The Lemmatization of Loan Words in the *isiNdebele–English isiHlathululi-imagama/Dictionary* and Their Successful Incorporation into the Language*

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Abstract: Researchers in linguistic and lexicographic fields such as Nkondo (1987: 70) and Kamwangamalu (1997: 89) assert that no language is lexically self-sufficient. According to Jafta (1987: 127), the reason for this is because no perfectly homogenous language group exist. There is no living language that can survive without supplementing its vocabulary through borrowing from another or other language(s). Thus Aitchison (2001: 249) is of the view that language gradually transforms itself and it cannot remain unaltered. On the other hand the so called 'purists' disapprove of such alterations because they view these transformations as a process of language corruption because they prefer coining which Mojela (2010: 702) termed indirect borrowing. This article proves and illustrates this notion as correct, especially in the case of African languages. The technical terms and vocabulary in social interaction is based on adjacent South African languages such as English and Afrikaans, which as official languages have inevitably cross-pollinated each other. Researchers also agree that one way of enriching language is through borrowing. The aim of this article is to show that borrowing does not only enrich a language, but it also causes language dilution especially in the case of languages that are less technologically advanced or do not yet function as official languages.

Keywords: BORROWING, CORPUS, DICTIONARY COMPILATION, LEMMATIZATION, LEXICOGRAPHER, LEXICOGRAPHY, ISINDEBELE WORDS, LOAN WORDS, BILINGUAL DICTIONARY

Opsomming: Lemmatisering van leenwoorde in die *isiNdebele–English isi-Hlathululi-imagama/Dictionary* en die suksesvolle opname daarvan in die taal. Navorsers op linguistiese en leksikografiese terreine soos Nkondo (1987: 70) en Kamwangamalu (1997: 89) voer aan dat geen taal leksikaal selfgenoegsaam is nie. Volgens Jafta (1987: 127) is

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die rede hiervoor dat geen perfekte homogene taalgroep bestaan nie. Daar is geen lewende taal wat kan oorleef sonder om sy woordeskat aan te vul deur ontlening uit 'n ander taal of tale nie. Daarom huldig Aitchison (2001: 249) die siening dat taal geleidelik omvorm word en nie onveranderd kan bly nie. Aan die ander kant keur sogenaamde 'puriste' sulke veranderinge af omdat hulle hierdie transformasies as 'n proses van taalkorrupsie beskou aangesien hulle verkies om indirekte ontlenings te vorm, soos wat Mojela (2010: 702) dit noem. Hierdie artikel bevestig en illustreer hierdie aanname as korrek, veral in die geval van Afrikatale. Die tegniese terme en woordeskat in sosiale interaksie is gebaseer op naasliggende Suid-Afrikaanse tale soos Engels en Afrikaans, wat mekaar as amptelike tale onafwendbaar kruisbestuif het. Navorsers is dit ook eens dat een manier om taal te verryk deur ontlening geskied. Die doel van die artikel is om aan te toon dat ontlening nie net 'n taal verryk nie, maar dat dit ook taalverarming verhaas veral in die geval van tale wat minder tegnologies gevorderd of nog nie behoorlik as amptelike tale funksioneer nie.

Sleutelwoorde: Ontlening, korpus, woordeboeksamestelling, lemmavorming, leksikograaf, leksikografie, isindebele woorde, leenwoorde, tweetalige woordeboek

1. Introduction

IsiNdebele as a standard language was recognized in South Africa in the 1980s. In 1985, it was formalized and introduced into schools. Its first orthography and spelling rules were published in 1982 and again revised in 1995 and 2005.

Prior to 1994 therefore, isiNdebele was one of the languages that were regarded as being marginalised. To ensure the equitable use and development of these languages, the new government enacted the Pan South African Language Act and established a Board to, among others; provide conducive environments for these languages to expedite their development. Afrikaans and English were used as yardstick (http://www.pansalb.org.za/pansalbhistory. html). However, by then, these languages were unequal because they had been separately and independently developed at their particular homeland levels, their development history therefore not being on a par with that of, for instance, Afrikaans.

The Pan South African Language Board's reorganization and renormalization of all South African official languages, followed by the establishment of dictionary institutions in 1999, came at a time when isiNdebele scarcely had anything that could be called a dictionary. All that existed then was *IsiHlathululimezwi sesiNdebele* compiled by Shabangu and Swanepoel (1989) that differed only slightly from *IsiNdebele Terminology and Orthography No. 1* (1983). IsiNdebele therefore had little previous experience as far as dictionary-making was concerned and consequently no sound lexicographic contributions could be made to the lexicographic debates. Thus, Skhosana (1999: 222) confirmed that isiNdebele had an insufficient corpus, which is developed from written materials only and that no consultation with language speakers had taken place.

Nine National Lexicography Units were established and registered in

2001, their task being to compile monolingual explanatory dictionaries and other products to help with language development (http://www.pansalb.org.za/pansalbhistory.html). One of these was the isiNdebele National Lexicography Unit (known as iZiko lesiHlathululi-mezwi sesiNdebele). The Lexicography Units are based at tertiary institutions throughout South Africa, the IsiNdebele Lexicography Unit being hosted at the University of Pretoria. In 2006, this Unit published its first bilingual dictionary, the IsiNdebele–English/English–IsiNdebele IsiHlathululi-mezwi/Bilingual and Explanatory Dictionary (also known as the IsiNdebele–English IsiHlathululi-magama/Dictionary, and henceforth referred to as the IsiNdebele–English Dictionary). This is a scholar's dictionary containing 15 000 lemmas in total. The experience gained during the compilation of this dictionary proved the need to re-explore some of the latest lexicographic views, because

- (a) unlike other languages that had their specific areas of development (e.g. isiZulu in KwaZulu-Natal, Setswana in the North-West, etc.), isiNdebele is one of the languages that has been intermingling with or spoken within the boundaries of other languages, and
- (b) isiNdebele had not been recognized as an official, autonomous language until 1985.

2. Language contact influencing isiNdebele

It has been noticed that most of the isiNdebele books from which the 2.1 million running words in the isiNdebele electronic corpus were drawn, have used more borrowed words than indigenous isiNdebele words. Thus a part of isiNdebele's vocabulary has gradually been disposed of and replaced by new Ndebelized foreign words, mainly from Afrikaans. This means that when writing books, authors mostly made use of borrowed words, discarding indigenous Ndebele words. The underlying cause can be the fact that the Ndebele speakers have been in contact with English-, Afrikaans- and Sepedi-speaking peoples. However, from a lexicographic point of view, this theory puts lexicographers in a dilemma, especially when they have to enter and define words as they are used colloquially in everyday speech.

Since 1999, isiNdebele is one of the African languages that have been developed through the dictionary-making process. The isiNdebele lexical stock was selected for and defined in the *IsiNdebele–English Dictionary*. During this project, it has been observed that the traditional approach where the lexicographer operates in a prescriptive capacity using his discretion with regard to the words for inclusion in or exclusion from this dictionary cannot be easily overlooked, especially in this era when the descriptive approach is highly favoured. Traditionally, the lexicographer was seen as judge or guardian of the language. The lexicographer therefore was somebody who chose acceptable words that

should be included in and unacceptable ones that should be excluded from the dictionary with the sole aim of using the dictionary to correct and purify the language.

Metalexicographers such as Al-Kasimi (1977: 84), Prinsloo and De Schryver (2002: 73), Hartmann (1983: 20) and others contend and reiterate that the responsibility of a dictionary is to record the language and not to determine its style. Challenges to the treatment of borrowed words when compiling African language dictionaries have been dealt with in Nong, De Schryver and Prinsloo (2002) for Sepedi and Drame (2001) for isiXhosa and they are all in agreement that the challenges faced with borrowed words lies in language attitude which vary from one language to the other. Ncube (2005) researched the attitude of target users regarding the acceptance and non-acceptance of borrowed words in Zimbabwean Ndebele. His finding was that indeed language attitude is at play because people regard borrowing as a process of language corruption.

In this article, therefore, the lemmatization of loan words in the *isiNdebele–English Dictionary* and the selection of words for lemmatization are discussed. The dictionary under discussion uses the stem-based approach which, De Schryver (2010: 162) refers to it as the 'one-size-fits-all approach' and it has been used by many African languages when compiling dictionaries. In conclusion, the article attempts to determine whether borrowing is successful in the growth and development of isiNdebele, and whether the lexicographer should be the final judge on which borrowed terms to include in the dictionary, or whether language users should be the ones to decide for the lexicographer.

Scholars sometimes use the linguistic terms *borrowing*, *loaning* and *adoption* interchangeably in studies that focus on language contact or language mix, (Mahlangu 2007: 1). Gleason (1956: 397) defines *borrowing* as "the copying of a linguistic item from speakers of another speech form", while Thomason and Kaufman (1988) define *adoption* as "the incorporation of foreign features into a group native language by speakers of that language".

Nkondo (1987), Jafta (1987), Mojela (1991), Madiba (1989) and Van Huyssteen (2003) argue that no language is lexically self-sufficient, because no perfectly homogeneous language group exists. Language is like a human being, it is never static, it grows every day and it changes as it grows. Given such a coexistence and also a situation in which the culture of the speakers of one language is regarded as socially and technologically dominant, the major flow of linguistic items will be primarily from the language of the dominant cultural group to that of the dominated speech community.

No fewer than four distinct languages have infiltrated isiNdebele, increasing the lexical stock of the language through language contact and borrowing. The languages affecting isiNdebele are Setswana, Sepedi/Se Sotho sa Leboa, Afrikaans and English. The spread of the Ndebele-speaking people all over white farms in the Highveld region around Middelburg, Belfast, Lydenburg, Standerton, Hendrina and Leandra resulted in most of their borrowed lexical items being drawn from Afrikaans rather than from English (Skhosana 1998: 118).

3. Presenting information in the *IsiNdebele–English Dictionary*

3.1 Entries

The *IsiNdebele–English Dictionary* is a bilingual, bi-directional dictionary, which is divided into two sections. The first section comprises isiNdebele headwords with each headword having an English equivalent, followed by the prefix, abbreviation of the part of speech and the definition(s). The second section comprises of English headwords with each headword having the isiNdebele equivalent, followed by an abbreviated part of speech and the definition(s). Two illustrations of entries from the isiNdebele–English and English–isiNdebele section of the dictionary are given respectively under (1) and (2) below:

- (1) -dzila (i-iin-) bz. brass that is worn around the neck/legs by Ndebele women
 - *-gubelo* (*i-ama-*) bz. meat that is roasted after a sheep/goat/cow has been slaughtered
- (2) *-brisket* (adj.) inyama yesifuba yenyamazana *-conclusion* (n.) isiphetho, isiqunto

In the above examples, lemmas are in isiNdebele and English and each lemma is followed by the equivalent or definition.

3.2 Lemmatization of loan nouns in the *IsiNdebele Dictionary*

In the *IsiNdebele–English Dictionary* all words are lemmatized under their stems. This approach was accepted by the Board of Directors of the isiHlathululi-mezwi sesiNdebele in 2001. The reason why this lemmatization approach was considered to be the appropriate one is because it shows word and lexical relationships and prevents repetition. While implementing this approach, several observations have been made, mainly with regard to loan words. Most common loan words in isiNdebele are channelled to the Class 9 nasal class which is a singular class of Class 10. This is a similar tendency or strategy applied in Sotho languages where most loan words channelled to Class 9 take their plural form in Class 10. Compare the Se sotho sa Leboa in (3) and isiNdebele examples (4) (a-c) below:

(3)	Class 9	Class 10
	<i>Bêibele</i> 'Bible'	diBêibele 'Bibles'
	kôpi 'cup'	dikôpi 'cups'
	tanka 'tank'	ditanka 'tanks'
	<i>lôri</i> 'lorry'	dilôri 'lorries'
	têntê 'tent'	ditêntê 'tents'
	rôkô 'dress'	dirôkô 'dresses'
	thai 'tie'	dithai 'ties'
	tôronkô 'jail'	ditôronkô 'jails'

(4)(a)	Class 9 iBhayibheli 'Bible' ibhigiri 'mug' ikopi 'cup' itanka 'tank' iraba 'rubber' itende 'tent'	Class 10/Class 6 iimBhayibheli/amaBhayibheli 'Bibles' iimbhigiri/amabhigiri 'mugs' iinkopi/amakopi 'cups' iintanka/amatanka 'tanks' iinraba/amaraba 'rubbers' iintende/amatende 'tents'
(4)(b)	Class 9 ikotini 'cotton' idrada 'wire' imbhaji 'jacket' imodere 'car'	Class 10 iinkotini 'cottons' iindrada 'wires' iimbhaji 'jackets' iimodere 'cars'
(4)(c)	Class 9 i-eseyi 'essay' i-albhamu 'album' i-adresi 'address' ijarada 'yard'	Class 6 ama-eseyi 'essays' ama-albhamu 'albums' ama-adresi 'addresses' amajarada 'yards'

Lexicographers therefore find themselves faced with a problem regarding the microstructural elements of the lexical item to be lemmatized, especially with the type of variety. The popular stem-based approach of the *IsiNdebele–English Dictionary* requires that the lexical entries of grammatical information such as prefixes and word categories be entered and bracketed immediately after the head word. Compare in this regard the following isiNdebele examples of Class 9 nouns in (5) below.

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(5) -kosi (i-/iin-) (bz): 'chief, traditional leader'
-nja (i-/izi-) (bz): 'dog'
-fene (i-/iim-) (bz): 'baboon'
-pilo (i-/iim-) (bz): 'life'
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From the examples in (5) above, it can be seen that the morphological information in the case of nouns, i.e. the singular and plural prefixes immediately succeed the headword and, as already intimated, these commonly comprise the morphological information.

Some loan nouns, especially those that take their plural forms in both Classes 10 and 6, pose the problem of (a) which of the two plural variant forms to enter as morphological information, or (b) whether to include them both. Compare the following isiNdebele loan nouns where in (4)(a) there are those that split their plurality into Classes 10 and 6, while examples (4)(b) and (4)(c) take only one plural form.

The grammatical rules state that "it is only the aspirated Class 5 nouns with a double plural form (i.e. nouns that can form their plural by substituting

the singular prefix with either the plural prefix *ama*- or *iim*-) that lose their aspiration when transposed to Class 10 while they retain their aspiration when they appear in Class 6". From the given examples, it can be observed that there are inconsistencies in the lemmas with these double plural forms.

- (a) In example (4)(a), the Class 9 nouns take their plural forms in Class 6 and 10. On the contrary, in examples (4)(b) and (4)(c), the Class 9 nouns take their plural forms either in Class 10 or Class 6.
- (b) Despite the inconsistencies highlighted, it is found that some of the borrowed words falling in these categories have double plurality in the same class, but their meanings are different. The following are examples of such nouns in Class 9/6
 - (i) *iraba* (rubber) > *amaraba* (rubbers) *iraba* (eraser) > *iinraba* (erasers)
 - (ii) *itende* (tent) > *amatende* (tents) *itende* (room) > *iintende* (rooms) (room especially for the bride made up of grass mats)
 - (iii) *ibhigiri* (mug) > *amabhigiri* (mugs) *ibhigiri* (trophy/cup) > *iimbhigiri* (trophies/cups)(vessel with two handles given as a prize to the winner(s) of a competition)

Although isiNdebele speakers frequently use these nouns as they appear in the examples given in (6) below, the solution would of course be to disregard one of the plural prefixes in the section for morphological information, meaning that either Class 10 or Class 6 is given as plural form. This would imply that these nouns will be entered as shown in (6) below.

In doing this, the lexicographer will have become prescriptive, which modern metalexicographers regard as the traditional approach. According to Al-Kasimi (1977: 84), Hartmann (1983: 20), and others, 'a responsible and accountable dictionary' has to record the language as it is written and spoken. This implies that the lexicographer should record the speaker's language as it is used, rather than focusing on language correction. If a descriptive approach is adopted, the examples of entries shown in (6) above would have several possible plural forms given in the section for morphological information, rather than two as is the case with most noun entries. Compare the examples in (7) below:

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(7) Class 5/6/10
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-Bhayibheli (i-/iim-/ama-) (bz) 'Bible'
-kopi (i-/iin-/ama-) (bz) 'cup'
-tanka (i-/iin-/ama-) (bz) 'tank'
-raba (i-/iin-/ama-) (bz) 'rubber'
-tende (i-/iin-/ama-) (bz) 'tent'
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Unfortunately, during the compilation of the *IsiNdebele–English Dictionary*, lexicographers did not work consistently since for loan words such as those shown in (8) below, only one plural prefix was given. In other words, the dictionary, *inter alia*, prescribes the usage, ignoring influences that isiNdebele might have undergone.

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(8) -tafula (i-/iin-) bz. 'table'

-tamati (i-/iin-) bz. 'tomato'

-teksi (i-/ama-) bz. 'taxi'

-tende (i-/ama-) bz. 'tent'

-bhayibheli (i-/ama-) 'Bible'

-bhayisikili (i-/ama-) 'bicycle'
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The lemmas in example (6) above should be entered in the same way as those in example (7) to avoid the inconsistencies shown in the lemmas in example (8).

4. Loan words as 'substitutes' for traditional vocabulary

Rasman (1977: 5) claims that many people reject adoptives, considering them to be an impure form of language. Thus they are referred to as 'borrowing' or 'loaning' which could imply that such words do not belong or only temporarily belong in a specific language.

Borrowing or loaning only occurs when a receiving language integrates a foreign item with the aim of closing an information gap in its vocabulary. Otherwise, there is no need for borrowing or loaning. As soon as a receiving language replaces its own items with new foreign items, it illustrates what is termed a language shift if not a language change. This is exactly the case in isi-Ndebele where numerous lexical items have infiltrated its lexical stock at the expense of vocabulary that it already owns. Commonly only nouns and verbs are vulnerable to borrowing in most African languages, but isiNdebele has gone beyond this normal boundary and has adopted other word categories such as conjunctions, adjectives and adverbs, especially from Afrikaans (Mahlangu 2007: 109). In the recent crises and accidents of Putco buses transporting people between Mpumalanga and Pretoria along the Moloto road, iKwekwezi FM captured a voice of one commuter who expressed her feelings regarding the conditions of the buses for the Yiza Nendlebe 'Come and Listen' programme. In this oral snippet the commuter enumerates three issues regarding Putco buses, fiercely stating:

(9) Die eerste ding, iimbhesi zakwaPutco ziyagcwala over. 'Firstly, Putco buses are always overloaded.' Die tweede ding, zimaratha. 'Secondly, they are all wrecked.' Die derde ding, siyaladelwa emsebenzini. 'Thirdly, we come late at work.'

IsiNdebele equivalent numerals such as *kokuthoma* 'firstly', *kwesibili* 'secondly' and *kwesithathu* 'thirdly' do indeed exist and are known to the commuter, but apparently loan equivalents are preferred to the originals. Compare the following similar additional examples in this regard.

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(10) -rhanorho (<Afr. genoeg) 'enough'/'sufficient' (instead of -anele) -stararha (<Afr. stadig) 'slowly' (instead of kabuthaka) -fenarha (<Afr. vinnig) 'quick' (instead of msinya) somara (<Afr. sommer) 'just' (instead of nje)
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It has therefore been observed during the compilation of the bilingual dictionary in question, that speakers discard their own lexical items and substitute them with loan items. This has been one of the challenges that isiNdebele lexicographers had to face, finding themselves between the two views of the dictionary making practice, i.e. prescriptive versus descriptive. Descriptive is concerned with the empirical basis whereas prescriptive is concerned with the genuine purpose of a dictionary. When one looks at the descriptive approach it becomes apparent that it is not viable as a single approach for text production if more than one variant prevails. Prescription is also not entirely a viable approach because it influences future text production activities and give the user one prescribed form to use. However, Bergenholtz (2003), Bergenholtz and Gouws (2010) have now found a solution to this predicament. According to these scholars, a proscriptive approach draws the best of both prescription and description and includes features of both approaches. It is an approach that is used in modern-day dictionaries. However, the focus of this article is not on the prescription, descriptive and proscriptive approaches but they will also be highlighted.

For isiNdebele bilingual dictionary a proscriptive approach is the best approach because it gives a lexicographer the opportunity to include different variants, but also to indicate which one is recommended. A given word can combine with different words in different forms in order to express the same meaning. In isiNdebele the noun *-bhigiri* 'cups' can use both *iim-* and *ama-* prefixes and the noun will be *iimbhigiri* or *amabhigiri* and both express the same meaning.

The foreign lexical stocks such as those in example (6) enjoy the highest frequency of usage amongst isiNdebele speakers. From a descriptive point of view, these words must be lemmatized. The problem is that the so-called National Language Body for isiNdebele (or former old isiNdebele Language

Board) plays a prescriptive role while the lexicographer's purpose has to follow a proscriptive approach.

Under these circumstances, lexicographers certainly find themselves in a dilemma since none of the lexical items such as those in example (10) are found in the electronic corpus of isiNdebele. This corpus is based mainly on written material, which contains formal standardized isiNdebele only, and not much in the line of informal, oral recordings. The question is: Should the foreign items such as those in (10) be lemmatized in the dictionary, replacing original isiNdebele items, as speakers suggest, or not? Should the lexicographers concur with Mdee (1999: 129) when stating that: "A dictionary shall command authority over its users if it convinces them that it is adhering to the standard language."

These are some of the questions the isiHlathululi-mezwi sesiNdebele Dictionary Unit, had to answer while the *Bilingual Scholar's Dictionary* was being compiled. If *mara* 'but', *dereveyi* 'while', etc. are incorporated in the dictionary, does it imply that isiNdebele is enriching its vocabulary by borrowing, or indirectly and gradually drifting towards Afrikaans? The lexicographer, in such instances, is bound to be prescriptive, since in spoken language hardly a sentence is uttered in the isiNdebele speech community without an Afrikaans item being used. Compare in this regard the following examples where foreign items frequently replace isiNdebele equivalents.

(11) IsiNdebele Afrikaans

(Less preferred) (Highly preferred) kodwana mara (<Afr maar) 'but'

ngesimanga sokuthi/ dereveyi (<Afr terwyl) 'because of/meanwhile'

ngesikhathi/nagade

eqiniswenientlege (< Afr eintlik) 'in fact'</th>ngamanegamare (<Afr kan maar) 'rather'</td>mbalajeyisi (<Afr juis) 'exactly/definitely'</td>

5. Conclusion

In the foregoing discussion, it has been shown how loan items can pose a challenge to lexicographers, especially where they have not yet decided whether they should be prescriptive, descriptive or proscriptive. The article aims to help lexicographers to decide which trend should be followed when they lemmatize words such as those with double plurals in isiNdebele. The suggested trend is the most useful, user-friendly and space-saving because instead of entering the same lemma twice, the lemma is treated once with the double plurals included, except where the plurals have different meanings. The article has also illustrated that loan items differ from one language to another and also that foreign items sometimes behave differently so much so that lexicographers can easily maintain or distort the language usage. The double pluralism that isiNdebele

exhibits in loan words of Class 6 and 9 shows that each language needs to have its specific treatment that will satisfy its users. The article has illustrated that some lexicographic principles such as descriptiveness or prescriptive can be a challenge in a language where its history of recognition is still in its infancy. IsiNdebele has further shown that borrowing is not necessarily an ideal trend towards language enrichment, but it sometimes leads to a language shift or a language impoverishment. The paper has also revealed that borrowing not only contributes towards language growth, as perceived by many scholars, but to some extent, in some indigenous African languages, language diminution or decay, especially when considering how isiNdebele opted to drop some of its own vocabulary at the expense of borrowed Afrikaans vocabulary.

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