

**THE IMPACT OF THE LANGUAGE OF THE CELLPHONE ON THE
DEVELOPMENT OF NORTHERN SOTHO**

by

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DECLARATION

I declare that the dissertation hereby submitted to the University of Limpopo for the degree of MASTER OF ARTS IN AFRICAN LANGUAGES has not previously been submitted by me for a degree at this or any other University, that it is my work in design and execution and that all material obtained therein has been duly acknowledged.

M.L. MPHEPYA

DATE

DEDICATION

1. My husband : Letutsa Stephen Mphepya
2. My children: Bhakoo, Mmoke, Thabo, Leah and Stuurman
3. My daughter-in-law: Masego
4. My son-in-law: Lesiba
5. My sister: Mantsha
6. My friend: Lizzy
7. My grandchildren: Keletjo, Onthatile, Kearabilwe, Rehauhetswe and Ofentše

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Thank you Lord Almighty.

ABSTRACT

The study focuses on the impact of the language of the cellphone on the development of Northern Sotho. The study argues that Northern Sotho lexicographers do not pay adequate attention to the cellphone language. This is why there are hardly any dictionaries that treat the cellphone language. The study shows that language of the cellphone should be treated like any other language. The study discovered that language of the cellphone assists in the development of African languages. In turn, this helps the cellphone users to close the gap between Northern Sotho and technological terms.

Lastly, the study recommends that language of the cellphone should not be ignored as technology is developing every minute.

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CHAPTER ONE

1.1 INTRODUCTION

Since time immemorial communication has played a vital role in human existence. It is through communication that people are able to express their desires, intentions, sadness, happiness and dreams (Shuttleworth, 2001). People use various types of methods and equipments in order to communicate with each other. Nowadays, the cellphone is one of the most popular means of communication. It cannot be overemphasized that the cellphone language dominates communication. People, especially the youth, use cellphone terminology on a regular basis. The use of numbers and acronyms now dominates communication through the cellphone.

1.2 BACKGROUND TO THE STUDY

1.3

As it is now an era of cellphone terminology, it is necessary to be flexible in order to cope with the situation (Shuttleworth, 2001). New terminologies need to be developed in Northern Sotho to increase its vocabulary. The cellphone terminology or language has brought some challenges. However, this will not be an easy undertaking given that some people do not use Northern Sotho correctly because of the influence of this terminology. There are some Northern Sotho words which existed long before the technologists developed cellphones. For example:

- (1) a. Message - *molaetša*.
- b. Send - *romela*.
- c. Open - *bula*.

The words in (1) above are no more used in the correct way because people use the following terms:

- (2) a. *Mesetše* instead of *molaetša*.
- b. *Nsendele mesetše* instead of *nthomele molaetša*.

Language users must be aware that even though technology has introduced new words, it is still necessary to use the existing words correctly.

Another challenge is that radio and television use acronyms instead of using full words or developing new words for the new terminology. For example:

(3) *Smsela*

It seems that language of the cellphone in Northern Sotho has not as yet been treated. This seems to be the case because language development using these technological items is not considered to be a crucial item by Northern Sotho language developers. That is why there is no dictionary for these technological terms. This means that lexicographers do not consider this as the most frequently used lexicon which should be given full lexicographic treatment:

- (4) a. e-mail - *emeile*
b. chat - *tšhatha*

As the cellphone language seems to dominate in day-to-day communication, it is therefore worthwhile to conduct a study on it.

1.3 LITERATURE REVIEW

As far as the study of the language of the cellphone is concerned, little has been done by way of research. Even Northern Sotho lexicographers have not yet developed the dictionaries which contain cellphone terms in Northern Sotho or in other South African languages. However, there are some researchers whose works are useful to this study. According to Lopez-Rua (2007) "sms language also known as txt-speak, chat speak, texting language, *smsish*, or *txt* talk is a term for the abbreviations and slang most commonly used to the necessary brevity of mobile phone text messaging, in particular the widespread sms (Short Message Service) communication protocol." Most people use *sms* as a word and not as an abbreviation without knowing that they use it as an acronym. Even on television they

use it as a full word, for example, *smsela* (send a short message). This acronym has been added with a suffix *-ela* to build a word.

According to Phihlela (2005:1), “the major goal of speech technology research comprising of text-to-speech synthesis, speech recognition, and speech understanding is to have computational machines that speak, read, understand, or even carry out dialogues.” He further says: “During the text analysis process, words are identified from the text, where a word can be found through some defined procedure. Abbreviations, numbers, and acronyms are identified and transformed into their equivalent full pronunciations”. He goes on to note that computational machines are developed every day. This shows that users cannot run away from technological development. Ours is just to recognize it and develop our language basing it on this computational machine language. Phihlela further shows that acronyms are used in full and this is going to confuse many people who are not even aware that they use acronyms instead of words.

According to Lopez-Rua (2007), *sms* language is similar to the language which was used by sending telegraphs that were charged by the word. The *sms* seeks to use the fewest number of letters to produce ultra-concise words and sentiments in dealing with space, time and cost constraints of text messaging. Users must know that abbreviations or acronyms are used to eliminate long sentences as the space in the cellphone is too small. However, when they talk or write they must use the words correctly in full. The lexicographers must also develop a dictionary with full words of these acronyms and also develop the languages concerned by using zero equivalence. According to Mphahlele (2004:1), zero equivalence is a case where a source language form or lemma does not have appropriate and immediate translation equivalent in the target language. In this case, it is usually said that a particular lemma is intranslatable. This means that such a lemma cannot be translated into the target language. Mphahlele (2004:1) further states:

Zero equivalence is caused by the fact that languages are not the same and even cultures of these people do differ. For example, the source language may have a lexical item which is only used in that language and an object, item or concept which is referred to in the source language is not found in the community of the target language users. In

other words, such an object is not known in the target language. Such an object which is not known in the target language is said to be “culturally bound”.

In other words, zero equivalence is a case where there is no direct translation equivalent for a lemma. Some scholars would refer to the lemma that has no direct immediate translation equivalents as a lemma with low level of translatability. For example, the following words are deemed to have low level of translatability from English into Northern Sotho:

- (5) a. web
- b. website
- c. password
- d. font
- e. database
- f. pixels

Furthermore, Mphahlele (2004) points out that sometimes, when African languages such as isiZulu, Northern Sotho, Xitsonga, and Tshivenda are being translated into English, there would be a prevalence of zero-equivalence. This would also happen when English is being translated into these African languages. The same applies to cellphone and computer language. For example:

- (6) a. Web
- b. Website
- c. Database
- d. Pixels
- e. Password
- f. Font
- g. Galler-graphic-clipart
- h. YouTube
- i. Synchronize
- j. Ovistore

According to De La Rosa (2005) and computer language, the word website means: “a computer connected to the internet that maintains a series of web.” This lexicon item is not used or known by the native speakers of Northern Sotho. Therefore, there is no way in which the term website could be given a Northern Sotho translation equivalent. In the case where English is translated into Northern Sotho, the lexicographer just borrows or transliterates the English term as it is. For example:

(7) web - *webo*

Teki (2013) states:

Programming language is an artificial language designed to communicate instructions to a machine. In particular a computer programming languages can be used to create programmes that control the behaviour of a machine and/or to express algorithms precisely. Thousands of different programming languages have been created, mainly in the computer field, with many being created every year. Most programming languages describe computation in an imperative style, that is as a sequence of commands, although some languages, such as those that support functional programming or logic programming, use alternative forms of description.

In addition to the information given above, the cellphone also has programmed languages as noted below:

- (8)
- a. The number you have dialed is not available.
 - b. The number you have dialed does not exist.
 - c. You have reached your call limit, please recharge before attempting any further call.
 - d. Please leave your messages after this tone.
 - e. If you are on prepaid please recharge; if you are on contract dial 140 to ask for a limit increase.
 - f. The number you have dialed does not exist, please text the number and dial again.

- (9)
- a. *Go thuswa ka Sesotho tobetsa 2*
 - b. To assist in English press 3
 - c. *Loko e labakofuniwa e se Tsonga phikelela 6*
 - d. To return to the main menu press #
 - e. To talk to the consultant press 9
 - f. To listen to the information again press 9
 - g. You have not made a selection
 - h. You did not make a decision
 - i. To speak to a consultant press 0

To add to this, there is also typed language. According to Wood, Kemp and Plester (2014), a type system defines how a programming language classifies values and expressions into types, how it can manipulate those types and how they interact. The cellphone language is also a programmed language, which requires the user to use one finger or fingers and stylus and there is also a mobile keyboard to use when one needs to text messages. It replaces the rotary dial.

Modipa (2008) states that “speech communication has always been the dominant way of human interaction, information exchange and instruction. Humans find it easy to communicate using speech as compared to other media like newspapers, text messages, telegrams and letters. In order to incorporate spoken language, other media are currently in use for remote communication, e.g. cellular phones, telephones, video conferring etc.”

According to Teki (2013), currently the language of the cellphone is the dominating one. It is used by old people, the youth and even children, the educated and the non-educated people. In the banks people use or interact with the computer and cellphone systems. In this process one chooses the language one prefers. Clients do not talk to people, but trained machine system do the required transactions. The same function that the computer is doing is also done by the cellphones. The cellphone is used for calls, text messages, banking, internet and e-mail.

According to Shuttleworth (2011:121), a familiar aphorism concerning dialect and language is that “a language is a dialect with an army and navy”. This saying expresses the idea that languages or dialects that become dominant in a geographical area do so largely by force. The technology is developing every day with such a force that it is extremely difficult to stop it. This is why many words relating to computers and cellphones have become part of the daily language.

According to Du Toit and Van Der Merwe (2002:389), e-mail, (electronic mail) gives one a fast cheap way to send information all over the world and to receive information. This is currently the most popular use of the Internet.

1.3.1 OTHER WAYS OF EXTENDING THE VOCABULARY

According to Finnegan (1994:89-101), besides affixation and reduplication, languages have ways of adding words to their word stock. These other ways do not involve derivational morphology directly, but it may be helpful to discuss them here. Finnegan discussed seven ways of extending the vocabulary. They are: compounds, conversion, semantic shift, blends, shortenings, back formation and borrowing.

English speakers have long shown a strong preference for putting existing words together to create new words, this process is called compounding. In the cellphone language, the following as examples can be found:

- | | |
|------------------|------------------------------|
| (10) a. Facebook | (noun + noun) |
| b. WhatsApp | (Inprogrative + verb + noun) |
| c. Setup | (verb + preposition) |
| d. Password | (noun + noun) |
| e. Podcasts | (noun + noun) |
| f. Downloads | (adverb + noun) |

Compounding occurs in many languages, for example:

- (11) Northern Sotho: - *mothomoso* (noun + adjective)
mabinagosolwa (verb + verb)

Functional shift or Conversion

Certain languages permit a word from one lexical category to be converted to another lexical category without any overt marking on the word itself. Functional shift is the transfer of a word existing in one lexical class for use in another without altering its form by derivation, for example:

- (12) Update – updating – updated

Semantic shift

Existing words can take on new meanings, shrinking or (more commonly) extending the domain of their reference. This phenomenon is called semantic shift or metaphorical extension. Consider the meanings of the underscored parts of the following phrases:

- (13) a. To derail congressional legislation
b. A buoyant spokesman
c. An abrasive chief of staff
d. To sweeten the farm bill with several billion dollars to skirt a veto fight.

Such metaphorical uses as shown in (13 a - d) above have become an integral part of the language.

Blends

English speakers are fond of blending, creating new words by combining parts of existing words. Among the better known blends are *smog* (from smoker and fog)

and *motel* and *hotel* others like modern (modular and demodular) appear from time to time.

Shortening

Shortening of various sorts is a popular means of increasing the word stock of a language. For example:

- (14)
- a. Radial (from radial tire)
 - b. Jet (from jet airplane)
 - c. Narc (from narcotics agent)
 - d. Obits (from obituaries) are common enough

There are also acronyms, in which the initials of a phrase are joined together and pronounced as a word as in AIDS (Acquired Immuno Deficiency Syndrome).

According to Mojela (1991:45), ellipsis (shortening) also leads to semantic restriction in loan words. This is usually found when a compound word or a phrase is shortened by dropping some of the words so that the remaining word can stand, meaningfully, on its own. The word either retains its original sense after shortening, or has its meaning restricted. Mojela further notes that the English word *motor-car* is adopted into Northern Sotho as *mmôtôrôkare*. The loan word is usually shortened to *mmotoro*, which was supposed to be a loan word for the English word motor which refers to all types of engines, machines and motor-cars. In this case *mmôtôrô* (motor) is a shortened loan word for motor car rather than a loan word from motor. The shortening of the names of places is another example in this regard:

- (15)
- | | |
|-------------------|----------------------------|
| a. O ile Nêila | He went to Nystroom |
| b. O ile Lôisi | He went to Louis Trichardt |
| c. O ile Brônkôrô | He went to Bronkhorstspuit |
| d. O ile Nabômô | He went to Naboomspruit |

Back Formation

A special type of shortening is suggested by forms derived from various forms. For instance, *computer* (originally formed by affixing the agentive suffix *-er* to the verb *compute* in its mathematical sense), a new verb *compute* has been “back formed” with the meaning “to use a computer” (for computation or other tasks). Other back formations are the verbs *typewrite* and *baby-sit*, which were invented historically subsequent to their noun forms *typewriter* and *baby-sitter*.

Borrowing

According to Mojela (1991:13-15), there are two types of borrowing, the direct and indirect borrowing. Direct borrowing is said to refer to the borrowing of words from foreign languages, whereas indirect borrowing is found where a foreign or a new concept is taken over and not the word itself. For example:

(16)

Loan words	Original language and word	Coined word
<i>Meyara</i>	ENG. ‘mayor’	<i>Ramotse</i>
<i>Mmotshare</i>	ENG, ‘mortuary’	<i>Bodulabahu</i>
<i>Mmotoro</i>	AFR. ‘motor’	<i>Sefatanaga</i>

Mojela further points out that speaker of Northern Sotho prefers to use the loan words, *meyara* for *mayor* and *mmôtšhara*, for mortuary in every speech rather than the coined words *-ramotse* or *bodulabahu*.

According to Finnegan (1994:01) “neither a borrower nor a lender be”, Shakespeare advised but languages pay no heed. Over the course of its history English has proved to be an extraordinary host to tens of thousands of borrowed words. Nearly hundred languages have contributed words to the English word stock during this century than from any other language. In turn, many languages have welcomed English words, although others have been guarded. The Japanese have drafted the words *beesbooru* (baseball), *futtobooru* (football) and *booringu* (bowling) from English.

1.4 THE AIM OF THE STUDY

The aim of the study is to examine the impact that language of the cellphone has on the development of Northern Sotho terminology.

1.5 RESEARCH QUESTIONS

- 1.5.1 What is the role of the cellphone on the development of Northern Sotho terminology?
- 1.5.2 What are the challenges brought about by the cellphone language to Northern Sotho?
- 1.5.3 What are the advantages of the language of the cellphone in Northern Sotho?

1.6 OBJECTIVES

- 1.6.1 To show the role of the language of the cellphone in the development of Northern Sotho terminology.
- 1.6.2 To highlight the challenges caused by the language of the cellphone in Northern Sotho.
- 1.6.3 To determine the advantages of the cellphone language in Northern Sotho language.

1.7 METHODOLOGY

This research used the qualitative method because this approach, as it allows face-to-face interaction with respondents, helped the researcher to find out why and how the language of the cellphone affects the development of Northern Sotho terminology. In addition, according to Leedy and Ormrod (1985:148) qualitative researchers often use multiple forms of data in any single study. They can use observations, objects, and anything else that can help answer their research questions.

1.7.1 DATA COLLECTION

The researcher used the following methods to gather relevant information about the language of the cellphone:

(a) Primary research method

The researcher gathered data from the following respondents:

- 4 lexicographers from University A.
- 10 students from University A.
- 8 educators from School A.
- 10 students from School A.

This enabled the researcher to gather firsthand information as it came from people who were directly concerned with the problem at hand. Moreover, the respondents have been chosen for convenience as the researcher had easy access to them. The researcher used open-ended and unstructured questions. Examples of such questions are the following:

- a) How useful is the cellphone language in the development of Northern Sotho terminology?
- b) Why do people tend to use acronyms and abbreviations instead of full words when using the cellphone?

(b) Secondary research method

This research method provided the researcher with second - hand information as gathered by other people. The researcher selected the information needed in order to consolidate and validate the study. The information was obtained from journals, theses, books and the internet.

1.8 ETHICAL CONSIDERATIONS

The study considered ethical issues in its analysis. The researcher ensured that respondents participated on a voluntary basis. Respondents were informed that they had the right to withdraw from the study at any time. In addition, the information that the respondents provided would be kept confidential. This was made possible by using codes for the names of the respondents.

1.9 DATA ANALYSIS

In this research information was obtained from interviews and as such the data produced would be text or narrative data which came from a variety of sources. The researcher used the answers collected from the respondents and analysed them. Conclusion was drawn from the analysed data.

1.10 SIGNIFICANCE OF THE STUDY

The study of Northern Sotho using the cellphone language will assist the cellphone users to use the correct word at the correct time and at the correct place. The lexicographers will understand and realise the role and importance of Northern Sotho and be able to translate these terms with ease. The lexicographers will also develop dictionaries with these cellphone technological terms.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

A variety of scholars such as Teki, Watt, Shuttleworth and Lopez-Lopez-Rua have studied the language of cellphones, but not much has been done concerning the language of cellphone in Northern Sotho. What follows is the literature review of what happens with other languages, especially English. The authors above dealt with sms language, acronyms, abbreviations and text messages of cellphone languages. As it has been pointed out, these are written in English and not in Northern Sotho. There is a need, therefore, to develop technological terms to align African languages with contemporary use. Technology is more advanced than the language being used by the cellphones users. This is supported by Watt (2010) who notes:

Many scientific, technological or political fields terminology and the production of up-to-date reference work is lagging behind, which causes problem to translators and results in inconsistent translation.

This is done because other topics are not treated. Literature review of this study is done to close the gap. We are having different languages according to what we are doing. For example, we are having mathematical language, biological terms, psychological terms, science terms and geographical terms. As technology is developing rapidly, day by day, hour after hour, we now have languages of cellphone with different terms in it.

As far as the study of the language of the cellphone is concerned, little has been done by way of research. Even Northern Sotho lexicographers have not yet developed dictionaries which contain cellphone terms in Northern Sotho or in other South African languages. However, there are some researchers whose works are useful to this study. Lopez-Rua (2007) writes:

With the popularity and rise in real-time text text-based communications, such as Facebook, Twitter, instant messaging, e-mail, Internet and online gaming services, chat rooms, discussion boards and mobile phone text messaging (SMS) came the emergence of a new text language tailored to the immediacy and compactness of these new communication media.

Most people use App as a word and not as an abbreviation without knowing that they use it as an acronym. Even on television they use it as a full word, for example:

When the WhatsApp, games, Facebook, Twitter expired you will find the following message from your cellphone to update them. Download the latest versions of Apps on play store. The acronym has been used as a word.

Everybody translates the technological terms in his or her own way. In this manner, they are haphazardly developed. There is no formal or standardized way of developing words. If these words can be developed by lexicographers, there will be a standardized way of formulating them into the mother-tongue.

2.1.1 Watt (2010)

Watt (2010) maintains that the implementation of state-of-the-art-translation technologies such as translation memories and management system can prove very useful both in supporting translators' work and providing reusable resources for the future. Lack of reliable terminological resources in turn will result in inconsistency.

The aim of this research is to motivate lexicographers to develop Northern Sotho terminologies by way of developing dictionaries incorporating cellphone words and translating or formulating other new words to meet with contemporary linguistic use and demand. Watt (2010) points out:

... at the heart of the relationship between terminology and knowledge engineering is the fact that practitioners of both disciplines function as intermediaries in a knowledge communication context involving processing technology on the other. It is noted further that a part of artificial

intelligence is concerned with the constitution of knowledge based system, which is built upon the definition largely by knowledge engineering from text analyses.

The statement above makes it clear that experts are needed to develop Northern Sotho language, which is haphazardly arranged, with words being developed and used the way people feel. For example, the word *camera* is developed in many ways as can be seen below:

- (1) Camera - *Khamera*.
- Camera - *khemera*.
- Camera - *setšeadiswantšho*.

If the word was developed in a standardized manner, everybody would use it correctly as it is written or developed. Another word which is developed in many ways is *game* as the examples below indicate:

- (2) Game - *geimi*
- Game - *gheimi*
- Game - *keimi*
- Game - *thaloko*

Another word is WhatsApp! It is also written in different ways. For example:

- (3) WhatsApp - *watsapo*
- WhatsApp - *whatsapo*
- WhatsApp - *mo watsapele*

Even the acronyms are not well developed as in the example of “pp”.

- (4) p.p - profile picture
- pic - picture
- Your pp is dope meaning, your profile picture is awesome

In order to standardize the language, words such as those discussed above need to appear in a scientifically developed form so that speakers of the language are able to use these terminologies in a more appropriate and acceptable way. Wood (2014) supports this idea by noting that terminological databases, working with how the language is used in day-to-day life, they are able to classify these terminologies and decide how best or appropriate they should be used. In other words, they are better able to propose correct usage of terminologies.

These new cellphone terminologies lead to new language called *textese*. In cellphone language people would normally use abbreviations, which is part of *textese*. According to Wood, Kemp & Plester (2014), language texting is becoming a language on its own, noting further that with cellphone becoming the primary means of distance communicating, text messages and instant messages have become almost a new written language of their own. *Textese* is a language of abbreviation based on Standard English. For example:

(5) “How are you doing today” - “hi hru 2 day”?

The study revealed interested insight into this emerging language. The study indicated that *textese* was not ruining students’ traditional spelling abilities; however, it did indicate that significant differences exist between English and *textese*. Traditional English takes longer to write, but is less ambiguous and quicker to read. *Textese* is ultra-speed to write, but takes a longer time to succeed in reading and is often misread.

Most young people use *textese* when writing their messages. They are used to these abbreviations. They do so because abbreviations reserve space as space is limited in cellphone messaging. Watt (2010) advises, “Its fine to use *textese* on a mobile phone, as it saves time, but you have to make sure your reader understands it. And do not let it move into your e-mail, student’s essays or job applications. Keep the boundaries”. The use of text messages and message sending started when the cellphone commenced. Before the cellphone messages were sent by letter or telegram.

The letter has to be posted to the person concerned and the receiver will get the letter after a few days. It is then that the message is delivered to the correct person. As for the telegram, the person who is sending the message has to pay according to the number of words. The lesser the words the lesser the amount to be paid. The more the words the more you pay. This was the fastest way but not like the cellphone message. With the cellphone, the person gets the message immediately after sending it. Technology has therefore given us new terms and services, so we also need to develop our language to balance our activities with these technological terms.

Williams & Thurlow (2005) have proposed the following properties of cellphone:

1. Initializations (acronyms and abbreviations composed of initials)
2. Reduction and shortenings, and omission of parts of speech.
3. Pragmatics and context in interpretation of ambiguous shortenings
4. Reactive tokens
5. Paralinguistic and prosodic features
6. Capitalization
7. Emotions
8. Punctuation, or lack thereof

Initialisation (acronyms and abbreviations composed of initial)

Initialisations indicate words that share the same abbreviations with different meanings. For example:

Lol - abbreviation

Lots of love or

Little old lady

Reductions, shortenings and omission of part of speech

In cellphone language, people use reductions and shortenings and omission of part of speech. They remove the vowels and function words and determiners such as “a”

and “the”. The reader has to insert the vowels when reading in order to understand or interpret a string of consonants.

Pragmatics and context in interpretation of ambiguous shortening

In some instances, these abbreviations can confuse the person who is interpreting. For example:

Omg-oh my god

Lol - laugh out loud

Lol - lots of love

This abbreviation has dual meaning

Reactive tokens

When one uses cellphone language like sms, the difference is that many words are shortened because of space unlike in spoken language. Here, the person replies the message which she/he already knows about. The answer will signify a reaction to a previous message. For example:

I know

Pictograms and logograms (rebus abbreviation)

Here, the writer uses one letter to present a word or use a picture to represent a word. For example:

Picture of a heart representing love U
“U” represents “You”.

Capitalization

In sms language, capital letters are not used and grammatical rules are not followed. In many cases people use capital letters only at the beginning of the sentence and

the sentence will have lower case letter even if these words stand for proper nouns such as names.

Punctuation, or lack therefore

In many cases punctuation marks are not used. In English many people do not use the apostrophe. For example:

We are

We're

Without the apostrophe, the above may lead to misunderstanding of the message. "We' re" may lead to were. In other words, the sms languages permit the sender to type less and communicate more quickly because of the use of shortcut.

A cellphone has become a more learning tool or instrument in the learning situation today. Students use their cellphones to search information for their lessons. They also use the cellphone to search information from the internet, calculator, email, note taker, voice recorder, video, pictures and photos. Creative teachers also use the cellphone to help students with vocabulary and grammar.

2.1.2 Kruger (2004)

According to Kruger (2004:7), there are different types of corpus, for example, British National Corpus, Linguistics-Corpus, mega corpora of English, Longman Corpus Network and Bank of English. There is also corpus in cellphone language which needs to be incorporated into translation studies. There are words which are translatable and others are non-translatable. For example, in Northern Sotho the following words are non-existent:

Facebook

Font

Password

These words need to be borrowed or transliterated into cellphone terms as it is shown:

Facebook - *feisepuku*

Font - *fonto*

Password - *phasewede*

Our people need to transliterate words rather than using English words as these will kill or dilute our language.

Kruger (2004:139) further notes that in order for a person to do translation equivalents, one should use the document as a source of conceptual and inquisitive information. Translators in most cases have problems of finding the correct word or the appropriate equivalent in the target language. For example, in cellphone language we have the word

Wallet - is where we download application

Wallet - *morabana wa tšhelete*

Wallet - *walete* (this word has dual meaning)

The translators should find translation equivalents since well it is not a single word but a group of words which is called “corpus” (Kruger, 2004:140). Lexicographers are faced with a big challenge in compiling dictionaries using cellphone language.

2.1.3 Mothiba (2012)

According to Mothiba (2012:7), lexicographers must know that dictionaries are used to overcome real problems. She goes on to state that bilingual dictionaries must give target language equivalents for source language headwords. Different dictionaries such as psychology dictionary or nursing dictionary do exist; equally a cellphone dictionary would help in getting the people to use a form of standardized language. This would go a long way towards reducing misunderstanding when people are texting each other.

According to Gouws and Prinsloo as cited by Mothiba (2012:8), more dictionaries should be developed to overcome problems encountered by users of different African languages. General dictionaries that are available are monolingual dictionaries and these do not explain the abbreviations and sms language. Mothiba suggests that there should be poly functional dictionaries which include different functions in it.

The above statement is supported by Mphahlele as cited by Mothiba (2012:10). Lexicographers develop dictionaries focusing on the needs of their target users. One dictionary cannot serve all the needs of the users, naturally. People can prefer to use more than one dictionary in order to get information they need. According to Mongwe as cited by Mothiba (2012:11), the challenges that people face are caused by a shortage of lexicographers. It is high time that students should be encouraged to regard lexicography as a serious field of study because technology is developing at a high speed in every sphere, so it needs people to cope with it and one way of doing so is by simplifying their communication strategies. Cellphone language forms an integral part of our daily communication. When the cellphone started it was named “*sellathekeng*” because most of men used to put them on their waist, and now they do not put them on their waist any more. So the name “*sellathekeng*” does not match the word cellphone anymore. In Northern Sotho people consider actions when naming, so if the action changes, the naming fail.

2.1.4 Ngobeni (2013)

Borrowing

According to Ngobeni (2013:17-19), borrowing is when one language uses words from another language and adopt them in their language to form part of their language. This means that the speakers of another language close their gap by borrowing. This means that they increase their vocabulary. The borrowing language uses the adopted words permanently into their language. Most African languages use borrowed words from English and Afrikaans. There are two types of borrowing; the direct which is called hybridization and indirect loan which is called hydration and indirect loan which is called transliteration. Direct loan is when the target language without changing the morphological structure. The loan words lack equivalent from

the target language and retains its spelling. Most of our languages use the prefix and an affix to the existing words to form new words from the source language. Words formed in this are called morphological hybrid forms. Transliteration is the method most frequently used in Northern Sotho when formulating new words from the source language if there is a lack of equivalents. According to Safer (1990:90) as cited by Ngobeni, "A direct loan is described as the taking over of the term from another language but adjusting its pronunciation, spelling and morphological characteristics." Ngobeni further says if transliteration is used excessively, the borrowing language will be diluted. Transliteration should be used as the last resort.

Pictorial illustrations

According to Ngobeni (2013:20), the use of pictures is another way of explaining the meaning of the words to the target language user. If the person uses a dictionary, he or she will be able to understand information needed when an unwritten equivalent cannot show spatial relationship effectively. Pictorial illustrations can be used to show effectiveness. Pictorial illustration will be used to explain the equivalents and the users will be able to comprehend what the lemma means.

2.1.5 Molotja (2008)

Code switching

According to Molotja (2008:22), in Mathematics people code-switch because of their lack of English, they switch to their home language. People code-switch when they use concepts which they understand in their home language than when a different language is used. Code-switching helps learners to understand mathematical concepts. The home language of the learners is very important in the teaching and learning of Mathematics as it helps the learners to understand the content better.

2.1.6 Malungani (2003)

Malungani (2003:9) notes that code or switching is the interchange from one language to another. It can be one or two languages. She further says that code

mixing means language mixing code. Mixing is when people use linguistic varieties in the same conversation. According to Crystal cited by Malungani, "Code mixing is when a single sentence begins in one language and then introduces words or grammatical features belonging to the other." People code mix because they want to adjust to people they are talking to or to people who are listening to them.

2.1.7 Nkwinika (1986)

Nkwinika (1986:3) points out that code-switching is influenced by the situation in which a person belongs and this is called situational code-switching. There are other conditions that influence the person to code-switch, things like the functions of switching. The environment also takes part in code-switching. Each situation corresponds to the change in a situation. He further says that code-switching where a person uses one word may be a borrowed word; this word may be from the donor language.

2.1.8 Mojela (1991)

Semantic change

According to Mojela (1991:83), a word changes meaning because of the new sense that may be added to the old word or the new word to an old sense in the form of meaning restrictions. A new meaning may be formed because of some alterations. Loan words are adopted with a different meaning. The meaning may differ from the original meaning in the other language. It is not always possible to differentiate between words that have undergone change in the original meaning and those that have undergone meaning shift. For example:

Application - *kgopelo* (in a form of a letter).

Application - menu in the cellphone are called application.

Words like the ones above need to receive comprehensive treatment so that they must be reader-friendly and or user-friendly.

- Application - a formal (often written) request for something, such as a job.
- Kgopelo* - *kgopelo yeo e dirwago ka lengwalo go swana le go kgopela mošomo.*

This word needs to be explained in full so that the person using or reading it must have a full explanation to find the difference.

Sending of the message has made a semantic shift in some words such as:

Delete - meaning to remove something that has been written or printed, with this word you do not use a duster, cloth or eraser to rub the message but you remove the message by pressing the button.

Forward - meaning to forward towards a place or position that is in front.

But in the case of a cellphone you forward the message to another as in the case of wanting to share that message with someone.

Another word is *archive*, meaning to put or store a document or other material or to move information that is not often needed to a tape or disk to save it.

In the past this type of information was stored in files, while now it is stored on CDs and USBs.

2.2 CONCLUSION

This chapter concentrated on literature review of different studies concerning the dynamics of developing Northern Sotho, how words develop through loan-words, code-switching, code mixing, semantic shift, transliteration and borrowing. Challenges in adopting or not adopting some words were also discussed. The next chapter will discuss the research methodology employed in this study.

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

In the previous chapter, the literature regarding language of the cellphone was reviewed. The aim of this chapter is to introduce the research design and methods. The definition of qualitative research and its characteristics are addressed using different authors and methods. The interview as a method which will be used in this study will be addressed and discussed. The sample in the study will be outlined. The research approach will be discussed. The sample in the study will be outlined to answer the following question with regard to the language of the cellphone:

- What is the role of the cellphone on the development of language to Northern Sotho terminology?
- What are the challenges brought about by the cellphone language to Northern Sotho?
- What are the advantages of the language of the cellphone in Northern Sotho?

The chapter will also outline ethical issues which will be followed when conducting this study.

3.2 RESEARCH METHODOLOGY

Leedy and Ormrod (1985:3-4) define research as the word which is used in everyday speech to recover a broad spectrum of meanings from elementary school to college. They have heard the word research in the systematic process of collecting and analyzing information (data) in order to increase our understanding of the phenomenon about which we are concerned or interested. In some situation, the word connotes finding and item of information or making notes and then writing a documented paper. Van Niekerk (2009:107) defined methodological design as the logic through which a research addresses the research question and gains data for the study. She further alluded that, the research methodology encompasses the complete research process: approaches, procedures and data collection or sampling methods. Cohen & Morrison (2000:39-44) describe methodology as the collection

approaches used in educational research to gather data to be used as a basis for inference and interpretation for explanation and prediction. Traditionally, the term refers to those techniques associated with the positivistic model, in order to elicit responses to predetermined question, such as recording measurements, describing phenomena, and performing experiment research methodology therefore aims to help us understand the processes and not the products of scientific inquiry.

3.3 RESEARCH APPROACH

According to Van Heerden (2009:164), the study requires specific and well-organized research methods for it to produce a credible outcome that may lead to better understanding of the phenomenon. The researcher purposely adapted to a case study approach because it offers an in-depth study of instances of a phenomenon. This approach will assist to learn more about language of the cellphone. Cohen, et. al. (2000) defined case study as “a specific instance that is frequently designed to illustrate a more general principle, and that it is the study of an instance action. This approach will assist to learn more about language of the cellphone which affects the development of Northern Sotho terminology.”

3.4 RESEARCH DESIGN

McMillan et. al. (in Moloji, 2009:101) contended that research design is a crucial part of an investigation due to the fact that certain limitations and cautions in interpreting the results are related to each design. Moloji described research design as a plan and a structure of the investigation used to obtain evidence to answer research question. According to Sebidi (2008:43), research design can thus seen as describing the procedures for conducting the study, which include when, from whom and under what conditions the data will be obtained. Creswell, Marshall, and Rossman (in Mphahlele, 2009:35) defined research design as a roadmap, an overall plan for understanding a systematic phenomenon of interest. To achieve the stated purpose of understanding language of the cellphone, the researcher undertook a qualitative case study.

3.5 QUALITATIVE RESEARCH

According to Leedy, *et. al.* (1985:147) the term qualitative research encompasses several approaches to research that are, in some respect, quite different from one another. Yet all qualitative approaches have two things in common. First: they focus on phenomena that occur in a natural settings, that is, in the “real world”. And second, they involve studying those phenomena in all their complexity. Guro (2009:54) described qualitative research as any research that uses qualitative data and usually came in words rather than in numbers. According to Van Niekerk (2009:108), qualitative research is an umbrella concept that includes several research strategies, which are flexible to obtain valid and reliable data. McMillan *et. al.* (2001:108) described qualitative research as an inquiry in which researchers collect data in face to face situations by interacting with selected person in their settings. This study will be conducted within a qualitative research framework because it addresses the direct experience lived by members using languages of the cellphone.

3.6 CONTEXTUAL BACKGROUND

Cellphone language is the language that is used everywhere, in the school, at home, in the shops, at work, everywhere where a person finds himself or herself seem to be necessary to use it. Language of the cellphone is used by everyone who is having a cellphone, it can be youth, older people or children.

3.7 INTERVIEWS

According to De Vos (2002:300), interviews are regarded as a primary source of data collection. The researcher used interviews as the primary source of the data collection strategy. The questions were in such a way that they would elicit participants responses about language of the cellphone which affects the development of Northern Sotho terminology. Pilot study was conducted with lexicographers from University A, students from the University A, educators and students from School A. The researcher chooses to use interviews rather than other data collection instruments because the researcher obtains large amount of data quickly with immediate follow-ups and clarification being possible if required.

According to Leedy and Ormond (1985:159), interviews can yield a great deal of useful information. The researcher can ask questions related to any of the following:

1. Facts
2. People's beliefs about facts
3. Feelings
4. Motives
5. Present and past behaviours
6. Standard of behaviour (i.e. , what people think should be done in a certain situation)
7. Conscious reasons for action or feelings (e.g., why people think that engaging in a particular behaviour is desirable or undesirable).

Cohen, et. al. (2000:268) indicated the following as aims of using interviews when conducting research:

1. To gather information having direct bearing on the research objectives by providing access to what is inside a person's head.
2. To measure the person's knowledge, values, preferences as well as his or her beliefs and attitudes.
3. To test hypothesis or suggest new ones.
4. To help identify variables and relationships
5. To follow up unexpected results, or to validate other methods, or to see deeper into the motivations of participants and their reasons for responding as they do.

According to Silverman (2001), qualitative interviews may take several forms: the informal conversation interview, the interview guide approach, and the standardised open ended interview. These forms all vary in the degree of structure and planning and the comparability of responses in data analysis. In the immediate context and are asked in the natural course of events, there is no predetermination of question topics or phrasing. Informal conversations are an integral part of participant observation. The researcher chose this method as it helps in gathering information which is useful for obtaining large amounts of data in a natural way.

Questions

1. Do you always understand your friend's message?
2. Are you able to read messages and comment on them?
3. Why do you use numbers instead of words?
4. Why do you use abbreviations instead of full words?
5. Why do you use acronyms as words?
6. What does the word WhatsApp mean?
7. Why do you use English words even if we have Northern Sotho words?
8. Are you not proud of your language?
9. Why do you not use or translate cellphone terms into Northern terms.

3.8 ETHICAL ISSUES

According to Leedy *et. al.* (1985:107-108), most ethical issues in research fall into one of four categories: protection from harm, informed consent, right to privacy, and honesty with professional colleagues. The following ethical issues will be taken and discussed while planning and conducting study to ensure that the rights and welfare of the participants are protected during the research procedure.

3.8.1 Protection from harm

Researchers should not expose research participants to undue, physical or psychological harm. As a general rule, the risk involved in participating in a study should not be appreciably greater than the normal risk of day to day living.

3.8.2 Informed consent

Research participants should be told the nature of the study to be conducted and be given the choice of either participating or not participating. Furthermore, they should be told that, if they agree to participate, they have the right to withdraw from the study at any time. Any participation in a study should be strictly voluntary. One common practice (and one required for certain kinds of research at much research institution) is to present an informed consent form that describes the nature of the

research project, as well as the nature of one's participation in it. Such form should contain the following information:

1. A brief description of the nature of the study.
2. A description of what participation will involve, in terms of activities and duration.
3. The guarantee that all responses will remain confidential and anonymous.
4. The researcher's name, plus information about how the researcher can be contacted.
5. An individual or office that participants can contact, should they have questions or concerns about the study.
6. A place of participants to sign and date the letter, indicating agreement to participate (when children are asked to participate, their parents must read and sign the letter).

3.8.3 Right to privacy

Any research study should respect participants' right to privacy. Under no circumstances should a research report, either oral or written, be presented in such a way that others become aware of how a particular participant has responded or behaved (unless, of course, the participant has specifically granted permission, in writing, for this to happen). In this study, participants will be assured of right to privacy.

3.8.4 Honesty with professional colleagues

Researchers must report their findings in a complete and honest fashion, without misrepresenting what they have done or intentionally misleading, others as to the nature of their findings. And under no circumstances should a researcher fabricate data to support a particular conclusion, no matter how seemingly "noble" that conclusion may be.

3.9 SAMPLING DESIGN

According to Leedy *et. al.* (1985:211), generally the components of the sample are chosen from the large population by a process known as random selection. Random selection means choosing a sample in such a way that each member of the population has an equal chance of being selected. When such a random sample is selected, the characteristics of the sample approximately represent the characteristics of the total population. According to McMillan (2010), sampling should be done in such a way that participants are not engaged in a study merely because the researcher knows or does not know the person, or merely in that it is convenient for the researcher to include or exclude certain individuals. In this research 4 lexicographers were consulted as they have been engaged in the formation of words or writing dictionaries, and thus have relevant and rich information about the words. Students also use cellphones every day when sending messages, WhatsApp, Facebook and others, thus were able to provide the researcher with rich information.

Educators are also regarded as important sample as they experience these problems of learners using abbreviations and synchronyms when writing letters and compositions. This group is regarded as suitable participants who could potentially offer rich information which the researcher wanted to explore. This group is sampled to represent the larger population. According to McMillan (2010:), the logic of the sample size is related to the purpose, the research problem, the major data collection strategy, and the availability of information-rich cases. The insights generated from qualitative inquiry depend more on the information richness of the cases and the analytical capabilities of the researcher than on the sample size. In this research the sample was 4 lexicographers and 8 students from University A, and 10 students and 8 educators from School A.

3.10 RELIABILITY AND OBJECTIVITY

According to Leedy *et. al.* (1985:99-100), the reliability of a measurement instrument is the extent to which it yields consistent results when the characteristic being measured has not changed. He further alluded that there are several things a

researcher can do to enhance the reliability of a measurement instrument. First, the instrument should always be administered in a consistent fashion, in other words, it should be standardized from one situation or person to the next. Second, to the extent that subjective judgements are required, specific criteria should be established that dictate the kinds of judgements the researcher makes. In this research, the researcher tried by all means to be reliable in order to get the correct information that was needed.

3.11 DATA ANALYSIS

According to Kamper (2007:13), analysis will be interpreted to make meaning of experiences, views, knowledge and ideas of the participants regarding the problem. In this research text messages are analysed to see which words or numbers are frequently used when people are writing their text messages.

Example 1

- 1) *'Hi Stuurman, i won't b able 2 attnd de practice.*
Hello Stuurman, I will not be able to attend the practice.
- 2) *Tjoo... Me neither gud people, i'll c u nxt week*
Wow... Me neither good people, I will see you next week.
- 3) *Boi its Hani, wer r u? i nd 2 go hme.*
Boy it's Hani, where are you? I need to go home.
- 4) *Hi big brther! Pls ask mom whn cn i start drinking cool drink.*
Hello big brother! Please ask mom when can I start drinking cool drink.
- 5) *Boi we've got a car axdnt nd i ws the driver nd am in dangr nw.*
Boy we have got a car accident and I was the driver and am in danger now.
- 6) *Nt gud frnd. Wud n wuw?*
Not good friend. What are you doing and who are you with?

- 7) *Y ddn't u cum 2 chrch on sunda?*
Why didn't you come to church on Sunday?
- 8) *Am no longa gin 2 b on watsapp.*
Am no longer going to be on WhatsApp.
- 9) *Ignr ppl hu talk abut u bhnd ur bck; cuz dats wer dey blng bhnd ur bck.*
Ignore people who talk about you behind your back because that's where they belong behind your back.
- 10) *It wz so gud 2 met u at lst.*
It was so good to meet you at last.

In most of the messages above vowels are skipped. For example:

Behind	-	<i>bhnd</i>
People	-	<i>ppl</i>
Friend	-	<i>frnd</i>
Back	-	<i>bck</i>

In some cases vowels are changed to other vowels. For example:

Good - *gud*
Come - *cm*

Numbers are used as words. For example:

The number '2' represent 'to'.
It was so good **to** meet you at last.
I am no longer going **to** be on WhatsApp.
Instead of 'to' the number '2' is used.

A sentence is shortened to about three letters. For example:

What are you doing - *wud*

One word may be represented by one vowel. For example:

You - u

The above examples need to be developed in a common way so that everyone must be able to read the shortened messages with understanding.

3.12 CONCLUSION

This chapter focused on the research design and methodology applied in the study on language of the cellphone affects the development of Northern Sotho terminology. The qualitative data collection method was discussed and substantiation was given for choosing this particular method. The interviews and sampling methods were discussed. The ethical considerations were also discussed.

CHAPTER FOUR

MAIN FINDINGS OF THE STUDY

4.1 INTRODUCTION

This chapter presents the summary of the main findings of the study on the impact of language of the cellphone on Northern Sotho.

4.2 MAIN FINDINGS

As it was indicated in the research proposal that the samples of this study were students at University A, students and educators at High School A, lexicographers at University A; my introductory question was posed to understand the impact of the language of the cellphone on Northern Sotho. In their responses common elements that appeared were the following:

4.3 THE USE OF CHAT ABBREVIATIONS

Definition of abbreviations

According to Lopez-Rua (2007), “an abbreviation is from the Latin word ‘brevis’ which means ‘shorts’, it is shortened form of a word or phrase. Usually but not always, it consists of a letter or group of letters taken from the word or phrase, for example, the word abbreviation can itself be represented by the abbreviation abbr, abbrvor and abbrev”. He further states that people should not confuse abbreviation and acronyms. They share the semantic and phonetic functions but they are not the same. According to Lopez-Rua (2007), while it does seem incredible that there are thousands of texting abbreviations, different chat abbreviations are used by different groups of people when communicating online. People playing online and games are likely to use chat abbreviations that are different from those used by someone running a financial updating. The abbreviations are used by students, educators and other people who are using cellphones. The most used abbreviations will be discussed in the following sections.

- (1) English: Ur- you are
Northern Sotho: Wo- wena o

The above examples show that the two words were amalgamated to form **Ur** in English and **Wo** in Northern Sotho. Unless one is familiar with this type of language, one will be at a loss as to what is meant, especially the Northern Sotho **Wo** which already exists as a word in its own right.

- (2) English: Cu - see you
Northern Sotho: Ktb - ke tla go bona

- (3) English: i see – i c
Northern Sotho: ke a bona - k a b

lc is made up of two words **l** and **see** the word **see** is represented by the consonant **c** which sounds familiar to the word. The above examples show that the two words were amalgamated to form IC.

- (4) English - inches - in
Northern Sotho - intšhi - in

The word **inches** and **intšhi** when abbreviated form the word **in** which already exists as a word **in** in English. The word **in** is used as a preposition.

- (5) English - just a minute
Northern Sotho - ka motsotso

The sentences **just a minute** in English and *ka motsotso* in Northern Sotho form other words which already exist in English and Northern Sotho. The words **just a minute** form **jam** which already exists as a word in its own right and in Northern Sotho it form the abbreviation **km** which is known as the abbreviation of *kilometara*. This may cause confusion to the reader.

Cu is made up of two words **see** and **you**, the word **see** is represented by the consonant **C** which sounds familiar to the word, the same applies to **you** which sounds like the vowel **u**.

- (6) English : Sry - sorry
 Northern Sotho : *Trl - tshwarelo*

The words **sorry** and *tshwarelo* which in the normal usage do not have abbreviations are now abbreviated. *Tshwarelo* has been abbreviated as an acronym whereas it is a word, and due to cellphone language this causes ambiguity as one may not be completely sure which word is being referred to.

4.4 OMISSION OF VOWELS

When people write messages using cellphones they omit certain vowels and use syllables only to save space. It is confusing to the person reading the message without knowing that vowels have been omitted. The person reading the message will have to read a string of consonants. For example:

(7)

- | | | | | |
|----|----------------|-----------------|-----------------|-------------|
| a. | English | People | becomes | ppl |
| | Northern Sotho | <i>Batho</i> | <i>e tla ba</i> | <i>bth</i> |
| b. | English | Money | becomes | mny |
| | Northern Sotho | <i>Tšhelete</i> | <i>e tla ba</i> | <i>tšhl</i> |
| c. | English | Night | becomes | nyt |
| | Northern Sotho | <i>Bošego</i> | <i>e tla ba</i> | <i>bšg</i> |
| d. | English | First | becomes | fst |
| | Northern Sotho | <i>Mathomo</i> | <i>e tla ba</i> | <i>mthm</i> |
| e. | English | Please | becomes | pls |
| | Northern Sotho | <i>Kgopelo</i> | <i>e tla ba</i> | <i>kgpl</i> |

f.	English	Reward	becomes	rwd
	Northern Sotho	<i>Poelo</i>	<i>e tla ba</i>	<i>pl</i>
g.	English	Person	becomes	prsn
	Northern Sotho	<i>Motho</i>	<i>e tla ba</i>	<i>mth</i>
h.	English	Help	becomes	hlp
	Northern Sotho	<i>Thušo</i>	<i>e tla ba</i>	<i>thš</i>
i.	English	Aware	becomes	awr
	Northern Sotho	<i>Phafoga</i>	<i>e tla ba</i>	<i>phfg</i>
j.	English	School	becomes	schl
	Northern Sotho	<i>Sekolo</i>	<i>e tla ba</i>	<i>skl</i>

The examples in (6a-j) above show that in both English and Northern Sotho words, vowels have been omitted. The problem here is that one may find it extremely difficult to understand such abbreviations as there are no dictionaries for them.

4.5 SEMANTIC SHIFT IN THE LANGUAGE OF THE CELLPHONE

The invasion of the cellphone has brought new terminologies which were not there in our indigenous languages. As we are using these new technological items, we are compelled to use the terminologies they brought about. Technology makes our lives easier. We are no more walking long distances to deliver messages or letters. New technology has substituted the telegram through e-mails, facebook, twitter, sms, BBM, Mxit, Wechat and WhatsApp. We also have other applications like store, Apps, music, phonebook, contacts, internet, alarm, calculator, setting, navigator, games and radio. Most of the words used in these technologies are new to Northern Sotho. These words have zero equivalents because they do not exist in Northern Sotho.

According to Mojela (1991), semantic change is the evolution of word usage - usually to the point that the modern meaning is radically different from the original usage. In diachronic (or historical) linguistics, semantic change occurs in one of the meanings of a word. Every word has a variety of senses and connotations, which can be

added, removed, or altered over time, often to the extent that cognates across space and time have different meanings. The study of semantic change can be seen as part of etymology and semantics. In order to use new words which do not have equivalents in Northern Sotho, a common strategy is adoption and translation, for example:

(8)	English	Northern Sotho
	Facebook	-face- <i>sefahlego</i>
	Book	- <i>puku</i>

In this case, Northern Sotho cannot use literal translation i.e. *sefahlegosapuku*, a better option is to transliterate the word to:

(9)	English	Northern Sotho
	Facebook	<i>feisepuku</i> .

According to Lopez-Rua (2007), the word **facebook** is a popular free social networking website that allows registered users to create profiles, upload photos and videos, send messages and keep in touch with friends, family and colleagues. Another vocabulary addition related to **facebook** is:

(10)	English	Northern Sotho
	Facebook account	- <i>feisepuku akhaonto</i>

It is the profile of the **facebook** owner which allows people to recognise music, book, marital status, gender, name, date of birth and religious status of other people. The words *faesepuku* and *feisepuku akhaonto* have been added onto Northern Sotho vocabulary and this is a positive step as Northern Sotho is kept up to date in terms of technology. Another popular term these days is:

(11)	English	-	Northern Sotho
	Mxit	-	<i>miksite</i>

According to Lopez-Rua (2007) *Mxit* (pronounced “mix it”) is a free instant messaging application development by Mxit Ltd. In South Africa, Mxit “*miksite*” is used to chat or to send messages with only the people you know. It also allows you to send those messages for free, but you have to log in first with your name and pin in order to be online. When you are offline you will not be able to send or receive messages.

In the present day context, another technological device that is popular is:

(12) English	Northern Sotho
You Tube	<i>yutšhupu</i>

Literal translation of the term in (12) above is “*wena lethopo*”, in Northern Sotho. However, this does not make sense at all. Thus, the only alternative to be used here is transliteration: *yutšhupu*. You Tube - “*yutšhupu*” is used to search for music, videos and news. This allows the user to listen to a type of music and songs he or she likes. It also allows searching any type of video and music videos you want to watch and to search the latest news.

A technological device that has also become very popular is Twitter. This tool is used to chat with people one has met, especially celebrities but not individually but as a group, to comment on how he or she performs his or her music or any other activity. Even in this case, Northern Sotho used transliteration:

(13)	English	: Twitter
	Northern Sotho	: <i>Thwitha</i>

Another technological device that has also become very popular is WhatsApp. WhatsApp is used almost by every person who has a phone and data. It is used to send messages, images, videos and audio media messages. It can also do voice calling features. WhatsApp provides group chat location sharing options. Even in this case Northern Sotho uses transliteration (Lopez-Rua, 2007).

- (14) English : WhatsApp
Northern Sotho : *Watsapo*

4.6 BROADENING

According to Mojela (1991), broadening is the change in the meaning of a word by expansion, so that the word is applicable in more context than previously was and means more than it previously did. There are some words which were used long ago before the advent of the cellphone. The cellphone terminology has developed those words with different meanings but the form has been retained, for example: *Oxford Advanced Learner's Dictionary* (2010:9) than was previously the case.

- (15) a. English: Account - an arrangement that somebody has with a bank.
Northern Sotho: *Akhaonto - yeo e šomiswago go bea tšhelete pankeng.*

- b. English: Account - It is where we find explanation about a person in connection with his or her music, book, marital status, sex, names, date of birth and religious status.

Northern Sotho: *Akhaonto - Ke mo re humanago tlhalošo ka ga motho mabapi le mmmino, dipuku, maemo a lenyalo, bong, maina, matswalo le tumelo ya motho.*

The words **account** and *akhaonto* have more meanings. When a person speaks, he or she has to give a comprehensive meaning of the **account** or *akhaonto* he or she refers to (*Oxford Advanced Learner's Dictionary*, 2010: 449).

- (16) a. English: Drive - to operate a vehicle so that it goes in a particular direction.
Northern Sotho: *Go otlela - Ge motho a otlela sefatanaga*

- b. English: Drive - navigator - an instrument giving direction
 Northern Sotho: *Go otlela - Tšhupamafelo ge motho a nyaka lefelo leo a sa le tsebego.*

The words **drive** and *otlela* refer more to driving a car, but also refer to navigation and *tšhupamafelo* (*Oxford Advanced Learner's Dictionary*, 2010:314).

- (17) a. English: Contact - the act of communicating with somebody especially regularly.

Northern Sotho: *Kgokaganyo - go kgokagana le motho yo mongwe*

- b. English: Contact - list of names of people and their phone numbers in an alphabetical order.

Northern Sotho: *Kgokaganyo - maina a batho le dinomoro tša bona ka tatelelano ya dialfabete.*

The above word, that is **contact** and *kgokaganyo* in English and Northern Sotho respectively have undergone a complete shift in meaning as the explanations indicate.

According to the *Oxford Advanced Learner's Dictionary* (2010:1131) **post** is the official system used for sending letters and packages. The advent of technology has broadened the meaning of this word:

- (18) a. English: Post - a job, especially an important one in a large organisation

Northern Sotho: *Poso - sekgoba sa mošomo*

- b. English: Post - where we send or receive letters

Northern Sotho: *Poso - ke mo re romelago goba re amogelago mangwalo*

c. English: Post - where you post your picture on facebook

Northern Sotho: *Poso - mo o beago seswantšho sa gago ka feisepuku*

In most cases, we are used to the word **post** as a place where we send and receive letters or a post for a job. Now the cellphone language has introduced the word **post** in a different way. The word **post** is also used to refer to when one puts your picture on facebook.

(19) According to the Oxford Advanced Learner's Dictionary (210:59):

a. English: Application: is a formal request for job, permission to do something or a place at a college or University.

Northern Sotho: *Kgopelo : ke kgopelo ya mošomo goba ya sekgoba kholetšheng goba Yunibesithing.*

b. English: Application: Everything we find in the cellphone is an application, e.g. Contact, WhatsApp and other things.

Northern Sotho: *Kgopelo: Dilo tšeo di lego ka gare ga founa di bitšwa "kgopelo".*

c. English: Application: menu of the cellphone.

Northern Sotho: *Kgopelo: menu wa selefoune.*

The words **application** and **kgopelo** have now been broadened to include more meanings which were not there in the past. These days **web** is another word that is common:

(20) a. English: web: spiders web.

Northern Sotho: *bobi bja segoko.*

b. English: A complicated pattern of things that are closely connected to each other e.g. a web of streets

Northern Sotho: *ke mo ditsela di raraganago gona.*

c. English: Web: World Wide Web – I found the information on the web.

Northern Sotho: *webo - ke mo re humanago ditaba tša lefase gona.*

d. English: A piece of skin that joins the toes of some birds and animals that swim, for example, ducks and frogs.

Northern Sotho: *Ke letlalo leo le kgomantšhago menwana ya maoto ya dinonyana.*

(Oxford Advanced Learner's Dictionary, 2010:1667).

The word **web** has been brought by the technological terms. It has extended the meaning of **web**. The words **web** and *webo* have more meanings. When a person speaks, he or she has to give a comprehensive meaning of which word he or she refers to. For example:

21. a. English: Cloud: a grey or white mass made of very small drops of water, that floats in the sky or cloud.

Northern Sotho: *Cloud: ke maru - ke ao a bonwago leratadimeng ebile a neša pula.*

b. English: Cloud: large mass of something in the air, for example, dust or smoke or a number of insects flying all together.

Northern Sotho: *Maru - dinonyana tšeo di fofago ka seboka.*

- c. English: Cloud: where we save information from the cellphone; this information will help the cellphone users when their cellphones are lost or damaged.

Northern Sotho: *Maru - ke mo re beago gona dinomoro goba melaetša ya bohlokwa yeo e lego ka gare ga founa gore ge go na le bothata o e humane.*

(*Oxford Advanced Learner's Dictionary*, 2010: 269).

The language of the cellphone has brought about new meaning of the word **cloud**. According to the cellphone language, **cloud** is where we save information from the cellphone so that when the cellphone gets lost or damaged you will still find all the information from the **cloud** or *maru*. Apple is another popular word:

- (22) a. English: Apple - a round fruit with shiny red or green skin and firm white crisp flesh.

Northern Sotho: *Apolo - ke seenywa se setala goba se sehwiwibu eupša ka gare e le se sešweu.*

- b. English: Apple: the name of the cellphone.

Northern Sotho: *Apolo ke leina la mogalasetšhiemorago.*
(*Oxford Advised Dictionary*, 2010: 59)

Language of the cellphone has added a new meaning of **apple** as the name of a cellphone. When you talk about people, you must give a comprehensive meaning so that people you are talking to must understand which **apple** they are talking about.

In this area of the cellphone, we are having a new name blackberry not meaning a fruit but the name of the cellphone. We are having a cellphone that is called Blackberry.

(23) English: Blackberry - a small soft black fruit that grows on a bush with thorns in gardens or yards in the country side.

Northern Sotho: *Polekeberi - ke leina la seenywa se sentsho sa boleta sa meetlwa se se humanwago nageng.*
(*Oxford Advanced Learner's Dictionary*, 2010: 14140)

(24) English: Blackberry - cellphone model.

Northern Sotho: *Polekeberi - leina la mogalasetšhiemorago*

The word **passport** has been brought about by the new cellphone terminology and it has extended the meaning of **passport**. For example:

(25) a. English: Passport - Personal document used to travel
Northern Sotho: *Pasepoto - pasa yeo e šomišwago go tshela mellwane.*

b. English: Passport - phone model
Northern Sotho: *Leina la mogalasetšhiemorago.*

Furthermore, this research discovered that Northern Sotho people prefer borrowed words to created words, for example:

(26)

English	Northern Sotho Borrowed words	Northern Sotho Created words
Calender	<i>Khalentara</i>	<i>Tšhupamabaka</i>
Office	<i>Ofisi</i>	<i>Kantoro</i>
Message	<i>Mesetše</i>	<i>Molaetša</i>
Camera	<i>Khamera</i>	<i>Setšeadiswantšho</i>
Phone	<i>Foune</i>	<i>Mogala</i>
Cellphone	<i>Sele/selefoune</i>	<i>Mogalasetšhiemorago</i>
Calculator	<i>Khalikhuleitha</i>	<i>Sehlakantšhi</i>
Butter	<i>Botoro</i>	<i>Sereledi</i>
Motorcar	<i>Mmotoro</i>	<i>Sefatanaga</i>
Watch	<i>Watšhe</i>	<i>Sešupanako</i>
Tape	<i>Theipi</i>	<i>Segatišamantšu</i>
Library	<i>Laeborari</i>	<i>Bokgobapuku</i>
Beer	<i>Biri</i>	<i>Bjala</i>
Coldrink	<i>Kholeterenke</i>	<i>Senotšididi</i>
Diary	<i>Dayari</i>	<i>Sešupamabaka</i>
Key	<i>Khiye</i>	<i>Senotlelo</i>
Aeroplane	<i>Eropoleine</i>	<i>Sephatšamaru</i>
Fridge	<i>Foretši</i>	<i>Setšidifatši</i>
Mine	<i>Mmaene</i>	<i>Moepo</i>
Shop	<i>Šopo</i>	<i>Lebenkele</i>
Doctor	<i>Doktha</i>	<i>Ngaka</i>

In examples above, the borrowed words are used more frequently than the Northern Sotho created words. In Northern Sotho, the word *mogala* is not frequently used as people prefer to use the word *foune*. They use English words more frequently because if one does not know English, one is humiliated. Parents also have the feeling that their children must know English, in order to gain employment. Technology has added to that.

4.7 THE USE OF SMS TEXT MESSAGES

Sms text messages are dominating communication in many spheres of life, for instance, banks, shops, government, medical schemes, educators, parents and learners use text messages to send information to other people. These text messages can be forwarded to thousands of people at a time. The use of text messages minimises the use of paper or letters. It also minimises the expenses to deliver letters to people or places; concerned people do not walk distances to the post offices. Text messages are used by business men to advertise their business, to order products or services. They also advertise their promotions, send messages about payment due dates. Bulk text messages are a powerful tool to deliver messages - leading to gradually abandoning of the traditional oral culture, especially among the educated people, for example:

(27) a. English: Apply for Polokwane Municipality's bursary: 2015 academic year. Forms obtainable at Civic Centre office 903 and [www.polokwane .gov.za](http://www.polokwane.gov.za).

Northern Sotho: *Dira kgopelo ya pasari ya dithuto ga masepala wa Polokwane ya ngwaga wa dithuto wa 2015. Diforomo di humanega kantorong ya sibiki Nomorong ya 903 le www.polokwane.gov.za.*

b. English: Power hour bundle purchased, your new airtime balance is R8,57. You have 60 min for VC to VC calls to use from 6am to midnight today.

Northern Sotho: *O rekile iri ya go founa, o šaletšwe ke R8,57. O na le metsotso ye 60 ya go founela megala ya VK go VK fela go tloga ka 6ms go fihla gare ga bošego.*

- c. English: Think ink is delivering in your area this week. Please let us know if you need anything. Think ink Polokwane 015 295 6226 or reply on this number

Northern Sotho: *Ba Think Ink ba romela merwalo beke ye. Ge o na le se o se nyakang o botše ba Think Ink Polokwane mo nomorong ye: 015 95 6226.*

- d. English: Reading and writing competition is arranged as follows: Date 11 June 2015 time 09h00 venue Sehlare all schools are urged to participate.

Northern Sotho: *Phadišano ya go bala le go ngwala e ka tsela ye e latelang: letšatši 11 June 2015 nako 09h00 lefelo Mosehleng dikolo ka moka di kgopelwa go tšea karolo.*

- e. English: Get an old mutual family funeral plan from only R35 per month and life plan from only R45 per month, reply yes and we will call you. Opt out to stop.

Northern Sotho: *Humana tirelo ya go boloka go tloga go R35 ka kgwedi le tirelo ya bophelo go tloga ka R45 ka kgwedi, fetola ge o nyaka thušo re tla go founela.*

- f. English: Reward voucher: spend R800 or more @ Markharm and & get R60.00 off by 15 Jul 2015.
Ref. #998EA119D144314. Ts & Cs. Opt out sms stop.

Northern Sotho: *Karata ya poelo: šomiša R800 goba go feta ga Markharm o humane phokoletšo ya R60 ka di 15 Julae 2015. Nomoro ya bohlatse #998EA119D144314. M le D di tla lebelelwa.*

- g. English: Tune into Thobela FM, Capricon FM, Energy FM or Zebediela FM on Thursday, 18 June 2015 for the STATE of City Address @10:00 – 12:00 Polokwane Municipality.

Northern Sotho: *Theeletša Thobela FM, Capricon FM, Energy FM goba Zebediela FM ka Labone, 18 June 2015 ka 10:00-2:00 go tlo bolelwa ka ditaba tša Masepala wa Polokwane.*

- h. English: Valued Client you have been selected for a loan of up to R200,000 Reply yes or send A Please To 074 263 4583 or No to OPT OUT BLACKLISTED WELCOME

Northern Sotho: *O kgethilwe go humana kadimo ya tšhelete ye e lekanago R2000.00. Fetola goba o romele molaetša go 074 263 4583 le ba mathata ba a amogelwa.*

- i. English: Worried about labour issues? For 24hrs access to GOOD LAWYERS sms RIGHT TO 33922. We'll call you back. Std Rates.

Northern Sotho: *O na le mathata ka tša mošomo? Boramolao ba humanega diiri tše 24. Romela molaetša wa GO LOKILE GO 33922. Re tla go letšetša tefelo ke ya go lekalekana.*

The above messages show that many departments use messages to talk to their people. The grammatical rules in the above messages are not followed.

Text is a language of abbreviations. In most cases, people take a short time to record or to write messages but it takes time to read them. Text messaging or texting is the act of composing and sending brief electronic messages between two or more mobile phones, or fixed or portable devices over a phone network. The term originally referred to messages sent using the short message services (sms). It has grown to include messages containing image, video, and sound content known as mms messages. The sender of a text message is known as a texter, while the service itself has different colloquialisms, depending on the region. It may simply be referred to as a text. For example:

- | | | | |
|------|----|---------------------------|--|
| (28) | a. | English
Northern Sotho | Bye for now.
<i>Šalang gabotse.</i> |
| | b. | English
Northern Sotho | Before.
<i>Pele ga.</i> |
| | c. | English
Northern Sotho | Love you forever.
<i>Ke go rata go ya go ile.</i> |
| | d. | English
Northern Sotho | Meet for coffee.
<i>A re kopane kofing.</i> |
| | e. | English
Northern Sotho | Men for men.
<i>Banna legatong la banna.</i> |
| | f. | English
Northern Sotho | Rest in peace.
<i>Robala ka khutšo.</i> |
| | g. | English
Northern Sotho | Lets chat.
<i>A re bolele.</i> |
| | h. | English
Northern Sotho | Arrive Alive.
<i>Fihla o phela.</i> |

- | | | |
|----|----------------|------------------------------|
| i. | English | Time to read. |
| | Northern Sotho | <i>Nako ya go bala.</i> |
| j. | English | Meet at school. |
| | Northern Sotho | <i>A re kopane sekolong.</i> |

The above examples are short sentences which people prefer to use as the space in the cellphone is too limited. If sentences are long, it would need more time and space and the battery will get low or the cellphone will freeze.

4.8 CELLPHONE IN THE TEACHING AND LEARNING SITUATION

In some cases educators use cellphones for educational purposes even though this has not been formally introduced. As long as they see learners having cellphones, educators just give them tasks to do using cellphones. The educator gives them the topic to google and tell them to bring the answer the following day. Some of the educators and lectures communicate with students and parents via *sms*. We also find the results of our learners from *smses*, for example:

- (29) a. English: FH3 Students: I have been booked off for few days. I have a serious bronchitis. We will not have class tomorrow. Thank you, Dr Bekker.
- Northern Sotho: *Barutwana ba thuto ya FH3: ke maikhutšong a matšatši a mmalwa. Ke bolawa ke mafahla. Nka se kgone go ba gona gosasa. Ke a leboga, Dr Bekker.*
- b. English: Good day. *Bafsa le meetse* competition will be held on the 29 April 2015.
Venue Primary School A (Ext 19 location)
Time 08:00. Please confirm receipt of this message.

Northern Sotho: *Thobela: Phadišano ya bafsa le meetse e tla swarwa ka di 29 Aporele 2015. Lefelo sekolo sa praemari A (Ext 19 location) Nako 08:00. Ka kgopelo tiišetša ka molaetša.*

d. English: Foundation phase (all home language and maths Lit teachers intermediate phase (all English FAL and Maths Lit teachers senior phase (all English FAL and Maths Lit teachers, the above persons are invited to an ANA results presentation and ANA intervention. Strategy planned as follows:
Date: 18 May 2015
Venue: Sehlare High school
Time: 13h00

Northern Sotho: *Thuto ya ka tlase (barutiši ba leleme la Sepedi le Dipalo. Barutiši ba magareng le leleme la Seisimane le Dipalo barutiši ba ka godimo ka moka le memiwa go tla dipoelong tša ANA le ditokišo. Di beakantšwe ka mokgwa wo:
Letšatši: 18 Mei 2015
Lefelo: Sekolo se se Phagameng sa Sehlare
Nako: 13:00*

e. English: Broad Management meeting scheduled for the 09 June 2015 Dikwane Primary 09h00. Inform principals to prepare lunch boxes as the meeting will knock off at around 15h00.

Northern Sotho: *Lekgotla la tlhahlo ya baetapele le tla swarwa ka 09 June 2015 sekolong sa Dikwane sa ka tlase. Tsebiša dihlogo tša dikolo gore di lokiše mefago ka ge lekgotla le tlo tšwa ka 15h00.*

This shows that cellphone language is here to stay. Rather than ignore it, it is much better to accommodate it where necessary.

4.9 THE USE OF NUMBERS WITH WORDS

In Northern Sotho, it is difficult to use numbers mixed with words as this is a mathematical language, but they are used when writing messages to save space, for example:

(30)	English		Northern Sotho
	4gv- forgive	-	<i>swarela.</i>
	b4- before	-	<i>pele ga.</i>

The number **4** is used to represent **for** as they have the same sound and again it represents the word **fore**. Both words **for** and **fore** have the same sound as 4. In Northern Sotho four (4) is found in the following example:

(31) *letšatši la Labone ke la bomme.*
Itsts la la4 ke la bomme.

In Northern Sotho, we use (*mabadi*) countings to represent the number. These *mabadi* are used when we count people, for example: *motho wa bone* meaning the fourth person.

Northern Sotho: *Thapedi*: The name of a person. The word *pedi* in **Thapedi** sounds similar as the number *pedi* (2) in Northern Sotho which is used to save space whereas in English we do not have the name *Thapedi*. The name *Thapedi* will be written in this way: Tha2.

English: Tuesday : the name of the second day of the week.

Northern Sotho: *Labobedi - Leina la letšatši la bobedi la beke*. The word Tuesday in English does not have the sound that sound like the number two (2) in English. In English we have examples like **to** and **too** which sound similar as the number two (2), for example, tomorrow - 2mrrw /2moro.
Too much - 2much
Labobedi - la2

English: Tomorrow - the next day

Northern Sotho: *Gosasa - letšatši le le latelago*. The word *gosasa* does not have the same sound as two in Northern Sotho above.

Northern Sotho: *ke tla go bona ka Labobedi*
K tl g bn k la2

The word *bedi* is used as counting word more especially when we count people. The word *bedi* represents *pedi* (2) meaning the number two (2).

English: Wednesday – is the third day of the week.

Northern Sotho: *Ke letšatši la boraro la beke*, just like Tuesday, the word Wednesday does not have the number that match with it in English, for example:

Laboraro ke letšatši la sekolo
La3 k ltsts l skl

In fact the number three (3) in Northern Sotho is *tharo*. We use the counting words (*mabadi*) on Northern Sotho to represent the numbers. The word *raro* in *laboraro* is used to represent the number *tharo* (3) three.

(34) a. English: Friday – the fifth day of the week

Northern Sotho: *Labohlano - letšatši la bohlano la beke. Hlano is the same as the number five (5) which is used to represent hlano to save space, for example:*

ke tla go bona ka Labohlano
K tl g bn k la5

b. English: One O'clock - 1 o'clock

Northern Sotho: *Iri ya pele - iri y 1*
I will see you at one o'clock
I wl c u @ 1o'clock

Re tla bonana ka iri ya pele.
R tl bnn k iri y 1

The following examples are only found in Northern Sotho as they have zero equivalence in English, for example:

(35) a. *Masego ke ngwana' Mapedi*
Msg k ngwn Ma2

The word *Mapedi* is the surname in which *pedi* in *Mapedi* sounds similar as the number two (2) (*pedi*) in Northern Sotho.

b. *Ke bolela Sepedi.*
K bli Se2

In this example Sepedi is a language in which *pedi* in Sepedi represents the number two (2) (*pedi*) in Northern Sotho.

- c. *O tšwa Bopedi.*
O tsw Bo2

The word *Bopedi* in the example above is the name of a place where we find the Sepedi speaking people. *Pedi* represents the number *pedi* (2) which sounds similar:

- d. *Lesiba ke Mopedi.*
Lsb k Mo2

The word *Mopedi* is the name of a person who speaks Sepedi. The word **pedi** in *Mopedi* sounds similar to the number *pedi* (2) in Northern Sotho.

4.10 THE USE OF ACRONYMS

According to the *Oxford Advanced Learner's Dictionary* (1988), an acronym is a word formed from the initial letters of a name or phrase. In other words, it is an abbreviation formed from the initial letters of other words and pronounced as a word. According to the strictest definition of an acronym, only abbreviations that are pronounced as words qualify. In most cases, when people write messages they use acronyms in their messages. Acronyms, like messages, dominate in the cellphone language. Acronyms are used to avoid repetition of words. Acronyms which are mostly used in the cellphone language are:

- (36) a. English : Vodacom - Voice Data Communication.
 Northern Sotho : PLD - *Poledišano ya lentšu ka didatha.*
- b. English : MTN - Mobile Telephone Network.
 Northern Sotho : KMS - *Kgokagano ya mogala wa go sepela.*
- c. English : App - Applications
 Northern Sotho : *K- Kgopelo.*

d. English	:	SMS - Small Message Send
Northern Sotho	:	GRMM - <i>Go romela molaetša wo mokopana.</i>
e. English	:	BIS - Blackberry Internet Service
Northern Sotho	:	TIB - <i>Tirelo ya inthanete ya blackberry</i>
f. English	:	BBM - Blackberry messenger
Northern Sotho	:	MWB - <i>Moromiwa wa blackberry</i>
g. English	:	MMS - Multimedia message
Northern Sotho	:	DTDTM - <i>Ditirelo tše dintšhi tša molaetša</i>
h. English	:	Sim card - Subscriber identity module
Northern Sotho	:	MWGL - <i>Motšulu wa go lefelwa</i>
i. English	:	TTS - text to speech
Northern Sotho	:	SDM - <i>sefetošetšadingwalwa mantšung</i>
j. English	:	VPN - Virtual private networks
Northern Sotho	:	TGNP - <i>Tlaleletšo ya neteweke ya praebeta</i>

The above acronyms are used almost every day and people do not even know that they use acronyms. They think they are on the right path. Acronyms is when we take the first letters of every word that is used. In the examples above the first letters of the words have been used.

4.11 CONCLUSION

This chapter discussed the use of chat abbreviations, semantic shift in the language of the cellphone, broadening, and created words in Northern Sotho. It has been discovered that Northern Sotho speaking people prefer to adopt words from English

when it comes to technology. In fact, the most preferred strategy is transliteration. Creation of new words in Northern Sotho is not preferred as it leads to words that people do not use or even understand.

CHAPTER FIVE

CONCLUSION

5.1 INTRODUCTION

This chapter focuses on the summary, conclusion and recommendations based on the empirical findings of the study, aims and the objectives of the study. The chapter also reflects the methodology, restating the aims and motivation for the study.

5.2 RESTATEMENT OF THE MOTIVATION OF THE STUDY

The researcher was interested in making a contribution towards the Northern Sotho language using the cellphone terminologies, encouraging the lexicographers to develop dictionaries on the cellphone language. Students are also encouraged to use their language, abbreviations and acronyms correctly.

5.3 RESTATEMENT OF THE AIM AND OBJECTIVES OF THE STUDY AND RESEARCH QUESTIONS

The aim of the study is to examine the impact that languages of the cellphone has on the development of Northern Sotho terminology.

5.4 RESEARCH QUESTIONS

1. What is the role of the development of Northern Sotho terminology?
2. What are the challenges brought about by the cellphone language?
3. What are the advantages of the language of the cellphone?

5.5 OBJECTIVES

- To demonstrate the role of the language of the cellphone on the development of Northern Sotho terminology.

- To highlight the challenges caused by the language of the cellphone.
- To determine the advantages of the cellphone language.

The objectives of the study were achieved because the researcher was able to encourage the lexicographers and the students to develop their language, Northern Sotho.

5.6 HOW THE STUDY WAS CONDUCTED

The study was conducted at University A and School A. Literature in this study was sought and reviewed in order to gain more knowledge on how the study could be conducted. The respondents consisted of 4 lexicographers from University A, 10 students from University A, 8 educators and 10 students from School A, and an interview guide questions were administered to the respondents.

5.7 SUMMARY OF THE MAJOR FINDINGS

A cellphone has become a more learning tool or instrument in the learning situation today. Learners and students use their cellphones for different functions such as to search information from their internet, calculator, email, note taker, voice recorder, download, video, pictures and photos. Creative teachers use cellphones to help students with vocabulary and grammars as the cellphones have dictionaries. The dictionary in the cellphone helps the students to know the meaning of the words. Sometimes we get the picture of the words to enhance understanding it. The cellphone is also used by primary learners. When they undertake a trip; they use their cellphones to take videos and photos. When they come back they are able to do revision of what they saw on their journey when they reach their destination. So, a cellphone does a wonderful job for our children. This needs to be developed.

Development from the cellphone language has become one of the ways of promoting communication among speakers of Northern Sotho and other African languages. This will remove the imbalances in the languages. Many departments and institutions rely heavily on language of the cellphone in order to conduct their daily businesses. According to Lenhart, Ling, Campell, and Purcell (2010), the

cellphones are used to find definitions for new terms, town and capital cities of different countries. One educator was surprised to know that the cellphones have a timer, when they were doing science lessons in the laboratory. The cellphone has successfully replaced the dictionaries, cameras, videos, timers, calendar, calculator, and writing of letters to some extent, telegrams by sending messages, navigator and many more.

Language of the cellphone cannot be separated from school improvement and students' achievements. There is evidence of commitment in the students that they will achieve good results if they use cellphones correctly. Students should be developed to have a strong sense of understanding and accountability in the classes or school as the cellphone enriches their progress. Teachers need to integrate their newly attained skills into their teaching and learning situation. Parents must also be involved in the use of cellphone in the classes as these will lead to higher performance of learners and students. Parents will help in maintaining discipline which is a serious challenge in schools nowadays.

5.8 SUMMARY

The study reveals that:

- All respondents were using cellphones
- Many indicated that they use abbreviations because the space in the cellphone is too limited.
- They also indicated that acronyms are also used to save space.
- The use of the cellphone developed a new method of skipping the vowels when writing messages using WhatsApp, Facebook and twitter to save space.
- A new method of text message has also been development.
- Language of the cellphone developed a mix of numbers and letters of the alphabet to be used together when writing to save space.
- Numbers substituted some letters of the alphabet.

- New words are developed from the cellphone terminology which develops our language.
- Language of the cellphone increases our vocabulary.

5.9 CONCLUSION OF THE STUDY

In conclusion, even though people live in different areas, most of them use cellphones, they do not differ in how they use the language of the cellphone. This indicates that cellphone language is the same everywhere. People need to be introduced to this new cellphone language or technological terms correctly. This needs to be started from the grassroots level until tertiary. These new terminologies will spread from one generation to the other. The information will spread accordingly.

5.10 CONCLUSION

Chapter One dealt with the problem statement whereby investigations showed that the application of language of the cellphone was not done.

Chapter Two dealt with literature review. Some of the scholars who treated language of the cellphone talked about **sms** language, text language and the use of chat abbreviation and the use of acronyms. Their work helped greatly in completing this study.

Chapter Three dealt with research design and methodology, research approach, qualitative research, contextual background, sampling and methodology, interviews and ethical issues like protection from harm, right to privacy, sampling data, reliability and objectivity and data analysis. Findings were outlined with the empirical study that was conducted. Lexicographers should develop dictionaries that will help people. People should understand the need to develop Northern Sotho.

Chapter Four dealt with the main findings regarding the use of chat abbreviations, acronyms, text messages and **sms** message.

5.11 RECOMMENDATIONS

On the basis of the results of the empirical investigation and the conclusions made from this study, the following recommendations are made that the Department of Education must ensure that language of the cellphone is taught from Grade R up to Tertiary level as part of our language. Curriculum advisors should also attend workshops in connection with this language of the cellphone so that they gain more knowledge and familiarity with the nature of this language of the cellphone. Educators should ensure that they also attend workshops about language of the cellphone.

School Management Teams should have a common understanding as to when, what and how they should provide support to educators to ensure efficient teaching and learning of the language of the cellphone as well as the introduction of online teaching.

5.12 AREAS OF FURTHER RESEARCH

- Research with larger samples including various languages on the language of the cellphone.
- The use of cellphones in the classroom.

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