

Making African Dictionaries More African

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Abstract: This article proposes strategies for compiling African dictionaries that are Afrocentric. It argues that such dictionaries must deal appropriately with the complex morphology typical of many African languages. Addressing complex morphology will help users connect words and meanings to develop a more nuanced understanding of the language. Afrocentric dictionaries ought to provide historical and etymological information of their entries, tracing lexical origins, migrations, and influences which would enrich the understanding of language evolution and its interconnectedness. For a broader vocabulary coverage related to African culture, traditions, flora, fauna, geography, and history, the article proposes that African dictionaries need to adopt a hybrid strategy of data collection that engages linguists, scholars, native speakers and community members in the dictionary-making process. Additionally, the paper argues that the middle section of African dictionaries presents an excellent space for lexicographers to capture, demonstrate, and preserve African cultures. The section should affirm, reinforce, and celebrate African food, attire, dances, cattle colour terminology — especially for pastoral communities — and kinship terminology. By implementing approaches set out in this article, it is hoped that African dictionaries will become more representative, inclusive, and reflective of the diverse African languages, cultures, and contexts.

Keywords: AFROCENTRIC, SETSWANA, AFRICAN DICTIONARIES, ETYMOLOGY, CULTURE, MORPHOLOGY

Opsomming: Om Afrika-woordeboeke meer Afrosentries te maak. In hierdie artikel word Afrosentriese strategieë vir Afrika-woordeboeke voorgestel. Daar word aangevoer dat hierdie woordeboeke die komplekse morfologie, wat tipies van Afrikatale is, op 'n gepaste wyse moet hanteer. Die aanspreek van die komplekse morfologie sal gebruikers help om woorde en betekenisse te verbind om sodoende 'n meer genuanseerde begrip van die taal te ontwikkel. Afrosentriese woordeboeke behoort historiese en etimologiese inligting van hul inskrywings te verskaf deur die leksikale oorsprong, migrasies, en invloede na te spoor, wat die begrip van taalevolusie en die onderlinge samehang daarvan sal verryk. Vir 'n breër woordeskatdekking wat verwant is aan die Afrika-kultuur, -tradisies, -flora, -fauna, -geografie en -geskiedenis, word daar in die artikel voorgestel dat Afrika-woordeboeke 'n hibriede strategie van data-insameling moet volg wat taalkundiges, vakkundiges, moedertaalsprekers en gemeenskapslede in die woordeboekmaakproses betrek. In hierdie artikel word ook geargumenteer dat die middelste deel van Afrika-woordeboeke 'n uitstekende spasie bied vir leksikograwe om die Afrika-kultuur vas te vang, te demonstreer en te bewaar. In hierdie afdeling moet Afrika-kos, -kleredrag, -danse, -veekleurterme — veral vir landelike gemeenskappe — en verwantskapsterme verklaar, versterk, en gevier word. Deur benaderings, soos in hierdie artikel uiteengesit, te implementeer, word daar gehoop dat Afrika-woordeboeke

meer verteenwoordigend, inklusief, en weerspieëlend van die diverse Afrikatale, -kulture, en -kontekste sal word.

Sleutelwoorde: AFROSENTRIES, SETSWANA, AFRIKA-WOORDEBOEKE, ETIMOLOGIE, KULTUUR, MORFOLOGIE

1. Introduction

Africa resonates with a rich tapestry of languages and cultures. Such a scenario presents unique challenges and opportunities for lexicographers working on the continent to craft dictionaries that are not mere linguistic compendiums, but living embodiments of African heritage, identity, and empowerment. With its staggering linguistic diversity, Africa is a continent of untold stories, intricate narratives, and boundless creativity. Yet, we find that dictionaries that were framed through lenses foreign to the continent's experiences, fail to capture the depth, and nuances that define the myriad tongues. The challenge that faces African lexicographers is to explore methodologies that pay homage to the authenticity of African languages. They must seek to forge a path towards dictionaries that encapsulate the very essence of Africa's diverse cultures. African lexicographers need to unravel the threads that tie language to identity, understanding that a dictionary is not merely a lexical inventory, but a living testament to the collective memory of a people. It is a repository of wisdom, a mirror to shared experiences, and a beacon for future generations. This article therefore argues that African lexicographers ought to embark on a collective mission to celebrate and preserve the linguistic heritage of the continent, fostering a sense of belonging and pride in every word, phrase, and expression that graces the pages of an African dictionary.

At the heart of such an enterprise, lies the question of how to make African dictionaries, specifically general dictionaries, truly or uniquely African. Features proposed in this article could be used as a checklist, or as tools that can be used to measure how African or reflective of a linguistic community a dictionary is. Historically, most African dictionaries came to communities through English or French missionaries (Pawliková-Vilhanová 2009, Prah 2009). These were mostly bilingual dictionaries serving a translation function in missionary schools or aiding evangelical work. Prinsloo and Zondi (2020: 17) refer to such dictionaries when they observe that:

The history of lexicography in Africa began because of European activities: exploration, evangelization, and colonialization. The early lexicons, whether compiled by explorers, missionaries, or colonial administrators, were "Euro-centred", produced in Europe for Europeans rather than for African users. ... Even with the emergence of modern linguistics, lexicographic works have been primarily intended for scholarly interest *and not for the needs of ordinary Africans* (my emphasis).

While this may be the context within which earlier African dictionaries were compiled, African dictionaries, do not have to mirror European dictionaries, since

African dictionaries exist in a unique environment which may necessitate a different structure and a different data collection strategy from those in Europe or America. What is needed are dictionaries designed to serve and reflect African communities.

The concern over African dictionaries with a Eurocentric bias is not new. Gangla (2001: 52) has decried Eurocentrism in African lexicography when he demonstrated that the pictorial illustrations of the *South African Multi-languages Dictionary and Phrase Book* (Reynierse 1996) were more Eurocentric than African. This, he argued, was shown by illustrated elements that did not reflect typical African architecture and sports. The dictionary instead depicted rooms in a house with a pantry, and sports played, being cricket and rugby.

Prinsloo (2017a: 5) has gone further to attempt a characterization of African dictionaries based on five classifications:

- i. Dictionary compilations by foreigners abroad. He classified these as having a "true Euro-centric approach."
- ii. Dictionary compilations by foreigners in Africa, e.g., on missionary posts using Africans as informants. He classified these as having a "Euro-centric approach."
- iii. Dictionary compilations by non-mother-tongue speakers of African languages who studied the grammar and even learned to speak African languages, working with mother-tongue speakers. He classified these as "containing Afro-centric elements."
- iv. Dictionary compilation by Africans guided by foreigners. He classified these as "containing Afro-centric elements."
- v. Dictionary compilation by Africans. He classified these as having a true Afro-centric approach.

Prinsloo's classification is an important contribution to determining a dictionary's Afrocentricity though it focuses much on the identity of a compiler and not on what is definitive of an Afrocentric or Eurocentric dictionary. There needs to be more thought into crafting features or measures of dictionary Afrocentricity. Such features can inform compilers at a dictionary design stage or function as a yardstick through which a dictionary's Afrocentricity could be measured. With the dictionary tradition in Africa having been established by non-Africans, it is conceivable to have Eurocentric dictionaries compiled by Africans. What practical lexicographers need is a clearer picture of what the features of an Afrocentric dictionary are.

2. Characteristic features of an Afrocentric dictionary

This article proposes six features that should characterise any general dictionary in Africa. These features are the use of multiple word-collection strategies, dialectal variation, inclusion of non-standard and colloquial words, the treatment of the unique morphology of a language, etymology inclusion, and a compre-

hensive coverage of the culture of a speech community of the dictionary.

2.1 Use multiple word-collection strategies

The unique African context demands that African dictionaries should be compiled through multiple-word collection strategies. This is because most African languages have a poor literary tradition and cannot depend exclusively on corpora. For many African languages with some written materials, such texts are usually within the restricted domain of creative works. Most African languages are not used in science, technology, engineering, and law domains. Some African languages are so underdeveloped that they lack standard orthographies, and their grammars are still undeveloped. This means that while the field of lexicography internationally has experienced an explosion of corpus lexicography (cf. Granger and Paquot 2012, Hanks 2012), many African language dictionaries cannot be compiled exclusively on corpora evidence (cf. Prinsloo 2017b). This is not to say that corpora are not important. They are indeed important. Atkins et al. (1992: 10) have argued that "[i]n our ten years' experience of analysing corpus material for lexicographical purposes, we have found any corpus — however 'unbalanced' — to be a source of information and indeed inspiration. Knowing that your corpus is unbalanced is what counts." The situation as defined by Atkins et al. is typical of very few African languages which have corpora. The vast majority of African languages lack corpora and should consider alternative methods of data collection for dictionary compilation. It is no wonder that Nkabinde (2003: 174) argues that "[a] corpus should be used to supplement the usages obtained through fieldwork in the compilation of a dictionary."

The major languages of the world such as English, French, Spanish and Portuguese often have large, published dictionaries available to them. They are usually supported by major publishing companies, such as Oxford University Press, Cambridge University Press, Longman, and Macmillan Publishers, who employ scores of professional lexicographers to compile massive text corpora and do the necessary research to compile quality dictionaries (Barati and Noor 2011, Robbins 2017). For many African languages, as Moe (2003: 216) has demonstrated, the picture is far bleaker. With few or no published texts, few, or no professional lexicographers available to them, and little or no funding, many African languages face a daunting challenge.

The challenge is even greater for many Khoisan languages such as N|uu who are on the verge of extinction (Sands and Jones 2022). Prinsloo (2015) also demonstrates that the dictionary compilation of Ju|'hoasi was compiled by a partnership between native-speaker children and academics. This is true for the compilation of the *N|uuki Namagowab Afrikaans English dictionary* (Sands and Jones 2022). Such collaborative efforts foster accuracy, inclusivity, and cultural relevance. African lexicographers should therefore use multiple word collection strategies so that the final dictionary captures regional and local variations of a language.

A hybrid strategy of data collection in African dictionaries compilation that engages linguists, scholars, native speakers, and community members in the dictionary-making process is attractive since it ensures a broader coverage of the lexicon. Having a broader team of contributors contributes to a broader headword list that covers a wide range of terms relating to various elements of African culture. These include local expressions, proverbs, idioms, and other cultural nuances that enrich a dictionary. The data collection strategy must also include consulting other collections of knowledge compilations in the language such as collections of herpetology (Auerbach 1986), animals and plants (Cole 1995) to enrich a dictionary with elements of indigenous knowledge systems. This means that African lexicographers ought to read widely in the related fields of culture, history, and anthropology to benefit from wide scholarship on the language, and culture of the linguistic community. For example, a study in Tswana hunting practices in the Transvaal and Kalahari (Morton and Hitchcock 2014) has contributed a rich hunting vocabulary that has enriched the second edition of *Tlhalosi ya Medi ya Setswana* which is still under development. Such vocabulary includes the following Setswana words:

- **mosokela-tsebeng** bow string
- **mutlwana(e)i** snare
- **segole** whip snare
- **telekelo** a hunting pit; a place to which animals are chased
- **tlhabadilebanye** bowstring
- **tlhagare** small iron arrow tip
- **tlhobolo** quiver for arrows (archaic; adopted for firearm, gun, rifle)
- **tshane** broad-bladed spear; sharpened stick used by herdboys
- **tshosa** long spear with a large blade

Finally, Moe (2003) has proposed a word collection strategy that uses a complex system of over 1800 semantic domains which has been proven to speed up word collection by yielding about 10,000 words per work. The semantic domains are now part of Fieldworks Language Explorer (Flex) which is used in dictionary compilation in Africa (Beier and Michael 2022). This method of word collection is one that lexicographers working on African dictionaries could explore to widen their data capture.

2.2 Capture dialectal variation

The second essential element for African lexicographers to consider is the representation of all dialects of their language since most African languages are not homogenous but are characterised by significant variation. Most of the linguistic variations are according to the geographical distribution of speakers who display differences in terms of vocabulary, grammar, and pronunciation (Southerland and Katamba 1996: 565, Honey 1997: 3, Crystal and Davy 1969: 67). A general dictionary of an African language should reflect dialectal varieties of

a language. It must not restrict itself to one or a few dialect(s) that a compiler judges as correct or pure. African lexicographers should move away from the narrow representation of one dialect in a general dictionary. They must capture all the dialects, tag them, and cross-reference the synonymous entries, especially words from regional speakers of a language. Lexical differences play a significant role in regional dialectology and inclusive lexicography since it reflects the lifestyles that diverse groups live or have lived (Batibo 1999). For instance, Otlogetswe (2012) has entered and cross-referenced all four Setswana dialectal words that refer to pounded meat. These are *seswaa*, *tšhòtlhò*, *tshwaiwa*, and *loswao*.

- **seswaa** /sìswáá/ Ngwt. •*ln.* 7. *se-*, *8. *di-*• nama e e budusitsweng thata e bo e kgobiwa *Nna o ntsholele seswaa rra, meno a me ga a thata* = TŠHÔTLHÔ, LOSWAO, TSHWAIWA
- **tšhòtlhò** /tʃʰòtʃʰò/ Kgat. •*ln.* 9. *n-*, *10. *din-*• nama e e swailweng kgotsa e thugilwe e budule = SESWAA, LOSWAO, TSHWAIWA
- **tshwaiwa** /tʃʰwáíwá/ Kwen. •*ln.* 9. *n-*• = LOSWAO, SESWAA, TŠHÔTLHÔ,
- **loswao** /lòswàò/ Ngwk. •*ln.* 11. *lo-*• 1° nama e e budusitsweng thata e bo e kgobiwa = TŠHÔTLHÔ, SESWAA, TSHWAIWA 2° Ngwt. thobane e e dirisiwang go swaa nama.

The four entries are tagged for the Setswana dialects of Sengwato (Ngwt.), Sekgatla (Kgat.), Sekwena (Kwen.) and Sengwaketse (Ngwk.).

2.3 Include non-formal, non-standard, and colloquial words

Lexicographers, in general, agree that a dictionary should document all frequently used words and meanings used in a language (Gouws and Prinsloo 2005, Svensén 2009). They agree that a compiler must not be prescriptive and attempt to choose the words he or she judges as good in the language since such a biased capture of the language will misrepresent the language and mislead the user. The lexicographer's role is to collect "all the words, whether good or bad" (Trench 1857: 7). This means that non-formal, non-standard, and colloquial words need to be collected and lemmatised. A lexicographer should primarily see himself as a historian and not a language critic. He or she must not see the dictionary as a representation of "the standard language," but rather as a collection of words used by speakers of the language, whether standard or not (Otlogetswe 2013). This argument is not new. Trench (1857: 7) has argued before that:

A dictionary ... is an inventory of the language ... It is no task of the maker of it to select the *good* words of a language. If he fancies that it is so, and begins to pick and choose, to leave this and to take that, he will at once go astray. The business which he has undertaken is to collect and arrange all the words, whether good or bad, whether they do or do not commend themselves to his judgment, which, with certain exceptions hereafter to be specified, those writing in the lan-

guage have employed. He is an historian of it not a critic ... There is a constant confusion here in men's minds. There are many who conceive of a Dictionary as though it had this function, to be a standard of the language; and the pretensions to be this which the *French Dictionary of the Academy* sets up, may have helped this confusion. It is nothing of the kind.

A general African dictionary should therefore be inclusive of all speech registers of a linguistic community and not discriminate against others. It must mark informal, colloquial, and offensive entries but not exclude them from a dictionary.

2.4 Respond to the unique morphological treatment of the language

African lexicographers need to walk away from an all-size-fits-all approach to dictionary compilation, and instead investigate features of their languages that demand special treatment, to shape a more definite language-specific macrostructure and microstructure. Specific attention needs to be paid to the morphology of a language and how it can be best represented in a dictionary.

The morphology of many African languages is complex, and it is essential that lexicographers respond to the morphological peculiarities of the languages they are compiling (Prinsloo 2015). Gouws and Prinsloo (2005) have demonstrated that dealing with complex morphology can help users make connections between words and meanings. It can help learners and dictionary users develop a more nuanced understanding of the language. Many lexicographers have rightly critiqued stem-based dictionaries and instead favoured word-based lemmatization (cf. e.g. De Schryver 2010, Prinsloo 2009, Van Wyk 1995). In most cases, they have done so without retaining the benefits that were addressed by the stem-based dictionaries and have not found an elegant way of linking semantically and morphologically related entries spread across a dictionary because of alphabetization (Van Wyk 1995).

A case in point is the marking and handling of deverbatives in Setswana dictionaries. An improved analysis of the morphology of deverbatives can reveal philosophical and conceptual views of the world hidden in the Setswana lexicon. These include nouns such as *boipuso* "independence, self-rule" derived from *busa* "govern, rule;" *boitumelo* "happiness" derived from *dumela* "believe, trust" and *kagiso* "peace" from *aga* "build."

The Setswana word *kagiso* "peace" is derived from the root verb *aga* "to build, to construct or to put together." The causative suffix *-is-* is then attached to the verb *aga* to form *agisa* "help someone build." The noun maker suffix [-o] is then attached to "agisa" and [k] inserted at the beginning to derive the noun *kagiso*. The complete process appears as follows:

aga + -is- = agisa + -o = agiso > [k] + agiso = kagiso

The central argument here is that instead of simply giving the meaning of a word, such as *kagiso* as "peace," a dictionary must fully capture the morphology

of an entry to reveal its source to contribute to the understanding of the world-view of a linguistic group. For instance, an analysis of *kagiso* demonstrates that Batswana believe that *peace* is something that is constructed as shown by its roots from *aga* "build." It is seen as a progressive matter and not just a state.

Another example is of the word *boitumelo* that means "happiness". It is derived from the verb *dumela* "believe or accept." Analysed this way, Batswana can make inferences that in Setswana happiness is attained when one reaches a state of self-belief, a state of believing themselves. *Boitumelo* can therefore be decomposed into bo-itum-el-o.

African dictionaries must also make morphological links between verbs that are derived from other base verbs as in Table 1.

Table 1: Verbs derived from other base verbs

Verb	English translation	Derived from	English translation
<i>Ipusolsetsa</i>	to revenge	<i>busa</i>	return
<i>Leseletsa</i>	carry a bucket on top of the head without touching it	<i>lesa</i>	leave, do not touch
<i>Itshephisa</i>	make holy	<i>tshepha</i>	trust
<i>Ikemisetsa</i>	intend/purpose	<i>ema</i>	stand
<i>Ikgolaganya</i>	connect yourself with	<i>golega</i>	tie/bind
<i>Ikgoga</i>	drag yourself	<i>goga</i>	pull/drag

African lexicographers should therefore be sensitive to the morphology of the languages they work in and attempt to capture its richness.

2.5 African dictionaries and etymology

Most African dictionaries are of languages that are in contact situations where speakers speak or are exposed to multiple local or foreign languages. It is critical that African dictionaries provide historical and etymological information of words, tracing their origins, migrations, and influences. This enriches the understanding of language evolution and its interconnectedness. A better documented contact situation in scholarship is the one in which an African language has borrowed words from Afrikaans, French, English, or Portuguese (Matiki and Ramaeba 2018). Such borrowed terms usually cluster around certain semantic clusters such as food, education, farming, computing, government etc. For instance, in the general domain of food, maize has its roots in the Americas and came into Africa by Portuguese traders in the 1500s to the 1600s through Mozambique into South Africa (Miracle 1965, McCann 2001). Miracle demonstrates that linguistic evidence demonstrates that maize is not indigenous to Africa. This is reflected in the name for maize in many African languages. In the Semitic

language spoken in Ethiopia maize is called *yabaher mashela* which means "grain from the sea." In Chichewa, maize is *chimanga* which means "from the coast." In Swahili maize is *muhindi* which means "a grain from India." Speakers of Kikongo call maize *maza mamputo* which means "white people's grain." In Mande, maize is *tuba-nyo* which means "a white people's grain." In Setswana, maize is *mmidi*, a word which came into Setswana sometime after 1700 from Afrikaans *mielie*, which itself is a borrowing from Portuguese *milho*. A single grain of maize in Setswana is called *pidi*, from Afrikaans *pit*. From the Afrikaans *kaboemielies*, Setswana has derived the word *kabu* which refers to boiled maize grains. Such linguistic evidence derived from history and archaeology can assist in enriching the microstructure of an African dictionary.

An uncommon and yet an important link in African dictionaries is to show borrowing between African languages themselves. For instance, Gunnink (2020) has demonstrated that Setswana has borrowed some of its vocabulary from Khoisan languages such as Khwe and Glui. Such words include *mokgalo* /mòq^háló/ "buffalo thorn (*Ziziphus mucronata*)" which is from Glui †qχ'árò, Kua †q'árò, or Naro †x'árò and *mokgwa* /mòq^hwà/ "Acacia nigrescens" which is derived from Glui †qχ'uà or Kua †χ'uà. Setswana has also borrowed from Zulu and other African languages such as Kalanga (Otlogetswe 2016). For instance, Otlogetswe (2012) demonstrates that the Setswana word *tandabala* "old age pension for Botswana citizens who are 65 years and older" is borrowed from Kalanga. In Kalanga *tandabala* means "to sit with stretched out legs."

Another way in which African languages dictionaries could be enriched with etymology information is for them to include proto-Bantu roots to demonstrate links between African languages themselves (Batibo 1996). For instance, Table 2 demonstrates how Setswana entries could be associated with Proto-Bantu roots. If this is done across multiple Bantu languages, extremely useful links could be established between multiple languages.

Table 2: Proto-Bantu and Setswana terms

Proto-Bantu	Setswana	gloss
*-bab-	<i>baba</i>	itch, sting, hurt
*-gwina	<i>kwena</i>	crocodile
*-bac-	<i>batla</i>	to look for
*-bad-	<i>bala</i>	to count
*-pala	<i>phala</i>	impala
*-bada	<i>sebala</i>	spot, speckle
*-badi	<i>bedi; pedi</i>	two
*-beede	<i>lebele</i>	breast; udder
*-bin-	<i>bina</i>	dance
*-bid	<i>bela</i>	to be cooked; to boil
*-bod	<i>bola</i>	to be rotten
*-bombo	<i>mmopo</i>	forehead; bridge of nose; nose

Accounting for the etymology of African languages must be more than tracing borrowed words to their European heritage. It must also account for words between African languages themselves.

2.6 Capture the culture of speakers in detail

A general African dictionary must capture the rich culture of its linguistic group. Its pages must ooze with the prototypical elements of that culture. Culture refers to the shared beliefs, customs, behaviours, and artifacts that characterize a particular group or society. It was defined in 1871 by Edward B. Tylor as "that complex whole which includes knowledge, beliefs, art, morals, law, customs and any other capabilities and habits acquired by man as a member of society" (Tylor 1871: 1). Peterson (1979) argues that culture in contemporary parlance consists of four elements: norms, values, beliefs, and expressive symbols. Scholars have suggested various elements that are definitive of culture, including language, religion, cuisine, social habits, music, art, and literature (Spencer-Oatey 2012). A dictionary that is Afrocentric should therefore reflect an African culture in its macrostructure. Sociologists (Spencer-Oatey 2012, Peterson 1979) have proposed norms, language, festivals, rituals and ceremonies, holidays, pastimes, food, architecture, religions, values, taboos, sports, clothing and outfits, music, social hierarchy, symbols, dance, and art as cultural elements. These provide some guidance on what constitutes a more authentic culture of a people. Compilers of African dictionaries must consider the definitive cultural elements of the linguistic community within which they work. Nkabinde (2003: 170) has argued that "[o]ne of the methods of identifying words in cultural context is to determine the various cultural aspects peculiar to a speech community rather than address the entire domain of culture as such." He (*ibid.*) identified the following key features of Zulu culture: "kinship and social organization, communal activities, recreation, customs and beliefs, food and beverages, sorcery and witchcraft, mourning, burial and death, agriculture and animal husbandry, mythology and legends, music, dancing and song, folklore, national ceremonies." Such features cannot be assumed to be general to every African linguistic group. It is up to the compiler to identify cultural elements that are definitive of the linguistic community whose dictionary they are compiling and reflect it in the dictionary. They should seek to protect the culture and not undermine it — whether intentionally or subconsciously. They must affirm that African communities have their own food, attire, dances, unique ways of measuring time, cattle colour terminology — especially for pastoral communities, kinship terminology, etc.

We demonstrate this by exploring cattle and beef terminology of Batswana who are a pastoral community. Like many Bantu speakers, Batswana have a strong relationship with cattle reflected by a rich cattle terminology. They have a long tradition of cattle butchering that is deeply rooted in their cultural activities and rituals. The rituals are characterised by several meat dishes which are

interwoven with their wedding, death, and birth rituals. Their vocabulary is rich of colour terms, lexicalized patterns, and colour placement on cattle skins. All these can inform and enrich the middle section of a general Setswana dictionary in a unique manner.

For instance, Figure 1 could be included in a Setswana general dictionary's middle section to show how Batswana partition a beef carcass in a distinct manner.

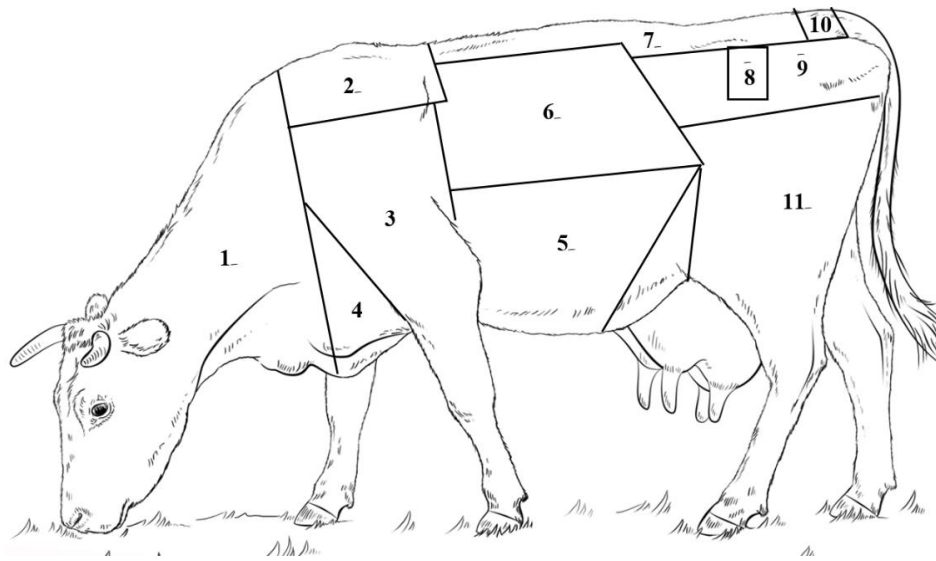


Figure 1: Setswana beef cuts (Adapted from Otlogetswe 2020)

Such an image could be accompanied by culturally relevant information explaining the different cuts as follows:

No 1. *Tlhogo* "head" which comprises the neck [*thamo*] and the first four ribs from the neck (two on the right and two on the left) (Otlogetswe 2019). *Tlhogo* is wrapped in a skin [*letlalo*] and given to the groom's maternal uncle who heads the wedding negotiations on the groom's side. He is the principal figure in a Setswana wedding and the ceremonies may not take place without his presence. As head of the wedding, he gets the *tlhogo*, the head of the slaughtered beast.

No 2. *Mokuana* (pl. *mekuana*): This is the meat found from just under the armpit of both front legs to above the shoulder of the cow. The shoulder bone is removed to allow the meat from the shoulder bone's cartilage to the spine to be cut out. This is done on both sides of the cow. During a cultural ceremony if a cow was shot, *mokuana* is given as payment to the person who shot the cow; if it was slaughtered, it is shared amongst the people who assisted.

No. 3. *Letsogo* (pl. *matsogo*). The word *letsogo* means an arm. However, in a cow it is the front leg, which is one of the first parts from a cow to be removed after it has been skinned. However, before both *matsogo* are removed, the metatarsal and metacarpal bones [*metwane*] are removed and thrown into a pot with miscellaneous pieces of meat, which are eaten after skinning. This pot of miscellaneous pieces is called *mothobiso*. *Matsogo* are dislodged from a cow with great precision. The lymph nodes [*dikgeleswa*] found where *matsogo* attach to the body, at the neck, must remain attached to the legs. One complete *letsogo* is given to the traditional doctor [*ngaka ya Setswana*] who ministered to the ceremony for his services. His role is to strengthen the wedding, to protect the homestead where the wedding is held, to doctor the fireplace, and to protect the bridal couple and all attendees from witchcraft. He is sometimes known as *setimamolelo* "the fire extinguisher" because the effects of witchcraft are usually expressed as heat.

No. 4. *Bokwana*. This is a cow's tip of the chest, which comprises fatty meat and bone. It is cooked and eaten by married individuals at the bride's home on the day that the bride is brought to the groom's homestead, the day after the wedding celebrations. The newlywed couple is served one large piece of meat on a plate for them to share. When served, this piece of *bokwana* is not cut with a knife since this would be considered a bad omen portending conflict between the couple. The couple eats by biting off pieces and placing the remainder back on the plate until it is finished.

No. 5. *Sehuba*. This is the chest area of a cow, which usually has a lot of fat, and includes all ribs that remain after the removal of *dithupa*. During the wedding, it is eaten by married men and women. It is believed that by eating it, partners affirm that they belong to each other via their chest, breasts, and heart.

No. 6. *Thupa* (pl. *dithupa*). The word *thupa* refers to a whipping stick. However, on a cow, it is a meat cut that comprises six ribs that are cut in half and separated from the chest ribs (Figure 2, Bone 4 or Figure 1, Part 6). The *thupa* ribs attach to the backbone, which is known as *tlholamatlotla* (Figure 2, Part 3). Once dislodged from *tlholamatlotla*, the *thupa* are added to the *mothobiso* pot which comprises various intestinal meat cuts (cuts from the rumen, small intestines, lungs, heart, omasum) and other small miscellaneous meat cuts. During the wedding celebration, *mothobiso* is eaten at the kgotla by men from both the groom's and the bride's side. It is usually cooked in the kraal or kgotla by those who slaughtered the animal.

No. 7. *Mokoto* (pl. *mekoto*). *Mokoto* is the meat along the spine, from the *mokuana* up to the tail (Figure 1, Part 7). After the *dirope* "hind legs" and the *metlhana* have been removed from both sides of a cow, what is left along the spine is *mokoto*. The butcher separates *mokoto* from *motlhana* at the hip bone (*ischium*). This bone is divided in two so that one part of the bone goes with *motlhana* and the other with *mokoto*. *Mokoto* thus "includes the tail, thoracic vertebrae, lumbar vertebrae, and metapodials" (Mooketsi 2001: 12). *Mokoto* is considered tasty and tender and is cooked in the kraal or in the kgotla. However, during a wedding, it

is eaten at the kgotla, not in the homestead, by all men who attend the celebration. *Mokoto* is considered a male cut and is not eaten by women. According to Ngwato tradition, *mokoto* is cooked with other pieces of meat such as rumen and omasum.

No. 8. *Tshiamo*. In Setswana, the word *tshiamo* means goodness. *Tshiamo* is a piece of meat cut from the tenderloin on the upper side of the cow. It is used in the Ngwaketse traditional wedding ritual of hanging a thin string of omentum around the neck of the bride and groom on their wedding day. In the Bangwaketse doctoring ritual, *tshiamo* is first smeared with traditional medicine by the traditional doctor and then roasted on the hot coals of an open fire. Once cooked, it is handed to the bride's maternal uncle who spikes it on a skewer and feeds it to the couple (Otlogetswe 2020). The couple first bites off small pieces of the doctored *tshiamo*, chews them, and spits them on the ground, after which they can bite, chew, and swallow additional pieces. The meat is believed to have powers to protect the couple against witchcraft (Otlogetswe 2020).

No. 9. *Motlhana* (pl. *metlhana*). This is a piece of meat that is cut after the legs have been removed. It includes the last two ribs of the cow, which have been cut in half, and a substantial portion of meat that stretches towards the tail and includes the hipbone or ischium (Figure 1, Part 9). Two *metlhana* are removed from a cow, one from each side, and each has a specific cultural role during a Tswana wedding. *Motlhana* that is removed from one side of the cow is given raw to the bride's maternal uncle, his wife, and the bride's paternal uncle and is then cooked by the bride's maternal aunt. The *sekgawane*, as it is then called, is eaten by the bride and the groom, their parents, and all village elders who are principal players at the wedding. *sekgawane* is usually served by the bride's maternal uncle to married persons, and the couple will share a plate as a sign that they are one. The second *motlhana* is stored by the bride's family, and carried by her maternal uncle's wife when the bride is delivered to her in-laws following the wedding celebration. The day after the delivery of the bride, tea is prepared and this second *motlhana* is cooked, with rice or samp, and served to the parents and relatives of the groom.

No. 10. *Bobadu*. This cut is found at the rump point before the oxtail. It is also known as *manoka* "the waist meat" since it is found around the centre of the cow. *Bobadu* is eaten together with *mokoto* by the men who have accompanied the groom during the wedding. This meat is eaten by adults only and is rarely given to young people.

No. 11. *Serope* (pl. *dirope*). The word *serope* means a thigh, but in this context refers to the meat of the hind leg. *Serope* is given to the bride's paternal aunt (*rakgadi*), who in traditional Tswana culture is responsible for the sexual education of the bride. Historically, Tswana couples did not always choose their own partners but depended on their parents to make the choice. The betrothed daughter would still be young and inexperienced. To make sure that the marriage was consummated, the bride's paternal aunt would sleep in the same room as the

newlyweds on their first night together. If the bride resisted the groom, the paternal aunt was supposed to rebuke her and hold her down. Although this does not occur anymore, the *serope* still carries the nickname of *marage* "the kicker" for the way the new bride would kick the paternal aunt in her struggle with her new husband.

The dictionary should not only account for the beef cuts and their cultural functions. It ought to account for the cattle skeleton, demonstrating a deep cultural appreciation of a cow skeleton as demonstrated in Figure 2.

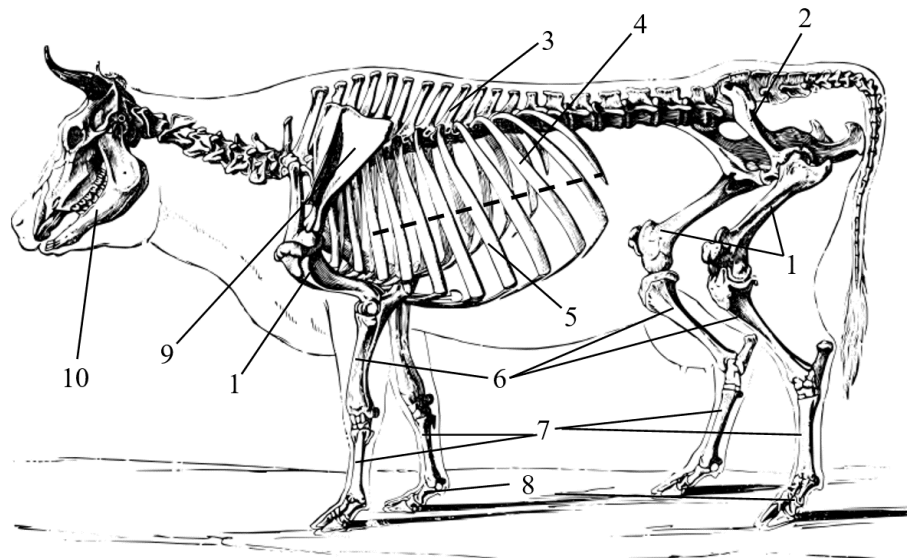


Figure 2: Cow skeleton (Adapted from Otlogetswe 2020)

Such an image could be accompanied by detailed text with the following explanations:

No. 1. Lesuhu (pl. *masuhu*). This comprises the femur from the hind leg and the humerus from the front leg of the cow. The humerus links up with the shoulder bone (Figure 2, Bone 9) at the top and the radius and ulna "*mosetlatshe*" at the bottom (Figure 2, Bone 6). The femur links to the hip bone (the ischium) at the top and the tibia and fibula "*mosetlatshe*" at the bottom. *Lesuhu* is cooked whole with small pieces of meat attached to it. The meat pieces are usually eaten after scraping them off the bone with a pocketknife (Mooketsi 2001: 112). The *mašetla*, the proximal ends of the bones, are juicy on the inside and are usually chopped with an axe and chewed. The femur is then cracked open with an axe, either along the shaft or in half, to extract the marrow, which is eaten. During a

Setswana wedding *lesuhu* is eaten by men on the day after the wedding celebration.

No. 2. *Lerapo la noka* "the ischium." It is cut into two with an axe. One half forms part of the *mothlana* (see above) and the other of the *mokoto*.

No. 3. Is *ttholamatlotla* which is the backbone and includes the thoracic, lumbar, and sacral vertebrae. This bone has little meat. It is cut into two and added to the *mothobiso* pot. It is served on the lid to the old men. This bone is believed to be an aphrodisiac.

No. 4. *Thupa*. This comprises the six ribs that are cut in half with an axe to separate them from the chest ribs. Before they are chopped with an axe, the *thupa* ribs attach to the backbone. *Thupa* is added to the pot of *mothobiso* and cooked.

No. 5. *Sehuba*. These are the chest bones that form part of the *sehuba* meat cut that is eaten by married couples.

No. 6. *Mosetlatshe* (pl. *mesetlatshe*). *Mosetlatshe* includes the tibia and fibula in the hind leg and the radius and ulna in the front leg. During a Tswana wedding, these two bones cooked in the same pot as the *masuhu* and are eaten only by women, usually on the day following the wedding celebration in the homestead. Like *masuhu*, these bones are cooked with small pieces of meat attached to them. Once cooked, the pieces of meat are scraped off the bone with a pocketknife and eaten. The bone is then broken with an axe and the extracted bone marrow is also eaten.

No. 7. *Motwane* (pl. *metwane*). *Motwane* is a general term that refers to the metatarsal and metacarpal bones found between the phalanx "*basimanyana ba tllhako*" (Figure 2, Bone 8) and the *mosetlatshe* [tibia, fibula, radius, and ulna] (Figure 2, Bone 6). *Motwane* is eaten on the day that the cow is slaughtered by the men and young men skinning the cow. It is cooked with small miscellaneous meat cuts in the kraal or at the kgotla as part of *mothobiso*. It is of low social status and not highly regarded.

No. 8. *Basimanyana ba tllhako*. These are the proximal and middle phalanx bones (Figure 2, Bone 8) that are usually eaten with the *motwane* [metatarsal or metacarpal bones] or the *tllhako* "hoof" by boys and young men who help with the skinning and butchering of a cow. Weeks, months, and even years after they have been eaten and discarded, they can be found in village playgrounds, pushed around by small children as toys.

No. 9. *Legetla*. This is the scapula [shoulder blade] (Figure 2, Bone 9). During the butchering, it remains attached to the front leg when cut from the carcass. It is therefore part of the meat that pays a traditional doctor or that is cooked by the bride's family during the day *bogadi* is received.

No. 10. *Tlhogo*. This is the skull "*logata*" and the cervical vertebrae of the Tswana (Figure 2, Bone 10). It is eaten by the maternal uncle of the groom and his fam-

ily. The head together with the neck and the first four ribs from the neck (two on the right and two on the left) are given to the maternal uncle of the groom wrapped in a skin in recognition of his role as head of the wedding negotiations. The maternal uncle takes the *tlhogo* to his house to cook and eat with his family.

A people's culture also includes their food and drink. The depiction of food in the dictionary should be culturally sensitive and not prefer Eurocentric foods to indigenous ones. For instance, a Setswana general dictionary ought to show that Batswana have their own fruits and berries apart from the Eurocentric grapes, pears, peaches, and apples. These include *mmupudu/mompudu* "Common red milkwood (*Mimops zeyheri* Sonder.)", *mopenoeng/molalagaka* "Jacket plum (*Pappea capensis* Ecklon and Zeyher)", *moretlwa*, "Wild berry, (*Grewia flava* DC)", *Moretologa wa kgomo/Morotologakgomo* "large sourplum (*Ximenia caffra* Sonder)", *Moretologa wa podi/morotologapodi*, "Small sourplum (*Ximenia Americana* L.)", *Morula* "Marula (*Sclerococcaria birrea* (A. Rich.) Hochst.)", *motlhatswa*, Milk plum "*Englerophytum magalimontanum*", *Ntoroko/motoroko*, "Prickly pear (*Opuntia* sp)", *mogorwagorwane* "*Strychnos Cocculoides*", *Mothwane/Mmilo*, "*Vangueria infausta*", also known as the wild medlar, *motsotsojane* "Kalahari hardy shrub raisin plant (*Grewia retinervis* Burret)", *mogwana* "*Grewia bicolor*", *mogwagwa* "Loganiaceae *Strychnos madagascariensis*", and *morojwa* "*Azanza garckeana*." These should not be classified simply as *wild*.

An Afrocentric dictionary should reaffirm that before the advent of missionaries and European travellers Africans cultivated their own crops and enjoyed a variety of vegetables, which they continued to enjoy alongside European spinach and cabbage. For instance, the Setswana vegetables include *thepe* (*Amaranthus thunbergii*), *rothwe/rotho*, "Spider whisp (*Cleome gynadra*)", *Thepelešwane* (*Amaranthus deflexus*), and *setlepetlepe* (*Amaranthus Spinosus*). Batswana have cultivated at least twelve crops which have been critical to their survival. These are captured in Appendix 2 (Obopile and Seeletso 2013: 20). No Setswana monolingual or bilingual dictionary illustrates any of Setswana vegetables and crops.

Not only that, an Afrocentric dictionary must also demonstrate that Africans had and still have alcoholic and non-alcoholic beverages such as *mosukujwane/mosukutswane* tea (*Lippia Jovania*), *kgomodimetsing* (resurrection plant) (*Myrothamnus flabellifolius* Welw), *longana* (*Artemisia afra*), *moritelatshwene*, *Rammola* leaves, *seswagadi* (*Jatropha zeyheri* Sond), *mosukudu* (*Lippia scaberrima*) and alcoholic drinks such as *bojalwa jwa Setswana* (traditional sorghum beer), *bojalwa jwa ila, khadi* (made from *segwere* "tuber" of *mogakangaga* "*Kedrostis hirtella*" plant and brown sugar) and *bojalwa jwa morula* (made from fully ripe morula fruits). Such information must enrich the backmatter or the middle section of the dictionary.

A Setswana dictionary must show that for many years Batswana have enjoyed eating various kinds of insects and worms such as *tsie* "locust", some of which have informed many proverbs and idioms such as *kgetsi ya tsie e kgonwa ke go tshwaraganelwa* "it is easier to achieve much by working together." A compre-

hensive list of worms that Batswana eat is in Appendix 1 (Bultosa et al. 2020: 9).

The discussion above on the beef cuts and their cultural relevance amongst the Batswana as well as a rich Setswana vocabulary on fruits and berries, vegetables, beverages, edible worms, and common crops is a demonstration of what could be included in the middle sections of an Afrocentric dictionary with detailed illustrations. There is much more that an Afrocentric dictionary can do to reflect a people's vibrant culture such as music, dance, clothes, religion, and many other elements which are definitive of a linguistic group. African lexicographers must not lose the fact that a dictionary reinforces a culture.

3. Conclusion

African lexicographers have a profound opportunity to reshape the narrative of African languages through dictionaries that are truly Afrocentric. This article has explored six vital strategies for making African dictionaries resonate with the heartbeat of the continent. These strategies are not just blueprints; they are catalysts for transformation. They represent a commitment to honouring the rich tapestry of languages that have flourished across the continent for centuries. In each meticulously crafted entry, in every nuanced pronunciation guide, and the thoughtful inclusion of cultural context, African lexicographers have the power to breathe life into African dictionaries. They have the power to amplify voices, bridge divides, and foster understanding. They have the power to unlock doors to knowledge, pride, and self-identity. They must craft dictionaries that are not mere repositories of words, but living, breathing testaments to the vibrant mosaic of Africa culture.

References

Dictionaries

- Cole, D.T. 1995. *Setswana — Animals and Plants*. Gaborone: The Botswana Society.
Otlogetswe, T.J. 2012. *Tlhalosi ya Medi ya Setswana*. Gaborone: Medi Publishing.

Other references

- Atkins, B.T.S., J. Clear and N. Ostler. 1992. Corpus Design Criteria. *Literary and Linguistic Computing* 7(1): 1-16.
Auerbach, R. 1986. First Steps in Setswana Herpetology. *Botswana Notes and Records* 18(1): 71-90.
Barati, A. and P. Noor. 2011. A Study of Methods for Meaning Discrimination of Homonymous and Polysemous Entries: A Case Study of Monolingual English Dictionaries. *Embracing Challenges in Current Trends. Proceedings of the International Conference on Language and Communication (LANCOMM 2011), 19–20 October 2011, Putrajaya, Malaysia*: 26-30. Kuala Lumpur: Kuala Lumpur Infrastructure University College (KLIUC) School of Communication and Language Studies.

- Batibo, H.** 1996. Loanword Clusters Nativization Rules in Tswana and Swahili: A Comparative Study. *South African Journal of African Languages* 16(2): 33-41.
- Batibo, H.M.** 1999. A Lexicostatistical Survey of the Setswana Dialects Spoken in Botswana. *South African Journal of African Languages* 19(1): 2-11.
- Beier, C. and L. Michael.** 2022. Managing Lexicography Data: A Practical, Principled Approach Using FLEx (FieldWorks Language Explorer). Berez-Kroeker, A.L., B. McDonnell, E. Koller and L.B. Collister (Eds.). 2022. *The Open Handbook of Linguistic Data Management*: 301-314. Cambridge, Massachusetts: The MIT Press.
- Bultosa, G., M. Molapisi, N. Tselaele, R. Kobue-Lekalake, G. Desse Haki, S. Makhabu, B. Sekwati-Monang, E. Seifu and P. Nthoiwa.** 2020. Plant-based Traditional Foods and Beverages of Ramotswa Village, Botswana. *Journal of Ethnic Foods* 7(1): 1-15.
- Crystal, D. and D. Davy.** 1969. *Investigating English Style*. London/New York: Routledge.
- De Schryver, G.-M.** 2010. Revolutionizing Bantu Lexicography — A Zulu Case Study. *Lexikos* 20: 161-201.
- Gangla, L.A.** 2001. *Pictorial Illustrations in Dictionaries*. Unpublished M.A. thesis. Pretoria: University of Pretoria. Retrieved from: <https://repository.up.ac.za/bitstream/handle/2263/22862/Complete.pdf>.
- Gouws, R.H. and D.J. Prinsloo.** 2005. *Principles and Practice of South African Lexicography*. Stellenbosch: SUN PReSS, AFRICAN SUN MeDIA.
- Granger, S. and M. Paquot (Eds.).** 2012. *Electronic Lexicography*. Oxford: Oxford University Press.
- Gunnink, H.** 2020. Language Contact between Khoisan and Bantu Languages: The Case of Setswana. *Southern African Linguistics and Applied Language Studies* 38(1): 27-45.
- Hanks, P.** 2012. *Corpus Evidence and Electronic Lexicography*. Granger, S. and M. Paquot (Eds.). 2012. *Electronic Lexicography*: 57-82. Oxford: Oxford University Press.
- Honey, J.** 1997. *Language is Power: The Story of Standard English and Its Enemies*. London/Boston: Faber and Faber.
- Matiki, A.J. and G.N. Ramaeba.** 2018. Lexical Borrowability in Setswana. *NAWA Journal of Language & Communication* 12(1) 93-110.
- McCann, J.** 2001. Maize and Grace: History, Corn, and Africa's New Landscapes, 1500–1999. *Comparative Studies in Society and History* 43(2): 246-272.
- Miracle, M.P.** 1965. The Introduction and Spread of Maize in Africa. *The Journal of African History* 6(1): 39-55.
- Moe, R.** 2003. Compiling Dictionaries Using Semantic Domains. *Lexikos* 13(1): 215-223.
- Mooketsi, C.** 2001. Butchery Styles and the Processing of Cattle Carcasses in Botswana. *Pula: Botswana Journal of African Studies* 15(1): 108-124.
- Morton, F. and R. Hitchcock.** 2014. Tswana Hunting: Continuities and Changes in the Transvaal and Kalahari after 1600. *South African Historical Journal* 66(3): 418-439.
- Nkabinde, A.C.** 2003. The Implications of Culture for Dictionaries of the African Languages. *Lexikos* 13: 168-182.
- Obopile, M. and T.G. Seeletso.** 2013. Eat or not Eat: An Analysis of the Status of Entomophagy in Botswana. *Food Security* 5: 817-824.
- Otlogetswe, T.J.** 2013. *Foreign Words in Setswana Dictionaries*. Available at: <https://otlogetswe.wordpress.com/2013/08/04/foreign-words-in-setswana-dictionaries/>
- Otlogetswe, T.J.** 2016. Are these Words, Setswana Words? *Sunday Standard*, 3 November. Available at: <https://www.sundaystandard.info/are-these-words-setswana-words-2/>.

- Otlogetswe, T.J.** 2019. *The Great Marage: How at Night Rakgadi Held Her Legs as the Man Mounted Her*, 7 April 2019. Available at: <https://otlogetswe.wordpress.com/2019/04/07/the-great-marage-how-at-night-rakgadi-held-her-legs-as-the-man-mounted-her/>
- Otlogetswe, T.J.** 2020. Beef Cuts amongst the Bangwaketse: The Case of Motlhakanelwa. *Anthropology Southern Africa* 43(4): 233-245.
- Pawliková-Vilhanová, V.** 2009. White Fathers' Linguistic Work and Contribution to the Development of African Languages and Literatures. Prah, K. 2009. *The Role of Missionaries in the Development of African Languages*: 61-90. Cape Town: Centre for Advanced Studies of African Society.
- Peterson, R.A.** 1979. Revitalizing the Culture Concept. *Annual Review of Sociology* 5(1): 137-166.
- Prah, K.K. (Ed.)**. 2009. *The Role of Missionaries in the Development of African Languages*. Cape Town: Centre for Advanced Studies of African Society.
- Prinsloo, D.J.** 2009. Current Lexicography Practice in Bantu with Specific Reference to the *Oxford Northern Sotho School Dictionary*. *International Journal of Lexicography* 22(2): 151-178.
- Prinsloo, D.J.** 2015. Corpus-based Lexicography for Lesser-resourced Languages — Maximizing the Limited Corpus. *Lexikos* 25: 285-300.
- Prinsloo, D.J.** 2017a. Analyzing Words as a Social Enterprise: Lexicography in Africa with Specific Reference to South Africa. Miller, J. (Ed.). 2017. *Analysing Words as a Social Enterprise: Celebrating 40 Years of the 1975 Helsinki Declaration on Lexicography*. Available online at: <https://www.adelaide.edu.au/australex/publications/>
- Prinsloo, D.J.** 2017b. Africa's Response to the Corpus Revolution. Xu, Hai (Ed.). 2017. *Proceedings of the 11th International Conference of the Asian Association for Lexicography, ASIALEX 2017, 10–12 June 2017, Guangzhou, China: Lexicography in Asia: Challenges, Innovations and Prospects*: 20-31. Guangzhou, China: ASIALEX.
- Prinsloo, D.J. and N. Zondi.** 2020. From Postcolonial African Language Lexicography to Globally Competitive e-Lxicography in Africa. Kaschula, R.H. and H.E. Wolff (Eds.). 2020. *The Transformative Power of Language: From Postcolonial to Knowledge Societies in Africa*: 259-274. Cambridge: Cambridge University Press.
- Reynierse, C. (Ed.)**. 1996. *South African Multi-language Dictionary and Phrase Book*. Cape Town: Reader's Digest Association of South Africa.
- Robbins, K. (Ed.)**. 2017. *The History of Oxford University Press: Volume IV: 1970 to 2004*. Oxford: Oxford University Press.
- Sands, B. and K. Jones.** 2022. *N|uuki Namagowab Afrikaans English Dictionary*. Stellenbosch: African Sun Media.
- Southerland, R.H. and F. Katamba.** 1997. Language in Social Contexts. O'Grady, W., M. Dobrovolsky and F. Katamba (Eds.). 1997. *Contemporary Linguistics: An Introduction*: 540-590. London: Longman.
- Spencer-Oatey, H.** 2012. *What is Culture? A Compilation of Quotations. GlobalPAD Core Concepts*. Available at GlobalPAD Open House: <http://go.warwick.ac.uk/globalpadintercultural>
- Svensén, B.** 2009. *A Handbook of Lexicography. The Theory and Practice of Dictionary-making*. Cambridge: Cambridge University Press.
- Trench, R.C.** 1857. *On Some Deficiencies in Our English Dictionaries: Being the Substance of Two Papers Read before the Philological Society, Nov. 5, and Nov. 19, 1857*. London: John W. Parker and Son.

- Tylor, E.B.** 1871. *Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Art, and Custom*. Vol. 2. London: John Murray.
- Van Wyk, E.B.** 1995. Linguistic Assumptions and Lexicographical Traditions in the African Languages. *Lexikos* 5: 82-96.

Appendix 1: Tswana edible worms

Setswana name	English name	Scientific name
<i>Phane</i>	Mopane worm	<i>Imbrasia belina</i> Westwood
<i>Sega/Sengana</i>	Arrow sphinx	<i>Lophostethus dumolinii</i> Angas
<i>Khana</i>	Oleander hawk moth	<i>Daphnis nerii</i> L.
<i>Phata</i>	Common emperor moth	<i>Bunaea alcinoe</i> Stoll
<i>Kokobebe</i>	Harvester termite	<i>Hodotermes mossambicus</i> (Hagen)
<i>Sekala</i>	Marbled emperor moth	<i>Heniocha</i> spp.
<i>Tutukgweba/Lebitse</i>	Giant jewel beetle	<i>Stenorcera orissa</i> Buq.
<i>Ntlhwa</i>	African thief ant	<i>Carebara vidua</i> F. Smith
<i>Tsie molome</i>	Red locust	<i>Normadacris septemfasciata</i> Serville
<i>Tsie segongwane</i>	Brown locust	<i>Locustana pardalina</i> Walker
<i>Tsie ya sekaka</i>	Desert locust	<i>Schistocerca gregaria</i> Forskal
<i>Nato</i>	Pallid emperor moth	<i>Cirina forda</i> Westwood
<i>Kgonono</i>	Willow emperor moth	<i>Imbrasia tyrrhea</i> Cramer
<i>Dikakabotha</i>	Sundown emperor moth	<i>Sphingomorpha chlorea</i> Cramer
<i>Thethe</i>	Scarab larvae	<i>Oryctes boas</i> Fabr.
<i>Tsiakgope</i>	Brown-spotted locust	<i>Cyrtacanthacris tatarica</i> L.
<i>Lentloro</i>	Common stick grasshopper	<i>Acrida acuminata</i> Dirsh.
<i>Morwerwe</i>	Silver striped hawk	<i>Hippotion celerio</i> L.
<i>Notshe</i>	Honeybee	<i>Apis mellifera</i> L.
<i>Senyetse</i>	Cicada	<i>Monomatapa insingnis</i> Distant
<i>Ntsi ya mooka</i>	Stingless bee	<i>Plebeina hildebrandti</i> Friese
<i>Kokomochane</i>	Stingless bee	<i>Hypotrigona gribodoi</i> Magretti,
<i>Tsie ya matebele</i>	Elegant grasshopper	<i>Zonocerus elegans</i> Thunb.
<i>Mmamati</i>	Burrowing grasshopper	<i>Acrotylus</i> spp.
<i>Mookotsane</i>	Mopane bees	<i>Meliponula</i> sp
<i>Senyanyantsodi</i>	Speckled emperor moth	<i>Gynanisa maja</i> (Klug)
<i>Monakamongwe</i>	Convolvulus hawk moth.	<i>Agrius convolvuli</i> L.

Adapted from Bultosa et al. (2020: 9).

Appendix 2: Setswana common crops

Setswana	English	Scientific Name	Parts Used
<i>Mabele</i>	Sorghum	<i>Sorghum bicolor</i> L.	Grains
<i>Mmidi</i>	Maize	<i>Zea mays</i> L.	Grains
<i>Lebelebele</i>	Pearl millet	<i>Pennisetum glaucum</i> (L.) R. Br.	Grains
<i>Dinawa</i>	Common beans	<i>Phaseolus vulgaris</i> L.	Pulses/seeds
<i>Ditloo</i>	Jugo beans	<i>Vigna subterranean</i> (L.) Verdc	Pulse/seeds
<i>Letlhodi</i>	Mung bean	<i>Vigna radiata</i> (L) R. Wilczek	Pulse/seeds
<i>Manoko/matonkomane</i>	Groundnuts	<i>Arachis hypogaea</i> L.	Nuts
<i>Lephutshe</i>	Pumpkin	<i>Cucurbita pepo</i> L.	Pulp
<i>Magapu</i>	Watermelon	<i>Citrullus lanatus</i> (Thunb.) var. <i>lanatus</i>	Pulp & seeds
<i>Makgomane</i>	Squash	<i>Lagenaria siceraria</i> (Molina) Standl.	Fruit
<i>Marotse/makatane/ maowane</i>	Melon	<i>Citrullus lanatus</i> var. <i>citroides</i> (L.H. Bailey) Mansf.	Pulp, seeds, rind
<i>Ntshê</i>	Sweet reed	<i>Sorghum bicolor</i> (L.) Moench	Stem reed

Adapted from Obopile and Seeletso (2013: 20).