# A Trilingual Dictionary Yilumbu-French-English: An Ongoing Project 

Paul Achille Mavoungou, Department of Afrikaans and Dutch, University of Stellenbosch, Stellenbosch, Republic of South Africa and Department of Linguistics, Omar Bongo University, Libreville, Gabon (moudika2@yahoo.fr)


#### Abstract

In this article, an account is given of the planning of a trilingual dictionary Yilumbu-French-English. The focus is on the target user, the purpose, nature and typology of the planned dictionary. Attention is also paid to some macro- and microstructural issues. For example, all types of lexical items, including multiword lexical items, are given lemma status. Moreover all items are included according to the word tradition and on account of their usage frequency in the corpus. Apart from these aspects, types of dialectal forms as well as the type of special-field lexical items are also discussed. From a microstructural point of view, this article investigates different kinds of data types to be considered for inclusion in complex articles in particular. User-friendliness parameters and innovative access structure procedures also come into play.


Keywords: DICTIONARY, LEXICOGRAPHY, DICTIONARY PLAN, METALEXICOGRAPHY, TARGET GROUP, GABON, SOURCE LANGUAGE, TARGET LANGUAGE, ENGLISH, FRENCH, YILUMBU

Résumé: Un dictionnaire trilingue yilumbu-français-anglais: projet en cours. Cet article rend compte de la planification d'un dictionnaire trilingue yilumbu-françaisanglais. Le centre d'intérêt réside au niveau du public cible, l'objectif, la nature et la typologie du dictionnaire proposé. Une attention est aussi accordée à quelques problèmes macro- et microstructurels. Par exemple, tous les types d'items lexicaux, y compris les items lexicaux formés de plusieurs mots, reçoivent le statut de lemme. En outre, tous les termes sont inclus selon la tradition du mot et sur la base de leur fréquence d'emploi dans le corpus. Hormis ces aspects, les types de formes dialectales ainsi que le type d'items lexicaux de spécialité sont également discutés. D'un point de vue microstructurel, cet article explore différents types de données à considérer pour inclusion dans les articles complexes en particulier. Les paramètres de clarté et de lisibilité ainsi que des procédés propre à la structure d'accès sont également pris en compte.

Mots-clés: DICTIONNAIRE, LEXICOGRAPHIE, PLAN DE DICTIONNAIRE, MÉTALEXICOGRAPHIE, PUBLIC CIBLE, GABON, LANGUE SOURCE, LANGUE CIBLE, ANGLAIS, FRANÇAIS, YILUMBU

## Introduction

Yilumbu ${ }^{1}$ is a developing Bantu language ${ }^{2}$ spoken by about 12000 to 20000 people (Grimes 1996) in Gabon, in the Republic of the Congo, and in the Democratic Republic of the Congo (DRC). Up to the present, French remains the only official language ${ }^{3}$ in Gabon. Therefore, most Balumbu speakers also use French as their lingua franca. The literacy rate ranges from $70 \%$ to $77 \%$. However, French is not the only language that is studied in Gabonese schools, colleges and universities. For example, Italian, German, Spanish, Portuguese, Arabic and especially English are school subjects and they are usually taught as optional second or third languages. Moreover, some Balumbu also speak neighbouring languages such as Yipunu and Civili, to name but two. This article focuses on the Yilumbu variety spoken in Gabon, particularly in three towns, namely Mayumba, Gamba and Setté-Cama.

Linguistically, Yilumbu (B44 Guthrie 1953) is part of the Sira-Punu group (B40) of the Bantu linguistic branch, which includes Ghisira ${ }^{4}$ (B41), Yisangu (B42) and Yipunu (B43) that are all mutually relatively intelligible. Many Yilumbu speakers also speak these languages. There are two main varieties of Yilumbu, Yilŭmbu yí menaáne (Yilumbu of 'I say that'), which shares some features with Yipunu and Yilŭmbu yi ghângu (Yilumbu of 'fry'), ${ }^{5}$ which shares features with Civili (see Blanchon 1984 and Mavoungou 2002b). The language has been the subject of academic enquiry since the late nineteenth century, including Garnier (1897, 1900 and 1904) (based on the dialect spoken in the Nyanga province and the Banio lagoon) and Murard (1903, 1903a) (based on the dialect spoken in the Ogooue-Maritime province and in the cantons of Ndugu and Basse Nyanga). A brief outline of the Yilumbu language is given by Emejulu and Pambo-Loueya (1990).

Yilumbu has been written since 1900, although the orthography has changed since then. Yilumbu orthography is in accordance with the Rapport Final de la Session de Concertation sur l'Orthographe des Langues Gabonaises (1999). However, the latter is not specific with regard to a number of important orthographical issues such as word division, stem tradition versus word tradition, and writing of variants. These aspects will receive some attention in the present article. The Raponda Walker Foundation ${ }^{6}$ is currently conducting research with a view to promoting the introduction of local Gabonese languages into the educational system. At present some Gabonese languages (including Yilumbu, Yipunu and Civili) are being taught in a number of high schools in Libreville and elsewhere thanks to the support of a relatively well-elaborated textbook called Rapidolangue whose writing system combines the alphabet of RapondaWalker (1932) and the set of symbols from the Rapport Final de la Session de Concertation sur l'Orthographe des Langues Gabonaises (1999). According to the research currently being conducted (and started in 1995) by the Raponda Walker Foundation, very little is known about how many people can, for example, actually read and write Yilumbu, Yipunu or Civili. A significant number of Yilumbu speakers are literate in Civili and Yipunu, whose spelling systems resemble that of Yilumbu. At present, there are no books, children's books and
newspapers written in Yilumbu. The Republic of Gabon attaches great importance to the development of local Gabonese languages as well as their introduction into the education system ${ }^{7}$. However, there is no dictionary of Yilumbu. This hinders the introduction of the language into schools. Contrariwise, some lexicographic reference works do exist in Yipunu (Bonneau 1956, CMA ${ }^{8}$ 1966 and Rittaud-Hutinet 1980, to list but a few) and in Civili (Derouet n.d. and Marichelle 1902).

## 1. Project background

According to Wiegand (1998), lexicographic processes refer to all the activities leading to the compilation and publication of a specific dictionary. Any undertaking must therefore begin with a realistic assessment of the pragmatic aspects inherent to that particular project. The current dictionary project can be traced back to a seminar organized by the Ministry of National Education, namely Les États généraux de l'Éducation et de la Formation that took place from 12 to 23 December 1983 in Libreville. One of the recommendations of the workshop was the introduction of Gabonese languages into the national educational system. Another important recommendation was the necessity to provide the Gabonese educational system with manuals, textbooks and good quality dictionaries in all the local languages of the country. These two recommendations were stressed again during the Table ronde sur les recherches linguistiques et l'Enseignement des langues au Gabon that was held from 9 to 11 December 1997 as well as during the Séminaire sur la standardisation de l'orthographe des langues gabonaises that took place in April 1999, also organized by the Ministry of National Education.

In accordance with the terms of these recommendations, three field trips to the Yilumbu-speaking areas in Gabon were successively undertaken during June-September 1995, 1996 and 1997 to obtain data.

Research at grass-roots level has shown that within the Balumbu speech community people urgently need various manuals and textbooks. But most importantly, the lack of a single dictionary could lead to a situation of frustration. It is generally accepted that the existence of dictionaries within a given speech community is a matter of great pride because dictionaries empower. Not surprisingly, the project has received good support from the Balumbu speech community including local administrative authorities (a.o. the mayor of Mayumba and members of the Mayumba Town Council) and leading personalities originating from Mayumba, Gamba and Setté-Cama (ministers, their advisors and collaborators, Members of Parliament as well as businessmen).

## 2. On the choice of French and English as co-target languages

The choice of French as one of the treated languages of the planned dictionary can easily be taken for granted because of the fact that up to the present French
remains the only official language of Gabon. Given the relatively poor representation of English in the linguistic situation in and the language policy of Gabon, the value of English as the co-target language of the planned dictionary together with French may raise some questions. As a matter of fact, English has a low recognition and is mainly used for communication with foreigners. As far as education is concerned, English has been integrated into high school curricula and is consequently taught as first foreign language. Taking the international standing of English into consideration, Busane (1990: 32) emphasizes that, "with the increasing spread of English in Central Africa, it appears that French will have to compete not only with the African languages but also with English". This is a point of great importance, and a lexicographer would do well to heed this observation of Busane.

Busane's statement does not only have implications for the L2 speakers but also for the L1 speakers of the planned dictionary. Although target language data is primarily directed at L2 speakers who wish to have access to Yilumbu it may be a bonus for L1 speakers who can empower themselves in French, the official language, and English whose international status is important, especially nowadays that multilingual education is the key to globalization.

## 3. The target users of the trilingual dictionary Yilumbu-French-English and dictionary use

### 3.1 Target users

In modern-day lexicography, more and more attention is given to the concept of "dictionary awareness" (Hartmann 1999). Dictionaries are produced so that they can be used by the speech communities at which they are directed. A number of metalexicographers such as Hartmann (1989) and Kromann et al. (1991) have correctly emphasized that the assessment of users' needs should always precede dictionary design. The target users of the planned dictionary range, on the one hand, from senior high school pupils to academics who have Yilumbu as first language and a relatively good command of French or English, and, on the other hand, pupils and scholars who want to improve or learn Yilumbu as a second language (Mavoungou 2002a: 185).

### 3.2 Dictionary use

Reference skills are "the abilities required on the part of the dictionary user to find the information being sought" (Hartmann and James 1998: 117). As far as the target user groups of the planned dictionary are concerned, it would not be expected that senior high school pupils and academics have much in common with respect to dictionary use. As a matter of fact, up to the present the teaching of dictionary skills does not form part of the curricula at school level.

Therefore, for most high school pupils of the current dictionary project, it can be assumed that they are not equipped with the necessary dictionary using skills. However, a very few high school pupils may have some knowledge of dictionary use. These pupils may have received informal instruction in dictionary use either from friends or relatives at home, but not in school from a teacher.

As far as academics are concerned, they do have some kind of dictionary using skills, being rudimentary reference skills acquired through informal learning and individual experience. Although it is impossible to satisfy the needs of everyone, it becomes clear from the foregoing that it is the lexicographer's responsibility to find ways of accommodating users. The users' often rudimentary reference skills (on the side of academics) or their absence (on the part of pupils) will have a definite influence on the dictionary conceptualization plan. In other words, dictionary data should be presented as explicitly as possible in order to take into account the needs and reference skills of both experienced and inexperienced users.

### 3.3 The users' socio-cultural background

The potential users of the proposed dictionary represent a culturally and linguistically heterogeneous community. In fact, from a sociolinguistic point of view Balumbu, Bavili and Bapunu, to name a few, often intermarry. As a result, some prospective Balumbu users of the planned dictionary will approach it with different mixes of languages, cultural backgrounds, world views, linguistic competence, etc. In the Mayumba area in particular, polyglossia is the norm rather than the exception. Quite a significant number of Balumbu speakers are literate in Civili and Yipunu, among others, and vice versa. Lexicographers of a Yilumbu dictionary will not have major difficulties incorporating the sociolinguistic aspects of people who have Yilumbu as first language or even those who are literate in more than two or three Gabonese languages (e.g. Civili, Yipunu or even Omyene) since they all share the same historical and linguistic background. Besides native speakers of Yilumbu who might need to use the dictionary, it might also be used by speakers of French or English (living in Gabon and abroad). These two potential user groups will obviously have different socio-cultural backgrounds. In fact, the prospective user living in Gabon and the prime target group (senior high school pupils and academics) will have the same or much the same socio-cultural background. With the users living abroad, the socio-cultural background (linguistic system, world view, etc.) may be different. As far as this particular area is concerned, this will require some attention on the part of the lexicographer. In other words, to deal with this range of backgrounds, a lexicographer must adapt his/her methods and presentation to the sociolinguistic requirements of the potential users. Whatever the decision may be, prospective users must be determined realistically. In fact, a lexicographer cannot satisfy all users' sociolinguistic differences on an equal
basis. The middle way for the lexicographer is to plan his/her dictionary in accordance with the sociolinguistic profile of the most typical target users.

## 4. The purpose, functions, nature and typology of the planned dictionary

Any dictionary project should clearly identify its genuine purpose (cf. Wiegand 1999: 299) prior to the compilation phase. At this stage the genuine purpose of the planned dictionary can be described as follows: On account of the encoding and decoding functions, the planned dictionary should assist native and for-eign-language speakers on an equal basis in retrieving relevant information as quickly as possible. More specifically, the planned dictionary should fulfil two main functions, namely: (a) a dictionary for the Balumbu helping them to understand Yilumbu texts, and (b) a dictionary for the Balumbu helping them to produce Yilumbu texts. Apart from these primary functions, the planned dictionary may also fulfil three other functions, namely: (c) a dictionary for the Balumbu translating from English and French into Yilumbu, (d) a dictionary for French translating from Yilumbu into French, and (e) a dictionary for English translating from Yilumbu into English. The dictionary should fulfil these last two functions (from which it will earn its poly-accessible character) because it will have two separate alphabetical registers, one focusing on the French language and one focusing on the English language. Moreover, the planned dictionary will be a typological hybrid (cf. Gouws 1999: 39) because it will have features of both translation and monolingual dictionaries. As far as monolingual features are concerned, the planned dictionary will provide users with a brief paraphrase of the meaning of the lemma sign in the source language, Yilumbu. With regard to translation features, the planned dictionary will present translation equivalents for lemmata where available (Mavoungou 2002a).

## 5. Scope, direction and function of the planned dictionary

In metalexicographic discourse, the concept of mono-directional is commonly used in the sense of monoscopal. In other words, a mono-directional dictionary is a publication including only one section dealing with the source language and the target languages, i.e. from A to B . In the same way, bi-directional dictionaries are publications encompassing both directions, i.e. from A to B and from B to A. This should, however, not be confused with what Hausmann and Werner (1991) regard as mono-directional/bi-directional and monoscopal/ biscopal. According to Hausmann and Werner (1991: 274), a mono-directional dictionary is a publication directed at the speakers of one of the treated languages, whereas a bi-directional dictionary is meant to serve the speakers of both the treated languages. As far as the planned dictionary is concerned, Hausmann and Werner's terminology is adhered to. In other words, the dictionary under discussion will be monoscopal in that it is only conceived for the
following language direction $A>B$, namely Yilumbu $>$ French-English. The choice of this language direction has many implications in terms of users' needs. As already stated, the current dictionary project is meant in the first place for people who want to have access to the Yilumbu word, its spelling, its meaning, etc. The westernization of communities and the change in lifestyle have already been responsible for a serious decrease in the proficiency of mother-tongue speakers of Gabonese languages. This is why Yilumbu macrostructural elements of the planned dictionary will act as a reference for younger Yilumbu speakers (or learners of Yilumbu) unsure of the meaning of more difficult words.

In addition to the foregoing, the major problem with monoscopal reference works is that only source language forms are lemmatized in the central list. This shortcoming can be remedied by making provision for the inclusion of back matter texts, e.g. an alphabetical register, giving the dictionary a polyaccessible character. Moreover, it will be poly-directional in that it will be directed at the speakers of both the source language and the target languages. As already mentioned, it will earn its poly-accessible character through the inclusion of an additional outer access structure: the alphabetical equivalent register in both French and English as back matter text. Practically every translation equivalent given in the central list will be lemmatized in the register section. This can be done by means of various computer programmes, e.g. the Omkeerbare Bilinguale Lexicale Databanken (OMBI), the Reversible Bilingual Lexical Databases, which is a language editor developed by the Dutch software house Software Engineering Research Centre (SERC) in Utrecht in the Netherlands (Martin 1996). By applying the reversibility principle, OMBI is able to create a secondary macrostructure by merely giving each translation equivalent in the central list a lemma status in the register section. Practically, while building the Yilumbu corpus, a computer programme can reverse all the English and French translation equivalents and the reversed counterparts that are automatically created and stored constitute a second database. The alphabetical registers mentioned above are linked to the concept of the dictionary as text type carrier. In fact, a dictionary may contain different text types, e.g. front matter texts, central list and back matter texts. In accordance with the data distribution structure and in order to add to the poly-accessibility of the dictionary it is part of its editorial policy to include an alphabetical register as one of the back matter texts in the dictionary. As already mentioned, it is difficult to treat both the source language and target languages on an equal basis but provision for the inclusion of back matter registers in both French and English gives the lexicographer the opportunity to treat the three languages of the dictionary in more or less the same way. During the dictionary conceptualization phase it is also important to determine the extent of the utilization of the register section. For example, the back matter could merely contain a text with a list of all the items, which are translation equivalents in the articles of the central list, plus a cross-reference indicating their respective lemmata. Apart from the lexical items
that are translation equivalents in the articles of the central list, the lexicographer could also propose a set of words and phrases used in international discourse, such as globalization, International Monetary Fund, information technol$o g y$, etc., together with their meanings. This is relevant especially nowadays that the world is more and more referred to as a "global village".

## 6. Word categorization and metalanguage used in the planned dictionary

Given the fact that Yilumbu has been selected as the language of primary lemmatization in the planned dictionary, it might be correctly expected that the metalanguage for word categorisation would be given in Yilumbu (the source language). However, the specification of the part of speech to which a lemma belongs is a relatively simple exercise in English and in French but not in Yilumbu. The reason for this is that French and English have long and strong established lexicographic terminologies and a relatively good foundation of metalexicography. Unfortunately, word-class categorization is still a challenge in most African languages. Word categorization related issues have been tackled afresh by linguists and lexicographers working in Zulu and Sepedi in particular (cf. Taljard and Gauton 2001). As far as Yilumbu is concerned, it is part of the editorial policy to use the standardized sets of abbreviations available in English and French in combination with Yilumbu on the metalinguistic level. In other words, the sets of abbreviations $n$. (noun/nom), v. (verb/verbe), adv. (adverb/adverbe), etc. will be used to indicate the part of speech to which the lemma belongs. However, if French or English is chosen as the metalanguage (e.g. the language used for the texts of definitions as well as metalanguage notes in the form of labels) of the planned dictionary, this will be less informative for Yilumbu speakers than for their French and English counterparts whose language will be used predominantly to reflect on the meanings of lexical items as well as the culture underlying them. That is the reason why Yilumbu has been chosen as the metalanguage for the paraphrases of meaning, the so-called diatopic or regional labels such as Ghâng. (short for Yilŭmbu yi ghângu) and Men. (short for Yilŭmbu yí menaánę) and sphere of usage labels such as (mangumba, dance held at a funeral), and encyclopaedic information in complex articles (cf. Gouws 2002) addressed at mother-tongue speakers. With regard to the indication of the part of speech to which the lemma sign belongs, priority has been given to the standardized set of labels in both French and English simply because of the trilingual nature of the work which obviously entails space limitations. The major problem with abbreviations is that abbreviations like $n$., $v$., etc. have much less value for the average dictionary user than their unabbreviated equivalents noun/nom, verb/verbe, etc. In other words, when given implicitly in the central list, the use of a comprehensive system of grammatical coding where all the codes are explained in the users' guidelines has its disadvantages because the user has to turn to the front matter section to retrieve the information he/she is expecting to find in the alphabetical section of the dic-
tionary (Gouws 1993: 36). Ideally, the word class should be given as an unabbreviated entry and this will obviously result in greater explicitness. However, this chiefly depends on the number of pages the lexicographer can allow for his/her dictionary.

With regard to this point, it is part of the editorial policy not to convey word categorization in a too implicit way. In other words, priority will be given to part of speech markers that may be regarded as less problematic for the average person because it will be easier for him/her to reconstruct their full forms. Given the fact that part of speech labels (italicized words in parenthesis or written with small capitals) will encompass a lesser degree of textual condensation, some will be longer than others in order to achieve greater explicitness.

A further aspect related to the problem of the metalanguage used in the planned dictionary is the explanation of the structure of the dictionary. As dictionaries should ideally contribute towards the development of international metalexicographic terminology, the outer texts explaining the structure of the dictionary should be given in the three languages of the dictionary.

## 7. The layout and format of the planned dictionary

### 7.1 The problem

The layout of the data on the dictionary page is a very important component of the dictionary conceptualization phase. Some dictionaries lack a clear indication of the boundaries of the different search zones in a dictionary article. For example, the definition is not clearly perceived by the user, and illustrative examples and idiomatic expressions are hardly ever discriminated from one another.

### 7.2 Decisions taken

### 7.2.1 With regard to the format

Instead of focusing on the way font sizes, styles and layouts of the different text examples will look like in the planned dictionary, this article will merely focus on the way data are presented, on the different principles underlying this presentation, and on the relative ease with which information can be found. Moreover, the data in question can best be presented in tables or frames. For a trilingual dictionary of the kind currently being planned, the ideal will be to have a final product combining dictionary and encyclopedia. In this regard, the format of various paper dictionaries, e.g. the Greater Dictionary of Xhosa, can be used. This dictionary, which is being compiled at the University of Fort Hare, is an explanatory trilingual dictionary with Xhosa, English and Afrikaans as treated
languages, of which Volumes 2 and 3 (K-P and Q-Z), published in 2004 and 1989 and edited by B.M. Mini et al. and H.W. Pahl et al. respectively, have so far been published. Within the central lists of these volumes the user will find Xhosa lemmata as well as their paraphrases of meaning and illustrative examples in the first column of each page. These data categories are then translated into English and Afrikaans in two further columns.

### 7.2.2 With regard to the use of structural indicators

In keeping with Wiegand's (1996) concept of micro-architecture, the black square symbol ■ will be used to mark the occurrence of groupings of sublemmata. On a similar basis another information type, the paraphrases of meaning, will be marked with a small diamond $\bullet$. Co-text entries in the source language starting on a new line will always be introduced by the symbol $\Sigma \|$. The symbols $\rangle$ will be used to mark a specific search zone within a partial article stretch whereas the black upside down triangle $\boldsymbol{\nabla}$ will appear in complex articles, marking an article zone in which the user will be provided with an additional text or lexicographic description of an encyclopedic or extra-linguistic nature.

Moreover, these diamonds, upside down triangles and other structural indicators are determined by the data distribution structure of the dictionary. When dealing with the treatment of lemma signs representing polysemous lexical items, boldface numbers will introduce the different senses and these distinctions in meaning will be numbered in separate sequences after each part of speech. These polysemic senses should not be arranged on a random basis, but according to fixed criteria accounted for in the compulsory text containing the users' guidelines. Consider the lexicographic treatment of the article of the lemma mudika below:

| mudika, mi (+ dika) [mùdík... /mìdík.... ] (aussi/also mudiku) $n$. (cl. 3/4) < ${ }^{*}$ - di d $^{\text {ka }}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 Miluunda mi mwiba $\Rightarrow$ mwiba; ndogha | $\langle\mathbf{F}\rangle$ | 1 Les fruits du manguier sauvage (Irvingia gabonensis). 〈T〉Mangues sauvages. | $\langle\mathrm{E}\rangle$ | 1 The fruits of the wild mango tree (Irvingia gabonensis). $\langle\mathbf{T}\rangle$ Wild mangoes. |
| $\Sigma\|\mid$ Mib'aba mitsibura na ilime! Baana batsyeboola mudika. | $\langle\mathbf{F}\rangle$ | Ces manguiers sauvages là-bas ont vraiment produit cette année! Les enfants sont allés ramasser les mangues sauvages. | $\langle\mathrm{E}\rangle$ | These wild mango trees over there have really produced this year! The children went to pick up some wild mangoes. |
| 2 Dipe (di mudika) vho mweembu bavalaamba na miluunda mi mwiba batsiletuula vho nyangu na ughaanga. | $\langle\mathbf{F}\rangle$ | 2 Pâte et sauce obtenue à partir des amandes de mangues sauvages pilées préalablement séchées et frites. $\langle\mathbf{T}\rangle(f r G a b)$ Pain d'odika ou chocolat indigène; sauce à l'odika. | $\langle\mathrm{E}\rangle$ | 2 Paste and sauce obtained from the pounded kernels of wild mangoes previously dried and fried. $\langle\mathbf{T}\rangle(f r G a b)$ Dika bread; dika sauce. |


| $\sum\left\|\left\lvert\, \begin{array}{c}\text { Maama atsilaamba } \\ \text { mbitsi na mudika. }\end{array}\right.\right.$ | $\langle\mathbf{F}\rangle$ | Maman a préparé de la <br> viande à la sauce odika. | $\langle\mathbf{E}\rangle$ | Mother has cooked some me <br> together with dika sauce. |
| :---: | :---: | :---: | :---: | :---: |

Bavatebaanga muluunda mudika yo bavatela ibilu mudika. Mwiri uvayidisi midika agho bavatela mwiba. Mudika vaandi, mweembu mudika. Nana tununama na iwuma i suupu mudika, ndogha. Byootsu bina a tsisuupu tsyo tsyeetu tsi bakaata balaamba. Byootsu bina a myeembu myo bakaata bo beetu balaamba vho teemu ughulu. Avha teemu ayi yetu avha ika tsitomaata. Bakaata basanayaaba tsitomaata. $\langle\mathbf{F}\rangle$ On casse la noix de la mangue sauvage (pour en extraire l'amande). L'arbre qui produit les mangues sauvages s'appelle mwiba (le manguier sauvage). Le terme mudika renvoie également à la sauce odika. De nos jours, on utilise beaucoup plus le terme d'emprunt "soupe" d'odika, le chocolat indigène. Tous ces termes renvoient aux sauces que préparaient nos ancêtres. Quoique la sauce tomate n'ait pas fait partie des habitudes culinaires de nos ancêtres, aujourd'hui c'est beaucoup plus elle qui tend à être utilisée de façon prédominante (par la population locale). $\langle E\rangle$ The nut of the wild mango is cracked (to remove the kernel). The tree which produces the wild mangoes is called mwiba (the wild mango tree). The lexical item mudika also refers to the dika sauce. Nowadays the borrowed lexical item dika "soup", the indigenous chocolate, is more often used. All these items refer to sauces, which our ancestors used to prepare. Although tomato sauce did not form part of the culinary art of our ancestors, today it is predominantly used (by the native population).

Quot/cit 〈F〉 D'après Raponda-Walker et Sillans (1961: 207-208), le bois (du manguier sauvage), difficile à travailler, mais très résistant, est utilisable pour la grosse charpente, à l'abri de la pluie. Les indigènes l'emploient pour la confection des pilons à mortiers ou auges. Les ménagères recueillent les amandes des fruits pour préparer le pain d'odika (mpongwè, galoa, nkomi, orungu), ndòc (fang), mudika (éshira, bavili, bapunu, masango, banzabi), d'un usage courant dans la cuisine gabonaise. La pulpe amère se mange aussi. Le chocolat indigène, réduit en poudre, peut s'appliquer sur les brûlures. Il intervient encore dans la composition de certains remèdes astringents. En outre, on consomme les râpures de l'écorce dans une grosse banane verte cuite sous la braise, pour enrayer la diarrhée ou la dysenterie; ou bien on la fait macérer pour s'en servir en lavement. À cause de sa fécondité, cette essence est considérée comme un porte-bonheur pour les plantations vivrières. Avec son écorce on fait des talismans pour donner ou rendre la fertilité au sol.
$\langle E\rangle$ According to Raponda-Walker and Sillans (1961: 207-208), the wood (of the wild mango tree), difficult to work but very strong, is used to construct frames for huts. The indigenous population uses it to make pestles and mortars or plates. Housewives collect the kernels of the fruits in order to prepare dika bread (mpongwè, galoa, nkomi, orungu), ndòc (fang), mudika (éshira, bavili, bapunu, masango, banzabi), commonly used in Gabonese cuisine. The bitter pulp (of the fruit) is also edible. The powdered kernels can be applied to burns. It is also used in the preparation of astringent medicines. Moreover, raspings of the bark together with a big green banana (plantain) baked in the embers are used as a remedy for diarrhoea or dysentery; or a decoction of the bark can also be used for enemas. Because of its prolificity, this tree species is believed to bring luck to alimentary plantations. Talismans for giving or restoring fertility to the soil are made from its bark.

## Text example 1: Article mudika

In addition to the foregoing, lexical items with identical spelling but different etymologies (see Table 1) will be entered separately and will have superscript or raised numbers. There should be some guidelines or criteria motivating in which order these homonyms will be presented. The frequency of use of the homonyms in question may be one of the criteria of incorporation and this basis should ideally be reflected in the guide. Merely from the way they create divisions in the lexicographic text, all these typographical, structural and nontypographical elements form part of the rapid access structure of the dictionary because the user is immediately guided to the data he/she is seeking. How-
ever, the lexicographer should be warned against what may be called overordering. A lexicographer may find him-/herself in a situation of over-ordering when using too many structural markers or ordering devices. The application of over-ordering results in lengthier articles with an overwhelming number of structural indicators and search zones to the displeasure of the confused user. Therefore, lexicographers will do well to keep the use of ordering devices to a strict minimum because if they utilize too many it could easily become confusing for the user.

| Yilumbu lexical items | Meaning | Etymology ${ }^{9}$ |
| :---: | :---: | :---: |
| neela ${ }^{1}$ | window | borrowed from the Portuguese janela "window" |
| neela ${ }^{2}$ | ring | borrowed from the Portuguese anel "ring" |
| ureesi ${ }^{1}$ | to divine |  |
| ureesi ${ }^{2}$ | rice | borrowed from the French riz "rice" |
| pali ${ }^{1}$ | type of bush rat |  |
| pali ${ }^{2}$ | malaria | borrowed from the French palu (abbreviation of paludisme "malaria") |
| kala ${ }^{1}$ | crab | *N-kádá |
| kala $^{2}$ | related to the past | ${ }^{*}$-kàdà, ${ }^{*}$ kà-dàìs〉 |
| kafi ${ }^{1}$ | paddle | *-kápì» |
| kafi ${ }^{2}$ | coffee | borrowed from the French café "coffee" |

Table 1: Some lexical item homonyms in Yilumbu

## 8. The macrostructure of the planned dictionary

### 8.1 Introductory remarks

While planning and structuring the macrostructure of a particular dictionary, lexicographers are usually confronted with the question of which lexical items to include and which ones to exclude. Obviously, there is a limit to what can be included in a dictionary. Due to the limited space in a dictionary, the answer to this question should be determined by the target user profile. That at this stage no dictionary exists in Yilumbu should lead the lexicographer towards compiling a standard dictionary, which could play a valuable role in the standardization of the Yilumbu language. In this regard, standard dictionaries must adhere to a certain set of criteria as Gouws (2001: 76) clearly states:

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.

The choice of the typological category of standard dictionaries is relevant for a number of reasons. First of all, Yilumbu has yet to be standardized and no dictionaries are currently available to the speakers of the different speech communities.

With regard to the choice of a standard variety, the macrostructure of a dictionary should not necessarily represent one variety of the language dealt with in the dictionary. When a dialect is chosen to be the standard form it becomes the form for the written language as well as the language of administration and the media, whereas other dialects are confined to spoken and informal communication. The choice of the standard dialect between Yilŭmbu yi ghângu and Yilŭmbu yí menaáne will obviously favour those who already use the chosen variety and impair those who do not. In order to avoid social unrest, a compromise solution is to be preferred to the choice of one single variety. Drame (2001: 235-236) has pointed out that the development of a writing system for isiXhosa by John Bennie in 1824 was based on two dialects, namely Ngqika and Gcaleka. The same principle may be applied to Yilumbu since its two major dialects are mutually intelligible despite variations that might occur in their lexicons. In addition to this, language or dialect standardization is most often initiated from governmental level (language planners) rather than from grass-roots level (speech communities). Put differently, it is the political authorities and language policy makers who should provide metalexicographers with answers or solutions regarding issues relating to dialect choices. The dictionary conceptualization plan also forces the lexicographer into making early decisions as to the types of lexical items to be lemmatized. Given the fact that the planned dictionary does not seek to stick to one single variety for its macrostructural elements, it can be argued that the dictionary in question should function as basis for a series of other dictionaries. This means that from a macrostructural perspective, it is important for the lemma selection of the planned dictionary not to be too restricted. On the contrary, it should include a fairly representative selection of macrostructural items as well as their extensive treatment. In other words, all types of lexical items (nouns, verbs, prefixes, adjectives, possessives, etc. including multiword lexical items) should be included as lemmata. This has a lot of implications as far as lemmatization is concerned (cf. Hausmann and Wiegand 1989: 337 and Gouws 1999: 72). Nouns and verbs are usually regarded as universal categories. Thus their inclusion in a dictionary is often taken for granted. Hausmann and Wiegand (1989: 329) correctly state that in the European tradition, verbs are lemmatized under their infinitive form or under the first person singular of the present indicative. With regard to African languages, two lexicographic traditions exist, namely the word tradition and the stem tradition. According to the word tradition, lexical items are entered in their complete forms, i.e. prefix plus stem, while in the stem tradition lexical items are lemmatized under the stem without their prefixes. It is
part of the editorial policy of the planned dictionary to lemmatize all the lexical items according to the word tradition. However, it is often claimed that the word tradition displays a bias towards prefixation. In other words, the adoption of the word tradition causes some sectors of the dictionary to be overcrowded and others nearly empty. This is especially true of certain data categories such as verbs, adjectives, possessives and so on. One of the ways for the lexicographer to avoid a bias towards prefixation is to combine features of both the word and the stem traditions. In the proposed dictionary verbs will be entered under their imperatives whereas adverbs and adjectives will be lemmatized according to the stem tradition. Consider the following examples in this regard.

> Wenda! (+wenda) [ùwěınd... ] $v$. (cl. 15) ...
> (bi)-ngi [bíıggì] adv. (cl. 8)...
> (u)-diidi [ùdídì] adj. (cl. 1)...

## Text example 2: Articles Wenda!, -ngi, and -diidi

Despite the fact that a decision has been taken to include all types of lexical items, they should not be included on a random basis but according to fixed criteria accounted for in the compulsory target users' text. Among these criteria, usage frequency should be one of the dominant factors. As far as criteria of incorporation of lemmata are concerned and as part of the planning of the macrostructure, the dictionary should deal with all possible dialectal forms. However, they will not be included on account of their occurrence as dialectal forms in the lexicon but on account of their usage frequency in the Yilumbu corpus. For example, the lexical item ngeeyu (you) accounts for 84 or $0,24 \%$ of the records, whereas eeyu (you) appears three times in the entire text of the Yilumbu corpus. This simply means that the focus for the lexicographic treatment of the lexical item meaning 'you' should be on ngeeyu with a cross-reference to eеуи.

As already said, special care should also be taken at the level of the metalanguage to ensure that the dialect in which the lexical items in question are used on a daily basis by mother-tongue speakers are acknowledged by the use of the so-called diatopic or regional labels such as (Ghâng.) and (Men.).

With regard to the macrostructural treatment of borrowed technical terms in various fields such as Mathematics, Biology, Physics, Astronomy, Chemistry, etc., there are two arguments to be considered:
(a) A lexicographer should consider well in advance the delimitation of the macrostructure of the special fields earlier mentioned. This can only be achieved if he/she works in cooperation with universities, institutions of higher learning and high schools by requesting departments of the special fields and teachers to comment on a preliminary term list.
(b) Given the fact that the planned dictionary will be compiled for use by the Yilumbu speech community, they should also be involved in the project as early as possible.

### 8.2 Dictionary basis, computational support and selection of lemma candidate list

As part of the secondary comprehensive lexicographic process (Wiegand 1998) of the planned dictionary, the gathering of speech material at grass-roots level has resulted in the compilation of the dictionary basis (Wiegand 1998: 139) or lexicographic corpus of the dictionary. The recordings were transcribed electronically. The transcriptions of these oral interviews (or data corpus collected so far and referred to in the project background above) have been the object of a frequency study conducted at the Bureau of the WAT (Mavoungou 2000). Relying on the frequency lists obtained, a selection of core vocabulary items was made.

## 9. The microstructure of the planned dictionary

When devising the microstructure of a dictionary, the lexicographer has firstly to consider the issue of what sort of data should be included and what excluded. One criterion for this selection is the dichotomy between what has been called communicative-directed function and knowledge-directed function. According to Bergenholtz and Tarp (2002), communicative-directed functions are meant to assist users in solving problems that might occur during the communication process. As such, they can be referred to as both the production and reception of texts (what is described as decoding and encoding functions by some authors). Knowledge-directed functions provide the user with explanations of the meaning related to the knowledge. Central to these functions is the culture that underlies the language. One aspect of a users' needs assessment encompasses the obligation for the lexicographer to know the users' general cultural and encyclopedic knowledge.

So far, questions about encyclopedic data have been addressed in terms of its relevance in the planned dictionary as well as the extent to which it should be treated. Therefore the question to be asked is: Where should encyclopedic data be included? This question connects with the data distribution structure (Bergenholtz, Tarp and Wiegand 1999: 1778) of the intended dictionary. The easy answer to the lexicographer's dilemma with regard to linguists criticizing the dictionary for not imparting linguistic data only in the definition may be found in the notion of integrated and non-integrated outer texts, as developed by Bergenholtz, Tarp and Wiegand (1999). This concept gives him/her the opportunity to account for encyclopedic data in the front and back matter texts together with a link to the central list. Such a treatment also creates another access possibility for the user and therefore gives the dictionary a poly-accessi-
ble character．For example，the Deutsch－Madagassisches Wörterbuch／Rakibolana Alema－Malagasy by Bergenholtz et al．（1994）presents cultural data（i．e．dealing with routine formulas）in the outer texts of the dictionary（see also Gouws 2002 for a more comprehensive account in this regard）．As far as the planned dic－ tionary is concerned，this notion of integrated and non－integrated outer texts will be used to account for proverbs and idiomatic expressions．In other words， these lexical categories will not be treated in the central text but in back matter texts instead．On the contrary，encyclopedic data will not be accounted for in the lexicographic definition but in a specific slot of a given lemma in the central list．This decision has influenced the dictionary conceptualization plan in terms of the microstructure，access structure，addressing structure，and so on．More－ over，in order to incorporate real－world knowledge in the planned dictionary， the treatment chosen is to include in the so－called complex articles all cultural data that would not be generally known to an English or a French user in par－ ticular．Consider the following dictionary article in this regard：

| malamu（＋lamu）［màlámù］n．（cl．6）＜＊－dámù |  |  |
| :---: | :---: | :---: |
| 1 －Dingiba di yilu（ $\Rightarrow$ mala－ mu ma yilu） | $\mathbf{1}\langle\mathbf{F}\rangle$ Vin récolté sur un pal－ mier non abattu． | $1\langle E\rangle$ Palm wine obtained from a palm tree that has not been felled． |
| $\sum \\|$ Nge malamu utsinu？ | ＜F $\rangle$ Es－tu soûle ？ | 〈E〉 Are you drunk？ |
| 2 Wootsu ke dingiba nana malamu mabeenga vho mala－ mu mangolu． | $2\langle\mathbf{F}\rangle$ N＇importe quel type de boisson alcoolisée tel que le vin ou le whisky． | $2\langle\mathrm{E}\rangle$ Any kind of intoxicating drink such as wine or whisky． |
| $\sum \\| \mathrm{Mi}$ sabenu malamu． | $\langle\mathrm{F}\rangle$ J＇ai arrêté de boire． | $\langle\mathbf{E}\rangle$ I have stopped drinking． |
| 3 （pęta）（Ghâng．）Muyinu bakaata bayinaanga mo teemu dufu（Men．）Muyinu bivhuunda bayinaanga mo dufu． | 3 （ancien．）〈F〉 Danse organisée à l＇occasion des funérailles pour pacifier l＇esprit du défunt （ ou de la défunte）$\Rightarrow$ Yip． ikóóku． | 3 （archaic）〈E〉 Dance held at funerals to pacify the spirit of the deceased．$\Rightarrow$ Yip．ikóóku． |
| $\sum \\|$（Ghâng．）Vho teemu ighulu bayinaanga malamu（Men．） Vho ighoomba i ghaala bayi－ naanga malamu（ $\Rightarrow \boldsymbol{\nabla}$ ）． | $\langle\mathbf{F}\rangle$ Autrefois，on dansait le тalamu（ $\Rightarrow \boldsymbol{\nabla}$ ）． | $\langle\mathbf{E}\rangle$ In the olden days，people danced the таІати $(\Rightarrow \boldsymbol{\nabla})$ ． |
| （cf．2）（Men．）malamu ma mbari（aussi／also ditutu）$(\Rightarrow$ （Ghâng．）mbula）Malamu ba－ vaboonga mu diba／mbari ili vhotsi． | $\langle\mathbf{F}\rangle$ Vin de palme récolté sur un palmier abattu． | 〈E〉 Palm wine obtained from a palm tree that has been felled． |
| $\sum \\|$（Men．）Ubentsuroomba malamu ma mbari vhavha iki isyemu． | $\langle\mathbf{F}\rangle$ Il est en ce moment difficile de trouver du vin de palme． | $\langle\mathbf{E}\rangle$ It is now difficult to find palm wine． |
| （cf．I）malamu ma yilu（ $\Rightarrow$ tsaamba）Malamu bavaboonga mu diba／mbari ili vho yilu． | $\langle\mathbf{F}\rangle$ Vin récolté sur un palmier non abattu． | 〈E〉 Palm wine obtained from a palm tree that has not been felled． |
| $\sum \\|$ Yisyeeli avasumbisi ma－ lamu ma yilu． | $\langle\mathbf{F}\rangle$ Le malafoutier vend le vin de palme récolté sur un pal－ mier non abattu． | $\langle\mathbf{E}\rangle$ The malafoutier is selling the palm wine obtained from a palm tree that has not been felled． |

V (Ghâng.) Vho teemu ighulu bayinaanga malamu. A Mutrafu. Batelaanga dina di mughisi a Mutrafu. Vho yilu malamu ika mangumba. Vho yilu mangumba ke kwagha $\langle\mathbf{F}\rangle$ Au temps des ancêtres, on dansait le malamu. Mutrafu était le nom du génie. Après le malamu vint le mangumba et ensuite le kwagha $\langle\mathbf{E}\rangle$ In the ancestors' time, the mangumba was danced. Mutrafu was the name of the spirit. After the malamu came the mangumba and thereafter the $k w a g h a \Rightarrow$ dingumba.

■ yisyeeli yi malamu ( $\Rightarrow$ yisyeeli); mulaangi malamu ( $\Rightarrow$ mulaangi); malamu Mutrafu (aussi/also malamu ma muvhyaanga) $(\Rightarrow \boldsymbol{\nabla})$; (cf. II) malamu ma myeenga $\langle\mathbf{F}\rangle$ Vin de palme frais $\langle E\rangle$ Fresh palm wine.

## Text example 3: Article malamu

From the data presented in this article given as Text example 3, the user can retrieve much information. In fact, data has been presented in four search zones which can be clearly perceived by the user and which displays an integrated microstructure. The first search zone presents the lemma sign followed by its stem, the phonetic transcription item, the part of speech indicator, and the item giving the class number as well as the proto-Bantu reconstruction. The second search area starting with the Arabic numerals presents a system of direct addressing between the paraphrases of meaning/translation equivalents and their co-text entries. In the third search zone introduced by the black upside down triangle $\mathbf{\nabla}$, the user is provided with lexicographic data of an extralinguistic nature. The fourth section of the article (introduced by the black square symbol ■) presents groupings of sublemmata. This paradigm of compounds with malamu as one of the component parts displays all the characteristic features of a case of nesting because the internal alphabetical ordering is not maintained in the sinuous file. More specifically, this presentation is referred to as second level nesting (Gouws, 2001: 106). In order to anticipate any problem in the retrieval of the information sought by the user, he/she is assisted by entries clearly indicating which sense of malamu applies to a specific treated sublemma.

With regard to the issue of labelling, the temporal label (ancien./archaic) actually tells the user that although the lexical item "malamu" is used on a daily basis by the Balumbu, sense 3 of the lemma sign is now obsolete. It was in use in the past but has now fallen into disuse. The matter to which it refers (funeral dance) is now referred to by another lexical item: "dingumba (pl. mangumba)".

The next text example accounts for the treatment of the lemma ngulubu:

| nggulubu [ทgùlùbù/tsìngúlùbù] $n$. (cl. 9/10) *-gùdùbè |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| - Ibulu yi musiru ili nana ngulu $\Rightarrow$ (Men.) <br> ngulubi | $\langle\mathbf{F}\rangle$ | Animal ressemblant au porc domestique ou cochon vivant en forêt $\langle T\rangle$ Potamochère (Potamochoerus porcus), (frGab) sanglier (voir $\boldsymbol{\nabla}$ et Fig. 1 et Fig. 2). | $\langle\mathrm{E}\rangle$ | Pig-like animal that lives in the forest $\langle\mathrm{T}\rangle$ Bush-pig (Potamochoerus porcus), (frGab) sanglier (see $\boldsymbol{\nabla}$ and Fig. 1 and Fig. 2). |
| $\Sigma \\|$ Kumba atsiboka ngulubu. | $\langle\mathbf{F}\rangle$ | Kumba a tué un potamochère. | <E> | Kumba has killed a bush-pig. |


| $\sum \\|$ Mureela na ditengu <br> batsibengunu na <br> muraanga ngulubu o <br> musiru (kughu yi mureela <br> o ditengu na ghu mutu). | $\langle\mathbf{F}\rangle$Le revenant et le chasseur <br> ont rencontré un trou- <br> peau de potamochères <br> dans la forêt (cf. conte du <br> chasseur fantôme et du <br> chasseur humain). | $\langle\mathbf{E}\rangle$The ghost and the hunter have <br> come across a group of bush- <br> pigs in the forest (cf. story of <br> the ghost hunter and the human <br> hunter). |
| :--- | :--- | :--- | :--- |
| $\boldsymbol{\nabla}\langle\mathbf{F}\rangle$ Les termes potamochère et sanglier doivent être soulignés à cause notamment des diffé- <br> rences référentielles. Le potamochère (Potamochoerus porcus) dénote l'un des mammifères de la <br> faune gabonaise en particulier. Tandis que le sanglier (Singularis porcus) est un mammifère qu'on <br> retrouve essentiellement en Europe. Par conséquent, sanglier est le terme du français local pour <br> désigner le Potamochoerus porcus au Gabon en particulier. |  |  |
| $\langle\mathbf{E}\rangle$ The lexical items potamochère and sanglier need to be clarified mainly because of the differ- <br> ences in denotation. The potamochère (Potamochoerus porcus) refers to one of the mammals of the <br> Gabonese fauna in particular, whereas the sanglier (Singularis porcus) is a mammal mainly found |  |  |
| in Europe. Therefore, the lexical item sanglier is the local French form used to refer to the Potamo- |  |  |
| choerus porcus in Gabon in particular. |  |  |

## Text example 4: Article ngulubu

In the planned dictionary, the focus should be on one variety of English, e.g. British or American English. As far as French is concerned, the emphasis is obviously on the variety of French spoken in France (in Paris in particular). But when including lexical items restricted to a variety exclusively used by the target users of the dictionary, the lexicographer should indicate this restricted usage by employing a system of geographical labels. These labels could have both a lemmatic and non-lemmatic address but help to shift the focus from the source language to the target language when they display non-lemmatic addressing procedures. Accordingly, the treatment of the article of the lemma $\underline{\text { ng}} \mathbf{g u l u b u}$ displays some aspects of the so-called non-lemmatic addressing procedures. In the section dealing with target language data in French in particular, the entry potamochère is given as a translation equivalent of the lemma sign $\underline{\text { ngulubu. With regard to ngulubu, the entry potamochère therefore displays a }}$ lemmatic addressing procedure. The entry sanglier follows potamochère from which it is separated by a comma used to achieve a metacommunicative function. In other words, commas are used to separate synonymous translation equivalents. Although sanglier is also presented as a translation equivalent of the lemma, it displays a non-lemmatic addressing procedure for it is a synonym of potamochère. This already creates topic switching for each non-lemmatic address is a new topic within the article (Hausmann and Wiegand 1989: 329). The topic switching is even strengthened by the occurrence of the entry frGab (short for Gabonese French, cf. Mavoungou 2002, 2002c) given in parentheses and addressed to the translation equivalent sanglier. The so-called diatopic or regional labels (frGab) actually tells the user that sanglier is the local form of French used to refer to Potamochoerus porcus in Gabon in particular. This is important because in monoscopal dictionaries (like the one that is currently being planned), the source language usually remains the only language of treatment. This often results in a lemmatic bias because the lemma receives the
primary focus. However, the target languages should also be seen as languages of treatment shifting the focus from the source language to the target languages (cf. Gouws 1996: 158). This shift in the treatment from a source language dominated approach to an approach where the target languages also come into play is taken somewhat further with the occurrence of the cross-reference entry sanglier. This cross-reference entry consists of two text segments: the reference marker voir (see) and the entry marking the reference address $\boldsymbol{\nabla}$. The upside down triangle takes the user to the distinction between potamochère and sanglier in terms of denotation.

However, if the lexicographer chooses not to make use of the specific slot in which extra-linguistic data are presented (also referred to in some literature as usage note), he/she can rely on the use of pictorial illustrations as a strategy to convey encyclopedic knowledge to the user. Consider Fig. 1 and Fig. 2 in this regard:


Fig. 1: Sanglier (extracted from NPL, 1971: 923)


Fig. 2: Potamochère (extracted from www.samaria.co.za/bushpig.htm)

As visual aids, Fig. 1 and Fig. 2 help the user to fully distinguish sanglier (Singularis porcus) and potamochère (Potamochoerus porcus) from one another.

If a lexicographer wants to take the user to the crux of the physical distinction between potamochère and sanglier in terms of denotation he/she may, for example, use the following encyclopedic definition of Potachoerus porcus taken from http://www.samaria.co.za/bushpig.htm:

Pig-like animal with elongated face and a short, laterally flattened body. Colour varies from reddish to dark brown or nearly black. Covered with hairy bristles with a crest of yellowish hair along back from head to base of tail, hanging over sides of shoulders and body. Ears covered with long tassels of hair, tusks short but very sharp.

If the lexicographic text already gives an account of the distinctive physical features of Singularis porcus and Potamochoerus porcus then pictorial illustrations
should not be used. In fact, there is no need for lexicographers to use both of these devices. A lexicographer can either use a usage note in order to reflect on the physical features distinguishing sanglier and potamochère from one another or he/she may simply use pictorial illustrations. If a lexicographer uses both these devices, the pictorial illustrations will be of more cosmetic or ornamental value than functional components of the dictionary article. In this regard, Gouws (1993: 45-46) has rightfully emphasized:


#### Abstract

Dictionary critics have the right to regard pictorial illustrations as redundant entries if they perform no distinctive function. However, the lexicographical validity of their employment is unquestionable when these entries enhance the comprehension of the target user.


## Conclusion

No dictionary should be attempted without a well-devised dictionary conceptualization plan as part of the dictionary specific lexicographic process. In order to lay a sound lexicographic basis for the planning and compilation of their dictionaries, lexicographers may rely e.g. on Wiegand's theoretical framework. As far as the planned dictionary is concerned, it will be monoscopal in that it is only conceived for the following language direction $A>B$, namely Yilumbu> French-English. However, reverse word lists for French and English will then be supplied after the central list giving the dictionary a poly-accessible character. The discussion above has merely focused on lemma signs representing a high degree of cultural information. This was motivated on the ground of the lexicographer's responsibility for imparting or enhancing the cultural knowledge of the source language. The application of Wiegand's concept of microarchitecture will both result in a decrease in the density of information in the microstructure and an increase in explicitness and user-friendliness of the dictionary. This dictionary project will only fulfil its purpose when completed.

## Acknowledgements

This article was extracted from my D.Litt. dissertation entitled Metalexicographical Criteria for the Compilation of a Trilingual Dictionary Yilumbu-English-French completed in the Department of Afrikaans and Dutch at the University of Stellenbosch. In this dissertation, I used Wiegand's metalexicography in order to establish, e.g., the dictionary basis, the macrostructure, the microstructure, the access structure, the addressing structure and the mediostructure of a trilingual dictionary Yilumbu-English-French. The dissertation was written under the supervision of Prof. R.H. Gouws, a leading authority on metalexicography, for whose directive comments I am grateful. Apart from Prof. Gouws, there are other theoretical lexicographers participating in the development of Wiegand's theory, e.g. Prof. Henning Bergenholtz and Prof. Sven Tarp, the influence of
numerous fruitful discussions I had with them during the work on the dissertation I herewith gladly acknowledge. I also extend my thanks to Prof. D.J. Prinsloo, known for his first-hand knowledge of African languages and lexicography, whose valuable comments from his regular lexicography seminars at the University of Stellenbosch could be incorporated into the final version of the dissertation.

## Endnotes

1. The Yilumbu language is often referred to as Ilumbu or Yiloumbou. The latter is a glossonym written according to a French-based orthography. Yilumbu is spoken by the ethnolinguistic group called Balumbu. This group is also referred to as Baloumbou or Loumbou.
2. A developing language is a language that has yet to be standardized and in which no textbooks, newspapers, dictionaries, etc. are currently available to the speakers of the different speech communities.
3. In Gabon, French is the language of wider communication in business, trade, media, primary and higher education as well as in international communication.
4. Ghisira (also referred to as Gisira or Eshira), Yipunu (also known as Ipunu, Yipounou or Apono), Yisangu (also referred to as Isangu or Masango) and Civili (also known as Vili, Tchivili, Fiote or Ciloango) are sister languages of Yilumbu. Yilumbu, Yipunu, Yisangu and Ghisira are all part of the Sira-Punu group (B40), whereas Civili (H12a) is part of the Kongo group, which includes Bembe (H11), Kiyoombi (H12b), Kunyi (H13a) and Kikongo (H16c).
5. In this article, the official Gabonese spelling is used and not the semiphonetic spelling employed by Guthrie, Jacquot, Kwenzi-Mikala a.o. The underlined $\underline{e}, \underline{o}$ and $\underline{u}$ represent $[\varepsilon]$, [ $\rho$ ] and [ y ] respectively. The phonetic sound [ $\rho$ ] is represented by the symbol $\rho$ in Gabonese orthography.
6. The Raponda Walker Foundation is a non-governmental organization whose main purpose is the promotion of the languages of Gabon and its different cultures.
7. "The Republic of Gabon has been in the process of promoting its local languages for at least the last 15 years. Through the content of his recommendations, the Gabonese States-General for Education and Training (Libreville, 17-23 September 1983) has shown that the Republic of Gabon attaches great importance to the development of local languages as well as their integration into the education system. This willpower is clearly seen through the acts of the Ministry of National Education on the one hand, and the Ministry of Higher Education, Scientific Research and Technological Innovation on the other hand. As an example, the following can be mentioned:
(1) Organization of seminars and conferences
(a) Séminaire sur l'alphabet scientifique des langues du Gabon (20-24 February 1989)
(b) Première table ronde sur les politiques linguistiques et l'enseignement des langues gabonaises (9-11 December 1997)
(c) Session de concertation sur l'orthographe des langues gabonaises (8-10 April 1999)
(2) Creation of the Department of Language Sciences at the University Omar Bongo (1994)
(3) Creation of the Department of Applied Linguistics at the Teachers' Training College (ENS, 1998)
(4) Creation of the Department of National Languages at the National Educational Institute (IPN, 1999)."
(cf. Ndinga-Koumba-Binza 2002).
8. The Christian and Missionary Alliance (CMA) was instrumental in producing religious and lexicographic publications in Yipunu (a sister language of Yilumbu). For example, the Dictionnaire français-yipounou/yipounou-français (1966) is the result of the input from the Language and Literature Committee of the CMA.
9. Most proto-Bantu forms in this Table are from Meeussen (1965) and Nsuka Nkutsi (1980).

## References

## Dictionaries and lexicons

Bergenholtz, Henning in co-operation with Suzy Rajaonarivo, Rolande Ramasomanana, Baovola Radanielina a.o. 1994. Deutsch-Madagassisches Wörterbuch/Rakibolana Alema-Malagasy. Antananarivo: Tsipika/Moers.
Bonneau, J. 1956. Grammaire pounoue et lexique pounoue-français. Brazzaville: Institut d'Études Centrafricaines.
CMA = Église Évangélique du Sud-Gabon. 1966. Dictionnaire français-yipounou/yipounou-français. Mouila: Christian Missionary Alliance.
Derouet, R.P. n.d. Dictionnaire français-vili. Loango: Imprimerie de la Mission.
Hartmann, R.R.K. and G. James. 1998. Dictionary of Lexicography. London/New York: Routledge.
Marichelle, C. 1902. Dictionnaire vili-français. Loango: Imprimerie de la Mission.
Mini, B.M. et al. (Eds.). 2004. The Greater Dictionary of Xhosa (IsiXhosa/English/Afrikaans). Volume 2. $K-P$. Alice: University of Fort Hare.
NPL = Nouveau Petit Larousse. 1971. Paris: Librairie Larousse.
Pahl, H.W. et al. (Eds.). 1989. The Greater Dictionary of Xhosa (IsiXhosa/English/Afrikaans). Volume 3. Q-Z. Alice: University of Fort Hare.
Rittaud-Hutinet, C. 1980. Lexique. Nsuka-Nkutsi, F. (Ed.). 1980. Éléments de description du Punu: 193-245. Lyons: Presses Universitaires de Lyon.

## Other literature

Bergenholtz, H. and S. Tarp. 2002. Die moderne lexikographische Funktionslehre. Diskussionsbeitrag zu neuen und alten Paradigmen, die Wörterbücher als Gebrauchsgegenstände verstehen. Lexicographica 18: 253-263.
Bergenholtz, H., S. Tarp and H.E. Wiegand. 1999. Datendistributionsstrukturen, Makro- und Mikrostrukturen in neueren Fachwörterbüchern. Hoffman, L., H. Kalverkämper and H.E. Wiegand (Eds.). 1999. Fachsprachen. Ein internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft/Languages for Special Purposes. An International Handbook of SpecialLanguage and Terminology Research: 1762-1832. Berlin/New York: Walter de Gruyter.
Blanchon, J.A. 1984. Présentation du Yi-lumbu dans ses rapports avec le Yi-punu et le Ci-vili à travers un conte traditionnel. Pholia: Revue du Laboratoire de Phonétique et Linguistique Africaine 1: 7-35.

Busane, M. 1990. Lexicography in Central Africa: The User Perspective, with Special Reference to Zaïre. Hartmann, R.R.K. (Ed.). 1990. Lexicography in Africa. Progress Reports from the Dictionary Research Centre Workshop at Exeter, 24-26 March 1989: 19-35. Exeter Linguistic Studies 15. Exeter: University of Exeter Press.
Drame, A. 2001. Foreign Words as Problems in Standardisation/Lexicography: English and Afrikaans Loan-words in IsiXhosa. Lexikos 11: 231-241.
Emejulu, J.D. and F. Pambo Loueya. 1990. yilumbu. Revue Gabonaise des Sciences de l'Homme 2: 197201.

Garnier, A. 1897. Katesisa i gheghe nesi ma loghi ma dzambi mu mbembu i-lumbu. Loango: Imprimerie de la Mission.
Garnier, A. 1900. Syllabaire i-lumbu keti mi ganda mio mi teti mi ranganga mu mbembo i lumbu. Loango: Imprimerie de la Mission.
Garnier, A. 1904. M'ambu ma nzambi mo make mu katesisa. Loango: Imprimerie de la Mission.
Gouws, R.H. 1993. Afrikaans Learner's Dictionaries for a Multilingual South Africa. Lexikos 3: 2948.

Gouws, R.H. 1996. Bilingual Dictionaries and Communicative Equivalence for a Multilingual Society. Lexikos 6: 14-31.
Gouws, R.H. 1999. A Theoretically Motivated Model for the Lexicographic Processes of the National Lexicography Units. Research report submitted to the Pan South African Language Board.
Gouws, R.H. 2001. Lexicographic Training: Approaches and Topics. Emejulu, J.D. (Ed.). 2001. Éléments de lexicographie gabonaise. Tome I: 58-94. New York: Jimacs-Hillman Publishers.
Gouws, R.H. 2002. Using a Frame Structure to Accommodate Cultural Data. Emejelu, J.D. (Ed.). Éléments de lexicographie gabonaise. Tome II: 54-69. New York: Jimacs-Hillman Publishers.
Grimes, B.F. $1996^{13}$. Ethnologue. Dallas: Summer Institute of Linguistics, Inc.
Guthrie, Malcolm. 1953. The Bantu Languages of Western Equatorial Africa. London: Oxford University Press.
Hartmann, R.R.K. 1989. Sociology of the Dictionary User: Hypothesis and Empirical Studies. Hausmann, F.J. et al. (Eds.). 1989-1991: 102-111.
Hartmann, R.R.K. 1999. Lexical Reference Books - What Are the Issues? International Journal of Lexicography 12(1): 5-12.
Hausmann, F.J. and R.O. Werner. 1991. Spezifische Bauteile und Strukturen zweisprachiger Wörterbücher: Eine Übersicht. Hausmann, F.J. et al. (Eds.). 1989-1991: 2729-2769.
Hausmann, F.J. and H.E. Wiegand. 1989. Component Parts and Structures of General Monolingual Dictionaries: A Survey. Hausmann, F.J. et al. (Eds.). 1989-1991: 328-360.
Hausmann, F.J. et al. (Eds.). 1989-1991. Wörterbücher: Ein internationales Handbuch zur Lexikographie/Dictionaries: An International Encyclopedia of Lexicography/Dictionnaires: Encyclopédie internationale de lexicographie. Handbücher zur Sprach- und Kommunikationswissenschaft, vol. 5.1.-5.3. Berlin: Walter de Gruyter.
Kromann, H.-P., T. Riiber and P. Rosbach. 1991. Principles of Bilingual Lexicography. Hausmann, F.J. et al. (Eds.). 1989-1991: 2711-2728.

Martin, W. 1996. Lexicographic Resources in a Multilingual Environment: An Orientation. Lexicography as a Financial Asset in a Multilingual South Africa: 9-24. Pretoria: Department of Arts, Culture, Science and Technology.
Mavoungou, P.A. 2000. A Frequency List of the Yilumbu Language. Unpublished study conducted at the Bureau of the Woordeboek van die Afrikaanse Taal (WAT), Stellenbosch.

Mavoungou, P.A. 2002. Synopsis Articles in the Planning of a Trilingual Dictionary: Yilumbu-French-English. Lexikos 12: 181-200.
Mavoungou, P.A. 2002a. Sociolinguistic and Linguistic Aspects of Borrowing in Yilumbu. South African Journal of African Languages 22(1): 41-58.
Mavoungou, P.A. 2002b. Metalexicographical Criteria for the Compilation of a Trilingual Dictionary: Yilumbu-English-French. Unpublished D.Litt Dissertation. Stellenbosch: University of Stellenbosch.
Mavoungou, P.A. 2002c. Vers un dictionnaire du français du Gabon. Emejulu, J.D. (Ed.). 2002: Éléments de lexicographie gabonaise. Tome II: 230-262. New York: Jimacs-Hillman Publishers.
Meeussen, A.E. 1965. Reconstructions grammaticales du bantou. (Traduction française). Tervuren: Musée Royal de l'Afrique Centrale.
Ministère de l'Éducation Nationale. 1999. Rapport Final de la Session de Concertation sur l'Orthographe des Langues Gabonaises. Libreville: Education Nationale.
Murard, P. (Tr.). 1903. Katsisu i keki i rendilu mu mbembo bis'Sette-Cama (petit catéchisme). Lyons: Imprimerie Paquet.
Murard, P. (Tr.). 1903a. Katsisu i neni i rendilu mu mbembo bis'Sette-Cama (grand catéchisme). Lyons: Imprimerie Paquet.
Ndinga-Koumba-Binza, H.S. 2002. The Bold and the Beautiful Languages in Gabon. Unpublished paper presented at the Department of General Linguistics, University of Stellenbosch, Stellenbosch, 13 August 2002.
Nsuka-Nkutsi, F. (Ed.). 1980. Éléments de description du Punu. Lyons: Presses Universitaires de Lyon.
Raponda-Walker, A. 1932. L'alphabet des idiomes gabonais. Journal de la Société des Africanistes 2(2): 139-146.
Raponda-Walker, A. and R. Sillans. 1961. Les plantes utiles du Gabon: essai d'inventaire et de concordance des noms vernaculaires et scientifiques des plantes spontanées et introduites du Gabon. Paris: Lechevalier.
Taljard, E. and R. Gauton. 2000. Supplying Syntactic Information in a Quadrilingual Explanatory Dictionary of Chemistry (English, Afrikaans, isiZulu, Sepedi): A Preliminary Investigation. Lexikos 10: 191-208.
Wiegand, H.E. 1998. Wörterbuchforschung. Untersuchungen zur Wörterbuchbenutzung, zur Theorie, Geschichte, Kritik und Automatisierung der Lexikographie. Berlin/New York: Walter de Gruyter.
Wiegand, H.E. 1999. Semantics and Lexicography. Selected Studies (1976-1996). Edited by Anntje Immken and Werner Wolski. Lexicographica. Series Maior 87. Tübingen: Max Niemeyer.

