Planning and Macrostructural Elements for a Multilingual Culinary Dictionary of Gabonese Languages*

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Abstract: This paper is an account of an ongoing dictionary project. It aims to outline the main features of the planned dictionary. The project is a first of its kind in Gabonese lexicography. The current paper gives a description of the data collection and sources as well as the macrostructural issues of the forthcoming dictionary. The paper starts with a brief outline of the project background, needs and interests.

Keywords: CULINARY DICTIONARY, MULTILINGUAL DICTIONARY, DATA COLLECTION, MACROSTRUCTURAL ELEMENTS

Résumé: Eléments de planification et macrostructuraux pour un dictionnaire multilingue de cuisine des langues gabonaises. La présente communication est un rapport sur un projet de dictionnaire en cours. Elle vise à décrire les principales caractéristiques du dictionnaire projeté. Ce projet de dictionnaire est une première dans la lexicographie gabonaise. Dans cet article une description est faite de la collecte des données et des sources du dictionnaire ainsi que de ses caractéristiques macrostructurales relatives du dictionnaire en projet. L'article commence par un bref aperçu du background, des besoins et de l'intérêt du futur dictionnaire.

Mots-clés: DICTIONNAIRE DE CUISINE, DICTIONNAIRE MULTILINGUE, COLLECTE DES DONNEES, ELEMENTS MACROSTRUCTURAUX

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1. Introduction

This article is an account of an on-going research project. The project is concerned with the compilation of a multilingual culinary dictionary for Gabonese languages. This paper primarily seeks to present the conceptualization of the intended dictionary. This should consequently attract attention and allow for the gathering of input from experts.

African cuisine is known as one of the exotic culinary pieces in the world. This explains why African restaurants are becoming more and more common in most of the world's biggest cities. In some of these restaurants, menus, dishes and recipes are often named in their original African languages. Nevertheless, a culinary dictionary in any African language hardly exists. The current project is intended to fill the gap with specific attention on Gabonese cuisine and languages.

In addition, one of the current trends in Gabonese lexicography for the past few years has been the compilation and publication of thematic dictionaries. This is an outcome of a fast-growing move to onomasiological studies in Gabonese linguistics (Raponda-Walker 2002, Malekou 2007, Kwenzi Mikala 2008, Mickala Manfoumbi 2011 and 2012). Although the forthcoming dictionary can be labeled as a thematic dictionary, it will however differ from most thematic dictionaries on various metalexicographical aspects such as a clearly-indicated typology, an identification of target users and a formulation of a genuine purpose.

The present paper contains three main sections, i.e. the data collection and sources, and the macrostructural features of the planned dictionary. These are preceded by a brief outline of the dictionary project background, needs and interests.

2. Project Background, Needs and Interests

The current planned dictionary project stems from an ethnolinguistic study that focused on the inventory, the denomination and the typology of culinary items in Gabonese languages. The ethnolinguistic project had made a distinction between names for comestibles, names for special dishes and names for kitchen tools for making those dishes. Cookware and kitchen tools can look alike in different cultures, but cooking methods and food preservation procedures vary from one region to another or from one culture to another. In fact, the main aim was to identify, inventory and classify the various traditional cookware and kitchen tools, cooking methods and food preservation techniques that exist within multicultural Gabon.

The ethnolinguistic project revealed the needs for such a dictionary in the context of multilingual Gabon. In fact, Gabon is known to be a language mosaic with French as the predominant and sole official language (cf. Ndinga-Koumba-Binza 2007). However, the population of Gabon is firmly of the Bantu

culture (cf. Kwenzi Mikala 1988 and 1989) as it is shown through their culinary tradition, habitual dressing codes, music, costumes and beliefs, etc. A multilingual dictionary will firstly reveal not only the development of the natural common Bantu lexicon (which in fact plays a role in the mutual intelligibility between a number of these languages), but also the development of African language vocabulary through linguistic adoptives, i.e. loanwords (cf. Raponda-Walker 1955). This dictionary project will contribute to proving or invalidating the hypothesis that argues that the Gabonese ethnolinguistic groups largely share a strong cultural heritage. Equally, the project will inevitably contribute to the preservation of the multi-ethnic Gabonese culture.

It should be noted that the target users of the planned dictionary are the public at large, starting at the population of Gabon, which is known to have a literacy rate of near 95% (cf. Nzang-Bie 2001).

3. Data Collection and Sources

This section is concerned with the data gathered for the planned dictionary. The first three sub-sections are concerned with the sources where data were gathered from. Data sources for a dictionary are known as the dictionary basis, which comprises the primary sources, the secondary sources and the tertiary sources (cf. Svensén 2009: 39, Ndinga-Koumba-Binza and Saphou-Bivigat 2012: 237). The different sources and their specificities are duly presented in this section. The last sub-section presents the type of data collected, which includes linguistic data and cultural data. The difference between the two types of data is also explained.

3.1 Fieldwork and primary sources

As mentioned in the previous section, this dictionary project stems from an ethnolinguistic research project. Thus, the primary data source of the planned dictionary is indeed the database resulting from research fieldwork for the ethnolinguistic project. Fieldwork and open-ended oral interviews were conducted in various villages for speech data and tools identification. There were no specific questionnaires for the interviews.

The main reason for choosing to conduct fieldwork in villages, and not in urban areas, is the fact that villages are still the custodians of culture as pointed out in most studies on Gabonese villages (cf. Lisimba 1997, Mayer 2002, Raponda-Walker 1963, Balandier and Pauvert 1952). Villagers still speak their respective native languages commonly on a daily basis (cf. Mabika Mbokou 2012, Ndinga-Koumba-Binza 2011 and 2005b). Indigenous knowledge is also still very well preserved in villages (cf. Mearns 2006 and 2007, Mearns, Du Toit and Mukuka 2006, Mwaura 2008, Lwoga, Ngulube and Stilwell 2010). Meanwhile, culinary culture is much influenced in cities where the populations are

experiencing many imported eating and food habits (e.g. fast food shops, Asian restaurants, European cuisine, etc.).

The methodology used for data collection was adopted and adapted from Medjo Mvé (2011) and from Kwenzi Mikala and Bigoundou (1999), which consists of collecting only lexical items from native speakers in the village by fieldworkers who are native speakers themselves of the language in use in a specific area. The specificity of the methodology in the current project is two-fold. First, the main informants were all female. This is due to the fact that cooking is notably a women's activity in Gabonese culture. Thus, the hypothesis on the fieldwork was that women would know much more about cookware and cuisine items than men. However, a few men were also consulted as occasional informants, especially when it came to translating the lexical items into French.

The second aspect of the specific methodology is the fact that fieldwork was not conducted on the basis of a questionnaire, but solely on discussions in kitchens just before and/or after lunch and/or supper time. The discussions were mainly focused on getting names of tools used, of meals made and of recipes. The main reason for this choice was the difficulty to make a questionnaire *ex nihilo*. In fact, the existing linguistic and anthropological questionnaires appear too impressionistic for domain-specific research such as cuisine. This reason adds to another difficulty, i.e. the quasi impossibility of finding a study of the same kind in African languages.

Subsequently, various intensive fieldwork sessions were conducted by different small groups (of two to three researchers) in a number of villages of the nine provinces of Gabon. The purpose of the fieldwork was to collect both visual and spoken data. Data obtained from the fieldwork and comparative classification appear adequate to gather the necessary material for a multilingual dictionary.

The general corpus of the lexical items constitutes the dictionary basis as the primary source of the planned multilingual dictionary. This corpus was built from recorded speech data. It is in fact known that the nature of primary sources can depend on whether the language a dictionary is being made for has enough written resources. Otherwise, the primary sources will be oral sources (cf. Granberry 1993, Nzang-Bie 2002, Soami 2002 and 2010a, Ndinga-Koumba-Binza and Saphou-Bivigat 2012). This is the case of the current dictionary project whose primary source is the corpus built from speech data collected during fieldwork in Gabon where most native languages are still being reduced to writing (cf. Ndinga-Koumba-Binza and Roux 2009, Hubert and Mavoungou 2010, Ndinga-Koumba-Binza 2010a).

3.2 Secondary sources

According to Wiegand and Kučera (1981: 100), secondary sources can often be written materials which are in principle all the dictionaries consulted during

the compilation phase of the dictionary. It is known that the emerging Gabonese lexicography is fast-growing, experiencing the production of many dictionaries in the last fifteen years (cf. Ndinga-Koumba-Binza 2005a and 2010b, Ekwa Ebanega and Tomba Moussavou 2006 and 2008).

The current existing Gabonese dictionaries consist of two types. The first is made of bilingual and multilingual dictionaries which comprise dictionaries and references works made by religious missionaries and colonial administrators of the early era of dictionary production in Gabon (cf. Ndinga-Koumba-Binza 2005a: 138; Ekwa Ebanega and Tomba Moussavou 2008: 350). Among other these dictionaries: Biton (1907), Galley (1964), ILALOK (2008), Lemoine (1994), Marichelle (1902), Mickala Manfoumbi (2004), Raponda-Walker (1995), Van der Veen and Bodinga-bwa-Bodinga (2002), Mavoungou and Plumel (2010), Mintsa (2013a) and Idiata and de Nadillac (2012) to name a few.

The second type is made of monolingual dictionaries of Gabonese French (cf. Mavoungou 2013). These are Boucher and Lafage (2000), Ditougou (2009), Dodo-Bounguendza (2008, 2010 and 2013), Mavoungou *et al.* (2014), and Moussounda Ibouanga (2011).

All dictionaries consulted were the sources for not only written data, but also and mainly for a number of equivalences for lexical items in French. Other sources such monographs and studies in the fields of linguistics and anthropology were also from times to times consulted whenever necessary. A few of these studies include Mintsa (2013b), Mba Abessole (2006), Idiata (2006) Akomo-Zoghe (2010), Loembe (2005), Mavoungou and Ndinga-Koumba-Binza (2010), Mabik-ma-Kombil (2001), Etsio (1999) and Rekanga (2014). The entire series of *Rapidolangue*, a method for learning Gabonese native languages developed Raponda-Walker Foundation (Hubert 2010, 1997 and 1995) was also consulted whenever necessary.

3.3 Linguistic data and cultural data

The current study notes a difference between linguistic data and cultural data. Linguistic data refers to speech data recorded from specific language speakers during the fieldwork. This is comprehended in the traditionally limited conception of linguistic data in the field of linguistics, i.e. "the observable patterns of speech or writing, especially when recorded and gathered together in a corpus" (Crystal 2008: 128). Linguistic data recorded in Gabonese native languages for the projected dictionary were processed in lemmatization procedures to form the lemmata of the dictionary.

Table 1 below displays a sample of linguistic data recorded. The dictionary project being a multilingual project, only five Gabonese native languages are considered in the table sample below. Thus, column 1 presents linguistic terms in Fang, column 2 contains words in Lumbu (also known as Yilumbu), and column 3 displays lexical items in Nzebi (also called Yinzebi). The two last columns contain equivalences of the linguistic data in Obamba (also called

Fang	Yilumbu	Yinzebi	Obamba	Civili
Akok	Ibenga	Ishighu	Kri	Cibenga
Sas	Tsafu	Tsegha	Ntshighi	Nsafu
Ngon	Teeri	Ndzaka	Ndjeghe	Ntêta
Edong	Yufu	Mbungu	Odu	Cufu

Lembaama) and Vili (also known as Civili) respectively.

Table 1: Sample of linguistic data in different languages (see Addendum for images of these items)

A cuisine is of the most intrinsic features of a culture (cf. Albala 2011). This explains why a cuisine is always associated to a culture or a region. It is in fact often ethnically, nationally or continentally labeled. At ethnic level, we have examples such as Sotho cuisine, Nguni cuisine and Afrikaans cuisine. At national level, examples can be Gabonese cuisine, Mozambican cuisine and South African cuisine. At continental level, we have African cuisine, Asian cuisine and European cuisine as examples. At national and at continental levels, the label mainly refers to respectively the similarities between various ethnic groups within the same nation and between various nations within the same continent. For instance, although it originated from Japan, sushi has become known as an Asian cultural meal for being most often served in any Asian restaurant in the western world.

The main reason of the association to a culture or a region is the fact that a cuisine is in a pure sense a cooking style involving distinctive ingredients, techniques and dishes. And it is generally influenced by both the availability of ingredients locally and the religious or traditional laws. The fact that a cuisine is an inherent item of a culture (implying identity the same way a language does) denotes that collecting linguistic data related to it is a form of cultural data collection.

The cultural data collection consisted of four procedures. The first procedure was to see the physical item. The second procedure was the acquisition of the linguistic data of the item. The third procedure was to take a digital photograph of the item. The fourth procedure was the acquisition of knowledgeable information about each item. In some circumstances, the informants also willingly gave the items to the fieldworkers as tokens of appreciation for the visit and interest on their culture.

The speech data were also digitalized in the process of building the corpo-

ra in Microsoft Excel sheets. The speech data are included on the corpus in the form of orthographic and phonetic transcriptions.

4. Macrostructural Issues and Decisions

Like most dictionaries of Gabonese native languages, the planned dictionary has to encounter a number of macrostructural challenges. The current project is concerned with the following issues, i.e. the orthography of Gabonese languages, the lemmatization, and ordering as well as terminology equivalences in French.

4.1 Alphabet and orthography

As it has been mentioned earlier, native Gabonese languages are unwritten languages to date. Nevertheless, various proposals have been made to put Gabonese languages in writing (cf. Raponda-Walker 1932, Hombert 1990, Mayer 1990, Idiata 2002, Maloughou Mangama 2009, Ndinga-Koumba-Binza and Roux 2009 and Ndinga-Koumba-Binza 2010a). It is unfortunate that "none of the proposals have yet received government accreditation to be taught and used in schools" (Ndinga-Koumba-Binza and Saphou-Bivigat 2012: 240). In addition, there also exist proposals specific to a particular language such Civili (Ndinga-Koumba-Binza 2010c), Fang (Afane Otsaga 2010), Yilumbu (Mavoungou 2010a) and Yipunu (Soami 2010b). It even appears awkward that related languages such as Civili, Yilumbu and Yipunu have three different orthography proposals.

Following Ndinga-Koumba-Binza and Roux (2009), contributors in Hubert and Mavoungou (2010) reflected on a unified, harmonized and standardized orthographic system for all Gabonese languages. Their proposal is a revised version of the proposal adopted at the national experts' workshop in April 1999 (cf. Idiata 2002). The proposal in Hubert and Mavoungou (2010) takes into account a number of issues raised in previous proposals (especially those contained in Raponda-Walker 1932, Mavoungou 2010a, Afane Otsaga 2010, Soami 2010b and Ndinga-Koumba-Binza 2010c) and by Ndinga-Koumba-Binza and Roux (2009).

The current dictionary project makes use of the latter proposal, which is unifying and harmonizing as suggested in Hubert and Mavoungou (2010). It is a proposal that bears a maximum of community-acceptable criteria mentioned by Ndinga-Koumba-Binza and Roux (2009) for a user-friendly orthographic system.

Ndinga-Koumba-Binza and Roux (2009: 101) suggest that a writing system for the minor languages such as those of Gabon should be based on:

(i) phonological characteristics,

- (ii) an alphabet for orthographic purposes, including writing, reading, punctuation and capital letters rules,
- (iii) user-friendliness in learning and writing,
- (iv) minimum of problems in readability,
- (v) machine printability, and
- (vi) uniformity for all Gabonese languages

4.2 Word tradition lemmatization

As far as the structure of the lemma is concerned, the projected dictionary follows the tradition adopted in most dictionary projects in Gabon, i.e. word tradition lemmatization (cf. Ndinga-Koumba-Binza and Saphou-Bivigat 2012: 242). This means that lexical items of the lemmata enter in their complete structural form according the word division and are lemmatized with their noun prefixes. It is seen in Mavoungou (2010b) that the custom in Gabonese lexicography with regard to word division is to write conjunctively in all lexical instances (the word is prefix + stem) and disjunctively in morphosyntactic and verbal declinations (predicates, copulas, verbs, etc. are separated from each other in a phrase or sentence).

It is our view that both word tradition and the word division adopted by this dictionary contribute more to the dictionary user-friendliness than the stem tradition and any other word division. In fact, the general public who the dictionary is targeted to is not only mostly acquainted with the French word division, but also may not understand the segmentation of the prefix from the stem.

4.3 Terminology equivalence issue

Terminology equivalence has been an issue in both bilingual lexicography and translation studies (cf. Adamska-Sałaciak 2010, Wiegand 2002 and Koller 1995). In fact, very often lexicographers are faced with the "absence of lexical equivalence" (Hohulin 1986: 43) or with no "perfect interlingual correspondence" (Adamska-Sałaciak 2011: 2) from one language to another. Adamska-Sałaciak (2011: 2) indicates that the "reasons for this can be located on three interrelated planes: language structure itself, the extralinguistic world, and the human mind".

The situation appears to be the same in the context of Gabonese native languages to French and vice versa when it comes to cooking and gastronomic items. In this case, the extralinguistic world, i.e. differences on culinary habits which are founded on cultural differences, is the main reason for terminology equivalence issues of the planned dictionary.

Nevertheless, as the terminology equivalence issue has been variously dealt

with in the lexicographic literature (cf. Zgusta 1987, Gouws 1996 and 2002, Wiegand 2002, and Adamska-Sałaciak 2010 and 2011), a number of strategies exist for dealing with lexicographic equivalence cases. For the present study, all linguistic data were recorded in the mother-tongue of the informants with translation in French.

The interviewees provided the translation in French whenever possible, and the fieldworkers had to require the help of other informants when an interviewee could not provide a French equivalence of any lexical item. A third alternative for the determination of lexical equivalence was to check in existing dictionaries of Gabonese languages (including Gabonese French dictionaries such as Dodo-Bounguendza 2008, 2010 and 2013; Ditougou 2009 and Mavoungou *et al.* 2014). This alternative was also for the verification of translations obtained from interviewees.

Loanword adoption is found among other strategies for translation as part of solving the terminology equivalence issue. In the direction from French to Gabonese native languages, the equivalence issue is often solved with the fact the latter record a great number of loanwords adopted from the former. The examples below in (1) show a few of adoptives from French (Fr.) into Civili (Civ.), Yilumbu (Yil.), Yinzebi (Yin.) and Pove (Pov.).

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(1) a. zoni (Civ.) <Fr. oignon "onion"
b. sukila (Yil.) <Fr. sucre "sugar"
c. ingata (Yin.) <Fr. gateau "cake"
d. nyonde (Pov.) <Fr. oignon "onion"
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There also exist a great deal of loanwords adopted from other European languages such as English (Eng.) and Portuguese (Port.). A few examples for the word "*rice*" in Civili (Civ.), Pove (Pov.), Yipunu (Yip.) and Myene (Mye.) are contained in **(2)** below.

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(2) a. loosu (Civ.) <Port. aroz
b. oresi (Mye.) <Eng. rice
c. uresi (Yip.) <Eng. rice
d. mulesu (Pov.) <Port. aroz
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On the other hand, in the direction from Gabonese native languages to French, the issue is more complicated with the total absence of lexical equivalence of Gabonese culinary and food realities in the French language. In fact, when the encounter between Western civilization and African cultures took place, the latter were mainly in a receiving position and thus had less influence on the former. This explains why there are very few African loanwords in European languages compared to European loanwords in African languages. Medjo Mvé (2007) believes that the French language is in the process of evolving as it is more and more including in its lexicon African loanwords such as Gabonese native language words. This is particularly true of Gabonese French. The

examples below in **(3)** show some of the rare African loanwords in Gabonese French related to culinary lexicon. The source languages of these loanwords are Myene (Mye.), Fang, Yipunu (Yip.) and Teke.

- (3) a. odika <Mye. "fruit of *Irivingia Gabonensis*"
 - b. folong <Fang. "a type of vegetable"
 - c. musungu <Yip. sugarcane wine1
 - d. safou <Civ. "fruit of Burseraceae Dacryodes Edulis"²
 - d. nkumu <Teke. "a type of vegetable" (Gnetum Africanum)
 - e. nyembwe <Mye. "palm nut sauce"

The second strategy for translation of items from Gabonese native languages into French was the use of local designations. This is mainly based on Gabonisms, i.e. particular Gabonese lexical items and expressions found in French the way it is spoken in Gabon (cf. Mavoungou 2013, Dodo-Bounguendza 2008, Ompoussa 2008 and 2011, Bagouendi-Bagère Bonnot 2007). Most of these lexical items and collocations are formed through calque and semantic shifts when equivalences do not exist in French. The following examples in (4) are noted in French from languages such as Myene (Mye.), Pove (Pov.), Civili (Civ.) and Yinzebi (Yin.).

- (4) a. odika (Mye.): chocolat indigène (fruit of *Irivingia gabonensis*)³
 - b. ngoya (Pov.): sanglier (potamochoerus suinae)4
 - c. cilemba (Civ.): feuilles de manioc (leaves of manihot esculenta)⁵
 - d. bukulu (Yin.): oseille à petites feuilles (Hibiscus Sabdariffa)6

4.4 Thematic and alphabetic ordering

One of the key components in the nomenclature of the planned dictionary is its thematic and alphabetic ordering. This determines the type of the dictionary in planning. In fact, although it is planned to be a multilingual translation dictionary, the planned dictionary cannot avoid containing a number of encyclopedic features such as the ordering, the full definition of extralinguistic and cultural items as well as the pictorial illustrations.

Thematic and alphabetic ordering is common practice in encyclopedic dictionary compilation. According to Stark (2011: 101), the "advantages of alphabetical order are its familiarity, fixed nature, and objectivity... The benefits of alphabetical order are so enduring that some dictionaries with thematic content have opted to arrange their themes alphabetically". The planned dictionary is indeed a thematic dictionary since it is intended that the macrostructural nomenclature is to be organized in themes and the themes will be arranged alphabetically. Entries will also be presented alphabetically within each theme.

Thus, the ordering organization will presumably look as follows below in **(5)** where uppercase letters A, B and C denote the themes, the lowercase letters

a, b, c, etc. indicate the sub-theme and the Arabic numbers characterize the entries in a sub-theme.

(5)

- A. Cookware
- B. Dishes
- C. Food and ingredients
- a. Dairy
- b. Drinks
- c. Fish
- d. Fruits
 - 1. apricot
 - 2. banana
 - 3. cherry
 - 4. lemon
 - 5. mango
 - 6. orange
- e. Meat
- Poultry
- Sea food
- Species
- Vegetables
 - 1. broccoli
 - 2. cabbage
 - 3. carrot

 - 4. lettuce
 - 5. spinach Kitchen
- k. Recipes

5. **Concluding Remarks**

Studies on Gabonese cultures and languages have paid little attention to culinary habits and gastronomic potentialities of Gabon. This article has reported on an ongoing dictionary compilation project, which is the lexicographic component of a general ethnolinguistic project on the culinary traditions of multilingual and multicultural Gabon. This paper has focused mainly on the dictionary basis (data and sources) and on various macrostructural issues of the planned dictionary.

This project contributes to the strategic planning of Gabonese lexicography as it opens with a first of its kind perspective within the field in Gabon. A further contribution of the project is that it should reveal the development of the natural Bantu common lexicon as it tests the hypothesis on the shared cultural heritage of Gabonese ethnolinguistic groups.

Finally, the compilation and production of such a dictionary will also give sense to the perception by Emejulu (2000: 53) to "identifying possible problem areas and providing a working platform for rational and profitable/profitmaking lexicographic development in a multi-cultural and multilingual set up". It is herein believed that Gabonese lexicography would succeed in such a perspective in producing dictionaries for cultural domains like the one planned in the present article.

Notes

- Musungu (originally from Yipunu) and malamba (originally from Fang) are the lexical items for sugarcane wine in Gabonese French.
- 2. This fruit of *Burseraceae dacryodes edulis* is also known as **atanga** in Gabonese French.
- 3. In Gabonese French **odika** (which is originally a Myene word) is an alternative for the Gabonism *chocolat indigène* (which literally means "indigenous chocolate", but has nothing to do with normal chocolate except for the similar color).
- 4. In Standard French, the common name for potamochoerus suinae (which only exists in Africa and Madagascar) is potamochère. It is however called sanglier in Gabonese French due to its resemblance with sus scrofa, commonly known as sanglier in European French and boar in English. Sus scrofa does not live in Africa.
- 5. Manihot esculenta is known as cassava or Brazilian arrowroot in English, manioc in French and tapioca in other languages such as Spanish and Portuguese. In Gabonese cuisine, the root (known as tubercule in Gabonese French) is eaten as potato or as flour (a traditional bread commonly known as baton de manioc in Gabonese French is also made from it) and the leaves as vegetables.
- 6. Hibiscus Sabdariffa is commonly known as roselle in English and is eaten in Gabonese cuisine as a vegetable often mixed with sardine or any other fish. A beverage commonly known in Gabonese French as bissap is also made from it. The beverage is sweet when mixed with sugar or honey.

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References

Dictionaries and Encyclopedias

Albala, K. (Ed.). 2011. Food Cultures of the World Encyclopedia. Santa Barbara, CA: Greenwood.

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- **Biton, A.** 1907. Dictionnaire français–ndumu et ndumu–français, précédé d'éléments de grammaire. Nantes: Imprimerie Bourgeois.
- Boucher, K. and S. Lafage. 2000. Le lexique français du Gabon (entre tradition et modernité). Le Français en Afrique 14. Special Issue. Nice: Institut de Linguistique Française.
- **Ditougou, L.** 2009. *On est ensemble: 852 mots pour comprendre le français du Gabon*. Libreville: Editions Raponda-Walker.
- **Dodo-Bounguendza**, E. 2008. *Dictionnaire des gabonismes*. Paris: L'Harmattan.
- **Dodo-Bounguendza, E.** 2010. Diagnostic du français du Gabon. Guide pratique destiné aux journalistes, politiques, administratifs et universitaires. Libreville: Les Editions Ntsame.
- **Dodo-Bounguendza, E.** 2013. *Dictionnaire du parler toli-bangando. Argot des jeunes gabonais*. Libreville: Les Editions Ntsame.
- Crystal, D. 2008. A Dictionary of Linguistics and Phonetics. Sixth edition. Malden, MA: Blackwell Publishing.
- Galley, S. 1964. Dictionnaire fang-français/français-fang. Neuchatel: Henri Messeiller.
- Idiata, D.F. and L. de Nadillac. 2012. Dictionnaire isangu-français. Libreville: Editions du CENAREST.
- ILALOK (Institut des Langues Locales au Kouilou). 2008. Dictionnaire vili-français/Mpisukulu bi kum' bi tshi vili ku tshi mputu. Paris: L'Harmattan.
- **Lemoine, G.M.** 1994. Petit dictionnaire français-gisira-ngosi (Mandji-Ndolu) et éléments des verbes. Libreville: Multipress.
- Marichelle, C. 1902. Dictionnaire français-vili. Loango: Imprimerie de la Mission.
- Mavoungou, P.A. and B. Plumel. 2010. Dictionnaire yilumbu–français. Libreville: Editions Raponda-Walker
- Mavoungou, P.A., F. Moussounda Ibouanga and J.A. Pambou. 2014. Le dico des makaya et des mamadou. Contribution à l'étude du français du Gabon. Libreville: Editions Odette Maganga.
- Mickala Manfoumbi, R. 2004. Lexique pove–français/français–pove. Libreville: Editions Raponda-Walker
- Mickala Manfoumbi, R. 2011. Dictionnaire des noms personnels punu. Paris: Editions Alpha-Omega.
- Mickala Manfoumbi, R. 2012. Dictionnaire des noms personnels pove. Paris: Editions Alpha-Omega.
- Mintsa, J. 2013a. Dictionnaire français-fang/fang-français. Morrisville, NC: Lulu Press.
- **Moussounda Ibouanga, F.** 2011. *Français du Gabon: approches sociolinguistiques et lexicographiques (le toli bangando).* Paris: Editions Universitaires Européennes.
- Raponda-Walker, A. 1995. Dictionnaire français-mpongwé. Libreville: Editions Raponda-Walker.
- Van der Veen, L. and S. Bodinga-bwa-Bodinga. 2002. Gedandedi sa geviya/Dictionnaire geviya français. Louvain/Paris/Sterling: Peeters Publishers.

Other Literature

- Adamska-Sałaciak, A. 2010. Examining Equivalence. International Journal of Lexicography 23(4): 387-409
- **Adamska-Sałaciak, A.** 2011. Between Designer Drugs and Afterburners: A Lexicographic-semantic Study of Equivalence. *Lexikos* 21: 1-22.
- **Afane Otsaga**, T. 2010. Propositions pour l'orthographe du fang. Hubert, J. and P.A. Mavoungou (Eds.). 2011. *Ecriture et standardisation des langues gabonaises*: 187-190. Stellenbosch: SUN Press.
- **Akomo-Zoghe, C.S.P.** 2010. Parlons fang. Culture et langue des fang du Gabon et d'ailleurs. Paris: L'Harmattan.

- **Bagouendi-Bagère Bonnot, D.** 2007. *Le français au Gabon: représentations et usages.* Unpublished Ph.D. thesis. Aix-en-Provence: Université de Provence.
- **Balandier, G. and J.C. Pauvert.** 1952. *Les villages gabonais: aspects démographiques, économiques, sociologiques, projets de modernisation.* Mémoires de l'Institut d'Etudes Centrafricaines Nº5. Montpellier: Imprimerie Charité.
- **Ekwa Ebanega, G.M. and F. Tomba Moussavou.** 2006. Des considérations sur la lexicographie et la linguistique au Gabon. *Lexikos* 16: 239-250.
- **Ekwa Ebanega, G.M. and F. Tomba Moussavou.** 2008. A Survey of the Dictionary Use of Gabonese Students at Two South African Universities. *Lexikos* 18: 349-365.
- Emejulu, J.D. 2000. Lexicography, an Economic Asset in Multilingual Gabon. *Revue Gabonaise des Sciences du Langage* 1: 51-69.
- Etsio, E. 1999. Parlons téké. Langue et culture du Congo et Gabon. Paris: L'Harmattan.
- **Gouws, R.H.** 1996. Bilingual Dictionaries and Communicative Equivalence for a Multilingual Society. *Lexikos* 6: 14-31.
- Gouws, R.H. 2002. Equivalent Relations, Context and Cotext in Bilingual Dictionaries. *Hermes* 28: 195-209
- **Granberry, J.** 1993. A Grammar and Dictionary of the Timucua Language. Tuscaloosa: The University of Alabama Press.
- **Hohulin, E.L.** 1986. The Absence of Lexical Equivalence and Cases of its Assymmetry. *Lexico-graphica* 2: 43-52.
- Hombert, J.M. 1990. Présentation de l'alphabet des langues du Gabon. Revue Gabonaise des Sciences de l'Homme 2: 97-103.
- **Hubert, J.** 1995. Rapidolangue. Méthode d'apprentissage des langues nationales. Volume 1 (fang, inzebi, lembaama, omyene, yipunu). Libreville: Editions Raponda-Walker.
- **Hubert, J.** 1997. Rapidolangue. Méthode d'apprentissage des langues nationales. Volume 2 (ikota, ghetsogho). Libreville: Editions Raponda-Walker.
- **Hubert, J.** 2010. Etat des lieux sur l'enseignement des langues gabonaises. Hubert, J. and P.A. Mavoungou (Eds.). 2010. *Ecriture et standardisation des langues gabonaises*: 5-28. Stellenbosch: SUN Press.
- Hubert, J. and P.A. Mavoungou (Eds.). 2010. Ecriture et standardisation des langues gabonaises. Stellenbosch: SUN Press.
- Idiata, D.F. 2002. Il était une fois les langues gabonaises. Libreville: Editions Raponda-Walker.
- Idiata, D.F. 2006. Parlons isangu. Culture et langue des bantu-masangu du Gabon. Paris: L'Harmattan.
- Koller, W. 1995. The Concept of Equivalence and the Object of Translation Studies. *Target* 2: 191-222.
- Kwenzi Mikala, J.T. 1988. L'identification des unités-langues gabonaises et leur classification interne. Muntu 8: 54-64.
- Kwenzi Mikala, J.T. 1989. Contribution à l'inventaire des parlers bantu du Gabon. *Pholia. Revue du Laboratoire de Phonétique et Linguistique Africaine* 2: 103-110.
- Kwenzi Mikala, J.T. 2008. Les noms des personnes chez les Bantu du Gabon. Paris: L'Harmattan.
- **Kwenzi Mikala, J.T. and J. Bigoundou.** 1999. La pêche: une technique d'acquisition des Bapunu du Sud-Gabon. *iBoogha* 3: 133-148.
- Lisimba, M. 1997. Les noms de villages dans la tradition gabonaise. Saint-Maur: Editions Sépia.
- Loembe, G. 2005. Parlons vili. Langue et culture de Loango. Paris: L'Harmattan.
- **Lwoga, E.T., P. Ngulube and C. Stilwell.** 2010. Understanding Indigenous Knowledge: Bridging the Knowledge Gap through a Knowledge Creation Model for Agricultural Development.

- South African Journal of Information Management 12(1), Art. #436, 8 pages. DOI: 10.4102/sajim.v12i1.436.
- Mabik-ma-Kombil. 2001. Parlons yipunu. Langue et culture des punu du Gabon-Congo. Paris: L'Harmattan.
- **Malekou, P.E.** 2007. *Les anthroponymes et les toponymes gisir: proposition d'un modèle de dictionnaire.* Unpublished M.A. thesis. Libreville: Université Omar Bongo.
- Maloughou Mangama, M.E. 2009. Un système alphabétique pour les langues gabonaises? Ondo Mebiame, P. (Ed.). 2007. *Quel avenir pour les langues et cultures du Gabon*?: 163-176. Libreville: Editions CUI-Gabon.
- **Mavoungou, P.A.** 2010a. Propositions pour l'orthographe du yilumbu. Hubert, J. and P.A. Mavoungou (Eds.). 2010. *Ecriture et standardisation des langues gabonaises*: 181-186. Stellenbosch: SUN Press.
- Mavoungou, P.A. 2010b. Lexicographie et confection des dictionnaires au Gabon. Stellenbosch: SUN Press.
- Mavoungou, P.A. 2013. Gabonese French Dictionaries: Survey and perspectives. Lexikos 23: 255-272.
- Mavoungou, P.A. and H.S. Ndinga-Koumba-Binza. 2010. Civili, langue des baloango: esquisse historique et linguistique. Munich: Lincom Europa.
- Mayer, R. 1990. Histoire de l'écriture des langues du Gabon. Revue Gabonaise des Sciences de l'Homme 2: 65-91.
- Mayer, R. 2002. Histoire de la famille gabonaise. Libreville: Editions du LUTO.
- Mba Abessole, P. 2006. Aux sources de la culture fang. Paris: L'Harmattan.
- Mabika Mbokou, L. 2012. A Survey Bilingualism in Multilingual Gabon. Ndinga-Koumba-Binza, H.S. and S.E. Bosch (Eds.). 2012. *Language Science and Language Technology in Africa: Festschrift for Justus C. Roux*: 163-175. Stellenbosch: SUN Press.
- **Mearns, M.A.** 2006. *Conservation of Indigenous Knowledge*. Ph.D. thesis. Johannesburg: University of Johannesburg.
- **Mearns, M.A.** 2007. The Basotho Cultural Village: Cultural Tourism Enterprise or Custodians of Indigenous Systems? *Indilinga: African Journal of Indigenous Systems* 6(1): 27-50.
- **Mearns, M.A., A.S.A. du Toit and G. Mukuka.** 2006. Conservation of Indigenous Knowledge at Cultural Villages. *Mousaion* 24(1): 23-50.
- **Medjo Mvé, P.** 2007. Langues gabonaises et évolution du français: aspects sociolinguistiques. *Annales de l'Université Omar Bongo* 13: 285-298.
- **Medjo Mvé, P.** 2011. *Introduction à la langue et la culture des chasseurs-cueilleurs Bakoya (Région de Mékambo, Gabon): avec un petit dictionnaire.* Cologne: Rüdiger Köppe Verlag.
- Mintsa, J. 2013b. Le complet de la langue fang. Morrisville, NC: Lulu Press.
- **Mwaura, P. (Ed.).** 2008. *Indigenous Knowledge in Disaster Management*. Nairobi: United Nations Environment Programme.
- Ndinga-Koumba-Binza, H.S. 2005a. Considering a Lexicographic Plan for Gabon within the Gabonese Language Landscape. *Lexikos* 15: 132-150.
- **Ndinga-Koumba-Binza, H.S.** 2005b. Politique linguistique et éducation au Gabon: un état de lieux. *Journal of Education* 4(1): 97-78. Réduit: Mauritius Institute of Education.
- Ndinga-Koumba-Binza, H.S. 2007. Gabonese Language Landscape: Survey and Perspectives. South African Journal of African Languages 27(3): 97-116.
- **Ndinga-Koumba-Binza, H.S.** 2010a. Alphabet et écriture: approche historique et cas des langues gabonaises. Hubert, J. and P.A. Mavoungou (Eds.). 2010. *Ecriture et standardisation des langues gabonaises*: 29-67. Stellenbosch: SUN Press.

- Ndinga-Koumba-Binza, H.S. 2010b. Trends in Gabonese Modern Lexicography. Paper presented at the 15th International Conference of the African Association for Lexicography (AFRILEX) held at the University of Botswana, Gaborone, Botswana, 19–21 July 2010.
- Ndinga-Koumba-Binza, H.S. 2010c. Propositions pour l'orthographe du civili. Hubert, J. and P.A. Mavoungou (Eds.). 2010. *Ecriture et standardisation des langues gabonaises*: 191-199. Stellenbosch: SUN Press.
- Ndinga-Koumba-Binza, H.S. 2011. From Foreign to National: A Review of the Status of the French Language in Gabon. *Literator* 32(2): 135-150.
- Ndinga-Koumba-Binza, H.S. and J.C. Roux. 2009. On writing Gabonese Languages. Batibo, H., R. Dikole, S. Lukusa and R.O.B. Nhlekisana (Eds.). 2009. Language, Literature and Society. Proceedings of the First International Conference of the Department of African Languages and Literature, University of Botswana, 26–28 June 2008: 83-106. Gaborone: Associated Printers.
- Ndinga-Koumba-Binza, H.S. and G. Saphou-Bivigat. 2012. Dictionary Basis and Lemmatisation for an Encyclopedic Dictionary of Yilumbu. Ndinga-Koumba-Binza, H.S. and S.E. Bosch (Eds.). 2012. Language Science and Language Technology in Africa: Festschrift for Justus C. Roux: 237-250. Stellenbosch: SUN Press.
- **Nzang-Bie, Y.** 2001. Vers une éducation multilingue au Gabon: première approche. *Revue Gabonaise des Sciences du Langage* 2: 17-29.
- Nzang-Bie, Y. 2002. Le corpus lexicographique dans les langues à tradition orale. *Lexikos* 12: 211-226.
- **Ompoussa, V.** 2008. *Les particularités lexicales dans le français scolaire au Gabon: le cas de la ville de Port-Gentil.* Ph.D. thesis. Grenoble: Université Stendhal de Grenoble.
- **Ompoussa, V.** 2011. Les fondements psychologiques des mots des jeunes à Libreville. *Mbaandza. Revue d'Etude et d'Analyse Francophones* 1: 75-86.
- Raponda-Walker, A. 1932. L'alphabet des idiomes gabonais. *Journal de la Société des Africanistes* 2(2): 139-146. Reprinted in Raponda-Walker, A. (Ed.). 1998. *Les langues du Gabon*: 7-15. Libreville: Editions Raponda-Walker.
- Raponda-Walker, A. 1955. Idiomes gabonais: similitudes et divergences. *Bulletin l'Institut d'Etudes Centrafricaines* 10: 211-236. Reprinted in Raponda Walker, A. (Ed.). 1998. *Les langues du Gabon*: 90-136. Libreville: Editions Raponda Walker.
- **Raponda-Walker, A.** 1963. Toponymie de l'Estuaire du Gabon et de ses environs. *Bulletin de l'Institut de Recherches Scientifiques au Congo* 2(2): 87-121.
- Raponda-Walker, A. 2002. Notes d'histoire du Gabon. Suivi de toponymie de l'Estuaire de Libreville et toponymie du Fernan-Vaz et Port-Gentil. Libreville: Editions Raponda-Walker.
- Rekanga, J.P. 2014. Grammaire du myènè-nkomi. Libreville: Editions Odette Maganga.
- **Soami, L.S.** 2002. Principes de base de collecte et traitement des données lexicographiques en fonction des types de dictionnaires. Emejulu, J.D. (Ed.). 2002. *Eléments de lexicographie gabonaise*: 85-103. New York: Jimacs-Hillman Publishers.
- **Soami, L.S.** 2010a. *Towards the Development and Application of Representative Lexicographic Corpora for the Gabonese Languages*. Ph.D. thesis. Stellenbosch: University of Stellenbosch.
- **Soami, L.S.** 2010b. Propositions pour l'orthographe du yipunu. Hubert, J. and P.A. Mavoungou (Eds.). *Ecriture et standardisation des langues gabonaises*: 200-204. Stellenbosch: SUN Press.
- Stark, M. 2011. Bilingual Thematic Dictionaries. Berlin/Boston: Walter de Gruyter GmbH.

- **Svensén, B.** 2009. The Handbook of Lexicography: The Theory and Practice of Dictionary-making. Cambridge, UK: Cambridge University Press.
- **Wiegand, H.E.** 2002. Equivalence in Bilingual Lexicography: Criticism and Suggestions. *Lexikos* 12: 239-255.
- Wiegand, H.E. and A. Kučera. 1981. Brockhaus-Wahrig: Deutsches Wörterbuch auf dem Prüfstand der praktischen Lexikologie. 1. Teil: 1. Band (A-BT); 2. Band (BU-FZ). Kopenhagener Beiträge zur Germanistischen Linguistik 18: 94-206.
- Zgusta, L. 1987. Translational Equivalence in a Bilingual Dictionary: Bahukosyam. Dictionaries 9: 1-47.

Addendum: Images of the items presented in the sample of linguistic data (Table 1)

Fang	Yilumbu	Yinzebi	Obamba	Civili	
Akok	Ibenga	Ishighu	Kri	Cibenga	
Sas	Tsafu	Tsegha	Ntshighi	Nsafu	
Ngon	Teeri	Ndzaka	Ndjeghe	Ntêta	
Edong	Yufu	Mbungu	Odu	Cufu	