicographer to employ alternative strategies in his quest to ensure semantic and communicative equivalence between source and target language (Gouws, 1996b:81). In this situation one can speak of surrogate or substitutive equivalence.

In an Afrikaans-English bilingual dictionary, according to Gouws and Prinsloo (2005a: 159), the word *padkos* should be entered as an Afrikaans lemma. No exact translation equivalent exists and the lexicographer will have to use a surrogate, e.g. a brief description like "food for the road".

Given the fact that the planned microstructural programme must provide the users with assistance in text reception and text production, the task of the lexicographer(s) is to provide translation equivalents for all senses of the lemma.

9.4.2.6 Absence of translation equivalents/lemmata

In bilingual dictionaries, where the reversibility principle should prevail, there are cases where a lexical item occurring as a translation equivalent itself does not appear as a lemma in the other alphabetical component, and vice versa. In some existing dictionaries in Fang, the compilers sometimes are inconsistent with regard to the

treatment of translation equivalents. What is the use of supplying a lexical item in section A and not including it in section B, and vice versa? Sometimes it could happen that the lexicographers have forgotten which translation equivalent was supplied and, when it comes to treating the lexical item in the other section of the dictionary, a new translation equivalent appears, or one is omitted.

The following inconsistencies can be found in the *Dictionnaire Fang-Français/Français-Fang*:

KON, esprit, revenant, fantome.
SPECTRE, esirge, kon, nsisim.

ENYUGHA, verre, abreuvoir, auge à bêtes.
VERRE, ndekh, amokh, elas, ekwa.

ALER, dur, durete, solide, difficile, avare.
SOLIDE, nyema, kone, won, yem, nkona, elere.

ESA, père, frère de du père, maître, chef de famille.
MAITRE, mmyene.

All the above-mentioned examples contain a few irregularities, e.g. in the treatment of the lemma **KON**, a lexical item *spectre* does not appear as translation equivalent in the first alphabetical component, although it occurs as lemma in the other alphabetical component.

With regard to the proposed microstructural programme, the problems are to avoid those translation inconsistencies observed in the bidirectional dictionary compiled by Galley. The aim is to show the compilers of future dictionaries in Fang that they should pay more attention to the finer details to ensure smoother information transfer.

9.4.2.7 Equivalence in the dictionary with the planned microstructural programme

The need and demand for equivalence types would also be great in the dictionary with the planned microstructural programme presented in this dissertation. The results of the questionnaire show that 74% of the respondents consult a dictionary to look up the paraphrase of meaning/translation equivalents. This semantic data is the most important data within the article of a dictionary as far as the results of the questionnaire are concerned. When planning the dictionary with the planned microstructural programme, the lexicographer(s) has to be aware of the existence of different types of translation equivalents. His or her duty is to make sure that the target users of the planned dictionary can achieve successful retrieval of information from a translation equivalent paradigm. The dictionary with the planned microstructural programme will make use of three types of equivalence, namely full equivalence, partial equivalence and zero equivalence. Some articles of the planned dictionary will display a one-to-one relation between Fang and French items, while others will not display a one-to-one relation. Consequently the lexicographers of the dictionary with the planned microstructural programme will be compelled to include additional entries as supporting material in order to assist the target users to make an informed choice when selecting the appropriate translation equivalent for a given occurrence of the Fang item.

With regard to the dictionary with the planned microstructural programme, I could follow Afane Otsaga (2004) and state that, when confronted with a lack of equivalence between Fang and French, the lexicographer(s) can adopt three types of surrogate strategies or approaches to ensure semantic and communicative equivalence between the source and the target language:

1. In some cases, the lexicographer can borrow words from other languages when they are already known and used by Fang people with the same semantic value and the same register of communication. That strategy has been used in many languages, even in Fang, to name new realities unknown

before. For instance, Fang people have borrowed from English terms to name realties like *soap* (sob in Fang), *towel* (tawɔl in Fang), or *motorcar* (mɔtwa in Fang).

2. Another approach could be to create substitute terms, either according to the physical description of the object to be named, by comparing the reality to be named with other realities, or according to the function of the reality or object to be named. This can be seen in existing Fang words. For instance, the object *train* is designated in Fang by the group of words *misini a mikong*, which literally means *bicycle of frogs,* because physically the train coaches look like a queue of frogs, and the train wheels are like bicycle wheels when the train is in motion. In the same vein, the *stereo radio* is called *ewala mikob* (i.e. box of words) and church is called *nda nzam* (i.e. God house).

3. The third and last strategy, the most strongly recommended one, will be for the lexicographer to initiate an investigation among the speakers of the language and ask them how they would intuitively name the new reality. If the lexicographer uses a live recording investigation, he should have with him photos or physical representations of realities to be named. In case of an investigation using forms to be completed by the speakers, photos or images of the things to be named should accompany these forms. This type of investigation will allow the lexicographer to have a broad idea of how the speakers would like to name the realities or things in question. Such a descriptive approach is contrary to the prescriptive approach.

The following example of the lemma **ETABLE**, a modified article taken from the *Dictionnaire Français-Fang/Français-Fang,* shows how the equivalents should be presented in the planned dictionary.

e.ta.ble [étàblé] <Fr.table . n. cl. 7/8. pl. bitable

- *edzom batob ayo*, quelque chose sur la quelle on peut s'asseoir.

• *ato etable ayo*, il ou elle est assis sur une table

After the items representing the morphological data of the lemma **ETABLE**, the item giving the paraphrase of meaning, the equivalent of the paraphrase of meaning, is provided. It is preceded by a structural marker, i.e. the comma ",".

9.4.3 Hyponymy

Hyponymy is generally regarded as a relation of inclusion. The WAT (1991: 21) goes further by making a semantic relation hyponymy versus hyperonymy, which is often used in the frame of "genus and differentia definition". A genus-differentia definition consists of two parts. The definiendum is first placed in the semantic class (the genus) to which it belongs. Then, the differences (differentia) between the definiendum and the other members of the class concerned are indicated.

9.4.3.1 Hyponymy in the dictionary with the planned microstructural programme

Consider the following example from the *Dictionnaire Fang-Français/Français-Fang*:

engen (b) n.5, pl. bingen. Panier, corbeille. *Engen* est le mot générique qui comprend *éngana, nkun, nzine, akura, done*. [...]

With regard to the above-mentioned article, the terms "mot générique" place the definiendum within a particular semantic domain before illustrative examples are

given. After the translation equivalents of the lemma **engen**, namely "panier, corbeille", the user is referred to other members of the class concerned. With regard to the dictionary with the planned microstructural programme, instead of an extensional definition of the lemma **engen** proposed by Galley, I suggest that the members of the class **engen**, like *éngana* "basket with large meshs", *nkun* "fish basket", *nzine* "cylindrical basket in lianas", *akura* "square basket square at the bottom and round at the top", and *done* "broader basket from top to bottom", be cross-referenced to the treatment of the lemma **engen**.

9.4.4 Antonymy

According to Hartmann and James (1998), an antonym refers to a member of a pair of words or phrases characterised by antonymy. Hartman and James (1998: 7) define antonymy as:

> *The latter is the sense relation obtaining between words or phrases of opposite meaning. Antonymy can be 'complementary', with one member of a pair implying the negation of the other: alive, not dead; 'conversive' or 'reciprocal', with the meaning of one member of a pair presupposing that of the other: buy / sell; or 'graded' ('gradable'), with two concepts being compared: clean versus dirty, bigger/better than....The term can also be used to refer to the phenomenon of one word having two opposite senses, e.g. sanction 'permit' or 'penalise'.*

Consider the following example of the article of the lemma **bon** taken from *Micro Robert* (MR):

bon [...] I. 1. Qui a des qualités qu'on en attend; qui fonctionne bien. ⇒ **satisfaisant** /contr. **mauvais**/ avoir une bonne vue [...]

In this article of the lemma **bon**, just after the item giving the paraphrase of meaning and the right arrow indicating the synonym, the item giving the antonym of the lemma sign is provided. This data is introduced by the structural indicator *contr.* and the

opposite word *mauvais*, both displayed between slashes (/ /), and the opposite word is given in bold.

Consider the following example of the lemma **propre** taken from the *Dictionnaire du Français Contemporain* (DFC):

> 1. **propre** [...]. 1° Se dit d'une chose nette, sans trace de souillure, de poussière ou d'ordure: *Un mouchoir proper. Va te laver les mains, elles ne sont pas propres. Passer une chemise propre* (contr.: sale, crasseux). *Des draps propres.*

In this article of the lemma **propre**, just after the item giving the paraphrase of meaning, the items giving the illustrative example and the item giving the antonym of the lemma sign are provided. This data is introduced by the structural indicator *contr.*, and the contrary words *sale, crasseux*, both displayed in parenthesis.

9.4.4.1 Antonymy in the dictionary with the planned microstructural programme

The following example is a modified article of the lemma **AKAP** drawn from the *Dictionnaire Fang-Français/Français-Fang*:

> **AKAP** (h) n.4, pl. *mekap*. 1. Pagaie. Vient de *ngap*, nageoire candale du poisson. *Akap nkyen*, pagaie longue pour pagayeur debout. *Akap e fep*, pagaie courte pour pagayeur assis. *Dukh akap*, pagayer. *Bedukh akap*, pagayeurs – 2. *Akap e mana*, queue du lamentin. *Mekap me ko*, nageoires (voir avighè).- 3. Akap, trenchant, aiguisé, rugueux (vb kap h). *Oken ô ne akap*, le couteau est aiguisé. *Ewar é ne akap*, la lime est rugueuse. /contr./ :*atul*. Voir *avôl, meyô, nzô*.

It is worth emphasising in the above dictionary article that the lemma **AKAP** is analysed as three times polysemous. The item giving the antonym of the lemma sign, "*atul*," appears in sense 3. With regard to the proposed microstructural programme, after the item giving the paraphrase of meaning and its translation equivalent, the item giving an antonym relating to a single sense of the lexical item

represented by the lemma will be provided. Where an article has an antonym relating to all the senses, after the different subcomments on semantics, a new line will be provided for the item giving an antonym. This is something the lexicographer has to pay attention for. The item giving an antonym will be introduced by the structural indicator contr. (short for contraire) displayed between slashes (/ /).

9.4.5 Homonymy and polysemy

A difficult task that the lexicographer must deal with is to reflect change in meaning or variation of meaning. This has an effect on the compiler's treatment of homonymy and polysemy.

Gouws (1989) is aware of the tricky problem of the limit between homonymy and polysemy. For this reason, he (1989: 125) identifies a continuum with homonymy and polysemy at different poles. This continuum is correct in cases where a semantic relation between senses can wither over time, so that two senses could be represented by two separate lexical items (Gouws, 1989: 125). This observation reiterates the point that separate etymology alone cannot be used for distinguishing homonyms.

Homonymy and polysemy are forms of lexical and semantic ambiguity. The users need to grasp the boundary between these two notions in order to understand the lexicon of the language and obtain efficient lookup skills. The lexicographer must be consistent when applying this distinction in the dictionary, and should do so in a user-friendly way.

Before discussing polysemy, it is first vital to outline the distinction between homonymy and polysemy. In the field of lexical semantics, polysemy refers to the lexical relation where a lexical item has different senses that are related to each other by means of extensions from the basic sense (Allen, 1986: 147). Homonyms are regarded as lexical items with the same form, spelling and pronunciation, but with unrelated meanings. In the *Dictionnaire Fang-Français/Français-Fang,* there are two lexical items **EKÔA**, which belong to the same part of speech category (noun) but have unrelated meanings. They are presented as separate lemmas:

EKÔA (h) n.5, pl. *bikôa*. Cimier, partie supérieure d'un casque. Grand bec de toucan. *Anon bikôa*, oiseaux à grand bec.

EKÔA (h) n.5, pl. *bikôa*. Réunion. Syn.: ésula, akôa.

The following examples contain two lexical items **NTÔL** with differences in the grammatical category. The word **NTÔL** functions as an adjective and as a noun.

NTÔL(h) adj. Ancien vieux. *Mô ntôl, bô betôl*, l'homme ancien, les hommes anciens.

NTÔL(h) n.2, pl. mintôl. 1. Aîné. *Ntôl ô môn,* premier né [...]

In the treatment of the two lexical items **EKÔA** and the two lexical items **NTÔL**, it is noted that they have the same form, spelling and pronunciation. They can be regarded as homonyms and their inclusion as homonyms presented as different lemmas is rational. Unfortunately, the lexicographer does not mark homonyms with numeral indicators (like in *Hachette*) or superscripts (like in *POD*). The lexicographer also does not provide the user with the type of method of ordering that was used. The method of ordering will be discussed in the following sections.

In the dictionary with the planned microstructural programme, the compiler(s) should have to rectify errors that occur in the *Dictionnaire Fang-Français/Français-Fang* by choosing a user-friendly system of ordering homonyms (with superscript numbers). This should be done by taking into account the different approaches to the questions of homonyms (etymological, grammatical and semantic), applying the system consistently and explaining the system in the user's guide in the dictionary.

As has been shown, polysemy refers to the lexical relation where a word has different senses that are related to each other by means of extensions from the basic sense. Senses of polysemous lexical items must be demarcated in the subcomments on semantics of a single article, preferably by means of a clear, unique system of

indication. Consider the following example of the lemma **Ateĉ** drawn from the *Lexique FAN-Français,* showing how the use of the system is applied:

> **Ateĉ**. Débilité, faiblesse, empl. Adj. Débile, sans force. *Ngokõn anoe ateĉ*, le malade est sans force. - Meuble (en parlant des terrains) fertile. *Afãn ateĉ d'ayueo bikon*. Un terrain meuble produit des bananes. – Paresseux = Onder. *Mõnoe ateĉ*. Enfant mou paresseux [...]

In the *Lexique FAN-Français*, the use of a dash (–) is employed to indicate different equivalents for different senses of the lemma **Ateĉ**. The problematic nature of the use of a weak system of indication, such as the use of a dash (–) in *Lexique FAN-Français*, should be noted. According to Louw (1998: 48–49), clear, numerical indicators are superior structural indicators and are internationally accepted as norm. A system based on the numerical system should replace the confusing system of the dash (–) currently used in the *Lexique FAN-Français*. The use of structural markers that function as indicators can help to provide rapid access to different equivalents for different senses. A good system of indication will have to be combined with consistently applied sense and equivalent discrimination. The user's guide will also have to explain every structural marker used.

9.4.5.1 A numerical indication of polysemy

In the previous section I discussed the problem faced by lexicographers in drawing a distinction between homonymy and polysemy. Lexicographers often use notational conventions to make a clear distinction between homonymy and polysemy. Dictionaries like the *Tweetalige Woordeboek / Bilingual Dictionary* and the *Dictionnaire FAN-Français* specifically use semicolons and the dash to indicate polysemous senses of the words. Dictionaries like *Larousse*, SADJS and SAOSD use numerical indicators to mark not only the polysemous senses of the words, but also to denote homonymy. The trickiness of the use of weak systems of indication such as

semicolons and the dash are noticeable in the bilingual desk dictionaries and the *Dictionnaire FAN-Français*. However, numerical indicators can be regarded as a potential solution to the problems of determining the boundary between homonymy and polysemy. The following is a list of some reasons why I might prefer the use of numerical indicators:

- The numerical indicator can be regarded as the standard or the most commonly used structural indicators in most modern dictionaries.
- The use of structural indicators leads to the creation of superscripts or superscript indicators, and Arabic numerals are often used to indicate homonymy.

With regard to the dictionary with the planned microstructural programme, the target users could have problems with distinguishing between homonymy and polysemy. In this regard, the lexicographers of the dictionary with the planned microstructural programme need to consistently apply the system of indication in order to make a clear distinction between homonymy and polysemy.

9.4.5.2 Homonymy and polysemy in the dictionary with the planned microstructural programme

Homonymy and polysemy can be regarded as two well-known semantic issues. A clear and consistent treatment of homonymy and polysemy can be an important precursor to the more direct transfer of semantic data. The lexicographer should have to innovate by using and applying common international systems and principles (superscripts to distinguish homonyms and numeral indicators to separate polysemous senses) in order to ensure an effective dictionary consultation procedure. The user's needs should motivate the choice of system, which has to be explained in the user's guide in the dictionary.

Methods of microstructural ordering should be determined empirically by means of questionnaires, interviews, etc. that form part of dictionary planning. This will ensure

that the ordering of senses that suit the target user best will be employed. These systems should then be applied consistently in the dictionaries.

If senses are to be ordered in a user-friendly manner, they must be based on corpus evidence. In Chapter 3 of this dissertation, it was stated that a corpus assists the lexicographer(s) in respect of sense distinction. Concordance lines generated from corpora by means of corpus query tools supplement the lexicographer's intuition. Such corpus lines have the additional advantage of covering all the relevant senses of the lemma sign. In order to make the lexicographer's task easier, it is therefore important that a corpus be used presenting the different senses of the lemma sign, which can be applied consistently throughout the dictionary.

However, it is not only the ordering of information subcategories that is relevant, but also the ordering in the dictionary article as a whole. At this point the standard inner access structure overlaps with the article structure. The choices made on the utilisation of certain article positions should be carefully planned and motivated well in the user's guide.

9.4.5.3 A further subdivision of senses

Apart from the numerical system, lexicographers very often use the lettering system. The latter is the dominant method used in monolingual dictionaries, such as the *Concise Oxford English Dictionary* (COED). Louw (1999) aptly suggests that a lettering system used in monolingual dictionaries could replace the unclear system of semicolons and commas currently used in the *Tweetalige Aanleerderswoordeboek / Bilingual Learner's Dictionary* (TAW) and the *Groot Woordeboek / Major Dictionary (GW)*. The lexicographers very often combine this method with the numerical system.

9.4.5.4 Methods of ordering senses

Numerical indication is the most important system of indicating polysemy in bilingual or monolingual dictionaries, although there are other methods according to which to

arrange senses in the dictionary article. This must be done according to the user's needs and expectations. Some of the different methods of ordering senses are given below.

9.4.5.4.1 Usage ordering

The arrangement of senses according to their usage, i.e. the way in which words are actually used in a language community, is chosen mainly for its practical utility for the majority of dictionary users (Kipfer, 1984: 101). Putting the most frequently used senses first seems to be the approach chosen for most general dictionaries (Kipfer, 1984: 101). Gouws (1989: 135) is aware of the importance of choosing usage ordering in the dictionary:

> *By using this ordering, lexicographical prominence is given to those senses that are best known and the typical dictionary user will want to look up ... This method is geared to the fast retrieval of the semantic data.*

Svensén (1993: 213) goes further by pointing out that, when ordering senses, all print dictionaries put the most "important" meaning first, where importance is generally based on considerations of frequency in common usage. Svensén (1993: 213) proposes the following classification to determine a hierarchy of use:

1. unmarked general language
2. current but stylistically marked general language
3. technical language
4. regional language
5. archaic and literary language.

With regard to the order mentioned above, Svensén (1993: 213) adds that this order is not obligatory in terms of 2 and 3, although it is important to regard this as a general suggestion, though not as a rule. Mostert (1984: 83) also gives another option to determine a hierarchy of use:

1) general and frequently used senses
2) archaic senses
3) colloquial and dialectal senses
4) slang
5) technical senses

In the dictionary with the planned microstructural programme, the lexicographers should preferably order senses according to frequency of use. Prominence will be given to those senses that are best known. The ordering of senses will be based on corpus evidence.

9.4.5.4.2 Regional language and ordering

Svensén (1993: 213) and Mostert (1984: 23) agree that regional language also needs to be placed in the hierarchy. As Svensén (1993: 213) aptly states:

> *In English dictionaries even regional language has a high ranking in so far as American English is concerned.*

It goes without saying that the high/low ranking of regional language depends on the context of the dictionary use. Hartmann (1987: 12) points out that dictionary research should be based on the contexts of dictionary use. It has already been stated that Fang is a cross-border language in the sense that it is also spoken in neighbouring countries, namely Cameroon and Equatorial Guinea. The users using a Gabonese dictionary with Fang as the treated language would expect senses that are predominantly or uniquely Gabonese to have a high ranking in a sense paradigm. The approach to order frequently used regional senses first should be considered cautiously before a dictionary is produced.

9.4.5.4.3 Historical ordering

Apart from the usage ordering mentioned above, Svensén (1993: 213) points out that dictionaries rely on historical principles (the oldest sense coming first). Ordering

based on historical principles is useful if the user needs information about sense development or about which sense to expect in a centuries-old text. However, the historical ordering is likely to confuse many users, who naturally expect the most useful information to be at the start of the article.

9.4.5.4.4 Logical ordering

With regard to the method of logical ordering, Kipfer (1984) comments that most lexicographers had only vague notions of what it meant. They arranged meanings according to their alleged logical order without being able to explain what they did in the process. Gouws (1989: 134) provides an appropriate description of the method of logical ordering. According to him, the method of logical ordering is based on a sense that serves as base, from which the other senses can be deduced by logical procedures. However, Gouws (1989: 134) is aware of the uncertainty this method can cause.

9.4.5.4.5 Ordering according to the primary and secondary senses

According to the WAT (2001: 19), the distinction between primary and secondary senses is not based on clearly defined linguistic criteria. There is no uniform guidance from linguists about what is to be understood by this. Either diachronic or logical criteria can be put forward for such a distinction. In the case of a diachronic approach, the oldest polysemic value is regarded as the primary value and placed first. This is the method of ordering adopted in a historical dictionary. If the ordering is based on logical grounds, a particular distinction in meaning serves as the basis and other distinctions are derived from this in terms of logical procedures. For example, WAT (2001: 19) proposes the treatment of the lemma ***change*** as follows:

> **1a** To cause to be different: *change the spelling of word*
> **b** To give a completely different form or appearance to: *he changed the yard into a garden*
> **2** To give and receive reciprocally: *they changed places*
> **3** To exchange or replace with another, usually the same kind or category: *change one's name*, etc.

Here, senses 1b, 2 and 3 of the verb can be seen as extensions of sense 1a, and are therefore ordered after it. This ordering method can also be extremely important in the identification and ordering of subsenses.

Senses could also be ordered according to their literal value, namely conjunctive and disjunctive values (cf. WAT, 2001: 20; Gouws, 1989: 134-135). If the ordering is done in terms of conjunctive and disjunctive values, the conjunctive distinctions in meaning are placed first in the article, followed by the disjunctive values. The way the lemma ***gallop*** is dealt with in the *Chambers-Macmillan South African Dictionary Junior Secondary* (SADJS) illustrates this method of ordering:

> **gallop** *noun* the fatest pace of a horse
> ... verb ... 1 to move at a gallop ... 2
> to do something very quickly: *He galloped through the work.*

The first sense has a literal value, while the second has a metaphorical value. Sense 2 is ordered after sense 1. The WAT (2001: 20) adds as a warning that the applicability of this method of ordering is limited, as the distinction between literal and metaphorical does not involve all lexical items, and the conjunctive is sometimes replaced by the disjunctive as "primary" sense.

9.4.5.5 Concluding remarks

It can be concluded that semantic data is the type of data most commonly needed by the average dictionary user; it is often regarded as the most dominant microstructural category in general language dictionaries. As a result, this data category has a vital place in the articles of general languages dictionaries. Semantic data has to be presented in a way that promotes interaction with the other microstructural entries.

The presentation of this category can be done in various ways, depending on the typological nature of the specific dictionary. Meaning as a data category can even determine the structure of a dictionary. Because of the fact that the nature, extent and presentation of semantic data can be decisive for the typological nature of a dictionary, the transfer of semantic data, in any typological category, will also have an influence on the position of and the way in which this data is presented in the dictionary.

The treatment of semantic data in the dictionary with the planned microstructural programme will be regarded as an extremely valuable contribution to Fang lexicography in general. From the user's perspective, it will be valuable on the following grounds. Firstly, the paraphrase of meaning will be relevant for the mother-tongue speakers of Fang who want to improve their knowledge of Fang. For these users, the ideal dictionary will be a monolingual dictionary. Secondly, the translation equivalent will be appropriate for those users who have a good command of French and want to learn Fang as second language. For these users, a bilingual dictionary will be necessary. Other semantic data like synonymy, antonymy, hyponymy and polysemy. will be necessary for both monolingual and bilingual dictionaries.

The advantage of the dictionary with the planned microstructural programme is that the boundaries between homonymy and polysemy have been studied and appraised. It has been noted that lexicographers should use and apply common international systems and principles (superscripts to distinguish homonyms and numeral indicators to separate polysemous senses) in order to ensure effective dictionary consultation procedures. The user's guide in the planned dictionary should provide an explanation for the system of ordering and of semantic relations such as homonymy and polysemy.

9.5 Pragmatic data

Too often, lexicographers struggle to provide the user with clear data or a fuller understanding of the lexical item. It sometimes happens that a strict linguistic description of a lexical item may not be sufficient. In this case, the lexicographer

needs additional data (pragmatic data) on the user's attitude, conversational implications, speech acts, deixis and the conversational structures of the lexical items and supplementary encyclopaedic data that can be useful to learners during their language-use process.

The compilers of dictionaries have always been criticised for providing users with too much data regarding encyclopaedic or extra-linguistic aspects of the lemma instead of linguistic data. In this regard, a distinction should be made between encyclopaedic dictionaries and encyclopaedic data in dictionaries. Encyclopaedic dictionaries provide data about the world, while encyclopaedic data can be regarded as an important part of linguistic dictionaries.

9.5.1 Background to the use of pictorial illustrations

There is significant literature regarding the use of pictorial illustrations. Important studies can be found in such domains as educational psychology or behavioural psychology and parallels have been drawn with dictionaries. Consider the following comments with regard to the use of pictorial illustrations:

> *Of the five senses sight plays a dominant part in the cognitive and linguistic development of the human mind. The pre-eminent role of this sense has always been recognised and thus educational systems are based on it. Their main medium of instruction is writing supported by all kinds of illustrations, whether schematic, diagrammatic, pictorial or whatever* (Stein, 1991: 99).

> *The definition should be expanded to include such borderline cases as number line, geometric figures, structural chemical formulas, curves, graphs and time lines* (Al-Kasimi, 1977: 96).

With regard to the use of pictorial illustrations in dictionaries, Stein (1991) points out that their use started in the Middle Ages. The lexicographical history of languages focussed upon by Hupka (French, Spanish, Italian, English and German) begins with

bilingual word lists. The first illustrations thus occurred in bilingual dictionaries. According to Stein (1991), the first printed English dictionary to include illustrations as woodcuts in the A to Z texts was Thomas Elyot's *Dictionary* in 1538, which was followed in 1552 by Richard Huloet's *Abecedarium Anglico-Latinum*. These woodcuts occur at the beginning of each article stretch.

Gouws (1989) states that pictorial illustrations entered late into the microstructure of dictionaries. It was only with the publication of *The Imperial Dictionary* (between 1847 and 1850) of Ogilvie and the 1859 edition of *An American Dictionary of the English Language* by Webster that this entry type became prominent.

As stated in the preceding paragraphs, the use of pictorial illustrations is very important in everyday life. In the same way, Hill (1967: 93–94) states that pictures play a great role in human communication and in the evolution of the symbolic representation of language.

As far as existing Fang dictionaries are concerned, they reflect a lack of the use of pictorial illustrations. However, when one considers how difficult it is to explain some of the concepts and the power of visual aids to assist in making the concept easily understood, pictorial illustrations become an important element of the dictionary, just like the lemma or paraphrase of meaning or equivalent. Our concern is the use of pictorial illustrations in the bilingual dictionary in Fang. Pictorial illustrations are useful to bridge the gap when there are semantic differences between two languages. They can contribute to bringing out the meaning.

9.5.2 Brief theoretical conspectus of pictorial illustrations

Metalexicographers such as Gouws (1994: 61) and Al-Kasimi (1977: 98) time and again emphasise the importance of pictorial illustrations in modern dictionary compilation. In turn, dictionary makers are constantly striving to improve the quality of their dictionaries to enhance semantic explanation. Pictorial illustrations, according to Gouws (1994: 61), are used as a microstructural type to enhance semantic disambiguation. Gouws continues by stating that pictorial illustrations have a semantic importance, a lexicographical function and a range of applications, and

although the primary utilisation of ostensive addressing is found in the differentiation of senses in equivalent relations of semantic divergence, it is also used where a lemma has a low degree of translatability. The explicitness that can be achieved through the use of pictorial illustrations enhances the retrieval of information. This applies to both monolingual descriptive and translation dictionaries.

Al-Kasimi (1977: 98) points out that pictorial illustrations should be systematically and consistently employed in bilingual dictionaries, not for the purpose of advertisement, but as an essential lexicographic device.

In Gouws's terminology, this type of definition is considered as an ostensive definition or ostensive addressing (Gouws, cited in Gangla, 2001: 46). Gouws (1989: 168) points out that this type of definition is normally used to enhance and clarify the verbal definition. Putter (1999: 51) and Swanepoel (1990: 186) also think that pictorial illustrations can be used as a type of definition.

Before discussing the lexicographic functions of pictorial illustrations, a survey of the encyclopaedic nature of pictorial illustrations is necessary.

9.5.3 Pictorial illustration as encyclopaedic data?

The use of pictorial illustrations as an encyclopaedic feature does not escape re-explanation. More so than "explanation", the use of the term "pictorial illustrations" has been problematic and, at times, polemic in metalexicographical circles. The common misuse of pictorial illustrations and their encyclopaedic nature has been severely criticised. With reference to Afrikaans lexicography, Gouws (1994: 66) points out:

> *The concept of encyclopaedic information has acquired an extremely negative connotation. It results from the fact that this concept has partly been used as part of the negative criticism expressed against the WAT [...] The criticism of WAT was throughout on the excessive character of the encyclopaedic information.*

Gouws (1994) adds that the criticism of the WAT results from its excessive use of encyclopaedic information. In this regard, Vos (1992, 39 cited in Gouws, 1994) brings a valid point of view. She points out that encyclopaedic information plays an important role because of the explanation of meaning that it brings. However, when the encyclopaedic data is redundant and obscures meaning, it may not be included in the definiens.

9.5.4 Function and purpose

One way of concisely providing visual support for the description of the meaning content of linguistic units is to use pictorial illustrations. The latter are concerned with the world, not with linguistic signs (Rey-Debove, 1971: 35).

According to Al-Kasimi (1977: 98), pictorial illustrations can serve two functions in a bilingual dictionary:

1. They cue and reinforce the verbal equivalents, especially when the dictionary user can identify, attend to, and respond differently to the picture.

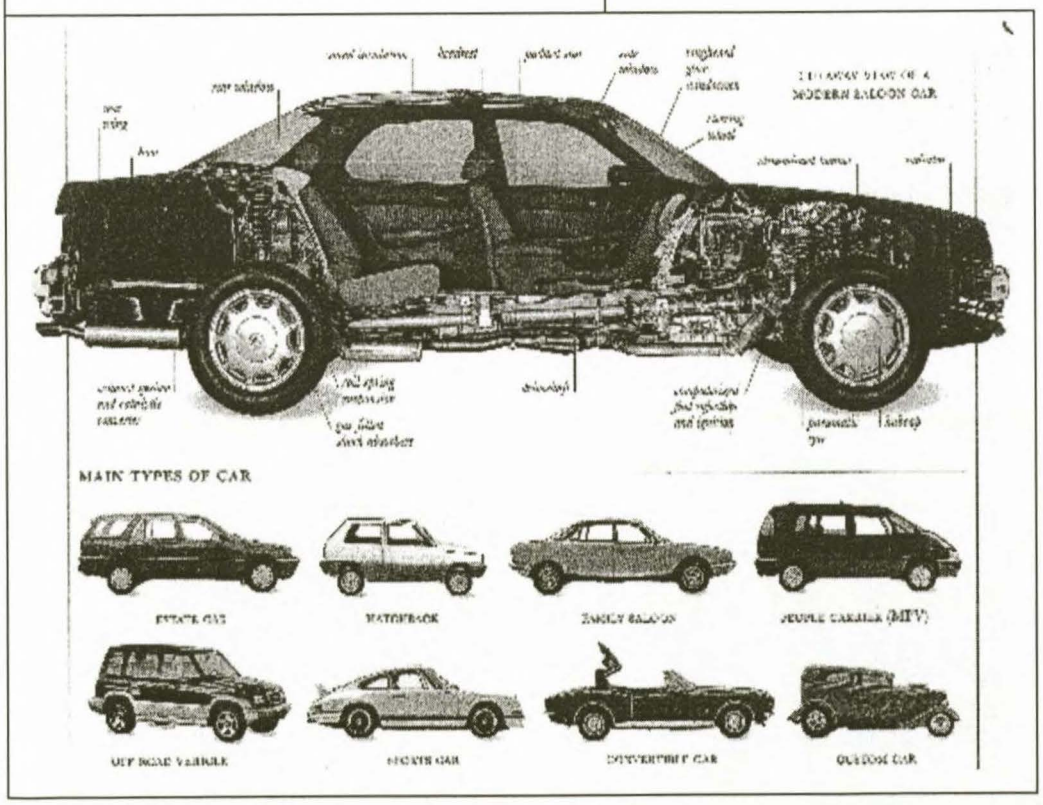
2. They serve as generalising examples when several different but relevant pictures are given in order to establish the concept they are intended to illustrate.

As far as bilingual dictionaries are concerned, Al-Kasimi (1977: 99) points out that pictorial illustrations can be employed to illustrate objects familiar to the user, as well as those cultural items that are peculiar to the foreign language. According to Smith (1960: 29), pictorial illustrations will then help the dictionary user to understand and remember the content of the accompanying verbal equivalent because they motivate him, reinforce what is read, and symbolically enhance and deepen the meaning of the verbal equivalent.

Al-Kasimi (1977: 100) goes further by pointing out that, when dealing with pictorial illustrations, one must bear in mind some fundamental considerations. These are the following:

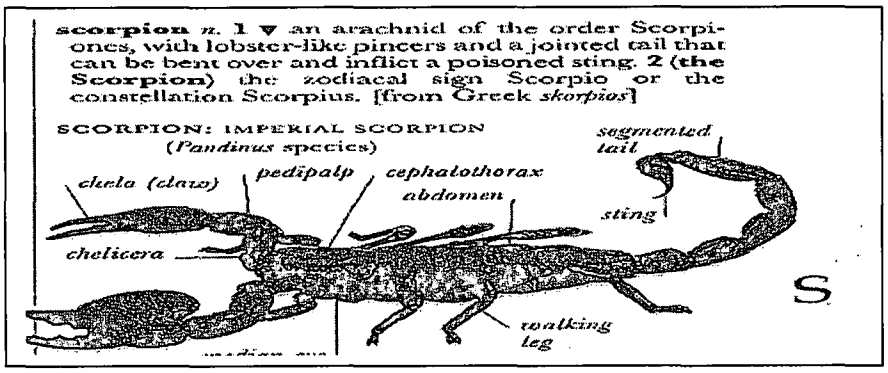
1. Pictorial illustrations should be used whenever they possess more discriminable properties, as well as when they have more control over the desired concept or over potentially competing concepts than do their verbal equivalents (cf. Gropper, 1963: 75–95; Al-Kasimi, 1977: 100). Al-Kasimi explains that the lexicographer should employ a pictorial illustration when it can univocally cue and reinforce a particular response or establish a particular concept more efficiently than a verbal equivalent could alone. As illustration (see Figure 9.4.), in the *Illustrated Oxford Dictionary* (IOD) the lemma *car* has not only been defined, but an illustration has also been provided. When looking at the illustrations, the dictionary user will evidently comprehend what the lemma refers to and will be able to recognise it when he observes one in the world around him.

car n.**1** (in full moto car) ▲ a mad vehicle able to carry a small number of people and powered by an internal-combustion engine. 2. (in *comb.*) **a** a wheeled vehicle, esp. of a specified kind [...] **b** a railway carriage of specified type (*driving car*)- **3** *N*, *Amer.* a raiway carriage or van. 4. the passenger compartment of a life, cableway, balloon, etc. (from Latin c*arrum*) □ carful *n.* (*pl.* **–fuls**).



2. Pictorial illustrations should be used when an uneconomical number of words is needed to present the verbal equivalents. In such cases a brief definition or a

short explanatory equivalent may be supplemented by a pictorial illustration that gives the dictionary user a fuller understanding of the concept desired. For instance, in the *IOD*, the lemma *scorpion* (see Figure 9.5.) has not only been defined but also illustrated.


scorpion *n.* **1** ▼ an arachnid of the order Scorpiones, with lobster-like pincers and a jointed tail that can be bent over and inflict a poisoned sting. **2** (**the Scorpion**) the zodiacal sign Scorpio or the constellation Scorpius. [from Greek *skorpios*]

SCORPION: IMPERIAL SCORPION (*Pandinus* species)

Figure 9.5: *Scorpion* in the IOD

3. Pictorial illustrations should be used when the verbal equivalents cannot show spatial or sequential relationships effectively. Graphic aids such as charts, maps, and diagrams may prove more efficient than words in facilitating the acquisition of relational concepts. Consider as an example the following lemma *near* found in *Longman*.

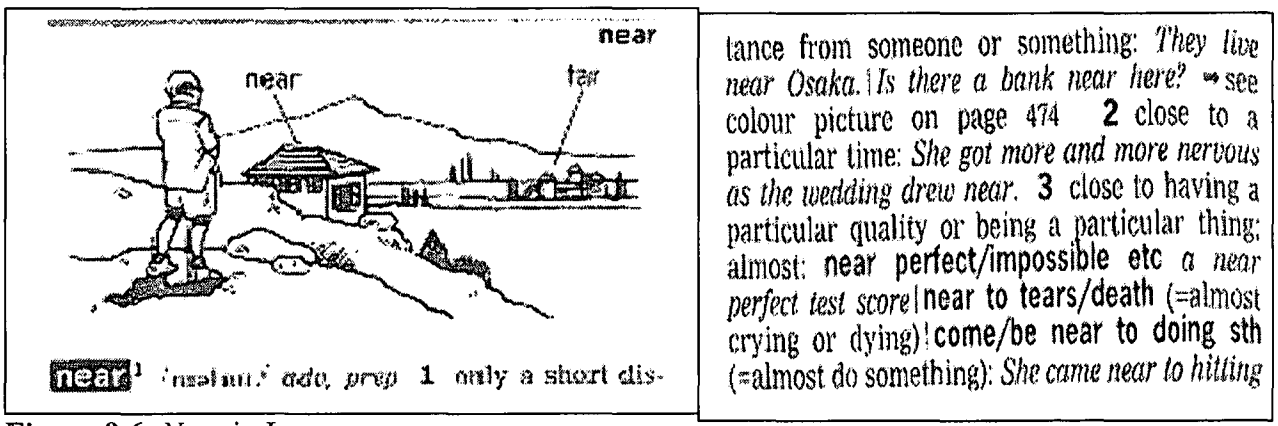


Figure 9.6: *Near* in Longman

The article of the lemma **near** shows spatial relationships between *near* and *far* by using pictures. Here, the pictures support the verbal definition and helps the user to understand the concept of the word *near*.

In addition to the foregoing, human beings attach different values to concrete objects according to whether they are of relevance or not (Stein, 1991). This is why lexicographers assume that dictionary users might be interested in knowing the constituent parts of objects deemed to be of particular social, cultural or intellectual relevance. This is also true of Fang people, who attach great importance to concrete objects. For instance, it is noted in Addendum 8 that the Fang people used animal names like *elephant* to name their villages.

9.5.5 Criteria for pictorial illustrations

According to Al-Kasimi (1977: 100), the lexicographer must have substantial knowledge about pictorial illustrations as necessary components of his dictionary. He distinguishes various criteria for pictorial illustrations, and these are discussed below.

9.5.5.1 Compactness

It is vital to reduce the pictorial illustration to its basics. As a result, information that is not particularly pertinent to the concept being illustrated should be minimal, and information that distracts the dictionary user from a correct interpretation or recognition of the pictorial illustration should be strictly eliminated. To illustrate this point, I will use the following example (see Figure 9.7) from the *Longman Dictionary of Contemporary English (LDOCE)*; the lemma *chair* is defined and pictorial illustrations showing the different types of chairs are also provided.

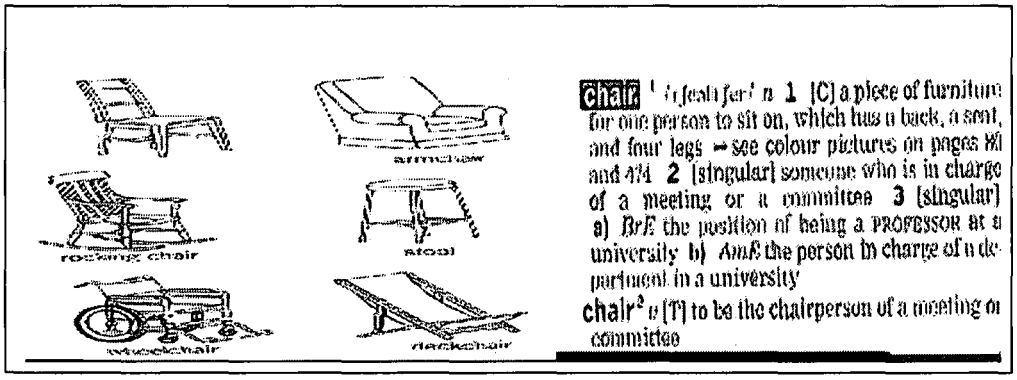


Figure 9.7: *Chair* in LDOCE

Here, the basic important differences are the shapes of the chairs, neither the colour nor the material used are necessary for this illustration. The pictorial illustration is precise and satisfactory and saves the lexicographer the difficult duty of explaining the differences between chairs. This illustration is text-supporting, as it expounds on the first meaning of the lemma *chair*. The lemma *chair* denotes a superordinate concept with not a very large number of subordinate concepts. It is therefore reasonable to deal with them all together (cf. Svensen, 1993: 172).

9.5.5.2 Fidelity

According to Al-Kasimi (1977: 101), the fidelity of pictorial illustrations is closely linked to how realistic they are. He adds that the type of pictorial illustration (i.e. realistic or abstract) is usually determined by the nature of the subject matter and the activities involving specific postures or parts of the human body. The higher the behavioural objective is, the more abstract the pictorial illustrations should be (cf. Fleming, 1967: 257–258). Consider the following example from LDOCE, where the lemma *crouch* is not only defined but illustrated.

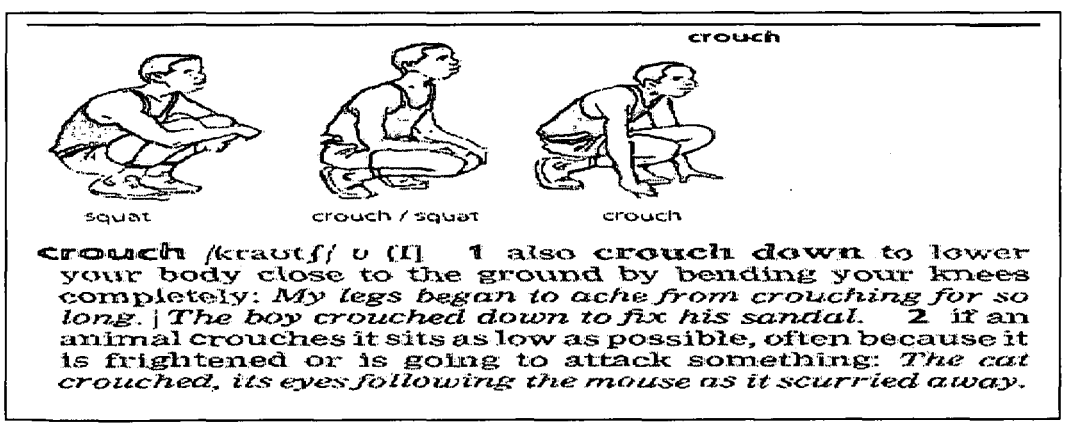


Figure 9.8: *Crouch* in LDOCE

With regard to the above-mentioned figure, the position determines what the concept refers to when you consider the paraphrase of meaning only "to lower the body closer to the ground by bending the knees" in all instances – that is, *squat*, *crouch*,

crouch/squat and *crouch* – the body is in fact lowered closer to the ground. However, the differences arise from the position of the back, and since the meaning as verbally defined here may leave leeway for various interpretations, the illustrations remove the vagueness or ambiguity. This illustration is complementary, as the interplay between the text and the illustrations is essential for the comprehension of the lemma.

9.5.5.3 Interpretability

According to Al-Kasimi (1977: 101), *interpretability* means that the pictorial illustration can be interpreted by the dictionary user, i.e. he can understand the message conveyed by the picture. The components of interpretability are discussed below.

9.5.5.4 Relevance

Taking into account the fact that all illustrations involve some kind of abstraction, pictures should be related to the user's past environmental and realistic experiences, which are determining factors in his success in the interpretation of the picture. For instance, consider the following example from LDOCE, where the lemma *bird* is defined and illustrated.

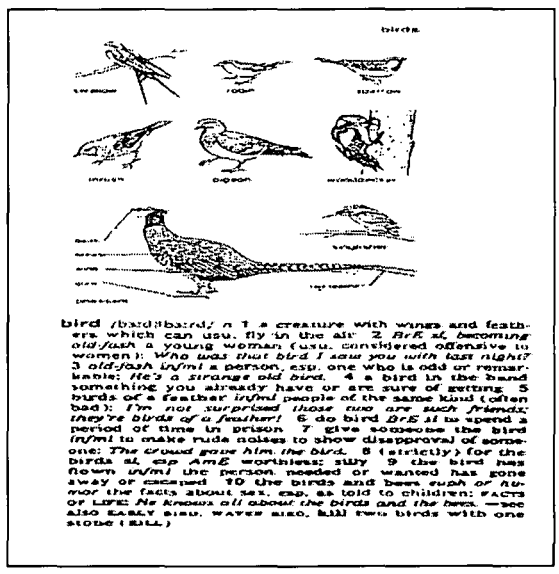


Figure 9.9: *Birds* in LDOCE

This dictionary provides useful information to the user by giving different birds and their names and the parts of the body. This makes the dictionary a helpful tool.

9.5.5.5. Simplicity

Considering the fact that, according to Al-Kasimi (1977: 102), pictorial illustration should require a minimum of separate actions on the part of the dictionary user to interpret its basic message, simplicity also implies that the pictorial illustration should not be open to dual interpretation resulting from a complex pictorial illustration. Consider the following example from the *OALED*, where the lemma **penguin** is not only defined but also illustrated.

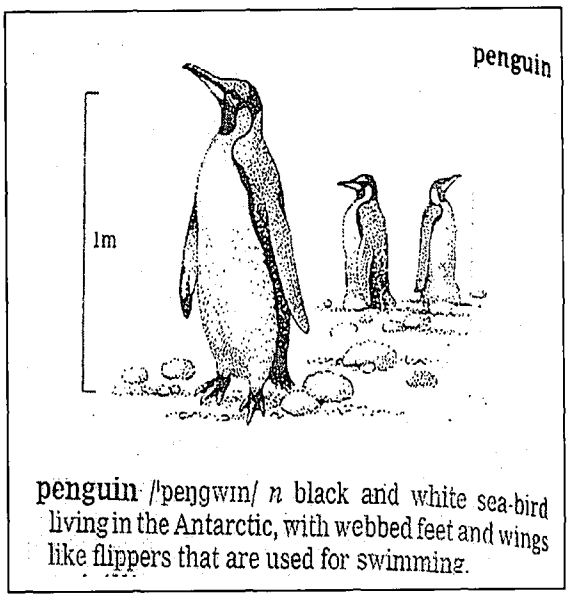


Figure 9.10: *Penguin* in OALED

The picture represents the word ***penguin***. It can be regarded as a simple illustration. Another characteristic of this picture is its redundancy, because there is an obvious overlap between the illustration and the definition.

9.5.5.6 Preciseness

According to Al-Kasimi (1977: 37), *preciseness* implies that the dictionary user's attention should be directed only to the feature of the pictorial illustration relevant to the desired concept. Consider the following lemma **for** taken from LDOCE.

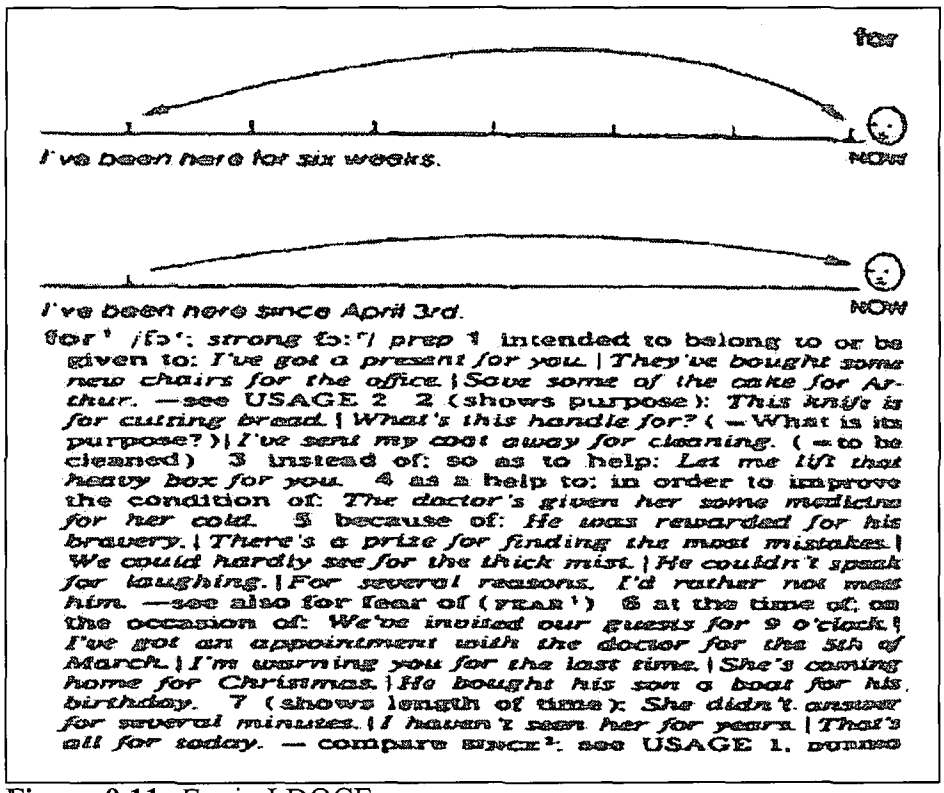
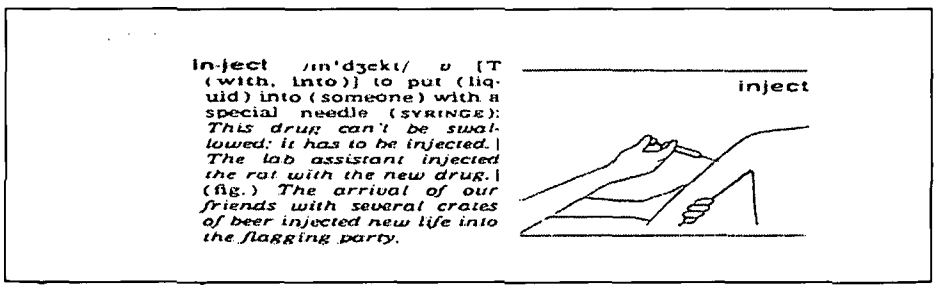


Figure 9.11: *For* in LDOCE

This illustration is very precise. It shows a fine level of detail. This illustration is text-supporting and it expands on a number of the meanings that are found in the article of the lemma **for**. According to Gouws (1994), this type of illustration is equally useful in an explanatory dictionary.

9.5.5.7 Completeness

According to Splauding (cited in Al-Kasimi, 1977: 102), the title and caption should be complete and add something descriptive to the picture in order to facilitate its interpretation. He says that the title should identify the picture, otherwise it might be taken as an illustration of an adjacent entry or a neighbouring sense. The caption should add information that is difficult to depict. Consider the article of the lemma **inject** taken from *LDOCE*.



The illustration has a caption. This caption helps to complete the definition of the lemma **inject**, therefore making the illustration complete.

9.5.5.8 Clarity

According to Al-Kasimi (1977: 102), clarity means that the pictorial illustrations should be easily distinguishable by the user. This requires an adequate artistic and typographical performance and an appropriate size. The lexicographer has to be aware of the fact that the picture must be easy to understand and interpret so that the user can decode the meaning. This determines which words are used, and how an object is drawn. Consider the following example from LDOCE of the lemma *cross-legged*.

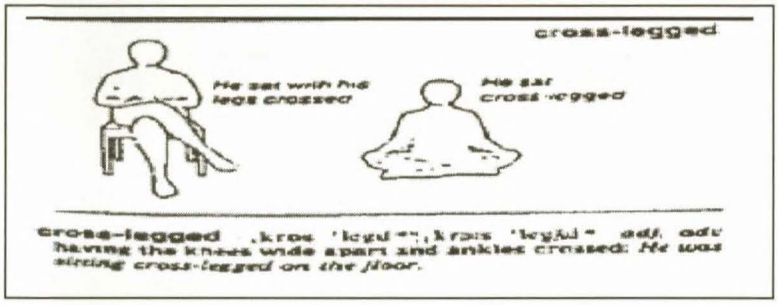


Figure 9.13: *Cross-legged* in LDOCE

This picture can be considered clear because it allows one to differentiate the twofold position adopted by the person, whether sitting with his legs crossed or sitting cross-legged. This picture is also text-supported as the meaning beneath explains the illustrations further.

9.5.5.9 Pictorial illustrations and existing Fang dictionaries

A survey must be done if one wants to determine to what extent and to what purpose existing dictionaries in Fang use pictorial illustrations. This will be done according to the four main types of illustrations given by Stein (1991: 106):

1. Illustrations showing common animals, object, plants.

2. Illustrations showing things that are not easily explained in words, such as shapes, complex actions, or small differences between words which are similar but not the same.
3. Illustrations depicting groups of related objects. These explain the differences between similar objects; show the range of shapes and forms covered by a particular word and serve as an important aid to vocabulary expansion.
4. Illustrations showing the basic or physical meaning of words that are commonly used to in an abstract or figurative way.

The results of the survey of the use of pictorial illustrations in existing dictionaries in Fang is illustrated in the table below.

Title of dictionary	Number of illustrations	Items Illustrated	Languages	Common animals, objects, plants	Not easily explained in words	Groups of related objects	The basic or physical meaning of words
Dictionnaire Fang-Français, Marling (1872)	None	None	Fang, Français	None	None	None	None
Dictionnaire Français-Fang ou Pahouin, Lejeune (1892)	None	None	Français, Fang	None	None	None	None
Dictionnaire Fang-Français et Français-Fang, Galley (1964)	None	None	Fang, Français	None	None	None	None

Table 9.2 Survey of the use of pictorial illustration in existing dictionaries in Fang

9.5.5.10 Ostensive illustrations and the dictionary with the planned microstructural programme

It goes without saying that the previous dictionaries in Fang did not make use of pictorial illustrations. Gouws (1993: 45; 1991: 274) has already noted the reasons why pictorial illustrations have long been neglected and regarded as ornamental components of a dictionary article, adding unnecessary encyclopaedic elements. According to him, this is very realistic if the pictorial illustrations are aimed at the presentation of data that is not relevant or necessary to transfer meaning or to achieve communicative equivalence. This is also logical when the pictorial illustrations present data that is already contained in the verbal definition or treatment of the translation equivalent. However, because of the great semantic importance of pictorial illustrations in modern dictionaries and the explicitness that can be achieved through the use of pictorial illustrations enhancing the retrieval of information, a new approach to pictorial illustrations in dictionaries in Fang is necessary.

In the proposed dictionary, the use of pictorial illustrations will be considered, particularly with reference to cultural items. Consider the following examples (see figures below) regarding the concept *basket* in Fang.

In showing how a dictionary may facilitate the learning of the lexicon of a foreign language, the concept BASKET (as known in French) shall be considered and compared with the same broad concept in Fang. In French there is only one generic word but, as indicated below, the Fang people have different names for different baskets depending on their shapes and functions.

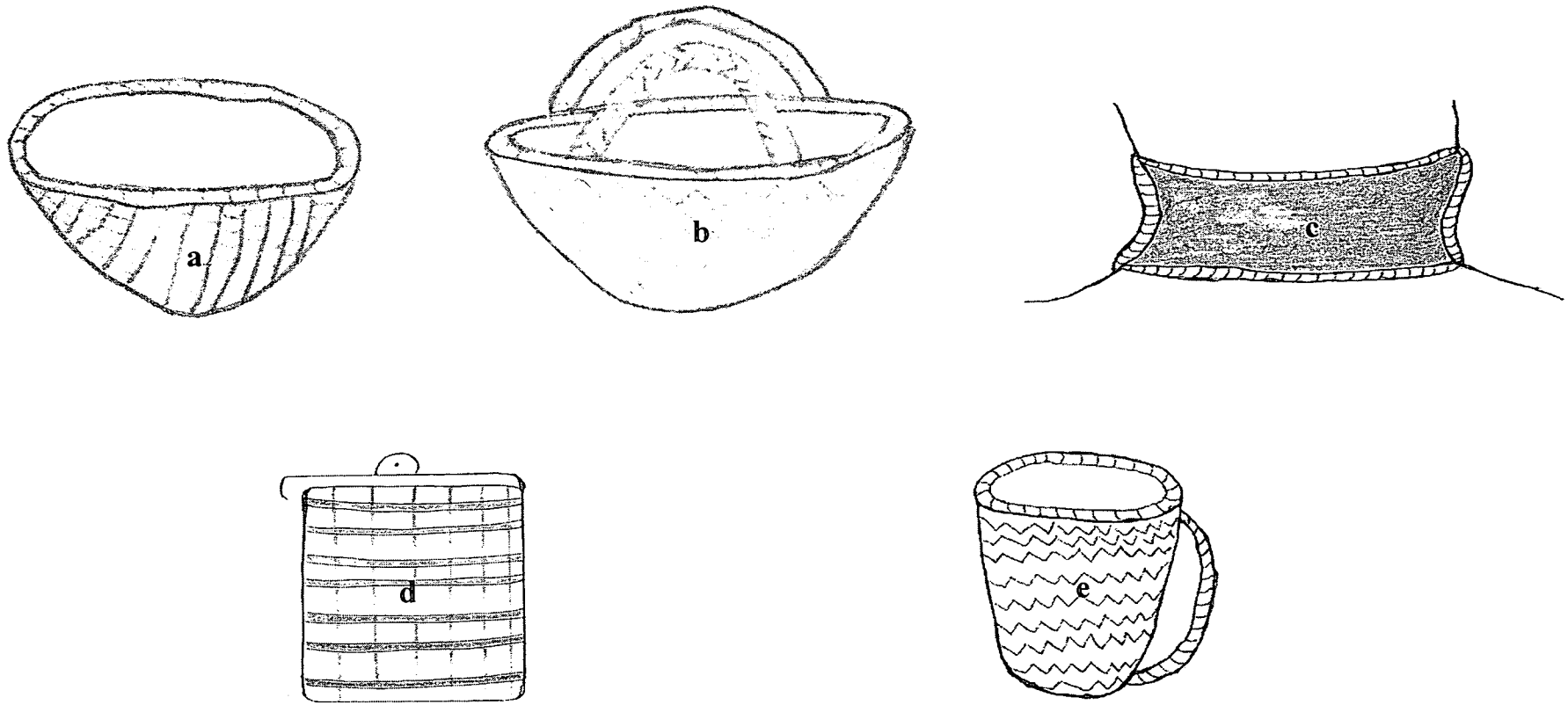


Figure 9.15a: Baskets

a. A winnowing tray called *dzar* **b.** A market basket called *ekat* **c.** A drying or keeping basket called *akang* **d.** A basket used for conserving grain called *awoun* **e.** A field basket called *nkwen*

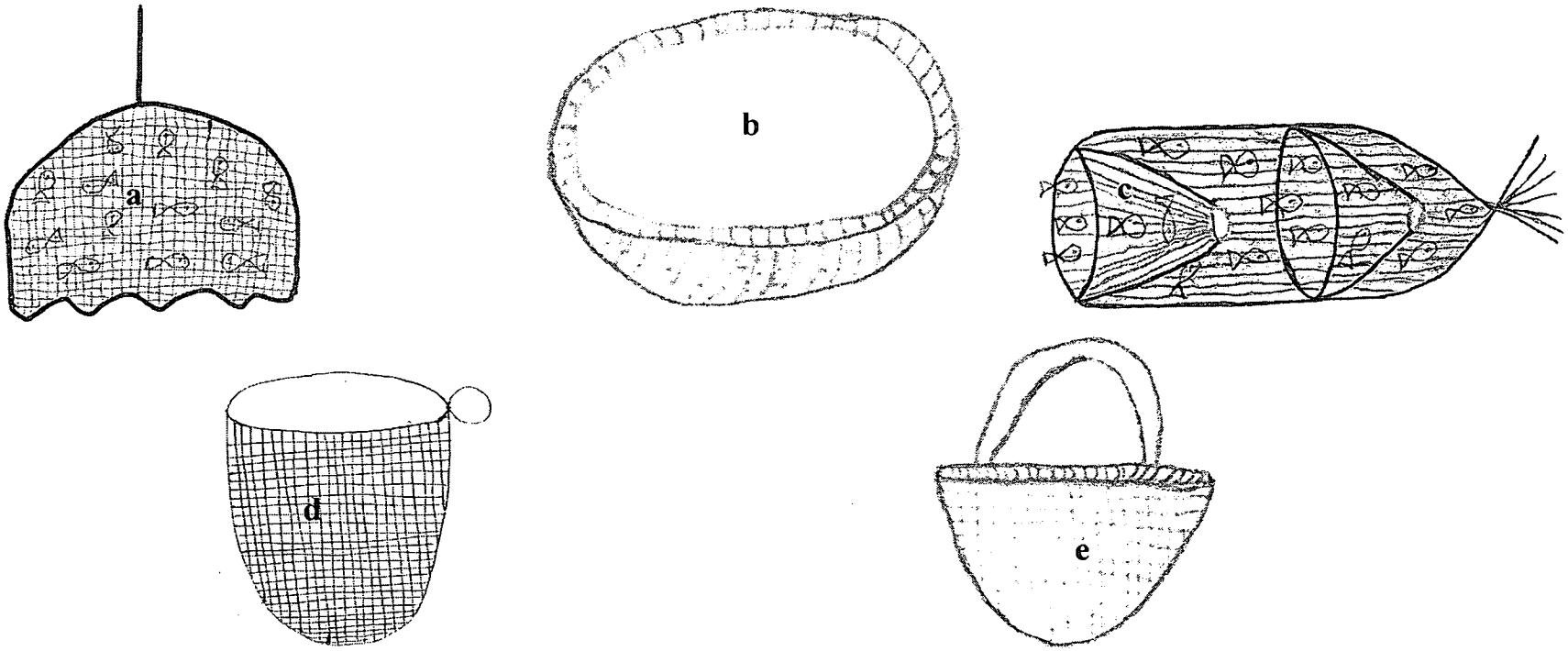


Figure 9.15b: Baskets with special uses

a. A big fish net called *avwat* **b.** A fish net called *tan* **c.** A fish basket called *aye* **d.** A small fish basket called *nkoun* **e.** A fish basket for catfish *ebar*

It goes without saying that the use of pictorial illustrations is of great interest in the proposed dictionary. Without using them, it would be impossible to illustrate the differences between these various baskets. The illustrations are simple and precise. They are also easily discerned. These illustrations therefore meet the criteria for pictorial illustrations as proposed by Al-Kasimi (1977). Moreover, the illustrations have distinguishing properties and thus establish the concept of BASKET more efficiently than a verbal equivalent could.

Furthermore, the compiler of the proposed microstructural programme should be aware of the reservations regarding the inclusion of illustrations in the dictionary, even if these items will be included in the planned dictionary. 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. In the planned dictionary, the pictorial illustration will be placed under the lemma. After the items giving the illustrative example, the items giving the ostensive illustration will be provided. The markers (⇒ illustration) will indicate the existence of a relevant pictorial illustration. The dictionary with the planned microstructural programme should adhere to the criteria of clarity, fidelity and comprehensiveness.

It is true that the Gabonese community in general and the Fang community in particular are not very familiar with dictionary-using skills. The use of pictorial illustrations should have to be planned in accordance with the needs and reference skills of the target users of the planned dictionary. Consequently, the lexicographer(s) of the dictionary with the planned microstructural programme have to use such pictorial illustrations very carefully. Consider the following modified article of the lemma **tsit** drawn from the *Dictionnaire Fang-Français/Français-Fang*.

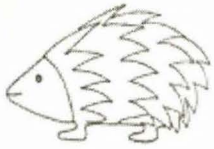
tsit [tsít] **tser** *nzaman* [tsér] **tsir** *atsi* [tsír] < * tiitu n. cl. 9/10. pl. bətsit.

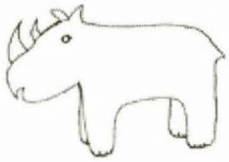
1. □ *Edzom mor adzi ebele meki*, etre comestible contenant du sang.
   • *adzi tsit*, il ou elle mange la viande.
   • *mora tsir*, gros animal ou grosse bête.
   ▶ Prov: *tsit milak kə ni mbi,* une bête à cornes n'entre pas dans une cavité.
   ⇒ illustration.

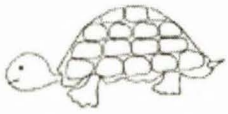
2. □. *Okwan yə abum*, la maladie du ventre.
   • *Akwan tsit*, il ou elle souffre de la rate.

3. □. *Mor a nə nziman*, une personne bête
   • *Emor nina a nə tsit*, cet homme est bête, têtu.

***Bətsir*, les animaux** (figures fromhttp://www.teteamodeler.com/coloriages; www.accesscanin.com; www.azurs.net/photo; www.indyzoo.com)

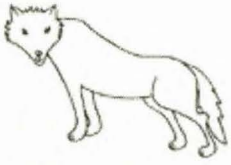

ngom


nzok mendzim


etugu

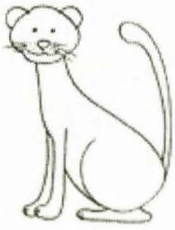

mvu ya dze


osen


mvu ya afan


so


gnol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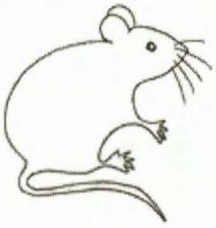
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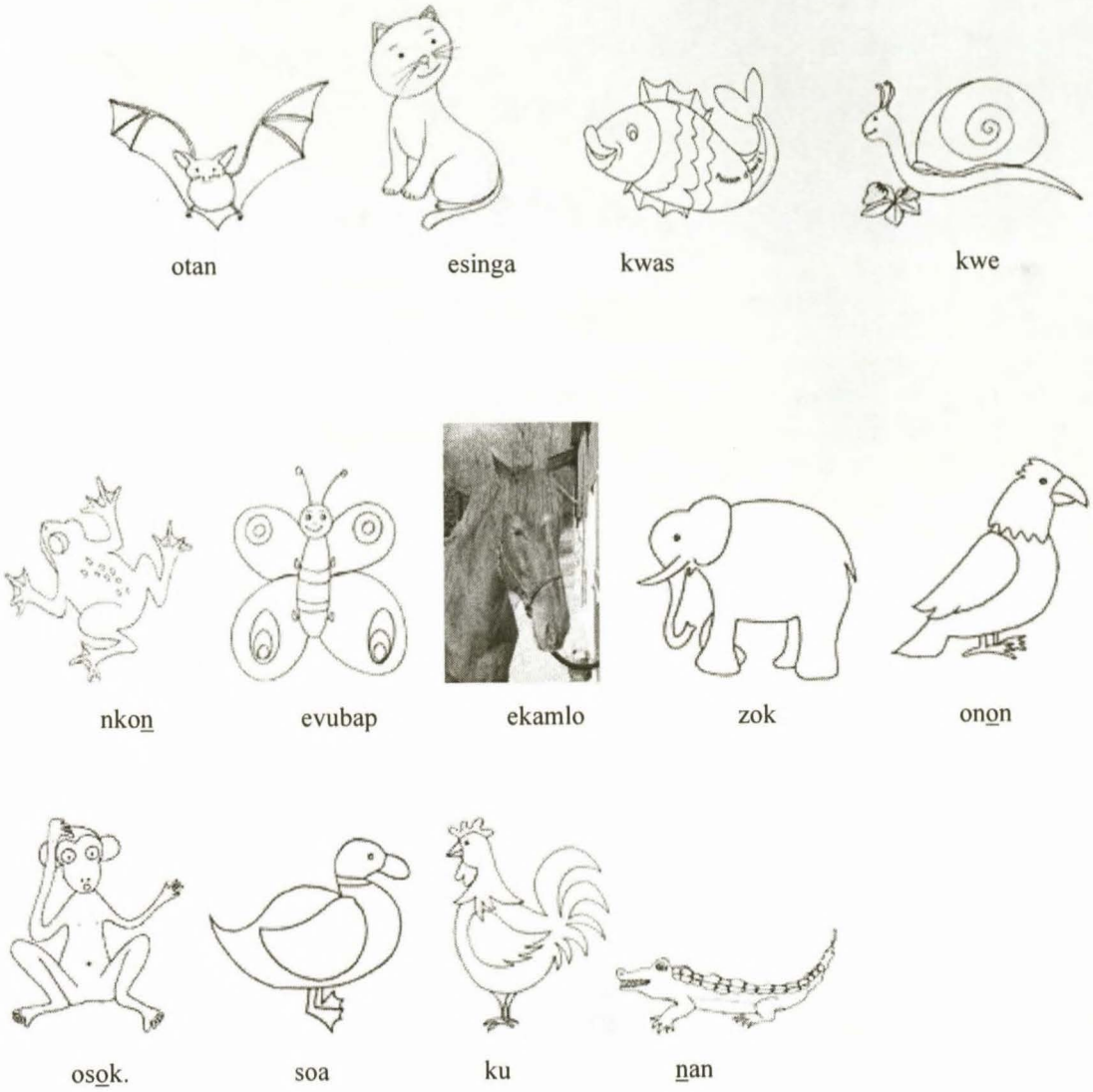


Figure 9.16: *Bətsir* "animals"

In the modified article of the lemma **tsit**, after the item giving the paraphrase of meaning and its translation equivalents, the items giving the ostensive definition are provided. They are preceded by the marker (⇒ illustration) indicating the existence of a pictorial illustration. The article of the lemma *tsit* mentioned above includes illustrations of several animals.

9.5.8 Concluding remarks

In general, on the basis of this study, it can be said that pictorial illustrations or ostensive definitions can be regarded as a type of definition that is used to augment or to elucidate the verbal definition. They are used to illustrate cultural items that no longer exist and which the user cannot easily conceive without the aid of an illustration. Such pictorial illustrations must meet the following criteria: compactness, fidelity and interpretability (relevance, simplicity, preciseness, completeness and clarity).

A survey was done of existing dictionaries in Fang. The aim was to determine to what extent and what purpose existing dictionaries in Fang use pictorial illustrations. It seems that these dictionaries do not make use of pictorial illustrations. Contrary to the previous dictionaries, the planned dictionary will make use of ostensive definitions because of the explicitness that can be achieved through their use, which enhances the retrieval of information. Pictorial illustrations will be used in both the monolingual descriptive and the bilingual dictionary. It will be an aid in bridging the semantic gaps that may occur between Fang and French.

9.6 Glosses

Glosses can be regarded as microstructural entries within the article of a dictionary. According to Zgusta (1971: 270), a gloss is any descriptive or explanatory note within the article. Before discussing the term *glosses*, Zgusta (1971: 332) starts by making a difference between labels and glosses. According to him, the first distinction one can make is formal. The form of glosses is free and can vary from one entry to another, while the form of the labels to be used in the dictionary must be decided on by the lexicographer before the work on the dictionary itself starts. A lexicographer has to give a list of all possible labels to be utilised in the dictionary in the user's guide and has to be meticulous in the application of the labels. The second difference pertains to purpose: semantic glosses always disambiguate, while labels only sometimes disambiguate; labels inform the user about the descriptive fact of language.

As far as the bilingual dictionary is concerned, Zgusta (1971: 329) points out that the translation equivalents are the most important entries in the dictionary article. But in the majority of cases, it does not suffice to indicate them alone; firstly because most of them have multiple meanings and because translation equivalents are more often than not only partial equivalents of the lemma. We have seen already that labels can be used to indicate the usage restrictions applicable to lexical items that deviate from the standard variety. A gloss can be used to disambiguate the multiple meanings of a translation equivalent. To illustrate, Zgusta gives the following example: Eng. *daughter* Ossetic *cyzg* (one's own child). According to him, such a gloss disambiguates the meaning of the Ossetic word, because it eliminates the other sense (girl). The author continues by stating that a gloss may not be seen as an explanation because it does not attempt more than to indicate as succinctly as possible the relevant difference, the sphere of application, whereas an explanation would need the statement of other critical features. In the same way, Zgusta (1971: 329) writes that glosses are used to specify the partial equivalents: they specify to which part of the entry-word's multiple meaning the respective partial equivalent belongs, and thereby also disambiguate its own multiple meaning. According to Zgusta (1971: 330), glosses are tools that can comprise varying forms and they overlap with other lexicographic devices such as explanations, explanatory equivalents, disambiguating synonyms, etc.

To illustrate an example of a gloss, which is an explanatory phrase, see the following example from the *Groot Woordeboek* (GW):

uitgly, (-ge-), slip (e.g. on banana skin); skid.

The following example is also drawn from GW. This is the case of a gloss that disambiguates a synonym. It is underlined as follows:

honkie-tonk (klavier), honky-tonk (piano)

Glosses are used to disambiguate a synonym, as in the *Dictionnaire Fang-Français/Français-Fang*, where the glosses are underlined.

BOGHBE (h) 1. Se coucher (animaux, malades, vieux), devenir infirme [...]

Zgusta (1971: 330) goes further by stating the lexicographer should not bother too much with the form of a gloss, as long as he/she does not write "uncalled-for encyclopaedic explanations in their places", but that the lexicographer should rather focus on finding the real critical feature or limited range of application.

The treatment of the lemma *uitgifte* in GW includes two disambiguating glosses (underlined) as well as a label:

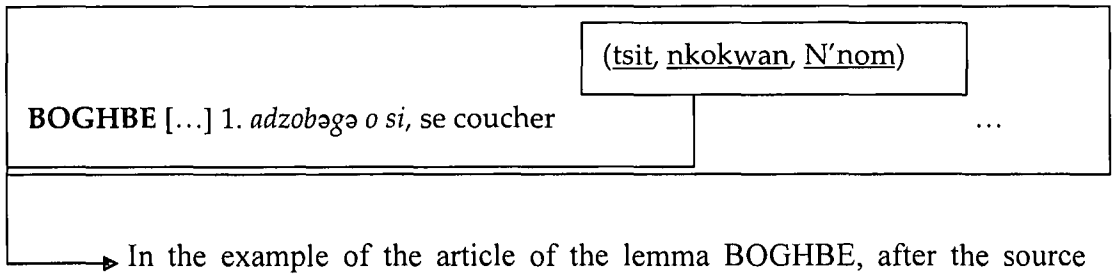
uitgifte (-s), issue (stamps); flotation (of loan); issuance (*mil.*) [...]

This example shows that the gloss designates that the translation equivalent is only partially equivalent to the lemma. The gloss shows that *issue* can be used to translate *uitgifte* with regard to stamps, whilst *flotation* can be the target language equivalent of the lemma in the case of a *loan.*

9.6.1 The use of glosses in the dictionary with the planned microstructural programme

The proposed microstructural programme will make optimum use of glosses to treat cultural or encyclopaedic data. The use of glosses in the dictionary with the planned microstructural programme gives the lexicographer(s) an opportunity to present the relevant and necessary cultural data. After the items giving the paraphrase of meaning and its translation equivalent, the item giving the gloss is provided. The item giving the gloss (or explanatory note indicating the range of application of the word) will be underlined and displayed in parenthesis.

Consider the following modified example of article **BOGHBE** taken from the *Dictionnaire Fang-Français/Français-Fang*. This example shows how the item giving the gloss will be presented in the planned dictionary.



In the example of the article of the lemma BOGHBE, after the source language item **BOGHBE**, the item giving the paraphrase of meaning and its translation equivalent, the item giving the gloss is provided, and it is underlined and displayed in parenthesis. The gloss used shows that the word **BOGHBE** can be used in reference to *tsit* (animal), *nkokwan* (sick person), and *N'nom* (vieux).

It is true that the Gabonese community in general and the Fang in particular are not very familiar with dictionary-using skills. The use of glosses should have to be planned in accordance with the needs and reference skills of the target users of the planned dictionary. Consequently, the lexicographer(s) of the dictionary with the planned microstructural programme have to use such "glosses" very carefully.

9.7 Usage notes

Hausmann and Wiegand (1991) write that various data types may be classed under the term *note*. Burkhanov (1998: 257) comments that the term *usage note* denotes a particular way of presenting particular data. It may comment on the typical contexts, particularly situational contexts, in which a given lexical item may be found. Kipfer (1984: 145) goes further by pointing out that the usage note may be considered a detailed extension of the usage label. In modern lexicography, lexicographers strive to utilise all available strategies to make the dictionary text as user-friendly as possible. Usage notes can be regarded as a key to assist the user in obtaining or finding what he or she needs as quickly and easily as possible in dictionaries.

Usage notes are part of the outer access structure of a dictionary and can refer to the lemma or a specific microstructural entry. According to Gouws (1993: 36), the position of these notes in the article should give a clear indication of their scope. Quite often, usage notes are placed in a square frame that sets them apart from the other entries. Gouws writes that the square frame serves as an access structure that indicates the specific type of entry.

The lexicographers of GW make limited use of usage notes, for example after the treatment of the lemma **nigger**, which is given the translation equivalent *Afrika-Amerikaner*:

The usage notes in GW are employed to provide data concerning the meaning and usage of lexical items. In the *Tweetalige Aanleerderswoordeboek/Bilingual Learner's Dictionary* (hereafter abbreviated TAW), usage notes are used for linguistic data, grammatical data, etc. Especially in this learner's dictionary, the user would have benefited greatly from usage notes providing cultural data in order to aid the user in understanding the culture and lives of the target language speech community, and to equip him or her for better communication in the target language. Kavanagh (2000: 99–118) states that a short note after a lexical entry is an attractive way of including more detailed cultural data.

Gouws (1996) discusses usage notes as a type of inserted inner text. 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. Hausmann and Wiegand (1989) state that the inserted inner texts are particularly appropriate for use in a learner's dictionary. As we have already established, most users of dictionaries in a diverse environment such as Gabon would probably be unfamiliar with at least one of the languages treated in the dictionary, which would make the majority of users of the dictionary learners and which would make usage notes, or inserted inner texts, particularly appropriate for the presentation of cultural data among others.

9.7.1 Classification of usage notes

Lexicographers present a part of the lexicon of a language in a dictionary. The material presented is selected in terms of the needs of the users of the dictionary. The treatment of usage notes consequently is different from one dictionary to another in the way it presents and treats the lexical items.

Howarth (1995) presents a categorisation of usage notes and the categories of linguistic information that these notes deal with. The following is an attempt at a categorisation of usage notes in the OALD:

1 grammatical information
1.1 morphology
1.1.1 word class *affect/effect*
as/like
1.1.2 derivatives *continuous/continual*
principal/principle
1.1.3 inflections *little/least/few/fewest*
bear/borne/born
been/gone
1.1.4 prefixes *re-*
1.1.5 suffixes *-ic/-ical*
1.1.6 spelling *-ise/-ize*

1.2 syntax
1.2.1 clause structure *although/though/however/albeit*
1.2.2 complementation
1.2.2.1 verb *clip/pare/prune/trim/shave*
1.2.2.2 adjective *different from/to/than*

2 semantic information
2.1 lexical sets
2.1.1 nouns *act/action/deed/feat/achievement/exploit*
2.1.2 verbs
2.1.2.1 intransitive *boil/freeze/melt/thaw/evaporate/condense*
2.1.2.2 transitive *arrange/organize/plan*
2.1.3 adjectives *beautiful/handsome/pretty/fair/good-looking/attractive*
2.1.4 adverbs *almost/nearly/scarcely/hardly*
2.1.5 prepositions *about/on*
2.1.6 sound symbolism *spray/shower/spatter/splash/slosh*

3. pragmatic information
3.1 exponents of functions *excuse me/sorry/I beg your pardon/pardon*
3.2 style
3.2.1 regional *holiday/vacation/leave*
3.2.2 formality *ask/request/beg/entreat/implore/beseech*
3.3 correctness *less/fewer*
3.4 non-sexist language *(s)he/he or she/they*
chairman/chairperson/chair

4. encyclopedic information
4.1 British culture *Britain/Great Britain/GB/United Kingdom/UK/Briton/ Britisher*
4.2. International culture *Christianity/Christendom/Islam/Judaism*

Table 9.3: A categorisation of usage notes in the OALD (cf. Howarth, 1995)

1 grammatical information
1.1 morphology
1.1.1 word class *affect/effect*
as/like
1.1.2 derivatives *continuous/continual*
principal/principle
1.1.3 inflections *little/least/few/fewest*
bear/borne/born
been/gone
1.1.4 prefixes *re-*
1.1.5 suffixes *-ic/-ical*
1.1.6 spelling *-ise/-ize*

1.2 syntax
1.2.1 clause structure *although/though/however/albeit*
1.2.2 complementation
1.2.2.1 verb *clip/pare/prune/trim/shave*
1.2.2.2 adjective *different from/to/than*

2 semantic information
2.1 lexical sets
2.1.1 nouns *act/action/deed/feat/achievement/exploit*
2.1.2 verbs
2.1.2.1 intransitive *boil/freeze/melt/thaw/evaporate/condense*
2.1.2.2 transitive *arrange/organize/plan*
2.1.3 adjectives *beautiful/handsome/pretty/fair/good-looking/attractive*
2.1.4 adverbs *almost/nearly/scarcely/hardly*
2.1.5 prepositions *about/on*
2.1.6 sound symbolism *spray/shower/spatter/splash/slosh*

3. pragmatic information
3.1 exponents of functions *excuse me/sorry/I beg your pardon/pardon*
3.2 style
3.2.1 regional *holiday/vacation/leave*
3.2.2 formality *ask/request/beg/entreat/implore/beseech*
3.3 correctness *less/fewer*
3.4 non-sexist language *(s)he/he or she/they*
chairman/chairperson/chair

4. encyclopedic information
4.1 British culture *Britain/Great Britain/GB/United Kingdom/UK/Briton/ Britisher*
4.2. International culture *Christianity/Christendom/Islam/Judaism*

Table 9.3: A categorisation of usage notes in the OALD (cf. Howarth, 1995)

With regard to the table mentioned above, many notes could be placed in several categories, e.g. the morphological distinctions of *as* are discussed along with the word *like,* the syntactic properties of *clip* are discussed along with other verbs, such as *pare, prune, trim* and *shave*, the semantic distinctions of *act* are discussed along with other nouns, such as *action*, *deed*, *feat*, *achievement* and *exploit.*

Considering the Gabonese environment where the compilation of dictionaries is in the embryonic stage and the fact that existing dictionaries in Fang do not provide the users with usage notes, the question is: do users use usage notes and, if so, how effectively? In order to discover how usage contributes to learning, it seems normal to collect some empirical data in order to evaluate their ability to use usage notes. This is something to which lexicographers have to pay attention.

9.7.2 Positioning or placement of usage notes

Lexicographers have different manners or styles to present usage notes in a dictionary. Howarth (1995) discusses the "style of presentation of usage notes". According to him, usage notes can be placed according to the manner in which the information is presented. He adds that the most common way is to construct a short explanatory paragraph stating distinctions or preferred examples. Consider the following example from the OALD:

> NOTE ON USAGE: British and US English differ as regards the prepositions used after **different.** 1 Before a noun or adverbial phrase, both **from** and **to** are acceptable in British English. Some speakers prefer **from. Different than** is not usual: *He's very different from/to his brother. o This visit is very different from/to last time.* In US English **than** is commonly used (not **to**): *Your trains are different from/than ours. o You look different than before.* 2 In both varieties, but especially in US English, **than** is an alternative to **from** before a clause: *His appearance was very different from what I'd expected/His appearance was very different than I'd expected.*

A similar case can be found in the following example from LONGMAN:

> **Hard** is an adverb used to say that something is done using a lot of effort or force: we studied hard for two weeks. **Hardly** means "almost not": I could hardly believe what she said.

The example mentioned above gives additional data about the lemma **Hard** and helps the user avoid mistakes when using the words *Hard* and *Hardly*.

Howarth (1995) suggests another style of presentation of usage notes, i.e. the use of a short illustrative paragraph, which helps to avoid the problem of stating definitely the semantic boundaries of items, but shows the typical central number of the categories under discussion:

> NOTE ON USAGE: **Sport** plays a big part in many people's lives. At school children can play football, netball and other **sports** and there are clubs for playing indoor **games** such as chess or snooker. After work a lot of people enjoy a game of tennis or squash. On TV we can watch tennis and football **matches** throughout the year and horse **races** are broadcast almost every day. Events in which people compete against each other often for prizes are **competitions** or **contests**: a dancing competition or an archery, angling, etc contest. A **tournament** or championship is series of contests: a tennis tournament of the European football championship.

Another style of presentation is in tables (cf. Howarth, 1995; Gouws, 1996b). For instance, consider the following example from the OALD:

	uncountable nouns	countable nouns
positive statements	lots of money (*less fml*)	lots of coins (*less fml*)
negative statements	a lot of money much money (*more fml*)	a lot of coins many coins (*more fml*)
questions	not much money little money (*more fml*) How much money?	not many coins few coins (*more fml*) How many coins?

9.7.3 Usage notes in the dictionary with the planned microstructural programme

Given the fact that the existing dictionaries in Fang do not make use of usage notes, the dictionary with the planned microstructural programme will include usage 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 usage note applies. This procedure of inclusion is echoed in dictionaries like the *Oxford Hachette French-English/English-French Dictionary*, *WAT* and *SAOSD*. In this proposed microstructural programme, though, a system whereby usage notes are inserted into a microstructure as inserted inner texts will be proposed. The lexicographers of the dictionary with the planned microstructural programme will make use of this type of text in order to draw the user's attention to the presentation of cultural or grammatical data. Usage notes will be placed in a different way than the rest of the lexicographical text, i.e. in separate frames distinguished by means of specific non-typographical structural markers.

In order to categorise the different types of usage notes and the categories of linguistic information that the notes deal with, the following categorisation of usage notes will be used in the dictionary with the planned microstructural programme.

Table 9.4: Categorisation of usage notes in Fang

1 grammatical information
1.1 morphology
1.1.1 word class *ele / bile* "tree/trees"
dzom/dzoma "thing/whatever or whoever"
1.1.2 derivatives *akə/ məkə* "to go/departure"
asili/ nsili "to ask/ question"
1.1.3 inflections *anu/onunu* "mouth(s)/small mouth"
kik/kigi " to cut/ cut!
dzi/dzak/adzidzi "to eat/dzak!/to use to eat"
1.1.4 pre-prefixes *e/a*
1.1.5 prefixes *e-*
1.1.6 suffixes *-a/-an/-ə*
1.1.7 spelling *alɔn/alon* "to weep/to build"

1.2 syntax
1.2.1 clause structure fa na/togə na/ "though/although/because
1.2.2 complementation
1.2.2.1 verb *aduk/abo minal* "to lie/to tell lies
1.2.2.2 adjective *ntok/otok/atok/etok*

2 semantic information
2.1 lexical sets
2.1.1 nouns *dzok/dzokə* "bedroom/abandon or pardon
2.1.2 verbs *kə oyo/dzob osi*
2.1.3 adjectives *mbən/edzi/ndoman* "beautiful/attractive/good-looking/attractive"
2.1.4 adverbs *beben/oyap*
2.1.5 prepositions *oyo/ayo*

3. pragmatic information
3.1 exponents of functions *masili wo bidzamənа/enonɔl/dzugəma*
3.2. regional *məwegan/oyon*
3.3 non-sexist language *(s) ma/wa/ba/mina*

4. encyclopaedic information
4.1 Fang culture *ntumu/atsi/mvai/nzaman/okak/meke*
esangi/ yəgun/esavus/yəbiven/odzip
4.2. International culture *chetien/musulmant*
fulasi/equato

The lexicographers of the planned dictionary should include in the front matter a text focusing on the different types of usage notes and the categories of linguistic information that the notes deal with. The inclusion of a text like this could increase the value of the planned dictionary because it could provide the target users with bonus information.

The categorisation of usage notes will be done according to the needs of the target users of the dictionary with the planned microstructural programme. Consider the following modified article of the lemma **atsi** taken from the *Dictionnaire Fang-Français/Français-Fang*. This example can also be found in the table mentioned above.

atsi [...]
e fang bakobə a Lambaréné, Ndjolé ye Bifoun, Le Fang parlé à Lambaréné, Ndjolé et Bifoun.

Notes d'usage:
meke, *e fang bakobe a Libreville, Kango, Ntoum ye Foulenzem*, Le Fang parlé à Libreville, Kango, Ntoum et Foulenzem.
mve, *e fang bakobeMinvoul*, Le Fang parlé à Minvoul.
ntumu, *e fang bakobeOyem ye Bitam*, Le Fang parlé à Oyem et Bitam.
okak, *e fang bakobe Mitzic, Medouneu ye Cocobeach*, Le Fang parlé à Mitzic, Medouneu et Cocobeach.
nzaman, *e fang bakobe a Makokou, Koumameyong, Booué ye Ovan*, Le Fang parlé à Koumameyong, Booué et Ovan.

Usage notes are provided at the end of the modified article of the lemma **atsi** drawn from the *Dictionnaire Fang-Français-Français-Fang*. They help the user to know other Fang dialects (Meke, Ntumu, Okak, Mve and Nzaman) and the different places these dialects are spoken. The user who accesses the lemma **atsi** increases his or her Fang knowledge through a conscious study of the attached section.

Consider the following modified article of the lemma **dzom** taken from the *Dictionnaire Fang-Français/Français-Fang*.

dzom [...]
edzam e ne ka ayil, sans valeur.

Notes d'usage:
*Ke fulan **dzom** ye **dzoma**. **Dzom** ayil na: edzam e ne ke eban; dzoma Ane mor ezin*. Ne pas confondre **dzom** et **dzoma**. **Dzom** désigne tout ce qui est sans valeur, alors que **dzoma** désigne quelqu'un.

The example of the modified article of the lemma **dzom**

mentioned above gives additional data about the lemma **dzom** and helps the user to avoid mistakes when using the words *dzom* and *dzoma*. A cross-reference from the article of the lemma *dzoma* to the lemma *dzom* should also be given, turning the lemma *dzom* into an external reference address located in the central list. Cross-references will also be used from the specific articles of the lemmas *Meke, Ntumu, Okak, Mve* and *Nzaman* to the lemma *atsi*, as far as the article of the lemma *atsi* mentioned above is concerned. This principle can be retained in the dictionary with the planned microstructural programme, as it helps the user to obtain rapid access to the desired lemma.

9.8 Proverbs and idioms as culture-bound items

Idioms and proverbs reflect the lifestyle and culture of a specific group of speakers at a specific point in time (Hendriks, 2003: 112–113). Sometimes speakers are not aware of the roots or etymology of a proverb and an idiom, yet it does not make them less meaningful, nor does it necessarily cause them to be used less frequently, says Hendriks.

In many dictionaries, proverbs and idioms are generally treated inconsistently. In a bilingual dictionary, says Gouws (1996b: 75), using proverbs and idioms in a fluently and stylistic correct manner is one of the ways in which L1 speakers distinguish themselves from L2 speakers. The lexicographers of a bilingual dictionary should endeavour to equip their users with L1 skills. This includes the mastering of idiomatic and proverbial language.

9.5.8.1 The positioning of proverbs and idioms

Once a decision has been taken to include proverbs and idioms, due consideration needs to be given to where these multiword lexical items (proverbs and idioms) should be placed. The placement of these items is determined mainly by their nature. In principle, multiword lexical items such as proverbs and idioms should have to receive full treatment in the article position in the macrostructure, meaning that they

should have to be treated as lemmas. Gouws (1996a: 56) is aware of the problem of positioning these items without a fixed word in first position. The possible solution that most lexicographers go for consists of placing them, alphabetically, in the article of a keyword. This keyword is typically the first noun or the first verb in the idiom. According to Gouws (1996a: 56), this approach of positioning multiword lexical items in the article is impractical. Gouws gives the following reasons why this approach is not workable:

- It misrepresents the lexical status of multiword lexical items.
- It often also incorrectly implies a semantic relation between the lemma and the multiword lexical items.

Gouws (1996a: 68) goes further by making another judgement with regard to the treatment of multiword lexical items. According to him, when multiword lexical items are treated in the article of a keyword, they are often included in a microstructural search area alongside other multiword lexical items such as collocations and illustrative examples, without structural markers that differentiate them from the other entries in that article position. He states that the undifferentiated presentation of source language multiword lexical items is followed by an equally undifferentiated presentation of translation equivalents. Gouws (1996a: 68) gives an example with regard to the treatment of multiword lexical items in dictionaries such as the *Tweetalige Aanleerders Woordeboek / Bilingual Learner's Dictionary* (henc eforth abbreviated as TAW) and the *Groot Woordeboek/Major Dictionary* (henceforth abbreviated as GW). According to him, the users of these dictionaries receive no assistance in ascertaining whether an entry given as translation equivalent for a source language idiom has idiom status in the target language or not.

In the treatment of the lemma **ASEKH** (something to esteem) in the *Dictionnaire Fang-Français/Français-Fang*, this undifferentiated treatment of the proverb alongside other multiword items is evident:

ASEKH (h) n.4, pl. mesekh (vbsekh). Chose à admirer, qualité par opposition à défaut. Contr.: *ata*, défaut. *Kale a ne y'asekh, a ne ye mba mir, mba meson*, tel homme a telle qualité, de beaux yeux, de belles dents. *E ndo nyi é asekh é zal di*, cette maison est la belle du village. *Kale a ne mesekh mebè*, un tel a deux choses qui sont à admirer. Proverbe: *Mbi ke su aseghe, mbe ke su ata*, si laid qu'on soit, il reste toujours quelque chose de beau. Si beau qu'on soit il reste toujours quelque chose qui pèche.

In this segment of the article, the proverb in the source language (Fang) is printed in italics and the translation equivalent in the target language (French) is given in Roman. There is no structural marker that differentiates the proverb from other entries in the article position, and the user can become very confused because some data categories are labelled (n., pl.) while others, namely proverbs, are not.

Gouws (1996a: 57) points out that the treatment of idioms and other multiword lexical items confronts the lexicographer with a wide-ranging spectrum of problems. The lexicographer(s) of the proposed dictionaries should have to include idioms and proverbs in the central list of the dictionary. This will be done in the articles of the keywords taken from the idiom or proverb, for example the first noun or the first verb. This is not the case in the *Dictionnaire Fang-Français/Français-Fang*, where the system of choosing the first noun or the first verb is not well applied. One finds this inconsistency in the treatment of the following lemmas.

ASEN .[...] n. [...]Proverbe: Asen e nyoghé nkukh e tele ôyo [...]

EBA [...] n. [...]Proverbe: Kul é nga likh biba bi ndokh [...]

EKOKWE [...] n. [...] Proverbe: Ekokwé éngôn, é burbe é si metekh, e yarbe e yô mezim [...]

ETURA [...] n. [...] Proverbe: Nku a nga nyakh mebi étura

It goes without saying that, in the treatment of the lemmas **ASEN** and **EKOKWE**,

the compiler chooses the first nouns, namely *Asen* and *Ekokwé*, while in the treatment of **EBA** and **ETURA**, the compiler does not apply the method of choosing the first noun or the first verb in the article of a keyword taken from the proverbs; the compiler chooses the keyword, which is typically not the first noun or the first verb in the proverb.

In the treatment of the following lemma **KU** (to fall), the system of choosing the first noun or the verb is well applied in the *Dictionnaire Fang-Français/Français-Fang,*

> **KU** [...] 5. Expressions diverses: *Ku amvîm*, trébucher l'un sur l'autre. *Ku mbekh*, faire une chute, tomber par terre. *Ku bubure*, tomber face en avant. *Ku mè*, tomber à l'inverse. *Ku memè*, tomber à l'inverse. *Ku mbîň*, être embrouillé (affaire). *Ku ňkwé*, atteindre sa puberté. *Ku mvôn*, être circoncis. *Ku som*, être pris de frayeur. *Ku kam*, être effrayé. *Ku avô*, rester immobile de surprise. *Ku melan*, être halluciné par la decoction. *Ku ésam*, être circonscis. *Ku nlô*, avoir un écoulement de sperme. *Ku azô* (poissons), les poissons font de l'écume dans l'eau ou bien les poissons sont très nombreux [...]

In the treatment of the lemma **KU**, it is noted that the compiler of the *Dictionnaire Fang-Français/Français-Fang* chooses the first verb, namely *Ku*, in the article of a keyword taken from the "expressions diverses" (idioms). Italics are used for idioms, but these entries are separated by the structural marker "Expressions diverses". Unfortunately, the user could have a problem when looking for these words and he could not quickly move from one idiom to another. In the treatment of idioms in the *HAT*, structural indicators, namely bold and italic, are used to mark a keyword in the idioms according to which the idiom has been ordered in the listing of idioms. By looking for these words in bold italics, the user can quickly move from one idiom to another (cf. Gouws & Prinsloo, 2005a: 172). Here, the rapid access structure can be established through the use of structural markers, which allow the user to reach the required data with as little trouble as possible (cf. Gouws & Prinsloo, 2005a). This is something to which the lexicographers have to pay attention.

9.8.2 Providing translation equivalents for idioms and proverbs

Once the positioning of idioms and proverbs has been determined, the lexicographers of bilingual dictionaries have to know how to determine the translation equivalents for idioms and proverbs. Will they translate proverbs with proverbs and idioms with idioms? According to Gouws (1996b: 68, 70), such a procedure is not a prerequisite for the suitable treatment of idioms and proverbs, because the existence of an idiom or a proverb in one language does not imply the existence of an idiom or a proverb with similar meaning in another language. For example, Gouws (1996b) points out that the idiom and translation equivalent would probably differ in context, register or style.

Although idioms and proverbs in the *Dictionnaire Fang-Français-Français-Fang* are regarded as treatment units and provided with target language translation equivalents, the treatment is very limited. Usually there is no indication given of the nature of the equivalent relation between them and their translation equivalents (Gouws, 1996b). This problem could be solved if idioms or proverbs are treated in a separate text from the central word list, where there would be more space to deal with issues like the type of equivalence relationship between the idiom/proverb and its translation equivalents.

The treatment of proverbs and idioms requires that the lexicographers have to focus primarily on the different types of equivalent relations, i.e. full equivalence (congruence), partial equivalence (divergence) and zero equivalence (surrogate equivalence) (cf. Gouws, 1996b: 70). One of the weak points of existing dictionaries in Fang is that the compilers do not specify the type of equivalence relationship between the proverb/idiom and translation equivalents. Besides the fact that these dictionaries do not contain any indication with regard to the type of equivalent relationship, they do not give any supplementary information that the list of translation equivalents that they provide contains only partial equivalents of the source language item. The task of the lexicographer is to apply equivalent discrimination consistently. This must be done in such a way that the user must be able to choose the correct equivalent where a

relation of divergence exists, cf. Gouws (1996b). Here, the lexicographer(s) must take into account the need of target users when treating idioms and proverbs. For example, in the Gabonese context, if the lexicographers want to compile a bilingual dictionary targeted at users who do not have a strong dictionary culture, he or she has to give information about such strong culturally rooted items as proverbs and idioms. He or she also has to indicate if the translation equivalent could be used in the same context as the source language idiom/proverb. One possible way this can be done is to make use of labels, glosses and structural markers.

9.5.8.3 Proverbs and idioms in the dictionary with the planned microstructural programme

The dictionary with the planned microstructural programme discussed in this dissertation should make provision for the presentation and treatment of proverbs and idioms. The results of the questionnaire show that 21% of the respondents consult a dictionary to look up an idiom/proverb.

The lexicographer of the dictionary with the planned microstructural programme must apply the system where idioms and proverbs are included in the article of the keyword (the first noun or the first verb) obtained from these multiword lexical items, and he/she must explain this system in the outer texts of the dictionary. This is not the case in existing dictionaries in Fang, where there is no explanation of this system in the outer texts.

The compiler of the dictionary with the planned microstructural programme should use structural markers and labels in order to separate idioms from other multiword lexical items like proverbs, as in the example below.

ASEN .[...] n. [...] ▶ Prov: *Asen e nuoghé nkukh e tele ôuo ...*

KUL [...] n. [...] ▶ Prov: *Kul é nga likh biba bi ndokh ...*

In this treatment for the lemmas **ASEN** and **KUL**, the proverbs are given in italics, but these entries are separated by the structural marker "prov" (abbreviation for "proverbe"), which is preceded by the structural marker "▶". Here, the proverb will be given in italics and will be followed by its translation equivalent. Compared with section 10.10.1, where the compiler applies the system of choosing the first nouns like *Asen*, this is not the case with regard to the treatment of the lemma **EBA**, where the compiler does not apply the method of choosing the first noun or the first verb in the article of a keyword taken from the proverb. In the present section, the proverb "*Kul é nga likh biba bi ndokh*" is not treated within the article of the lemma **EBA**. Now it can be found within the article of the lemma **KUL**, as far as the system of choosing the first noun or the first verb is concerned (see below).

ku [...] vb. [...]

♦ IDIOMS: *Ku* ***amvîm***, trébucher l'un sur l'autre. *Ku* ***avô***, rester immobile de surprise. *Ku* ***bubure***, tomber face en avant. *Ku* ***ésam***, être circonscis. *Ku* ***kam***, être effrayé. *Ku* ***mbekh***, faire une chute, tomber par terre. *Ku* ***mbîň***, être embrouillé (affaire). *Ku* ***mè***, tomber à l'inverse. *Ku* ***melan***, être halluciné par la decoction. *Ku* ***memè***, tomber à l'inverse. *Ku* ***mvôn***, être circoncis. *Ku* ***ňkwé***, atteindre sa puberté. *Ku* ***som***, être pris de frayeur. [...]

In the treatment of the modified article of the lemma **ku** taken from the *Dictionnaire Fang-Français/Français-Fang*, the text block for

idioms is introduced by an entry "IDIOMS". The entry is given in typographical structural indicator (capital letters) and this enhances rapid access to the text block entrance because, being the only entry given in capital letters, it becomes much more manifest. The entry IDIOMS is preceded by the structural marker "♦". Within the article slot where idioms are given in italics, cf. the words ***amvîm***, ***avô***, ***bubure***, ***ésam***, ***kam***, ***mbekh***, ***mbîň***, ***mè***, ***melan***, ***memè***, ***mvôn***, ***ňkwé*** and ***som*** in the different idioms presented in the relevant text block of the article of the lemma sign **ku**. Where a text block will contain more than one idiom, these idioms will be ordered alphabetically according to the words given in bold italics. By looking for these words in bold italics, the user can quickly move from one idiom to another. This style of presenting idioms in a dictionary is well known in *HAT*.

It is true that the Gabonese community in general and the Fang community in particular are not very familiar with dictionary-using skills. The use of proverbs and idioms should be planned in accordance with the needs and reference skills of the target users of the planned dictionary. Consequently, in the dictionary with the planned microstructural programme, proverbs and idioms should be used very carefully.

It can be concluded on the basis of the discussion regarding "proverbs and idioms as culture-bound items" that they reflect the lifestyle and culture of the specific group of speakers at a specific point in time. Both the proverbs and idioms are often included in microstructural search areas, including other multiword lexical items such as collocations. They play an important role in the article of a dictionary.

Shortcomings relating to existing dictionaries in Fang include the absence of a well-devised system to position proverbs and idioms within the article. The lexicographers of the dictionary with the planned microstructural programme should include proverbs and idioms and they should pay more attention when positioning these multiword lexical items in the dictionary. They should have to explain them consistently in the outer texts of the dictionary.

Some dictionaries, like the *Oxford Dictionary of English Proverbs* (ODEP), present the sources in which the proverb is found. These sources are listed in chronological order. The sources consist not only of various dictionaries but also of works of literature. The meaning of the proverb is also given. It is indicated before the source of the proverb. This can be retained in the dictionary with the planned microstructural programme, as it will show clearly how the form of each proverb listed has changed in the course of being handed down.

9.9 Examples

9.9.1 Introduction

According to Lehmann (1995: 3), the field of lexicographical example has not yet been explored in depth. However, there is a great deal of literature devoted to the example, but most of the time this part of the microstructure receives only secondary attention compared to the dparaphrase of meaning. Nevertheless, the example, like the definition, constitutes one of the most important elements of metalexicographic discourse and both form the core of metalexicography (cf. Rey, 1987: 201).

Metalexicographers such as Gouws (1989, 2000) and Hausmann and Wiegand (1989) repeatedly emphasise an approach according to which the compilation of dictionaries is guided by the user perspective. In turn, lexicographers endeavour to improve the quality of their dictionaries in respect of enhanced information retrieval. Improving the quality and appropriateness of examples is one of the ways of enhancing the process of information retrieval (cf. Gouws, 2000: 139). The inclusion of examples should benefit all target users of a dictionary, but it is of special importance to the encoding user who needs maximum guidance within the physical limitations of a dictionary article.

Dictionaries differ from one another according to their specific needs and each data category of the dictionary should adhere to the purpose of the dictionary being

compiled. The presentation and treatment of examples should be seen within the context of the more comprehensive lexicographic process, where both dictionary typology and the choice of the type of microstructure play a decisive role (cf. Prinsloo & Gouws, 2000: 140). In the following section, the historical background of examples, the purpose of a dictionary and the difference between good examples and bad examples (cf. Prinsloo & Gouws, 2000: 144) will be discussed.

9.9.2 Historical background of examples

The word *example* comes from the Latin word *exemplum*. In its turn, the word derives from the verb "eximere" which means "extract (from a whole)". The Latin word was widely used in rhetoric to refer to "*a sample, an exact copy and an object chosen from the collection or category; an object which is isolated and aimed to serve as a model*" (Rey, 1995: 96). One can see clearly the present sense of the word *example* in the modern lexicography.

Illustrative examples occurred in French lexicography since the 17th century by Richelet (Quemada, 1967: 505 and Al-Kasimi, 1977: 89), in English lexicography in 1755 by Johnson (Al-Kasimi, 1977: 89). Al-Kasimi argues that illustrative examples had been used in dictionaries before that. They had been employed with various degrees of skill and abundance by Arab lexicographers since the eighth century. The lexicographers found that it is quite useful to add some phrases and sentences after the definitions to present the actual usage of the word. Since its inception in the 17th century, the example plays an important role in lexicography.

9.9.3 Purpose of examples

Zgusta (1971: 263ff) states in relation to monolingual dictionaries that the purpose of the example is to show how the entry-word functions in combination with other lexical units. Al-Kasimi (1977: 88) points out that an illustrative example is any phrase or sentence that illustrates the use of the item defined or translated. He

continues that it is one of several terms used interchangeably by various writers. Prinsloo and Gouws (2000: 114), with reference to bilingual dictionaries, point out that the purpose of examples is to guide the user regarding a variety of characteristic features of the lexical item represented by the lemma sign, which functions as guiding element of the specific article. Laufer (1992) notes that examples play an important role in guiding the user to know the word. She (1992: 71) says:

> *Knowing a word would ideally imply familiarity with all its properties...When a person "knows" a word, he/she knows the following: the word pronunciation, its spelling, its morphological components, if any, the words that are morphologically related to it, the word's syntactic behaviour in a sentence, the full range of the word's meaning, the appropriate situations for using the word, its collocational restriction, its distribution and the relation between the word and other words within a lexical set ... The foreign language learner knows a much smaller number of words ... In many cases word knowledge is only partial, i.e. the learner may have mastered some of the word's properties but not the others.*

The following section will provide a discussion of the treatment of examples in a dictionary. Given the fact that existing dictionaries in Fang are bilingual dictionaries, the focus will be on this type of dictionary.

9.9.4 Treatment of examples in dictionaries

It has already been stated that the choice of the type of microstructure determines the treatment of examples in a dictionary. In Chapter 7, different types of microstructures were discussed. In a dictionary with an unintegrated microstructure, the items giving the paraphrase of meaning/equivalents and co-text entries appear in different text blocks. Consider the following examples of the modified article of the lemma **ÉNŽENŽAM** drawn from the *Dictionnaire Fang-Français/Français-Fang*.

ÉNŽENŽAM [...] 1. Embarras. 2. inouï. *Ma yen énženžam*, je suis embarrassé. *Mvè éto énzenzam*, cette joie est inouïe

The article of the lemma **ÉNŽENŽAM** shows that the present type of microstructure is an primitive microstructure because the translation equivalent and its co-text entries each appear in different blocks. As a result, the primitive microstructure presents the illustrative example "*Ma yen énženžam* (1), je suis embarrassé" and "*Mvè éto énzenzam,* cette joie est inouïe (2)", separated from the text block containing the translation equivalent paradigm or the different subcomments on semantics given for the various polysemous senses of the lemma sign (1. *Embarras* 2. *Admirable*). There is no link between the co-text entries and the translation equivalents to indicate to the user which co-text entry belongs to which equivalent. This is especially problematic when there are more subcomments on semantics.

In a dictionary with an integrated microstructure, the item giving the paraphrase of meaning/equivalents and its co-text entries appear in the same block. Consider the following example of the article of the lemma **ABELE** drawn from the *Dictionnaire Fang-Français/Français-Fang*.

ABELE [...] 1. action de tenir. *Abele abi, mauvaise prise*, on ne sait par où prendre cet objet. 2. Manche. *Abele mvi*, manche de marmite [...]

The article of the lemma **ABELE** shows that the present type of microstructure is an integrated microstructure because the translation equivalent and its co-text entries appear in the same block. The co-text entries "*abele abi*" and "*abele mvi*" and their translation equivalents are presented as immediate neighbours of the translation equivalents "action de tenir" and "manche".

9.9.5 Characteristics of good examples

The following characteristics of good examples are drawn from the findings of Atkins *et al.* (cited in Prinsloo & Gouws, 2000):

- disambiguate senses,

- distinguish one meaning from another,
- clarify an abstract definition,
- supplement the information in a definition,
- show or indicate the selectional range,
- place the word in context,
- place the word in co-text,
- specify the semantic range,
- indicate the collocational behaviour, including typical collocations,
- illustrate the grammatical patterns,
- specify the word order,
- give pragmatic uses,
- note stylistic features,
- indicate appropriate registers,
- reflect the word history,
- be accurate, especially those quoting measurements, technical data, etc., and
- stimulate the user to capture the features or characteristics of the word in question and use the examples as model to create examples of his/her own.

9.9.6 Characteristics of bad examples

In this regard, Prinsloo and Gouws (2000: 145) summarise what one can understand by bad examples. These are:

- register mismatch,
- confusing examples,
- distracting examples, and
- examples containing irrelevant detail, etc.

In addition to the above-mentioned bad examples, one can add the typical problems

listed by Atkins *et al.* (cited in Prinsloo & Gouws, 2000):

- natural, typical ... but completely pointless (e.g. *Silician: a quarrel between two Silicians*),
- includes distracting or irrelevant detail,
- serious atypical (e.g. by proxy: *You can create an international incident by proxy*),
- highly context-dependent (e.g. gravitate: *He gravitated, naturally, to new markets*),
- register mismatch (e.g. latter: *We have to decorate the kitchen and the hall – I'd rather do the latter (room) first)*,
- confusing (e.g. black vb: *They blacked all coal from mines that had continued working during the strike*),
- or just missing when you need it ...

Apart of some of these examples of bad examples, Prinsloo and Gouws (2000: 145) quote extralinguistic factors that can make examples tedious. It can be race, sex, politics, culture; to this, one can add references to female subjects, or the morally unacceptable.

According to Lahaie (2001: 69), one of the well-known functions of the example is indeed to illustrate the most common syntactic constructions and the most frequent collocations. This leads to a discussion of "collocations".

9.9.7 Collocations

Collocations shall refer only to word combinations where the members have a certain affinity to each other. According to Gouws (1989: 227; 1996b: 60), collocations can be regarded as lexical combinations that are usually included in the microstructure as co-text entries or part of the treatment of the lemma and represent a typical contextual occurrence of the lemma. According to Svensén (1993: 101), information about collocations is important in both monolingual and active bilingual dictionaries, since

the user cannot be expected to know which words customarily occur together. Gouws (1989: 227) states that they do not have lexical status as a whole, but comprehensive inclusion is still a necessity, especially in pedagogical and translation dictionaries. The collocations are always given by means of examples.

9.9.8 The treatment of collocations

Hausmann (cited in Gouws, 1996b; Otto, 1998) divides a collocation into a base and a collocator. As far as Fang is concerned, the noun is the base in a verb + noun combination such as *ku si*, and the verb is the collocator. In adjective + noun collocations such as *ntuk nda*, the noun is once again the base, and the adjective is the collocator. In verb + adverb collocations such as *kə vé*, the verb is the base and the adverb is the collocator.

Benson (1986: ix) divides collocations into two major groups: grammatical collocations and lexical collocations. According to him, a grammatical collocation is a phrase consisting of a dominant word (noun, adjective, verb) and a preposition or grammatical structure such as an infinitive or clause. In Fang, one can identify combinations that are similar to those identified by Benson.

- Collocations consisting of nouns + verbal prefix + verb: *za mora dzam a bo sikol*, "it is a great thing to study". This example shows a combination of noun *dzam* + *a* + verbal prefix + verb *bo* "to do"
- Collocations consisting of a preposition + noun combinations. Examples are *o yo* "on top", *a si* "in bottom", etc.
- Collocations consisting of adjective + verbal prefix a + verb. An example is *abe a dzimle nye* "it is bad to lose his/her mother". The word *abe* is an adjective, *a* is a verbal prefix and *dzimle* is a verb.

Lexical collocations, in contrast to grammatical collocations, normally do not contain prepositions, infinitives or clauses. Typical lexical collocations consist of nouns,

adjectives, verbs and adverbs. According to the classification of collocation done by Benson, collocations in Fang can be classified as follows:

- Collocations consisting of noun + noun. An examples is *nda zam* (God's house) "church". The word *nda* "house" is combined with the word *zam* "God".
- Collocations consisting of adjective + nouns. An example is *mbe̱ mot* "bad person". This example shows a combination of the adjective *mbe* "bad" + the noun *mot* "man"
- Collocations consisting of verb + noun. An example is *abo esen* "to work". The verb *abo* "to do" is combined with the word *esen* "work".
- Collocations consisting of verb + verb. Examples are *akə dzi* "to go to eat", a*kə bo* "to go to do".
- Collocations consisting of verb + adverb. Examples are *abo dən* "to do soon", *akə ve*? "where to go?

The presentation and treatment of collocations should be seen within the context of the more comprehensive lexicographic process where the dictionary type plays a decisive role. In monolingual dictionaries, the dictionary article is divided into two interactive components. In the first component, collocations are placed under the base of the combination without examples. In the case of collocations, no definitions will be provided, since collocations are by definition transparent constructions (cf. Gouws, 1989: 232). In the second component, collocations as second treatment unit, which are typographically distinguished from the first, there will be an example for every combination mentioned in the first component. After the translation equivalents in bilingual dictionaries there will be an example for every combination mentioned, followed by its translation equivalent combinations. Bilingual dictionaries require the inclusion of different types of translation equivalents. Because collocations, according to Gouws (1996b), are not single lexical items, their translation equivalents often have to be done on a word basis. Consider the following article of the lemmas **TONE** and

PELER showing the first type of translation equivalent given for collocations in the *Dictionnaire Fang-Français/Français-Fang*.

TONE [...] *Toné ékô*, ôter la peau [...]

PELER [...] Peler une banane, *Toné ékôn*, [...]

In the article of the lemma **TONE**, the collocation *Tone ékô* has the French collocation *ôter la peau* as translation equivalent, and in the article of the lemma **PELER** the collocation *peler une banane* is translated as *Toné ékon*. These examples display a one-to-one relation between the components of the source and target language collocations and represent a relation of complete equivalence.

Consider the following articles of the lemmas **BIEN** and **DORMIR**, showing the second type of translation equivalent given for collocations in the *Dictionnaire Fang-Français/Français-Fang*.

BIEN [...] Bien fait, *nkômda* [...]

DORMIR [...] Faire dormir, *yale* [...]

In the article of the lemmas **BIEN** and **DORMIR**, the collocation *bien fait* and *faire dormir* are translated as *nkômda* and *yale* respectively, which have no collocation status in Fang. What happens in this situation is that the target language, Fang, does not have a corresponding collocation for the source language French, and the translation equivalent could not be a one-to-one representation of the source language. This lack of such an equivalent constitutes a form of partial equivalence, and the given translation can be regarded as a surrogate equivalent used to fill a collocational gap in the target language (cf. Gouws, 1996b).

In the discussion above, it was stated that the treatment of collocations is not always a one-to-one translation between their components. There is also the situation where the lexicographer gives a target language collocation with an equivalent meaning, but without a relation between its components and that of the source language entry. Consider the following article of the lemma **ÉNYAN**:

ÉNYAN [...] *Wôk môr ényan*, être jaloux, être attaché à

In the treatment of the lemma **ÉNYAN** in the *Dictionnaire Fang-Français/Français-Fang*, the collocation *wôkh môr ényan* is translated as *Etre jaloux, Etre attaché à.* The French equivalents are collocations with the same meaning as the Fang collocations, but with a difference in components.

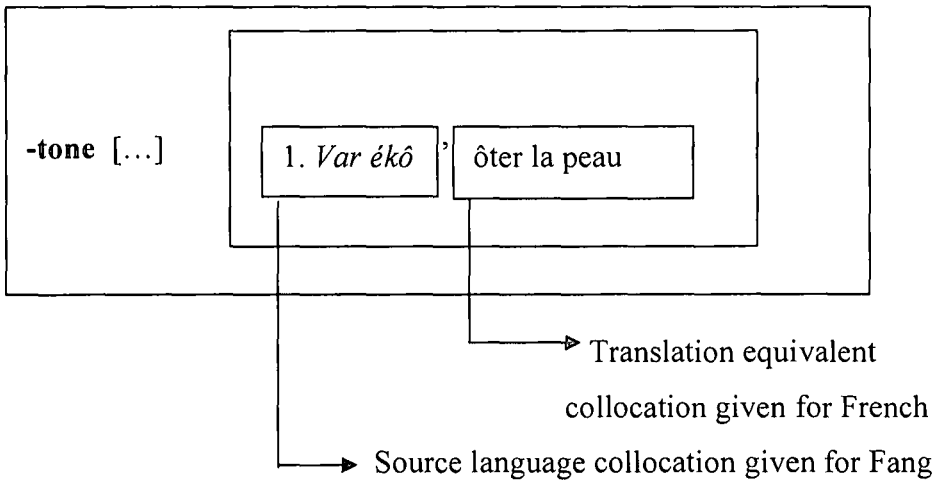
9.9.9 Illustrative examples and collocations in the dictionary with the planned microstructural programme

It can be suggested that the need and demand for items giving examples would also be great in the planned microstructural programme in this dissertation. The results of the questionnaire show that 37% of the respondents consult a dictionary for items giving examples. It could be postulated that many respondents are not aware of the importance of items giving the examples in the dictionary. It could also be assumed that this result of the questionnaire results from insufficiencies in the presentation of data. The postulations mentioned above would need to be verified empirically.

In the dictionary with the planned microstructural programme, the presentation of examples will be done in accordance with the type of microstructure used. As the planned microstructural programme displays the features of both integrated and semi-integrated microstructures, examples in the source language, Fang (followed by the translation equivalents) and the item giving the paraphrase of meaning (followed by the translation equivalent) will appear in the same text block as the co-text entry following the paraphrase of meaning.

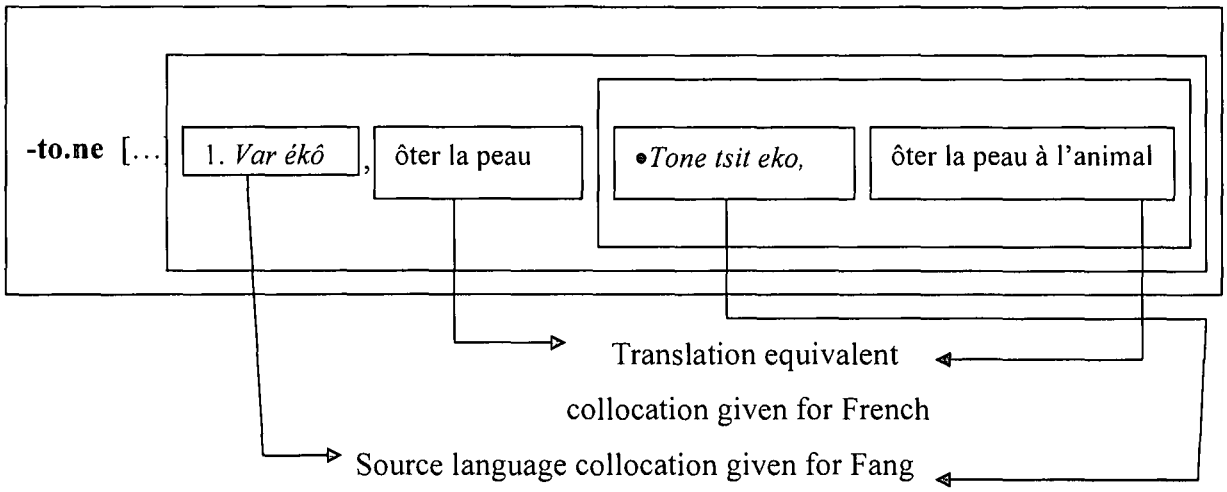
The lexicographers of the planned microstructural programme should consider certain features of good examples when dealing with illustrative examples and should be aware of all the pitfalls in the way of constructing good examples.

The treatment of collocations in the dictionary with the planned microstructural programme must be done in accordance with the type of microstructure. The collocations will display both complete and partial equivalence. If the collocations display a one-to-one relation between the components of the source language, Fang, and target language, French, the ideal type of equivalence will be complete equivalence. If the treatment of collocations is not directed at a one-to-one translation of their different components, the lexicographers of the dictionary with the planned microstructural programme will give a French collocation with an equivalent meaning but without a relation between its components and that of the Fang entry. In this case, the French collocation will not function as a collocation but as explanatory translations of the Fang collocations. Consider the modified article of the lemma **tone** below.



In the first component of the treatment of the article of the lemma **tone**, the collocations in the source language Fang, followed by their translation equivalents in the target language French, are placed under the different polysemous senses of the lemma **tone**, without examples. In this article of the lemma **tone**, the collocation *var ékô* is translated as *ôter la peau.* These examples display a one-to-one relation

between the components of the source language (Fang) and target language (French) collocations and represent a relation of complete equivalence.



In the second component, typographically distinguished from the first, there will be an example (for every combination mentioned in the first) followed by its translation equivalent combinations.

Consider the following example of the modified article **dan̲** taken from the *Dictionnaire Fang-Français/Français-Fang*.

> **-dan̲** [...] 1. *Anyi vom edzin̲,* entrer dans. ∘ *Dan̲ **ete**,* monter dedans. *Dan̲ o **yo**,* monter sur. 2. ***Alorə dzom n̲ə** mor edzin̲,* dépasser surpasser, gagner. ∘ *Dan̲ **abwin**,* être plus nombreux. *Dan̲ **akur**,* être plus bête. *Dan̲ **bəyin**,* vaincre ses ennemis. *Dan̲ **byan̲**,* passer sur la fétiche d'épreuve. Dan̲ *kin̲ə*, accoster. *Dan̲ **nen**,* être plus grand. *Dan̲ a **yap**,* être plus grand.

Within the article slot where collocations are given in italics (cf. the words ***ete*** and ***yo*** in the first subcomment on semantics followed by the words ***abwin***, ***akur***, ***bəyin***, ***byan***, ***nen*** and ***ayap*** in the second subcomment on semantics presented in the relevant

text block of the article of the lemma sign **dan**), each collocation in the source language (Fang) is followed by its translation equivalent combinations (French). Where a text block will contain more than one collocation, these collocations will be ordered alphabetically according to the alphabetical value of the words given in bold italics. By looking for these words in bold italics, the user can quickly move from one collocation to another. In this article of the lemma **–dan**, the Fang collocation "*dan byan*" has the French collocation "*passer sur la fétiche de l'épreuve*". The French equivalents are collocations with the same meaning as the Fang collocation but with a difference in components.

Given the fact that the Gabonese community in general and the Fang community in particular are not very familiar with dictionary-using skills, the use of examples should be planned in accordance with the needs and reference skills of the target users of the dictionary with the planned microstructural programme. Consequently, the lexicographers of the dictionary with the planned microstructural programme have to use such data very carefully.

If collocations are to be user-friendly, they must be based on corpus evidence. In Chapter 3 of this dissertation, it was stated that a corpus assists the lexicographer(s) in identifying typical collocations and combinations of words. In order to make the lexicographer's task easier, it therefore is important to use a corpus presenting the typical collocations and word combinations, which must be applied consistently throughout the dictionary.

9.5.9.10 Etymological data

9.5.9.10.1 Historical survey

The first years of European lexicography saw a progressive shift from the tradition of glossaries of giving Latin and Greek equivalents, e.g. the Vocabulario (1612), to the indication of origin as a formal part of the entry. The Vocabulario was followed by

the *Nouveau Dictionnaire François* compiled by Richelet (1719), which later gave discursive statements of origin. The Bailey's (1721) was the first dictionary in England to treat etymology with consistent purpose and seriousness (Landau, 1984: 99) and it also traces words beyond an immediate source or single etymon. The German Adelung (1774) provided some discursive etymologies as part of his stated purpose of purifying the language and showing which words should and should not be used (cf. Collison, 1982: 105).

Webster, in the United States, first (1806) ignored etymologies, but later (1828) included them in his major dictionary. According to Landau (1984: 21), Webster established etymology as an essential part of the article in American general dictionaries.

9.5.9.10.1.2 The identified typological category

According to Gouws (2001b: 73), the second typological distinction to be made when planning a dictionary is that of diachronic and syncrohonic dictionaries. Diachronic dictionaries focus on the origin, history and development of the treated language. This category includes two subcategories, i.e. historical and etymological dictionaries. A historical dictionary presents the development of the lexicon and reflects the changes in form and meaning of the lemmata. An etymological dictionary has the presentation of the etymology of the lexical items as its first assignment. For the present, however, we will leave the question of historical data and focus on the question of etymological data. The inclusion of etymological data in a dictionary is a difficult challenge to the compiler of a dictionary. According to Stark (1990), dictionaries pay very little attention to etymological data. Indeed, Stark himself was wary of the danger of giving learners the historical meaning of words, because it may differ from their current meaning. Monolingual English learners' dictionaries do not provide etymological information, and published materials for the training of students almost entirely ignore this aspect of dictionary use (cf. Stark, 1990). Zgusta (1971: 257–262) does not see the importance of using etymological data in the dictionary, since if one's

purpose of using a dictionary is simply to find out how to use words today, one may well not need any etymologies. Zgusta (1971) points out that, in Europe, desk dictionaries often do not give word origins. "In some cultural areas", he (1971: 251) says, "such as, for example, the United States, short etymological data is expected even in the smallest dictionaries. It is without doubt not obligatory to give such etymological data in the purely standard dictionaries."

Many of the tasks identified by Wise (1997), however, involve a study of the origin and development of French words. Some dictionaries, like Webster, provide evidence of the importance of giving etymological data in a dictionary:

> *Etymology has been made a strong feature of this dictionary because it is believed that insights into the current usage of a word can be gained from a full knowledge of the word's history and that a better understanding of a language generally can be achieved from knowing how words are related to other words in English and to words in other European languages* (cf. Gove, 1966)

Ilson (1983) and Pierson (1989) argue that etymology can be a very useful tool in the language classroom. Although the interpretation of etymological information might appear to be an advanced skill, Ilson's (1983) experience with students suggests that it may be relevant to a broader range of learners. Drysdale (1979: 47) gives three good reasons for including etymologies in general desk, college-level, or larger dictionaries:

1. to provide raw material for the scholar and the student of the history of the language,
2. to increase understanding of, and stimulate interest in, both language in general and one language in particular, and
3. since a dictionary is a record of the culture of those who speak the language it describes, it provides clues to the history of that culture and its relationships to others.

Ilson (1983: 81) motivates the inclusion of etymological data in the dictionary by stating that it can "a. disambiguate … b. relate … c. illuminate … d. motivate". A more detailed discussion of these points can be found in Ilson (1983: 78–81).

Like Ilson (1983), Drydsdale (1989) also motivates the inclusion of etymological data in a dictionary. He (1989: 526) states that a word can only be used properly if its origin is known.

Sijs (2003: 313) mentions the following important questions that the lexicographer(s) should have to answer when giving etymological data in a dictionary:

1) Are all, or only some of the lemmas given an etymology?
2) What choices have been made in the treatment of native words and loan words?
3) Has attention been paid to both form and meaning changes?
4) Have dates of first occurrences been provided?

As far as question 1 is concerned, it is noted that not all data are given etymologies, e.g. in *Chambers*, the word **battery** has no etymology and the verb **batter** has etymology. However, in *Larousse*, every word has its etymology, except for compounds and derivatives. Consider the following articles taken from *Chambers* and *Larousse*:

Chambers:

battery: no etymology; s.v. batter (vb.): O.Fr. battre (Fr. Battre)- L.L. battere (L. ba (t)tuere, to beat)

Larousse:

batterie 1: de batterie 1; 1190 au sens class
batterie 2: de batterie 1; 1290
batterie 3: de batterie 1; v. 1800
neige: de neiger; v. 1320
baste: it basta, il suffit; 1534

With regard to question 2, a distinction has to be made between native words and loan words (for a discussion of "loan words", see Chapter 8). As far as native words are concerned, the lexicographer(s) has to focus on the cognates. In the case of loan words, according to Sijs (2003: 314), the focus should firstly be the source language and, secondly, on the enumeration of the whole history of the word. In the *Dictionnaire Fang-Français/Français-Fang*, **ÉTABLÉ** can be regarded as a loan word, borrowed from the French word **TABLE**. Some change occurs in the form of the words **ÉTABLÉ** and **TABLE**. See the following example taken from the *Dictionnaire Fang-Français/Français-Fang*:

> **ÉTABLÉ** (h) n.5, pl. bitalé. Table (c'est le mot français).

In the article above, the lemma **ÉTABLÉ** and the equivalent *Table* are given; the origin of the word is provided in parenthesis. This leads to the answer to the aforementioned question 3 regarding changes in form and meaning.

With regard to question 4, Sijs (2003) points out that the first recording of a word is the starting point for the description of the word's history. In French dictionaries like *Larousse* (see the example above) and *Robert*, all data have dates. This is not the case in existing dictionaries in Fang, where all data and meaning have no dates.

9.5.9.10.3 Etymological data in the dictionary with the planned microstructural programme

It is likely that the need and demand for etymological data would also be great in the dictionary with the planned microstructural programme under discussion in this dissertation. The results of the questionnaire show that 13% of the respondents consult the dictionary to look up etymological data. It could be postulated that the respondents are not aware of the importance of etymological data in the dictionary. It

could also be assumed that this result of the questionnaire is caused by the insufficiencies in the presentation of data in dictionaries. The postulations mentioned above would need to be verified empirically.

The compiler of the dictionary with the planned microstructural programme must choose etymological data, as it will be of interest to the intended users, and present this information in such a way that it is lucid, accessible and reasonably concise. Etymological data would then enrich the users' understanding of the continuity of language and of humanity, and of how people have used and adapted language to reflect the needs of their culture. Etymological data will be the most important type after the item giving the pronunciation of the main treatment unit. It must be considered for inclusion in the dictionary with the planned microstructural programme.

The following example is a modified article drawn from the *Dictionnaire Fang-Français/Français-Fang*, illustrating how the presentation of etymological data could be done in the dictionary with the planned microstructural programme:

etable [étàblé]	<Fr.table.	cl. 7/8. pl. bitable
- *edzom batob ayo,* quelque chose sur la quelle on peut s'asseoir		
∘ *ato etable ayo,* il ou elle est assis sur une table		

After the item representing pronunciation data, the item representing etymological data is provided. It includes the structural marker " < " (i.e. the word originates from), and the abbreviation "Fr." for the French word *Français* and the French word *table* preceding the item representing the morphological data.

The following example, which is the case study of "native words", is a modified article drawn from the *Dictionnaire Fang-Français/Français-Fang* illustrating how

etymological data could be presented in the dictionary with the planned microstructural programme:

n.lo [nló] < *tu n. cl. 9/10. pl. minlo.

- *ekila nyol oyo ebele asu ye melo,* partie supérieure du corps comprenant le visage et les oreilles.

∘ *Okon nlo,* maladie de la tête

After the item representing pronunciation data, the item representing etymological data is provided. It includes the structural marker "< " (i.e. the word originates from) and the protoform "*tu" preceding the item representing the morphological data.

The Gabonese community in general and the Fang community in particular are not very familiar with dictionary-using skills. The use of etymological data should have to be planned in accordance with the needs and reference skills of the target users of the dictionary with the planned microstructural programme. Consequently, the lexicographer(s) have to use such etymological data very carefully.

On the basis of the discussion regarding etymological data, it can be concluded that etymological data can be regarded as microstructural data. Like other types of microstructural data, i.e. items giving the pronunciation, paraphrase of meaning/equivalent etc., it plays an important role in the article of a dictionary and can be used to indicate the origin of the specific lemma.

Shortcomings relating to existing dictionaries in Fang include the absence of a well-devised system to include etymological data. The lexicographer(s) of the dictionary with the planned microstructural programme should include etymological data and should present etymological data in such a way that it is lucid, accessible and reasonably concise.

9.6 Concluding remarks

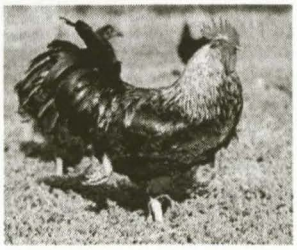
In this section, attention was paid to the comment on semantics, as it is the search area accommodating those data types that reflect on the semantic and pragmatic features of the lexical item represented by the lemma. With regard to semantic data, data like paraphrase of meaning, translation equivalent, synonymy, polysemy, etc. have been discussed. As far as pragmatic data is concerned, data like pictorial illustrations, idioms, proverbs, etymology, glosses, usage notes, etc. have been discussed. The monolingual presentation of meaning has been seen to be located most appropriately in the item giving the paraphrase of meaning. Bilingual dictionaries are frequently consulted for another type of semantic guidance, i.e. translation equivalents. In the comment on semantics, the paraphrase of meaning and translation equivalent must be followed by items giving the examples, synonymy, etc. The task of the lexicographers of the dictionary with the planned microstructural programme is to make sure that the treatment reflects the spectrum of semantic values relevant to the planned dictionary.

After presenting the different types of data directed at the comment on form (Chapter 8) and comment on semantics (preceding sections), a brief overview of the various aspects of the dictionary with the planned microstructural programme is given in the following section:

ku¹ [kú] < *koko. n. cl. 9/10. pl. bəku.
□ *O non wa tobə a dzẹ o nə ndzuk ayələ,* l'oiseau domestique, aux ailes à peu près ineptes au vol.
● *N'nom ku*, le coq.
▶ Prov: *N'nom ku a se ki lon misən mibẹ*, on n'est connu que dans son pays.
⇒ illustration, cf. http://fr.wikipedia.org/wiki/Image:Rooster03.jpg & www.infini-fr.com/.../Animaux/Oiseaux/index.html

Ngal ku (hen)

mwan ku (chick)



N'nom ku (cockerel)

-ku² [kù] < * gu. v.

1. □ *A dar,* faire une chute.
   ● *Ku o si*, tomber par terre
2. □ *A bələ byọm abi*, acquérir des richesses.
   ● *Ma ku byọm abi*, je gagne beaucoup de richesses.
   ♦ IDIOMES: *Ku amvîm*, trébucher l'un sur l'autre. *Ku mbekh*, faire une chute, tomber par terre. *Ku bubure*, tomber face en avant. *Ku mè*, tomber à l'inverse. *Ku memè*, tomber à l'inverse. *Ku mbîň*, être embrouillé (affaire). *Ku ňkwé*, atteindre sa puberté. *Ku mvôn*, être circoncis. *Ku som,* être pris de frayeur. *Ku kam,* être effrayé. *Ku avô,* rester immobile de surprise. *Ku melan,* être halluciné par la decoction. *Ku ésam,* être circonscis.

e.ba [èbà], eko <* bamba n. cl. 7/8. pl. biba.

1. □ *Ekop tsit*. La peau de l'animal.
   ● *Eba e ka*, écaille de pangolin.
   Syn: ekop
2. □ *Mva zo*, nuée du ciel.
   ● *Biba bi zo*, les nuées du ciel.
3. □ *Edzom be ne tsak*, tout ce qu'on peut écraser ou cuire.
   ● *Eba owon*, la patte d'arachides.
   ▶ Prov: *Kul e nga lik biba bi dok*, il ne faut pas renvoyer à demain.
   ▷ Notes d'usage:

Ka fulan **eba** ayile na "*e bor be vo*" ye **eba** ane "*ekop tsit, mva zo*". Ne pas confondre **eba** qui signifie "les autres" et **eba** qui signifie "écaille, nuée"

It was said in the Chapter 1 that the focus is on the microstructural programme with reference to dictionaries in Fang. This programme can also be taken to other dictionaries. I therefore am discussing one comprehensive programme, i.e. a programme that includes different types of data, and from this one programme, different programmes for individual dictionary projects can be drawn. With regard to the articles of the lemmata **ku**, **–ku** and **eba**, spelling data, data on pronunciation, morphological data from the items giving the part of speech like noun (*n.*), verb (*v.*), class (*cl.*) plural (*pl.*), pragmatic data from items giving the example (Ex: *ku o si*, "tomber par terre" or *Eba e kat*, "écaille de pangolin"), idioms (Ex: *Ku amvîm* "trébucher l'un sur l'autre"), pictorial illustrations and usage notes can be taken, either for a monolingual or a bilingual dictionary. The items giving the spelling and pronunciation variants, gloss, proverb, etc. also will be necessary. Semantic data via items giving the paraphrase of meaning (Ex: *o non wa tobə a dzẹ o nə ndzuk ayələ*), the items showing semantic relationships like synonym (*ekop*), and the item giving the origin of the word (Ex: < * gu) can be given in monolingual dictionaries. Semantic data by means of translation equivalents can be given in the bilingual dictionaries.

Chapter 10: Guide structures

10.1 Introduction

The term "guide structures" refers to the set of structures or procedures identified in metalexicography that provides a framework within which the accessibility and availability of information types in the dictionary can be evaluated (cf. Louw, 1999: 109). It includes certain substructures, namely access structure, addressing structure, micro-architecture and mediostructure.

As far as the microstructure is concerned, an evaluation of the accessibility of microstructural data in a dictionary is an important factor in determining its level of attractiveness or user-friendliness. Gouws (2001c: 102) convincingly argues that "the rapid and unimpeded access of the user 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 task of the lexicographer, according to Louw (2004: 160), is to use innovative and effective methods to guide the user on his or her search path to the required data and prevent protracted, frustrating searches. In the following section, the access structure will first be discussed.

10.2 Access structure

The access structure determines the search route the dictionary user follows during a consultation procedure (cf. Béjoint, 1994; Bergenholtz & Tarp, 1995), or the route the user follows to reach an entry in the dictionary (cf. Gouws, 2001a: 88; Gouws & Prinsloo, 2005a: 165). Bergenholtz and Tarp define it as the structure of lexicographical indicators directing the user to the information required. A distinction is made between the outer and inner access structure. The outer access structure leads a user up to the lemma sign, introducing the article from which the needed information is to be retrieved, and the inner structure guides the user within the dictionary article to the search zone in which the relevant data is presented.

In this section, attention will be paid to the elements that comprise the access structure of the dictionary, namely the outer and inner access structure.

10.2.1 The outer access structure

In printed dictionaries, the user follows an outer search path that takes him/her to the desired article and he or she is aided on this search path by the outer access structure. The outer access structure of printed dictionaries comprises elements such as the cover, table of contents, thumb indexes, running heads, etc. According to Gouws and Prinsloo (2005a: 165), these entries are not only for promotional purposes or a form of lexicographic cosmetics to enhance the looks of the dictionary, but are functional entries and form an integral part of the dictionary presentation.

10.2.1.1 Front cover, spine and back cover of the dictionary

The outer access structure of the dictionary starts with the cover. The front cover and spine of the dictionary often represent the first encounter a user has with the dictionary (cf. Gouws & Prinsloo, 2005a: 166). The entries on the cover should inform the user what to expect in the specific dictionary. At one glance one can see that Galley, the author of the *Dictionnaire Fang-Français/Français-Fang*, is well known, because his photo appears on the front cover of the dictionary. This author is best known within the Fang community, with whom he spent forty years. Under the photo of the author appears the title of the dictionary, *Dictionnaire Fang-Français/ Français-Fang,* which gives the users a good idea of the dictionary type. On the back cover of the dictionary is a map of Gabon, which shows the different regions of the country. However, the back cover does not inform the users much about what is going on in the dictionary. On the title page is the title, followed by the name of the author, the origin of the publication (Association des Amis d'Albert Schweitzer), the name of the editor (Editions d'Henri Messeiller) and the place where the dictionary was edited (Neuchâtel). In this regard, Gouws and Prinsloo (2005a: 166) point out that a user may wish to consult a dictionary, known to him/her by title, or the names of the authors, or even by the publishing house.

10.2.1.2 Table of contents

In the discussion of the access structure of a dictionary, Gouws and Prinsloo (2005a: 166) assert that the access structure should be the instrument to guide a user to those texts that could provide solutions to the problems that motivated the specific dictionary consultation procedure. In this regard, a text presenting the table of contents of a dictionary has an important role as part of the access structure.

Kammerer and Wiegand (1998), Gouws (2002a), and Gouws and Prinsloo (2005a: 166) point out that the table of contents is a functional part of a dictionary as a compound of texts, or big texts. It should guide the user over the textual boundaries of the different parts of the dictionary. Lexicographers are aware of the fact that most users will probably not use this support. The table of contents is regarded as a functional text that could aid users in their dictionary consultations.

Neither the *Dictionnaire Fang-Français/Français-Fang* nor *Lexique FAN-Français* make full use of their table of contents. Both give the page numbers on which the various front and back matter texts start, but no mention is made of the starting point of particular article stretches. For the proposed dictionary, the compilers should not only take into account the importance of a table of contents, but also have to indicate the page number on which each article stretch starts.

The compilers should take note of the warning of Gouws and Prinsloo (2005a: 167) that the table of contents is a special part of the outer access structure and that, when planning dictionaries, lexicographers will do well to include a table of contents as one of the front matter texts, as shown in the example below from *The Concise Oxford Hachette French Dictionary (1998): French-English/English-French*:

Acknowledgement	vi	**French English Dictionary**	**1**
Introduction	vii	French correspondence	643
A corpus-based dictionary	viii	English correspondence	667
Using this dictionary	x	French advertisements	691
The structure of entries	xiv	English advertisements	697

With regard to the example mentioned above, one can note that the table of contents, by means of an indication of page numbers, allows the user to have rapid access to the central list and to the different texts constituting the big text.

10.2.1.3 Thumb index

A first rapid outer search path has to lead the user to the beginning of the article stretch in which the required lemma will be. According to Gouws and Prinsloo (2005a: 167), this rapid search path goes via different lexicographic road signs that form part of the outer access structure. One of these roads signs, according to Gouws and Prinsloo (2005a: 167), is the alphabetical letter indicating the beginning of a new article stretch, as in the following examples from the *Dictionnaire Fang-Français/Français-Fang* and *Lexique FAN-Français* respectively:

E
E (m) prép. Pour dans, à, vers. E ndo éti, dans la maison [...]
E euphorique. *Môr-e-môr*, aucun homme. *Tem-e-tem*, tout à coup.
E
E. Prép. Dans, en, sur. *E-nda*. Dans la case.- Pron. Obj.. Cl. III, IV, V, II. Elle
Eba. Pron. Dét. Ceux-là. Celles-là [...]

A thumb index can be used very efficiently as an element of the rapid outer access structure. Many dictionaries also have a thumb index on the open outside of the

dictionary (cf. Gouws & Prinsloo, 2005a: 167). By putting a finger on the specific letter and opening the dictionary right there, the desired article stretch is reached and the user can continue with the search within the relevant article stretch. An elementary thumb index, which gives an indication where the various articles stretches start, can help to make the initial ordering more accessible. These thumb index markers form part of the rapid outer access structure of the dictionary. In the dictionaries with a strict alphabetical ordering like the *Dictionnaire Fang-Français/Français-Fang* and *Lexique FAN-Français*, the user looking for a lemma starting with the letter *E*, for example, could also page through the dictionary until the marker "E", indicating the beginning of the article stretch of lemmata starting with the letter *E*, is reached.

10.2.1.4 The system of running heads

The system of running heads can be regarded as a universal convention. According to Gouws and Prinsloo (2005a: 167), within a central list the access structure is also realised by means of the search words presented as headers on each page to indicate the first and the last lemma sign featuring on the specific page. Some dictionaries present two words, which are given on each page, with the left-hand words indicating the first lemma sign and the right-hand word indicating the last lemma sign on that page. Gouws and Prinsloo (2005a: 167-168) state that other dictionaries have a search word on the left-hand page, indicating the first lemma sign on that page, and one search word on the right-hand page, indicating the last lemma sign on that page. Furthermore, the dictionaries mentioned above employ the system of running heads, as these are likely to be the first elements of the rapid outer access structure the user will come into contact with. Both dictionaries make use of running heads to grant the users rapid access to the relevant partial article stretch. Unfortunately, in the *Dictionnaire Fang-Français/Français-Fang*, two words are not given on each page, but rather the word and the thumb index marker.

Contrary to the *Dictionnaire Fang-Français/Français-Fang*, two search words are given on each page in *Lexique FAN-Français*, with the left-hand word indicating the first lemma sign and the right-hand word indicating the last lemma sign on that page.

With Gouws and Prinsloo (2005a: 165), one can say that the outer access structure determines the part of the search route that leads the user from the entries on the cover of a dictionary. The front cover; spine, back cover, thumb index, the table of contents and the system of running heads can be regarded as functional entries that guide the user quickly to the desired macrostructural element. The lexicographer(s) should apply them consistently and explain them in the user's guide. This is also true of the inner access structure.

10.2.2 Inner access structure

Gouws (1996c: 16) and Gouws and Prinsloo (2005a: 170) define the inner access structure as determining the search route a user follows to reach the specific information categories within the article. The complexity of the microstructure and the number of data categories that it encompasses necessarily make the user's inner search path more difficult (cf. Louw, 2004: 167). The success of the inner access structure depends on the use of structural indicators leading the user on this inner search path.

Articles should be structured in such a way that the user can clearly distinguish the different data categories. One way of assisting the user in this regard is the use of structural indicators as microstructural entries (cf. Gouws & Prinsloo, 2005a: 167). See, for example, the treatment of **AKUL** (in the *Dictionnaire Fang-Français/Français-Fang)* and **Alo** (in *Lexique FAN-Français*) below:

> **AKUL** (b) n.4, pl. mekul. 1. Main, pied (d'homme, de chien, de singe, de toute bête qui a des doigts). *Akul ewo*, main. *Akul abo*, pied. On peut même dire *akul eku*, patte de poule (ou *abo ku*). Voir *mfè, atsin.* –2. *Akul e mvu* (bh), espèce de noeud (atsin) que l'on dit ressembler à une patte de chien. C'est le début du tressage d'une corbeille.

In the treatment of **AKUL** in the *Dictionnaire Fang-Français/Français-Fang*, each sense is introduced by a structural indicator or marker 1, 2, which forms part of the inner rapid access structure of the dictionary, (cf. Hausmann & Wiegand, 1989: 354–356).

> **Alo.** Oreille, ouie. Edu melo, fermer les oreilles.- *Ngal* ou *nzali*, bassinet du fusil.- *Kama*, petit morceau de fer forgé servant anciennement de monnaie = ntoe biki- nzoê (oreille d'éléphant), arbre rudéral à grandes feuilles circulaires.- *Vyo*, champignon.

In *Lexique FAN-Français* a workable inner access structure and especially a rapid inner access structure are lacking. A lack of structural markers can lead to a frustrating and unsuccessful simulated question-and-answer dialogue between the lexicographer and the user. In any dictionary article, structural markers as elements of the rapid inner access structure will determine the success of the user's inner search path.

10.2.2.1 Structural markers/indicators

Gouws (1996c: 23) defines the role of structural markers as follows: "Structural markers ... indicate the borders between information categories as well as the position and scope of different search areas." This premise leaves enough room to broaden the scope of the term *structural marker* to include the elements of the access structure that indicate semantic relations.

The focus on structural indicators is a microstructural issue. When planning a dictionary, the lexicographer(s) have to be aware of the different structural indicators to be used in the article of a dictionary. They have to know which structural indicator to use for each item in the article of a dictionary. Lexicographers use a number of markers to present an article of the dictionary as in a manner that is as user-friendly as possible. A variety of markers are used to assist the user in obtaining or finding what he or she needs as quickly as possible.

Good dictionaries normally explain the use of all types of markers in the user's guide. This is not the case with existing dictionaries in Fang, where all types of structural indicators are not explained in the user's guide.

A new system of structural markers should be employed, for example, to indicate different equivalents for different senses of the lemma, as opposed to different equivalents for different usages of the lemma or partially synonymous translation equivalents. A system based on the numerical and letter systems used in the *Dutch Afrikaans Dictionary* being compiled (cited in Gouws & Prinsloo, 2005a: 170–171) should replace the confusing system of semicolons and commas currently used in *Lexique FAN-Français*. If some of the old methods are integrated with the new approach, structural markers that function as indicators can help to provide rapid access to the correct equivalent. A good system of indication will have to be combined with consistently applied sense and equivalent discrimination. The user's guide will also have to explain every structural marker used.

Within structural indicators, one can distinguish typographical indicators and non-typographical indicators. Both types of structural indicators are entries that identify a specific item or data category, as illustrated by the treatment of **bril** in the *Dutch-Afrikaans dictionary* (cited in Gouws & Prinsloo, 2005a: 171):

bril

1 [om te kijken] #

– een bril hebben/dragen; hij heeft zijn bril niet op; ...

∘ <inf.> een bril moeten'n bril moet kry ...

♦ elk ziet door zijn eigen bril elkeen kyk deur sy eie bril

door'n roze bril kijken deur'n rooskleurige bril kyk

▶ iemand'n bril op die neus sit iemand te grazen nemen (ANNA)

According to Gouws and Prinsloo (2005a: 171), the structural indicators "–", "•" and "▶" can be regarded as non-typographical structural indicators, which are employed

to guide the user to specific types of items. The fact that this system is explained simply and effectively in the users' guidelines is further evidence of the *Dutch-Afrikaans Dictionary*'s user-orientated approach. This system is explained as follows:

- The user interested in examples that show a contrast between Dutch and Afrikaans merely looks for "•", the structural indicator marking this type of example.
- Rapid access to non-contrastive examples goes via the structural indicator "–".
- The presentation of Dutch idioms with their Afrikaans equivalents is preceded by the marker "◊".
- The indicator "▶" is used to mark the presentation of Afrikaans idioms as source language items, coordinated with their Dutch equivalents.

The *Dictionnaire Fang-Français/Français-Fang* also employs a variety of structural indicators, as illustrated in the next example:

> **ABI** (h) (lg) n.4, pl. mebi. 1. Sein, mamelle, lait. Nyang abi, tetter sa mère. *Nyaň mon abi,* allaiter son enfant. *Mebi me tsvi,* seins. *Abi ntaňa,* lait d'homme blanc (c-à-dire de conserve). Syn: *menyaň*. 2. Petit trou rond qui sert de porte au gite (*abighé* h) gu por-épic, sous l'arbre abeňya. On dit surtout mebi: *keň k'a tu mebi,* va ouvrir des gites de pors-épics pour les capturer.

In this article from the *Dictionnaire Fang-Français/Français-Fang*, typographical indicators play an important role as route markers in the inner access structure. The different typefaces, e.g. bold, italic and Roman, indicate specific search fields or data

categories. The lemma sign is given in bold, the translation equivalent in Roman and illustrative examples in italics.

10.2.2.1.1 Structural indicators in the dictionary with the planned microstructural programme

With regard to the dictionary with the planned microstructural programme, the following table contains the structural indicators the lexicographer(s) should use.

1/2,3/4	...noun classes 1 &2, 3 & 4,etc.
1. 2. ..	indicate polysemous items
1.2...	differentiate homonyms
.	full stop, placed at the end of entry, item, sentence, abbreviation.
,	introduces a translation equivalent
( )	brackets
[...]	symbolizes pronunciation
{... }	symbolizes a reference entry to the author and year of publication
´ `	high tone and low tone
/	separating different genders of classes
-	indicates adjective stem as lexical item to be included as lemma
—	indicates the verb stem as lexical item to be included as lemma
□	indicates the definitions and their translations equivalents
∘	indicates the examples or collocations and their translation equivalents
◇	indicates idioms and their translation equivalents
▷	indicates proverbs and their translation equivalents
+	indicates cultural data and their translation equivalents
→	indicates cross-reference
//	indicates opposing/contrasting
⇒	indicates the pictorial illustration
‹	indicates the origine of the word
*	indicates the proto form of the word
◊	indicates the quotation

Table 10.1: Structural indicators for the dictionary with planned microstructural programme

Given the fact that the Gabonese community in general and the Fang community in particular are not very familiar with dictionary-using skills, the use of structural indicators should have to be planned in accordance with the needs and reference skills of the target users of the dictionary with the planned microstructural programme. Consequently, the lexicographer(s) should have to explain them consistently in the user's guide of the dictionary.

10.2.3 Access structure in the dictionary with the planned microstructural programme

With regard to the dictionary with the planned microstructural programme, I suggest 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/she is looking for. In this regard, the access structure of the dictionary needs to be planned carefully, because the success of finding the data without delay depends on it. For the dictionary with the planned microstructural programme, I propose that the access structure will be as functional as possible. The title of the planned dictionary will be given in full. **ABA'** "book", is best known in Fang speech community. The word **ABA'** is also the people's name. The full form will appear on the cover and on the title page:

- ABA' **Fan** (monolingual dictionary)

- ABA' **Fan -Fal** or ABA' **Fal -Fang** (bilingual dictionary) where the translation equivalent of the word **Fal** is *French.*

A thumb index will be used in the dictionary with the planned microstructural programme indicating the beginning of each article stretch. The side of the dictionary (**Fan-Fal**) will be marked. A table of contents will also be included of the dictionary with the planned microstructural programme. The table of contents will allow the user to have rapid access to the different parts of the dictionary by means of an indication of page numbers.

Running heads will be presented in the dictionary with the planned microstructural programme, with two search words given on each page. The left-hand word will indicate the first lemma sign and the right-hand word will indicate the last lemma sign on that page.

Both typographical and non-typographical markers will be used in the inner access structure of the dictionary with the planned microstructural programme. Lemma signs in Fang will be presented in bold, and the paraphrase of meaning (italics) and their translation equivalents (Roman) will be preceded by the marker "□". The examples in Fang will be in italics and their translation equivalents (in French) will be in roman characters. The examples will be preceded by the marker (∘). The idioms in Fang (italics) and their translation equivalents (Roman) will be preceded by the marker "◆". The proverbs in Fang (italics) and their translation equivalents (Roman) in French will be preceded by the structural marker "▶". The cultural data in Fang (italics) and their translation equivalents (Roman) will be introduced by the marker "▷". In addition, markers [...] can be used to indicate the pronunciation; the marker "→" will indicate a cross-reference; the markers 1, 2, 3 ... will characterise different senses of a lemma, etc.

- **tola** [tòlà] vb.
1.□ abɔ̂rɔ̂bɔ̂ edzom vo o yo, s'appuyer sur quelque chose.
∘ *Elé éva tolan ézi évok o yo*, un arbre qui tombait est venu se fixer sur la fourche d'un autre arbre qui a tenu bon.
syn: sakbɔ̂, yɔ̂gbɔ̂
▶prov: *gu ebi ve tola ne elon*, tomber dans un trou et en ressortir pour aller se jeter dans un piège d'éléphant.
2. □ tolanɔ̂ o yo, aller plus loin.
∘ *kale a tolanɔ̂ o yo*, il est tombé encore plus loin.

It is important to specify that, to be usable or accessible to the users, the access structure of the dictionary has to be clearly explained in the front matter texts.

10.3 The micro-architecture

According to Gouws and Prinsloo (2005a: 172), the success of a dictionary consultation process does not only rely on whether the dictionary contains the relevant data a user is looking for and whether the user manages to find this data. The quicker and easier the access to a specific item or data type, the higher is the level of appreciation the user has for the dictionary and the better are the chances of successful dictionary consultation procedures (Gouws & Prinsloo, 2005a: 172).

Yet the lexicographers should take heed of Gouws and Prinsloo's (2005a) warning that, when planning the data distribution structure of a dictionary, they should not only focus on where specific data should be presented, but also on how it should be presented. In this regard, the access structure and the search area structure are of vital importance. For instance, if three data categories (paraphrase of meaning, translation equivalent, and cultural data) have to be included in the treatment of a lemma, the lexicographer has to make provision for three article slots or search zones in the dictionary article. This partly corresponds to Wiegand's (1996d) concept of micro-architecture. Bergenholtz *et al.* (1999: 1770) make a distinction between articles that display a micro-architecture and those that do not. According to Gouws and Prinsloo (2005a: 172), a dictionary that displays a micro-architecture is characterised by definite text topological relations, i.e. top to bottom and left to right relations. The following examples, taken from the *Dictionnaire Fang-Français/Français-Fang*, illustrate an article without a micro-architecture:

> **ABÎKH** (b) n.4, pl. mebîk. 1. Sangsue. – 2. Ver blanc qui fait bosse sous la peau des hommes ou des animaux et qu'on fait sortir en pressant. Il a 3cm de long et plusieurs mm. de large . Cela fait des enflures. Il grossit vite, et on peut le sortir après 2 ou 3 jours. Cela arrive aux gens qui vivent en brousse.

The following example is a modified article drawn from **the** *Dictionnaire Fang-Français/Français-Fang* illustrating an article with a micro-architecture:

ABÎKH (b) n.4, pl. mebîk.

1. Sangsue.
2. Ver blanc qui fait bosse sous la peau des hommes ou des animaux et qu'on fait sortir en pressant. Il a 3cm de long et plusieurs mm. de large. Cela fait des enflures. Il grossit vite, et on peut le sortir après 2 ou 3 jours. Cela arrive aux gens qui vivent en brousse.

Contrary to the first example, the second example makes provision for a clear distinction between comment on form and comment on semantics and treats the different subcomments on semantics in different text blocks. Gouws and Prinsloo (2005a: 173) add that the division between the text blocks becomes even clearer when a white line is used to separate them. The following modified articles of the lemmas **ABIKH** and **TOLA** taken from *Dictionnaire Fang-Français/Français-Fang* show a white line separating text blocks.

Abik (b) n.4, pl. məbik.

1. Sangsue.

2. Ver blanc qui fait bosse sous la peau des hommes ou des animaux et qu'on fait sortir en pressant. Il a 3cm de long et plusieurs mm. de large. Cela fait des enflures. Il grossit vite, et on peut le sortir après 2 ou 3 jours. Cela arrive aux gens qui vivent en brousse.

- **tola** [tòlà] vb.

1 □ *abɔ̂rɔ̂bɔ̂ edzom vo o yo*, S'appuyer sur.

∘ *Elé éva tolan ézi évok o yo*, un arbre qui tombait est venu se fixer sur la fourche d'un autre arbre qui a tenu bon.

syn: Voir sakbɔ̂, yɔ̂gbɔ̂.

▷ prov: *gu ebi ve tola ne elon*, tomber dans un trou et en ressortir pour aller se jeter dans un piège d'éléphant.

2. □ *a ku oyap*, Aller plus loin.

∘ *kale a tolanɔ̂ o yo*, il est tombé encore plus loin.

10.3.1 The micro-architecture in the dictionary with the planned microstructural programme

With regard to the *micro-architecture* of the dictionary with the planned microstructural programme, the first level will start with the lemma, items giving the data on pronunciation, items giving the etymological data or items giving the morphological data. The second level will start just below the lemma up to the paraphrase of meaning, followed by the translation equivalent item, etc.

- **tola** [tòlà] vb.

1 □ *abə̂rə̂bə̂edzom vo o yo*,
S'appuyer sur.

∘ *Elé éva tolan ézi évok o yo*, un arbre qui tombait est venu se fixer sur la fourche d'un autre arbre qui a tenu bon.

syn: Voir sakbə̂, yə̂gbə̂.

▶prov: *gu ebi ve tola ne elon*, tomber dans un trou et en ressortir pour aller se jeter dans un piège d'éléphant.

2. □ *a ku oyap*, Aller plus loin.

∘ *kale a tolanə̂ o yo*, il est tombé encore plus loin.

This presentation will allow the user to quickly identify each search zone in the article slot.

10.4 Addressing structure

According to Gouws and Prinsloo (2005a: 134–135), when planning and when consulting a dictionary, it is important to pay ample attention to the scope of each entry, to realise what the lexicographer hopes to achieve with the inclusion of each entry and to know what kind of contribution such an entry makes in achieving the overall genuine purpose of the dictionary. All microstructural items should be included as part of the treatment offered in the specific dictionary and lexicographers and users should know exactly at which treatment unit a specific item is directed. This leads to the introduction of the concept *addressing structure*.

Each microstructural entry is part of the treatment of the lemma sign of the given article or a form of treatment or lexicographic comment on another microstructural

entry elsewhere in the dictionary. Microstructural entries are directed or addressed at specific targets. Hausmann and Wiegand (1989: 349) say that each item refers to an addressee through an address given in the article. Normally the central address of a dictionary article is the item giving the form of the lemma sign and consequently the lemma. The lemma is the most typical address in an article, but other items also function as addresses. This leads to a distinction between two major types of addressing, i.e. lemmatic and non-lemmatic addressing. When the address is the lemma, we have *lemmatic addressing*; when it is the sublemma, we have *sublemmatic addressing*; in all other cases we have procedures of *non-lemmatic addressing*. If all items inside the article are addressed at the lemma, we have *full lemmatic addressing*.

10.4.1 Lemmatic addressing

According to Gouws and Prinsloo (2005a: 135) the lemma functions as first level of treatment or the primary treatment unit in an article. Consequently it is the most typical address in that article. Gouws and Prinsloo (2005a: 135) and Gouws (2001c: 89) add that lemmatic addressing is a procedure where the lemma is the address of an entry. In a dictionary that adheres to a strict initial alphabetical ordering, all the lemmata would be arranged vertically and each lemma will be the guiding element of an article. Lemmatic addressing will always have one of these lemmata as an address of a given entry.

Most of the items giving data on pronunciation, part of speech, grammar, semantics and pragmatics are addressed at the lemma. They are primarily used to aid the user in employing the lexical items in encoding and decoding situations.

10.4.2 Sublemmatic addressing

It goes without saying that, in a dictionary where a sinuous lemma file prevails, niched and nested articles can have sublemmata as their guiding elements and primary treatments units. These sublemmata are addressed by items in the subarticles and such a sublemma therefore functions as the address of an item in a subarticle. This addressing procedure is known as sublemmatic addressing. The sublemmata remain

part of the macrostructure of the dictionary; therefore sublemmatic addressing is a type of lemmatic addressing (Gouws & Prinsloo, 2005a: 135; Gouws, 2001c: 90). See the following example from the *Oxford Hachette Bilingual Dictionary French-English/English-French*:

eye: ~**brow** pencil n crayon m à sourcils;
~**catching** adj [design, poster] attrayant;
[adverisement headline] accrocheur/-

Following the article of the lemma **eye**, the niched articles are headed by sublemmata. The partial article stretch starts with the article of *eyebrow*, presented in a condensed form as the partial lemma *~brow*, and ends with the article of the sublemma *eyecatching*, presented in a condensed form as the partial lemma *~catching*. These sublemmata are the guiding elements of subarticles and these articles contain translation equivalents given for the sublemmata. These translation equivalents are addressed at the sublemmata and this constitutes a procedure of sublemmatic addressing.

10.4.3 Full lemmatic addressing

According to Hausmann and Wiegand (1989: 349), if all items inside the article are addressed at the lemma, we have full lemmatic addressing. This means that there is no topic switching because all lexicographic statements comment on the lemma sign. In the situation of full lemmatic addressing in bilingual dictionaries, equivalent items appear without any treatment addressed at them. However, sublemmatic addressing can be part of the full lemmatic addressing if it is regarded as a type of lemmatic addressing.

10.4.4 Non-lemmatic addressing

According to Gouws and Prinsloo (2005a: 136), non-lemmatic addressing is an addressing procedure in which the lexicographic treatment is directed at an item not functioning as a lemma. Hausmann and Wiegand (1989: 349) and Gouws and Prinsloo (2005a: 136) state that lemmatic addressing is directed at macrostructural items, while non-lemmatic addressing is directed at microstructural items. The use of

non-lemmatic addressing implies a system of topic switching within the dictionary article because each non-lemmatic address introduces a new treatment unit as topic (cf. Hausmann & Wiegand, 1989: 329). Gouws (2001a: 90) adds that non-lemmatic addressing is a procedure involving an entry not functioning as a lemma as an address. The address is the topic of the specific treatment procedure.

10.4.5 Addressing structure in the dictionary with the planned microstructural programme

In contrast to *Lexique FAN-Français*, which uses non-lemmatic addressing (cf. Chapter 5), the dictionary with the planned microstructural programme will utilise a lemmatic addressing procedure since they are monoscopal in nature and because of the lemmatic bias that prevails in such work. The main lexicographic treatment will be addressing at the source language item (lemma). Consequently, data on pronunciation, morphology, grammar, semantics and pragmatics will be addressed at the lemma.

Sublemmatic addressing will not be part of the model I propose. The dictionary with the planned microstructural programme will present a straight alphabetic macrostructure, which means all potential sublemmata will be presented as main lemmata and no sublemmatic addressing will take place.

10.4.6 Concluding remarks

It has been noted that the addressing structure is a system that describes all types of addressing in a given dictionary. It can be regarded as a strategy according to which one item is directed at another. In such a strategy, each microstructural entry is part of the treatment of the lemma sign of the given article or a form of treatment or lexicographic comment on another microstructural entry elsewhere in the dictionary. When planning a dictionary, the lexicographer(s) has to know exactly at which treatment unit a specific item is directed or addressed.

10.5 Mediostructure

The quality of dictionary use, in other words the degree of success a user experiences when consulting a dictionary and employing the retrieved information, is determined by a variety of features. One of the most important characteristics of a good dictionary is its accessibility, which leads to an unambiguous retrieval of information presented on both the macro- and microstructural levels (cf. Gouws & Prinsloo, 2005a: 177). This leads to the concept of the mediostructure, the system of cross-referencing, which is a lexicographic device that can be used to establish relations between different components of the dictionary. To be more precise, the system of cross-referencing is employed in a dictionary to lead the user from one entry to another (cf. Gouws, 2001c: 91; Gouws & Prinsloo, 2005a: 177). As a support in the evaluation and standardisation of systems of cross-references and to recommend better systems, the theory of mediostructures was identified and discussed by Wiegand (1996d), who gives an exposition of the fundamental terms used in a theory of mediostructures. Gouws and Prinsloo (1998: 11–43; 2005a: 177) succinctly explain the basic terms relating to a theory of mediostructures, starting with the following statement:

> *A lexicographer cross-refers the dictionary user from a cross-reference position to a cross-reference address. This is usually done by means of a cross-reference entry in which a cross-reference marker is used and gives the user additional relevant lexicographic data. A cross-reference relation is established between the cross-reference entry and the cross-reference address.*

The *Dictionnaire Fang-Français/Français-Fang* contains the following entries in the article of the lemma sign **TOR**:

TOR (h) vb. *Tor ñkume,* abattre un groupe de petits arbres de façon à ce qu'ils tombent ensemble. Syn.: *baghé ñkume.* Voir *ñkume.*

In this extract, this specific slot in the article of the lemma sign **TOR** is the cross-reference position and the lemma sign **ŇKUME**, the separate macrostructural entry to which the user is cross-referred, is the cross-reference address. In a cross-reference entry such as "Voir *ñkume*", the word "Voir" (see) is the cross-reference or mediostructural marker and "*ñkume*" remains the item giving the cross-reference address, as mentioned above. The abbreviation "syn." is also used to make a cross-reference.

The mediostructure comprises three important types of cross-references, namely internal, external and dictionary external cross-references.

10.5.1 Structural indicators

Before discussing the three important types of mediostructure, it is crucial to provide an outline of the structural markers accessible to the compiler in the pursuit of efficient cross-referencing. Non-typographical structural indicators such as arrows (see, for example, the English Dutch translation dictionary *Van Dale Groot Woordenboek Engels-Nederlands* (VDGW)) are sometimes used as cross-reference markers. Another type of marker can be found in the *Cambridge International Dictionary of English* (CIDE), which mixes typographical and non-typographical techniques, e.g. pic, which is employed to refer to the relevant illustrations inserted as inner texts. Unfortunately, arrows are not employed in the existing dictionaries in Fang. Words [e.g. Voir (see)] and abbreviations (e.g. *peu.us.)* can be used to make cross-reference entries more explicit.

Before discussing the three important types of mediostructure, it is also necessary to give an outline of the different microstructural connections.

10.5.2 Microstructural connections between the central word list and front matter texts

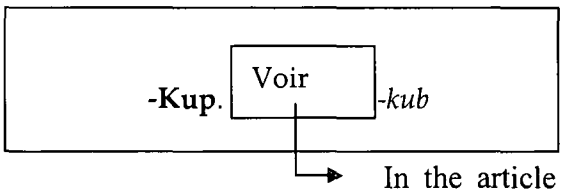
In Chapter 5, a number of data categoriesinside the front matter section were selected as part of the planned dictionary. The system of cross-referencing can be regarded as

a lexicographic device that can be used to establish the connection between the central list and the front matter texts in order to achieve the genuine purpose of the dictionary (cf. Berghenholtz *et al.*, 1999: 177). A list of abbreviations is an example of texts that help the user(s) to have a successful dictionary consultation procedure. This is also relevant from a mediostructural perspective (Gouws, 1999d: 7). The lexicographical utilisation of both these texts represents the establishment of a mediostructural link between the central text and the integrated outer text containing this list of abbreviations and their respective full forms, says Gouws.

10.5.3 Mediostructural connections in the central word list

10.5.3.1 Explicit and implicit cross-references

Gouws (1999d: 12) distinguishes two types of cross-references in the front matter, i.e. the explicit and implicit reference. According to him, explicit references are marked by entries like *voir* (see) or *comparer* (compare). Consider the following article of the lemma **kup** taken from the *Lexique FAN-Français*:



In the article of the lemma **kup**, the entry *voir -kub* (see) can be regarded as an explicit cross-reference used by the compiler of the dictionary.

Implicit cross-references do not have such a marker and the editorial board takes it for granted that the user will know that a specific entry refers to another lemma where the desired information can be found. Implicit cross-references are marked by entries like *syn.* for synonymy and *ant.* for antonymy. These implicit cross-references have been discussed in Chapter 9 under the sections synonymy, antonymy, etc.

In some cases, implicit cross-references are given without cross-reference markers. They consist only of the items giving the cross-reference address.

10.5.3.2 Mediostructural connections between the central word list and the back matter texts

10.5.3.2.1 The presentation of source-directed cross-reference entries

Some dictionaries, like the WAT X, present a text containing the bibliographical sources referred to in the articles of the central text in their back matter. Each citation in the central text is immediately followed by a cross-reference, given in parenthesis, to the relevant source (Gouws, 1999d: 8). Wiegand (cited in Gouws, 1999d) regards the use of references indicating the source of a quotation as the source-directed mediostructure of the dictionary. Such cross-references from the articles in the central text to the back matter constitute such a text as an integrated outer text (Gouws, 1999d). From a mediostructural perspective, the cross-reference entry given in the central list only has one cross-reference address, i.e. the source included in the back matter text.

Unfortunately, existing dictionaries in Fang fail to provide references indicating the source of quotations in the back matter. With regard to the planned dictionary, I suggest the inclusion of a text giving the sources and the presentation of source-directed reference entries directing the user to this text in the back matter.

Consider the following modified articles of the lemma **na** in the *Dictionnaire Fang-Français/Français-Fang*:

na [...] conj. *Kə na alu ebo̱*, avant que la nuit tombe. {Ondo Mebiame, P. 1992} [...]

In the article of the lemma **na**, after the item giving the part of speech, the source language citation in Fang is given in italics as an illustrative example, followed by its translation equivalents in French. The use of braces { }, which indicate a cross-reference to the author (Ondo Mebiame) and the year of publication (1992), should have to be explained in the user's guide of the dictionary. A user who interprets such

a source-directed cross-reference entry as a direct link to a dictionary-external source and who is familiar with the specific source mentioned as cross-reference address or is capable of connecting the condensed version of the external source title with the relevant full text, can proceed with the act of following up the reference by going to the specific external source (Gouws, 1999d: 9). According to Gouws (1999d), such a cross-reference procedure is not initiated by the cross-reference entry, but by the user's knowledge. The planned dictionary with the microstructural programme are addressed at advanced learners and sometimes they get what they need in dictionaries. The target users of the planned dictionary will be able to interpret such a source-directed cross-reference and will be capable of connecting the condensed version of the external source title with the relevant full text.

Some dictionaries, like the WAT X, use parentheses to present the source of a quotation. With regard to the planned dictionary, the choice has been made to use braces {...} to separate this reference from the presentation of labels, for example.

10.5.3.2.2 Transitive cross-reference addresses

Before discussing transitive cross-reference addresses within the article of the dictionary with the planned microstructural programme, it is vital first to define the term *transitive cross-reference addresses*. According to Gouws (1999d: 10):

> *[...] The reference address entries included in the source-directed reference entries have but a single reference addressing function. They refer the user to the relevant entries in the back matter text. These entries in the back matter text are external reference addresses because the reference directed at them goes beyond the borders of a single article. However, the reference does not go beyond the borders of the dictionary and these addresses could therefore be classified as dictionary-internal external reference addresses. From this reference destination users can obtain optional reference instructions directing them to a source outside the dictionary. Although the external reference address entries included in reference entries in the articles of the*

central list function on a dictionary-internal reference level, the user will eventually be able to reach the dictionary-external source as the final reference destination. The dictionary-internal external reference addresses function as a reference destination inside the dictionary. These entries in the back matter text can also be regarded as reference entries directing the user to a dictionary-external reference address. Therefore these dictionary-internal external reference addresses can be called transitive external reference addresses. A transitive relationship between the dictionary-internal and the dictionary-external reference addresses.

With regard to the dictionary with the planned microstructural programme, I suggest that the back matter text containing the list of sources from which central list quotations have been taken should have entries like the following:

Ondo-Mebiame, P. 1992. *De la phonologie à la morphologie du Fang parlé à Aboumezok (Langue Bantu A.78).* 2 volumes. Unpublished Thèse de doctorat. Tervuren: Université Libre de Bruxelles.

The entry **Ondo-Mebiame, P.** in the article of the lemma **na** mentioned above, which refers the user to the source from which the quotation has been taken, includes a reference to the author, to the year of publication complemented by entries indicating the city where the work was done. According to Gouws (1999d), an entry indicating the year of publication has no functionality and could be omitted without decreasing successful access to the external reference address. The entry **Ondo-Mebiame, P.** in the article of the lemma **na** is an example of a transitive reference addresses, because the cross-reference refers the user(s) to the relevant entries inside the dictionary, particularly in the back matter text.

10.5.3.3 The article-internal cross-reference address

Gouws and Prinsloo (2005a: 179) regard the article-internal cross-reference address as the first category of cross-reference address. An article-internal mediostructure relation assists the user to relate various microstructural entries employed in the same

article. With the internal cross-reference address, the mediostructural relation does not exceed the boundaries of the article. This type of cross-reference is used to ascertain coherence between different microstructural entries in one article.

Comprehensive dictionaries like the *Woordeboek van die Afrikaanse Taal* (WAT) contain internal cross-reference addresses. The internal cross-reference address is used inside items giving the paraphrase of meaning to refer to preceding senses or syntactic functions of the lexical item represented by the lemma sign. The WAT contains the following entries in the article of the lemma sign *kroon* (crown):

kroon. I ... 1.a. Hoofsieraad ...
b.[Simboliese] voorstelling of afbeelding van'n kroon (bet.I, a), ...
3.a. i. Ornamentele kopbedekking wat herinner aan, of 'n namaaksel, voorstelling is van'n kroon (bet I, 1a)

In this excerpt, cross-references are made to sense *I 1 a* in the treatment of sense *1 b* and sense *3 a I*, i.e. to a cross-reference address within the article. Unfortunately, existing dictionaries in Fang opted not to include internal cross-reference addresses.

10.5.3.4 The external cross-reference address

Gouws and Prinsloo (2005a: 179) regard the external cross-reference address as the second category of mediostructure. The cross-reference exceeds the boundaries of the article. Two search domains can be identified for external cross-reference addresses. Dictionary articles are texts, but they also function as subtexts of the central list, which is the dominating lexicographic text. The external address can be located elsewhere in the central list, i.e. another lemma sign or a specified microstructural element in another article, or in a separate text outside the central list. The *Dictionnaire Fang-Français/Français-Fang* contains the following entries in the article of the lemma signs **EKÔM**, **ÉLEÑLA**, **YEM** and **AKURA**.

EKÔM (b) n.5, pl. bikôm (vb kôm b). Stérile (homme ou femme), incapable d'avoir des enfants. Se dit aussi des animaux. *Ñga wam a ne ékôm*, ma femme est stérile. *Fam é ne ékôm*. Voir *ñkôkôm*.

ÉLEÑLA ... 2. Photographie, statue de quelqu'un. Voir *éyema, éfôna, mveghle*.

YEM ... 2. Vb. Aux.: *Ma yem-e-bo = ma bo mvè*, je fais bien. *Ma yem-e-lôn = ma lôñ mvè*, je construis bien. *A yema bo*, il a réussi. ... Contr: *zimé*...

AKURA (h) n.4, pl. mekura. 1. Panier carré en bas, rond en haut. Syn.: *añgun* ...

In this excerpt, the item **EKÔM** can be regarded as monosemous, with one sense. The article displays the meaning paraphrase/equivalent of the item **EKÔM** and cross-refers the user instead to the treatment presented for another lemma sign, i.e. *ñkôkôm*. This lemma sign is the external cross-reference address located somewhere in the central list.

The *Dictionnaire Fang-Français/Français-Fang* includes the item **ÉLEÑLA**, which is polysemous and has three different senses. The article of this lemma displays the equivalent of the item **ÉLEÑLA** and cross-refers the user to the treatment presented for three other lemma signs, i.e. *éyema, éfôna* and *mveghle*. These lemma signs are the external cross-reference addresses located in the central list.

In the excerpts above, the item **YEM** is an antonym item and has a different sense to that of another item **ZIMÉ**, with reference to the entry "Contr.". The article of the lemma sign **YEM,** by means of the abbreviation, cross-refers the user to the treatment presented for the lemma *zimé*. This lemma sign is an external cross-reference address located elsewhere in the central list.

The *Dictionnaire Fang-Français/Français-Fang* includes the item **AKURA** (type of basket), which is a hyponym item, i.e. a more specific item included in a more general

item (cf. Lyons, 1969: 453) *añgun* (a wider class of basket), which is preceded by the abbreviation "Syn.". The cross-reference guides the user to the treatment presented for the lemma *añgun*. The lemma sign is an external cross-reference address situated elsewhere in the central list. Unfortunately, the abbreviation "Syn." is employed in *Dictionnaire Fang-Français/Français-Fang*, to establish a reference relation between synonyms, polysemous words, hyponyms, etc. The methods employed in this dictionary are marred by inconsistency and a lack of transparency (especially when one or more of the lemmas in the pair or grouping are polysemous, hyponyms, etc.).

10.5.3.5 The dictionary-external cross-reference address

Gouws and Prinsloo (2005a: 179) regard the dictionary-external cross-reference address as the third category of mediostructure. This mediostructural procedure links a text segment in a dictionary to a source outside the dictionary. In a dictionary where this procedure is applied well, the back matter contains a bibliography of sources in which more information regarding the terminology treated in the dictionary can be found. Many articles contain condensed bibliographical references that lead the user to the bibliography in the back matter, which is the cross-reference position from where the user is guided by means of a complete reference to the specific source.

10.5.3.6 Ostensive cross-reference address

Lexicographers differ in the way they position illustrations in dictionaries. Some compilers of biscopal, bilingual dictionaries place the illustrations in the back matter. Monolingual dictionaries such as SADJS place illustrations under the relevant lemma or in close proximity to the relevant lemma. Unfortunately, existing dictionaries in Fang opted not to include illustrations.

In some cases in SADJS (e.g. **bed**), the problem of remote addressing is resolved by positioning the illustration just after the appropriate sense. This obviates the need for cross-references.

With regard to the dictionary with the planned microstructural programme, it has already been said in Chapter 9 that the item giving an illustration will be positioned under the lemma. The ostensive cross-reference marker indicating the illustration will be placed after the items giving an example.

10.5.3.7 Dead cross-references

One of the basic errors sometimes made by lexicographers is to give a cross-reference entry referring the user to a cross-reference address that does not exist (cf. Gouws & Prinsloo, 2005a: 185). Compare the following examples drawn from the *Dictionnaire Fang-Français/Français-Fang*:

REINCARNATION de l'esprit d'un homme dans un animal, *éleñla* (h), *ñgô* (m). Voir *nže mfera* (mhh), *éleñla é nžokh* (hh).

Both cross-references to *nže mfera* (man leopard) and *éleñla é nžokh* (the spirit of man reincarnated in the elephant) are dead references, since these words are not entered as lemma signs in the dictionary. In fact, these errors come from the fact that the compiler struggled to lemmatise compound nouns.

In the *Lexique FAN-Français*, one can also find this inconsistency:

-Kup. Voir *-kub*

The cross-reference to *–kub* (to spill) is a dead reference, since this lexical item is not entered as a lemma sign in the reference work. This dead reference defies the principle of user-friendliness and could frustrate the user. Lexicographer(s) need to pay close attention when applying cross-references in a dictionary. They have to give a cross-reference entry referring the user to an existing cross-reference address so that the user can find this cross-reference address as a lemma sign or other entry in the dictionary.

10.5.3.8 Failure to utilise cross-referencing where needed

According to Gouws and Prinsloo (2005a: 186), the lexicographer should not miss out on golden opportunities to utilise a system of cross-referencing, especially in those cases where an excellent potential cross-reference address exists. Consider the following article in the *Dictionnaire Fang-Français/Français-Fang*:

> **NEN** (h) adj. Grand, gros, important (vb *nen* h). Cl. 1: *nen*, *benen*; cl.2: *nen*, *minen*; cl.3: *nden*; cl.4: *anen*, *menen*; cl.5: *énen*, *binen*; cl.6: *nen*, *anen*.

In this dictionary, the lemma **NEN** (big, fat, important) is entered and treated in the central list. Here the user gets more information from the treatment of **NEN**, namely part of speech, translation equivalents and different classes (cl.) of **NEN**. In the back matter of the dictionary, the different classes of **NEN** and their use in context are also given. Consider the following table of adjectives in *Dictionnaire Fang-Français/ Français-Fang*:

Table 10.2: An outline of adjectives in Fang: the case of **NEN**

Nouns	Adjective
1. môr/ bôr, homme(s)	nen/ benen
2. mbi/ mimbi, porte(s)	nen/ minen
3. ku/ beku, poule(s)	nden/ enen
4. alo/ melo, oreille(s)	anen/ enen
5. éli/ bili, arbre(s)	énen/ anen
6. ônon/ anon, oiseau(x)	nen/ menen
7. byal/ mal, pirogue(s)	Nen/ menen

Unfortunately, no cross-reference is given from **NEN** to the back matter, nor from the

back matter to the central list where **NEN** is treated. The compiler could save space when giving the different classes of **NEN** by giving a cross-reference from **NEN** to the back matter of the dictionary.

10.5.3.9 Cross-references to the wrong cross-reference address

The lexicographer should make sure that the user is cross-referred to the correct cross-reference address, especially in cases where homonyms or closely related polysemous homonyms are given (cf. Gouws & Prinsloo, 2005a: 187). In the *Dictionnaire Fang-Français/Français-Fang* there are some inconsistencies in this regard:

> **Eṇīn**. Voir *Enīn*.
> **Enīn**. Vie, existence. A. f. eṇin. Enīn ayo. Longue vie.
> **Enīn**. Marée. A. f. eṇin. *Enīn z'atioe* ...

The cross-reference address to which the user is referred from the entry **Eṇīn** guides him to two homonyms **Enīn**. Here the user does not know the correct cross-reference address, which could cause confusion and disappointment. The question that arises is on what grounds the target user of the dictionary is going to distinguish between the two members of the homonym paradigm. A solution would be to give them superscript numbers, or start with a structural indicator reflecting frequency of use, as it is usually done in such cases. For examples, [1]**Enīn** and [2]**Enīn**, or **1. Enīn** and **2. Enīn**. Here the homonyms should receive superscript numbers to make cross-references more unambiguous.

10.5.3.10 Cross-references that misguide the user in respect of information retrieval

Consider the following articles in the *Dictionnaire Fang-Français/Français-Fang*:

> **EKO** ... (see ôko) crochet en bois ou en fer, porte-chapeau, suspension
> **ÔKO** ... crochet en bois ou en fer

In the articles of the lemma **EKO**, the addition of the translation equivalents *porte-chapeau* and *suspension* raise a few questions. Firstly, it implies that *porte-chapeau*

and *suspension* are suitable equivalents for **EKO** but not for **ÔKO.** Secondly, no cross-reference is given from **ÔKO** to **EKO**. Thus the entire relationship between **EKO** and **ÔKO** is unclear. The user cannot determine in which relation they stand to each other.

10.5.3.11. Unidirectional versus bi-directional cross-referencing

Consider the following modified dictionary articles of Fang taken from Dictionnaire Fang-Français/ Français-Fang:

ntokh...	**- tokh**
atokh...	**- tokh**
étokh...	**- tokh**

-tokh adj. petit, mince, de peu d'importance. *Nten ntokh*, petit livre.

In Gouws and Prinsloo's terminology (2005a: 189), this type of cross-referencing is an unidirectional (one way) cross-referencing because the user who looks up the full form of the adjective (class prefix plus stem) is correctly guided by means of a cross-referncing to the lemma sign **–tokh**. However, in order to to enable the user to retrieve as much information as possible unidirectional cross-referencing should be used sparingly, Gouws and Prinsloo (2005a) continue.

Bi-directional cross-referencing should be seen as the default cross-rerencing procedure, also in cases where a comprehensive lexicographic treatment is given to both lexical items and where the user will benefit from the information given in the other entry, Gouws and Prinsloo (2005a). Consider the following examples drawn from the articles of the lemmas **EŇGYEL** and **ŇKÜ** drawn in the *Dictionnaire Fang-Français-Français-Fang*:

EŇGYEL (b) n.5. pl. *biňgyel*. Nain très court, ou tout homme très court sans être nain. Voir *ňkü*. *Eňgyel* est toujours petit, tandis que ňkü peut avoir une taille normale ou même haute.

ŇKÜ (b) (lg) n.1, pl. *bekü*. Nain, pygmée, négrille. [...] On reconnaît les *Bekü* à leur petite taille, à leur odeur (metul), à la forme la plus grande de leur oreille, à leur langage. Leur lèvre b'a pas de rebord (*ňka*), ils sont comme des chimpanzés [...] Voir *éňgyel*.

In the article of the lemma **EŇGYEL**, for example, explicit reference is made to *ňkü*. At the reference address **ŇKÜ**, the user finds more useful information on *éňgyel*. Likewise, the user who firstly consulted the entry **EŇGYEL** will find, in addition to other useful information given there, "Voir *ňkü* [...] *ňkü* peut avoir une taille normale ou même haute" According to Gouws and Prinsloo (2005a), this is good lexicography since for User A who consulted the lemma **ŇKÜ**, as well as User B who looked up **EŇGYEL**, the cross-references were useful because they obtained more information at the respective reference addresses..

10.5.3.12 Using cross-referencing to avoid a full treatment of the lemma

One of the errors made by lexicographers is to utilise the system of cross-referencing simply because he or she is too lazy to give proper treatment to the items in question. According to Gouws and Prinsloo (2005a), if it is in the interest of the target user that a specific lemma should be entered and treated, it has to be done.The non-treatment of the word **EZA** in *Dictionnaire Fang-Français/ Français-Fang* can be offered as a typical example:

EZA (m) Ce qui est à autrui. Voir *éwa*.

Apart from the the translation equivalent in French, no example is given, only an explicit cross-reference to **EWA**. In the article of **EWA**, many references are once again made to **EZA**, such as *éza nda (la maison de l'autre)* and *éza étô (le pagne de l'autre)*. However, EZA itself remains without examples.

10.5.3.13 Mediostructure in the dictionary with the planned microstructural programme

When dealing with the system of cross-referencing, the lexicographer(s) of the dictionary with the planned microstructural programme has to be aware that there are

three types of cross-reference addresses, i.e. the internal cross-reference address, the external cross-reference address and the dictionary-external cross-reference address. All of these cross-reference strategies have to be used carefully in order to avoid inconsistencies arising from potential dead cross-references, misguiding cross-references, or cross-references to the wrong cross-reference address.

I propose the following three types of mediostructural strategies in the dictionary with the microstructural programme:

- The first type will firstly concern a reference marker, i.e. an arrow (→), referring the user to the treatment of other lexical item(s) where he/she can find additional data regarding the lemma or the equivalent item or any other entry in the article. The arrow means that there is a mutual relation between the treated lexical item and the one given as reference address. Secondly, the cross-reference marker, i.e. the sign (⇒), will refer the user to a particular pictorial illustration.

- The second type of strategy will be the use of abbreviations such as *Syn.* (synonym), *Hom.* (homonym) and *Ant.* (antonym), referring the user to other lemma(s) or equivalent item(s) that have a semantic and/or morphological relation to the treated lemma. In most dictionaries, synonyms, homonyms, antonyms, etc. are not given as cross-references. With regard to the dictionary with the planned microstructural programme, I propose these abbreviations will also be cross-reference entries because they will refer to other entries regarding the lemma or the equivalent item (cf. Beyer, 1995: 50).

- The last type of mediostructural strategy will be the page numbers. This complex cross-reference address entry involves the first two procedures. Indeed, the cross-referred items will not be given only with the arrow or the mentioned abbreviations, but also with the page number indicating where they can be found in the dictionary. The page number will be given after the referred item (e.g. *Syn.* **Esa** 125). This will lead to the term "double cross-reference addressing", where the lemma **Esa** will be the main entry and the marker *125* will be the subaddress entry of this reference. The lexicographers of the dictionary with the planned microstructural programme should be aware

that such a procedure demands a high degree of textual condensation. However, given the fact that the target users of the planned dictionary are advanced learners, the users will have more sophisticated dictionary-using skills enabling them to interpret such a procedure. This strategy is necessary for the users of the dictionary with the planned microstructural programme because it offers a clear search path to reach the needed address.

10.5.4 Concluding remarks

The focus in this chapter was on the guide structures, i.e. those structures and procedures that enhance the accessibility of data in the dictionary. With regard to the access structure, it was said that it comprises the outer access structure and the inner access structure. The outer access structure includes elements such as cover, table of contents, thumb indexes and running heads. The inner access structure comprises elements such as the structural indicators. Within the structural indicators there are non-typographical structural indicators and typographical structural indicators. With regard to the addressing structure, one can distinguish lemmatic addressing, non-lemmatic addressing, sublemmatic addressing and full lemmatic addressing. The lemmatic addressing procedure has been chosen for the planned dictionary because of its monoscopal nature and because of the lemmatic bias that prevails in such work. The mediostructure, which is a system of cross-referencing, can be regarded as an important lexicographic device available to the lexicographer(s) to enhance the quality of dictionary articles by referring users to reference addresses where more information can be retrieved. When dealing with the system of cross-referencing, the lexicographers of the dictionary with the planned microstructural programme have to be aware of the existence of three types of cross-reference addresses, i.e. the internal cross-reference address, external cross-reference address and the dictionary-external cross-reference address. They have to use all these cross-reference strategies carefully to avoid inconsistencies arising as a result of dead cross-references, misguiding cross-references, or cross-references to the wrong cross-reference address.

The lexicographers of the dictionary with the planned microstructural programme have to be aware of the fact that the Fang community is not very familiar with

dictionary-using skills, and the use of access structure, addressing structure, micro-architecture and mediostructure procedures should be planned in accordance with the needs and reference skills of the target users of the dictionaries.

GENERAL CONCLUSION

1. Conclusion

The general preparation phase of dictionary conceptualisation lays the foundation for the structure, content and presentation of the final product. One of the issues to receive attention in the general preparation phase of any dictionary is the microstructural programme, i.e. the different data categories to be included in the treatment of the lemmata and the typical article slots allocated to these categories. It was indicated that the Wiegand framework is extremely useful for planning a dictionary. It is the only theory that deals extensively with all aspects of dictionary planning. It is very clear that, for the purposes of the proposed dictionary, one can definitely make use of Wiegand's theory.

As far as this model for the dictionary project in Fang is concerned, our concern is with hybrid dictionaries, which will have characteristics of both monolingual descriptive and bilingual dictionaries. Such models will be monoscopal (Fang >French) in the treatment presented in the central list.

In the course of this study, it became evident that the corpus plays an important role in the selection of the data to be included in the dictionary. It is the first step in the compilation of any dictionary, whatever its typology. Lexicographers must provide researchers with data (corpus) that allow them to compile dictionaries in such a way that language development is effective. At the microstructural level it assists the lexicographer in respect of sense distinction, retrieval of typical collocations, pinpointing of typical examples to be included in the dictionary, and studying idioms. A corpus requires some scientific criteria, i.e. it should be functional, representative and balanced. The compilation of the corpus for the planned dictionary is a big issue that the lexicographers have to solve. The representative corpus will be an ideal source for future dictionaries in Fang. The lexicographers have to be aware of the size such a corpus can be. This choice will not be easy for the compilers of the planned dictionary and demands widely-available texts in Fang. One of the big challenges facing the lexicographers of the planned dictionary is the analysis of data. Modern

lexicographers make use of widely available corpus analysis tools (e.g. *WordSmith Tools*) to analyse data. Since the planned microstructural programme aims to give different data to be included in the dictionaries, this corpus analysis could help in identifying typical definitions, examples, paraphrase of meaning, idioms, etc.

Just as any other researcher or producer of utility products, lexicographers must study – or ought to study – human activities in order to detect possible needs that can be satisfied by means of a dictionary. But human needs must not be viewed as something abstract, having their own independent life. They are always linked to a specific group of people and a specific situation. The lexicographers of the dictionary with the planned microstructural programme therefore have to draw up a profile of the intended user group and a typology of the user situations where problems or needs may pop up that can be solved by providing lexicographic data in dictionaries. On this basis, the functions and genuine purpose of the planned dictionary can be determined. These aspects have an impact on the content of the planned dictionary, i.e. the data to be included in this dictionary's articles. The users of the planned dictionary comprise, on the one hand, advanced adults, high school students and academics who have Fang as their mother tongue and want to improve their knowledge of this language and, on the other hand, students who have a good knowledge of French and want to learn Fang as second language. In the course of this study, it has been said that the teaching of dictionary skills in Gabon has not yet been established. To improve the lexicographic situation in Gabon in general and in the Fang community in particular, the teaching of reference skills should first target the teachers themselves. The teachers are in a better position than other researchers or even lexicographers to assess the students' lexicographic needs. If teachers gain competence in dictionary skills and pass on the skills to students, a dictionary culture could grow in the community. In order to become empowered through knowledge, students and adults need to have information on grammatical data, orthography, pronunciation, morphology, semantics, etc.

The most important structures of a dictionary have been discussed in the course of this study. It can be concluded that distribution of the data comprises a programme that organises the distribution of all the lexicographic data between the different texts

presented in the dictionary. As a programme, it works in parallel with the microstructural programme by determining the way in which data types are presented and different texts are positioned in the dictionary. Two types of distribution structure were identified, namely a simple data distribution structure and an extended data distribution structure. Where the central list is the only target for the data distribution, the dictionary displays a simple data distribution structure. Where the outer texts are employed to accommodate data as part of the procedure of data distribution, the dictionary displays an extended data distribution structure. Regarding the central list, a brief discussion was provided of the structures like macrostructure, microstructure, access structure, addressing structure and mediostructure. The macrostructure and microstructure in existing dictionaries in Fang were also discussed. The conclusion that can be drawn is that these works make a valuable contribution to future dictionaries in Fang. On the microstructural level, existing dictionaries in Fang present various data types, namely tonal indication, paraphrase of meaning, translation equivalents, part of speech and co-text entries. There are some inconsistencies in the field of phonology, e.g. the lack of tonal indication and stress indication; in the field of morphology, e.g. the lack of morphological status in the treatment of the lemmas; and in the field of semantics, e.g. unclear indication of polysemous items, etc.

The front matter and back matter of the planned dictionary were also discussed. The focus was on the data to be included in the front matter and the back matter. It was said that all the microstructural data cannot be provided in the article of the dictionary. The usual method used by lexicographers is to include an extensive account of microstructural data. As an option, the lexicographers of the dictionary with the planned microstructural programme could limit the presentation of the microstructural data in the articles of the dictionary and include comprehensive and systematic discussions of the microstructural data in the outer texts (front and back matter texts). The front matter will include data like the background data, which will provide the users with the history of Fang and the origin of their language. The data section in the table of contents will give access to most of the texts and occasionally to parts of these texts. The data section will also give access to most of the data of the

outer texts. The data system in the user's guide of the dictionary with the planned microstructure must provide explanations of conventions and procedures employed therein.

A comprehensive and extensive discussion of some relevant grammatical data categories was provided. The grammatical data will form part of the mini-grammar and include data like prefixes, pronouns, adjectives, adverbs, conjunctions, prepositions, tables of the conjugation of verbs, pronunciation and the alphabet(s). The back matter will include additional data, such as the names of villages, the names of seasons, the names of days, and the names of countries. The back matter of the dictionary with the planned microstructural programme will include bibliographical data as important data. Consequently, it will contain a complete list of sources from which the central list quotations in the dictionary have been taken. The lexicographers of the planned dictionary should preferably use cross-referencing to guide the users to the specific lemma where an exhaustive treatment of the lemma sign is given.

The microstructure type for the dictionary with the planned microstructural programme will include all types of data categories that can be helpful to the target user. This microstructure type will contain elements typical of both an integrated microstructure and a semi-integrated microstructure. This means that co-text entries will directly follow the paraphrase of meaning/translation equivalents. Some additional co-text data could be added at the end of the article according to the treated lemma. However, the lexicographer must make sure that the inclusion of this co-text data will not make the articles unnecessarily complex (Gouws, 2002a).

The transcription of sounds in the dictionary with the planned microstructural programme will be based on a phonetic alphabet, whether the dictionary displays monolingual or bilingual characteristics. The International Phonetic Alphabet (IPA) method will be chosen on the basis of the capacity of the data to meet the needs of the target users. The IPA is important for both L1 and L2 users of the proposed microstructural programme. Since the target users include advanced adults, high school students and academics who have Fang as their mother tongue, and students who want to learn Fang as their second language, they can be assumed to have a

relative degree of familiarity with the IPA (revised 1993, updated 1996). However because of the considerable differences between the sound systems of the African languages and those of the European languages, problems that are likely to arise in this particular area should be solved by introducing (i.e. in inserted inner texts or in the mini-grammar) explanations of the specificities of the *Alphabet scientifique des langues du Gabon* (ASG) or the ARA, the Africa Alphabet published by the International African Institute (IAI). It was shown that, for the dictionary with the planned microstructural programme, phonetic transcription would be more effective than phonemic transcription, as it produces linguistically satisfactory results. The transcription system of Nzang-Bié, which is based on the IPA, was chosen as the most practical because it represents all the sounds used in Fang. As the planned dictionary is descriptive in nature, targeting mother-tongue speakers of Fang and non-mother-tongue speakers of Fang, it is vital to provide transcriptions at each lemma. The planned microstructural programme will include pronunciation variants, with the main pronunciation being determined strictly according to the frequency of use. The planned microstructural programme will present syllable divisions by means of full stops, and tonal indications of the lemma will be provided between brackets "[...]". The stress is regarded as an essential component of data on pronunciation. The lexicographers of the dictionary with the planned microstructural programme should place the stress on the lemma sign, but it should also be given in the transcription.

In the course of this research, it has been said that one of the main problems of existing dictionaries in Fang is that they fail to adhere to the standard language. Among the varieties of Fang, no variety has yet been chosen as standard variety. These dictionaries may confuse and mislead the users and would be condemned by users and reviewers.

The planned dictionary must be regarded as the authority on spelling, grammar, meaning and usage of the language. It must record the standard variety, reflecting the norm, and must include items of another norm or other varieties of Fang, and the social and geographical areas where each is spoken must be marked accordingly. Many studies have been done regarding the regional variety of Fang, including

those by Nzang-Bié (2004), Afane Otsaga (2004) and Ekwa Ebanéga (2001). These authors give the following reasons for choosing Fang-Ntumu as the standard variety model:

- Fang-Ntumu is the most vital variety because of its number of speakers.
- Fang-Ntumu is the most homogeneous variety; it is found in the province (Woleu-Ntem) where Fang is the only language.
- Fang-Ntumu in the province of Woleu-Ntem does not coexist with other foreign languages, as is the case with Fang-Ntumu, which is found in Oyem, while Fang-Ntumu, which is spoken in Bitam, coexists with Haussa, a foreign language spoken in Cameroon.
- Fang-Ntumu plays an important economic, cultural and social role in the province of Woleu-Ntem. The main activities in this province take place in Oyem and Bitam, which are original regions of Fang-Ntumu. A lot of people from the other parts of this province and from neighbouring countries (Cameroon and Equatorial Guinea) go there to work, study and do business. Fang-Ntumu is the language of communication between members of the Fang population in this part of Gabon.
- Of all the varieties of Fang, works published in Fang-Ntumu are more accessible to people today. Most of the works in the other varieties are not readily available in Gabon. For instance, dictionaries compiled in Fang-Atsi and Fang-Mekè cannot be found in any library in Gabon.
- Fang-Ntumu is the Fang variety used most in the audiovisual media (radio and television) in Gabon. Fang-Ntumu also is the first variety of Fang in which an entire movie has been made.

In the planned microstructural programme, spelling variants of the words will be shown after the item giving the pronunciation of the lemma.

As far as the alphabet is concerned, the model for the proposed microstructural programme will use the April 1999 alphabet because it is the one that was drawn up by many experts (linguists, sociologists, anthropologists, etc.). In this regard it deserves much consideration and also has the chance to be considered by the full

Gabonese community. Furthermore, the April 1999 alphabet is used in ongoing research, such as that of Nzang-Bié in her unpublished *The Orthography of Fang*. The model for the dictionary with the planned microstructural programme will be explained in the front matter of the dictionaries. All the vowels, consonants, digraphs and monographs will also be presented and discussed in this functional part of the dictionary.

Regarding the morphological data, after the item giving the syllable division, the item representing pronunciation data and the item representing etymological data, the items representing part of speech will be provided. With regard to the proposed microstructural programme, I will follow Gouws's footsteps and propose to indicate two types of part of speech, i.e. a primary and a secondary lexical classification. Abbreviations such as *n.* for *noun*, *préf.* for *préfixe*, *suf.* for *suffix*, *adj.* for *adjective*, *adv.* for *adverb*, *prep.* for *preposition* and *conj.* for *conjunction* will be used as items giving the primary lexical classification. Secondary lexical classifications for *nom* (*nom simple = n.s.; nom derive = n.dér.*), *préfixe* (*préfixe nominal = préf. n.*, *préfixe pronominal = préf. pronom.* and *préfixe verbal = préf. verb.*), *suffixe* (*suffixe nominal = suf. nom.* and *suffixe verbal = suf. verb*) will be abbreviated as well. The lexicographers of the dictionary with the planned microstructural programme must explain the abbreviations for both primary and secondary lexical classifications in the front matter.

In the dictionary with the planned microstructural programme, I propose that the lexicographers must provide the users with lists of irregular and regular conjugations and the category of conjugation (statement, aspect, tense, mood, etc.). The lexicographers must also provide the users with all the conjugated forms in all tenses and modes. This must be explained in the user's guide of the dictionary with the proposed microstructural programme. On the microstructural level, after the item giving the part of speech *verb,* the lexicographer(s) will provide the user with the markers (1, 2...) for the different forms of the verbs chosen as a model of treatment presented in the back matter of the dictionary. These markers will be in bold in order to differentiate them from other markers indicating the polysemy items of the lemma.

It is suggested that the need and demand for paraphrase of meaning would also be great in the dictionary with the planned microstructural programme, as indicated by the results of the questionnaire. It was stated that the corpus could also be very useful for the lexicographers of the dictionary with the planned microstructural programme in the writing of definitions. Concordance lines generated from the corpus could help the lexicographers of the dictionary with the planned microstructural programme to determine different senses of the word and to select appropriate examples to complement the definition in each case. In the dictionary with the planned microstructural programme, items giving the paraphrase of meaning will be preceded by items giving the part of speech, and the translation equivalent(s) will come after the paraphrase of meaning. With regard to the definition types, the decision is to make meaning very explicit to the target users of the dictionary with the planned microstructural programme. Paraphrase of meaning by means of circular definition cannot help in the goals assigned to the dictionary with the planned microstructural programme. The purpose is to help the target users to enhance their own language and to assist those users who want to learn Fang as second language. The need for paraphrase of meaning by means of genus-differentia definitions and paraphrase of meaning by means of the definition by examples will be relevant for the dictionary with the planned microstructural programme. The lexicographers could define words better by using an example that reveals the meaning in the context of usage in everyday communication. Paraphrase of meaning has to be included and treated in a way that is accessible to the target users and that corresponds to their level of language skills. The need for paraphrase of meaning by means of the synonym definition will also be relevant for the dictionary with the planned microstructural programme, and the task of the lexicographers is to be sure that the synonym reference is indeed included and treated in the dictionary. The lexicographers of the dictionary with the planned microstructural programme should adhere to the criteria of completeness, clarity, accuracy, consistency, independency, objectivity and neutrality. The lexicographers of the planned dictionary should be aware of the problems that could be caused by the inclusion of paraphrase of meaning in the articles of the dictionary.

During the planning of the dictionary, the lexicographers have to be aware of the existence of different types of translation equivalents. Their duty is to make sure that the target users of the planned dictionary can achieve successful retrieval of information from a translation equivalent paradigm, whether one or more than one. The dictionary with the planned microstructural programme will make use of three types, namely full equivalence, partial equivalence and zero equivalence. Some articles of the planned microstructural programme will display a one-to-one relation between the Fang and French items, and others will not. Consequently, the lexicographers of the planned dictionary will be compelled to include additional entries as supporting material in order to assist the target users to make informed choices when selecting the appropriate translation equivalent for a given occurrence of the Fang item.

When confronting the lack of equivalence between Fang and French, the lexicographers of the dictionary with the planned microstructural programme could adopt three types of surrogate strategies or approaches to ensure semantic and communicative equivalence between the source and the target language:

1. In some cases, the lexicographer can borrow words from other languages when they are already known and used by Fang people with the same semantic value and the same register of communication. This strategy has been used in many languages, even in Fang, to name new realities unknown before. For instance, Fang people have borrowed from English terms to name realties like *soap* (sob in Fang), *towel* (tawɔl in Fang) and *motorcar* (mɔtwa in Fang).

2. Another approach could be to create substitute terms, either according to the physical description of the object to be named, by comparing the reality to be named with other realities, or according to the function of the reality or object to be named. This can already be seen in existing Fang words. For instance, the object *train* is designated in Fang by the group of words *misini a mikong*, which literally means *bicycle of frogs,* because physically the train coaches look like a queue of frogs, and the train wheels are like bicycle

wheels when the train is in motion. In the same vein, the *stereo radio* is called *ewala mikob* (i.e. box of words) and the church is called *nda nzam* (i.e. God house).

3. The third and last strategy, the most strongly recommended one, will be for the lexicographer to initiate an investigation among the speakers of the language and ask them how they would intuitively name the new reality. If the lexicographer uses a live recording investigation, he should have with him photos or physical representations of the realities to be named. In the case of an investigation with forms to be completed by speakers, photos or images of the things to be named should accompany the forms. This type of investigation will allow the lexicographer to have a broad idea of how the speakers would name the realities or things in question. This descriptive approach is in contrast to the prescriptive approach.

In the dictionary with the planned microstructural programme, after the items representing the morphological data and the item giving the paraphrase of meaning, the equivalent of the item giving the paraphrase of meaning is provided. It is preceded by a structural marker, i.e. the comma "**,**" .

Homonymy and polysemy are two well-known semantic problems. A clear and consistent treatment of these lexical items can be an important precursor to the more direct transfer of semantic data. The lexicographers of the dictionary with the planned microstructural programme should have to innovate by using and applying common international systems and principles (superscripts to distinguish homonyms and numeral indicators to separate polysemous senses) in order to make effective the transfer of dictionary-usage skills. The user's needs should have to motivate the choice of system and this has to be explained in the user's guide in the dictionary. In the dictionary with the planned microstructural programme, homonyms will be differentiated by the use of superscripts ($^{1,2,\cdots}$). This choice was motivated by the fact that the superscripts mark the lemma itself and this will allow the users to make a clear differentiation between homonyms and polysemous senses. As a result, the lexicographers of the dictionary with the planned microstructural programme should

use structural indicators (1, 2...) to place polysemous items. Other semantic data, like hyponyms and antonyms, will also receive attention in the planned dictionary. With regard to the treatment of hyponyms, cross-references will be used to refer to other member(s) of the class. In the dictionary with the planned microstructural programme, after the item giving the paraphrase of meaning and its translation equivalent, the item giving the antonym will be provided at a few selected senses. It will be introduced by the structural marker *contr.* (short for *contraire*) displayed between slashes (/ /).

The lexicographers of the dictionary with the planned microstructural programme should be aware of the problems that can be caused by the inclusion of examples and collocations in the article of the dictionary. Each collocation in the source language (Fang) will be followed by its translation equivalent combinations (French). Where a text block will contain more than one collocation, these collocations will be ordered alphabetically according to the alphabetical value of the words given in bold italics. By looking for these words in bold italics the user can quickly move from one collocation to another.

In general, on the basis of this study, it can be said that pictorial illustrations or ostensive definitions can be regarded as a type of definition that is used to augment or elucidate the verbal definition. They are used, for example, to illustrate cultural items that no longer exist and that the user cannot easily conceive without the aid of an illustration. Such pictorial illustrations must meet the following criteria: compactness, fidelity and interpretability (relevance, simplicity, preciseness, completeness and clarity). A survey was done of existing dictionaries in Fang with the aim to determine to what extent and purpose they use pictorial illustrations. It was found that these dictionaries do not make use of pictorial illustrations. In contrast, the dictionary with the planned microstructural programme will make use of ostensive definition because of its hybrid nature. Ostensive definitions will be an aid in bridging the semantic gaps that may occur between Fang and French, as they can contribute to bringing out the meaning. The compilers of the dictionary with the planned microstructural programme should be aware of the reservations regarding the inclusion of illustrations in the dictionary.

With regard to the positioning of pictorial illustrations, large pictures will be employed in the back matter; small pictures will be included as microstructural items addressed at a few selected lemmas. After the items giving the illustrative example, the items giving the pictorial illustration will be provided. The structural marker, a right arrow (⇒), followed by the abbreviated form of the word illustration (*illus.*) will indicate the pictorial illustration. The dictionary with the planned microstructural programme should adhere to the criteria of compactness, fidelity and interpretability.

In the course of this study it was noted that existing dictionaries in Fang did not make use of usage notes, but usage notes will be included as microstructural items in fixed article positions in the dictionary with the planned microstructural programme, usually at the end of the article or at the end of the specific sense to which the usage note applies. This is a procedure that is also used in dictionaries like the *Oxford Hachette French-English/English-French Dictionary*, *WAT* and *SAOSD*. In this planned microstructural programme, however, a system whereby usage notes are inserted into the microstructure as inserted inner texts will be proposed. The lexicographers of the dictionary with the planned microstructural programme will make use of this type of text in order to draw the user's attention to the presentation of cultural or grammatical data. Usage notes will be presented in a different way than in the rest of the lexicographical text, i.e. in separate frames.

The lexicographers of the dictionary with the planned microstructural programme must apply the system where idioms and proverbs are included in the article of the keyword obtained from these multiword lexical items, and he/she must explain this system in the outer texts of the dictionary. This is not the case in existing dictionaries in Fang, where no explanation is provided of this system in the outer texts. The compilers of the dictionary with the planned microstructural programme should use structural markers and labels in order to separate idioms from other multiword lexical items like proverbs. In the planned microstructural programme, the proverbs will be given in italics and will be separated by the structural marker "prov" (abbreviation for "proverbe"), which will be preceded by the structural marker "►". The idioms will be given in italics and these entries will be clearly separated by the structural marker

IDIOMES, preceded by the marker "♦". Each idiom in the source language (Fang) will be followed by its translation equivalents (French). Where a text block contains more than one idiom, these idioms will be ordered alphabetically according to the alphabetical value of the words given in bold italics. By looking for these words in bold italics the user can quickly move from one idiom to another.

The compilers of the dictionary with the planned microstructural programme must present etymological data in such a way that it is lucid, accessible and reasonably concise. Etymological data would then enrich the users' understanding of the continuity of language and of humanity, and of how people have used and adapted language to reflect the needs of their culture. After the items giving the pronunciation, the items giving the etymology will be presented at a few selected lemmas. These will be introduced by the structural marker "<" (i.e. the word originates from), the source language and the original form of the word or the protoform of Fang, which will be preceded by the asterisk "*". After the item giving the etymological data, the items giving the part of speech will be provided.

The term *guide structures* refers to the set of structures identified in metalexicography that provides a framework within which the accessibility and availability of data types in the dictionary can be evaluated. It includes certain substructures, namely access structure, addressing structure and mediostructure. As far as the relationship between the microstructure and the guide structure is concerned, it was noted that an evaluation of the accessibility of microstructural data in the dictionary is an important factor in determining its level of attractiveness or user-friendliness. Rapid and unimpeded access by the user 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 task of the lexicographer(s) is to use innovative and effective methods to guide the user on his or her search path to the required data and prevent protracted, frustrating searches. It was suggested that the data on offer in the dictionary will be presented in such a way that the target user can access it in order to retrieve the information he/she is looking for. In this regard, the access structure of the dictionary needs to be planned carefully, because the success of finding the data without delay

depends on it. In the dictionary with the planned microstructural programme, I propose that the access structure should be as functional as possible. Apart from the dictionary title, the cover (i.e. front and back) will also specify the number of treated lemmata and the data categories included in the dictionary, which will allow the user to know what kind of information is available in the dictionary. A thumb index will be used in the dictionary with the planned microstructural programme to indicate the beginning of each article stretch. A table of contents will also be included in the dictionary with the planned microstructural programme. By providing page numbers, the table of contents will allow the user to have rapid access to the different articles and central lists constituting the big text. Running heads will be used in the dictionary with the planned microstructural programme, comprising two search words on each page, with the left-hand word indicating the first lemma sign and the right-hand word indicating the last lemma sign on that page. The sections where outer texts will be included (e.g. conjugation, rules of grammar, and proper names) will be identified in the dictionary by different colour stretches.

Both typographical and non-typographical structural markers will be used in the inner access structure of the dictionary with the planned microstructural programme. Lemma signs in Fang will be presented in bold, and the definitions and their translation equivalents (Roman) will be preceded by the marker "□". The examples in Fang will be in italics and their translation equivalents (French) will be in Roman characters. The examples will be preceded by the marker (∘). Idioms in Fang (italics) and their translation equivalents (Roman) will be preceded by the marker "♦". Proverbs in Fang (italics) and their translation equivalents (Roman) in French will be preceded by the structural marker "▶". In addition, the markers [...] can be used to symbolise the pronunciation; the marker "→" will indicate a cross-reference; the marker "⇒" will indicate a pictorial illustration; the markers 1, 2, 3 ... will characterise polysemy items of a lemma; the marker / / will indicate contrasting; the marker {...} will symbolise a reference entry to the author and year of publication; the structural marker "◊" will indicate a quotation, etc.

In the dictionary with the planned microstructural programme, the *micro-architecture* will correspond to the presentation of each component of the proposed microstructure.

Indeed, each component of the microstructure will start with a new paragraph so that that it can be identified easily at the extreme left of the article. Another important microstructural aspect will concern the arrangement of each data category. The first level will start with the lemma, items giving the etymological or the morphological data, the second level will start just below the lemma up to the paraphrase of meaning, followed by the translation equivalent item, etc. This presentation will allow the user to quickly identify each search zone in the article slot.

I propose that there is no sublemmatic addressing since the dictionary will not include sublemmata. Since the planned dictionaries are monoscopal in nature and because of the lemmatic bias that prevails in such work, the dictionary with the planned microstructural programme will utilise a lemmatic addressing procedure. The main lexicographic treatment will be addressing at the source language item (lemma). Consequently, most of the data giving information on pronunciation, morphology, grammar, semantics and pragmatics will be addressed at the lemma. The dictionary with the planned microstructural programme will present a straight alphabetic macrostructure, which means that all potential sublemmata will be presented as lemmata and no sublemmatic addressing will take place.

When dealing with the system of cross-referencing, the lexicographers of the dictionary with the planned microstructural programme has to be aware of the three types of cross-reference addresses, i.e. the internal cross-reference address, external cross-reference address and the dictionary-external cross-reference address. The lexicographer(s) has to use all these cross-reference strategies carefully in order to avoid inconsistencies that could arise with dead cross-references, misguiding cross-references, or cross-references to the wrong cross-reference address.

In the dictionary with the planned microstructural programme I propose three types of mediostructural strategies. These are as follows:

- The first type will include a reference marker, i.e. an arrow (→) referring the user to the treatment of other lexical item(s) where he/she can find additional data regarding the lemma or the equivalent item or any other entry in the

article. The arrow means that there is a mutual relation between the treated lexical item and the one given as reference address. Also, the cross-reference marker, i.e. the sign (⇒), will refer the user to a pictorial illustration.

- The second type of procedure will be the use of abbreviations like *Syn.* (synonym), *Hom.* (homonym), *Ant.* (antonym), etc., referring the user to other lemma(s) or equivalent item(s) that have a semantic and/or morphological relation to the treated lemma. In most dictionaries, synonyms, homonyms, antonyms, etc. are not used as cross-references. I propose the use of these abbreviations, also called reference entries, as cross-reference markers because they will refer to additional entries regarding the lemma or the equivalent item.

- The last type of mediostructural procedure will be the page numbers. This complex reference address entry involves the first two procedures. The items to which reference is made will not be given only with the arrow or the mentioned abbreviations, but also with the page number indicating where they can be found in the dictionary. The page number will be given after the referred item (e.g. *Syn.* **Esa** 125). Most of the time people have to use their alphabetical knowledge to find the given cross-reference in the dictionary. The page number procedure, giving a double address entry, will allow the user to find the cross-referred item quicker, to access all data related to it and consequently to gain time during the dictionary consultation

In this research, the focus was on the microstructural programme with reference to hybrid dictionaries. This programme could also be used for other dictionaries. I therefore discussed one comprehensive programme, i.e. a programme that includes different types of data, from which different programmes for individual projects can be drawn. Spelling data, data on pronunciation, morphological data from the items giving the part of speech like noun (*n.*), verb (*v.*), class (*cl.*) plural (*pl.*), and pragmatic data from the items giving the example, idioms and pictorial illustrations can be used for either monolingual or bilingual dictionaries. The items giving the spelling and

pronunciation variants, gloss, proverb, usage note, etc. also will be necessary. Semantic data, such as paraphrase of meaning and etymological data, could be provided in monolingual dictionaries. Semantic data such as translation equivalents can be given in bilingual dictionaries.

The present research had three main goals: (1) to use the theoretical framework of the German metalexicographer HE Wiegand as a basis to devise a model for the investigation of different kinds of microstructures, articles, data and items to be considered for future dictionaries in Fang, directed at the specific needs and reference skills of the target users; (2) to show the assistance of other components of the dictionary, i.e. dictionary functions, access structure, addressing structure and mediostructure, in order to organise the microstructural data within the article of the dictionary; and (3) to build a set of articles, data and items that could be useful for dictionaries in Fang. The formulation of metalexicographical criteria for the microstructural programme took place in Chapter 3, which concentrates on the corpus and the microstructure. The use of a corpus is of great importance in the compilation of a dictionary's microstructure. The identification of microstructural elements (sense distinction, translation equivalents, authentic examples, collocations, idioms) by means of a corpus were discussed.

Chapter 4, *function typology*, focuses on aspects such as the genuine purpose of a dictionary, and on characteristics of the users and their needs. These aspects have an impact on the content of the dictionary, i.e. data to be included in the dictionary article.

Chapter 5 focuses on the major structures of a dictionary and includes a brief discussion of these structures, i.e. data distribution, central list, macrostructure, microstructure, access structure, addressing structure, mediostructure and outer texts. This chapter also focuses on data to be included in the front and back matter texts in the planned microstructural programme.

Chapter 6 focuses on different types of articles and lexical items to be included in the dictionary. The focus was on single articles, complex articles, synopsis articles,

lexical items, sublexical items and multiword lexical items.

Chapter 7 concentrates on the nature of the microstructure and different types of dictionaries. The type(s) of microstructure used in the dictionary enhance the retrievability of information on the part of the users. For example, in the planning of a dictionary, the lexicographer(s) has to decide between different types of microstructures, i.e. an integrated, unintegrated or semi-integrated microstructure.

Chapter 8 focuses on the comment on form. Those data types that reflect on the form of the lemma sign, i.e. phonetics, pronunciation, spelling, grammar were discussed.

Chapter 9 concentrates on the comment on semantics. Those data types that reflect on the semantic and pragmatic features of the lexical item represented by the lemma, i.e. paraphrase of meaning, equivalents, antonymy, polysemy, hyponymy, etymology, pictorial illustrations, usage notes and glosses were discussed.

Chapter 10 focuses on the guide structures of the dictionary and aspects like access structure, addressing structure and mediostructure were discussed. These aspects are necessary for a dictionary consultation procedure. By means of these guide structures the user can have rapid access to the desired data. This chapter also includes a discussion of aspects such as the front matter text, back matter text, and mini-grammar.

2. Recommendations

- Future dictionaries in the Gabonese languages in general, and in Fang in particular, should base the compilation of their microstructure on a corpus. Such a corpus-based dictionary could be an aid for writing better dictionary articles, and for sense distinctions, the retrieval of typical collocations, authentic examples, etc. This corpus should typically be designed to be representative. It should cover all the linguistic aspects of Fang. Such a corpus would be the best way to respond to the needs of the target users. Their needs are to empower their own language, Fang.

- Any dictionary project should clearly identify its target users and their needs prior to the compilation phase. The target users and their needs should be the central focus of the lexicographical activities. The determination of the target users and their needs should be made in accordance with the type of dictionary, the functions of the dictionary, and the types of data to be included in the dictionary. In this case, the target users include, on the one hand, adults, high schools students and academics who have Fang as mother tongue and a relatively good command of French and, on the other hand, adults and students who want to improve or learn Fang as second language.

- The data to be included in the microstructural treatment should be related to the type of dictionary. In this case, the planned dictionary is monoscopal (from Fang to French), but the data would also form the basis for the compilation of future monolingual dictionaries in Fang. Thus it is suggested that the primary lexicographic treatment should be directed at the item giving the paraphrase of meaning in Fang.

- When compiling a dictionary, lexicographers should make provision for different types of microstructures. The decision regarding the different types of microstructures should coincide with the decision regarding the typological classification of the dictionary. The choice of the type of microstructure should be made in accordance with the type of data to be included in the dictionary. The types of microstructure that could respond to the needs of the target users could be integrated and semi-integrated microstructures, as additional data will be added to the articles of the dictionary.

- The selection and presentation of data in the lexicographic treatment differ from dictionary to dictionary. This leads to various challenges for lexicographers. One of the challenges is the microstructural programme. The

  lexicographers of future dictionaries in the Gabonese languages in general and Fang in particular should devise the microstructural programme in the early phases of the lexicographic process. The microstructural aspects to be planned

comprise the type of microstructure, the data categories to be included and the organisation and presentation of the different entries in the dictionary. The lexicographers have to select microstructural data in accordance with the subtypological criteria of the dictionary.

- When compiling a dictionary, one of the big challenges facing lexicographers is the inclusion of semantic data, since it should be regarded as the most prominent data type in the articles of the dictionary. Attention should not only be given to the explanation of the meaning of the word, but also to the semantic relations, e.g. antonymy and synonymy, etc. The lexicographers should make provision for the methods by which to select and order senses, since the aim should be to help the users to be aware of them and have unimpeded access to them.

- One of the major challenges facing lexicographers of dictionaries in the Gabonese languages in general and Fang in particular is the matter of tone. The question of tones in Gabonese languages has not been solved yet, since experts in languages (linguists and lexicographers) have different views regarding this matter. Some believe that the transcription of tones is essential, since the latter play a distinctive role in the functioning of the language, while others think that there is no need to use tones because it is possible to learn a language without mastering tones. As an example they quote missionaries who studied Gabonese languages without mastering tones. In order to help the users of Gabonese languages to improve their knowledge of their mother tongues, dictionaries should cover all the linguistic aspects of these languages. Lexicographers should present tone in dictionaries so that the target users are able to recognise them. This is why the planned dictionary has opted for the phonetic transcription of tone.

- One of the main weak points of existing dictionaries in Gabonese languages in general and Fang in particular is the lack of pictorial illustrations. The survey done for this study showed that the lexicographers of existing dictionaries in Fang did not make use of pictorial illustrations in their dictionaries. Such illustrations are important microstructural data, since they help to bridge semantic gaps that may occur between languages and also save space that

would otherwise be taken up by long descriptions of the lemma. In this case, further analysis of pictorial characteristics should be done in order to develop a culture of the inclusion of pictorial illustrations in future dictionaries in Fang so that their explanatory value will be realised by lexicographers.

- Dictionary-making should be regarded as team work. In the Gabonese environment, more projects such as PROLAG (*Projet pour les Langues Gabonaises* (Gabonese Languages Project)) should be initiated and launched. The intention of such projects would be to produce a series of dictionaries and other reference works in the indigenous languages of Gabon. As collaborative project, PROLAG could be regarded as a team of researchers, assisted by a group of lexicographers, linguists and computer scientists. Such projects should yield a very substantial corpus of texts that would potentially have many uses. Training and planning workshops should be held involving university staff, lexicographers, linguists, scientists and students working on dictionaries in the Gabonese languages.

- Research on dictionary use is one of the important aspects of lexicography. A questionnaire was used to investigate the needs and reference skills of Gabonese students at the University of Stellenbosch and the Cape Peninsula University of Technology. The results of the questionnaire shows two general ideas:
    - Bilingual dictionaries should be the first to be compiled with regard to Gabonese languages.
    - Gabonese students need instruction in dictionary skills.

Bearing these conclusions in mind, a similar study should eventually move to further research by administering similar questionnaires to a more representative sample of Gabonese students in order to gain knowledge of their general profile.

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Addendums

Addendum 1

The following articles are the examples that show the various aspects of the planned microstructural programme. All the letters of the alphabet have not been used here.

A

a.be [ábé], **abi** *atsi* [ábí] < * bii adj.
□ *edzom e se ki bən*, ce qui n'est pas bon.
◉ *anə anu abe*, il ou elle a une mauvaise parole.
▶ Prov: *abe nləm kə durə mor*, le méchant n'attire pas.
▶ Prov: Emor a dzen abe a*kəkwan nə do*, celui qui cherche le danger y périra.

a.bo [ábó] < * tende. n. cl. 5/6. pl. məbo.
□ *mva nyol wa nam o si, wa bəl nyol tətəl*, partie du corps qui pose sur le sol, supporte le corps en station debout.
◉ *akul abol*, pied.
▶ Prov: *Abo e nə minal da kə vum asə*, le pied est menteur, il se promène partout.
▶ Prov: Marəgə *abo mor kə marə abo tsit*, Evite de suivre un homme à la trace mais pas une bête.

a.sə [àsə`] < *ncè. pro. ind.
□ *Edzom e nə ngura*, entièrement ou tout.
◉ *Mor asə*, tout homme. *Si esə davak*, le monde entier se réjouit.

a.wu [áwú] < *gu n. cl. 5/6. pl. məwu

1. □ *amanə enyin*, la fin de la vie.
   ◉ *Awu a nə olu bor bayi*, les gens pleurent, il y a une mort là bas.
   ▶ Prov: *A wu osua oyo*, une première mort c'est le sommeil.
   ▶ Prov: *A wu kə mbi, ayombə kə byan*, on ne fuit pas la mort, on ne guérit pas la vieillesse.
2. □ *Edzom e nə edədə ndzuk*, ce qui est pénible.
   ◉ *Sikol a nə awu*, l'école est pénible.

3. □ *Etan ba som tsit*, le prix d'un animal.
   ◉ *Awu kaban*, le prix d'une chèvre.

4. □ *Okwan o nə mban*, une maladie fréquente
   ◉ *Awu e nə nye mban ənyu və məbara*, il n'a qu'une maladie vraiment sérieuse, c'est le pian.

B

be[1] [bɛ́] <* badi. pron. num.
□ *Fok yə fok*. Un plus un.
● *Ku ebe*, deux poules.

be [2] [bɛ́] < * baag. v.
□ *Ave dzom a nyul été yə son* dzom, ôter ce qui est entré dans le corps avec un instrument pointu.
● *Be eyo*, ôter une épine.
▶ Prov: *O begə ku, swa a te wa*, quand tu dépèces la poule, le canard te regarde.

-by.e [nyɛ́] < * biad. v.
1. □ *Akul mon atan*, enfanter, engendrer, produire, pondre.
   ⊙ *Abe da bye awu*, le péché engendre la mort.
   Monga a nə mbyea, la femme a accouchée.

2. □ *Te mam*, dire des mensonges.
   ⊙ *Bye mam*, inventer des choses.

D

dze [dzɛ́], **dzal** *atsi* [dzál] <* gii. cl 5/6. pl. *me*.
□ *Nsam mə de a fan ete*, village.
⊙ *Edze dam*, mon village.
Alon dze, construire un village.

Syn: mvok, nlam.
▶ Prov: *kə tobə dze sən wafum*, Ne reste pas dans un village dont la cour est propre (ne sois pas indifférent à ce qui passe au village).

dumu [dùmù] < *duma n. cl. 3/4 pl. mum.
□ *Ele ebələ fufuk*, arbre appelé fromager, dragonnier ou kapockier et fournissant le kapock
⊙ *Sur e dum*, coton du fromager ou du kapokier.
▶ Prov: *Dum da wu be mvik- mvige*, une grande chose est tuée par unr toute petite

+ (Med. trad) *Eyon o va bye e mwan a nə tok, onon fwin dum, o fur mə eve ena məndzim ete. Eyon te wa fur mwan mendzim mə tə ete. Eyon tə mwan tə a yə bo nən. Mendzim məte ma yie nə ki bol mwan no a kal na no osa nən.* Si tu mets au monde un enfant chétif, prends des écorces du fromager que tu deposes dans une cuvette. Fais prendre au bébé un bain et il grossira. Toute fois le danger de ce bain se situe au niveau de la tête de l'enfant avec l'eau du bain de peur que l'enfant ne grossisse de façon disproportionnée.
◊ **Cit.** Le tronc du fromager sert parfois à faire des pirogues. Le kapok est vendu dans le commerce. Chez les indigenes, il sert à garnir les cousins et les matelas ou bien il est filé pour en faire des sacs de voyage. L'écorce des jeunes arbres, débarrassée des épines, est située pour faire des cloisons de cases. La decoction de l'écorce est employee comme vomitif ou comme lavement. Les feuilles sont emollients ou calment les névralgies. On tire de l'huile de ses

graines. Ce vegetal géant est considéré par les Noirs comme un arbre sacré. Lorsqu'on voit sur l'emplacement des anciens villages deux pieds de Ceiba côte à côte, c'est l'indice que là, autrefois sont nés deux enfants jumeaux. On le plante aussi comme arbre principal du fétiche-protecteur ou sur les tombes. C'est au pied de ces arbres que l'on depose les offrandes faites aux mânes des ancêtres ou aux genies titulaires, cf. **Raponda-Walker et Sillans (1961: 106)**

-dzap [dzà] v. <*zo

1. □ *Adzobəgə e mon minəga abə ki yie na yen bə fam, a nə a kwan*, Viler une fille non nubile qui en devient malade.
   • *Andeme a nə de məbyan bə na dzap nə,* Andeme se trouve à l'hopital, on l'a violée.
2. □ *Adzobgə eminəga adagə byen, eyon te mwan a wu gə ki fa akwan*, coucher avec une femme qui nourrit son bébé, ce qui tue l'enfant ou le rend malade.
   • *A va dzap mwan*, il a violé l'enfant de la nourrice.
3. □ *Abo məlo we kwan,ka be edzam ngənan wa dzo.* ne pas respecter les prescriptions du médecin.
   • *Adzap byan*, violer l'effet du médicament.

dzis [dzís], **dzir** *atsi* [dzír] < *yico. cl.5/6. pl. mis.

□ *Mfa nyul wa və na mor yətsit bəyen*, organe qui permet à lhomme ou l'animal de voir.
• *Edzis dam*, mon œil. *akon odzis*, il a mal à l'œil.

E

e.ba [èbà], eko <* bamba n. cl. 7/8. pl. biba.

1. □ *Ekop tsit*. La peau de l'animal.
   • *Eba e ka*, écaille de pangolin.
   Syn: ekop

2. □ *Mva zo*, nuée du ciel.
   • *Biba bi zo*, les nuées du ciel.

3. □ *Edzom be ne tsak*, tout ce qu'on peut écraser ou cuire.
   • *Eba owon*, la patte d'arachides.
   ▶ Prov: *Kul e nga lik biba bi dok*, il ne faut pas renvoyer à demain.
   ▷ Notes d'usage:

> Ka fulan **eba** ayile na "*e bor be vo*" ye **eba** ane "*ekop tsit, mva zo*". Ne pas confondre **eba** qui signifie "les autres" et **eba** qui signifie "écaille, nuée"

eboga [ébògà] < *buga < galwa n. cl. 5 pl. biboga

□ *Ele da və nae mor adzi edo a ku məlan* , plante qui, quand elle est magée donne des hallucinations.

• *Ma ko e mwan nina won a kal na adzi eboga*, j'ai peur de cet enfant car il mange l'iboga..

• *Eboga da və nə na a ten,* l'iboga lui fait tourner.

+ (Med. trad) Arbrisseau des sous-bois de la forêt, l'ibogha fait partie des produits réputés de la pharmacopée traditionnelle gabonaise. Il possède un double usage, méducal et magique. Les râpures d'écorce ainsi que les raciness de l'abrisseau se consomment comme fortifiant, aphrodisiaque ou encore comme coupe-faim. A faible dose les raciness combattent efficacement les coliques. Les vertus magiques de l'iboga sont connues des populations locales depuis longtemps. Mais ce n'est que dans ce qu'il convient d'appeller la région du Bwiti que l'iboga est place en haute estime. En effet, c'est l'arbre sacré des adeptes de cette regions.

◊ **Cit.** D'un point de vue scientifique, l'iboga est utilisé comme stimulant neuro-musculaire (depressions et asthénies physiques et intellectuelles); antitoxique (convalescence des maladies infectieuses, intoxications). [...] C'est surtout dans les pratiques fétichistes que les indigenes en font usage de l'iboga. C'est en effet la plante magique par excellence des adeptes du bouïti. Elle sert principalement pour la cérémonie rituelle d'initiation à cette société secrete. L'absorption des râpures d'écorces ou du bois de la racine determine une société d'ébriété, d'hébétude, de torpeur dans les facultés intellectuelles. A doses massives, l'iboga fait perdre la raison, provoque des hallucinations et parfois la mort. L'état de léthargie dû à l'usage immodéré de l'iboga dure 4 à 5 jours pendant lesquels le patient ne prend aucune nourriture, cf. **Raponda-Walker et Sillans (1961: 90)**

F

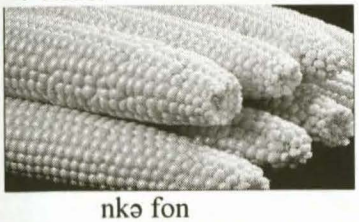
fak [fák] n. cl. 5/6. pl. məfak

1. □ *edzom da və na mor a yil dzam*, ce qui sert à l'homme pour parvenir à une fin.
   ○ *Zen fak, bu fak,* chercher un moyen.

2. □ *Ayəm bo mam,* homme ingénieux, rusé.
   ○ *Mor a məfak,* un homme ingénieux, rusé qui a des detours dans son sac, qui sait se débrouiller.
   Contr: Akut, ndzəm.

3. □ *Edzom da və na bə yəm abim dzom da bo,* qui sert à mesurer.
   ○ *Ma vak yə fak,* je mesure avec une mesure.
   → Evəga, mvəgə.

fon [fón] n. cl. 5/6. pl. fon
□ *e mwan ele abələ mə fəs mwan mor adzi*, plante à grain utilisés dans l'alimentation.
• *nkwəl fon,* épi de maïs.
Prov: *efak fon: bwan zə, bənyamor zə*, un champ de mais: des jeunes barbus, des vieux barbus.
⇒ illus.



nkə fon

figure from http://www.fr.wikipedia.org/wiki/)

fop [fóp] n. cl. 5/6. pl. fop
□ *nkob abwin*, action de parler abondamment.
• *Abo fop, a nə fop abwin*, il est très bavard.
Syn: Abagələ.
→ onon.

K

ku[1] [kú] < *koko. n. cl. 9/10. pl. b∂ku.
□ *O non wa tobə a dze o nə ndzuk ayələ,* oiseau domestique, aux ailes à peu près ineptes au vol.
• *N'nom ku*, le coq. *Ngal ku*, la poule. *Mwan ku*, le poussin.
▶ Prov: *N'nom ku a se ki lon misn mibe*, on n'est connu que dans son pays.
▶ Prov: *Ku yə okwal məyon məbe,* poule et perdrix, deux oiseaux différents.
▶ Prov: *N'nom ku alon a nzi bəyən ba dzi dzo,* le coq qui chante sur le toit sera mangé par les étrangers.
▶ Prov: *N'nom ku a lon edze okukut məbe emor a nə byom a bera so na mayi som ku,* le coq qui chante au village du pauvre, voit arriver un jour ou l'autre un homme riche pour l'acheter.
⇒ illustration.

ngal ku

nnom ku

mwan ku

Figures from http://www.infini-fr.com/gallerie/Animaux/Oiseaux/Poule &
http://www.fr.wikipedia.org/wiki/

—ku² [kù] < * gu. v.

1. □ *A dar,* faire une chute.

   ● *Ku o si*, tomber par terre

2. □ *A bələ byom abi*, acquérir des richesses.

   ● *Ma ku byom abi*, je gagne beaucoup de richesses.

   ♦ IDIOMES: ***Ku*** *amvîm*, trébucher l'un sur l'autre. ***Ku*** *mbekh*, faire une chute, tomber par terre. ***Ku*** *bubure*, tomber face en avant. ***Ku*** *mè*, tomber à l'inverse. ***Ku*** *memè*, tomber à l'inverse. ***Ku*** *mbîň*, être embrouillé (affaire). ***Ku*** *ňkwé*, atteindre sa puberté. ***Ku*** *mvôn*, être circoncis. ***Ku*** *som,* être pris de frayeur. ***Ku*** *kam,* être effrayé. ***Ku*** *avô,* rester immobile de surprise. ***Ku*** *melan,* être halluciné par la decoction. ***Ku*** *ésam,* être circonscis.

M

mvok [mvók] n. cl. 5/6. pl. bəvok

□ *Dze yə etsin mor,* le village, la tribu et le pays d'un homme.

○ *Ma kə mvok,* je vais chez moi.

mvu [mvú] <*bua. n. cl. 9/10. pl. *bəmvu.*

□ *etsir da tob a dze da bira wul ba mor*, animal domestique et ami fidèle de l'homme.

● *Mvu da bom,* le chien aboie. *Mvu dawon*, le chien chasse.

▶ Prov: *Mvu a nga lo yo olun nzen*, le chien meurt quand il souffre de faim.

N

n.da [da] < * dabo n. cl. 5/6. pl. mədə̲

□ *E vom mwan mor a tobə*, lieu d'habitation, demeure, case.

● *E kur nda*, maison abandonnée.

▶Prov: *Nsing o byalean a nda été*, une génette est née chez toi.

n.kus [nkús] n. cl. 1/2. pl. minkus.

□ *emor a va dzimlə nnom, nal,* celle dont le mari est mort, celui dont la femme est morte.

● *Nkus fam, nkus minəga,* un homme veuf, une femme veuve.

▶Prov: *Minkus, minkus kə bin bifun,* quand il n'y a que des veuves, on ne saisit pas d'otages.

n.lo [nló] <* tue . n. cl. 9/10. pl. minlo.
□ *Ekila nyol oyo ebələ asu yə məlo*, partie supérieure du corps comprenant le visage et les oreilles.
• *Okon nlo*, maladie de la tête

n.nom [nnóm] < * dume. n. cl. 1/2. pl. bənnom.
1. □ *Emor a lugan minəga*, celui qui a épousé une femme.
   ● *Nnom wom*, mon mari.
   ▷ Prov: *Nnom gwan ondər kə dzi ku aben,* le gendre paresseux ne mange pas de poule chez ses beaux-parents.
2. □ *Fam*, le mâle.
   ● *Nnom ku*, le coq.
   → fam.

O

omomon [òmómõ] n. cl. 1/2.
□ *Mwan mon,* un petit enfant.
● *Abobon di*, ces petits enfants.

onon [ònón]< * uni n. cl. 5/6. pl. anon.

1. □ *E tsir ebələmə fap da yələ,* l'animal qui a des ailes et qui vole.
   ○ *Onon yə akinlə,* l'oiseau terrien.
   ▷ Prov: *Onon o fan yələ kə koan evun,* même en volant, l'oiseau ne rattrape pas le vent. + Kə *nin enin minal,* il ne faut pas se nourrir des chimères.

2. □ *E mor akobə abwin,* celui qui parle baucoup.
   ○ *Akobə a nə onon,* il parle comme un oiseau.
   → fop.

T

tə.ble [tɔ́blé] <Fr.table. n. pl. bitable
□ *edzom badzi ayo*, quelque chose sur la quelle on peut manger.
○ *adzi təble ayo*, il ou elle est assis sur une table.

—to.la [tòlà] < *do. vb.

1. □ *abərəbə edzom vo o yo*, S'appuyer sur.

   ○ *Elé éva tolan ézi évok o yo*, un arbre qui tombait est venu se fixer sur la fourche d'un autre arbre qui a tenu bon.
   Syn: Voir sakbə, yəgbə.
   ▷ Prov: *gu ebi ve tola ne elon*, tomber dans un trou et en ressortir pour aller se jeter dans un piège d'éléphant.

2. □ *A ku oyap*, Aller plus loin.
   • *kale a tolanə o yo,* il est tombé encore plus loin.

tsit [tsít] **tser** *nzaman* [tsér] **tsir** *atsi* [tsír] < * tiitu n. cl. 9/10. pl. bətsit.

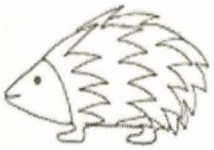
1. □ *Edzom mor adzi ebele meki*, etre comestible contenant du sang.
   - *adzi tsit*, il ou elle mange la viande.
   - *mora tsir*, gros animal ou grosse bête.
   - ▶ Prov: *tsit milak kə ni mbi,* une bête à cornes n'entre pas dans une cavité.

   ⇒ illustration.

2. □. *Okwan yə abum*, la maladie du ventre.
   - *Akwan tsit*, il ou elle souffre de la rate.

3. □. *Mor a nə nziman*, une personne bête
   - *Emor nina a nə tsit*, cet homme est bête.

***Bətsir*, les animaux** (figures fromhttp://www.teteamodeler.com/coloriages; www.accesscanin.com; www.azurs.net/photo; www.indyzoo.com)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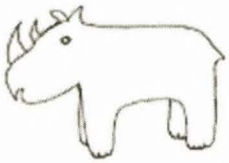
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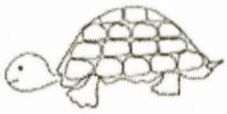
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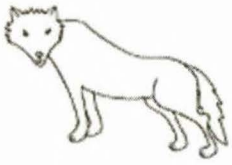
mvu ya dze


osen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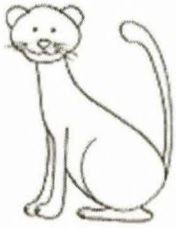
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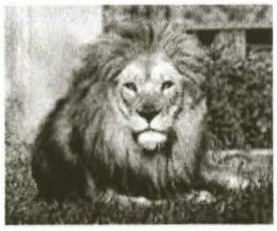
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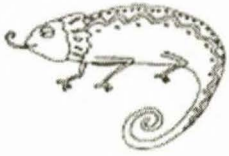
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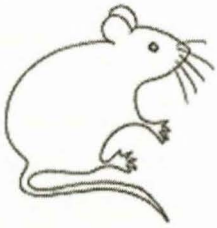
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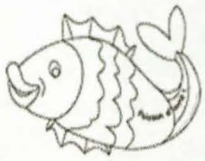
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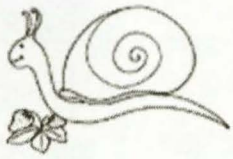
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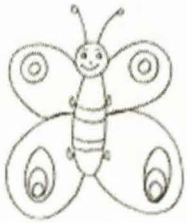
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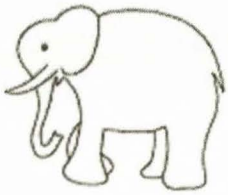
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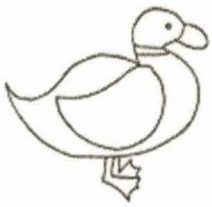

soa


ku


nan

V

—və [-və´] < * pa. v.

1. □ *Akə dzom ekəkə*, faire don de quelque chose.
   • *mavə evvə*, je donne un cadeau. *Məvaa nyə byom*, je lui ai donné des richesses.*Vakh mə byom,* donne moi des richesses.
2. □ *Kə*, s'appliquer à faire un travaille/ donner du cœur au travail.
   • *A və nlem e bo ese,* il s'applique à faire le travaille.
3. □ *Dzo abora*, dire merci.
   • *Avə Nzamə abora*, remercier Dieu (toi et moi).

— vi.lə [vìlə`] v.

1. □ *Akə zdom anu we duru evun e nəm*, sucer en aspirant.
   • *Ma vilə evəs tsit,* je suce l'os de l'animal.
   Syn: aye
2. □ *Adzim daghə mor*, regarder quelqu'un de travers.
   • *Akil Bilogho mis,* il ou elle regarde Bilogho de travers ;il ou elle toise Bilogho.

W

—wok [wók] v.
□ *abe, abalə dzam ezin ya nno*, entendre, comprendre, saisir quelque chose par l'esprit.
• *Mə dzo ma wok,* les paroles sont entendues.
► Prov: *Kə we bidzi nə wok na edze wa kə bidzi bi nə abwin, o za dzoobəgə zen,* Ne jette pas tes provisions de voyage, parceque tu as entendu dire qu'il y a des vivres en abundance au village où tu te rends, tu pourrais te coucher sans manger.

—wu [wú] < * ku v.
□ *Amanə enyin*, cesser de vivre.
• *Emor mə nga yen odzan a va wu alu,* la persone que j'ai vue avant-hier est décédée hier soir.
► Prov: *O kə wu kir, kir osə oyap,* Tu mouras demain: demain n'est pas loin.

— wul [wúl] v.
□ *Kə osu ya məbo,* avancer avec les pieds.
• *Mwan a wul,* l' enfant marche.
► Prov: *Osyn məkok, wa wul, wa təbə,* dans un ruisseau encombré de roches, on marche, on s'arrête (de crainte des chutes)

► Prov: *Otagə wul yə enin a nə kos məson, bor ba yə wo mar,* N'avance pas dans la vie comme un poisson armé de piquants, sans quoi les gens te fuiront

Z

Ze [zé] n. cl. 3/4. pl. bəze.
□ *e mwan tsit a nin mədzim ete*, petit animal qui vit dans l'eau.
• *Ze avore,* une loutre.
► Prov: *Ze da lo, evum*, la loutre mord puis souffle dessus. + *e mor a wok abe a sul nu*, un homme se fâche puis se répend.
⇒ illustration. (figure from http://www.dinosoria.com/loutre.htm)

Addendum 2: Prefixes

Participants	Nominal prefixes	Pronominal prefixes	Verbal prefixes
1st singular person		ma	ma
2nd singular person		wa	wa
1st plural person		bi	bi
2nd plural person		mi	mi
Dual			
3rd singular person			
Classe 1	°ǹ-		a-
2	ba-		
3	°n-		
4	mi-		
5	°a-		
6	ma-		
7	°è-		
8	bì-		
9	n-		
10	n-		
15	o- vi-		

15a			
16	va-		
17	o-		a-
18		mu	a-

Table : Ondo Mébiame (1992)

Addendum3: Noun Classes

Singular prefix	Plural prefix	Singular example	Plural example
mo-	ba-	mot	bot
ϕ-	bə-	tarə	bətarə
n-	mi-	nlo	minlo
n-	mi-	ndzis	mindzis
a-	mə-	abo	mə
e-	bi-	evəs	bivəs
o-	a-	okən	akən
o-	a-	onon	anon
n-	bə-	nzok	bəzok
ϕ-	bə-	kaba	bəzok

Addendum 4: pronouns

a. Personal pronouns

Participants	
1st sing. pers	ma
2nd sing. pers	wa
1st plur pers.	bya
2nd plur pers.	mina
Classes	
1	ene

2	ebo
3	ewo
4	emyo
5	edo
6	emo
7	edzo
8	ebyo
9	edzo
10	edze
15	ewo

d. Reflexive pronouns

Classes	
1	emyen
2	bebyen
3	obyen
4	mibyen
5	ebyen
6	mebyen
7	ebyen
8	ebyen
9	ebyen
10	ebyen
15	obyen

e. Neuter or connective pronouns

Classes	Neuter or connective pronouns
1	ə
2	bə
3	ə
4	mi
5	ə
6	m∂
7	ə
8	bi
9	e
10	e
15	ə

f. Adjective pronouns

Classes	Adjective pronoun I or closed	Adjective pronoun II or very far	Substantival adjective pronoun
1	nina	nelen	ete
2	bana	balen	bete
3	wina	welen	ote
4	mina	myelen	mite
5	dina	delen	ete
6	mana	malen	mete
7	dzina	dzelen	ete
8	bina	byelen	bite
9	nina	nelen	ete
10	nina	nelen	ete
15	wina	welen	ote

Addendum 5: Adjectives

a. Possessive adjectives

Personnes / Classes	1st sing. pers	2nd sing. pers	3rd sing. pers.	1st plur pers.	2nd plur pers.	3rd plur pers.
1	ewom	ewye	ewen	ewe	ewenan	ewoba
2	ebam	ebwye	eben	ebe	ebenan	eboba
3	ewom	ewye	ewen	ewe	ewenan	ewoba
4	emyam	emwye	emyen	ewye	emyenan	emyoba
5	edam	edwye	eden	ede	edenan	edoba
6	emam	emwye	emen	eme	emenan	emoba
7	edram	edrwye	edren	edze	edzenan	edzoba
8	ebyam	ebwye	ebyen	ebye	ebyenan	ebyoba
9	edram	edrwye	edren	edze	edzenan	edzoba
10	edram	edrwye	edren	edze	edzenan	edzoba
15	ewom	ewom	ewen	ewe	ewenan	ewoba

b. Indefinite adjectives

Classes	
1	ase
2	bese
3	ose
4	mise
5	ase
6	mese
7	ese
8	bise
9	ese
10	ese
15	ose

c. Interrogative adjectives

Classes	quantity	place
2	ban fe	
4	myan fe	
5	dan fe	
6	man fe	
8	byan fe	
10	dzan fe	
15		ve

d. Numeral Adjectives

1. fo

2. be

3.la

4. ni

5. tan

6. saman

7. zanbwe

8. mom

9.ebu

10 awom

11. awom ya mbo

12. awom ya be

13. awom ya la

14. awom ya ni

15. awom ya bətan

16. awom ya sman

17. awom ya zanbwe

18. awom ya mom

19. awom ya ebu

20. məwom be

21: məwom be ya mbo

22: məwom ya be

23: məwom ya la

24: məwom ya ni

25: məwom ya tan

26: məwom ya saman

27: məwom ya zanbwe

28: məwom ya mom

29: məwom ya ebu

30: məwom la

31: məwom ya mbo

40: məwom ni

41: məwom ya mbo

50: məwom tan

51: məwom ya mbo

60: məwom saman

61: məwom ya mbo

70: məwom zanbwe

71: məwom ya mbo

80: məwom mom

81: məwom ya mbo

90: məwom ebu

91 məwom ebu ya mbo

100: ntətə

101: ntətə ya mbo

110: ntətə ya awom

111: ntətə ya awom ya mbo

120: ntətə yə məwom be

121: ntətə ya məwom b*e* ya mbo

125: ntətə məwom be ya tan

130: ntətə məwom la

140: ntətə məwom ni

150: ntətə məwom tan

175: ntətə məwom zanbwe ya tan

200: mintətə be

201: mintətə mibe ya mbo

210: mintətə mibe ya awom

220: mintətə mibe ya məwom be

225: mintətə mibe ya məwom be ya tan

250: mintətə mibe ya məwom tan

260: mintətə mibe ya məwom saman

270: mintətə mibe ya məwom zanbwe

275: mintətə mibe ya məwom zanbwe ya tan

280: mintətə mibe ya məwom mom

290: mintətə mi be ya məwom ebu

300: mintətə mi la

400: mintətə mi ni

500: mintətə mi tan

600: mintətə mi saman

700: mintətə zanbwe

800: mintətə mom

900. mintətə ebu

1000: toyin

1.010: tonyin ya awom

1.020: tonyin ya məwom be

1.100: tonyin ya ntətə

2.000: tonyin be

2.010: tonyin be ya awom

5.000: tonyini tan

10.000: awom toyin

11.000: awom toyin ya toyin

20.000: awom toyin be

21.000: awom toyin be ya toyin

21.100: awom toyin be ya toyin ya ntətə

26.000: awom toyin be ya toyin saman

30.000: awom toyin la

50.000: awom toyin tan

100.000: ntətə toyin

200.000: toyin mintətəbe mi be

5F: dol

10F: dol be

15F: dol la

20F: doi ni

25F: dol tan

30F: dol saman

35F: dol zanbwe

40F: dol mom

45F: dol ebul

50F: awom dol

55F: awom dol ya dol

60F: awom dol ya dol be

65F: awom dol ya dol la

70F: awom dol ya dol ni

75F: awom dol ya dol tan

80F: awom dol ya dol saman

85F: awom dol ya dol zanbwe

90F: awom dol ya dol mom

95F: awom dol ya dol ebu

100F: ntətə

105F: ntətə ya dol

110F: ntətə ya dol be

125F: ntətə ya dol tan

150F: ntətə ya awom dol

175F: ntətə ya awom dol ya dol tan

200F: mintətə mi be

250F: mintətə mi be ya awom dol

500F: mintətə mi tan

550F: mintətə mi tan ya awom dol

600F: mintətə mi saman

650F: mintətə mi saman ya awom dol

700F: mintətə zanbwe

750F: mintətə zanbwe ya awom dol

800F: mintətə mom

850F: mintətə mom ya awom dol.

900F: mintətə ebu

950F: mintətə ebu ya awom dol

1.000F: toyin

1.050F: toyin ya awom dol

1.100F: toyin ya ntətə

2.000F: toyin be

5.000F: toyin la

6.000F: toyin saman

9.000F: toyin ebu

10.000F: awom toyin

100.000F: awom toyin

1000.000F:

Addendum 6: Conjugation

		Mood	Indicative	
		Order	Affirmative	Negative
Aspect	Tense	Sub-tense	Example	Example
Perfective	Past	Gen. perf. I	mənabo	menaboki
		Dur. and hab. perf. I	mənabəbo	menabɔboki
		Rest. perf. I	mənabobo	menaboboki
		Gen. perf. II	mabo	
		Rest. Perf. II	mabobo	
		Gen. dur.	məmbono	membonoki
		Rest. dur.	məmbonobo	membonoboki
		Gen. pret. I	məvabo	mevaboki
		Dur. pret. I	məvabəbo	mevabəboki
		Rest. pret. I	məbo	mevaboboki
		Gen. pret. II	məbobo	maboki
		Rest. pret. II	məboan	maboboki
		Gen. poss.	məboabo	
		Abs. poss.		
Imperfective	Present	Immediat	mabo	maboki
		Habitual	mabəbo	maboki
		Restrictive	mabonbo	maboboki
		Gen. Inchoative	məgaboan	
		Rest. Inchoative		
	Future	General	məmbo	məmboki
		Restrictive	məmbobo	məmboboki
Combined	Concomitant	Gen. concom. I	məbono	
		Rest. concom. II	məbonobo	
		Gen. concom. II	mebo	
		Rest. concom. II	mebobo	
	Subsecutive	Gen. Subsecutive	mənabo	
		Rest. Subsecutive	mənabobo	
	Concordant	Gen. concordant	məbo	
		Rest. concordant	məbobo	

Table: Simple conjugation of the verb "bo"

		Mood	Indicative	
		Order	Affirmative	Negative
Aspect	Tense	Sub-tense	Example	Example
Perfective	Past	Gen. perf. I	mənatarə bo	menatarəkibo
		Dur. and hab. perf. I	mənatətarəbo	menatətarəkibo
		Rest. perf. I	mənatarəbobo	menatarəkibobo
		Gen. perf. II	matarabo	
		Rest. Perf. II	məntarəgəbo	
		Gen. dur.	məntarəgəbobo	mentarəgəkibo
		Rest. dur.	məvatarəbo	metarəgəkibobo
		Gen. pret. I	məvatətarəbo	mevatarəkibo
		Dur. pret. I	məvatarəbobo	mevatətarəkibo
		Rest. pret. I	mətarəbo	mevatarəkibobo
		Gen. pret. II	mətarəbobo	matarəkibo
		Rest. pret. II	mətarəyabo	matarəkibobo
		Gen. poss.	mətarəyabobo	
		Abs. poss.		
Imperfective	Present	Immediat	mabo	matarəkibo
		Habitual	mabəbo	matətarəkibo
		Restrictive	mabonbo	matarəkibobo
		Gen. Inchoative	məgaboan	
		Rest. Inchoative		
	Future	General	məmbo	məntarəkibo
		Restrictive	məmbobo	məntarəkibobo
Combined	Concomitant	Gen. concom. I	məbono	
		Rest. concom. II	məbonobo	
		Gen. concom. II	mebo	
		Rest. concom. II	mebobo	
	Subsecutive	Gen. Subsecutive	mənabo	
		Rest. Subsecutive	mənabobo	
	Concordant	Gen. concordant	məbo	
		Rest. concordant	məbobo	

Table: Compound conjugation of the verb "bo"

		Mood	Indicative	
		Order	Affirmative	Negative
Aspect	Tense	Sub-tense	Example	Example
Perfective	Past	Gen. perf. I	mənatarə bəra bo	menatarəki bəra bo
		Dur. and hab. perf. I	mənatətarə bəra bo	menatətarəki bəra bo
		Rest. perf. I	mənatarə bəra bobo	menatarəki bəra bobo
		Gen. perf. II	matarə bəra bo	
		Rest. Perf. II	məntarəgə bəra bo	
		Gen. dur.	məntarəgə bəra bobo	mentarəgəki bəra bo
		Rest. dur.	məvatarə bəra bo	metarəgəki bəra bobo
		Gen. pret. I	məvatətarə bəra bo	mevatarəki bəra bo
		Dur. pret. I	məvatarə bəra bobo	mevatətarəki bəra bo
		Rest. pret. I	mətarə bəra bo	mevatarəki bəra bobo
		Gen. pret. II	mətarə bəra bobo	matarəki bəra bo
		Rest. pret. II	mətarəya bəra bo	matarəki bəra bobo
		Gen. poss.	mətarəya bəra bobo	
		Abs. poss.		
Imperfective	Present	Immediat	matarə bəra bo	matarəki bəra bo
		Habitual	matətarə bəra bo	matətarəki bəra bo
		Restrictive	matarə bəra bobo	matarəki bəra bobo
		Gen. Inchoative	mənatarəya bəra bo	
		Rest. Inchoative	mənatarəya bəra bobo	

	Future	General Restrictive	mən̲tarə bəra bo mən̲tarə bəra bobo	mən̲tarəki bəra bo mən̲tarəki bəra bobo
Combined	Concomitant	Gen. concom. I Rest. concom. II Gen. concom. II Rest. concom. II	mətarəgə bəra bo mətarəgə bəra bobo metarə bəra bo metarə bəra bo	
	Subsecutive	Gen. Subsecutive Rest. Subsecutive	mən̲atarə bəra bo mən̲atarə bəra bo	
	Concordant	Gen. concordant Rest. concordant	mətarə bəra bo mətarə bəra bobo	

Table: "Surcomposé" regular conjugation of the verb "bo"

		Mood	Indicative	
		Order	Affirmative	Negative
Aspect	Tense	Sub-tense	Example	Example
Perfective	Past	Gen. perf. I Rest. dur. Gen. pret. I Gen. pret. II Rest. pret. II Gen. poss.	mən̲adzin̲ mabo məndzin̲ mabo məvadzin̲ mabo mədzin̲ mabo mətarə bəra bo mədzin̲an̲ mabo	mən̲avini mabo məmvinən̲ə mabo məvavini mabo məviniyan̲ mabo
Imperfective	Present	Immediat Gen. Inchoative	madzin̲ mabo mən̲adzin̲ mabo	məvini mabo mən̲aviniyan̲ mabo
	Future	General	mən̲dzin̲ mabo	məmvini mabomabo
Combined	Concomitant	Gen. concom. I Gen. concom. II	məndzin̲ə mabo medzin̲ mabo	məvininə mabo mevini mabo
	Subsecutive	Gen. Subsecutive	mən̲adzin mabo	mən̲avini mabo
	Concordant	Gen. concordant	mədzin̲ə mabo	məvini mabo

Table: Periphrastic conjugation of the verb "bo"

Mood	Subjunctive
Tense	Example
Present	məbo̲

Table: subjunctive mood of the verb "bo"

Mood	Imperative
Tense	Example
Present	bono

Table: Imperative mood of the verb "bo"

Mood	Optative
Tense	Example
Present	m∂bonbonoki "May I do"

Table: Optative mood of the verb "bo"

Addendum8: The names of villages

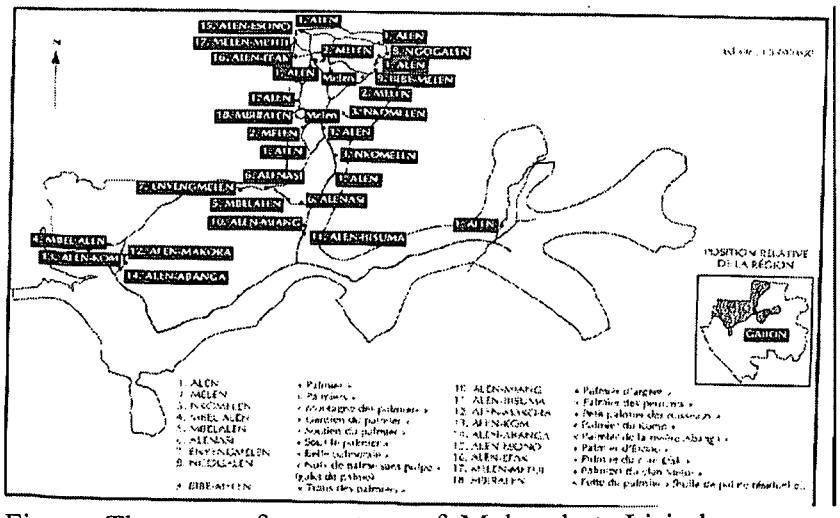


Figure: The names from nature, cf. Mukumbuta Lisimba

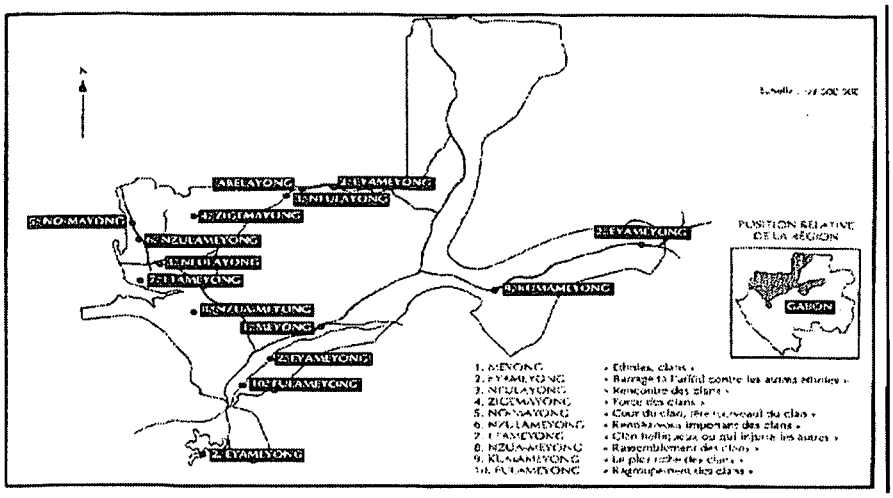


Figure: the names from Society, cf. Mukumbuta Lisimba

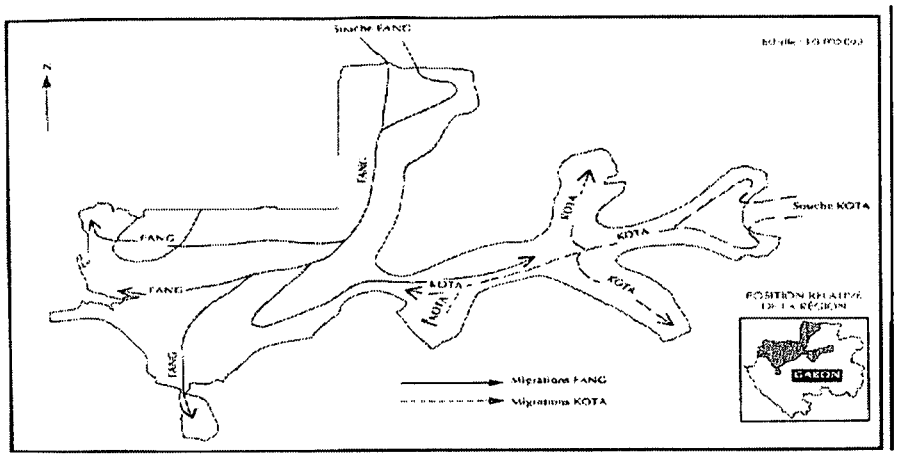
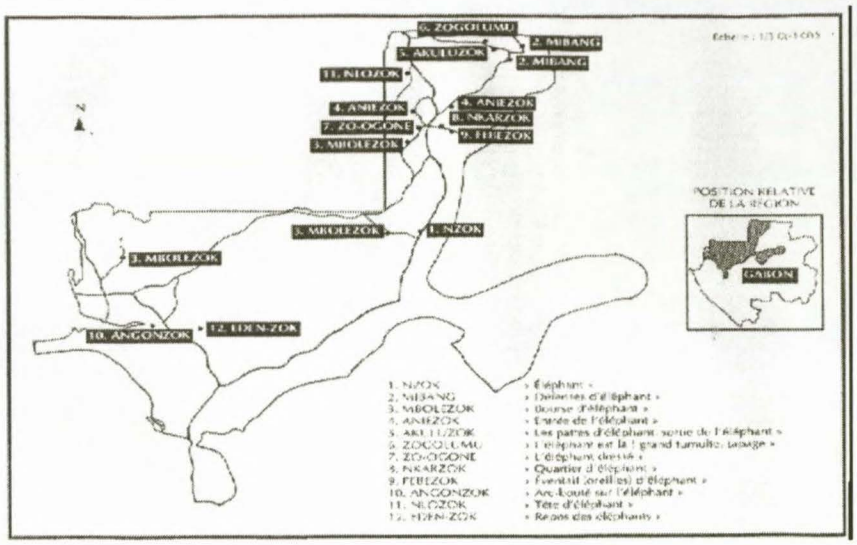
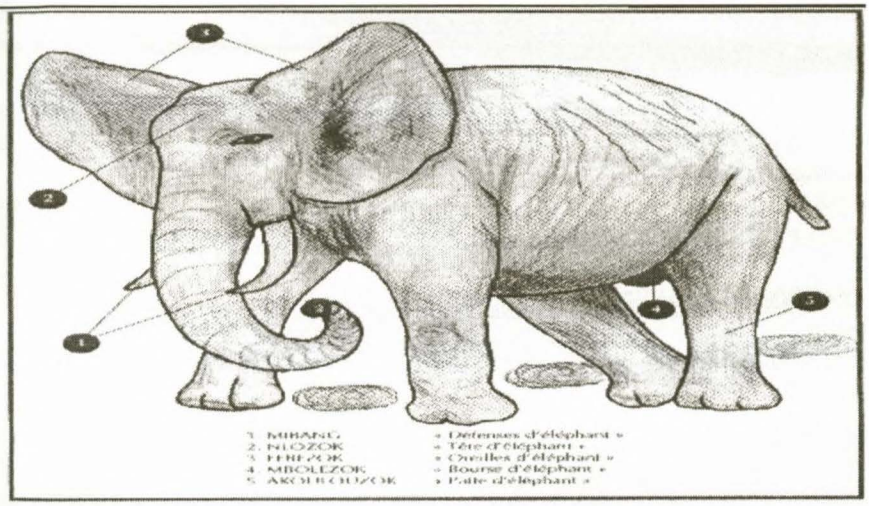


Figure: The names from history of migrations





Figures: the names from physical reality: case of elephant, cf. Mukumbuta Lisimba (1997)

Addendum 9: Names of days:

Fang	French	English
Alu oswa	Lundi	Monday
Alu be	Mardi	Tuesday
Alu lal	Mercredi	Wednesday
Alu ni	Jeudi	Thursday
Alu tan	Vendredi	Friday
Alu saman	Samedi	Saturday
Son	dimanche	Sunday
Alu esesang	Jour de fête	Feast day

It is observed that like French or English people, Fang people have (7) days in a week. Unfortunately existing dictionaries in Fang do not have the names of days included in the back matter.

Addendum 10: Names of months

Fang	French	English
Ngon oswa	Janvier	January
Ngon be	Février	February
Ngon lal	Mars	March
Ngon ni	Avril	April
Ngon tan	Mai	May
Ngon saman	Juin	June
Ngon	Juillet	July
Ngon mom	Août	August
Ngon ebu	Septembre	September
Ngon awom	Octobre	October
Ngon awom ya bɔbe	Novembre	November
Ngon awom ya bɔlal	Décembre	December

Addendum 11: Names of seasons

Fang	French	English
sugu	saison des pluies	Rainy season
oyon	Saison sèche	Dry season

Addendum 12: Some names of countries

Fang	French	English
Angleterre	Angleterre	England

Gabon	Gabon	Congo
Congo	Congo	Congo
Equato	Guinée Equatorial	Equatorial Guinea
Cameroun	Cameroun	Cameroon
Côte - Ivoire	Côte - Ivoire	Côte - Ivoire
Fala	France	France

Addendum13: The names of Gabonese cities

Fang	French	English
Beyok	Libreville	Libreville
Oyem	Oyem	Oyem
Port-Gentil	Port-Gentil	Port-Gentil
Mouila	Mouila	Mouila
Makokou	Makokou	Makokou
Tchibanga	Tchibanga	Tchibanga
Franceville	Franceville	Franceville
Koulamoutou	Koulamoutou	Koulamoutou
Lambaréné	Lambaréné	Lambaréné

Addendum 14

SURVEY ON DICTIONARY USE

Instructions
Please answer the following questions by circling the relevant number(s) in each block. Some questions require you to circle ONE NUMBER only, whereas others permit you to circle MORE THAN ONE NUMBER. It is thus important that you read the instructions for each question very carefully.

1. Gender

Female	1
Male	2

2. Age

.....years

3. What is your native language? Which foreign language(s) have you studied?

.....

4. Which language do you mainly speak at home?

.....

5. For which programme course are currently enrolled? Which degree?

.....

6. Which subject(s) are you studying at University of Stellenbosch?

.....

7. When did you start to use dictionary in Gabon?

.....

8. If you own a dictionary, when did you first acquire it?

At primary school	1
At secondary school	2
At University	3

9. What types of dictionary do you own in Gabon?

General dictionary (e.g. Dictionary of English):	1
special subject dictionary (e.g. Dic. of Music):	2
bilingual dictionary (e.g. English-French Dic.):	3
thesaurus (e.g. Dictionary of Synonyms):	4
encyclopedia	5

10. Do you own any electronic dictionaries?

.....

11. How many dictionaries do you own?

.....

12. Which type(s) of dictionary exist in Gabonese languages?

General dictionary (e.g. Dictionary of Fang):	1
special subject dictionary (e.g. Dic. of Music):	2
bilingual dictionary (e.g. Fang-French Dic.):	3
thesaurus (e.g. Dictionary of Synonyms):	4
encyclopedia	5

13. Which type(s) of dictionary do you use most frequently in Gabon?

General dictionary (e.g. Dictionary of English):	1
special subject dictionary (e.g. Dic. of Music):	2
bilingual dictionary (e.g. English-French Dic.):	3
thesaurus (e.g. Dictionary of Synonyms):	4
encyclopedia	5

14. If one wants to compile dictionary in Gabonese languages, can he or she begins with……

General dictionary (e.g. Dictionary of Fang)?	1
special subject dictionary (e.g. Dic. of Music)?	2
bilingual dictionary (e.g. Fang-French Dic.)?	3
thesaurus (e.g. Dictionary of Synonyms)?	4

Encyclopedia ?	5

15. If you use an electronic dictionary, which type is it?

.....

16. When you last bought a dictionary, was it ...

because a teacher of tutor recommended it?	1
because a friend or relative suggested it?	2
as a result of your own deliberate choice?	3
as a result of an advertisement?	4
due to an impulse?	5
I cannot remember	6

17. What is your priority when you buy a new dictionary?

its relevance to my needs	1
the number of words	2
the number of examples	3
a reasonable price	4
the reputation of the publisher	5
convenient to carry about	6

18. Do you ever use information contained in the appendices?

lists of abbreviations	1
lists of irregular verbs	2
units of measurement	3
proper names	4
other (to be specified):	5

19. If you are aware of the user guidance notes at the front of the dictionary, do you ...

study them?	
find them user-friendly?	
manage without them?	

20. When do you use a dictionary?

during a class	1
during an exam	2
studying at home	3
studying in a library	4

other (specify):	5

21. Do you use a dictionary while you ...

read newspapers and magazines	1
read textbooks	2
read academic journals	3
read a book for entertainment	4
work on a translation exercise	5
play word games	6

22. What do you do when you notice a new or difficult word while reading?

look it up in a dictionary	1
guess the meaning	2
ask other people what it means	3
ignore it and go on reading	4

23. How often do you use a dictionary?

when you write	1
when you read	2
when you listen	3
when you speak	4
to look up a definition/equivalent of a word	5
to look up a spelling of a word	6
to look up synonyms/words of similar meaning	7
to look up examples of a word's use	8
to look up a grammar point, e.g. part of speech	9
to look up encyclopedic information	10
to look up the pronunciation	11
to look up a word origin/etymology	12
To look up idiom/ proverb	13

24. Are you, on the whole, satisfied with your ability to use a dictionary?

.....

25. Do you ever consult a dictionary without being able to find the information you need?

very often	1
often	2
sometimes	3
never	4.

26. What type of information is most difficult to find?

General (English) words	1
Specialized technical terms	2
common (English) words in a special subject area	3
Idiom, proverbs and phrases	4

27. What do you think are the causes of these difficulties?

my lack of dictionary skills	1
my lack of dictionary knowledge	2
not enough information in the dictionary	3
unclear layout of the dictionary	4
I don't read the instructions to the user	5

28. In your opinion, using dictionaries is…

easy	1
difficult	2
exciting/fun	3
tedious/boring	4
worthwhile/informative	5
of little help/not worth the trouble	6

29. Based on your experience, which of the following statements do you agree with?

Using dictionaries can improve my reading	1
Using dictionaries can improve my writing	2
Using dictionaries can help my speaking	3
Using dictionaries can help me perform better in my studies	4

30. Have you ever been taught how to use a dictionary in Gabon?

Yes	1
A little	2
Never	3

31. Do you think it is important for students in Gabon to be taught how to use dictionaries?

It is very important	1
It is important	2
It is not important	3
I do not know	4

32. Add any other points you want to make about your experiences with dictionaries.

.....
.....

33. Can you write in your home language?

.....

THANK YOU FOR YOUR TIME AND YOUR COOPERATION

Addendum 15

Result page

Total: 100

3. Gender

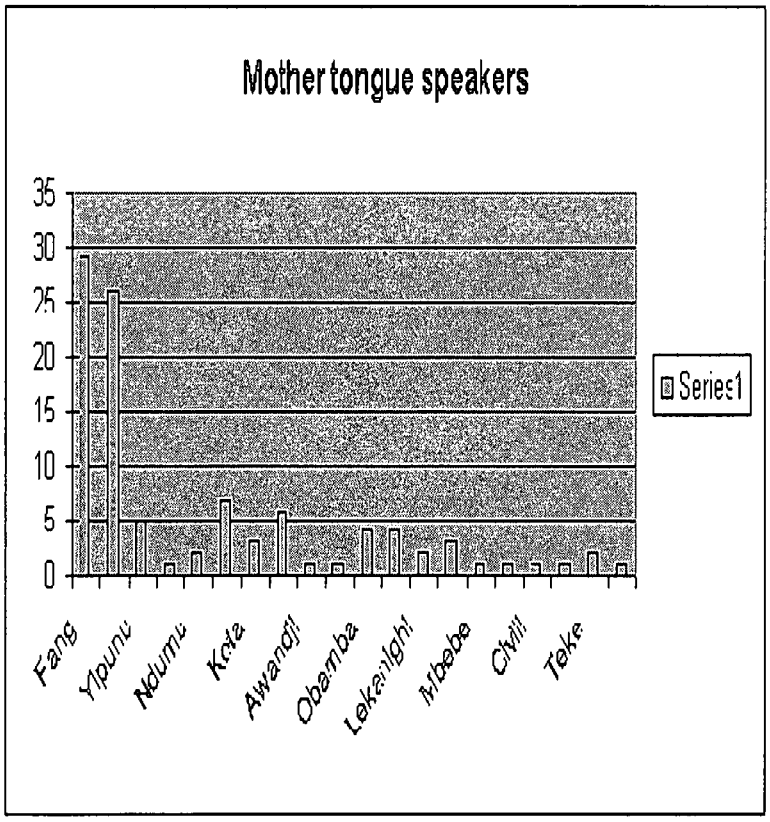
Female	36=36%
Male	64=64%

4. Age

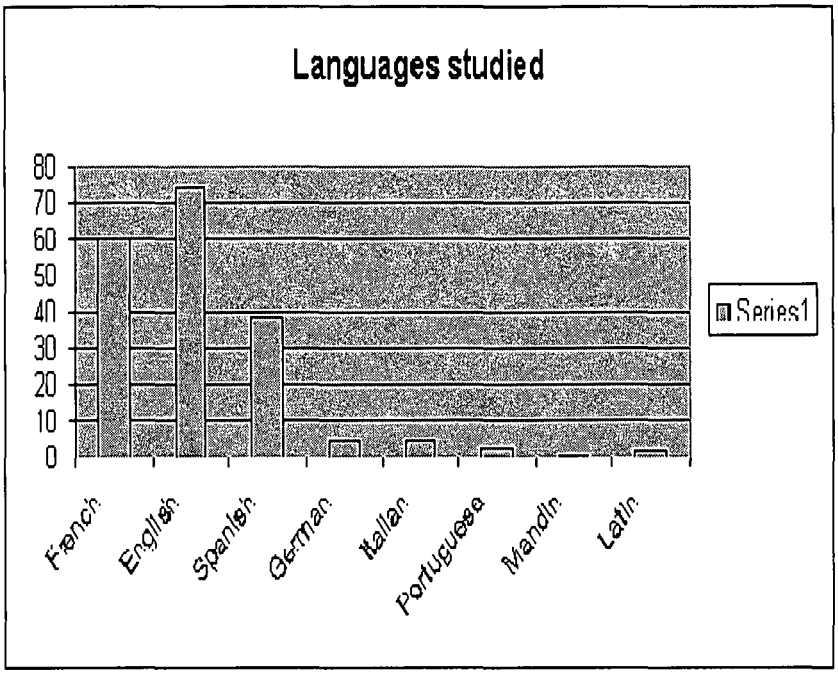
.....years

1. What is your native language? Which foreign language(s) have you studied?

Fang	**29**
French	**26**
Yipunu	**5**
Mahongwe	**1**
Ndumu	**2**
Lembaama	**7**
Kota	**3**
Inzebi	**6**
Awandji	**1**
Bemba	**1**
Obamba	**4**
Myene	**4**
Lekanighi	**2**
Aduma	**3**
Mbebe	**1**
Gisir	**1**
Civili	**1**
Tsogo	**1**
Teke	**2**
Lumbu	**1**



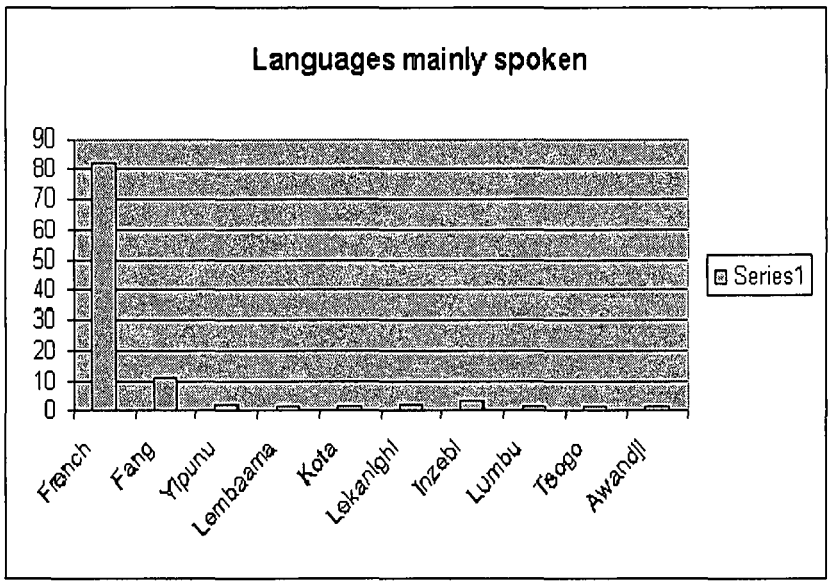
French	**60**
English	**74**
Spanish	**39**
German	**5**
Italian	**5**
Portuguese	**3**
Mandin	**1**
Latin	**2**



.....

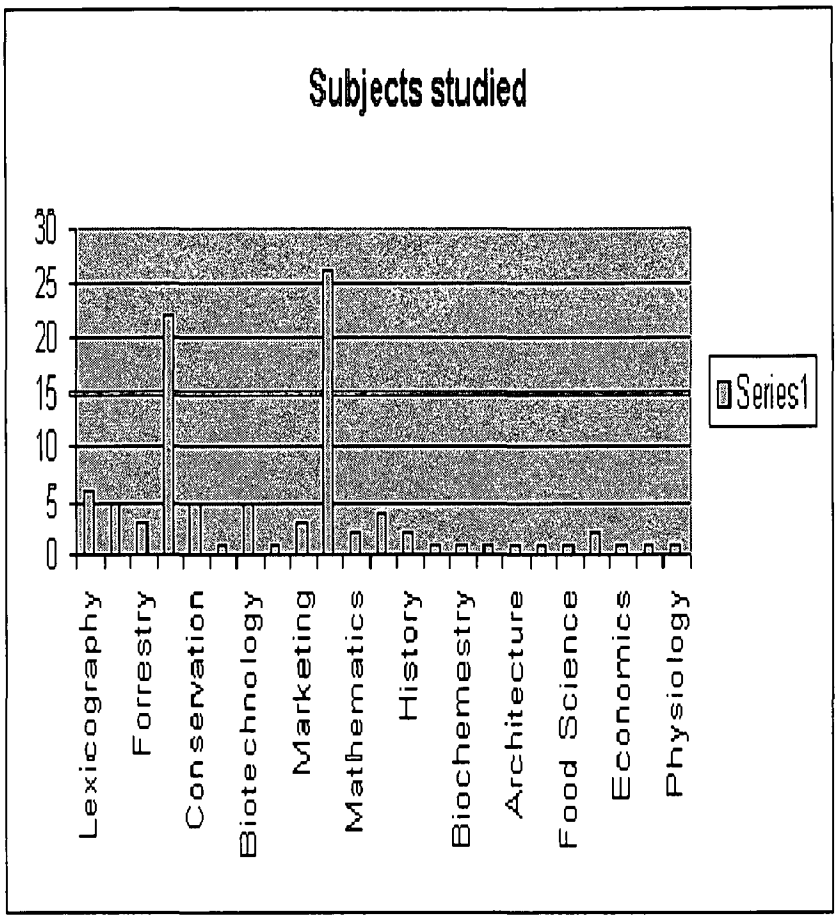
11. Which language do you mainly speak at home?

French	**82**
Fang	**11**
Yipunu	**2**
Lembaama	**1**
Kota	**1**
Lekanighi	**2**
Inzebi	**3**
Lumbu	**1**
Tsogo	**1**
Awandji	**1**



12. For which programme course are currently enrolled? Which degree?

Lexicography	**6**
Geology	**5**
Forrestry	**3**
Business Management	**22**
Conservation Ecology	**5**
Phonetics	**1**
Biotechnology	**5**
Sociology	**1**
Marketing	**3**
English	**26**
Mathematics	**2**
Mechanical Engeneering	**4**
History	**2**
Food Beveverage	**1**
Biochemestry	**1**
Medical Science	**1**
Architecture	**1**
Environmental Health	**1**
Food Science	**1**
Botany	**2**
Economics	**1**
Zoology	**1**
Physiology	**1**



.....

13. Which subject(s) are you studying at University of Stellenbosch?

14. When did you start to use dictionary in Gabon?

Primary 61 = 61%; Secondary 26 = 26%

.....

14. If you own a dictionary, when did you first acquire it?

At primary school	58=58%
At secondary school	37=37%
At University	2=3%

15. What types of dictionary do you own in Gabon?

General dictionary (e.g. Dictionary of English):	85=85%
special subject dictionary (e.g. Dic. of Music):	18=18%

bilingual dictionary (e.g. English-French Dic.):	81=81%
thesaurus (e.g. Dictionary of Synonyms):	38=38%
encyclopedia	46=46%

16. Do you own any electronic dictionaries?

...No = 78 = 78%; Yes = 22 = 22%

.....

11. How many dictionaries do you own?

...4 = 19= 19%; 3 = 26= 26% ; 2= 27 = 27%; 1 = 6= 6%; More than 90 = 90% have...more than one dictionary.

.....

13. Which type(s) of dictionary exist in Gabonese languages?

General dictionary (e.g. Dictionary of Fang):	36=36%
special subject dictionary (e.g. Dic. of Music):	10=10%
bilingual dictionary (e.g. Fang-French Dic.):	46=46%
thesaurus (e.g. Dictionary of Synonyms):	38=38%
encyclopedia	46=46%

13. Which type(s) of dictionary do you use most frequently in Gabon?

General dictionary (e.g. Dictionary of English):	79=79%
special subject dictionary (e.g. Dic. of Music):	9=9%
bilingual dictionary (e.g. English-French Dic.):	63=63%
thesaurus (e.g. Dictionary of Synonyms):	36=36%
encyclopedia	67=67%

14. If one wants to compile dictionary in Gabonese languages, can he or she begins with.....

General dictionary (e.g. Dictionary of Fang)?	32=32%
special subject dictionary (e.g. Dic. of Music)?	2=2%
bilingual dictionary (e.g. Fang-French Dic.)?	64=64%
thesaurus (e.g. Dictionary of Synonyms)?	17=17%
Encyclopedia ?	12=12%

15. If you use an electronic dictionary, which type is it?

.....

16. When you last bought a dictionary, was it ...

because a teacher of tutor recommended it?	23=23%
because a friend or relative suggested it?	7=7%
as a result of your own deliberate choice?	69=69%
as a result of an advertisement?	0=0%
due to an impulse?	8=8%
I cannot remember	6=6%

1. What is your priority when you buy a new dictionary?

its relevance to my needs	90=90%
the number of words	12=12%
the number of examples	10=10%
a reasonable price	12=12%
the reputation of the publisher	16=16%
convenient to carry about	3=3%

2. Do you ever use information contained in the appendices?

Lists of abbreviations	57=57%
Lists of irregular verbs	73=73%
units of measurement	21=21%
proper names	26=26%
other (to be specified):	12=12%

19. If you are aware of the user guidance notes at the front of the dictionary, do you ...

study them?	24=24%
Find them user-friendly?	31=31%
manage without them?	40=40%

20. When do you use a dictionary?

during a class	20=20%
during an exam	4=4%
studying at home	91=91%
studying in a library	59=59%
other (specify):	14=14%

21. Do you use a dictionary while you ...

Read newspapers and magazines	47=47%
Read textbooks	65=65%
Read academic journals	44=44%
Read a book for entertainment	27=27%
work on a translation exercise	75=75%
Play word games	45=45%

22. What do you do when you notice a new or difficult word while reading?

Look it up in a dictionary	13=81%
guess the meaning	44=44%
ask other people what it means	18=18%
ignore it and go on reading	11=11%

23. How often do you use a dictionary?

when you write	63=63%
when you read	67=67%
when you listen	20=20%
when you speak	1=1%
to look up a definition/equivalent of a word	74=74%
to look up a spelling of a word	58=58%
to look up synonyms/words of similar meaning	46=46%
to look up examples of a word's use	37=37%
to look up a grammar point, e.g. part of speech	20=20%
to look up encyclopedic information	13=13%
to look up the pronunciation	41=41%
to look up a word origin/etymology	13=13%
To look up idiom/ proverb	21=21%

24. Are you, on the whole, satisfied with your ability to use a dictionary?

...Yes = 81%; No = 19%

.....

25. Do you ever consult a dictionary without being able to find the information you need?

very often	4=4%
often	11=11%
sometimes	76=76%
never	10=10%

26. What type of information is most difficult to find?

General (English) words	2=2%
Specialized technical terms	73=73%
common (English) words in a special subject area	34=34%
Idiom, proverbs and phrases	26=26%

27. What do you think are the causes of these difficulties?

my lack of dictionary skills	13=3%
my lack of dictionary knowledge	7=7%
not enough information in the dictionary	63=63%
unclear layout of the dictionary	22=22%
I don't read the instructions to the user	13=13%

28. In your opinion, using dictionaries is…

easy	48=48%
difficult	3=3%
exciting/fun	24=24%
tedious/boring	3=3%
worthwhile/informative	58=58%
of little help/not worth the trouble	2=2%

29. Based on your experience, which of the following statements do you agree with?

Using dictionaries can improve my reading	38=38%
Using dictionaries can improve my writing	66=66%
Using dictionaries can help my speaking	43=43%
Using dictionaries can help me perform better in my studies	53=53%

30.Have you ever been taught how to use a dictionary in Gabon?

Yes	32=32%
A little	38=38%
Never	27=27%

31.Do you think it is important for students in Gabon to be taught how to use dictionaries?

It is very important	64=64%
It is important	25=25%
It is not important	0=0%
I do not know	7=7%

32.Add any other points you want to make about your experiences with dictionaries.

.....
.....

33.Can you write in your home language?

...No = 53 = 53%; Yes = 47 = 47%
.....

List of terms

abbreviation
access structure
addressing structure
article
article slot
article stretch
back matter
bi-directional
bifunctional
bilingual
bilingualised
biscopal

carrier of text
central list
circular definition
cluster
collocates
comment on form
comment on semantics
communication-orientated functions
communicative equivalence
complex article
components
conceptualisation plan
concordance line
condensation
congruence
context
corpus
corpus line
cotext
cross-reference
cross-reference address
cross-reference entry
cross-reference marker
cultural

data category
data distribution
data distribution structure
data types
dead references
decode
default article
definiens
definition
descriptive
dictionary article
dictionary basis
dictionary conceptualisation plan
dictionary culture
dictionary external cross-reference
dictionary plan
dictionary skills
dictionary typology
dictionary use
divergence
double address

electronic dictionaries
encoding
encyclopedic
entry
equivalent
etymological data
etymological dictionaries
etymology
explicit
external cross-reference
extralinguistic

frame structure
frequency
front matter
full equivalence

gap
general dictionary
general preparation phase
genuine purpose
genus and differentiae denitions
glosses
guiding element

header
historical
homonym
horizontal ordering
hybrid
hyphen
hyponymy
hyponyms

derivation
idiom
indicators
inner access structure
inserted inner texts
instruction book
integrated
integrated microstructure
integrated outer texts
internal
internal cross-reference
internal cross-reference address
internal inner texts

key
key instruments
keyword
knowledge
knowledge-orientated function

labels
language for general purpose
layout
learners
left-expanded article structures
left expanded microstructures
lemmatic addressing
lemmatisation
lemma sign
lexical divergence
lexical gaps
lexical items
lexicographic function
lexicographic labels
lexicographic process
linguistic dictionaries
LSP

material acquisition phase
material collection
material planning
material planning
material preparation phase
material processing phase
mediostructure
metalanguage
metalexicography
micro-architecture
mini-grammar
monolingual dictionary
monosemous
multilexical
nested
niched
non-integrated microstructure
non-lemmatic addressing
non-typographical structural
non-typographical makers indicators
normative
numerical order

obligatory microstructure
one to more than one relation
one to one relation
ordering
organisation plan
ostensive definitions
outer text

paraphrase of meaning
partial equivalent
part of speech
pedagogical
place keeping symbols
polyfunctional
polysemy
pragmatic
precriptive
primary sources
primitive microstructure
pronunciation
publication
punctuation

query tools

rapid access
rapid outer search path
reference needs
reference skills
register
remote addressing
restricted dictionary
reversibility

search area
search fields

microstructural programme
search zones
secondary sources
semantic divergence
semantic gaps
semantic relations
semi-clon
senses
single articles
sinuous lemma file
slang
source language
special field
standard
stress
stress indication
structural indicator
style guide
subarticles
subcomment
subject field
sublemma
sublemmatic addressing
sublexical
superordinate
superscript
surrogate equivalent
synchronic
synonym
synopsis articles

user-friendly
user-perspective

vertically ordered

word book
word list

zero equivalence

search route
taboo
target user
terminology
textual condensation
textual constituents
text block
text production
theoretical lexicography
thesaurus
thumb index
tone
translation equivalent
translation equivalent paradigm
treatment units
typographical structural indicators