

TERMINOLOGY DEVELOPMENT IN ISINDEBELE: CHALLENGES AND SOLUTIONS

by

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DECLARATION

I, Ms Christinah Sibongile Mabena, declare that this dissertation, “Terminology development in isiNdebele: Challenges and solutions” is my own work and that all the sources that I have used and that have been quoted in the study have been acknowledged by means of complete references.



31/ 08/ 2020

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CS MABENA

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DATE

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TABLE OF CONTENTS

DECLARATION.....	i
ACKNOWLEDGEMENTS	ii
LIST OF TABLES.....	v
Chapter 1: Terminology development in isiNdebele: Challenges and Solutions	1
1.1. Introduction	1
1.2. A short overview of isiNdebele terminology development	2
1.3. Research problem.....	4
1.4. The purpose of the study	5
1.5. Objectives of the study.....	5
1.6. Literature review.....	5
1.6.1. Terminology development	6
1.6.2. Terminology development in South Africa	9
1.6.3. Terminology and language development.....	10
1.6.4. Terminology development and language policy.....	11
1.6.5. Factors/problems hampering terminology development in African Languages.....	11
1.6.6. Terminology development and education	12
1.6.5. Terminology development as an ongoing (academic) activity	13
1.7. Research Methodology	14
1.8. Definition of concepts.....	14
1.8.1. Term	14
1.8.2. Terminology.....	15
1.8.3. Terminography	15
1.8.4. Lexicography	15
1.8.5. Standardisation.....	15
1.8.6 Chapter Layout	16
Chapter 2: Critical overview of terminology development in South Africa, with reference to isiNdebele.	17
2.1. Terminology as part of language development	17
2.2. Legislation and language policies on terminology development	17
2.3. Terminology policy	20

2.3.1.	Language planning and policies	21
2.3.2.	Pan-South African Language Board (PanSALB)	22
2.3.3.	Language Plan Task Group (LANGTAG)	23
2.3.4.	National Language Policy Framework	23
2.3.5.	Higher Education Act.....	24
2.3.6.	South African Language Practitioners' Council Act	24
2.3.7.	Copyright	25
2.4.	Has the legislation resulted in any tangible results?.....	25
2.5.	Current state of terminology development in isiNdebele	27
2.5.1.	Development of methods for the harvesting of terminology.....	29
2.6.	Availability of developed isiNdebele terminology lists and dictionaries	31
2.7.	Conclusion	32
Chapter 3: Term formation strategies in isiNdebele: a case study		33
3.1.	Introduction	33
3.2.	Term formation strategies	33
3.3.	Guidelines for the formation of terms	34
3.4.	Term formation processes in the African languages	36
3.5.1.	Systematic Sampling	41
3.6.	Findings from the case study	47
3.7.	An analysis of term formation strategies used for isiNdebele.....	49
3.8.	Conclusion	49
Chapter 4: Summary, Recommendations and Conclusion.....		50
4.1.	Introduction	50
4.2.	Summary.....	50
4.3.	Recommendations	51
4.4.	Conclusion	52
References.....		53

LIST OF TABLES

Table 1: Predominance of languages by province – 2013 statistics (Alberts 2017: 150).....	19
Table 2: Multilingual Human, Social, Economic and Management Sciences Terminology List ..	43
Table 3: Multilingual Terminology for Information Communication Technology (ICT)	44
Table 4: Pharmaceutical terminology	46
Table 5: Term formation strategies.....	48

Chapter 1: Terminology development in isiNdebele: Challenges and Solutions

1.1. Introduction

IsiNdebele is an African language that belongs to the Nguni group of Bantu Languages and that is spoken mostly in four provinces in South Africa namely, Mpumalanga, Gauteng, Limpopo and North West. According to Statistics SA (2018), isiNdebele as home language is spoken by 1 090 223 people across all nine provinces in South Africa. As a written medium, it is one of the youngest indigenous languages in South Africa, arising as it did following the transition in 1994 from two to eleven official languages. Considering the fact that it is still in a developmental stage, it is affected by many challenges, especially with regard to terminology development, an important component of language development.

Alberts (2017:148) describes terminology, along with its related disciplines of terminography and lexicography, as a strategic resource and indicates that it has an important role to play in the functional development of a country's languages and their users – especially in a multilingual country. Terminology plays a vital role in language development and the promotion of multilingualism. Standard terminology contributes to the quality of translations, editing and specialised or subject-related communication.

Terminology is not an end in itself; rather, it addresses specific social needs within a linguistic community. It attempts to facilitate and optimise communication between experts, semi-experts and lay people within a specific subject field, and its primary aim is knowledge transfer from one linguistic community to another. Terminology development as part of language development is therefore of the utmost importance to the isiNdebele-speaking community, especially if the status of isiNdebele is to change from that of a historically marginalised language to that of a fully-fledged language of higher functions.

Only if they are provided with the correct terminology can the effective scientific and technical communication skills of isiNdebele speakers be maximally developed.

1.2. A short overview of isiNdebele terminology development

AmaNdebele nation – up until the death of King Musi in 1630 – had been a single, united nation. However, after a subsequent chieftancy struggle involving two of his sons, Manala and Nzunza, they came to be divided into the Southern and Northern Ndebele groupings. (Van Warmelo, 1930: 9). The Southern Ndebele grouping was made up of the Manala and Nzunza sub-groupings. The Northern Ndebele, meanwhile, were formed by the followers of Mthombeni (also one of Musi's sons) and are now resident in Limpopo. It must be noted that Northern Ndebele has not, as yet, developed sufficiently to be taught in schools and nor it is recognised as an official language (Skhosana, 2003:112).

According to Skhosana (2003:114), prior to 1985, most Southern Ndebele speaking children used isiZulu as their first language at school. The advent of the so-called KwaNdebele homeland in 1979 – which is currently part of Mpumalanga Province – brought hopes that isiNdebele would be recognised as a regional language of learning and teaching for Southern Ndebele speaking pupils (Taljaard 1993:228). In 1980, the then KwaNdebele government proclaimed isiNdebele as a formal language both for official use and for teaching and learning. The same year also marked the formation of the Southern Ndebele Language Board by the KwaNdebele Department of Education – and thus the rebirth of the Southern Ndebele people as a nation.

Taljaard (1993:229) indicates that this board was formed with the aim of standardising isiNdebele and establishing it as a written language. According to Skhosana (1998:31), the Southern Ndebele Language Board had to document the sound system of isiNdebele and its spelling rules and encourage native authors to start writing learning materials and to assist teachers to cope with the new language's sound system and orthography in schools. The Board was made up of members from the Department of Education, the Department of Justice, the Department of Health and Welfare and the Department of Agriculture, as well as from Tribal offices. Additional members were drawn from the Bible Society of South Africa and four tertiary institutions, namely, the University of Pretoria, the University of South Africa, the Rand Afrikaans University (now the University of Johannesburg) and the University of Zululand.

The first publication of this board – a preliminary outline of the Southern Ndebele orthography and spelling rules – appeared on 1 July 1982 in the school circular magazine *Educamus*, the second publication was done in 1995 by *Via Afrika*.

The third publication was *isiNdebele Terminology and Orthography No.1* which was published by the Government Printer in 2001. According to Mahlangu (2016:100), the latter serves as a term bank for isiNdebele terms and is the only terminology book that has been issued by the Department of Education and Training. Its entries are arranged alphabetically according to the English terms, with Afrikaans in the second column and isiNdebele in the third column, without any regard to the subject or course of study in which they are to be used (Mahlangu 2016:100). In 2008, a revised version called *Imithetho yokutlola nokupeleda (IsiNdebele Spelling Rules and Orthography)* was published by PanSALB, but it contains only the spelling rules.

During its currency, the Board experienced many challenges which involved, amongst others, arguments regarding the orthography and pronunciation of words, especially those borrowed from Afrikaans and English, dialectical problems (for example, isiNzunza versus isiNala) and the identification of the relevant term to explain what is meant by specific English or Afrikaans terms.

The conferring of official language status on the 11 official languages in the Constitution of South Africa 1996 resulted in the development of the National Language Service (NLS) which is, amongst its various activities, concerned with terminology development. The terminology division of the NLS works in close collaboration with the National Language Bodies of the Pan South African Language Board (PanSALB). PanSALB was established in 1996 to give effect to the letter and spirit of Section 6 of the Constitution. It is a constitutional body instituted in terms of the PanSALB Act 59 of 1995 (as amended in 1999) and it functions as an independent body (Alberts 2017:157). In addition, it developed thirteen National Language Bodies as advisory structures to take care of terminology development, verification and authentication of terminologies, and also to assist with the standardisation of terms (Alberts 2010:610-611). Due to the development of National Language Boards, the iKhwezi (NLB) for isiNdebele was formed.

The iKhwezi (NLB) has, to date, approved 10 terminology lists. These are of various sizes, ranging from 200 to 400 terms, and are available on Department of Arts and Culture website (www.dac.gov.za/terminology-list). It is, however, essential to note that the terminology lists may not be consistently present on the website and that they may be removed from time to time for updating. This also implies that lists not mentioned here may subsequently be added to the website.

The lists includes a Mathematics term list (September 2005), an OBE (Outcomes Based Education) term list (May 2002), an HIV and AIDS term list (July 2013), a Parliamentary/Political term list (2013), a Multilingual Natural Sciences term list (20), a Multilingual Soccer term list (2013), a Multilingual Terminology for Information Communication Technology term list (2013), a Multilingual Mathematics Dictionary for Grades R-6 (2013), a Multilingual Election Terminology list (2014), a Multilingual Arts and Culture Intermediate Phase Terminology list (2015) a Multilingual Financial term list (2017) and a Multilingual Human, Social, Economic and Management Sciences Terminology list (2017).

Each of the teams of collaborators involved in the compilation of term lists consists of subject specialists for the relevant subject, such as teachers, language practitioners from different government departments, and a specialist in the field that the terminology will be focusing on. For example, if the terminology list that needs to be compiled is for Mathematics, a specialist in Mathematics will work with collaborators identified by the Department of Arts and Culture, as noted earlier. The Department is in the process of finalising the updated version of the pharmaceutical, engineering and construction term lists for isiNdebele.

1.3. Research problem

Bryman (2007) defines a research problem as a definite or clear expression about an area of concern, a condition to be improved, a difficulty to be eliminated, or a troubling question that exists in scholarly literature, in theory, or within existing practice that points to a need for meaningful understanding and deliberate investigation.

Terminology development is inextricably linked to language development; therefore, any planned account of terminology development needs to be done against the background of language development. No such account has thus far been given for isiNdebele. Furthermore, a critical evaluation of available term formation strategies has not yet been undertaken for this language.

1.4. The purpose of the study

The purpose of this study is to give a critical overview of terminology development in isiNdebele, with specific reference to (a) terminology development as part of language development, and (b) term formation strategies available for the creation of isiNdebele terminology. With regard to (a), particular attention will be paid to legislation regarding language and terminology development; with reference to (b), common techniques of term formation will be evaluated, followed by a small case study. Term formation strategies to be studied include derivation/affixation, semantic expansion, compounding, blending, acronyms, coinage, loan translation and borrowing (cf. Gauton, Taljard and De Schryver 2003).

1.5. Objectives of the study

The objectives of the study are as follows:

To give a critical overview of the current state of terminology development as part of language development in isiNdebele against the background of the relevant legislation.

To investigate term formation strategies which are available to terminologists by identifying the advantages and disadvantages of each strategy. This will take the form of a small case study, using terminology created by the Department of Arts Culture in some of their terminology lists as data to be analysed.

1.6. Literature review

Considerable changes have taken place in South Africa during recent years, which have affected language development. Different fields have become more accessible and this has led to an increasing demand for the use of various indigenous languages (Alberts

1999). We are in a country that promotes multilingualism, which gives rise to an urgent need for multilingual terminology in different subject fields.

This means that there is a need for language development for speakers of indigenous languages but also that language policies need to be taken into account in such developments.

1.6.1. Terminology development

Terminology plays a vital role in language development and the promotion of multilingualism. The availability of (multilingual) polythematic terminology is an indicator of development since specialised communication can constitute a central hub in terminology (Alberts 2017:148). There has been a complete restructuring of the labour force and greater involvement of the different population groups in matters of own and general interest. Different fields have become more accessible which, in turn, has led to an increasing demand for the use of various indigenous languages (Alberts 1999).

In promoting multilingualism, each language is developed in terms of its planning and policy. Language planning and language policy express particular efforts at special intervention and control in the sphere of language. Normally, the direction and ambitions of language policy and planning embody an economic and social vision (Wright 2007:6). Moropa and Shoba (2018) emphasise that the main aim of multilingual term lists is to develop and standardise terminology in all official languages, with particular focus on the indigenous languages. In South Africa, it is not possible to translate official documents into all eleven official languages and, as a result, Alberts (2017) elaborates that we are, to a certain extent, made to believe that it is civilised to speak a “prestigious” European language. Moreover, Mojela (2007) states that these attitudes regarding the preference for colonial languages has led to the extinction of some indigenous languages since children are deprived of learning and using their linguistic heritage.

Alberts (op.cit) further emphasises that, as economic, scientific and technical communication skills are being developed, effective transfer and assimilation of knowledge and skills among subject specialists and the country’s citizens is being

achieved through the use of correct terminology. Therefore, as a society we should also take into consideration how information is transferred from one person to another. Alberts (2017:148) states that standardised terminology leads to exact communication and serves to prevent misinterpretation or misunderstanding. There can be no knowledge transfer without terminology.

According to Batibo (2010:32), terminology is an important component of the learning process, since all concepts need to be supported by appropriate and concise terms. Most African languages have a critically limited repository of technical terms, simply because such languages were mainly used in family, village and cultural contexts. Therefore, such terms for use in various fields of education, science and technology simply do not exist. However, the absence of such terms doesn't mean that the language concerned is incapable of delivering these concepts by the use of other strategies. Dalvit (2009:78), as quoted by Mahlangu (2016:118), alludes to the problem that African languages are excluded from the academic domain solely because they lack terminology, and he warns that the development of such terminology can be a process that is both expensive and lengthy, especially when considering the fact that such development will be necessary for nine of the 11 official languages.

Thelen and Steurs (2010:42-43) emphasise that terminology work can assimilate knowledge and skills. In identification of terminology work, (a) aims such as creation of new terms should be aimed at replacing those that are missing or incorrect ones, (b) systematisation and maintenance of the new terms belonging to a certain domain must be undertaken, and (c) teaching of terminology is crucial and the creation of terminological databases and research into terminology must also take place. The above-mentioned aims can be successful if appropriate knowledge and skills in respect of terminology development are applied.

All languages that are recognised by the Constitution of South Africa as indigenous languages need to be developed. The functionality of nine of the 11 official languages relies on terminology development. In this regard, it is important to realise that a functional language is a language with a future (Alberts 2015). Even though we know that we can't

move away from English in developing new terms, it is nonetheless important for speakers to know that the more functions a language loses, the easier it becomes for a language community to move on to a more “useful” language (Buys 2014) in Alberts (2017:153). In addition, Nkabinde (1992:95), cited by Alberts (2017), sees terminology development as being connected to a person’s involvement in a scientific, economic and technological environment. Minority languages lack the advantage of numbers as well as status and power. Their lower status arises from perceived problems such as that it is uneconomical to cater for them, since using them requires huge investment in language development and that speakers of minority languages tend to learn another language.

Ndebele (2014:116) states that language is not only a vehicle to facilitate communication, but that it is also an embodiment of people’s culture, their cognitive memory, their indigenous knowledge systems, their history, their values and beliefs. This implies that a language cannot be separated from its speakers, and it is through terminology that each language can be recognised in different fields and organisations. It is important for the continued growth and development of our economy that each and every structure should be able to function in a language that people understand.

Developing the terminology of a certain language implies respect for and an honouring of that language. According to Prah (2018:10), it is generally observed that African language speakers do not regard their languages as languages of advancement and development. The perception exists that African languages are of little use, cannot be developed and are not economically beneficial; in short, they cannot be modernised. These prejudiced attitudes persist and are rife in African language-speaking communities. What is crucial is that, whichever language development strategies are deployed to enhance and intellectualise African languages, a central consideration which needs to be borne in mind is that, ultimately, speakers must be able to make the use of these languages economically profitable and societally beneficial. If the economics of the development and use of African languages is growth-oriented, the social attitudes constraining the development of African languages, will be readily discarded by African language speakers.

The language policy of a country influences terminology development since it determines which languages are more likely to be developed. Consequently, terminology development should adhere to the national language policy and to sound terminological and terminographical principles and procedures (Alberts 2017:149).

1.6.2. Terminology development in South Africa

Terminology management and development in South Africa is primarily the responsibility of two statutory bodies, the Pan South African Language Board and its subsidiary bodies, and the National Terminology Service of the Department of Arts and Culture. According to Alberts (2008:18-19), PanSALB was established to develop the official languages, create conditions for their use and investigate language rights violations. This mandate is exercised through three types of bodies. The first of these is the Provincial Language Communities (PLCs), one in each province, whose duty it is to identify the needs and priorities of language development (policy, terminology, lexicography, education, orthography) as well as language rights advocacy issues. The second of these are the National Language Boards (one for each language) which serve as umbrella planning agencies for each language at the National level, and along with PanSALB on such matters as the standardisation of orthography and terminology. They also develop guidelines for term formation and are mandated to authenticate/verify terminology before final documentation and dissemination. The third of these is the National Lexicography Units (NLUs) for each language, whose mandate is to “Continue to develop dictionaries in all of the 11 official languages and to be closely aligned with the Terminology Coordination Section” of the National Language Services (DAC 2003). These NLUs, for the 11 official languages, namely isiNdebele, isiZulu, Xitsonga, Tshivenda, siSwati, isiXhosa, Sesotho sa Leboa, Sesotho, Setswana, English and Afrikaans, were established in 1996.

According to Alberts (2017:159), in 2006, the then Minister of the Department of Arts, Culture, Science and Technology (DACST), Dr Ben Ngubane appointed the Language

Plan Task Group (LANGTAG) to investigate the matter of language dispensation in South Africa. The report presented by LANGTAG led to the amalgamation of the National Terminology Services (NTS) and State Language Services (SLS) of the Department of Arts and Culture, Science and Technology (DACST) to form a new National Language Service. The amalgamated office is now called the Terminology Division of the National Language Service and is the largest organisation in South Africa that devotes its time entirely to terminology work. Its mission is to assist with the development and modernisation of technical vocabularies for all National South African Languages.

1.6.3. Terminology and language development

Terminology development is part and parcel of language development. Development of standardised terminology is an intervention which is aimed at increasing the status of a language to that of a language of higher functions. This view is supported by Cluver (1996:1) who sees language development as a continuous process referring to the planned modification of a selected variety to fulfil new functions it did not fulfil previously. Two of the activities that Cluver identifies as necessary for language development are, firstly, standardisation of orthography and spelling rules, and, secondly, modernisation. With regard to standardisation, one could ask whether the spelling and orthography rules of isiNdebele are contributing to the development of terminology and whether there is an effective standardisation process for terms developed by the Department of Arts and Culture and the National Lexicography Units. Secondly, modernisation calls for general terminology development in all spheres of the working environment, for example, the economy, science and technology.

Cluver (1996) further claims that language welfare should reflect the welfare of the speech community and that language development should form an integral part of the development of any community by the community itself. Languages such as isiNdebele can learn from Afrikaans, which was initially regarded as “kitchen language” but has since developed into a functional language in the fields of science, technology, the economy and education. There is no reason why the other official languages cannot develop into fully-fledged languages in higher institutions (Alberts 2017:142). The reality is that the

hegemony of English often results in the other official languages – isiNdebele included – struggling with terminology development. This is because most terms denoting specific concepts reach South Africa in English and efforts need to be made to translate them into various languages (Alberts 2012).

1.6.4. Terminology development and language policy

Language policy in any country influences terminology development since it determines which languages are more likely to be developed. Consequently, terminology development should adhere to the national language policy as well as to sound terminological and terminographical principles and procedures (Alberts 2017:149). Language policy in South Africa is based on a number of policy documents, the most important of these being the Language Plan Task Group (LANGTAG), which was mentioned earlier, the National Language Policy Framework (NLPF) of 2003, the Use of Official Languages Act 12 of 2012, the Higher Education Act 101 of 1997 and the South African Language Practitioners' Council Act 8 of 2014. A detailed discussion of these policy documents will be provided in Chapter 2 of the study arising from the research.

1.6.5 Factors/problems hampering terminology development in African Languages

According to Mtintsilana and Morris (1998:109), terminology development in South Africa has been hampered by a number of ideologies as well as by historical and educational factors, the most fundamental of which are the language policies adopted in the Republic of South Africa prior to 1994. Mtsintsilana and Morris highlighted that the functional value of these languages has been transformed, not only during the creation of the national and self-governing states where these languages were adopted as official languages, but also as a result of the new democratic changes that have taken place in the country, thus opening up South African society and enabling the participation of all the citizenry in national development.

Louwrens (1997:246) views terminographers involved in the development of scientific terminology in African languages as being faced with a major uncertainty brought about mainly by two factors, namely (a) existing attitudes regarding the sustainability of the indigenous languages for the purposes of scholarly discourse and (b) the way in which the autonomy of these languages is affected by the ideal of nation building. There are those who feel that teaching of African languages through a medium other than the vernacular itself is totally inexcusable. On the other hand, however, there are scholars who maintain that the indigenous languages are, at least for the present, not adequately equipped to be used as mediums of instruction on a tertiary level. This leaves terminographers dealing with terminology with doubts as to whether it is worthwhile to embark on projects for terminology development if there is no guarantee that these languages will indeed, in future, reach a point where they will become accepted as worthy means of scholarly discourse. Louwrens further advises that it would be unwise of a terminographer to occupy him or herself with the development of terminology without assessing in advance how the outcome of such an endeavour is likely to be received.

1.6.6 Terminology development and education

Alberts (2014:5) emphasises that the Language Policy for Higher Education (2002) highlights the need to promote South African languages for use in instruction in higher education. It furthermore encourages all tertiary institutions to consider ways of promoting multilingualism and requires institutions to indicate in their plans what strategies have been put in place. Models mentioned by Alberts (2014:9) could help in the development of terminology for tertiary phase education, namely, dedicated terminology offices, independent terminology centres, terminology centres at tertiary institutions, and a proposed integrated model: the establishment of terminology centres at tertiary institutions.

Moreover, Batibo (2010), states the following advantages of using African languages in tertiary education. Firstly, during tertiary education, young learners are not exposed only to new information, but also to new concepts and ideas. This takes place at a time when they usually lack fluency, confidence, and depth in their articulation of ideas. Secondly, it

is a well-known fact that there is no country in the world which has developed on the strength of a foreign language. Countries such as South Korea, Thailand, Malaysia and China are developing on the strength of their own languages. Thirdly, another advantage of using the African or home languages in tertiary education is that they allow the young learners, and later, graduates, to connect with the communities which they are going to serve in their various professions. Fourthly, in many tertiary institutions, particularly cultural, anthropological and medical research centres, there is a lot of effort to infuse indigenous knowledge into the educational systems. Finally, the use at tertiary level of a language which is close to the relevant community makes the tertiary institution part of the community.

1.6.5. Terminology development as an ongoing (academic) activity

According to Batibo (2010), terminology development is an on-going activity. It demands patience, resilience, collaboration, creativity and an understanding of word formation in a given language. There are two motivations for the creation of new terms, namely the contextual motivation and non-contextual motivation. The contextual type of motivation includes situations such as the need for specific terms in the course of translating a passage; in one's professional field (e.g. social work, agriculture, nursing, etc.); when conducting a lecture or giving a speech; during curriculum development and evaluation (preparation of teaching materials); and during interaction with the public (in, for example, a court of law). The out of context motivation involves the search for equivalents from another language, such as the translation of dictionaries and glossaries. Moreover, when identifying equivalents for new selected terms, we should start with internal sources (from the language itself or its dialects) before going to external sources.

Taljard (2008) agrees that there is a serious need for language specialists to formulate principles or guidelines which are language specific for term formation, and that those guidelines should not be formulated on an ad hoc basis. Moreover, Taljard advises that when creating term equivalents in African languages, terminologists must be acquainted with these guidelines, which will assist in the terminology being accepted, by both linguists and in special field subjects. Such guidelines involve one-to-one relations between each

term and the concept that the term represents. In other words, terms that refer to related concepts must be similar in one way or another in order to show similarities between related concepts and a term should conform to the spelling, morphology and pronunciation rules of the language for which it is intended.

1.7. Research Methodology

The study is of a qualitative nature and is literature-based. It aims to critically analyse existing legislation regarding terminology development and to determine the effectiveness of the implementation of the legislation with specific reference to isiNdebele. The envisaged case study will focus on term creation strategies used in term creation in isiNdebele.

According to Anderson (1993:156-160), a case study is concerned with how and why things happen – and it allows for investigation of both contextual realities and of any differences between what was planned and what occurred in reality. The intention behind a case study not to examine the entire organisation, but rather to focus on a particular issue. In this study, that issue is the term formation strategies used in the creation of new terms in isiNdebele. In addition, Patton (1987:18-20) highlights that a case study is useful when it is necessary to understand a particular problem in great-depth, as well as in instances where it is necessary to identify cases that are rich with information.

1.8. Definition of concepts

1.8.1. Term

The vocabulary (or 'terminology') of a subject is the group of words (called terms) that are typically used when dealing with or discussing the specific subject area or domain (Alberts 2017:69). Sager (1990:56) further states that each separate meaning of a term is represented by a separate concept and that the entries in a terminological glossary cover separate concepts.

1.8.2. Terminology

'Terminology' is defined by Sager (1990:2-3) as the study of and field of activity concerned with the collection, recording, documentation, description, processing, systematising, standardising, presentation and dissemination of terms. Cluver (1996) sees terminology as a collection of terms in a specific knowledge domain, the methods used to document, systematise and standardise terms, and the theory or science of researching the nature of terms, their form and communicative function.

1.8.3. Terminography

Terminography is one of the subdivisions of lexicography and it deals with documentation of the terminology of different subject fields (Alberts 2017:68). When read together with the definition given by Sager, it is clear that there is some overlap between the notions of terminography and terminology. The term "terminography" has, to a large extent, fallen into disuse, and the term "terminology" is used to cover, in addition, the notion of documentation of terms.

1.8.4. Lexicography

According to Alberts (2017:51), the point of departure for lexicography is usually the documentation of a given language. The linguistic function of a word in a given language is determined and the word is documented according to its syntactic, semantic and contextual features and functions in the grammar of the particular language.

1.8.5. Standardisation

After all the processes of terminology development have been followed, standardisation follows, its purpose being the fixation of meaning and a choice from among competing terms (Sager 1990:114).

1.8.6 Chapter Layout

The study will carry out research on challenges faced and opportunities arising with regards to terminology development for isiNdebele. Moreover, it will focus on an analysis of available terminology developed by the Department of Arts and Culture and will examine the procedures or methods followed in the development of that terminology. The role played by methods such as transliteration/adoption, loan words, semantic transfer, paraphrasing and compounding will be evaluated, and the advantages and disadvantages of using them in isiNdebele terminology development will be considered.

This research is structured as follows:

Chapter 1

Introduction

Chapter 2

A critical overview of terminology development in South Africa, with specific reference to isiNdebele

- 2.1. Terminology development as part of language development
- 2.2. Relevant legislation on terminology development
- 2.3. Current state of terminology development in isiNdebele

Chapter 3

Term formation strategies in isiNdebele: A case study

Chapter 4

Conclusion and recommendations

Chapter 2: Critical overview of terminology development in South Africa, with reference to isiNdebele.

2.1. Terminology as part of language development

According to Budin (2004:6), quoted by Alberts (2017:132), language development is more than the coining of words and terms and working on spelling reforms. It is also more than language planning and standardisation. In addition, Alberts (2017:132) highlights that language development should be part of the overall development of a community and that it should contribute to such development. In addition, the status of a language can be enhanced by proving to its users that it can be employed as a modern means of communication to function in domains in which language of wider distribution functions.

Codification and modernisation are two of the activities identified by Cluver (1996:2-3) as being part of language development. Both pertain to what language development entails, and both play a vital role in terminology. Codification involves the development of a writing system, the documentation of existing vocabulary and grammar, and the development of spelling and orthography (for an unwritten language). Modernisation refers to the updating of existing spelling rules and orthographies and standardisation of the language. Hence, it looks at general terminology development in all spheres of the working environment – for example, the economy, science and technology.

In addition, there is currently a strong awareness of the need to intensify efforts to develop the previously marginalised indigenous languages and to promote multilingualism among South Africans if they are to be liberated from undue reliance on the utilisation of non-indigenous languages as the dominant, official languages of the state.

2.2. Legislation and language policies on terminology development

According to Alberts (1999:33), structural and policy factors have had an effect on the practice of terminology in South Africa. Some language bureaux have either been dissolved or reduced to the point where they perform a minimum of functions. Further, it has been accepted as the responsibility of the state to develop and promote African Languages. Alberts further emphasises that government policy in language promotion before 1994 stipulated that the promotion of the African Languages was the task of the

former national states and self-governing regions, and not that of the South African government.

As mentioned in the previous chapter, language development is governed by policies that were prioritised by the then Minister of Arts and Culture Dr Ben Ngubane from 31 August 1996 to February 1999. It is highly important to understand these policies as they pertain to this research as the focus here is on the terminology development of isiNdebele as one of the developing languages. All the structures still to be mentioned played an important role in policy development. These structures will, moreover, also help in determining whether terminology that has been developed in isiNdebele so far has been governed by these policies. These structures will help in two further ways. Firstly, they will determine whether work must still be done to ensure that isiNdebele, as an indigenous language, has already followed the necessary policy or policies. Secondly, they will determine whether it still needs to do so in order to be recognised as a developed language.

According to the National Language Policy (2003:10), language policy takes cognisance of the Constitutional provision on multilingualism and is in contact with government goals for economic, socio-political and educational growth. Its aims are to:

1. Promote the equitable use of the 11 official languages
2. Facilitate equitable access to government services, knowledge and information
3. Ensure redress for previously marginalised official languages
4. Initiate and sustain a vibrant discourse on multilingualism with all language communities
5. Encourage the learning of other indigenous languages to promote national unity and linguistic and cultural diversity; and
6. Promote good language development for efficient public service administration to meet client expectations.

The Constitution of the Republic of South Africa provides for the equitable use of all official languages of the country and for the promotion of marginalised indigenous languages. According to Section 6 (1) of the Constitution, the official languages of South Africa are, Sesotho sa Leboa(nso), Sesotho(sot), Setswana(tsn), Siswati(ssw), Tshivenda(ven),

Xitsonga(tso), Afrikaans(afr), English(eng), isiZulu(zul) and isiNdebele(nde). It should also be taken into consideration that Khoi and San languages, as well as South African Sign Language, are recognised by the Constitution.

Table 1: Predominance of languages by province – 2013 statistics

(Alberts 2017:150)

Eastern Cape	xho 78,8%	afr 10,6%		
Free State	sot 64,2 %	afr 12,7%		
Gauteng	zul 19,8%	eng 13,3%	afr 12,4%	sot 11,6%
KwaZulu-Natal	zul 77,8%	eng 13,2%		
Limpopo	nso 52,9%	tso 17%	ven 16,7%	
Mpumalanga	ssw 27,7 %	zul 24,1 %	tso 10,4%	nde 10,1 %
Northern Cape	afr 53,8 %	tsn 33,1%		
North West	tsn 63,4%	afr 9,0%		
Western Cape	afr 49,7%	xho 24,7%	eng 20,3%	

According to Alberts (2017:151), English is scarcely used for neighbourhood communication in the Limpopo, Mpumalanga, North West, Free State, Northern Cape and Eastern Cape provinces. Its functional use in neighbourhood is limited to KwaZulu-Natal, Gauteng and the Western Cape. English is therefore a useful a lingua franca in only three provinces. IsiZulu is similarly used as a neighbourhood language in provinces such as KwaZulu-Natal, Gauteng and Mpumalanga.

In addition to the comparison presented above on predominant languages and their usage, it is important to consider the work of Nkabinde (1992:95) in which he says that terminology development is connected to a person's involvement in scientific economic and technological environment. Nkabinde's view is supported by Abdulaziz (1989:32), quoted by Alberts (2017), where he stipulates that it is important for African Languages and Afrikaans to be regarded as useful aids to popularising scientific and technological knowledge. Consequently, according to these views, the terminologies of the languages concerned should be developed.

2.3. Terminology policy

Antia (2008:10) states that it is important to understand that policy making seeks to develop a vision against the backdrop of an environmental scan of strengths, weaknesses, opportunities and threats.

He continues that terminology policy may be seen as an outline for a vision and set of instruments for:

- (a) fostering the optimal and rational use of a language's referential resources in order to support specialised communication.
- (b) managing the intellectual and other proprietary assets of an organisation, community in order to advance given goals.

Antia's interpretation is supported by UNESCO (2005:15) when it states that institutions that are most dedicated in their commitment to language policies are required to be involved. UNESCO (2005:15) further states, though, that it is advisable to engage the whole community in the process of generating policy on terminology and also that it will be wise to ensure active participation of those institutions that are dedicated in language planning policies. Additionally, the main thrust of formulating a terminology policy can be geared towards the development of:

- (a) affiliated general language as a means of domain communication in general
- (b) the special purpose languages (SPLs) in a given language
- (c) a combination of both these aspects.

In addition, Alberts (2017:174), elaborates that terminology policy affects all professional life even subject areas such as legal and health systems. This leads to its effect on anyone who needs to understand or acquire specialised knowledge of some kind.

Antia (2008) and Alberts (2017) both emphasise that characterisation of a terminology policy in this way implies that the vision in terminology policy-making may be directed not only at the efficiency and effectiveness of special purpose (or technical) communication, but also at a range of added-value goals dealing with knowledge.

The structures, bodies and conventions listed below have been and are of paramount importance in the development of language policy for terminology development.

2.3.1. Language planning and policies

In 2005, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) defined terminology development as a natural, unavoidable phenomenon, further recognising it as a goal-driven initiative that forms part of language development and, at the same time, serves as a tool for realising socio-economic and language transformation policies.

Alberts (2017:156) emphasises that language planning should not support undemocratic and untenable government policies. This is especially true when it is taken into consideration that terminology as a discipline is governed by the language policy of the country. Looking at South Africa's language diversity and how 11 official languages – which include, English, Afrikaans, IsiNdebele, siSwati, isiZulu, Southern Sotho, Sesotho, Tshivenda, Xitsonga, Setswana and isiXhosa – are given equal treatment based on the Constitution, it becomes clear that language policy is not being compromised.

Beukes (2004:8-9), highlights that language policy in South Africa is divided into three levels of governance. At the national level; language management responsibilities are shared by Minister of Arts and Culture (Macro language policy matters), Minister of Education (Language of learning and teaching), Minister of Communication (language policy in broadcasting) and Minister of Justice and Constitutional Development (language matters in courts); At the provincial level, nine provincial governments are required to monitor their language matters and the local governments, municipalities are expected to develop their language policies which are relevant to provincial policies.

Alberts (2017:155) states that, the language policy of a country determines the status of the indigenous languages of that particular country. Therefore, there is a direct link between language planning, language policy and terminology development. If the language policy of a specific country does not make provision for the development of a particular language in its policy, then no terminology development will take place. It is clear that language policy is driven by state legislation. If any indigenous language is not recognised in the language policy of a country, it is unlikely that terminology development in such a language will be encouraged. On the other hand, if the language policy recognises a language, it is the state's responsibility to develop such a language as a

functional language. This includes making provision for terminology development in that language. This implies that in South Africa, the government has an obligation to provide for terminology development in isiNdebele.

2.3.2. Pan-South African Language Board (PanSALB)

As noted in Chapter 1, PanSALB was established in 1996 to give effect to the letter and spirit of Section 6 of the Constitution. Its primary objectives are to promote multilingualism and to develop the previously marginalised official South African Languages, including SASL as well as the Khoe and San languages.

According to Alberts (2017:158), PanSALB created advisory structures to assist it in achieving its mandate, namely to promote multilingualism and to develop languages and their rights. The structures involved PLCs, NLBs and NLUs, all of which are defined and discussed in the previous chapter. However, it must be taken into consideration that, to a large extent, there is mismanagement present in these structures – this due to lack of funding and various other contributing factors. Wolvaardt's (2017) presentation creates an awareness that the importance of NLUs is not taken into consideration. When the National Lexicography Units Bill was presented in parliament in 1996, the intention was to make equitable provision for national general dictionaries for each of the official languages of South Africa. Sadly, the Bill was not approved and, three years later, the NLUs found themselves under PanSALB following the amendment of PanSALB Act of 1995. This led to the growth of PanSALB which used the funds allocated for the dictionary units for other purposes. This happened due to PanSALB failing to consider the importance of the NLUs. Currently, most NLUs are under resourced and are inadequately staffed. If this fact is not recognised and solutions are not forthcoming, then most of South African languages will be neither recorded nor intensively researched, preserved or developed.

2.3.3. Language Plan Task Group (LANGTAG)

LANGTAG was an appointed task group formed in 2006 by the then Minister of Arts, Culture, Science and Technology (DACST), Dr Ben Ngubane. Its reports consisted in the main of recommendations which addressed terminology development and management.

According to Alberts (2017:159), both the short-term and long-term recommendations made by the DACST (1996:201-204) gave rise to a new terminology dispensation for South Africa. In the light of this, multilingual terminology had to be developed to accommodate the terminology needs of South African communities within a multilingual dispensation.

2.3.4. National Language Policy Framework

According to Alberts (2008:19), the Constitution (Act 108 of 1996) and the National Framework Policy (NLPF), the government aims to promote South Africa's linguistic diversity and it intends to achieve this by means of functional mechanisms. This implies that the choice of a particular language in a particular situation will be determined by the context in which it is used; the main criteria of functional multilingualism being language preference, use and proficiency.

Alberts (2017:159) notes that it is clearly stipulated in the NLPF that, because of the South African government needs to communicate with its citizens, all government documents shall be made available in all 11 official languages. Due to difficulties experienced when documents need to be translated, some languages still lack essential terminology. This promotes a situation in which government departments publish in at least six official languages, namely Tshivenda, Xitsonga, Afrikaans and English, as well as one from the Nguni group (made up of isiNdebele, Siswati, isiXhosa, isiZulu) and one from the Sotho group, (made up of Sesotho, Setswana and Sesotho sa Leboa), taking into consideration that the grouped languages here are mutually intelligible as is the case for the Nguni group.

2.3.5. Higher Education Act

The Language Policy for Higher Education (2002) highlights the need to promote South African languages for use in instruction in higher education. This is, however, not possible without subject-specific terminology being available for all languages. Alberts (2017:161) therefore emphasises that, by developing subject-specific terminology in all official languages and the compilation of multilingual, polythematic term lists/glossaries/dictionaries and other supporting teaching resources (i.e. multilingual study materials that incorporate multilingual terminology), the process of developing the official languages into scientific languages will be facilitated. At the same time, academic proficiency in the language of learning and teaching will also be promoted.

In addition, the Language Policy for Higher Education (2017:10-11) states that, in 2010, the Department of Higher Education and Training (DHET), held a round table discussion on the development of African Languages. They were tasked with coming up with clear recommendations on how to strengthen African Languages at universities. Their findings created an awareness that promotion of multilingualism that embraces indigenous languages should be taken into consideration. However, the fact that the government has not allocated funding towards supporting universities to implement their language policies and plans should not be ignored.

2.3.6. South African Language Practitioners' Council Act

It is believed that the South African Language Practitioners' Council is in a position to have a substantial influence on terminology practice as such, as well as on the work of lexicographers, terminologists and terminographers. This will depend upon how the South African Language Practitioners' Council Act 8 of 2014, as well as the Draft Regulations on the Language Practitioners Council (Government Gazette, 2 June 2015, No 38853) are interpreted and implemented in practice. If such an Act is implemented it will provide the assurance that only language practitioners who are accredited by the SA Language Practitioners Council and who are accredited terminologists, will be allowed to compile technical dictionaries and term lists in future (Alberts 2017:162).

2.3.7. Copyright

Copyright protection is another relevant aspect of terminology development. The intellectual property rights (IPRs) of compilers should, of course, be protected, but it is unfortunately not always easy to determine who coined a term or who defined the concept related to the term for the first time. It is, therefore, difficult to protect copyright in respect of a term or of its existing definition (Alberts 2017:162). Furthermore, for some existing concepts it is somewhat difficult to provide a “new” definition and thus to determine who owns the copyright on a particular definition.

According to Butters (2012:1-14), copyright is one of four legally enforceable limitations on the general public’s freedom of expression with respect to a wide variety of creative productions. Butters highlights two historical developments that created new complexities in the relationship between linguistics and copyright. Firstly, copyright law has been impacted by various technological innovations that combine spoken language with other—such as those available in films, television, and via the internet.

Secondly, the term “language” would have been understood by earlier generations in the strict linguistic sense of the sentences of human languages used as the medium of expression in writing and recorded speech. Today, however, the sense of what we understand to be language has expanded owing to developments in areas such as sociolinguistics and dialectology as well as in pragmatics and semiotics.

2.4. Has the legislation resulted in any tangible results?

The language-related Constitutional clauses that led to the formation of the structures described above were hammered out at the multi-party negotiations in Kempton Park in 1993. According to Beukes (2008:21-22), the road since then has clearly been a rough one with the process having been both difficult and ideologically contested. More recently, it has also generated much debate and academic analysis. Several important dimensions of policy still require urgent and close review. Clarity must be sought as to the desirability of legislative measures such as the long-awaited South African Languages Act and the South African Language Practitioners’ Council Act. Furthermore, the current organisational arrangements between government’s executive arm in such matters (the

National Language Service, which is located within the national Department of Arts and Culture) and South Africa's only statutory body dedicated to language, the Pan South African Language Board, must be investigated. The convoluted arrangement dealing with institutional matters and protected interests between these two pivotal language policy and planning agencies must, according to Beukes, be addressed as a matter of urgency. This arrangement has, without doubt, given rise to a plethora of contradictory and counter-productive structures.

In addition to Beukes, Tshotsho (2013:42) states that the government wanted to use education as a tool to achieve its multilingualism goal. The LANGTAG advice to the then Minister of Arts, Culture, Science and Technology, was that language in education policy should encourage the use of African languages at all levels of education and that people should also be allowed to choose which language or languages should be used as languages of learning. Sadly, more than ten years later, nothing has been achieved in respect of either objective. This also implies that those who are not proficient enough in English are not likely to get jobs that pay well because English is used as a yardstick to measure if a person is capable of doing the job or not. This leads to Wright (2012) being of the opinion that National Language Policy (NLP) is struggling due to the fact English is dominant in the central economy. Indeed, for most South Africans, English has obtained a high social status as a marker of modernity.

Alberts (2017:155) adds to the above arguments when she highlights that language policies tend to reflect the ideology of state political infrastructure. However, we need to pay more attention to the fact that the language policy of a country determines the status accorded to that country's various indigenous languages. These arguments and facts lead us to the exposure of the current state of terminology development for isiNdebele as a language of focus in this study.

In addition, it is clear, even in the education sector, that the language policy has not been implemented. The former Education Minister (Bengu:1996), stated that students have a right to be taught in the language of their choice. It is, however, argued that the practical implementation of this ideal is not possible due to the lack of books written in African languages and the lack of standardised terminology for the various subject fields.

Lastly, Wright (2012:111-123), also questions the effectiveness of the National Language Policy (NLP). Firstly, he says that African Languages were abused by the apartheid regime to divide people. It was thus assumed that there must be substantial pent-up demand among African people to see their languages be developed and modernised so that these languages would be able to participate in the central economy on an equal footing with English. It is difficult to find evidence of such an upsurge with regard to the African languages. Wright's second point is that the language planners disregarded the political and communicative challenges implicit in using nine African languages at national level. Thirdly, according to Wright, the policy planners radically miscalculated the character and strength of the social motivation required to drive language development of the kind and at the scale assumed by South Africa's NLP.

Languages develop from real social need, not from "nice" principles of cultural equity. Wright's last point highlights that there was an important omission in the conceptual repertoire of those responsible for drafting South Africa's Language Policy and Plan. From a technical, language-planning perspective, South Africa's NLP may be said to have lost its way because those drafting it failed to appreciate the immense traction, economy and social reach of so-called "natural" language planning, versus the restricted scope, the substantial expense and the constrained social reach of interventionist language planning.

2.5. Current state of terminology development in isiNdebele

As mentioned earlier, isiNdebele is one of those languages which gained recognition after the identification of 11 official languages of South Africa. The statistics presented in Table 1 (in section 2.2, above) show that this language is predominantly spoken in Mpumalanga and that it is gaining more speakers in Gauteng – a change which, it is believed, might be as a result of job migration.

Even though isiNdebele is still developing, the National Language Service section has contributed much to the development of isiNdebele terminology. As mentioned in the previous chapter, the Ikhwezi National Language Board has approved 10 term lists. In addition, the isiNdebele Dictionary Unit (NLU) has also contributed to the growth of isiNdebele through the publication of a bilingual dictionary in (2006), an English-Ndebele-

Afrikaans: *iZiko lesiHlathululi-mezwi sesiNdebele-Trilingual Dictionary* and *isiHlathululi-mezwi sesiNdebele* which were published in 2015, and *The Official Foundation Phase Caps isiNdebele-English Dictionary*, a children's dictionary for Grade 3 which was published in 2018.

According to Kosch (2013), in her analysis of the *Oxford Bilingual Dictionary for Northern Sotho and English*, there are three approaches that relate to those used in the isiNdebele Bilingual dictionary. These approaches are as follows:

1. Lemmatisation approach (arrangement of entries according to stems)
2. Word based approach (Verbs entered as stems not words)
3. Cross-references (frequently used lemma being used for full explanations)

Examples are as follows:

On p 110, an example of a verb, **-thandaza sz** 'pray' appears. It should be taken into consideration that, in this dictionary, stems are used when either nouns or verbs are listed as entries/lemmas.

Also on p 110, an example of a noun **umthandazo** appears. Here it is entered as **-thandazo (um-/imi-)** 'prayer'.

Parts of speech and explanations are used as guidelines, especially in entries with similar stems.

Page 52: **-khotha (isi-/iin)** bz is an abbreviation for **ibizo**, noun, which means 'an open field'.

-khotha (sz) sz is an abbreviation for **isenzo**, verb, which means 'to lick', a proverb was used for explanatory purposes (**Ikhotha eyikhothako**; you give help to the one who helps you).

Cross-referencing is also used in the isiNdebele Bilingual dictionary.

Page 12: A cross-reference was done for the nouns **-boda** (wall) and **qala-thangala**, taking into consideration that both were given equivalents from the source language, but that the one most frequently used will be chosen to cross-reference the other one.

2.5.1. Development of methods for the harvesting of terminology

It is important to examine the journey of isiNdebele as regards terminology development and terminology harvesting. Four methods identified by Alberts (2017:177) are detailed below.

2.5.1.1 *Subject-oriented approach to terminography*

This represents the traditional manner of harvesting terminology and describes the manner usually employed by large terminology offices worldwide. Its approach is to focus on concepts and the relationship that exists between concepts and conceptual systems. In most cases, subject specialists themselves are responsible for documenting specialised terminologies.

This approach has been used in many of the term lists that have been developed thus far. The Department of Arts and Culture invites mostly subject specialists to contribute when developing a new term list for a specific field.

In the terminology list (ICT) Multilingual Dictionary (2013:xvi), the entries also treat the various target languages in terms of an equivalent which is the term in the target language most frequently used or best known in describing a concept. In this regard, “equivalent synonym” is another term in the target language referring to the same concept as the equivalent.

Example: English: information communication technology,

IsiNdebele: *itheknoloji yelwazithintano*.

2.5.1.2 *Translation-oriented approach of terminography*

The point of departure for this approach is a source language that has to be translated. Translators who work with specialised texts face an increasing need to record and retrieve terminological information, as being able to do so saves time and allows them to work efficiently, thereby increasing their productivity. The most important aspect of this approach is that it establishes terminological equivalents in the various languages that translators use as points of reference, thereby raising the quality of translated texts.

This approach is supported by Buys (2014) and Alberts (2017) when they highlight that, in developing new terms, we cannot move away from English, but that it remains important for speakers of languages concerned to know that, the more functions a language loses, the easier it becomes a language community to move on to a more “useful” language.

In the terminology list (ICT) Multilingual Dictionary (2013: xvi), in the case of the source language, a synonym is introduced by means of an English synonym.

Example: Internet café → cybercafé (synonym source language),

isiNdebele equivalent (*isitodlwana sethungelelwanohlanganiso*).

2.5.1.3 Community-oriented approach to terminography

Terminology is harvested from rural and urban speech communities and then documented. This can be done by any person who is interested in terminology development. The challenge here is the fact that terms that exist in communities are generally not documented. Unfortunately, this contributes to the general stereotype that the African languages are incapable of naming abstract concepts.

This researcher believes that this approach represents a challenge for most African languages. The problem is illustrated by an examination of the collaborators named in many of the ICT’s terminology lists (ICT 2013). The collaborator entries are populated by representatives of the Department of Arts and Culture, the Department of Education, and the SABC, as well as language practitioners, ICT specialists and Post Office staff. Missing from these entries are community members or other representatives of the communities that were involved before the content was documented.

2.5.1.4 Language-planning-oriented approach to terminography

The emphasis of this approach falls on official intervention to enhance the status of minority languages which have, for one reason or another, been historically disadvantaged. Its underlying belief is that the use of an unstable language can change when official bodies intervene systematically and strategically. In such instances,

terminology imported from languages spoken in technologically advanced and dominant countries is replaced with local and native equivalents.

As already noted, isiNdebele started to receive a certain degree of recognition in 1985 when it was introduced as a language of teaching and learning. Prior to the translation of the isiNdebele Bible, isiZulu terms were used for preaching in the religious context.

Example: English > Covenant box

IsiZulu > *Umphongolo wesivumelwano* (used by the isiNdebele speakers).

After the intervention of the isiNdebele Bible Writers Association



Umfaji wesivumelwano for Covenant box,

(Bible Society 2012), based on the scriptures 1 Samuel 5:1 and Hebrews 9:4 where the term is used.

2.6. Availability of developed isiNdebele terminology lists and dictionaries

Even though much has been done towards the development of isiNdebele, the availability of term lists and dictionaries is still a challenge. At the moment, terminology training receives little attention in lexicography or in the translation modules presented at South African universities (Alberts 1999:34). Alberts further highlights that the development of languages is, to a certain extent, the task of the government, but that every citizen should make it his/her responsibility to develop the terminology of his/her mother tongue.

Alberts (1999) further explains that term creation will remain a wasteful endeavour unless the end product is appreciated and fully utilised by all those involved in the relevant subject domain. This stresses a crucial problem experienced by the speakers of languages that are so affected and who cannot access the relevant documents listed on the Department of Arts and Culture website. Appreciation of the material so painstakingly

made available must emanate spontaneously from people who benefit. As Louwrens (1996:7) stresses, there is no path to success in forcing a language onto its speakers.

The work done by the language board is also affected by the lack of co-ordination between the various sectors because each sector is busy pursuing its own terminology activities. There is a lack of available funding for the publication and dissemination of isiNdebele lists and technical dictionaries are not available (Mtsintsilana and Morris 1988:110). This implies that a great deal still needs to be done for languages such as isiNdebele.

2.7. Conclusion

Despite all the challenges that isiNdebele is faced with on its journey to its development as a language of teaching and learning, it is highly important to consider the term formation strategies taken into account by Mtsintsilana and Morris (1988:110). These strategies will be visited in order to determine which of them have been used in creating term list and whether the terms thus created are suitable for use in IsiNdebele. This matter will be discussed in detail in the next chapter.

Chapter 3: Term formation strategies in isiNdebele: a case study

3.1. Introduction

Terminology development is an important part of general language development. According to Van Huyssteen (1997:179), term creation methods have an important role in language elaboration because they are linguistic tools that make technical modernisation and expansion of the lexicon available. Taljard (2008:90) emphasises the guidelines that translators need to be aware of in the creation of new term equivalents and these guidelines will be highlighted in this chapter. Term creation, moreover, is often a trade-off between two or more of these guidelines. In this chapter, a case study will be used to determine the preferred term formation strategies used in the terminology lists developed for specific fields by the Department of Arts and Culture.

3.2. Term formation strategies

According to Sager (1990:59), terms can have variable pragmatic status associated with their age, acceptability, exclusiveness of existence and spread of use. According to Fourie (1994:11), there are a number of reasons for terms being rejected by potential users. Some of the reasons include terms which are perceived to be inexpressive, artificial or not expressing the correct meaning, the relationship between terminological institutions and language user is not based on feedback, no compliance with folk taxonomy and terms that are cumbersome and unwieldy.

Linked to the notion of variable pragmatic status mentioned above, is the process of terminologisation, which Sager (1990:60) defines as the evolution of concepts being accompanied by stages of naming. When developing knowledge, concepts of science and technology undergo changes like those seen in other disciplines. Concomitant to this process of conceptual change, is the change in terminology. This will be demonstrated in examples provided below when analysing strategies used in the development of science and technology terminology for isiNdebele.

Alberts (2017:89) and Sager (1990:80) are in agreement as regards the two major types of term formation, namely primary term formation and secondary term formation. The conventions of primary term formation are that new terms are formed as and when new

concepts are created from scientific and technological innovation and also from the restructuring of existing knowledge, as well as incidental developments or new industrial developments. Primary term formation therefore takes place simultaneously with the formation of new concepts and is always monolingual. It must also be taken into consideration that in primary term formation, the language in which such formation takes place is called the documentation language or the Source Language (SL). The source language would therefore be the first language in which a particular concept is named.

Secondary term formation occurs when a new term is created for a known concept. Alberts (2017:89) further explains that secondary term formation may happen as a result of revisions to terminology or as a result of the transfer of knowledge from one linguistic community to another. Secondary term formation is the process of providing a term equivalent in a target language for a term that exists in a source language. Moreover, secondary term formation is subject to more guidelines than primary term formation. While primary term formation is spontaneous, secondary term formation can be designed and engineered. It is therefore the concern of the terminologist to provide such guidelines on the basis of the term and word formation patterns of the target language.

3.3. Guidelines for the formation of terms

The International Standards Organisation provides guidelines for term formation. The aim of these guidelines is to assist in the creation of terminology accepted by linguists and in specialised fields. Following these guidelines will help to prevent the exclusion and rejection mentioned earlier. Both Sager (1990:89) and Taljard (2008:90) emphasise that when terminologists create term equivalents they need to be cognizant of these guidelines, which are the following:

- a. Terms should be created systematically with respect to their morphological, syntactic, semantic and pragmatic characteristics.
- b. A term should conform to the morphology, spelling and pronunciation conventions of the language for which it is intended. For isiNdebele terminologists, this implies that, for example, a conjunctive method of writing must be followed when terms are created.

- c. Once a term has gained wide acceptance, it should not be changed without compelling reason and a strong certainty that the new term will become accepted as a full substitute. If a new term succeeds only partially in replacing an existing term, the confusion may be worse as this would amount to deliberate synonym creation. In this case it is preferable to introduce a new term.

Mahlangu (2016:88) and Sager (1990:89), however, both point out that these guidelines are of a broad and general nature and are, therefore, not especially useful. Sager (1990: 89-90) formulates a list of twelve of what he calls “highly idealised requirements” for terms, which he acknowledges, can be realised only in a strictly controlled environment. It is interesting to note that only the first three items on his list are stated as requirements, and thus contain the modal form ‘must’, for example, “The term must relate directly to the concept. It must express the concept clearly”, whereas the rest of his list takes more the form of recommendations and suggestions, for example:

- a. Terms should be capable of providing deverbatives.

According to Mahlangu (2016:94) deverbative stems are those which are derived from some other part of speech by addition of a prefix or suffix. In addition, deverbatives in isiNdebele can be used to coin terms.

Example: *-thengisa* (verb) meaning ‘to sell’ > noun *umakhambathengisa* meaning a ‘hawker’. It is derived from the verb *-thengisa*.

- b. Without sacrificing precision, terms should be concise and not contain unnecessary information.

Schmitz (2009:39) and Alberts (2017:92) list eight features which terms should have. These are valuable, since they provide practical guidelines for the creation of new terms:

- a. Transparency - concepts designated by terms can be inferred without a definition and the meaning of the term is visible by morphological and semantic motivation.
- b. Consistency – terms are used consistently in all parts of the document.

- c. Appropriateness – terms have to be familiar to the user and should not cause confusion or insecurity.
- d. Neutrality – terms should have no negative connotations.
- e. Linguistic economy – short terms should be found to replace long and inaccessible terms.
- f. Derivability – multiple terms should be derived for each stem.
- g. Linguistic correctness – use natural or indigenous language rather than foreign language for term coinage.
- h. Preference for the natural or native language – use natural or indigenous language rather than foreign language for term coinage.

One of the functions of terminology is communication. Alberts (2017:93) asserts that the exact meaning of the message to be conveyed relies upon the standardisation of the language to be used. She also supports the fact that terminologists need to make sure that the basic terminology principles and word forming principles, as well as practices and attitudes towards language, are taken into consideration when concepts are named and terms are coined.

3.4. Term formation processes in the African languages

Taljard (2008:90) and Mtintsilana and Morris (1998:110) are in agreement that, in the creation of new terms, there are a number of term translation/creation strategies that translators and terminologists working with African languages can use. A distinction is usually made between language internal word formation processes, and borrowing, which comprises language external processes. These strategies are as follows:

Language internal processes:

- a. Semantic transfer
- b. Paraphrase
- c. Compounding
- d. Deideophonisation

- e. Neologism
- f. Shortening

Borrowing:

- a. Loan words
- b. Adoptives

These processes are explained in detail in the paragraphs below.

a. Semantic transfer

This is a process whereby new meaning is attached to existing words by modifying their semantic content (Mtintsilana and Morris 1988:110). In cases of semantic transfer, the original word usually co-exists with the new term, with the word being used in general language, and the term being used in its specific subject field.

There are two aspects to semantic transfer, namely semantic specialisation which refers to the narrowing of the original meaning of a word in general vocabulary, and semantic generalisation which is defined as the process by which a word from the general language acquires a more general extended meaning without losing its original meaning, cf. Alberts (2017:97).

Example: In everyday isiNdebele, i.e. general language, the word *isenzo* means an act or action, while in the subject field of linguists, it means a verb. The meaning of *isenzo* ‘act, action’ has been broadened to also encompass the new concept. In the above example, a word from the general vocabulary acquires an additional, more technical meaning.

Another example is one that highlights semantic specialisation. The term *umgomani*, which means ‘flu’, is these days also used for any sickness that a person may be experiencing – as well as when there has been a death in the family or when something is not going according to plan.

b. Paraphrase

Taljad (2008:91) defines paraphrase as a short description or explanation that represents a very productive way by means of which terms are formed in the African languages.

Example: *isitodlwana sethungelelwano hlanganiso* 'internet cafe'.

In the above example of paraphrasing, *sethungelelwano hlanganiso* is a term that means internet, but was created using a verb *-thungelela* 'combine with a certain pattern' and a verb *-hlanganisa* 'combine'.

The disadvantage of paraphrasing is that, instead of one word, the term will consist of two or more words – or, as is often the case with conjunctively written languages, extremely long orthographical units which might lead to complications if they need to be used frequently. Some terms that start out as paraphrases often end up as compounded terms.

c. Compounding

This is the process whereby a new term is coined by combining existing words or lexical items. The meaning of the new term is independent of the meaning of the compounding words.

Example: *ikombahlelo* 'desktop' – this term, in isiNdebele, was formed by the combination of two nouns: *ikomba* 'pointer' and *ihlelo* 'programme'.

noun + noun *ikomba* 'pointer' + *ihlelo* 'programme'.

d. Deideophonisation

Van Huyssteen (2003:114) views this strategy as a unique method for word formation found in African languages. According to Mtintsilana and Morris (1998:111) deideophonisation is a process where terms are formed from sounds that resemble those associated with the object or action named, taking into consideration that these terms are formed by adding a prefix to the ideophone.

Example: *itjhwaratjhwara* 'plastic'.

Prefix (i-) > *tjhwaratjhwara* > derived from a sound made by plastic.

e. Neologism

According to Alberts (2017:99), new terms have to be coined for inventions, situations and articles in many languages. In addition, Thipa (1989:125) explained neologism as words which have been coined in an attempt to express new (modern ideas) or terminology.

Example: *umbelekeli* 'surrogate mother'

f. Borrowing

This a process by means of which linguistic elements are carried over from one language to another. Languages grow and African languages continue to enrich their vocabularies through borrowing (Mtintsilana and Morris 1988:111).

There are two types of borrowing:

i. Loan/ foreign word

This refers to words that are borrowed as a whole, without any morphological or phonological changes, with their meaning remaining intact. True loan words are relatively rare in the African languages – in most cases, terms are adapted to the morphological and phonological systems of the borrowing language. The best example of true loans or foreign words are music terms, which are borrowed from Italian. Cf. *vivace* 'to be played in a lively and brisk manner', *largo* 'to be played in a slow tempo and dignified style'. These terms have not been adapted in any way and are actually still Italian terms used as is in whatever language.

ii. Transliterations/adoptives

These are words that have been completely adapted to the language system of the borrowing language. In African languages, transliteration goes along with the adaptation of the structure of the original word – that is, on the syntactic, morphological, phonological and tonological levels (Taljard 2008:91). Furthermore, in addition (Mtintsilana and Morris 1988:111) see transliteration as the easiest and most productive method of term formation. The fear of many linguists is the language losing its character, given that transliteration fills the prevailing non-equivalence gaps and taking into consideration that

the pronunciation of a loanword is retained by the reflection of the phonological structure of the borrowed language.

Similarly, Mojela (2010:702) highlights the importance of recognising the borrowing of lexical items from foreign languages in a direct and indirect manner. Direct borrowing takes place when words borrowed from a foreign language are incorporated into the linguistic system of the target language, while indirect borrowing occurs through coinage, where only the meaning or sense of the foreign term is taken.

In most terminology lists, direct borrowing has not been used as a strategy. Most new terms in isiNdebele are developed through indirect borrowing:

Examples:

ividiyo 'video'

iposikarada 'postcard'

ithekhinoloji 'technology'

Lastly, isiNdebele has borrowed, indirectly, a term from Sesotho sa Leboa. The term concerned is that for gangrene, as is to be found in one of the tables included in the pharmaceutical terminology list reproduced below.

Sesotho Sa Leboa

isiNdebele

gangrene '*sefola*'

isifula

derived from – *fola* ***betha*** 'beat'

The above example should be taken as one of the reasons why linguists fear that transliteration can lead to language losing its character.

g. Shortening

According to Louwrens (1993:10), shortening refers to the process by which a word or words are omitted, as will usually occur instinctively and be taken for granted and easily understood in the construction of a sentence. Following this strategy, the meaning which was carried by the deleted word or words, is transferred to the remaining word or words after deletion has taken place.

The following terms, drawn from two terminology lists issued by the Department of Arts and Culture, serve as examples of this strategy:

Human, Social and Management Sciences list

Example: *ibhanga* 'commercial bank'

Information Technology list

Example: *loga* 'log off'

In both examples, terms from the source language (English) were shortened, but still retained the meaning carried by the deleted term.

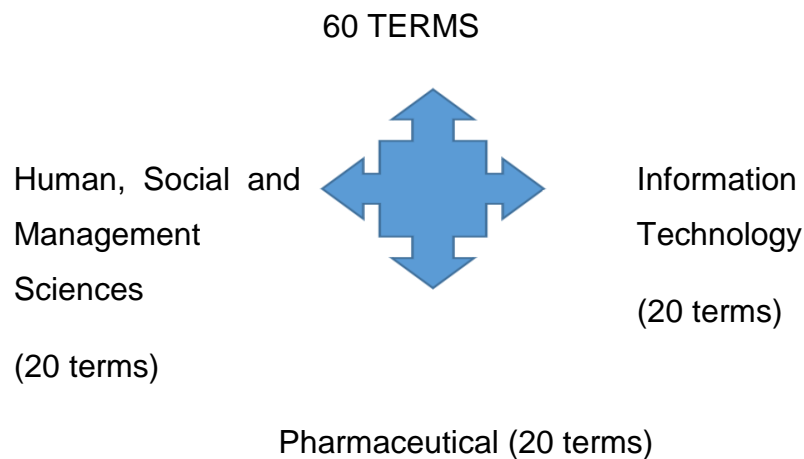
This case study is based on three terminology lists issued by the Department of Arts and Culture. Its main focus is on examining the term formation strategies that are frequently used in the creation of new terms in isiNdebele. The main aim of this case study is to compare term formation strategies used in the terminology lists, taken from different domains, in order to identify those most frequently used, and also to identify other possible strategies to help isiNdebele translators in their process of coining terms for different fields.

3.5.1. Systematic Sampling

A method that will be used in the examination of term formation strategies is that of systematic sampling, which is defined by Neuman (2000:206) as a simple random sampling with a shortcut for random selection and in which the sampling interval becomes a quasi-random selection method. The sampling interval guides the researcher on how to select elements from a sampling frame by skipping elements in the frame before

selecting one for the sample. In systematic sampling, all members of the total population must have an equal chance of being included in the sample.

In this study, 60 terms (20 from each of three terminology lists) were selected. In order to make this selection, the fourth term under each of the first 20 letters of the alphabet were selected in order to determine the 20 terms making up each list



The three terminology lists issued by the Department of Arts and Culture and used in this case study are:

1. Multilingual Human, Social, Economic and Management Sciences (2017)
2. Multilingual terminology for Information Communication Technology (2005)
3. Multilingual Pharmaceutical terminology (2017).

Table 2: Multilingual Human, Social, Economic and Management Sciences Terminology List

<i>English term</i>	<i>IsiNdebele term</i>	<i>Term formation strategy</i>
amortisation	<i>ukubhadala</i> <i>ngesitolimende</i>	Paraphrasing
balance of payments	<i>isitatimende senarha</i> <i>sokuthengisalana</i>	Paraphrasing
capital gain	<i>inzuzo yepahla</i>	Paraphrasing
debtors journals	<i>ijenali yabakolodi</i>	Paraphrasing
economic implosion	<i>ukufadalala komnotho</i>	Paraphrasing
factory cost	<i>iindleko zefekthri</i>	Paraphrasing
general equilibrium(zomnotho)	<i>ukulingana kweemfuno</i> <i>nokuthengiswako</i>	Semantic transfer (this term is given a new meaning in the field of economics)
holding company	<i>ikhamphani elawula ezinye</i>	Paraphrasing
imports	<i>ipahla engeniswa</i> <i>ngekhaya</i>	Paraphrasing
joint stock company	<i>ikhamphani yepahla ehlanganyelweko</i>	Paraphrasing
labour supply	<i>inani leensebenzi</i>	Paraphrasing
market	<i>imakethe</i>	Transliteration

English term	IsiNdebele term	Term formation strategy
net worth	<i>inani osala nalo</i>	Paraphrasing
opportunity cost	<i>ilahlekelo yokuzuza</i>	Paraphrasing
pay-as-you-earn system	<i>UMthelo umQatjhi awuDosa esiSebenzini</i>	Paraphrasing
quota	<i>ukukhawulelwa kwerhwebelano</i>	Paraphrasing
rebate	<i>isehliselo</i>	Semantic transfer
savings account	<i>i-akhawundi yokubeka imali</i>	Paraphrasing
tax avoidance	<i>ilehlisomthelo ngokomthetho</i>	Paraphrasing
unit costs	<i>iindleko zomkhiqizo ngamunye</i>	Paraphrasing

Table 3: Multilingual Terminology for Information Communication Technology (ICT)

English term	IsiNdebele term	Term formation strategy
local area network	<i>ithungelelwanothintano lendawo</i>	Paraphrasing
DVD	<i>idividi</i>	Transliteration
bit	<i>ibhithi</i>	Transliteration
bandwidth	<i>umkhawulelommumatho</i>	Compounding

English term	IsiNdebele term	Term formation strategy
cellular network	<i>ithungelelwano</i> <i>labofunjathwako</i>	Paraphrasing
cordless telephone	<i>umtatomoya</i>	Compounding
data	<i>idatha</i>	Transliteration
digital camera	<i>isithombenomboro</i>	Compounding
e-mail	<i>imeyila</i>	Transliteration
hardware	<i>ingaphandlemtjhiningqondo</i>	Compounding
internet	<i>i-inthanethi</i>	Transliteration
open source software	<i>ingaphakathimtjhiningqondo</i> <i>elivulekileko</i>	Paraphrasing
postage stamp	<i>isitembu sokuposa</i>	Paraphrasing
postbank	<i>ibhanga</i>	Transliteration
satellite	<i>isathelayithi</i>	Transliteration
server	<i>isithwalithungelelani</i>	Compounding
television license	<i>ilayisensi yethelevitjhini</i>	Paraphrasing
video	<i>ukugadangiswa kwevidiyo</i>	Paraphrasing
video tape	<i>ividiyokhasede</i>	Transliteration
website	<i>iwebhusayidi</i>	Transliteration

Table 4: Pharmaceutical terminology

English term	IsiNdebele term	Term formation strategy
acetaminophen	<i>ipharasethamoli</i>	Transliteration (it is a synonym of paracetamol)
bed rest	<i>ukulatjhelwa embhedeni</i>	Paraphrasing
calories	<i>ikhelori</i>	Transliteration
decreasing dosage	<i>umthamo ophungukakao</i>	Paraphrasing
effective dose	<i>isilinganiselosihlahla esisebenzako</i>	Paraphrasing
fibrosis	<i>ifayibhrosis</i>	Transliteration
gangrene	<i>isifula</i>	Transliteration (from Sesotho sa Leboa-sefola)
hard drug	<i>isidakamizwa esibukhali</i>	Paraphrasing
immune response	<i>ukuzivikela komzimba</i>	Paraphrasing
joint pain	<i>ubuhlungu bamalungu</i>	Paraphrasing
kidney	<i>iso</i>	Semantic transfer (this term is given a new meaning in the field of economics)
lactose	<i>ilakthosi</i>	Transliteration
maintenance dose	<i>umthamo wokulonda</i>	Paraphrasing

English term	IsiNdebele term	Term formation strategy
nasal	<i>-phathelene nepumulo</i>	Paraphrasing
oestrogen	<i>i-istrojini</i>	Transliteration
paraesthesia	<i>ipharesthesiya</i>	Transliteration
quinine	<i>umuthi kamahlengezela</i>	Paraphrasing
recombinant DNA	<i>ibhasdere le-DNA</i>	Paraphrasing
safranine	<i>isafranini</i>	Transliteration
tapeworm	<i>isoboya</i>	Neologism

3.6. Findings from the case study

Table 5, overleaf, consists of term formation strategies used for Multilingual Human, Social, Economic and Management Sciences (2017), Multilingual terminology for Information Communication Technology (2005) and Pharmaceutical terminology (2017) respectively.

Table 5: Term formation strategies

Term formation strategy	Multilingual Human, Social, Economic and Management Sciences (2017)	Multilingual terminology for Information Communication Technology (2005)	Pharmaceutical terminology (2017)
Paraphrasing	17	6	10
Transliteration	1	9	8
Neologism	1	0	3
Compounding	0	5	0
Loan words	0	0	0
Semantic transfer	2	0	1
Shortening	0	0	0

A summary of the above table shows the following in respect of the three terminology lists:

1. Paraphrasing was used in 33 terms.
2. Transliteration was used in 18 terms.
3. Neologism was used in 4 terms.
4. No loan terms were used in the term lists.
5. Compound words were used in 5 terms.
6. Semantic transfer was used in 3 terms.
7. No shortened terms found in the term lists.

3.7. An analysis of term formation strategies used for isiNdebele

Looking at the number of terms given, it is clear that paraphrasing and transliteration are the most commonly used strategies in the formation of new terms in this small sample of isiNdebele terms. Neologism and compounding, on the other hand, saw moderate use. Shortening was not used in any terminology list. Semantic transfer, which is defined by Gauton et al (2008) as a process of attaching new meaning to existing words, was used only to a small degree. It is a strategy that can be of use in languages such as isiNdebele because such languages are still at the stage of developing new terms for many specific fields. Lastly, loaning was not used for any of the terms which were identified in the three terminology lists. Even though this was a small sample, the fact that term formation strategies across three different domains/subject fields were investigated, seems to suggest that the preference for paraphrasing and transliteration is a general trend in term formation in isiNdebele. However, this would need further investigation with a larger sample, cutting across different subject fields.

3.8. Conclusion

In this case study, in which terminology lists from the Department of Arts and Culture were used, it is demonstrated that isiNdebele as a language is growing. It is important for all translators or subject specialists who are invited to collaborate in the creation of these term lists to familiarise themselves with the various forms of term formation strategies. This will assist in terms of understanding the strategy behind each and every term that they create or have created.

It is also very important to understand why use of a certain strategy predominated in a specific term list, such as in Table 3 (ICT) where transliteration is the most frequently used strategy.

Chapter 4: Summary, Recommendations and Conclusion

4.1. Introduction

The purpose of the study was to give a critical view of the current state of terminology development for isiNdebele and also to investigate term formation strategies used in the development of terminology lists that are developed by the Department of Arts and Culture. Three terminology lists, namely the Multilingual Human, Social, Economic and Management Sciences (2017), Multilingual terminology for Information Communication Technology (2005), and Pharmaceutical terminology (2017) were used as a case study. The aim was to establish whether there is a specific preference for any of these term formation strategies and also what the advantages and disadvantages of each strategy is. This chapter consists of a summary, recommendations and conclusion.

4.2. Summary

Terminology plays an important role in the development of languages. Through it, new terms for use in different fields – such as those concerned with economic, scientific, health and information technology matters and the like can be developed. The development of terminology is especially valuable for languages that are still developing, such as isiNdebele.

Tables 1, 2 and 3 in Chapter 3 make it evident that paraphrasing is the dominant strategy that has been used in the terminology lists developed by the Department of Arts and Culture. It is understandable that, when looking at terms such as ***inzuzo yepahla*** ‘capital gain’ and ***ukukhawulelwa kwerhwebelano*** ‘quota’ (Economics term list), ***ithungelelwanothintano lendawo*** ‘local area network’ (Information technology list), ***ingaphakathimtjhiningqondo elivulekileko*** ‘open source software’ (Information technology list), as well as ***ukuvikela komzimba*** ‘immune response’ and ***umuthi kamahlengezela*** ‘quinine’ (Pharmaceutical list), the terminologists and their collaborators preferred paraphrasing. It would appear that this is because it was believed that these concepts would be new to isiNdebele; paraphrases are deemed to be semantically transparent and using a paraphrase would contribute to the internalization of the concept designated by the term.

Where paraphrasing is used as a strategy, the equivalent terms formed tend to be lengthy. It is, nonetheless, important to embrace this technique as a strategy that, in future, will be able to help terminologists to form new, shorter terms based on the long descriptions given when the terms were first introduced to the developers. As was pointed out, paraphrases are often over time shortened to become compound terms, which are not as unwieldy as paraphrases. Furthermore, transliteration as a strategy took second place to paraphrasing in this study. This is understandable because terms such as *Isafranini*, 'Safranine' (from the Pharmaceutical list), *idatha*, 'data' (from the ICT list) and *imakethe*, 'market' (from the Human, Social, Economic and Management Sciences list) were adopted into isiNdebele syntactically, morphologically and tonologically. While both of these leading strategies have their advantages and disadvantages, the main issue here is the contribution that they bring to the development of isiNdebele along with the associated change – as well as the fact that terms already developed – can be used as guidance in the coining and revision of terms.

4.3. Recommendations

This study on the terminology development of isiNdebele will serve as the foundation for further creation of new isiNdebele terms where particular strategies will be used. Many of the terms already in existence can still be debated according to the strategies used in their creation – especially those that are already considered as standardised terms for isiNdebele speakers. In considering the findings from the case study, it is highly recommended that:

- Mother-tongue speakers, subject specialists and various committees in the community, as well as identified boards (NLB's) and authorities (chieftaincy representatives), should work in collaboration.
- The developed terminology should be made accessible to speakers of the language, irrespective of their location and including in schools and government departments.
- Workshops on term formation strategies for terminology development should be made available to language practitioners from various sectors so as to facilitate the management of consistency in term formation and usage.

- Follow-ups should be undertaken on the usage of current terminology lists and their impact on users.
- Evaluations of the user-friendliness of the terminology lists available on the Department of Arts and Culture website should be carried out.
- A website should be developed from which these terminology lists dealing with the various fields can be accessed by users.
- Funding and incentives should be made available to motivate collaborators and authenticators.
- Standardisation of the terminology lists should also be given attention as a matter of priority because terms sent to users should meet a required standard and their coinage must be justified if it is questioned by the users.
- Articles should be written on these strategies in order to see how they are similar to or different from each other in their usage for various African languages.

4.4. Conclusion

The creation of new terms in isiNdebele is certainly a challenge. However, there are solutions in place that can help and guide isiNdebele terminologists. It has been proven that some of the existing strategies – especially paraphrasing – have been long used, many IsiNdebele speakers use Afrikaans as part of their daily conversations, such words also can play a major role in the development of isiNdebele new terms.

The contribution of government towards the development of official languages (isiNdebele in this case) – especially financially – will contribute to the speedy growth of this language. More terminologists will be trained, more standardised terms will be produced, driven by government incentives. If more standardised terms are produced, more books for basic education in various different languages will be developed and this, in turn, will lead to books for use in institutions of higher education institutions also being written in different languages. This, then, illustrates the impact that the whole concept of teaching a child using a language that he or she understands can have.

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