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Developing Harmonised Terminological Units for isiZulu and isiXhosa at Tertiary Institutions

Dissertation submitted in fulfilment of the requirements of the Masters of Arts (MA) Degree

In the Department of African Languages, School of Languages, Literature and Media

by

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Faulty of Humanities

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Abstract

The development of South African indigenous languages has been a contentious topic amongst scholars and the government since the South African indigenous languages were reduced to writing during the colonial era. At the height of decolonising tertiary education, the development of South African languages has especially been highlighted in the country by both students and scholars who feel marginalized and would like for students who are not English or Afrikaans first language speakers to be catered for equally. The lack of terminology in the South African indigenous languages has proven to be a problem and hence it is taken over a decade to implement the programmes of languages of teaching and learning to be in the indigenous languages. The lack of terminology is an effect of the larger number of languages that need to be developed and therefore, this research has suggested harmonisation as an aid to resolving this issue.

Harmonisation is unifying two or more mutually intelligible languages as illustrated in this research with isiXhosa and isiZulu. The word formation processes were used alongside the nomenclature systems, which were used to study and analyse the terms to be harmonised. During the harmonisation process it was found that isiXhosa and isiZulu are very similar in structure and that most of the terms are merely synonyms of each other and in some cases they appear in both languages as the same. Therefore,

this research has proven that language harmonisation is feasible between these two languages and new Nguni terms were created that can be used by both the isiZulu and isiXhosa speakers. For quality assurance purposes, these terms were given to a group of students in order to verify if they are understandable, functional and relevant to the language speakers. The findings were in the affirmative.

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CHAPTER 1

1. Introduction

This chapter will outline the background of the study in order to give context to the reader and to situate the study. The research proble, will be highlighted in this chapter so will the objectives and the purpose of the study. This chapter will also give a brief discussion of the methodology; data analysis and finally, limitations and delimitations of the study. The chapter layout for the rest of the study will be displayed at the end of chapter 1.

1.1. Background

Language is a central feature of culture and the means by which culture is transmitted, interpreted and configured (Prah 2006). Full command of one or more languages is crucial for education, personal growth, social development and building communities especially in a multilingual country like South Africa. Fromkin and Rodman (1993:25) assert that all languages are equally complex and equally capable of expressing any idea in the universe. The vocabulary of any language can expand to include innovative words for new concepts at any point in time. Ferguson (1977) contends that all languages change in the course of time, and that all speech communities change

through time in respect to the functional allocations of the varieties of languages used in the community. He also notes that all users of language in all speech communities be it speakers, hearers or readers and writers all evaluate the forms of the language(s) they use. It is said they regard some forms as better, more correct or more appropriate than others, either in an absolute sense or for certain purposes or by particular people or in certain settings, all in an attempt to foster innovation. It is for this reason that South Africa needs standard South African indigenous languages that can be used for teaching and learning without amending the spoken versions of these languages.

This simply means that South African black students at all levels should be given equal opportunities equal to those of white students in relation to learning in their indigenous languages. This has and is one of the significant dilemmas South Africa is currently facing. The South African Constitution Act No. 108 of 1996 asserts that the state must take practical and positive measures to elevate the status and advance the use of indigenous languages as every person living in South Africa has the right to learn and be taught in their mother tongue language. While these rights exists on paper, practically it has been a strenuous task for the government to implement or even address these issues due to innumerable obstacles that have been encountered. These obstacles include the financial burden of developing nine indigenous langauges in order for them to be used as languages of teaching and learning. For this reason, the researcher suggests harmonisation as a practice in order to counter this obstacle by

reducing the number of languages to be developed, by establishing one language for every language cluster that is intelligibly related.

Haugen (1972:325) argues that the preservation of a language is determined primarily by the people who learn it, use it and transmit it to others and therefore, language harmonisation in South Africa could be a real possiblity. A new generation of learners could learn and be taught in their home languages if indigenous languages could be harmonised to consist of two major groups namely, the Sesotho group and the Nguni group. The possibilities that harmonisation could create are endless, not only in education but also in mass media, as the same strategies could be used in order to reach a greater audience than there would ordinarily have been able to. A great example of harmonisation is with the South African sign languages, where both the Nguni and the Sotho clusters have their own signs which are already unified. Therefore, why would it not be possible to harmonise these languages orthographically?

1.2. Research problem

There is a growing demand for black students at tertiary level to learn and to be taught in their home languages (Alberts 2014:2 and Msimang 2000:226). The only hindrance preventing this from happening is the lack of suitable terminology in indigenous languages. Scholars such as Mtintsilana & Morris (1988), Louwrens (1997), Carstens (1998), Bunyi (1999) and Msimang (2000) just to mention a few, have been at the forefront of raising awareness with regards to terminology and the development of indigenous languages at tertiary institutions. The idea that indigenous languages could be developed to a level where they have accommodation in academics is the motivating factor for this study. Since I started my studies at the University of Witwatersrand, it has been my wish to study in my home language but this could not be fulfilled, as the African Languages course has always been offered in English. This concept did not make sense to me at all because everything was taught in English but we would perform examples in our home languages. My experience inspired this study, as it is extremely frustrating that students who have chosen to study African Languages cannot be taught in an African Language in an African country all because of the lack of terminology.

The University drop-out rate in South Africa is staggering and in the past 25 years since South Africa gained its democracy from the Apartheid government the rates have been

improving by extremely very small margins. According to a study that was conducted in 2013 by the Council of Higher Education, South African Universities are only able to accommodate 18% of new matriculants and 47% of that number of matriculants drop-out before completing their degrees. This 47% drop out rate is comprised of a very large number of black students followed by colored students. These alarming rates led the Department of Higher Education and Training to launch a programme to investigate the causes leading to students dropping out and to assist in supporting students who are struggling. This programme is called The South African Resources Development for First Year Experience and Students in Transition and was launched at the University of Johannesburg. The Director of the Academic Development Centre at the University of Johsnnesburg suggested that these students performed poorly because they were not properly prepared by schools to face such a transition and that multi-lingual support is needed, reported the Council of Higher Education (2013). This means students go into University not knowing what to study and the kind of options they have because they did not go through the curriculum guidance in their respective schools. This also means, because these students come from very diverse linguistic backgrounds, they are not given the opportunity to express themselves by – asking questions or receiving orientation in African languages, and they are subjected to English which may not have been their first language of learning previously. Therefore, universities are not ready to cater to students who do not speak English or Afrikaans. From the first time these students have any contact with tertiary education they are already at an immense

disadvantage because they cannot receive information in any African language nor can they be taught or answer questions in it, which is potentially intimidating for first-year students.

According to Statistics South Africa (2019) students who finish their degrees in three years are only 22% of the original number that started together at first year. The rest which is 39% finish in the fourth year to sixth year. What one can deduce from these statistics is the fact that this causes a ripple effect on the unemployment rate and the economy at large. From these numbers, it is still the black and coloured students who finish last and not getting the same opportunities in the work place as their white counterparts. It is especially important to take a closer look at these numbers because the world is shifting towards the Fourth Industrial Revolution but South Africa is way behind compared to other countries, these numbers mean the unemployment rate will rise every year if the system continues to marginalise these students. Once again, the only people who will be able to participate in the fourth industrial revolution will be the white students, as increasing numbers of jobs will be automated and therefore not be suitable for former black students struggling to learn in English. There is also a large number of black South Africans who cannot read or write in English and are struggling to get jobs, let alone accessing tertiary education because of the language barrier. If most people were able to communicate in their own languages, they would have employment. Without these limitations, South Africa could potentially have access to

innovative ideas which could have been explored for the betterment of the country. It is well understood that it is not only people with formal education who can change the world but all kinds of people can. People who have not been given the opportunity to showcase their skills, craftsmanship or natural knowledge are also quite capable of contributing and should therefore be given equal treatment even if they cannot speak English. South Africa needs to prove that in the 21st century one can go on to become a scientist, a programmer, an economist or whatever they desire to be even if they cannot speak English. Knowingan African language should be good enough.

The growing demand for the use of African languages in tertiary institutions has also intensified due to the increasing numbers of black students entering universities who are not English or Afrikaans first language speakers (Alberts 2014:2). This became the key element in nationwide movements such as #FeesMustFall #RhodesMustFall and #AfrikaansMustFall, all calling for the decolonisation of tertiary education. Decolonisation of education refers to the ending of western epistemological traditions, histories and figures (Molefe 2016:32). This simply means that South Africa would have to create a new curricula which would speak to the importance of being an African, the values, beliefs and habits attached to an African and its soil. This should focus on the knowledge skills that would best benefit the country and tailor programmes to best suit the African child while exploring tenets from other countries that could be of aid to South Africa.

The current curricula is a legacy of the colonial and the apartheid system which served the interests of white people by limiting the employment opportunities and qualifications that were available to black people. Mbembe (2016:23) argues that there is something profoundly wrong if the syllabuses designed to meet the needs of colonialism and apartheid continue well into the liberation era. The education system during the colonial era played an instrumental role in promoting and imposing the eurocentric ways and worldviews while subjugating everything else (Heleta 2016 :2). It was a system that was designed to marginalise black people, their ideologies, beliefs and their knowledge so that they would believe Western knowledge alone was the truth and the light. The apartheid government went as far as segregating black people from the mainstream education system. There were designated universities for black people with a curricula designed to oppress the black mind and maintain the colonial system. Gibbon & Kabaki (2004:123) argue that the entire education system served to construct and maintain the social, political and economic features of the apartheid order. The result of these actions have left many South Africans especially the older generation that went through the apartheid era damaged, in the sense that they still see English as a superior langauge that can open doors for their children and believe there is no need for them to learn any African languages formally.

A number of scholars such as Mantoa Motinyane (2018) at the University of Cape Town, Leketi Makalela (2018) at the University of Witwatersrand, and Nokhanyo

Mayaba (2018) at the Nelson Mandela University have explored the subject of decolonising education in these universities where the movements had a presence. Decolonisation of education speaks to so many people in so many ways and mostly, it speaks to transformation and higher education. These scholars found that black students felt marginalised and sought opportunities equal to their white peers who currently enjoy better options and outcomes when it comes to education and employment in general. Inequality in tertiary education as the progeny of colonisation still prevails, its impact is real hence the protests for it to be dismantled. The principal motivation for this research is for indigenous languages to be harmonised in order to cater for black students who currently feel marginalised because they cannot study in their own languages.

The policies put in place for the education system in the country are a device of both the apartheid and the colonial systems (Maseko 2012:3; Alberts 2010 and Roy-Campbell 2006:2). The Department of Education (2008:41) claims the policies for redress are in place but what is lacking is the political will to implement them. Therefore, for higher education to be decolonised these systems would have to be undone and new systems implemented. This undoing would entail constantly rejecting any views, values, beliefs, traditions, and knowledge previously imposed to South Africans by the colonisers, in the same way other African countries have done after their independence. Mudimbe (1985:206) points out that local academics in other countries such as Zimbabwe used

reflexivity and critical analysis to establish themselves and their societies as subjects of their own destiny, as well as to reinvent their past and envision their future. This has to be a constant work in progress as new knowledge arises in South Africa, with original ideas and the shifts that occur in the modern world.

The decolonisation of education does not only entail values and beliefs but also South African knowledge that has been ignored for centuries and this also includes its languages. The South African languages and their growth have been consistently marginalised and the damage caused by the apartheid system was not undone by the post-apartheid government. This damage included languages that were separated instead of being developed as one despite the fact that they were from the same language cluster and were in fact dialects of each other. The post-apartheid government continued this tradition of treating these dialects as separate languages. Decolonisation of education would mean undoing that damage and finding a way to reunite these languages without causing unnecessary confusion to the speakers of these languages. In the interim a distinct plan in the development of new terminology is required and for old terms to be standardised (Alberts 2014:2 and Msimang 2000:226). South Africa is in dire need of modernisation of indigenous languages so that they can cater for the different spheres such as science, technology, economics and linguistics just to mention a few and this could be done by having terminology that is readily available.

The modernisation of African languages would play a significant role in the future especially as the fourth industrial revolution sweeps the world. South Africa needs to remain relevant to the world and this would be done via artificial intelligence and robotics. Therefore, the education system would have to deliver a program that speaks to these sectors and the contribution made by indigenous languages could be enormous. A system is needed that encourages the students to be problem-solvers and to shift with the times instead of memorising facts about things that are not relevant in the 21st century. For this to be possible in South Africa, existing technology would need to be Africanised linguistically but unfortunately, there is a lack of terminology. This is the struggle in South African languages as this sector is stagnant and results in the country not being innovative enough generally, across all sectors. This is one of the many consequences that the lack of language development has caused in the country, and the development of academic terminology in the indigineous languages is therefore of paramount importance.

1.3. Research objectives and purpose

The overall objective with the present research is to create harmonised linguistic Nguni terms. The study is with a specific focus on linguistic terms and how harmonisation can bring about change in language development for tertiary education. The sub-objective of this study is to. i) provide a comprehensive overview of the lack of terminology at tertiary

institutions and ii) explore and highlight language development in South Africa with the focus being on South African indigeneous languages.

In order to achieve the above objectives, certain research questions need to be answered by a detailed interrogation of the current literature with a view to addressing the following sub-objectives:

- To explore the challenges currently facing language development in the country.
- To discuss the options of black students at schools and at tertiary institutions in relation the languages of learning and teaching.
- To establish the role of language harmonisation in language development of indigenous languages.

The purpose of the research is to bring to the reader's attention the inadequacy of terminology at tertiary institutions, which if corrected could enable African studies or any other studies for that matter to be taught in South African indigenous languages. Lastly, in addition to the latter, the study seeks to contribute to the development of South African indigenous languages at tertiary institutions so as to enable the decolonisation of education. This purpose will be achieved by reviewing the linguistic terminology that exists in English and by using dictionaries, terminology and orthography books to find

isiXhosa and isiZulu equivalents and finally, using the nomenclature systems and the onomasiology approach to designate new terms and to harmonise the two languages.

1.4. Significance of the study

The study is of significance because the rate at which black students are dropping out of tertiary institutions is startling and this calls for a closer look at the languages of learning and teaching at tertiary institutions, with a focus on decolonising the curriculum in order to make it more relatable to South African students. The language policies at universities only cater to black students on paper but in practice these students are still marginalised and do not receive the same privileges as their peers which in turn contributes to the immense obstacle South Africa is currently facing i.e high rate of unemployment especially in black and coloured communities. The lack of terminology at tertiary institutions has been repeatedly highlighted, and yet it continues to persist. It is therefore imperative that terminology be developed and made available to the users.

Scholars such as Akinnaso (1994), Carstens (1998), Wilkes (2001), Makalela (2009) and Babane and Chauke (2015) have explored harmonisation in theory from within South Africa and the African continent at large, in order to discuss whether or not it is a worthwhile venture. The aim of this study is to add the actual practice of harmonisation to the existing literature of theoretical work to demonstrate that harmonisation can be done in practice. The need for terminological units is in growing demand and as such, it should be one of the main priorities of language development especially at tertiary institutions. Therefore, this paper seeks to bridge the gap of not having readily available

terms for teaching and learning African Languages and Linguistics at tertiary institutions. There have been debates as to whether there are insufficient funds to develop indigenous languages. The harmonisation process can assist in minimising the financial burden because instead of developing nine languages, there would be fewer languages to develop. This would also be a less tedious process, between the four languages of each cluster there are terms that already exist and those particular terms could be used as the main term to cater for the four languages that fall under that language cluster. In some cases there would be no need for new terms to be created and this would improve the probabilities of the terms being used. Users would be utilising terms that they already know instead of learning new ones. Harmonisation, allows us to that it is indeed possible as this study has proven and further practical research into it can improve the development of indigenous languages in our country.

1.5. Methodology

This research uses a qualitative method, which is a method usually utilised when non-numerical data is collected and is used to answer the research questions notes Creswell *et al.* (2007) and Kemmis & Wilkinson (1998). This particular research collected terminological units in isiZulu and isiXhosa in order to match the equivalent English terms. The terms were collated and matched to their equivalents, these terms were then grouped according to their lexical categories in order to find the patterns that

exist in the naming process and to asses what similarities the words have in each category. Where words did not have equivalents in both languages, the word formation processes were used in order to create new ones by first studying terms that exist in the different categories and then designating a new one.

The second step was to harmonise these terms to form a new Nguni term and this was done by studying the nature of the term and analysing each morpheme in order to reveal even the underspecified segments of the word. Harmonisation took place for some terms because they appear in one language there was no need for harmonisation. The term that was used was the one that is already available in that language. The terms were then separated into different tables in order to indicate which ones have been harmonised. The words not harmonised existed in both languages and were newly created, including ones that were similar in both languages or only different in one morpheme of the word.

These harmonised terms were then given to a group of black isiZulu and isiXhosa speaking third-year students for quality assurance, in order to determine whether they are understandable and functional. These students were randomly selected and given the terms to analyse. They were each given a private space to do this so they would remain anonymous and not be able to influence each other when writing their reports. A more in-depth discussion of the research methodology will be included in the third

chapter in order to clarify the manner in which the study was conducted.

1.6. Data analysis

The data was analysed using the nomenclature systems and the onomasiology approach. Academic reports, publications and journals, dictionaries and orthography books were consulted in order to ensure that the information obtained was applicable, credible and legitimate for this study. This was done so that the varying views of academic authors in relation to the topic are displayed all in the quest of answering the ensuing research questions:

- What challenges are currently facing language development in the country?
- To what extent can it be said that some of the effects of black students not doing well at tertiary institutions are caused by non-mother tongue languages of learning and teaching (LoLT)?
- How can language harmonisation play a role in the language development of indigenous languages?

A mini-survey was also conducted, with persmission from the Ethical Considerations Board, in order to determine if the study had accomplished its objectives and to gauge

the attitudes of the speakers of the languages towards harmonisation. This was accomplished by making use of a questionnaire, which was administered to five third year students at the University of the Witwatersrand.

1.7. Limitations and Delimitations

One can conclude by stating that terminology harmonisation is possible between these two languages provided they can be analysed thoroughly and systematically. This process can be time consuming but it is worth the endeavor.It is a more practical and linguistic rule-based approach which is better than developing terms that may not be used by the language speakers. Starting this kind of project could potentially create a lot of tensions amongst the groups of language speakers in the country and amongst scholars who are language purists. However, if the approach is respectful and inclusive, these tensions could be eased. The project of this nature should not feel like it is imposed on the speakers because people can be very sensitive when it comes to their mother tongue languages. This is exacerbated in the South African context considering what the indigenous languages went through during the apartheid regime.

The number of terms available in the linguistic field in these two languages is very limited, and it is therefore suggested that more than one person should work on the collection process in order to have a wider coverage than this study did. Time is also of

the essence, as one would require more of it in order to explore terms that are available in IsiNdebele and Siswati in order to cover the four Nguni languages, and thus include a larger number of users of the language.

1.8. Chapter layout

Chapter two examines at the literature review of language development and language harmonisation in the country and globally. The research makes use of literature and theories clustered around the ceoncept of how harmonisation and language development are the key to addressing the problems of black students in higher education.

To achieve the goals of this research, chapter three will delve into the methodology applied in the research, its appropriateness for this study and how it is applied to the data in order to achieve the goal of harmonising new Nguni terms.

The fourth chapter discusses the research questions by employing different sources so as to explore and highlight the issues that impede the progress of language development. This chapter also discusses the issues that black students face in the education system when study in non-mother tongue languages.

Chapter five on the other hand, comprehensively discusses the analysis and findings of the study where harmonisation takes place through the use of the research methods.

The concluding chapter proffers the summary of the study accompanied by a brief report on the findings of the study whilst recommending what may potentially be done in the future of language development and harmonisation.

1.9. Conclusion

To conclude, this chapter has introduced the topic and situated the study. It has proceeded to analyse each aspect that is salient to the reader in order to contextualise this research and highlight its significance. It has also granted a brief explanation on the methods used for this reesearch and how relevant they are for a study of this nature. This chapter has also explored the limitations of the study and layout of the paper.

CHAPTER 2

2. Literature Review

2.1. Introduction

This section will devote an overview of the history of South African indigenous langauges, their journey from the colonial era right through to the apartheid era and the present post apartheid era. This will be done by discussing literature from various scholars who have been at the forefront of language development in the country and have been researching these languages, their usage, their status and most importantly how they have been marginalised. It will also discuss, explore and highlight harmonisation in the country and also draw from some examples from the continent and globally in order to position and contextualise harmonisation in South Africa. Lastly, a discussion of how harmonisation can contribute into language development is presented and the significance of this study is discussed.

2.2. Historical background of language development in South Africa

South African political history plays a very critical role in the development of indigenous languages in South Africa and it is cardinal to explore this history in order to understand its contributions and effects. As Kamwangamalu (2003:229) points out, the history of

written South African indigenous languages dates back to when the British arrived in southern Africa. Prior to this, the Dutch had attempted to open a school for the Khoisan in the Cape Colony. These efforts by the Dutch failed dismally as the Khoisan people had no interest in learning Dutch because of the way it was presented to them, as a language for oppressing the indigenous people. The English subsequently took control of the Cape Colony in order to protect the sea route to India against Napoleon's[1] rule. It is imperative to note that before the Dutch arrived on the South African shores, oral African language traditions existed but these languages had not yet been reduced to writing.

Heugh (2015) notes when the British landed, they introduced English as a language that represented liberation and participation in global affairs hence they were welcomed by the indigenous people. The British missionaries saw the South African indigenous languages as problematic from the onset because of their diverse nature. The English were accustomed to having one language for one nation, and thus did not know how to handle the diversity of indigenous languages. By 1906, the British missionaries were starting to codify and standardise the dialects in their immdediate geographical vicinity, and had also opened a school in Hill Town in the Cape Colony for black people. Prior to

[1] Napoleon Bonaparte was a French emperor who rose to prominence during the French Revolution.

this, disagreements between the British government and their Dutch subjects in the Cape Colony lead to the Dutch expansion as settlers in South Africa (Heugh 2015). What is noteworthy is that because the Dutch and the British represented written language traditions, their languages then became the template for indigenous languages.

By 1925, 300 years after the Dutch arrived in southern Africa, Afrikaans had developed from being a Creole into a fully developed language. During the same period, discussions and recommendations towards the unification of Bantu languages had started in order to prevent logistical and material supply challenges. These efforts came mostly from the missionaries, to enable them to carry out their aim of colonising and christianising Africans through education. Therefore, the history of terminology development in indigenous languages in South Africa dates back to 1928 when Language Committees were created to oversee the development of all indigenous languages (Alberts 2000:236). Basic translations and ordinary dictionaries were developed and published such as the *Practical Orthography of African Languages* by the Institute of African Languages and Culture in 1930. In that same year, a research group was established by the Inter-University Committee for African Studies to investigate the 'native languages of South Africa' in order to be able to make recommendations on written text and literature for primary education (Heugh 2015).

A turning point for all these efforts came in 1948 when the Afrikaners[2] won the national elections and instituted their policy of Apartheid. Their plan for languages was to implement the notion of a single language as constitutive of national or ethnic identity, just as in Europe in the 18th and the 19th century (Alexander 1989:21). The Apartheid government financially supported Language Boards which were formed to report to "homeland governments". These homelands were specifically designed for each ethnic group and were as follows: the Transkei and the Ciskei for the Xhosas, Bophuthatswana for the Tswanas, Venda for the Vendas, Gazankulu for the Tsongas, KaNgwane for the Swatis, KwaNdebele for the Ndebele, KwaZulu for the Zulus, Lebowa for the Pedis, and QwaQwa for the Sothos (Malherbe 1977). The focal point of the agenda for these boards was to translate and document English and Afrikaans terms. The first isiZulu/isiXhosa publication to ever materialise from these efforts was the T*erminology and Orthography* volume 1 in 1957.

The education system also changed, the Apartheid government eventually imposed an education system called Bantu Education. This meant that black students would be taught in Afrikaans instead of being taught in their home languages in primary school and English in secondary school. This drove the then President of the African National

[2] Afrikaners – a South African ethnic group descended from predominantly Dutch settlers first arriving in the 17th and 18th centuries.

Congress (ANC), Prince Albert Luthuli to mobilise a resistance movement against Bantu education in 1954 (Heugh 2015:17). During the period of 1947-1957, different proposals were proffered to assist in the standardisation of orthographies within the different indigenous languages. It is also important to note that key political members of the ANC and Pan African Congress of Azania (PAC) were imprisoned from the 1960s all the way to the early 1990's by to the Apartheid regime. Therefore, discussions about unification of the Nguni languages and the Sotho languages completely disappeared from the public domain (Heugh 2015). Indigenous dialects grew into separate languages from this point because they were developed as such.

In 1971, the Coordinating Terminology Board was formed in order to make sure that the efforts of terminology development from the departments such as the South African Defence Force, South African iron and steel industry, the South African Bureau of Standards and the South African Broadcasting Corporation were well coordinated (Alberts 2000:236). In 1976, the Terminology Division of the Department of Education merged with the Vertaalburo of Suid Afrikaanse Akademie vir Wetenskap en Kuns (SAAWK) to form a division called the Term Bureau which was subsequently named the National Term Service and was responsible for documenting terminology. The terms that were compiled and documented by this Board were published in multilingual disctionaries which were then disseminated to schools and Universities. During this time, Afrikaans as a teaching and learning language was fully introduced to the black

schools and this is one of the major issues that led up to the 1976 uprising.

It was not until 1996, which was two years after South Africa gained its freedom from the Apartheid government that the Pan South African Language Board (PANSALB) was formed in order to monitor the usage of languages in the country (Alberts 2000:236). Two years later in 1998, the National Term Service and the State Language services of the Department of Arts and Culture merged to form the National Language Services. The National Language Services was to be responsible for compiling bilingual dictionaries and bi-directional technical dictionaries for the indigenous languages. It was during this process that the National Language Services realised that there was still an enormous shortage of terminological units in South African indigenous languages.

Therefore, the next mission was naturally to create and compile terminological units for these languages in order for them to be matured. Indeed terms were created at this point from medical terms, political terms and media terms in order to modernise the South African indigenous languages. The main agenda in post-apartheid South Africa was to create a rainbow nation in which all languages and all cultures would be given equal status. As much as linguistic pluralism was the plan in reality, monolingualism was becoming the accepted norm. Once again, African indigenous languages were marginalised (Alexander, 2013; Madiba, 2010). Unfortunately, this process was affected by structural and policy factors because a lot had to be changed and new adaptations

were to be taken into consideration with the new government (Alberts 2000:248). The government had to unexpectedly cater financially for eleven languages which had never been catered to before and in addition they all had to be treated equally.

2.3. Harmonisation in the continent and globally

In southern Africa, academics such as Doke (1933), Lestrade (1929) and Tucker (1929) were some of the very first scholars to work on harmonisation of written forms because the number of indigenous languages to be developed was overwhelming. Therefore, Professor Doke and Professor Lestrade from the African Languages and Culture joined forces in order to work on the harmonisation of the Nguni written forms and the Sotho written forms. The Nguni written forms at the time were only isiXhosa and isiZulu as Ndebele and siSwati had not yet been reduced to writing. IsiNdebele as a written language was only first published in 1982, while isiSwati was reduced to writing in South Africa in 1977. Therefore, the isiXhosa and isiZulu written forms were treated as one language called Nguni as they were seen to be variants of the same language group (Miti 2006:45), the spoken variants were developing naturally on their own.

In 1944, a scholar, a journalist, and a political friend to the ANC, Dr Jacob Nhlapho publicly proposed that indigenous languages be classified and grouped according to their mutual intelligibility in order to develop and grow their written forms as one (Alexander 1998:270). This idea of harmonisation has been explored by scholars such as Alexander (1989, 1992, 1998), Msimang (1992, 1994) and van der Walt (2015) for instance. Lestrade (1935:137) described harmonisation or language unification as a method that seeks to construct a common language from groups of dialects by making

use of all commonalities to all variants in those groups, and where it is not possible, by the use of forms common to the predominant majority or in previously attained literary forms. Van der Walt (2015:324) on the other hand postulates harmonisation as a process where various dialects are codified and elaborated to form a new language that will be accepted by its primary users. Doke (1931:104) also substantiated this by saying that the unification of the languages would be a natural development and not that of artificial creation. This would be done by regulating grammar, by definitively fixing the orthography and permitting as great a freedom as possible in the choice of vocabulary. Msimang (1998) also notes that in language planning jargon, harmonisation is used synonymously with unification.

The first committee officially appointed to be responsible for the harmonisation of the written forms of indigenous languages in Southern Africa was appointed at Somerset House language conference in 1947 (Msimang 1994:149). To be precise, these committees were combined in order to unify orthographies that could eventually precede to unification of languages. This unification of orthographies would then take place between isiZulu, isiXhosa, isiNdebele and isiSwati on one hand and between North Sotho, South Sotho and Tswana on the other hand. From their efforts, the first two Terminology and Orthography volumes were published in 1957 under the Department of Native Affairs, one being a Sotho TNO and the other being a Nguni TNO. The Apartheid government undid all these efforts shortly after 1957 by disbanding the

language committees to form new ones. Therefore, the concept of harmonisation died with these committees because the new Department of Bantu Education compiled and published new TNO's for each language separately in 1962. Since then, there have been many debates surrounding the topic of harmonisation from many scholars especially in the light of the failure of language development for South African indigenous languages after South Africa gained its freedom from the Apartheid government. In the South African context, harmonisation would mean developing two written forms (Nguni and Sotho) instead of developing the orthography of seven languages (isiZulu, isiXhosa, Ndebele, Swati, Sepedi, Setswana and Sesotho) separately.

As much as these TNO's have made a weighty contribution towards the development of African languages, they have also been criticised by some scholars such as Van Huyssteen (1999) and Makoni (1998). Van Huyssteen (1999:2) points out that some of the words that were coined during these times were artificial and were not true to the language speakers because the people coining them were trying to impress the powerful authorities. Makoni (1998) asserts that Europeans used vocabulary that reflected settler and missionary ideology and that they coined terms, words and phrases useful for talking about Africans, not engaging with them and which were not a true reflection of Africans. This resulted in some words not being accepted by some speech communities as they did not resonate with them. These were mostly terms that spoke

negatively about black people and their culture, describing both as dark and needing the enlightenment from a white man.

There may be some advantages of harmonisation as Makalela (2009) points out that language harmonisation of the written form for Sotho languages for example, could help with the reduction of costs when translating into one unified Sotho language instead of three varieties of Sesotho. Currently, there are three languages in the Sotho group namely Sepedi, Sesotho and Setswana, which are all very closely related. These languages also have their own varieties, each with their own speech communities, who are fighting for them to be standardised and made into official languages. These varieties range from Setlokwa, Sekwena, Setaung, and siLozi amongst others. The same case could be applied to the Nguni (isiXhosa, isiZulu, Ndebele and SiSwati) languages as they are also very mutually intelligible and have varieties that are currently marginalised, which could be uplifted by being harmonised into one language.

While there is consensus amongst a number of scholars with regards to unification of languages, some academics do not agree with this concept. For example, there have been claims that Southern Ndebele and Northern Ndebele should be treated as separate languages because they differ from each other in many ways linguistically (Wilkes 2001:313). The study shows how these two variants are different from each other because they contain influences from languages that fall under other language

clusters. Northern Ndebele is said to be highly influenced by languages from the Sotho cluster such as Venda and Northern Sotho, which are not similar Southern Ndebele. Therefore, the study concluded by suggesting that these two variants of each other should be developed as single languages. These are some of the issues that minority languages are currently battling with in terms of harmonisation. Each one is fighting for a space to be recognised as a full language and these speech communities feel that their languages are being swallowed by big languages but this further increases the number of languages to be developed.

Scholars such as Babane and Chauke (2015) have proposed cross-border harmonisation between mutually intelligible languages such as Xitsonga in South Africa and Shangani in Zimbabwe. These two languages are treated separately as minority languages in both countries because of the borders that separate them when in actual fact they should be growing together as one language. This is one of the colonial legacies where artificial borders were created and people were separated from each other as part of the colonisers' divide and conquer strategy. These two languages are not only spoken in the above two countries, but also by a large number of speakers in other countries like Mozambique, Swaziland and Lesotho. Therefore, it would aid issues like trade and help improve the education systems of these nations if these languages were developed as one in order to cater to this large number of speakers instead of growing as separate minority languages, which are marginalised even though they are

official languages.

The above study could be compared to isiXhosa and isiNdebele, isiSwati and isiZulu in displaying how they could be seen to be different from each other especially by someone who is not exposed to linguistics as a field/subject. As a linguistic student and a language speaker of one of these languages, the researcher can attest that these languages are very closely related. Particular representations of the sounds do not correlate even though these languages share the same alphabet. It is critical to note that not only pronunciation, but languages as a whole are always subject to change. Strang (2015) notes that over time sounds change as a function of their environment and the reconstruction of pronunciation by the speech communities, especially a new generation of speakers in that language. Therefore, one could say that this is the case with the Nguni varieties as they mostly differ in sound segments rather than concepts.

These differences could be attributed to time and the isolation of these languages from one another that they have developed as varieties with similar structures but with different in pronunciations. An example given by Strang (2015) displays how an infant would pick up the structure of a language with the pronunciation being influenced by their parents or the people around them before they are influenced by a larger community. Therefore, for a long time, this infant would believe and interpret/imitate the sounds they hear at home until they reach a level of development where they join the

outside world. This also applies to language, the shape it takes is highly influenced by its speakers and it is only much later that the outside world affects it. In Kenya, there is also a proposal by Kurgat (2014) to harmonise dialects of Kalenjin into one language. These dialects are found in Kenya, Uganda and Tanzania - again this would be cross-border harmonisation. This proposal focuses on the written form of these dialects as the speakers are spread through out these different countries, this would in turn grow the language and give these speakers a standardised option comparable to English and Swahili.

Globally, there are successful projects such as the Chinese writing system, the Norwegian writing system and the Arabic writing system and even English to mention a few, which can be used as a blueprint for the harmonisation of terminology in South Africa. One of the oldest examples that displays harmonisation is the Chinese writing system. There are about 400 regional variations in dialects from 9 families of spoken languages, which amongst themselves have 56 official ethnic groups according to the People's Republic of China list. Some of these languages do not possess written forms but the users are still able to communicate with each other because they share one common formal written form. The Chinese written form dates back to the era of pictograms, which can be traced to 1200 - 1050BC. It is said that the spoken forms have evolved greatly compared to the written form of Chinese. It was only in 1919 after

the May Fourth Movement[3] that the written form moved from classic Chinese to modern written Chinese. This writing form mostly represents the vocabulary and syntax of written Mandarin and is also known as vernacular Chinese. It is important to note that 71% of the people in mainland China speak Chinese Mandarin, while the rest speak other languages such as Wu, Yue, Min, Hakka, Xiang and Gan but still use this writing system.

In the Chinese language, one glyph represents an object or an abstract notion. Occasionally a character consists of only one component, but more commonly two or more components are combined to form more complex characters. Now, one would say it would seem easy to harmonise such languages because they use pictograms and not the alphabetical characters. In this case, the writer disagrees because an average person would have to learn about 3000 Chinese characters whilst as a South African, the person only has to learn 26 letters and from those letters, learn a few more sounds depending on their home language. This may not be the conventional harmonisation of a written form but there are some elements that can be assessed and used in order to implement harmonisation of the written form of African languages because in essence, the alphabetical letters represent something just as much as the pictograms in Chinese

[3] May Fourth Movement – An anti-imperialist, cultural, and political movement that grew out of student protests in Beijing.

represent something. It would actually seem easier to harmonise African languages than Chinese because we have fewer characters and with a few exceptions, most African languages share the same sounds.

In Norway for example, no single language variety has been authorised as the standard spoken language. By doing this, the government aims to avoid giving privileges to some social groups while marginalising others (Røyneland 2009). Therefore, people are given the freedom to speak their languages how they please but when it comes to the writing system the rules are different. There are two written forms which are known as Bokmål and Nynorsk and they are standardised. In other words, when it comes to their vocabulary, syntax and morphology that is standardised but people can use the phonology of their dialects. This has been done by producing and publishing dictionaries that do not include information on pronunciation in order to give people the freedom to use their dialects when reading out loud for example.

The first written form is Bokmål and is based on old written Danish which was the official language in Norway for about 400 years from 1380-1814. This written form came about when the elite and the official authorities established a spoken class-variety of Danish that was comprised of local Norwegian phonology (Sandøy 2001). Whilst the second form called Nynorsk was created by scholars such as Ivar Aasen in the 1850's from a compilation and combination of Western Norwegian regional dialects in order to cater

for the cultural aspects of the nation such as music, literature and folklore. This written form was established from harmonising the four main Norwegian dialects which are said to be mutually intelligible but differ significantly with regard to accent, grammar, syntax and vocabulary. These two written forms have been competing since the 1900's and the government is still hopeful that they will somehow be merged in the future. Now, one cannot say that this system is perfect but if a nation can have the freedom to speak their dialect with a harmonised writing system that caters to all, this would solve many issues especially in South Africa. By this the present study means, if the Nguni group could have a harmonised writing system that caters to the soeakers of all four language in that cluster, as well as their dialects, without affecting the spoken form then it would be easier to develop African languages to a level where they can compete on a global platform.

Duprez and du Plessis (2000:15) cite the case of Yugoslavia to show that languages or dialects that have common linguistic features can be harmonised regardless of their political, social and cultural differences. The three language groups that were harmonised against Germanisation and Magyarisation are Serbs, Croats and Slovenes. These languages were seperated due to religion and cultural factors, and were treated as separate languages. Even though the harmonisation process was successful after some time written forms emerged from this unified language called Serbo-Croat or Central South Slavic Language, although this only happened when some states

became independent. The objective here is to show that languages with common linguistic features can be harmonised successfully and that this could be applied to the languages in the Nguni or Sesotho clusters in South Africa.

Arabic is another language that has over 30 varieties but its written standard form is used and understood 60 countries and the very same Arabic alphabet can be used to write other languages like Persian, Latin, Afrikaans, Malay, Maldivian etc. The Modern Standard Arabic written form is mostly used for any official documents and oral media and can be understood widely by people who speak different dialects. In the same way English has many varieties e.g. British English, American English, Australian English, Jamaican English, Zimbabwean English, Nigerian English, etc. and within these dialects there are sub-dialects, yet there is one written standard of the English language.

Another example of successful harmonisation on the African continent would be the creation of Standard Shona in Zimbabwe in the 1930s (Makoni 2015:255). Despite the fact that the whole administration was heavily and negatively influenced by political factors, it nonetheless succeeded. This process was a unification of orthography for six dialects namely Korekore, Zezuru, Kangara, Manyika, Ndau, and Kalanga. Standard Shona was eventually taught at schools and at a particular point it gained a new generation of speakers. The important factors that need to be highlighted in this study are that the government heavily supported this project and in addition to this the project

was further nurtured by the missionaries. On the other hand, this was not the case in Nigeria between 1905-1912, with the attempted harmonising of Union Igbo from five dialects, namely Owerri, Onicha, Arochukwu, Unwana, and Bonny (Cluver 1994:182). The unsuccessful nature of this project was blamed on the lack of support from the government together with attitudes from the speakers of the languages and the elite. It is important to note that most language attitudes stem from the actual speech communities of African indigenous languages because they have been led to believe that their languages are not a resource and therefore, they must learn a language that they can use as a resource in order to survive.

The above examples display the potential of what could happen if the South African government and scholars could come together and decide consciously to harmonise each cluster that is mutually intelligible from the eleven official languages. One writing form for each cluster could be established for it to represent the speakers of those languages equally in all spheres.

2.5. Conclusion.

This section has given the background history of terminology and harmonisation focusing mainly on the South African context with excellent examples from Africa and globally. In South Africa, written language has been greatly influenced by the colonial

history and the apartheid history in both negative and positive ways. Different scholars have written comprehensively on the topics of terminology and harmonisation but most importantly, on how harmonisation could help reduce the costs of the language development funding and also be efficient by using different strategies such as the implementation of the Braille strategy and standardisation. It has also been highlighted that languages could gain an equal status and social equality could be achieved with the aid of harmonisation. Most importantly, harmonisation could help information technology and mass media to reach a wider audience especially for those who do not understand English.

CHAPTER 3.

3. Methods

3.1. Introduction

This chapter of the research report will take a closer look at the approach used to carry out this research. The research question being addressed was whether isiZulu and isiXhosa linguistic terminology can be harmonised in order to form Nguni linguistic terms and how this could be achieved.

The nature of this research is qualitative, employing a methodology called the Onomasiology approach which focuses on terminology. This chapter will define this approach in detail and also briefly outline its contrarian approach called the Semasiology approach, which is applied to general words. For the sake of this paper and the nature of the research, the Onomasiology method will be the main focus, and it uses the Nomenclature systems to create new terminology. This chapter will also outline the background history of the Nomenclature systems and how this system is applied in order to create new terms and terminology harmonisation will be explored. This chapter will also outline the challenges faced in the completion of this research; and the process that was followed in analysing and presenting the data. Lastly, the chapter will describe the ethical considerations that had to be dealt with in the

development of this research.

3.2. Research approach

When the research questions were studied, it was evident that the aim of the research was to create new terms that are harmonised from isiZulu and isiXhosa terms that currently exist and the new ones that were created. This was to be done through the word formation process by applying the terminology method called the onomasiology approach.

3.2.1. Background

There are different word formation processes that are used when creating words; they can be created using derivation, compounding, conversion, reduplication and borrowing amongst others depending on that particular language. These processes make use of two methodologies named the Semasiology approach and the Onomasiology approach. The Semasiology approach is associated with general words in the process of creating general dictionaries. Grzega and Schöner (2007:5) explains that the word itself originates from the Greek word *séma* meaning ‘sign’. This approach is mainly concerned with looking at the words that already exist and then finding their meaning,

therefore it proceeds form to meaning/concept. For example, a lexicographer[4] would collect all the words in a language and sort them according to their meanings. The lexicographer would then create subsets of these words according to their diverse uses and designate them into concepts and this process is called Lexicology. These words would then be used in general dictionaries, grammar books and all other resources that are used to preserve a language. In terms of the type of words that are documented in lexicography, there is a wide variety because all the words of a language are documented; like colloquial words, common words, slang and dialectal usage etc. In terminography on the other hand, the terms must be very specific to a particular subject like in botany, zoology or linguistics. With lexicography, emotional connotations are attached to words and this could change/shift the meaning of the word while in terminography terms are exact in order to avoid ambiguity and there are no emotional connotations attached to terms.

These two practices have different approaches when it comes to their methodology in how they document and create the terms and words. In the case of lexicography, the descriptive approach is adopted in order to describe and preserve a language in all its aspects. So, the lexicography practice uses the semasiology approach to compile

[4] Lexicographer - A lexicographer is a linguistic specialist responsible for collecting words, compiling and editing a general words dictionary.

general dictionaries which looks at names and creates meanings for them. Terminography on the other hand, uses an approach called onomasiology in the compilation of special dictionaries and this approach looks at concepts in order to designate a name for them. Terminography uses the prescriptive approach for describing and documenting the ideas in a particular field by using definitions and terms in order to standardize a terminological unit (Sager 1990:55). In terms of the type of words that are documented in lexicography, there is a very wide variety because all the words of a language are documented including colloquial words, common words, slang and dialectal usage. In terminography, the terms are very precise and relate to a specific area of knowledge. With lexicography, emotional connotations are attached to words while in terminography terms are exact, in order to avoid ambiguity they have no emotional connotation.

There are also a number of similarities that terminography shares with lexicography especially in terms of the structure. The macrostructure of a dictionary refers to the internal appearance of a dictionary or the entry list, which comprises of the table of contents, the preface, the instructions, the grammatical information and appendices. Dictionaries are all arranged in alphabetical order, they are unidirectional and bidirectional, they are retrograde, have both the back matter and the front matter except for the online dictionaries. When it comes to typology, both terminography and lexicography can produce monolingual, bilingual or multilingual translating or

explanatory dictionaries. The microstructure of the two dictionaries slightly differs in terms of information classes because a general dictionary records all kinds of words in a general language, while a terminological dictionary has fewer parts of speech due to the nature of the terms that are required in the technical fields. The microstructure of a dictionary refers to the internal structure of the entries themselves like symbols, abbreviations, bibliography, conversion tables and transliteration tables (Alberts 2001:83). Apart from the process in which terms and words are created, these two fields are very closely related to each other, in fact on could day that termionolyg is a subdivision of lexicology. Lexicography will not be the main focus of this study as the study deals with terminology, it will be a part of terminography that will be explored but not fully because the author does not wish to compile a dictionary but rather a term bank.

According to Alberts (2010:616) South Africa is the only country in Africa where terminology is officially practised separately from lexicography. In countries such as Tanzania (Institute for Kishwahili Research at University of Dar es Salaam) and Zimbabwe (African Languages Research Institute) the work is done concurrently at these research institutions with the assistance from a team of terminologists who solely focus on the terminology, while the lexicographers focus on the general dictionaries. This has proven to be successful in these respective countries and it has been suggested that South Africa may be struggling on the terminology front because it has

separate research institutions for terminology development. Therefore, the recommendation has been for South Africa to use other countries as blueprints in order to be progressive in its approach to term development.

3.2.2 The Onomasiology approach

This study will focus on the Onomasiology method which is used in the creation process of terminological units and is associated with special dictionaries. The Onomasiology approach focuses on the concept at hand and then designates a name for it (Sager 1990:56). The word Onomasiology is derived from a Greek word *ónoma*, which means 'name'. This is a classic theory that emerged from the 1800's when linguistic geography was being compiled; some of the first works were by Friedrich Diez in 1875 (Štekaur 1998:1). It was not until the 1900's when Adolf Zauner who was studying body parts, coined the term. The next scholar to follow this methodology of naming concepts was Jules Gilliero who used it in a Linguistic Atlas that was published after 1920 (Rey 1995:15). Since then, a series of branches have grown from this methodology, namely the etymologist-onomasiology which traces the origination of a word back to the object that was used the naming process. Therefore, unlike the creation of general words this process focuses on concepts that already exist in the real world. This process of designating terms usually starts off with inventors in specific fields who come up with new inventions or processes of creation in their fields and want to name them. A

linguistic specialist would be commissioned in order to help with the coining of the term. Therefore, a terminologist[5] will look at the concept and study it by looking at the related expressions, analyse the context and study the way other concepts relate to this new one. Grzega and Schöner (2007:5) define onomasiology as a method that finds the linguistic form or the words that can stand for a given concept/ idea/object. This methodology has been studied comprehensively by numerous researchers from various language foundation resulting in various hypothetical methodologies of the onomasiology hypothesis. For instance, Milös Dokulil (1964,1968,1997) accentuates the degree of theoretical preparation by setting out the two primary degrees of arranging an idea. These two degrees of calculated preparation allude to the onomasiology base being the primary level, which is the essential gathering of the idea/the superordinate degree of the idea. The subsequent level will at that point be resolved inside the breaking points of the main gathering and will at that point be the onomasiology mark.

Ján Horeckÿ (1983,1989) features the four characterizations of implications, which can be utilized for the onomasiology approach under his staggered model of word arrangement. This staggered model has a chain of command of markers from the categorial significance, invariant importance and explicit implying that are generally basic and they underlie the lexical importance. By basic, it implies the initial three

[5] Terminologist – a linguistic specialist who studies and uses terminology.

implications are given by the interrelation between the onomasiology base and imprint. Hence, the base would be the linguistic nature while the imprint is the family proximum. Ultimately, Pavol Štekauer (1996,1998) proceeds to pressure the three parts of word development, which are the extra-semantic reality, the discourse network and the word arrangement segment and how they are interrelated in onomasiology. This implies the naming demonstration is a subjective wonder depending on the scholarly limits of a coiner and is significantly affected by human information, human intellectual capacities, encounters, and disclosures of new things, procedures, characteristics and human creative mind. These angles at that point connect to what is known as the Nomenclature frameworks, which are a lot of decisions that are utilized to control the naming procedure for terms. The terminologist will at that point, by utilizing word development forms to assign a name for the new idea by utilizing the three primary parts of the term arrangement process, which are the phonetic, the theoretical and the down-to-business perspective.

Studies done using word formation processes through the Onomasiology approach usually use a lot of data in the word format and they usually require a lot of linguistic knowledge, systematic sorting and the researcher's background knowledge about the nature of languages.

3.2.2. Nomenclature systems

Terms are usually formed or requested when a need arises in that particular field or in the process of creating special dictionaries and this implies, that there may be terms that already exist in that field. This also means there is a system of naming that already exists, which was used to name the old terms and this is called the nomenclature systems. Sager (1990:80) defines the nomenclature systems as systems that provide guiding principles for the formation of new terms or as a system of rules for forming terms from existing ones. Thus, a term will then be classified into the different lexical categories according to its use and function in that field. To give an example of how nomenclature systems is used, the term *isibizo* 'noun' can guide the terminologist to creating a new term *isimelabizo* 'pronoun' by making use of the compounding process with the different morphemes which are *isi-* noun classification prefix, *-mela* a verb that means to 'stand for' - and *–bizo* 'name'.

These patterns of naming are discovered once one has studied a term/word that already exists and has broken it down into morpheme segments in order to understand where it was initially derived from.

3.2.4 Terminology harmonisation

Terminology harmonisation is very much like harmonisation of general words because terminological units have the same structure as general words. Ndlovu (2013:29) describes harmonisation as a phenomenon that seeks to harness the incidence of mutual intelligibility found among structurally and genetically related languages to enhance cross-linguistic and intercultural communication. Alexander (1998:270) articulates it as a process whereby varieties of the same language are unified to form a single language. Cluver (1994:180) defines it as a model that seeks to bring together speech communities by developing a single orthography or by unifying the vocabulary of the language or by producing a common grammar. This process can happen in an inter-language or intra-language setting and in cross-border contexts. An inter-language setting means that harmonisation can happen across different languages while intra-language means harmonisation can happen within the language itself. Critics such as Akinnaso (1994), Carstens (1998), Wilkes (2001), Makalela (2009) and Babane and Chauke (2015) have explored harmonisation in theory from within South Africa and the African continent in general in order to gauge whether it is a worthwhile venture or not. Even though it has not been fully explored as a practice, one could agree that it is a worthwhile venture and could possibly change the future of African languages.

Wright and Strehlow (1995) define terminology harmonisation as a phenomenon that

concerns itself with the meaning of a term being reflected in two definition statements that can be assigned to the same concept. Definitions play a critical role when it comes to terms because definition statements are what guide concept identification. Therefore, studying definition statements could assist in assessing the degree of harmony in two concepts that are alike in order to understand intent, meaning and use of the term, which would then make it easier to identify the terms to be harmonized. In the case of this study, harmonisation will happen across two languages, namely isiZulu and isiXhosa. The two terms are studied using the nomenclature systems; the word formation process was applied for equivalents that do not exist in order to create new ones. Finally, the terms are compared and contrasted in order to capture the one term that fully represents the concept to be used to represent both languages.

3.3. Research Data

Firstly, a terminological unit/term is described by Cabré (1998:81) as a conventional symbol that represents a concept defined within a particular field of knowledge. Lérat (1989) on the other hand defines terms by referring to them as units with form and meaning that belong to the linguistic system of a particular language, within which there exist several alternative specific subsystems. They can be classified by criteria of form, function, meaning and origin so in this sense they are similar to general words. They are very much like ordinary words and the only difference between them is that terms are

created for concepts that already exist, while ordinary words are compiled and their meaning is studied in order to designate them to a concept.

Conceptually, terms can be classified into conceptual systems representing the real view of the world, namely objects or entities (trees, planes, books), which fall under nouns and it so happens to be the highest classificatory value compared to verbs, which are processes/operations/actions (corrosion, fabricate, cast), properties/states under adjectives (visual, auditory, perceivable, material) and relationships (equivalent, subordinate, derived) notes Cabre (1998:35). For example, *isibizo* 'noun' has the following characteristics: it is a name given for entities, persons or things; it is a member of a lexical category; nouns also denote abstract and intangible concepts. Pragmatic on the other hand refers to the usage of terms in communication. They can be referential, with regards to the specialized concepts they represent in the real world and that is how terms differ from general words, they have a primarily referential purpose. Terms are used in professional and scientific discourse unlike general words, which can be used in any way. They are more structured than general words and are used by specialists in specific fields. So, the context in which a term is used is usually the one that determines and classifies a term in that field.

Taking a closer look at the linguistic aspect, which is also known as the formal method, phonetically terms are the same as general words in terms of the phonetic form. It is

important to also note that the written form is very important in terminology more so than pronunciation as it is the wrutten form that standardizes a term (Cabre 1998:83). Morphologically, terms like words can be broken down into morphemes and they can be simple, complex, compound or phrasal. The formal method or linguistic aspect uses a combination of morphemes and words in order to create new ones. This is done by derivation, compounding and organized syntactic combination of words and truncation depending on the particular language.

Terminological units can be learned contemporaneouosly and systematically through textbooks for example, unlike general words that can be learned subconsciously (Alberts 1999:220. It is also noted that terms can only be used if the user already knows the configuration of knowledge which determines the role of the term in a structured system. This simply means one should know the context in which the term can be used. Terms are very specific and this allows them to be used in a proper context and environment, unlike regular words which can be used in any context. This makes it easier for users to have an agreement on the fixed reference for the term instead of having a fluid/vague meaning.

There are four langauges that fall under the Nguni cluster: isiZulu, isiXhosa, Ndebele and SiSwati. For the purpose of this research only two languages, isiXhosa and isiZulu, have been chosen by the researcher. The justification for this is purely that the other

two languages, Ndebele and Siswati are young languages, in the sense that they were only reduced to writing much later than the other two languages. Thus, isiXhosa and isiZulu have a large vocabulary and the terminology goes as far back as the colonial era. This means that many terms are readily available to the researcher in both isiZulu and isiXhosa, while in Siswati and Ndebele most of these terms would have to be coined first before the actual research takes place and that would require considerable time. Another justification for this choice is that these two languages have phonological, syntactical and morphological similarities and they share similar speech sounds (Simango 2003:63). The most important purpose of this study is to make it easier for people literate in one language to be able to read and understand the terminology in Nguni.

3.3 Data collection

In recent years, the means of data processing and collection have evolved and improved tremendously; and have become more practical with the aid of computers in terms of speed, flexibility, storage and capacity. There has also been a great increase in term banks since the 1980s when computers became part of data processing and collection in terminology (Sager 1990:130). Two approaches are used in the compilation of terminology: the first approach being specific cases of terminology while the other is the systematic compilation of terminology. The first approach is used when there has

been a specific request for terminological services and it is used for primary and secondary term creation. This refers to terms that are being coined for the first time or being translated to a foreign language. The second approach, which was used for the compilation of the data used in this research, is the systematic compilation of terminology. It is used for the purposes of creating and building a term bank or in the case of making a technical dictionary (Sager 1990:130). Therefore, the terms used in this research were purposely collected for this type of research.

The systematic compilation of this terminology can be said to be corpus-based because the terms are extracted from a body of texts that are in a particular subject field - in this instance linguistics - and this is known as a corpus. The corpus is usually the vocabulary of a discipline or interdisciplinary text, notes Sager (1990:132). The compilation of terms using a corpus means terminological units can be reassessed and revised according to the new information that emerges with time and they can be updated with new meanings all the time. Therefore, this makes compilation an ongoing process. The corpus and database approach have many advantages compared to conventional ways of compiling terminology (manually collected data). These advantages make it easier for the terminologist to focus on the work at hand therefore improve the quality of work produced as there is no need to worry about other issues that have nothing to do with the term itself. Thus, the output becomes more reliable and of high quality because of the systems and structures that the computer uses to collect,

compile and store information. The data for this research has been intentionally compiled to create a database/term bank of terms that can be used for different researches in the African Languages Department and have not been specifically compiled for this research only.

The data for this research, which is in English, was previously provided for the author's Honours Degree research paper, from different sources used for the African languages' undergraduate syllabus at The University of Witwatersrand in 2017. The research is conducted at the University of Witwatersrand with the aim of creating a terminology list/term bank that could in future be helpful in the development of African languages at Tertiary institutions. The languages that have been chosen are isiZulu and isiXhosa, because they both have a sizeable vocabulary compared to the other two Nguni languages and therefore some of the terms would be readily available to the researcher.

For the rest of the terms collected I used dictionaries, grammar books, TNO's and many online linguistic sources, in order to gather the terms in isiZulu, as the isiXhosa terms were already available from the previous research. It took three months (1 June 2019 – 31 August 2019) to collect and arrange these terms into their respective categories in order to have the terms ready for the analysis. Term collection was not as quick and easy as I imagined it would be, as some terms were not easily accessible and more research had to be done. I realized that most terms that are readily avaibale in isiZulu

correlate with those in isiXhosa and those that are not found in isiZulu are also not available in isiXhosa. This further emphasizes a point that I have already made in my literature review about the TNO's that were previsouly combined in the colonial era and were divided in the Apartheid era, and that these two languages used to be one langauge. This further proves that the work put into these two indigineous languages lacks consistency and requires updating.

3.4 Research instrument

The researcher introduced another form of verification as a form of quality assurance from the language speakers of isiZulu and isiXhosa by compiling a questionnaire. This had to be approved by the University's Ethical Clearance Board (see section 3.7).

This questionnaire has quality assurance questions and also instructs the participants to analyse the given Nguni terms to see if they are able to understand them. It is important to have such quality assurance and not to solely rely on your own knowledge with the belief that the research has been executed well. This input was then used to refine my research and work on whatever I had missed in the analysis of the terms. The report from the participants also gave me another perspective on how they perceive the research, as potentially they would be the ones using these terms.

3.6 Data analysis

After collecting and compiling the data from the different data sources, I had to analyse and present it in a certain manner. I used a very popular strategy where the data is broken down into manageable units in order to be codified, analysed and similarities or contrasts are identified as patterns that occur in the data. The sorting process takes some time, which was the month of September 2019, as each word has to be researched and classified into its respective category for analysis. The analysis of the actual terms started in the month of October 2019 right through to December 2019.

The data analysed is presented in a table format, the newly created terms will be presented on their own to show which ones did not exist in isiXhosa since this research started with the search and creation of isiXhosa linguistic terms for the authors previous research. From there, a list of terms that are very similar to each other will be created because, in most cases these terms in both languages share so much in common that at times they only differ with one sound. There will be a third table containing all the data with all the harmonisation changes made. The data is presented in this way so that there is clarity on what exactly has been harmonised because some terms have been left as they are since they are the same in both languages. These terms are put together in order to show which terms appear as they are in both languages; while some differ in one segment (a vowel or a consonant). All these changes will be further

explained in the following chapter, the harmonisation process is shown and some patterns that have been identified in the process have been highlighted in order to clarify the research.

Participants from the 3rd year African languages class were randomly chosen by the researcher in order conducting an analysis on the harmonised terms. A set of questions were selected to guide the analysis. The main aim of this analysis is to get an indication from the language speakers of their understanding of the terms, whether they understand the terms or if they have no idea what the terms mean.

3.7 Ethical consideration

The University of the Witwatersrand Human Research Committee sets out clear rules and guidelines for ethical considerations that researchers need to adhere to in order to get formal clearance to conduct their research. This research got formal clearance before the beginning of the survey. The survey did not deal with vulnerable groups or individuals but what was of significance with regards to ethics was informed consent and privacy for the participants. Participants were informed that their identities would be kept confidential and that care would be taken to not accidentally identify them through reference to their name or occupation or position in the event that they wished to remain unknown.

Before the process, participants were informed of the nature of the research, its purpose, the research aims and their rights as participants. If they wished to continue with the interview, they were handed a formal consent form to sign. The participants were also issued with a participants information sheet that they could keep and which summarised the research, why they were chosen for it, guarantee of their anonymity if they wished their identities to stay confidential and my own and my supervisor's contact details. No payments were made to any participant for their participation in this study.

3.8 Conclusion

This chapter has described and justified the methodology used, the instruments chosen and has also outlined the differences between the Semasiology and the Onomasiology approach while defining the theoretical framework and the processes that go with it. It has also defined the research data, explained how it was chosen and how it was compiled in order to clarify to the reader the nature of the study and the data used. The data analysis was presented with an explanation how the data will be presented in the chapter to follow (Chapter 4) and lastly, the ethical considerations were presented in order to confirm and justify the importance of the participants' confidentiality in the report which has had great impact on this study.

CHAPTER 4

4. Discussion

4.1. Introduction

The purpose of this chapter is to answer the research questions posed in order to accomplish the main objective of this study, which is to create unified Nguni terms. The questions chosen outline the problems that the country is facing when it comes to language development and also highlight the importance of teaching in the mother tongue language, whilst advocating for harmonisation of languages to be considered as one of the options that could potentially assist in speeding the process of indigenous languages development.

4.2.The challenges currently facing language development in South Africa.

This section will answer the first research question with the intention of accomplishing the first objective of this study which is to explore the challenges currently facing language development in the country in order to accomplish the overall objective of this research.

It is evident that to this day, term development especially for educational purposes has

not been a priority for the Government. One of the primary excuses for the neglect of African indigenous languages and the lack of proper language planning and development is the fact that there are too many languages to be developed. The general belief is that the choice of one language over others would inevitably trigger ethnic rivalries and threaten national unity. Another concern, related to the multiplicity of languages, has been the prohibitive cost of producing books and other teaching materials in African languages as noted IDRC[6] (1997). These have been the major problems for language development and even though the government is aware of these problems it is not doing enough work to elevate them into a standard where the South African indigenous languages can be used as langauges of instruction, especially in tertiary education. There is also a fear of developing languages that might end up not having enough speakers as people gravitate more and more towards English.

Fourie (1994:11) notes that the concept of developing technical terms for South African indigenous languages has not been fully embraced by some scholars and politicians. The reasons vary, from the exercise possibly being too costly, people rejecting the new terms because they are already used to the borrowed ones they currently use, the cognitive difficulties in the encoding and the decoding process, the inaccuracies that occur with the terminology process and the number of languages to be developed.

[6] IDRC – International Development Research Center

Scholars such as Webb (1999) and Ridge (1996) have also raised the issues that parents are generally the ones who choose the language in which their children are taught at school. Ridge (1996:26) goes on to indicate that some parents especially those from the liberation movement see English as the language of empowerment hence they would prefer it to be the language of instruction at schools. These issues have been debated broadly but the one that receives the most attention is the issue of the number of languages to be developed. The debate about South Africa having too many official languages is not a new topic; it dates back from the early years of the history of the development of indigenous languages and it will continue until something is done about the number of languages to be developed.

South Africa has nine indigenous languages and all nine indigenous languages are in dire need of development in all spheres. The latter development is desirous so that indigenous languages can be effectively utilised as languages of learning, teaching, and robust communication and not simply as a means to a colloquial end. Van Huyssteen (1999), Louwrens (1997), Madiba (2001) and Alberts (2000 and 2001) have written about and debated the factors that have resulted in this situation, including the lack of financial and human resources, political will and insufficient efforts to create new terminology for the indigenous languages. There have been many suggestions for over a decade now on how to develop a cost-effective and efficient language development project to deal with these issues. One proposition has been Harmonisation, a process

whereby one combines mutually intelligible languages to form language clusters, thus creating much larger speech communities. Harmonisation in South Africa was first proposed by Lestrade (1929), Tucker (1929), Doke (1933), Nhlapho (1944) and Westphal (1946) followed by Alexander (1989,1992,1998), Msimang (1992,1994) and van der Walt (2015) and the focus was on the Nguni cluster (isiXhosa, isiZulu, isiNdebele, and isiSwati) and the Sotho cluster (Setswana, Sesotho and Sepedi).

Scholars such as Prof Alexander Neville have made great advances when it comes the South African indigenous languages by opening a non-profit organization called PRAESA[7] in order to research and develop isiXhosa. The organization focused on early childhood literacy research, materials and training in the lower grades up to Grade 9. This project contributed in developing vocabulary lists, glossaries, translated mathematics and science textbooks, dictionaries and produced children's literature. This project is still running, and is making a difference in isiXhosa first language learners in the townships of Cape Town. It is similar to another project by the Nelson Mandela Institute for Education and Rural Development which is based in East London in the Eastern Cape. This institution has been developing terminologies in order to transform education in the rural areas, so that learners can have a better understanding of their work. These and many other projects are stepping in and assisting in language

[7] PRAESA – The Project for the Study of Alternative Education in South Africa.

development in the country, since the government is not making any major advances when it comes to developing indigenous languages for academic purposes.

Countries such as Tanzania should be used as a template for finding South African language solution because Tanzania has successfully developed and implemented the usage of an indigenous language in a multilingual country. Swahili in Tanzania is one of the languages that was previously marginalised during the colonial era as it was depicted to be unsuitable and ill-equipped to express modern concepts (Legére 2006). Now, Swahili is one of the most widely spoken languages in Africa and has even gained international status to a point where it is being taught outside the continent by Universities such as Princeton, Harvard, Yale and Stanford. For Swahili to reach this level, co-operation from the government and speech communities was the main factor for communities appreciating their mother tongue and constantly choosing it over other languages. This is the kind of collaboration that South Africa needs - to be offered readily available terminology and vocabulary so the speakers of indigenous languages are able to choose their indigenous languages from the languages of instruction currently being offered to them.

It should be noted that, for these projects to be fully functional, successful and for them to make a difference, institutions such as Universities need to be testing these advances by implementing language policies that speak to such projects. This means

the data being collected and analysed by these projects should be disseminated and further developed at tertiary institutions in order to have uniformity and develop a standardized terminology which can assist in the process of langauge development at a larger scale. Therefore, these ideas are some of the suggestions that can be used in order to deal with these major challenges with regards to langauge development which are the number of languages to be developed and the costs of developing these languages.

4.3. Effects caused by non-mother tongue languages of learning and teaching on black students

This section discusses the effects that the languages of learning and teaching in South African schools has on black students at higher education, in order to give a comprehensive overview of why it is significant to develop South Africa languages and have them as languages of learning and teaching across the education system.

When it comes to South African higher education, students still do not have the option of choosing to be taught in their mother tongues. This gave rise to a movement across the country to decolonise higher education. Decolonising higher education means different things to different people. For some it means free education, for some it means language equality and for some it means that the entire syllabus should be

reconstructed to create equality and reflect our African context. Learning and teaching in an indigenous language would mean that students have the opportunity to express themselves entirely in their mother tongue when writing their exams and assignments. Ngubane (in Sookra 2006:2) notes that an introduction of an indigenous language as a medium of instruction could in turn improve learning opportunities and widen participation in higher education. For example, Chetty (2013) conducted a study which was looking at Physical science possibly being taught in isiZulu at High School level in KwaZulu Natal. The results showed more students participating and engaging in the classrooms than before, with the paper also highlighting that this concept should be started from an earlier education level. The paper also states that some teaching materials should be written in isiZulu, such as tutorials and exercises in order to give students a clearer understanding of the concepts. Therefore, this means that there is space for African indigenous languages in classrooms even at primary and secondary level and this should be a priority in order to cater for black students.

To this day, most institutions do not cater for African indigenous language speakers who want to be taught in their mother tongue and this has sparked many debates across these institutions. Scholars such as Bunyi (1999), Alberts (2014), Ndhlovu (2013) have reached a consensus when it comes to the idea of educating in the mother tongue, and have shown that it is beneficial for students because they generally do better academically when taught in their own languages. These authors have supported this

idea by highlighting the fact that people in general understand concepts better if they are first introduced to them in their home languages. Also, conveying information is much easier if it is done in the first language of the receiver, rather than in their second language. This may be the case, so even though these languages have received negative attitudes from the mother tongue speakers especially parents (Barkhuizen 2001; Heugh 2000 and Webb 1996).

Constantino (1966:13) argues that foreign language instruction is an impediment to edutcaiton. This is an old example, in the early 1930s the Filipino nation at a time when their own language was seen as inferior in comparison to American English and could not be used as a medium of instruction. Most speakers of the language preferred English and students were taught in English from an early age, which proved to be problematic as some learners even dropped out after primary schooling. This was because at school they learned in a foreign language, English. They memorized its vocabulary, the accents, intonations and sounds only to get home and speak in their mother tongue, which resulted in the children forgetting what they had been taught. This also meant that their thought process would be slightly slower because a student would have to first translate the concept in their head before answering the question in English. This proves that language is indeed a tool of the thinking process. The above example can be linked to the education system in South Africa today as this is something that is currently happening in most institutions of learning where black

students are struggling because they are being taught in English instead of their mother tongue. In some of these spaces, black students are not even given the opportunity of translanguaging.

Translanguaging is a term that was coined in Welsh by Cen Williams to refer to a teaching practice of deliberately changing the language of input and the language of output. Williams (2002) further clarifies that translanguaging in education refers to using one language to reinforce the other in order to increase understanding and to augment the pupil's activity in both languages (as cited in Lewis, Jones and Baker, 2012b: 40). Colin Baker (2001) discusses four potential educational advantages to translanguaging by stating that it may promote a deeper and fuller understanding of the subject matter, help the development of the weaker language, facilitate home–school links and co-operation and lastly, help the integration of fluent speakers with early learners. Translanguaging thus goes beyond the simple use of a 'safe' practice just to understand the lesson, in the ways described by Martin (2005). Makalela and Mgijima (2016:89) also state that enhanced cognitive and metacognitive skills are achieved when translanguaging techniques are applied in a multilingual classroom. This was the conclusion after research done with fourth grade learners using isiXhosa-English readers in the Eastern Cape who were tested before and after the translanguaging teaching method used as part of the research. This further demonstrates how the learning and teaching in African languages could improve the education system in

South Africa if the students and teachers could have readily available terminology in order to accomplish this.

United Nations Educational, Scientific and Cultural Organisation (1953), De Wet (2002) and Carstens (1998) also highlight the importance of teaching students in their mother tongue from an early age as this assists the child to think and function in their home language until a certain stage, which is the cognitive and academic language proficiency stage. Besides the educational benefit, children also benefit psychologically and sociologically. Psychologically, this is associated with a system of meaningful signs that in his/her mind works automatically for expression and understanding. Sociologically, it is a matter of identifying with the community to which the child belongs. Therefore, learning in their first language makes it easier for students to acquire a second language because they have already mastered strategies of negotiating meaning in their home language. All of these ideas and strategies could help students have a better understanding of the different subjects being taught, especially technical subjects such as science and mathematics.

When it comes to technical subjects, Setati *et al.* (2002) have noted that it becomes very challenging to teach such subjects when the teachers themselves are second language speakers of English. Teachers are thus forced to use other teaching alternatives such as code switching between an indigenous language and English in

order to try and make sense of the work. Other methods are exploratory talk and discourse-specific talk, in order to make the topics as relatable as possible to their students' everyday lives. This further proves that technical terms are indeed required in order for technical subjects to be taught in the mother tongue of the students. Msimang (2000) identifies some of the limitations that could potentially arise from teaching in African languages with the obvious one being the lack of terms, which will be the main focus of this study. The second challenge is the potential restriction placed on African scholars writing in their indigenous languages preventing them from reaching a wider audience and lastly, the fact that it becomes difficult to engage in comparative Bantu linguistics or grammatical typology. This means these scholars' work would not be referenced internationally by other scholars and would therefore not be credible enough. These limitations are issues that could be worked around because there are translation services available to assist scholars to have documents available in English should there be a need and this should thefore not stop one from trying to enrich their home language by publishing a paper in it.

One of the Universities that has been at the forefront of implementing these new language policies has been the University of KwaZulu Natal in collaboration with

SANTED[8] , NORAD[9] and the Department of Higher Education. This was implemented under the Universitys' language policy in 2008. The main aim of this project is to assist future graduates in professional disciplines to learn isiZulu so that they can be able to communicate with their clients in both isiZulu and English (Ndimande-Hlongwa et al 2010). The reasoning behind this project is that many South African graduates struggle to interact with ordinary people (clients) and, even though they are proficient in their fields, the language barrier is persists and hampers their work. The project used theories such as the Vigotsky's 1978 constructive theory which seeks to enable the teacher to be active and involved as this could in turn encourage learning through interactive teaching practices. Like any other new project, there were bound to be some shortcomings and some positive outcomes. For example, some students found the course very helpful but they felt the course was not given enough time compared to their major courses. Therefore, the students highly recommended that the course be given more time and more work especially for those who would like to continue to a higher level with the course.

As much as this specific project was a success, there are still some issues of

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[8] SANTED – South African-Norway Tertiary Education Development Programme.

[9] NORAD – Norwegian Agency for Development Co-Operation

standardisation when it comes to the different isiZulu dialects. Just like any other South African language, these are mostly influenced by the regions where the languages are spoken. Therefore, this raises another issue of standardisation when it comes to alaready exissting terminology. Msimang (2000) investigates the inaccuracies that occur in the isiZulu language being taught at tertiary institutions and how the terminology lacks uniformity and consistency. Standardisation can be defined as the natural development of a standard language in a speech community or an attempt by a community to impose one dialect as a standard (Crystal 1985). Hudson (1980) on the one hand, describes it as direct and deliberate intervention by society to create a standard language where before there were just dialects. The standard language is an institutionalised norm which can be used in mass media, the economic sector, education, science and technology. This goes to show that it is imperative to follow appropriate procedures after coining new terms in order to prevent such problems.

Rhodes University has also been in the forefront for developing African indigenous languages with a policy that was adopted in 2001. This policy promotes the intellectualisation of isiXhosa as it is the home language of 80% of the student population at Rhodes University, while the ermaining 20% is shared between English and Afrikaans (Maseko and Kaschula 2009). The Schools of Language and Literature at this University are dedicated to developing academic languages and literature in isiXhosa. This SANTED driven initiative aims to promote language through the

acquisition of isiXhosa as an additional language in order to produce graduates who can function in a multilingual professional environment. This project is specifically aimed at Pharmacy and Law students but it is rapidly growing into other faculties at this University. An inter-cultural discipline-related teaching model was also implemented which focuses on two crucial issues in intercultural communication. Firstly, it focuses on creating a relaxed and supportive environment for learning. The hope is that this will in turn encourage the students to use their newly acquired language skills confidently and appropriately, thus creating a more comfortable environment for communicating with isiXhosa-speakers within the University, in community engagement and, most importantly, in providing a service to isiXhosa-speaking clients when they are qualified professionals. Secondly, particularly in discipline-specific courses, besides language learning, the focus is on cultural aspects, which, as noted by Ting-Toomey (1999), form what is perhaps the most crucial component of intercultural communication (Maseko and Kaschula 2009:137). This again displays that African languages development is crucial and is an urgent matter in the country and should be treated as such.

4.4.The role of language harmonisation in language development

It is important to explore and highlight how harmonisation could be used as an aid in the long struggle of language development and this section explores this as an objective to the study.

Van der Walt (2015:324) highlights some of the principles that are important for harmonisation of South African indigenous languages. Firstly, by using harmonisation as a unity project amongst the communities and making sure that the community is involved in the process of choosing the correct terminology. It is also important to be aware of language rights for minority languages as this could have an unfavourable impact on the project as a whole if they are not observed (Akkinnaso 1994:139). This would in turn make sure that everyone's voice is heard and people would feel that their languages have equal status with the others in the collaboration. Msimang (1994:162) also supports the idea of harmonisation, by suggesting that the same strategy being used in Braille be employed into the Nguni and Sotho languages in order to harmonise them. This means employing the same Braille codes for different languages such as Sotho, Tswana, and Pedi and also with the Nguni group of languages. By using Braille, the process of harmonisation could speed up the process of development of indigenous languages by using strategies that already exist and this could also help cut the costs of the whole process. For example, in Braille there are signs that already exist which have

been harmonised for Nguni and Sotho speakers and these could be used as a starting point for harmonisation of these languages, instead of starting from scratch.

The above discussion has set out the many arguments in favour of harmonisation, however scholars have pointed out potential issued or effects of harmonisation. Bourdieu (1991) notes that harmonisation has the potential of marginalising language varieties and their respective speakers. Most importantly, this could potentially cause the reduction of diversity which is a western ideology instead of celebrating the diversity of African cultures and languages. Msimang (1994) and Louwrens (1997) also highlight some of the attitudes that could potentially arise from the speech communities of both the Nguni and the Sotho speakers. These attitudes are related to resistance of change because it is generally difficult for people to accept change due to uncertainty of the unknown. This will be especially difficult for language purists who believe that the languages in question are whole languages and not dialects and together can form one main language, a Nguni or a Sotho language. As much as some language purists may not agree with the idea of harmonisation, what needs to be considered is that South Africa needs languages that can compete on the same level with English and Afrikaans (Banda 2009:2). In other words, instead of having many indigenous languages fighting for space in the modern world, why not develop a few that can cater for all South Africans in all spheres? The harmonised languages can be used on a national level for socio-economic development, mobility, and education.

Critics such as Makalela (2009), Msimang (1994, 1996, 2000), Cluver (1990, 1994), Alexander (1998) and Makoni (2015) have written extensively on harmonisation as discussed in the above sections. Some authors have written in support of it and have demostrated how it can help with the development of South African indigenous languages. Some scholars have highlighted the issues that could potentially arise from harmonisation such as term rejection and language attitudes. What is evident from the research on harmonisation is that the focus has not been on the actual creation of harmonised terms in South Africa, which this paper seeks to explore. The timing of introducing a harmonisation project is also very important because people are always on high alert when it comes to their languages as they have been exploited repeatedly in the past and therefore, for South Africa, it is now the perfect time to raise this topic. Especially since there are projects that have already introduced African indigenous languages into Universities such as University of KwaZulu Natal and currently Witwatersrand University. It would help a great deal to have uniformity and consistency when it comes to the terminology being used even though these institutions are in different provinces.

Potential challenges have also been noted such as language attitudes, the reduction of diversity and language purity issues. In this research, it has been displayed that harmonisation of written forms could assist greatly with the development of indigenous languages. Therefore, this leads to the aim of this paper, the creation harmonised

linguistic terms that can be used at tertiary institutions to teach African languages studies. Creating harmonised terms for tertiary institutions could mean that the terms being used are the same throughout the country and these could further be used in other spaces such as the mass media, in parliament and some corporate institutions that cater for a clientele that currently feels marginalised in these spaces because they cannot comprehend or conduct business in English. The same tactic could be applied to politics espceially with speeches and all mass rallies being conducted in a language that people at grass-roots level can relate to and comprehend. As much as there will be resistance to the idea of harmonisation it is a better alternative than watching African indigenous languages being swallowed up by English. The same strategy used for the promotion of Afrikaners could be used and as black South Africans we have so many language options if we could be persistent in this movement we would certainly succeed.

However, the writer wishes for the unification of terminology as a practice focusing on the orthography to bridge this gap and help improve the academic struggles of black students. The outcome of this research paper aims to improve the development of indigenous languages at tertiary institutions while simultaneously improving social cohesion. South Africa suffers from a problem of tribalism which is another legacy of colonialism and therefore, unifying the languages could help in turn trace the origins of languages and also unite the tribes that had been previously divided. By treating the

various languages equally, people would feel the inclusion that harmonisation will bring and would therefore feel as though they are being treated equally in accordance with the Constitution, thereby enforcing the peoples' right to human dignity. This is not a guaranteed outcome when it comes to the response of the people at community level as they often have very different beliefs and values especially when it comes to languages. The belief that English is the key to problems such as unemployment is the main belief in this regard because almost every black parent encourages their children to pick English over South African indigenous languages with the hope that it will put them at an advantage.

4.5 Conclusion

This chapter has discussed with an attempt to answer the reaserch questions that have been posed. It has been displayed that there are indeed too many official languages in South Africa that still need tobe developed, it has been highlighted how costly and tedious this proces could be hence the suggestion of harmnisation. This chapter also displayed the success of langauge development through harmonisation especially with countries such as Tanzania where Swahili is widely used as the main language to a point where it has has even reached Universities that outside the continent. Most importantly, this chapter has highlighted how decolonisation of higher education can be an aid to issues that black students are currently facing in higher institutions. All this

discussion has let to why it is important to look at language harmonisation as an aid to language development. If a students were to be taught in an African language which is closest to their mother tongue than English chances of them succeeding would be greater than if they were taught in English.

Chapter 5

5. Data Analysis

5.1. Introduction

This chapter discusses data analysis and findings of the study. The methodology used for this research was carefully chosen in order to best analyse the data and still be able to accomplish the studys' objective. The main objective of the study was to create harmonized Nguni terms whilst gauging the attitudes of the languages speakers towards harmonisation through a mini-survey.

5.2. Attitude of language speakers towards harmonisation

The objectives of this study were to establish if there really is a problem at tertiary institutions or in the education system in general which is directly linked to the inadequacy of indigenous languages. As mentioned in the previous chapter, the lack of developed indigenous languages is one of the main reasons it has been difficult to implement the strategy of using these languages as a medium of learning and teaching, that and the fact that these institutions lack the determination to implement the policies that favor indigenous languages. The survey I did with the students who were the participants to my quality assurance questionnaire reveals that the concept of

harmonisation is not a foreign one to the language speakers. They also state that they fear their languages which are isiXhosa and isiZulu would disappear or be swallowed into each other therefore losing their authenticity. What needs to be emphasized and communicated when introducing harmonisation is the fact that harmonisation should not in any way affect the speech community but should start and end with orthography, as stated in this study.

The participants also stated that they wanted indigenous languages to have a space in the academic sphere instead of English, they would in fact go as far as choosing the harmonized version of their languages as this would be closer to their home language than English. What I gathered from the questionnaires was that given the opportunity, the harmonized Nguni language would make a huge difference in the African languages department because students would be able to write their academic papers without code-switching with English for terms that do not exist in these languages.

5.3 Analysis

This section will discuss in detail the data analysis and the research findings. The data was classified into the different linguistic categories, namely phonetics, phonology, morphology, syntax and semantics. Once this classification is done, within these categories the data was then further classified into word categories such as nouns,

verbs and adjectives. The reason for these classifications is so that the data could be analysed according to the relationship that the terms have with each other in order to identify the naming patterns. It is important to note that, conceptually, terms can be classified into conceptual systems representing the real view of the world, namely objects or entities which fall under nouns and generally, this happens to have the highest classificatory value compared to verbs which are processes/operations/actions and lastly, properties/states under adjectives and relationships Cabre (1998:35). This is also the case with this study; the highest word category classification is under nouns, followed by verbs and lastly adjectives.

The next step was to collect equivalents for these terms in both isiZulu and isiXhosa; these were collected from grammar books, TNO's and dictionaries. The overall number of terms that had equivalents from isiXhosa was 165 out of 194 terms, the remaining 29 terms did not have equivalents. Unfortunately, these 29 terms also did not have equivalents in isiZulu either and therefore, Nomenclature systems had to be applied. These terms were analysed according to the categories they fall under and word formation processes were used (see Appendix B). When all the isiXhosa terms were compared to the isiZulu terms collected, it was found that only 11 out of 194 terms had exactly the same matching equivalents in both isiXhosa and isiZulu (see Appendix D). As the terms were being compared to each other in isiXhosa and isiZulu, it was found that there were 24 terms that are similar and differed from either one sound/segment or

one morpheme (see Appendix C).

The analysis of terms was done by taking each isiXhosa term, comparing and contrasting it with an isiZulu term. The origins of a term are traced using dictionaries and the word formation processes by breaking down the actual word into morphemes so that they could be analysed separately. Once the origins of the terms were traced, the two meanings were compared and contrasted in order to determine which one was closest to the meaning of the concept and the closest one was then selected for use. For the terms that do not exist, these were created by using the word formation processes using the terms that already exist in that category to create the new ones. This is done by studying the meaning of the concept, finding morphemes that already exist which relate to the meaning of the concept and attaching them together to form a new whole word.

Firstly, all the data was taken and classified into the five main linguistic components of language which are the phonology, morphology, syntax, semantics and phonetics. In these categories, I further grouped the data into lexical categories which were only nouns, verbs and adjectives in this study. It was within these lexical categories that the data was then grouped according to each topic or the guide word for each group of words. For example, a guide word would be *isibizo* ‘noun’ and all the words that have the term isibizo will be put together for analysis in order to identify patterns that occur in

that group of words. These patterns would reveal how that particular term came about and how it relates to others around it, which would then lead to a new creation or harmonisation of the term.

The next step was to do a survey of the terms I had harmonised by compiling a questionnaire and with the help of five third year students this was accompished. The main objective of the survey was quality assurance purposes in order to include the voice of the languages speakers to this research. This was done privately and the participants did not have any contact with each other at all. Each participant was given an hour to look at ten terms so as to establish if the terms were understandable to the Nguni speakers and if so, whether the terms were usable. The other important objective was to determine how the participants felt about harmonisation of these two languages.

Once all the harmonisation of the terms was complete, the data was classified into the different tables in order to better display the analysis that has been conducted. A list of all the terms that have been harmonised is in Appendix A, while the list of all the newly created terms is in Appendix B. The next list is Appendix C, a list of terms that differ in one segment which can be in a form of a sound or a morpheme. Lastly, Appendix D has a list of the collected terms that are exactly the same in both languages.

5.4. Report Analysis

This section gives a detailed report on the analysis. The key element in this study is understanding and knowing the functions of the terms you are working with as the researcher because these terms appear as synonyms of each other in these two languages. For example, with the term *isandiso* and *isihlomelo*, one could argue that they both mean the same thing. I agree they do mean the same thing but the context in which they are used is very important as one could mean ‘extension’ and the other ‘add on’. Also, in the case of the term ‘adverb’ this would mean that the verb is being modified by time, place or manner or that word is an extended version of the verb and therefore the correct term to use would be *isandiso* ‘extension’ which explains the choice used for ‘adverb’ and its derivatives.

Some of the examples are displayed (Fig.1) in order to show how the term formation process assists in the harmonisation process because if one can break down a term then it becomes easy to harmonise it. This means the researcher must first find the original spelling of the term in order to reveal any segments that are underspecified, as the Nguni languages tend to have these segments omitted. For example, the word *umuntu* ‘human’ in isiZulu is spelled as *umntu* ‘human’ in isiXhosa, and therefore one would have to go back to the noun class system to allocate its origins. This word falls under the class of humans, the *umu-* class which then displays that the word does have

the –*u* which is underspecified in isiXhosa and therefore, the correct term to use would be *umuntu*. There is quite a number of these terms and an analysis of them has been done in order to trace their origins. Some of these examples have been displayed below. In some of the examples in isiZulu, some morphemes have been omitted or are optional from the actual word and this could be caused by the influence from the speakers of the languages and their dialects. The terms *elidlule* 'past' in isiXhosa and *edlule* 'past' in isiZulu have the same meanings but the difference in the isiZulu term is that -*li*- underspecified and therefore the actual word in isiZulu is *e(li)dlule* which makes it the same as the isiXhosa term. The same applies to the term *izwi* and *ilizwi* both meaning 'voice', the term *i(li)zwi* the segment –*li*- is underspecified and on the other term it is not.

The analysis of the term *ibizonje* 'common noun' in isiZulu and in isiXhosa is called *i**si**bizonje.* For this term to be classified as a noun it needs to have a class noun prefix that can also take the term into the plural state. What needs to be taken into consideration is also the fact that this term does not occur on its own, that there is a group of terms that are derived from it and the consistency patterns have to be analysed. This is done in order to see if all the words derived from the term *ibizo* all start with *i*- instead of *isi*- like in the isiXhosa term *i**si**bizonje*. From this analysis, it was concluded that as much as these mean exactly the same thing, the term to be used is *isibizonje* because of the consistency that occurs from the terms in both languages

derived from this particular word. Another analysis that can be used for *isibizo* 'noun' is the fact that in both languages the stem *–bizo* means 'name' or 'call' and therefore all the other terms associated with the noun will have the stem *–bizo (see fig 1).* There are many similar other examples, which have been analysed accordingly in order to choose the appropriate term.

Noun	isibizo	ibizo	isibizo
Noun Class	ihlelo lezibizo	ihlelo lamabizo	ihlelo lezibizo
Noun Phrases	amabinzana esibizo	amabinzana ebizo	amabinzana esibizo
Noun Prefix	isifakelo sangaphambili sesibizo	isiphongozo sebizo	isiphongozo sesibizo
Noun Root	ingcambu yesibizo	umsuka wesibizo	umsuka wesibizo
Noun Stem	isiqu sesibizo	isiqu sebizo	isiqu sesibizo
Common Noun	isibizo-nje	ibizonje	isibizonje
Complex Noun	isibizo esixandileyo		isibizo esixandileyo
Deadjectival Noun	isibizo esisiphawuli	isibizo esisiphawuli	isibizo esisiphawuli
Proper Noun	isibizo-ngqo	ibizoqho	isibizonqo
Pronoun	isimelabizo	isabizwana	isimelabizo
Demonstrative Pronoun	isimelabizo sonibisa	isabizwana sokukhomba	isimelabizo sokukhombisa
Absolute Pronoun	isimelabizo soqobo	isabizwana soqobo	isimelabizo soqobo

Fig.1. A list of terms that are related to each other with one word in common

What can be noticed from this entire list of terms analysed is that terms that denote something performing the act end with the suffix *–i* and those denoting a process or the act of, end with *–o.* For example, the terms *-phawulo* 'marking' and *-phawuli* 'the marker' while the *–phawulwa* would be the 'marked' are all derived from the verb

phawul- ‘mark’ which is also derived from the word -*phawu* ‘sign/mark’. Morphemes are prefixed or suffixed in order to classify these terms into their respective word categories and noun classes. This can be noticed with terms that appear to not have the plural form in both the languages, therefore what has been done is to make sure that the terms are analysed and assigned to noun classes so they will have the plural form, which then affects the consistency of the terms in both languages. For example, the term *uvumelwano* in isiZulu and *isivumelwano* in isiXhosa both meaning ‘agreement’ share the same morphemes, except for the one segment which is the noun class prefix. Therefore, the term appropriate to use would be *isivumelwano* because it can be taken to the plural form which would be *izivumelwano* ‘agreements’. This is how most terms have been analysed in order to get the appropriate terms especially if they are nouns. This change then affects the words that appear in the category that are derived from the term *isivumelwano* even in isiZulu, the terms derived from this term would change from *uvumelwano* to *isivumelwano* followed by whatever phrases that occurred after this one.

In some cases, because these terms are adopted or translated from the English langauge they tend to be more descriptive, whereas the equivalent is a one-word term. The term ‘morphology’ in English, meaning an area of study that deals with how words are formed, is a phrase in isiXhosa as in *ulwazi ngokwakhiwa kwamagama* and then in isiZulu it becomes one word again *ukubunjwa.* These two equivalents are correct and mean the same thing, even though in isiZulu it has not been specified what it is exactly

that is being moulded. Therefore, the best option would be a short version if it is the one closest to the meaning of the term. Therefore, the term unified from both languages is *ubumbo lwamagama.* Harmonisation does not only mean forming new terms from ones that already exist but also looking at terms and then creating/making use of a general word that already exists in the language to complete the term as it was done in this example. The part *lwamagama* 'of the words' was not part of the original terms but because it is fitting to use it as it best describes exactly what is being moulded in this context. The word *ubumbo 'a moulding'* is derived from the word *bumba* 'to mould' which is a verb and this is indicated by the suffix *–a.* Therefore, to show that it is a process or an act of moulding we would suffix *–o* to the end of the word *bumb-* and then assign it to a noun class *u-* which does not require a plural state because of the nature of the process.

This brings me to another point: in English, words that end with the suffix *–tion* are words that form nouns, meaning the action of the verb or the result of a verb. In the two Nguni languages, these terms start with *u-* and end with *-o.* The prefix *u-* denotes, in most cases a noun that does not have a plural and this is displayed in the below table. Therefore, it becomes easier to harmonise these terms once one has identified the similarities and the differences (see Fig. 2).

English	**isiXhosa**	**isiZulu**	**Nguni**
Palatalization	isinkalakahliso	ukulwangisa	ulwangiso
Passivization	unyanzeliso		unyanzeliso
Question	umbuzo	umbuzo	umbuzo
Reduplication	uphindaphindwano	impindwa	uphindwo
Substitution	itshintshanisa		itshintshwaniso

Fig.2. A list of terms that end with the suffix –*tion* in English

Another grouping that has been studied and has shown some similarities in its structure is in the semantics cluster with words that have the suffix *–nym*. These terms have been analysed using nomenclature systems and have displayed some relation to each other with a few exceptions. They all have a prefix that is *isi-* and they have a suffix that is *–i.* The superordinate term also guides the subordinate terms in this case, in Nguni 'semantics' *isichazukuthi* the term is made up of the prefix *isi-* and the suffix *–i* which also creates this relation amongst these terms. Therefore, if the word does not exist in one language it becomes easier for a new term to be created using what is already available to the researcher (see Fig 3).

English	isiXhosa	isiZulu	Nguni
Meronym	isalathi		isalathi
Synonym	isifanokuthi esithethantonye	elisho okufanayo	isifanokuthi

Antonym	isichasi	isiphikiso	isiphikisi
Semantics	isichazukuthi	isichazukuthi	isichazukuthi

Fig.3. Examples of terms that show similarities in structure

The creation of new terms displays some relation of terms to each other and how it is used to form new terms. The formal method of the word formation processes for example, the first one is derivation, which is the addition of affixes to lexical bases to form a new word. For example, by using the derivation process one can create a noun by affixing the noun class 7 prefix *isi-* to the lexical base *cacisa* ‘articulate’ and then replace the default verbal suffix *–a* with *–i* in order to indicate that the word is no longer a verb and the new term would be *isicacisi* ‘articulator’ following the isiXhosa morphological rules. These are some of the examples (fig.4) that have been created in the same way with the first two created with prefixes from class 7 and the last one from class 4.

English	isiXhosa
Nasal	Isinkantazo
Fricative	Isifutho
Labial	Imilebe

Fig.4. Examples of the derivation process

Compounding on the other hand, is when two or more lexical bases are added to create a new word, like the term *umabizwafane* ‘homograph’ where the first base is *bizwa* ‘the called’ is added to the class prefix uma- and *fana* ‘identical’ and lastly, replace the *–a* with the *–e* at the end to show the change in lexical categories. Other examples are as follows:

English	isiXhosa
Ideophone	isifanekisozwi isi- noun class 7 -fanekiso ‘similar’ -zwi ‘voice’

Fig.5. Examples of compounding

When it comes to phrasal terms, they are created by organizing a syntactic combination of words as follows: the term *isoluli sesixando esigxinisisayo* ‘intensive extension’. These are three different terms that exist as individuals but have been combined in order to form a new term, with *isoluli* ‘an extension’, *sixando* ‘portion’ and *ngxinisisayo* ‘emphasizes’. It is evident that these words have been affixed with prepositions *se-* in *sesixando* and *esi-* in *esingxinisisayo* according to isiXhosa morphological rules. The truncation process on the other hand, is very rare in African languages and is mostly

found in European languages and or where African languages borrow from European languages.

English	isiXhosa
Morphotactics	ulandelelwano lwentsingiselo-gama
homorganic assimilation	ufaniso lwamaqabane anokufana
Phonotactics	ulandelelwano lwesandi esinye segama

Fig.6. Examples of phrasal terms

The functional method refers to the use of conversion/zero derivation or lexicalization where the inflected form of a word is used in a different grammatical category. This

process will not be used on this research; these are mostly used for general words and are hardly if ever used in terminology as they could cause ambiguity just like the semantic method, where the meaning of a word is extended to form another word. Linguistically, the functional and the semantic methods are not ideal for term formation.

Lastly, the obvious but least popular term formation process is the creation of new linguistic entities also known as neologism that will fit into that language's lexicon. This could be a totally new term or a term that is borrowed from another language and gets adapted into the new language (Sager 1990:79). Conceptually, terms are interrelated to other terms in the same field because they have similar characteristics and so, when a new term is needed, its name becomes closely related to those that already exist in that field. Thus, the naming of a new term becomes systematic in that sense; and this process is done by studying the nomenclature system of the terms that already exist (Cabre 1998:95).

This part of the analysis will further explain and analyse the systematic ways utilized to designate terms from studying the ones that already exist. Firstly, terms are meant to be unambiguous and only one term can name one concept /object but this does happen in reality as it cannot be avoided. Also, terms are interrelated, so the concepts themselves would be related in a specific field. For example, the word *isibizo* 'noun' is a simple word that represents the concept of naming things, entities, objects etc. Other concepts can

be derived from the term *isibizo* that are related to it. In English, when a morpheme of the concept is followed by a sub-division morpheme as in ‘noun stem’ then the term in Nguni would be vice versa. The sub-division morpheme would come first which is the qualifier and would be followed by the concept morpheme and attached to it would the pre-position affix, like the term ‘noun stem’ *isiqu sesibizo* with *isiqu* being the ‘stem’ and *se-* ‘of’ being the preposition and –*sibizo* ‘noun’.

In some cases, when the concept in English is preceded by the morpheme that represents the subdivision of the concept, because most African languages are agglutinative in nature the term in Nguni would be the concept *isibizo* with the sub-division morpheme *-nje* suffixed to it. For example, the term, ‘common noun’ would be *isibizonje.* What can be noticed is that related terms are put together and they usually fall under the same linguistic aspect, which makes it easier to name them as the concepts they represent appear under the same umbrella. For example, the following terms fall under the syntax category and that means they have to do with the creation of sentences and therefore this makes it easier to analyse their context. This also means that the chances of a term being repeated are very slim as these terms represent completely different concepts and this also makes it easier for the harmonisation process because the terms are already sorted into the categories that they fall into in this context.

Noun – isibizo
Noun Stem – isiqu sesibizo
Noun Root – ingcambu yesibizo
Noun Class - ihlelo lezibizo
Noun Prefix - isifakelo sangaphambili sesibizo
Noun Phrases – amabinzana esibizo
De-adjectival Noun – isibizo esisiphawuli

Complex Noun – isibizo esixandileyo
Compound Noun – isibizombaxa
Common Noun – isibizonje
Proper Noun – isibizongqo

Fig.7. Examples

Lastly, this cluster of terms shows a preposition ‘of’ being used and so the equivalents in Nguni also utilize a preposition in order to indicate the kind of *isihlomelo* ‘adverb’ it is. So, *se-* is a preposition affix that is used to show what the adverb indicates.

Adverb of Manner – isihlomelo sendlela

Adverb of Time – isihlomelo sexesha
Adverb of Place - isihlomelo sendawo

Fig.8. Examples showing relations

The examples displayed, are to show how the term formation process assists in the harmonisation process because if one can break down a term then it becomes easy to harmonise it. This means the researcher must first find the original spelling of the term in order to reveal any segments that are underspecified for example, as the Nguni languages tend to have these segments omitted. For example, the word *umuntu* 'human' in isiZulu is spelled as *umntu* 'human' in isiXhosa, and therefore one would have to go back to the noun class system to allocate its origins. This word falls under the class of humans, the *umu-* class which then displays that the word does have the *–u* which is specified in isiXhosa for example. There is quite a number of these terms and an analysis of them has been done in order to trace their origins and some of these examples have been displayed below.

There are some instances where the terms are synonyms of each other and this happens often lot when it comes to these two languages. The whole point of harmonisation is making sure that the terms are easiest to use and are to the point. For example, some terms are phrasal with three segments as in *isoluli sesixando sokwenzela* in isiXhosa 'applicative extension' whilst it is called *impambosi yokwenzela* in isiZulu. Therefore, one would have to choose the one term that is simple and one that can be easily used by the users of the languages, and this term would be *impambosi yokwenzela*. As much as the Nguni languages are agglutinative langauges when it comes to terminology one has to be careful so as to not have a lot of phrasal terms as the meaning could easily get lost in translation so the shorter, the better.

5.5. Conclusion

This section has presented the various patterns that occur in the word formation process and most importantly, how harmonisation is done. It shows how these patterns are used to form new words, deconstruct ones that already exist in order to reveal their origins and classify the words into their respective linguistic categories.

CHAPTER 6

6. Conclusion

6.1 Findings

The main challenge in this research was finding readily available terminological units in both languages; therefore this meant that the researcher needed to create new terms first before considering harmonisation. The research also displays that new terminological units can be created in isiXhosa and isiZulu because there is a sizable number of terms that already exist in the different fields and therefore new ones could be derived from the old ones. But, the focus was on the actual harmonisation of terms and therefore, the ones that already exist were harmonised accordingly using the nomenclature analysis in order to come up with the best terminological unit. This involved studying each words' origin, how it related to others and even breaking down each syllable in order to identify similarities between the words and/or the sounds. The analysis also included researching the meaning of each word in order to find its truest meaning and comparing both meanings in order to choose the one that best describes the term.

Another highlight for this research was the similarities within these two languages. Most of the terms that do exist in the two languages are basically synonyms of each other.

Therefore, it was easier to harmonise them because what needed to be done was just to find one that is a better description of the concept compared to the other. On the other hand these terms only differ in one segment, in most cases its one sound which again proves that these two languages are very similar to each other and can be harmonised. When it comes to the attitude of the speakers towards harmonisation which was covered in the mini survey, it shows that some people are open to exploring new ventures when it comes to the development of indigenous languages.

6.2 Recommendations for further research

As much as the research was feasible, it is time-consuming requires diligence as well as ability to focus on each word and do an analysis on each word without losing track of the work. A team of language expects would be needed to do the different parts of the analysis in order to have a well co-ordinated and coherent process. As an individual conducting the research, I had to create a system that would work for me in order to not get confused. I would suggest that terms to be grouped according to their function and word categories; one would find that there are some correlations between the words and that would make it easier for the researcher. Another way would be to harmonise terms according to the specific fields, because again, words that have a relation towards each other are easy to analyze. Lastly, the researcher would have to be neutral and not biased when it comes to the languages being worked with, as it can be very easy for

one to be easily swayed into favoritism. As an isiXhosa language speaker for example, I had to constantly remind myself that my language is not superior than isiZulu and therefore I should treat them as equals and not pick the isiXhosa version of the terms without analyzing both the terms in order to see both their origins. Finally, it would be key to work with the terms that already exist and are being used by the speakers instead of creating completely new terms as this could potentially confuse the language speakers.

The most important concern about the harmonisation concept has been for the languages to not lose their authenticity especially the spoken language, hence the focus of this study is on written language. This means the written language should be standardized while the language speakers can still keep their dialects when speaking but at the same time be literate in the standardized versions, which can assist in education, the mass media, politically and economically. One of the issues raised in the survey is that speakers are fearful of losing their languages or the authenticity of the languages should they be harmonised. The participants understood some terms but needed help with others and I view this as a challenge that faces any language because when a speaker has their first encounter with a term, they sometimes need to look up the definition especially if it is related to a specific field.

To conclude, no research is perfect, and therefore it was inevitable that challenges woul

be encountered and that there would be areas that could be improved on by the researcher. However, the existence of challenges and restrictions does not mean this kind of research should be neglected altogether.

6.3 Conclusion

This research aimed to create harmonised Nguni terms as a contribution to the development of indigenous languages at tertiary institutions. Based on the qualitative method that was used in the collection of the terms that do exist, it has been evident that terminology in Linguistics for African Languages still needs to be developed. The results display that harmonisation is indeed possible between the two languages that were selected for this research.

It is evident that in the education system there is space for African languages, which can be used to improve the education experience of most black students. This can in turn improve the education system, and the pass rate of black students at both the primary and secondary levels of schooling and at tertiary level. The literature demonstrates that most black students suffer academically because they struggle to decode material in English and this puts them at a disadvantage in comparison to their peers how are English/Afrikaans first languages speakers. Many scholars have engaged with these issues and have made suggestions on how this obstacle could be

dealt with in order to develop indigenous languages. The main question which has been asked for decades is whether these African languages are adequate to fulfill this task. With the number of African languages in South Africa, it has been difficult to develop all of them simultaneously because of the lack of funds and the personnel to do the job. In this regard, the South African government has failed dismally and many scholars have written extensively on ways in which language development in South African can be aided.

Language harmonisation is one of the possible solutions which could assist in the problem of language development in South Africa and this paper displays that, it is indeed possible for languages to be harmonised. Harmonisation in this context means taking written languages that are mutually intelligible and collapsing them into one language that can serve the different language speakers of that particular cluster such as the Nguni group for example, with isiXhosa, isiZulu, Ndebele and Siswati. This is a very contested topic in language development because many scholars believe that some languages would be marginalized whilst other scholars are concerned about language purity. On the other hand, I believe that it could make a huge difference in the country especially for the large number of people who are illiterate in English and could be used in the education system, official documents, parliamentary speeches and the mass media. The main aim should be reaching as many people as possible in their indigenous languages rather than in most people's second language, which is English.

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Appendix A.

1.Harmonised data.

English	**IsiXhosa**	**IsiZulu**	**Nguni**
Active	isisebenzi	isisebenzi	isisebenzi
Adjective	isiphawuli	isiphawulo	isiphawuli
Adjective phrase	ibinzana lesiphawuli	ibinzana lesiphawuli	ibinzana lesiphawuli
Adjective Stem	isiqu sesiphawuli	isiqu sesiphawuli	isiqu sesiphawuli

Adposition	isihlomelo binzana-njongosenzi		isihlomelo binzana-njongosenzi
Adverb	isihlomelo	isandiso	isandiso
Adverb of Manner	isihlomelo sesimo	isandiso sesimo	isandiso
Adverb of Place	isihlomelo sendawo	isandiso sendawo	isandiso
Affix	isifakelo	isifakelo	isifakelo
Agreement	isivumelwano	uvumelwano	isivumelwano

Allomorph	amalungu angafaniyo entsingiselo-gama		amalungu angafaniyo entsingiselo-gama
Allophone	amalungu angena ntsingiselo		amalungu angena ntsingiselo
Alveolar	ontsinini	ontsinini	ontsinini
Anaphor	isolathi	isolathi	isolathi
Anaphora	isolathisi	isolathisi	isolathisi
Antecedent	isandulela	isandulelo	isanduleli

Argument	isiyamani senzi		isiyamani senzi
Articulator	isicacisi		isicacisi
Associative	isinxulumelanisi		isinxulumelanisi
Bracketing Convention	isithethe sobiyelo		isithethe sobiyelo
C-Selection	ukhetho luka-C		ukhetho luka-C
Cardinal Vowel	isikhamiso esalathayo		isikhamiso esalathayo

Categories	izigaba	izigaba	izigaba
Circumfix	isima-macala		isima-macala
Clitic	isishunqulwa		isishunqulwa
Closed Lexical category	isigaba solunganiso magama oluvalekileyo		isigaba solunganiso magama oluvalekileyo
Coda	ilungu eligqibelayo		ilungu eligqibelayo
Common Noun	isibizo-nje	ibizonje	isibizonje

Complement	isizalisi		isizalisi
Complementizer Phrase	ibinzana lesongezo		ibinzana lesongezo
Complex	isixandi		isixandi
Complimentary Distribution	usasazo olungqamanayo		usasazo olungqamanayo
Compound Noun	isibizo-mbaxa	ibizo-mbaxa	isibizo-mbaxa
Copulative	isibanjalo	isibanjalo	isibanjalo

Deadjectival Noun	isibizo esisiphawuli	isibizo esisiphawuli	isibizo esisiphawuli
Declarative	isibhengezi		isibhengezi
Default Verb Suffix	isimamva sesenzi esimi		isimamva sesenzi esimi
Deideophonic Verb	isenzi esilungu mabini		isenzi esilungu mabini
Deletion	ukucinywa		ukucinywa
Derivation	isakhigama	isakhigama	isakhigama

Diminutive	isinciphiso	isinciphiso	isinciphiso
Discourse	inkulumo		inkulumo
Disyllabic	elimalungu-mabini		elimalungu-mabini
Elission	ukushiya		ukushiya
Enclitic	isishunqulwa		isishunqulwa
Enumerative	isibali		isibali
Enumerative Phrase	ibinzana lobala		ibinzana lobala

Enumerative Prefix	isimaphambili sesibali		isimaphambili sesibali
Enumerative Stem	isiqu sesibali		isiqu sesibali
Enumerative Suffix	isimamva sesibali		isimamva sesibali
Epenthesis	ufako lwesandi		ufako lwesandi
Free Variation	iyantluko ezihambelayo		iyantluko ezihambelayo

Glide	isandi esishelelayo		isandi esishelelayo
Glide Formation	ukhwakha isishebelezi		ukhwakha isishebelezi
Homograph	umabizwafane	umabizwafane	umabizwafane
Homonym	umabizwafane	umabizwafane	umabizwafane
Homorganic Assimilation	ufaniso lwamaqabane anokufana		ufaniso lwamaqabane anokufana
Hyponym	isingaphezulu		isingaphezulu

Infix	isimaphakathi		isimaphakathi
Inflection	isitshintshigama		isitshintshigama
Intensive Extension	isoluli sesixando esigxinisisayo		isoluli sesixando esigxinisisayo
Juxtaposed Vowels	izikhamiso ezithelekiswayo		izikhamiso ezithelekiswayo
Labialization	isilebiso		isilebiso
Levels	amanqanaba		amanqanaba

Lexical Nodes	ulungelelaniso lwendibano yamalungu		ulungelelaniso lwendibano yamalungu
Locative Prefix	isifakelo sangaphambili sesalathandawo		isifakelo sangaphambili sesalathandawo
Locative Stem	ingcambu yesalathandawo		ingcambu yesalathandawo
Locative Suffix	isifakelo sangemva sesalathandawo		isifakelo sangemva sesalathandawo

Margin	umphetho	umphetho	umphetho
Meronym	isalathi		isalathi
Morpheme	intsingiselo-gama		intsingiselo-gama
Morphotactics	ulwandelelwano lwe ntsingiselo-gama		ulwandelelwano lwe ntsingiselo-gama
Nominalizer	isibizo sokonyulwa		isibizo sokonyulwa
Nominalizing suffix	isimamva sesibizo sokonyulwa		isimamva sesibizo sokonyulwa

Noun	isibizo	ibizo	isibizo
Noun Class	ihlelo lezibizo	ihlelo lamabizo	ihlelo lezibizo
Noun Phrases	amabinzana esibizo	amabinzana ebizo	amabinzana esibizo
Noun Stem	isiqu sesibizo	isiqu sebizo	isiqu sesibizo
Nucleus	ilungu elisisiqu		ilungu elisisiqu
Object	injongosenzi		injongosenzi
Object Verb	isivumelwano senjongosenzi		isivumelwano senjongosenzi

Agreement	nesenzi		nesenzi
Oblique – injongosenzi ebucala	injongosenzi ebucala		injongosenzi ebucala
Onset – ilungu elisisanduleli	ilungu elisisanduleli		ilungu elisisanduleli
Open Lexical Category	isigaba solunganiso magama oluvulekileyo		isigaba solunganiso magama oluvulekileyo
Passive	isinyanzeli		isinyanzeli

Passive Extension	isoluli sesixando sokwenziwa		isoluli sesixando sokwenziwa
Passivization	unyanzeliso		unyanzeliso
Passivizer	isinyanzelisi		isinyanzelisi
Perfective	isipheleli		isipheleli
Phone	isandi sokuthehtha		isandi sokuthehtha
Phoneme	isandi esinye segama		isandi esinye segama

Phrases	amabinzana	amabinzana	amabinzana
Positive	isivumi		isivumi
Possessive Phrase	ibinzana lesimnini		ibinzana lesimnini
Possessive prefix	isimaphambili sesimnini		isimaphambili sesimnini
Possessive stem	isiqu sesimnini		isiqu sesimnini
Postposition	isimamvanjongosenzi		isimamvanjongosenzi

Precedent	isizekeliso		isizekeliso
Predicate	isivisa		isivisa
Preposition	isimaphambili njongosenzi		isimaphambili njongosenzi
Proclitic	isishunqulwa		isishunqulwa
Progressive Assimilation	isixando sokuqhubela sofanisa		isixando sokuqhubela sofanisa
Proper Noun	isibizo-ngqo	ibizoqho	isibizongqo

Question	umbuzo	umbuzo	umbuzo
Reduplicant	isiphindaphindwa		isiphindaphindwa
Reduplication	uphindaphindwano		uphindaphindwano
Reduplicator	isiphindaphindi		isiphindaphindi
Referent	isibhekiso		isibhekiso
Referential Chain	umxokozelwano wezibhekiso		umxokozelwano wezibhekiso
Reflexivization	isizenzekelisi		isizenzekelisi

Relative	isibaluli		isibaluli
Relative Phrase	ibinzana lesibaluli		ibinzana lesibaluli
Relative prefix	isimaphambili sesibaluli		isimaphambili sesibaluli
Relative Stem	isiqu sesibaluli		isiqu sesibaluli
Relative Suffix	isimamva sesibaluli		isimamva sesibaluli
Reversive Assimilation	isixando sokuphendulela		isixando sokuphendulela

	sofaniso		sofaniso
S-Selection	ukhetho luka - S		ukhetho luka - S
Semantics	isichazukuthi	isichazukuthi	isichazukuthi
Singular	isinye	ubunye	isinye
Statement	ingxelo		ingxelo
Stative	ubume	ubume	ubume
Stop	isandi esimayo		isandi esimayo

Subject	intloko	intloko	intloko
Subject-Verb-Agreement	isivumelwano sentloko nesenzi		isivumelwano sentloko nesenzi
Subjunctive mood	lolandelelwano		lolandelelwano
Substitution	itshintshanisa		itshintshanisa
Syntactic categories	udidi lombumbo		udidi lombumbo
Syntactic Trees	imithi yobumbo		imithi yobumbo

Tiers	izaleko		izaleko
Trisyllabic	elimalungu- mathathu		elimalungu- mathathu
Velarization	isithwathiso		isithwathiso
Verb	isenzi	isenzo	isenzi
Verb Phrases	amabinzana esenzi	amabinzana esenzi	amabinzana esenzi
Verb Stem	isiqu sesenzi	isiqu sesenzi	isiqu sesenzi

Voice	ilizwi	izwi	ilizwi
Word categories	izigaba zamagama	izigaba zamagama	izigaba zamagama

Appendix B

2. Created terms

Do not have equivalents in isiXhosa	**New created terms**
Active	Isisebenzi

Anaphor	Isolathi
Anaphora	Isolathisi
Articulator	Isicacisi
Associative	Isinxulumelanisi
Cardinal Vowel	isikhamiso esalathayo
Default Verb Suffix	isimamva sesenzi esimi
Deideophonic Verb	isenzi esilungu mabini

Elission	Ukushiya
Homograph	Umabizwafane
Homorganic Assimilation -	ufaniso lwamaqabane anokufana
Hyponym	Isingaphezulu
Immediate Tense	ixesha elikhawulezileyo
Intensive Extension	isoluli sesixando esigxinisisayo
Juxtaposed Vowels	izikhamiso ezithelekiswayo

Labialization	Isilebiso
Meronym	Isalathi
Morphotactics	ulwandelelwano lwe ntsingiselo-gama
Passive	Isinyanzeli
Passivization	Unyanzeliso
Passivizer	Isinyanzelisi
Perfective	Isipheleli

Phonotactics	ulandelelwano lwesandi esinye segama
Positive	Isivumi
Predicate	Isivisa
Reflexivization	Isizenzekelisi
Remote Tense	ixesha elikude
Stop	isandi esimayo
Velarization	Isithwathiso

Appendix C

3. Terms similar to each other

English	isiXhosa	isiZulu
Adjective	isiphawuli	isiphawulo
Agreement	isivumelwano	uvumelwano
Antecedent	isandulela	isandulelo
Assimilation	ufaniso	isifaniso
Common Noun	isibizo-nje	ibizonje

Compound Noun	isibizo-mbaxa	ibizo-mbaxa
Concord	isivumelanisi	isivumelwano
Conjunction	isihlanganisi	isihlanganiso
Coordinate Conjunction	isihlanganisi - solingano	isihlanganiso - solingano
Demonstrative Pronoun	isimelabizo sonibisa	isabizwana sokukhomba
Denominative Verb	isenzi esakhiwe kwisibizo	isenzo esakhiwe ngebizo

Fricative	isifutho	isifuthwa
Imperative	isiyalelo	isimo sokuyalela
Locative	isalathandawo	undaweni
Monosyllabic	elungu linye	ulunganye
Noun	isibizo	ibizo
Past	elidlule	edlule
Possessive	isimnini	ubumnini

Pronoun	isimelabizo	isabizwana
Proper Noun	isibizo-ngqo	ibizoqho
Semantics	isichazukuthi	okuchazisukuthi
Singular	isinye	ubunye
Verb	isenzi	isenzo
Voice	ilizwi	izwi

Appendix D

4. Terms exactly the same in both languages

English	**IsiXhosa**	**isiZulu**	**Nguni**
Affix	isifakelo	isifakelo	isifakelo
Alveolar	ontsinini	ontsinini	ontsinini
Categories	izigaba	izigaba	izigaba
Discourse	inkulumo	inkulumo	inkulumo
Homonym	umabizwafane	umabizwafane	umabizwafane

Margin	umphetho	umphetho	umphetho
Phrases	amabinzana	amabinzana	amabinzana
Question	umbuzo	umbuzo	umbuzo
Stative	ubume	ubume	ubume
Stem	isiqu	isiqu	isiqu
Subject	intloko	intloko	intloko