

**TERM CREATION: AN ANALYSIS OF THE STRATEGIES USED IN SOME
SELECTED SHONA SPECIALISED TERMS DICTIONARIES.**

by

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DECLARATION

I, LETTIAH GUMBO, student number 50086754 declare that this thesis, entitled:

**TERM CREATION: AN ANALYSIS OF THE STRATEGIES USED IN SOME
SELECTED SHONA SPECIALISED TERMS DICTIONARIES**

is my own work and that it has not been submitted before, for any degree or examination in any other University, and that the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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ABSTRACT

This study is in the area of terminology activities in Zimbabwe and it analyses the term creation used in the following selected specialised terms dictionaries: *Duramazwi Reurapi Neutano* (Dictionary of Biomedical Terms), *Duramazwi Remimhanzi* (Dictionary of Shona Musical Terms), and *Duramazwi Redudziramutauo NeUvaranomwe* (Dictionary of Shona Linguistic and Literature Terms). The study specifically analyses and explores how terminographers together with health, music, language and literature specialists made use of their term creation skills and strategies in the creation of new specialised terms for the field of music, health and linguistics. In addition, this research takes into account the impact of factors such as culture, socio- economic, etymological purity, attitudes of the target users, language policy, as well as availability of resources on term creation. Hence, term creation is an exercise that involves many aspects and interlinked factors.

This research advances the argument that while some term creation strategies (compounding, coining and derivation) can be adequate and appropriate, however, at times; they are some which result in created terms that are rather cumbersome, vague, artificial, and difficult to master and remember. In addition, this study found out that some term creation strategies (semantic expansion and loan translations) are unproductive; that means they do not add any value on the Shona language vocabulary. Moreover, the borrowing term creation strategy was analysed on the basis of whether it is promoting and elevating the Shona language or is it undermining its value and vitality. This study emphasises the need for a collaborative approach to term creation, with terminologists, linguists, subject area specialists and target language users during the different phases of word formation processes for the collective ownership of the created term and their acceptability to the target users. This study highlights that, through good term creation strategies the Shona Language can significantly contribute to the promotion and development of Shona language in Zimbabwe. Overall, the research yields a substantial amount of information in the terminological formation processes as well as the identification of factors that can be used to improve term creation strategies in order to develop indigenous languages for use in all spheres of life. The major contribution of this study is the identification and highlighting of the major strength and weaknesses of term creation strategies as a way of developing indigenous languages. The useful findings in this study will benefit the indigenous language development and language policy planners and terminologists in Zimbabwe and other African languages in similar situations.

The significant amount of information about term creation that was used in the analysis of term creation in the three dictionaries was solicited from questionnaires and interviews that were carried out with linguists, the specialised dictionary compilers, music students, medical students and high school students doing Shona language and literature subject in Zimbabwe. More information on the term creation was done through content analysis of the three specialised dictionaries and the present researcher's own experiences as a former Shona high school teacher, linguist and above all as a Shona language speaker.

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KEY WORDS

Term creation strategies, borrowing, loan translation, compounding, coining, derivation, semantic expansion, acrimony, transliteration, phonologisation, rephonologisation, corpus, dialectal variation, descriptiveness, prescriptiveness, functionality etymology purity, specialised terms, linguistic considerations, cultural considerations, standardisation, scientific and technical terms, language development

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LIST OF ABBREVIATIONS

DR -*Duramazwi Remimhanzi* (Dictionary of Shona Musical Dictionary)

DRN- *Duramazwi Reurapi Neutano* (Dictionary of Biomedical Terms)

DRU -*Duramazwi Redudziramutauo NeUvaranomwe* (Dictionary of Shona Linguistic and Literature Terms)

GTT- General Theory of Terminology

CTT- Communicative Theory of Terminology

MSU – Midlands State University

GZU – Great Zimbabwe University

UZ – University of Zimbabwe

Chapter 1: INTRODUCTION

1.1 Background

This study analyses term creation strategies in the Shona specialised terms dictionaries. The selected Shona specialised dictionaries are *Duramazwi Reurapi Neutano*, (Dictionary of Biomedical Terms, Mpofu, et al, 2004), *Duramazwi Remimhanzi*, (Shona Musical Terms Dictionary, Mheta 2005) and *Duramazwi Redudziramutauro neUvaranomwe* (Dictionary of Shona Linguistic and Literary Terms, (Chimhundu and Chabata, 2007). Term creation is the creation and giving of new meaning to words. “It is concerned with the collection, the description, the processing and the presentation of terms (Sager 1990:2). A term is regarded as a word or words or a combination of words that express a scientific or technical concept and a lexical item belonging to specialised areas of usage of one or more languages (Rey (1996). In addition, the International Standardization Organization, (ISO 1087), states that, a term is the linguistic denomination of a concept, or is a “designation of a defined concept in a special language by a linguistic expression. Term creation can therefore, be regarded as a linguistic mechanism that can be used to develop languages so that they can be used effectively in all spheres of life. On the other hand, a specialised terms dictionary is a dictionary in which the language of description is the same as the language being described, that is, the macro structural information is given in the language from which the entry words are drawn (Bejoint 2000 :38). Therefore, it is a dictionary written using one and the same language. The assumption is predicated on the axiom that people can best participate, create and innovate through use of their indigenous languages (Mutasa, 2006:63). Specialised terms dictionaries therefore, are seen as tools of empowerment in the context of colonial marginalisation. Furthermore, they help in the Science and Technology development by making knowledge more accessible by imparting it in the languages which people understand better.

Chimhundu (2005:2) postulates that “term creation and the making of specialised dictionaries have a particularly powerful impact during the language raising process”. This contention is valid because the Shona language, one of the oldest Bantu languages spoken in the northern parts of Zimbabwe, has an inferior status to the English language, because it was along with other Zimbabwean indigenous languages, marginalised by the advent of colonialism (Vambe,

2006). Shona school readers did not focus on technical and scientific knowledge thus creating a situation where the Shona language was continuously dependent on the English language for scientific and technical terms. As a result of this colonial legacy, African languages now lie far behind English in the areas of science and technology. This has been highlighted by Ngugi (1994: 14) when he said that, "the language of the African child's formal education is foreign, the language of the books he reads is foreign and this has left the children without a language in the classroom" Consequently the Shona language in particular does not have a broader use or user based science and technological terms, and this has prompted the use of term creation strategies such as borrowing, coining, derivation, compounding, and loan translation and semantic expansion to produce specialised dictionaries that will help fill in the gap.

In addition, linguists contend that there is a great need to develop indigenous languages for use in all spheres of life (Chimhundu 1998, Mutasa 2002, Magwa 2006, Mutasa 2006, Vambe 2006). Chimhundu as cited in Nkomo (2008) remarked that "a language cannot raise itself like self-raising flour." As such, Chimhundu implies that linguists need to take action to develop their own indigenous languages. Thus term creation is being engaged in Zimbabwe by terminologists to harness indigenous languages to be major vehicles of scientific and technological dissemination and development. Mufwene (2001) believes that the survival of any language depends on its strength to provide socio-economic survival to its users. It is against this background that great attention is being given to corpus planning, in many developing nations and including Zimbabwe. This is supported by Magwa (2006:126) who postulates that:

The process of spontaneous term creation has been greatly widened and accelerated during the last half century owing to political, commercial and industrial development ... which creates pressure for term creation.

To date, the Shona language has undergone dynamic circles of change and expansion, as it has, to some considerable extent, explored and devised new terms and semantics in the technical and scientific domains. Although there is no government department that deals with language revalorisation, Zimbabwe has the domain of national language committees, which are comprised of academics and there are other concerned parties such as African Languages Research Institute (ALRI). Terminographical, there have been some considerable achievements for the Shona language as specialised dictionaries in the form of general and specialised dictionaries have been produced. ALRI has made inroads in the promotion and

elevation of Shona and Ndebele indigenous languages. To date they have produced general dictionaries in the form of *Duramazwi RechiShona* (General Shona Dictionary, Chimhundu, 1996), *Duramazwi Guru RechiShona*, (Advanced Shona Dictionary, Chimhundu, 2001) and *Isichazamazwi SesiNdebele* (General Ndebele Dictionary, Hadebe et al, 2001). They have also produced specialised terms dictionaries which were analysed in this study; *Duramazwi Reurapi Neutano*, (Dictionary of Biomedical Terms,), and *Duramazwi Remimhanzi*, (Shona Musical Terms Dictionary,), *Duramazwi reDudziramutauo neUvaranomwe* (Dictionary of Shona Linguistic and Literary Terms). ALRI is continuing on some of its initiated dictionaries, which include the Revised and Enlarged Ndebele Dictionary (REISN), the Shona Children's Dictionary, (SCD) and a dictionary of Agricultural Terms. One can conclude that the effort of the compilers of these Shona specialise dictionaries is only a beginning of an extensive exploration of Zimbabwean indigenous language needs. The production of these specialised terms dictionary is commendable as it maintains and advances the status of the Shona language.

Klein (2007:418) remarks that:

the dictionaries that are being compiled in modern day are compiled mainly by and for first language speakers, the dictionaries do not necessarily intend to meet the real needs of the users but also to develop pride and confidence in the indigenous languages.

Indeed the lexical activities that are being carried out to develop the indigenous languages in Zimbabwe show that all languages, including Shona were created equal, and are capable of expressing technical and scientific knowledge up to any level of abstraction.

1.2 Statement of the problem

Although the elaboration and modernisation of African languages would enable them to be used as languages for the teaching of African languages in their own medium, the necessary terminology to ensure efficiency in this process is lacking. English and other foreign terms continue to be adapted and adopted where indigenous terms are deficient. Thus, this study notes the challenge faced by indigenous languages in Zimbabwe and their need to be developed to their full capacity while at the same time ensuring that their developmental strategies do not form a barrier to their access and success. It can be noted that colonialism

created two linguistic; the first was the forceful imposition of European languages which has created what Robinson (1996:6) terms the “sociocultural dichotomy of mixed or undefined identity” and the second was the redefinition of the roles of African indigenous languages (Makoni and Meinhof, 2003) which basically secludes them to a range of narrow indigenous home, domestic and cultural functions of no real impact to nation state. Hence, there is need for mental decolonisation of the speakers of the Shona language in such a way that any efforts to develop the language receive a positive attitude; such that the created specialised terms are acceptable to the target users. This is the major reason behind the analysis of the term creation strategies used in the specialised dictionaries. In this analysis the created terms are scrutinised for their appropriateness, adequateness, efficiency and effectiveness. Thus, the rationale behind this study is firstly to identify term creations strategies used by the selected specialised dictionary compilers and secondly to describe, explain, scrutinise and analyse how term creation strategies were employed by the compilers in the Shona specialised terms dictionaries. The big questions are; is there an extensive scientific and technical vocabulary available to realise the goal of Shona language development? Are the created specialised terms in the dictionaries user friendly? Can the loan translation and the borrowing term creation strategies convey ideas and express elegantly the concepts the Shona specialised dictionaries compilers want to capture in the source language? Table 0-1 below gives an example of borrowed musical terms from the English language taken from *Duramazwi Remimhanzi* (DR):

acapello	<i>akapero</i> p 11
afrobeat	<i>afurobhiti</i> p 1
baritone	<i>bharitoni</i> p 16
country	<i>kandiri</i> p 145
amplifier	<i>Ambirifaya</i> p 1

Table 0-1 : Showing examples of rephonologised musical loan terms (Mheta, 2005)

From the example given in the Table above, one can question whether the borrowing term creation strategy results in contaminating the Shona language or not? Furthermore, one can question whether the borrowing and the loan translation term creation strategy result in the creation of terms that are meaningless and ‘Shonalised’ English terms? The other questions are; does the borrowing term creation strategy perpetuates the hegemony of the English language especially in Science and technology? Can the indeginised term creation strategies used adequately and sufficiently to create terms that can uplift the status of he indigenous

languages? Is it possible that the localised term creation efforts may be too artificial for example, the loan translated terms in Table 0.2 below:

guitar waist	<i>chiuno chegitare</i> p 23
accentuation	<i>Chiratidzasimbaradzo</i> p 22
clef	<i>Chiratidzachidenhamhanzi</i> p 21

Table 0-2: Showing loan translated terms that may face rejection by target users

Hence, it can be asserted that direct borrowing from European or other languages should be done with caution since such borrowed words do not convey any meaning initially and such a method produces clumsy sounding words (Makaudze, 2005:5). It can also be declared that inadequate created terms from whatever term creation strategy may end up being exclusive and short-lived and may not be acceptable to the target users, and above all, may face rejection by the target users. Hence, the quality and adequateness of a created term is a key factor in terminology. Terminographers should therefore have the ultimate goal of creating terms that are clear, understandable, adequate and acceptable to the target users.

1.3 Aim of the study

This study is aimed at exploring and critically analysing the adequacy and potential of term creation strategies as a mechanism for promoting the growth and development of indigenous African languages. This was done through a thoughtful study, identification and critique of the term creation strategies that were used in three selected Shona specialised terms dictionaries, which are *Duramazwi Reurapi Neutano*, (Dictionary of Biomedical Terms) *Duramazwi Remimhanzi*, (Shona Musical Terms Dictionary) and *Duramazwi reDudziramutauo neUvaranomwe* (Dictionary of Shona Linguistic and Literary Terms) so as to ascertain their contribution to the raising and development of the Shona language. This aim was pursued with the aid of the following specific objectives:

1.4 Objectives of the study

- a) To analyse the adequateness and nature of term creation strategies used in the Shona specialised terms dictionaries.

- b) To explore factors influencing the dynamics of term creation in the Shona specialised dictionaries.
- c) To assess the user perspectives on whether the created terms in the specialised dictionaries satisfy their needs.
- d) To establish the role of term creation in language development.
- e) To advocate for a workable and sustainable term creation and specialised dictionary making unit in Zimbabwe.

1.5 Research questions

This study seeks to provide answers to the following research questions;

- a) Are the term creation strategies and the created terms in the Shona specialised terms adequate to facilitate indigenous languages development?
- b) To what extent do the Shona specialised dictionaries compilers adhere to the principles and guidelines of term creation?
- c) What strategies are used in addressing the issue of lexical inadequacies and the problems encountered during term creation activities for the Shona specialised dictionaries?
- d) What is the purpose of term creation in as far as language development is concerned?

1.6 Significance of study

This study hinges upon the premise that national development is based upon communicative efficiency of the indigenous languages of a country. This is supported by Chimhundu (1997) who is of the view that development of a nation emanates from facilitation of language development and the dissemination of that knowledge. In as much, this researcher strongly believes that for a nation to develop, its languages should be able to express scientific and technological concepts to keep pace with global trends. Indigenous language awareness, respect and its promotion, therefore, are a must to meet the greatest needs of this cognitive demand and at the same time falling in step with the on-going language raising the world over. In this regard the specialised Shona dictionary has come to play a central role than ever in language development. The importance of this notion is aptly put by Vambe, (2006:8), who declares that, “language is developed through terminological development”. The

researcher strongly believes that it should be the concern of all Africans and Zimbabweans in particular to develop indigenous languages, failure of which will render them totally alienated and entangled in a world of their own. It is against this background, that this study is an analysis of term creation strategies used in the Shona specialised dictionaries, to evaluate their adequateness and effectiveness in developing the Shona language. It is a fact that terminology is becoming increasingly important every day, and therefore, specialisation and innovation in all subject fields necessitates careful engagement of term creation strategies that are capable of expressing adequately and accurately scientific and technological terms in indigenous languages.

Moreover, this study is an academic effort that aims to stimulate awareness and consciousness among linguists, students and societies to reject being westernised through language use. Vambe (2006:8) supports this as he puts it that language is a carrier of culture, values, ideas and social ideals... Therefore, a preserved language is a preserved culture and the opposite of this is true. A language is an enclave of a heritage and in losing it to others is like submitting oneself to cultural and mental slavery (Bukari, 2011). Hence, the ability and power to develop indigenous languages through term creation is one way of promoting their value as well as its speakers' cultural and social dignity. Basing on this postulation, this study overallly upholds the fact that through language use people can liberate themselves from Western bondage. Indigenous languages were capable of expressing scientific and technical concepts in pre-colonial Africa, and therefore it can be professed that they are capable of expressing advanced concepts of science and technology in the contemporary society. Hence, the need to analyse the contribution or hindrance of term creation strategies in Shona language development, of which it is the main focus of this study. This study also analyse whether the created terms reflect aspects of Zimbabwean indigenous thinking, preservation, performance and related phenomena enshrined in the Shona language.

The study is a revelation to those who may want to expand their knowledge in Shona terminography in view of language raising and development. It gives an insight into how language development may be accounted for in a multidialectal language situation. As such, the researcher believes that language development can be achieved through standardisation of specialised terms, which should encourage the teaching, and learning of the indigenous languages in all spheres of life. In developing a language, terminographers should promote the implementation of term creation strategies that will promote indigenous language usage for example; the production of Shona specialised dictionaries that are used in all spheres of

life, including the school so as to aid the growth of the Shona lexicon. Thus, term creation becomes a vehicle of promoting the status of any language to describe and express any concept, be it scientific or technical. It is against this background that the study gave an unrivalled opportunity to highlight the importance of term creation in uplifting of marginalised languages of Zimbabwe like Shona and to call for their status restoration. According to Mutasa (2006:7):

teaching materials in African languages is one of the major constraints or hurdles in the use of African languages in the teaching of all subjects...there is little that the post-colonial government has done as preparatory measure to champion the use of African Languages in the education domains at all levels.

This then, is one of the most important justifications for putting greater emphasis in the need for the development and use of adequate and appropriate term creation strategies. This will ensure the development of adequate and appropriate Shona scientific and technical terms by specialised dictionary compilers.

It is discouraging to note that African languages are being taught in some higher institutions of learning (for example, Midlands State University) through the medium of English. This means that, the Shona language is being marginalised, because when students and teachers use the a foreign language to acquire education, that then contributes significantly to the growth and uplifting of the status of that language in all spheres of life. The underdevelopment of the Shona languages is now used as a reason and an excuse for not using it as a medium of instruction in schools, hence the need to develop the Shona corpus through term creation. If nothing is done by Zimbabweans and Shona speakers in particular, the English language will remain the language of teaching and learning for as long as teaching materials are not adequately developed in those languages (Mutasa 2006). Therefore, there is greater need to develop adequate specialised terms that would enable the growth of the Shona language as media of instruction from primary up to higher education level, to make them have “extensive functional duties that will enable the language to maintain a currency proportionate to keeping them alive rather than in the archives”(Anchimbe, 2006:100). Chumbow (1980), Alobwede (1998),Echu (1999)Mutasa (2006) strongly call for these African indigenous languages to be used as a medium of instruction in schools.

China, Japan, and Malaysia are very good examples of Eastern countries that have successfully developed indigenous languages, such that they are used in both public and

private sectors. Therefore, basing of the models in these countries, the researcher contends that language development through term creation is not a worthless exercise. The researcher believes that, the time has come to compensate for the indigenous languages deficiency through teaching and encouraging their wider use in all spheres of life. In as much, according to Nkomo (2008) Afrikaans scholars in the 1950s contributed significantly to the development of the Afrikaans language and its terminology through term creation. This partly made it possible for the language to be used on the same scale as English in South Africa. Zimbabwean scholars can pluck a leaf from that South African effort and endeavour.

Participants in this research valued this study as an essential purely academic exercise, which can have a big impact in the development and empowerment of the Shona language community. Thus the researcher laboured to ensure that the coverage of the research study was adequate and identified term creation strategies that accurately designate scientific and technical concepts that are acceptable within the Shona language community. This then, would therefore reduce the likelihood of the production of unuseful specialised terms dictionaries in Zimbabwe. Prah (2003) points out that all developed societies in the world have used their own indigenous languages from beginning to end for education as he noted that "somehow when it comes to Africa the logic breaks down and all sorts of reasons are found ... why in the case of Africa this should be different" As Prah (1995) has noted, no society in the world has developed in a sustained and democratic fashion on the basis of a borrowed or colonial language.

1.7 Literature review

A literature review is a description, summarisation, evaluation and clarification of the literature relevant to a particular field or topic (Lane, 1996). In other words, it provided an overview of the field of inquiry showing how prevailing ideas fit, agree or differ from this study. This study by virtue of its major thrust, reviewed literature that provided a relevant background and insight to the topic under study, which is to analyse term creation strategies used in specialised terms dictionaries. The literature on term creation and language revitalisation generally will form the background of this study. The researcher used evidence drawn from these literatures and fieldwork research as presented in Chapter 2. One common way to approach a literature review is to start out broad and then become more specific. It can

be postulated that a good research begins at its broadest point focusing as the analysis continues until it concludes at the point at which the research focus is established. The funnel approach thereby guided the researcher to focus on broad issues related to term creation the world over and then narrowed it to the specifics of the study. This gave the study some breadth and depth of relevant information for the study, identifying pitfalls and gaps which may need filling. Basing on this notion, new discoveries therefore, do not materialize out of nowhere; but they build upon the findings of previous experiments and investigations. Hence, Muranda (2004:27) argues that in research, every subject tends to have some outstanding researchers whose works are commonly quoted because their views form ground rules for the subject". Many scholars of African languages and linguists in Zimbabwe and abroad have already shown an interest in the study of terminology and they have been dealing with the issues of language elaboration and revitalisation for some time now. Some of the literature discusses strategies of term creation strategies such as borrowing, compounding, derivation, acronyms, shortening, abbreviation, semantic expansion, loan translation and coinages. The literature identified the strengths and shortfalls, challenges of these term creation strategies so as to give an effective analysis of research findings.

The literature review process for this study was divided into three categories; literature from scholars that are of non-African descent, then literature by scholars of African descent and finally narrowed to literature by scholars of Zimbabwean descent. This gave the researcher a focus to the research analysis, as similar studies are grouped together. Charamba (2012) argues that the sub-categorisation of scholars of African descent into two is justified on the fact that Zimbabwe is the microcosm case study for the research while post-independence Africa as a whole is the macrocosmic case study for the same research.

Western countries linguists remain far less committed to terminology activities than their counterparts in other counties (Strehlow and Wright, 1993:2) and hence very few English speaking linguists have taken interest in terminology activities (De Cluver 1980:53). The researcher therefore focused on linguists from Asian, North and South American countries such as Canada, India, China, Malaysia, and Japan which are formerly colonised countries. These linguists provided an overview of language development efforts around the world, enabling the researcher to get an insight on the interactive aspects of language development the world over. Premsrirat and Malone (2003) and Coronel-Molina (2011) examine what language revitalisation and planning mean both as developments on their own and as part of the nation-building and the serious obstacles the programmes face in Asia. The Asian

scholars argue that language development activities must precede and contribute to the literacy and mother tongue education components as language revitalisation program. Bauman (1980) and Burnaby (1996) urge practitioners in applied linguistics and minority language education to develop participatory ways in the process of language development. These include collaborations in designing or revising appropriate writing systems for the languages and for promoting mother tongue literature. Spencer (1991) provided various term creation strategies which can be utilised by terminologists for language development efforts. Denzer-King (2008), Brisson (2009) and Ahmad (2011) confirm that in vocabulary expansion, dictionaries are typically an early strategy for standardising a previously unwritten language. Their studies provided an overview of language development efforts in their respective countries emphasizing the interactive aspects of language development and the facilitation of minority language literature development. To achieve goals of language development, they emphasise that it is necessary to take draconian measures at all levels, to unite, articulate and multiply these efforts.

Premrirat and Malone (2003), Greymorning (1999) also argue that language development involves teaching, cultivating, strengthening and disseminating a language to make it a vital instrument of communication. Felber (1980), Sager (1990), Gilreath (1993) Valentois (1997) provided literature about terms as the subject matter of the field of study, and they explained the relationships that they have with the concepts that they represent. Their literature show that the study of terminology does not end with naming concepts but also includes collection, description and presentation of terms in a way that displays the relationships between concepts and terms of particular subject fields. Wuster, (1955) and Cabre (1999) provided the literature about the theory of terminology, and how the theories which guide terminographers in the creation of specialised terms. The study drew a lot of information on these theories and among them theories from renowned scholars such as Felber (1984), Sager (1990) and Cabre (2002). The theoretical framework of this study is given in Chapter 3. It therefore served as a guideline to this research.

Many academic papers on language development and term creation have been written by African scholars calling for the greater use of African languages in all facets of communication in Africa (Mazuruse and Mberi 2012). This is a counter response to the colonial legacy which has rendered African languages impotent in many African countries. Countries like South Africa, Tanzania, Cameroon, Kenya, Uganda, and Ghana among others

have made significant contributions in indigenous languages development. Hence, literature from linguists in these countries was reviewed by the researcher. Nkomo (2008) argues that term creation is a tool of revitalising, empowering and accommodating African languages. Term creation help in the democratisation of science and technology by making this knowledge more accessible in the languages which people understand better. Onyango (2005) examines issues that emerge in the attempt that have been made in national language policy on language terminology in Kenya by linguists and scholars. Onyango (2005) views terminology development as a process that entails the formation of a language institute, setting up of goals, the actual engineering of the terms, the mode of dissemination and evaluation. However, he notes that there is no organised structure in Kenya to undertake terminology planning. By presenting various approaches and applications of terminology development, the Onyango's (2005) work raises fundamental questions about the use of concepts and the ordering of terminological knowledge. Moreover, important new insights into the principles and methods employed in terminology development are offered by the ways in which contributors have tackled problems of terminology in their specific subject fields. Msimang (2000) provides literature on the ways to improve grammatical terminology for the teaching of African languages at tertiary level. Prah (1997), Anchimbe (2006), Ogutu (2006), Webb (2006) provided literature of how various language policies and attitudes towards African languages influence or retard language development and elaboration efforts in Africa. Mtintsilana and Morris (1988), Van Huyssteen (1999) Madiba (1998), Mabasa (2005), Mojela (2010) provide various works on term creation strategies, the problem of term creation equivalence of borrowed terms and issues of standardisation of the created terms. Alberts (1999) gave a general terminology and outlook in South Africa, clarity of relationships between concepts and terms in specialised communication. Mufwene (2001) and Kame (2012) touched on multilingualism in African countries. They urged Africans to embrace linguistic diversity so as to improve indigenous language development efforts. Therefore linguistic diversity can be viewed as an indigenous language development tool. Louwrens (1996) work shows that attitudes towards indigenous languages are difficult to change and there is need for an aggressive approach in tackling this issue. This can be done by cultivating it through the media that is indigenous languages should be used in the media and that government should take an active role. Linguists and language users should be aggressive in their endeavors to develop and promote indigenous languages in major domains like publishing in African languages, using the indigenous languages as a medium of

transmission in the education system. It was helpful and relevant for this study's component of terminology and social attitudes of speakers.

Alexander (2007) shows the relationship between language status and power. He comments that the problem is made acute by the non-usage of indigenous languages in formal situations like industry, commerce, education and law. (This contention is also aired by Magwa (2006) and Zvobgo (1992). These are the areas where corpus planning should be emphasised. He purports that these areas need urgent attention from all relevant government departments, language planners, academics and linguists. Alexander proposes that the language users should be conscientised about the benefits of using their own indigenous language in education and administrative domains, and show how this will improve their own lives. Thus he observes that the Zimbabwean language policy confines African languages to the unofficial domain, which have led to the underdevelopment of terminology in almost all the fields. As such he notes with concern, the absence of specialized terminology in African languages, for the various disciplines one can think of.

Furthermore, these linguists had valuable ideas on how to solve the various problems that terminographers may face during the process of term formation. Usually problems faced by terminographers in lexical engineering are equally the same, and these problems are applicable to the Shona language as well. It is against this background that the issues of adequacy and appropriateness of the term creation strategies in the current study emerged, although the purpose of this study is, however, to provide an analysis of the term creation strategies used in the Shona specialised dictionaries. Nonetheless, both research studies are more or less the same on the issue of terminological development.

There are many linguists in Zimbabwe who view language revitalisation as a worth exercise to empower indigenous languages such that they will be used in science and technology. They contend that there is a great need to develop indigenous languages for use in all spheres. One such scholar is Mutasa (2002) who hopes that post-colonial Africa would employ a radical shift ... giving impetus to a resurgence of African languages so that they may carry philosophical and scientific discourse to unprecedented heights. In his study he put forward term creation strategies that can be implemented for the rejuvenation and revitalisation of African languages in sub Saharan Africa such as borrowing, compounding and coinages. These term creation strategies should involve people from the grassroots. Furthermore he posits that successful implementation of language change depends on the attitudes of the

users and Mutasa urges linguists to change the attitudes through a psychological approach. This study was very significant to this study because it revealed the different term creation strategies that can be used to elaborate and revitalise a language. However, this study scrutinised and analysed the effectiveness of these term creation strategies in the compilation of Shona specialised dictionaries.

Chimhundu (2002) have contributed valuable ideas and useful information for this study especially on the issue of treatment of loan words, which he prefers to call adoptives, in a receiving language. Emphasis of his study is on the process of transfer and continuity with related processes mainly focusing on the phonological level where it has been found that transferred elements undergo a process of assimilation before they become fully integrated, (also noted by King 1969, Mwasoko 1989, Thomason 2001, Hadebe 2002). In other words, he shows how loan words are morphologically and phonologically adapted in the receiving language. Chimhundu also describes how the Shona language is coping in the contact situation with other languages like English, Swahili, Portuguese, Ndebele, Sotho, and Cewa, Zulu, Xhosa and Afrikaans (Chimhundu, 2002: 32). Chimhundu notes that the contact languages, especially the dominant English language do not threaten the existence of the Shona language as they are operating with positive effect at the lexical levels and it will not die or shift to other languages. Chimhundu's thesis was particularly useful in that it shed more light into the overall language development situation. Chimhundu gave information about speech habits, thus provided the researcher with detailed analysis of attitudes of language users towards coined words aimed at replacing the adoptives.

Hadebe (2007) posits that the first monolingual Ndebele dictionary, *Isichazamazwi SesiNdebele*, had a number of effects on Ndebele, some of which had implications for language planning such as the standardisation of Ndebele. He mainly focuses on the standardisation of vocabulary and spelling and raised crucial questions for a general monolingual dictionary like *Isichazamazwi SesiNdebele* which benefitted this study. His work exposed major problems encountered in term creation. Hadebe (2007) highlighted the problems encountered with spelling of loanwords. This study drew a lot of terminological information from Hadebe's dictionary-making experience. However, this study is different from Hadebe's work, in that it mainly focuses particularly on term creation strategies of Shona specialised dictionaries while Hadebe's work is on the monolingual Ndebele vocabulary dictionary.

Overall, outstanding scholars in this study are: Gumperz (1968), Bauman (1980), Chumbow (1980), Mateene (1980), Felber (1984) Mwasoko (1989), Renouf (1987), Mtintsilana and Morris (1988), Sager (1990), Fishman (1991), Spencer (1991) Chiwome (1992), Sonneveld and Loening (1993), McMahon (1994) Mazrui (1995), Burnaby, (1996) Fishman (1996), Louwrens (1996), Prah (1997), Sonneveld (1997), Valentois (1997), Madiba (1998), Alberts (1999), Fishman (1999), Echu (1999), Greymorning (1999), Van Huyssteen (1999), Msimang (2000), Fishman (2001), Mufwene (2001), Cabre (2002), Chimhundu (2002), Hadebe, (2002), Mutasa (2002), Makoni and Meinhaff (2003), Premsrirat and Malone (2003), Qorro (2003), Viriri (2004), Chimhundu, (2005), Mabasa (2005) Makaudze, (2005), Mutasa (2005), Onyango (2005), Anchimbe (2006), Hadebe, (2006), Magwa (2006), Mutasa (2006), Ogutu (2006), Roy-Campbell (2006), Vambe (2006), Webb (2006). Alexander (2007) Hadebe (2007) Magwa and Mutasa (2007), Mheta (2007), Denzer-King 2008, Mutasa and Ogutu (2008), Nkomo (2008), Brisson (2009), Coronel-Molina (2009), Mheta (2009), Mojela (2010), Ahmad (2011), Nyota and Mapara (2011), Charamba, (2012), Kame (2012), Mazuruse and Mberi (2012) and Ndhlovu (2012).

1.8 Theoretical framework

Literature on theories of terminology were investigated and analysed. A theory is a system of proposition deduced from a small number of principles whose objectives are to represent in as simple and precise form as possible a set of experimental laws, (Budin, 2001:23). In this study, the communicative theory of terminology (CTT) was used as a reference framework to offer appropriate guidelines for the analysis of term creation strategies used in the Shona specialised dictionaries. This theory enabled the researcher to integrate basic justifications, principles and conditions which adequately describe terminological elements. It also enabled the description of their characteristics and properties, the relationship between their intrinsic components, their function, and the relation they establish among themselves and with other units (Cabre, 1992:68). In addition, Cabre's CTT has a functional approach to terminology which aims to bring about a cognitive plausible account of what it means to know a language; of how a language is acquired and of how it is used. The CTT has two major premises: the first is that terminology is simultaneously a set of needs, a set of practices to resolve these needs and a unified field of knowledge. The second is that terminology is a set of applications in as far as it allows the development of linguistic products specifically intended to satisfy

needs such as special language engineering, translation and technical writing to mention but a few. Most of the terminographic activities are highlighted in chapter three of this study. Cabre emphasises that specialised dictionaries should be compiled on the basis of the needs of users, as according to their professional and academic needs. This brings user friendliness into practice during the dictionary compilation. This study largely took the users perspective into account during research. It is for this reason that the dictionary use and the habits of the users were always be in focus in this study. Overall, CTT hasan applied side from which data could be generalised to solve terminological problems. Hence, Cabre (1992:63) comments that this theory is characterised by a strong orientation towards practical problem solving and establishing methods with scientific justification in order to make problem solving more efficient. The literature review on theories of terminology gave the researcher a theoretical base for the research and helped the researcher to determine the nature of study.

1.9 Methodology

This section deals with methods that were used to gather data for this research study. The term data refers to the rough materials researchers collect from the world they are studying; they are particulars that form the basis of analysis, (Bogdan and Biklen, 1992). Issues like the research design, data collection instruments and sampling techniques are covered in this section.

1.9.1. Research design

The inquiry was in the form of a survey and this approach was used to probe the determined objective. The chosen research design helped the researcher in the collection of credible data from the target population.

1.9.2 The qualitative research paradigm

This research is predominantly qualitative in nature as it is a descriptive research tradition for things that cannot be measured such as feelings, behaviour, speech and thought. Qualitative research has richness and precision needed in a research study since it provides for the interpretation and analysis of data by the researcher, (McEnery and Andrew, 1996:54). Such research involves small samples of respondents who will provide descriptive information

about their thoughts, feelings, and beliefs that can be easily projected onto the total population. According to Muranda (2004), qualitative research has three fundamental characteristics that distinguish it from quantitative research which are:

- ② It involves small samples.
- ② It combines indirect methods of investigating feelings, perceptions, attitudes and beliefs.
- ② Results are premised on the fact that a small sample is being dealt with and generalised to a larger premise.

Borg and Gall (1990) postulates that Qualitative research involves holistic inquiry and is usually carried out in natural settings, where humans are the primary data gathering instruments and the researcher, the key instrument. Qualitative data are collected mainly in the form of words or pictures and seldom involve numbers and that is why it overly relies on the questionnaire and interview as data collecting instruments. Data is interpreted inductively. This is explicitly stated by Bell (1993:141) who says, “the mark of judging qualitative evidence is the extent to which the details are sufficient or appropriate to the problem under investigation.” Thus, other reason for choosing the qualitative research design is that collected information is presented in a descriptive manner.

1.9.3. Sample

A sample is a group from whose responses shall be considered to be representing the pattern of responses in whole target population (Holiday 1995:103). The main purpose of sampling is to achieve representativeness of the population from which it is taken (Gilbert, 1997, Jennings 2001). In this study the researcher ensured that the sample chosen was as representative as possible of the desired population, so that conclusions become an accurate representation of how the larger group of people acts. The researcher used the random and purposive sampling techniques for choosing the 165 research participants for this study. This enabled the researcher to ensure that the sample chosen is the best to serve the researcher’s interests and stated goals.

1.9.3.1. Random sampling.

The researcher identified the target research participants of 165 University students from the Department of Music and Musicology, African Languages students from UZ and MSU and medical students from University of Zimbabwe were randomly selected to answer questionnaires meant to solicit data for the research study. The researcher used the class

register to randomly select student participants for this study, so as to eliminate all bias that may lead to selection of a population against others.

1.9.3.2. Purposive sampling

In this study, four lecturers in African Languages Department and four lecturers in Music and Musicology at the Midlands State University, four University of Zimbabwe lecturers in Medicine, and four University of Zimbabwe lecturers in African Languages were purposively sampled, since the research study requires experts in the field of language, culture, lexicography, medicine and music. Thus the researcher selected a population that met a particular criterion that satisfied the stated goals and aims of this research study.

1.9.4 Data gathering instruments

The whole process of preparing to collect data is called instrumentation. It involves the selection or design of the instruments and the procedure and the condition under which the instrument will be administered (Fraenkel and Wallen, 2003:119). It addresses the location of data collection, when it will be collected and the time of collection and how often the data is to be collected and who is to collect the data. The research method that is proposed in a study also implicitly determines the instruments to be used for data collection. The two commonly used instruments for data collection in qualitative research are the questionnaire and the interview. In this study, the interview and the questionnaires were employed in such a way that they complemented each other to give adequate and accurate information needed for the success of this study. The questionnaire allowed the researcher to convert data into information as offered by respondents. On the other hand, the researcher used the structured and unstructured interviews for the same groups of respondents to gain a more comprehensive picture of the research study. Use of varied instruments enabled the researcher to gather useful information from respondents to validate the findings of the study. The questionnaire was then analysed quantitatively. Collected data was converted or organised into tables and graphs for analysis and discussions. Tuckman (1978) posit that results are triangulated to cross check the validating of data and the derived conclusion.

1.10 Presentation and data analysis plan

The researcher used the inductive technique to analyse the data collected by exploring words used, concepts discussed and the linguistic elements noted by the researcher. The questionnaire data was presented largely in descriptive form. It was presented and analysed according to the researcher's findings with focus being directed at the nature of the data. Since the research study is a qualitative research design, the understanding of research findings are built by a process of uncovering and discovering the main themes that run through the raw data and by interpreting it correctly. Thus, this study involved the use of inductive reasoning to generate relevant conclusions by engaging literature, prior experience of the researcher and the research questions, to come up with a credible conclusion that shows clear relevance with the project's overall research questions, aims and objectives.

1.11 Definition of key terms

There are some basic terms and concepts that should be clearly understood because they were frequently used in the study and as such they form an essential tool for the study's analysis. The key terms are defined from the researcher's point of view with the aid of scholars where need arose.

Term Creation: words created and given new meaning.

Term: i) A lexical unit that has a special meaning depending on the thematic context. ii) A semantically charged linear structure, which names an abstract or concrete reality, studied in a special subject field.

Terminology: is the study and the field linguistics actively concerned with the collection, the description and the presentation of terms, (Sager, 1990:12). It can also be regarded as the practical task of producing dictionaries of lexical terms that are specific to specialised domains of knowledge, (Meyer, 2000: 279).

Specialised dictionary: a dictionary of specialized information and knowledge or a dictionary that has been designed to cover terms of one particular subject.

Standardisation: is an agreement as to which technical terms will be used in a standard language and specifies the characteristics by which terms selected are to be understood, (Dubuc, 1997:131).

1.12 Scope of the study

The study analysed term creation strategies in relation to objectives and aims outlined for this study. It critically assessed whether term creation strategies in the Shona specialised dictionaries impacted negatively or positively on the development of the Shona Lexicon. An analysis of the adequacy of the created specialised term was made in order to assess whether they captured the essence that is being carried in a language. Term creation strategies that were analysed are borrowing, compounding, coining derivation, derivation, loan translation and semantic expansion. Focus was on whether term creation contributed or hindered the development of the Shona language and vocabulary.

The researcher held interviews and administered questionnaires to get information for the study, which was confined to language academics, professionals and students in the department of African Languages and Culture at Midlands State University (MSU) and UZ, lecturers and students in music and musicology at MSU. Students at these various institutions of higher learning were randomly and purposively selected to participate in the research study.

1.13 Organisation of the study

This study is divided into nine chapters, organised as follows;

Chapter 1-: Introduction

This chapter gives a general introduction of this study. It provides a statement of the problem, historical background, the aim and objectives of the study, research questions, justification of the research, a brief literature review, research methodologies, scope of study, and definition of key terms. This chapter outlines the problems that this research strives to give answers to and also outlines the theoretical framework to guide this study.

Chapter 2: - Literature Review

This chapter deals with the literature that laid the foundation for subsequent data analysis and evaluation of term creation strategies in the Shona specialised dictionaries. The literature on term creation and language development generally formed the background to this study. The related literature for this study was drawn from both inside and outside Zimbabwe.

Chapter 3: - Theoretical Framework

This chapter highlights and discusses the theory that is related to the issues of term creation and language revalorisation; the communicative theory of terminology (CTT). This theory provided a sufficiently broad methodological framework and laid the foundation for the investigation of the strategies used by Shona specialised dictionary compilers. This theory is basic to term creation in that it delimits the way terminologists should approach and integrate social and linguistic aspects of a language. The researcher also evaluated the applicability of this theory to the study of term creation strategies.

Chapter 4: - Research Methodology

This chapter presents the research methods that were used for gathering research materials for this study. Thus, the researcher gave an outline of the methodologies, research paradigms research procedures, research instruments and the methods of analysis that were used that were used to collect, analyse and interpret the collected data.

Chapter 5:- Research Findings, Analysis and Discussion of the dictionary of musical terms – *Duramazwi Remimhanzi* (DR)

This chapter gives an analysis and discussion of the research findings from the DR. It provides an analysis and a discussion of the term creation strategies utilised in the dictionary. This chapter explored some of the basic term creation processes by which new terms are created. Specifically these strategies analysed and discussed: borrowing, loan translation, compounding, coining, blending and derivation. Scientific approaches to the above term creation strategies and their adequacy will be highlighted. Mostly, this chapter will focus on users' perspectives pertaining term creation strategies used in the Shona specialised dictionaries, using information gathered from fieldwork research.

Chapter 6:- Research Findings, Analysis and Discussion of the dictionary of medical

terms – *Duramazwi Reurapi Neutano (DRN)*

This chapter presents an analysis and discussion of the research findings from the DRN. It provided a discussion of term creation strategies and an exploration of some of the basic processes by which new terms for the medical and health areas were created. Specifically the strategies that were analysed and discussed are borrowing, loan translation, compounding, coining, blending and derivation. Scientific approaches to the above term creation strategies and their adequacy were highlighted in this chapter. In most cases this chapter focused on users' perspectives pertaining term creation strategies used in the DRU using information gathered from fieldwork research.

Chapter 7:- Research Findings, Analysis and Discussion of the dictionary of linguistic and literature terms –*Duramazwi Remutauro neUvaranomwe (DRU)*

This chapter presents an analysis and discussion of the research findings. It provides a discussion of term creation strategies and an exploration of some of the basic processes by which new terms are created. Specifically, the strategies which were discussed are borrowing, loan translation, compounding, coining, blending and derivation. Scientific approaches to the above term creation strategies and their adequacy were also highlighted. Mostly, this chapter seven focused on users' perspectives pertaining term creation strategies used in the literary and literature specialised terms dictionary, using information gathered from fieldwork research.

Chapter 8:- Comparative analysis of the three specialised Shona dictionaries DR, DRN and DRU

This chapter gives a comparative analysis of the term creation strategies that are used in the DR (*Duramazwi Remimhanzi*), DRN (*Duramazwi Reurapi Neutano*) and DRU (*Duramazwi Redudziramutauro neUvaranomwe*). The comparative analysis focuses on the term creation strategies used in the as well as responses from research participants and Shona language experts.

Chapter 9:- Conclusion

This chapter sums up the main results obtained from the entire research study, in other words it draws the conclusion of the research. In this chapter, the researcher provides a general conclusion that contains remarks, observation and recommendations drawn from the entire study

1.14 Conclusion

This chapter aims to show that development of terminology is a fascinating area of study from a linguistic and socio-linguistic perspective. This has been highlighted and shown in the background of the problem, statement of the problems, justification, aims and objectives of the study. Literature review and the theoretical framework of the study have been provided to give an overview of the field of inquiry showing how prevailing ideas fit, agree or differ from this study. The research methodology has been given to ensure that the data to be collected is valid and reliable. The organisation of this study and the chapters are outlined to give a general overview of the study.

Chapter 2: LITERATURE REVIEW

2.1 Introduction

This chapter presents a literature review that is related in one way or the other to term creation and language development, language contact and language change. Literature on language contact and language change was firstly reviewed in this chapter because it is the central aspect to the understanding of term creation strategies and meaning making because they are the products of the interaction of people who do not speak the same language. Muranda (2004) acknowledges that literature review is the springboard for argument in any study, and as such, the researcher reviewed literature that explains various ways in which languages can come into contact, in order to deepen the understanding and evaluation of term creation strategies and indigenous language development. Findings on the influence of language contact in various literatures are very valuable to this research, which was carried out on the understanding that, it is language contact, mostly, that necessitates term creation as new ideas, new cultures and new concepts are brought in a speech community through language contact. Secondly, the researcher reviewed literature on term creation strategies such as borrowing, loan translation, compounding, coining, semantic expansion and derivation. Such literature laid the foundation for the subsequent data analysis and evaluation and analysis of term creation strategies, which is the major objective of this study. Furthermore, the literature helped the researcher in the exploration of the basic processes by which new terms are created. The literature reviewed was drawn from both inside and outside Zimbabwe. Lastly, the researcher focused on literature that discusses linguistic principles of term creation and as such the literature provided the current researcher with regularity in the word formation processes in all languages in general and the Shona language in particular.

2.2 Literature review on language contact and language change

2.2.1 Language contact

Reviewed literature shows that languages have been in contact certainly for thousands of years and probably since the beginning of human kind, (Thomason, 2001:3). Sankoff (2002) has the same opinion as he says that, language contact is part and parcel of everyday life for

millions of people the world over. In addition Romane (1989:8) came to a similar conclusion, as he remarks that “language contact is everywhere, there is no evidence that any language has developed in total isolation from other languages”. By way of definition, Thomason (2001:2) says, “we use the term language contact to refer to situations where group of people who speak very similar varieties are in contact with people who speak rather different varieties”. From this postulation, it is overwhelmingly clear that language contact occurs when speakers from different speech communities encounter one another and attempt to engage in linguistic communication. In other words, it can be noted that language contact precipitates the transfer of linguistic units and patterns from one system to another.

The Europeans brought with them new concepts, ideas and technologies that did not exist before in the colonised countries. These are some of the historical events that have led languages to acquire new vocabulary and consequently, have caused languages to change. In view of this, Sankoff (2002) contends that language contact gives rise to a wide variety of linguistic outcomes, including bilingualism, borrowing, code switching, convergence, pidginisation, and language shift. Thus any given instant of language contact can have a wide range of potential outcomes as cited above. Garret (2004) adds that language contact mainly took place in areas where Europeans “discovered, explored, conquered, missionised, plundered, exploited, ruled, administered and settled mostly between the 16th and the late 19th centuries, mainly in Africa and other continents colonised by European states”. However, colonisation brought with it social inequalities even in spoken languages. This is rightly noted by DeGraff (1999) who pointed out that, when two languages come into contact, due to social inequalities, it often happens that one of them gains a more dominant role. The dominant language maybe that of the conquering group and it becomes the language of the master. Basing on this view, in most African colonised states, English became the language of the master and was given an official and superior status. Thus, the indigenous languages were relegated to an inferior status, which was the language of the home with no economic value. In light of this, this study is analysing language development efforts which are aiming to uplift the indigenous languages from this inferior status. In the subsequent sections, the current researcher analyses linguistic outcomes of language contact and language change. This added more insight on the understanding and analysis of term creation as a process to develop indigenous languages.

2.2.1.1 Bilingualism

One of the linguistic outcomes of language contact is bilingualism; and it is defined as the “existence within a single speaker’s competency of more than a single grammar” (Bynon, 1997:172). In other words, a bilingual speaker is a person with some knowledge of two languages Garret (2004:53) remarks that, bilingualism and multilingualism are the most common outcomes of language contact. It should be noted that, a bilingual speaker’s two languages will not match completely in phonology and grammar; one might have sounds which are absent from the other. It is also safe to assume that most of the world’s population is bilingual. One type of bilingualism is Diglossia. Trudgill (1974:117) defines Diglossia as:

a particular kind of language standardisation where two varieties of language exist side by side throughout the speech community and where each of the two varieties is assigned a definite social function.

Such a diglossic relationship does exist in Zimbabwe between English and Shona/Ndebele. These languages are generally “non-competitive functionally, although English is invading some of the domains of use of the two vernacular languages” (Chimhundu, 2002:23). It is therefore difficult for two languages to meet in contact on genuinely equal terms. Accordingly, it can be argued that, in Zimbabwe and many third world countries, all indigenous languages were overtaken by the English which is the language used for wider communication and also the language for specialised information. Thus, with the Zimbabwean situation, Chimhundu (2002:232) remarks that:

When we consider other factors relating to status and function such as prestige, uniformity of image and wider communication, English clearly enjoys more sociolinguistic vitality.

Therefore, in most diglossic situations, one of the varieties is a high variety and the other one is a low variety. The high variety is codified and is the vehicle of a large and respected body of written literature. According to Ferguson (1959:336) the high variety is “learned largely by formal education and is used for most written and formal spoken languages but is not used by any sector of the community for ordinary conversation”. Magwa (2006) comments that such a diglossic scenario will result in a country failing to progress socially, politically, technologically and economically because it is so overwhelmingly dependent on foreign languages for its philosophical and scientific discourse at all levels of learning and administration. Mutasa (2006:62) attributes such a scenario to “the attitude of people who think that European languages are prestigious and superior in such a way that they think

indigenous languages cannot be languages of wider communication". The researcher believes that such attitudes are counter-productive as far as Shona language development is concerned. This may affect language development efforts like term creation in a very negative way, as the created terms may not be acceptable to language users in preference to English terms which are of superior status. Hence, the inevitable need to elevate indigenous languages to an official status, but this cannot happen until the indigenous languages are developed.

Overall, reviewed literature on bilingualism in this study has shown the researcher that bilingualism has a far reaching influence on the social, political and economic as well as cultural lives of the people. It facilitates effective interaction and effective communication. Related literature has shown that, being a bilingual speaker, one can communicate widely; borrow terms from other languages so as to expand one's own language. One can maximise translation skills as a viable communication strategy as well as creating terms for lexical items being introduced into a society especially scientific and technical terms which play a pivotal role in the economic and social development of nations. Therefore, bilingualism in society should be looked at as a linguistic enrichment of socio-cultural life of a community. It is a virtue which when fairly managed, can open opportunities as well as challenges for linguistic, economic and socio-cultural development.

2.2.1.2 Borrowing

Of all the literature reviewed it is overwhelmingly clear that the major process involved in language contact is borrowing. The term borrowing is used in this study in its broad sense "as the transfer of linguistic features of any kind from one language to another, (Poplack and Meechan 1998:44). It should be noted that, usually through borrowing, the native language is maintained, but the lexicon is changed by the addition of incorporated features from the source language (Bloomfield, 1933; Haugen, 1950). In most cases, the newly borrowed words are adapted phonological, morphological and other features of the language to the receiving language. In addition borrowing results in the increase of the receiving language's vocabulary. A good example is the English language where new words from French, German, Greek, Italy, Latin and Spain heavily changed the language and moulded it to what it is today. It can also be noted that, in most developing countries, new words are being borrowed from other languages for use in Science and Technology, and some of these get into the general vocabulary.

Chimhundu (2002) provided an intimate knowledge of the conditions under which languages come into contact in Zimbabwe. These conditions affect the kind of intensity of borrowing, depending among other factors; relative prestige of the languages that come into contact. In Zimbabwe, the Shona language came into contact with mostly English, Ndebele and other minority languages. As a result, it has borrowed words from the English language and to a lesser extent other languages to enrich its lexicon (Chimhundu, 2002) and this influence has greatly changed the Shona language. However, literature reviewed on borrowing show that, through language contact, writers, scientists and translators had been confronted with the serious linguistic problem of expressing a host of new concepts and ideas of which no words existed. This has necessitated the engagement of various term creation strategies so as to counter excessive borrowing from the in light of etymological purity considerations.

2.2.1.3 Code switching

Another linguistic outcome of language contact is code switching. The term code-switching refers to a situation in which a speaker uses a mixture of distinct language varieties as discourse proceeds (Akmajian et al, 2001). In other words it is a tendency by people to switch in one and the same sentence from one language to the other, change from one register to another in the same sentence. According to Zentella (1997:97) “code switching is a means of realignment for a speaker or an attempt by speakers to control their interlocutor behaviour or as a resource of clarification of emphasis of a point”. Thus, from this viewpoint, code switching adds meaning in a conversation. Furthermore, various literatures studied show that code switching is a common phenomenon in many parts of the world where two or many speech communities come into frequent contact with each other. Poplack and Meechan (1998:127) argue that, “all bilingual corpora empirically studied, mixed discourse is overwhelmingly constituted of lone elements, usually major class content (nouns, verbs, adjectives) of one language embedded in the syntax of another”.

Thomason and Kaufman (1988) add a social dimension to the definition of code-switching, where they envision that, speakers may feel that the second language is more prestigious and switch to it to make their speech appear fashionable. This view seems to hold, taking Zimbabwe and many other African nations into context, where English is a language with a superior status. Relatedly, it has been observed by this researcher that there is a general tendency to switch from Shona and Ndebele (and other indigenous minority languages) to

English every now and then because English acts as the language of deeper knowledge, and therefore, is a language of prestige. Conversely, Soukalo (1995) claims that the code switching by educated Africans, should not be seen as a common characteristic of bilingualism in general, but is partly due to the existence of deficiencies and loss in the repertoire of such people as a result of their limited use of African languages. From this postulation, it can be debated that, is it lack of terminology in the indigenous languages that causes people to code switch, especially in scientific and technical terms or is it because of prestige?

Literature on code switching has shown the researcher that code switching may pose a challenge in term creation where for example, when linguists want to create a specialised Shona term, they may mistake a foreign term as being native because they may have got used to it and adapted it as their own. This leads to the denial of normal growth or indigenous means in a language's vocabulary and terminology. Basing on this argument, Shona proficiency, both in speaking and writing can be compromised and negatively affected as a result of code switching. This further validates the need for term creation in indigenous languages, so that Shona speakers can fully maximise the use of their own indigenous languages to their full capacity.

2.2.1.4 Language shift

Deficiency of terminology in a language may cause speakers to shift to other languages. Dorian (1989) contends that language shift is the gradual displacement of one language by another in the lives of the community members. Nakin (2009) remarks that, all languages shift at various times in their histories. Shift occurs as a result of social attitudes, proximity to a larger language, and the changing of popular attitudes towards the influence of external language. Thus, language shift occurs when a minority language is constantly in contact with a dominant language. However, it should be noted that sometimes language shift is not always by choice, but could be circumstantial, (due to industrialisation, urbanisation migration colonisation among others). Language shift can bring either desirable or disastrous effects. While language shift can bring new concepts and modern ideas in the lives of a community, there can be tragic disadvantages such as loss of proficiency in one or more of the language such as speaking, writing, listening and reading. In most developing countries, indigenous languages are under extreme pressure to shift to English. New technologies, industrial products and experience simply require one to be proficient in English. It can

therefore, be argued that, technological development often drives language shift.

In view of the above contentions, it can be deduced that, if indigenous languages such as Shona are not developed to express scientific and technological terms, they may end up shifting to other dominant languages like English. The researcher agrees, therefore, that there is a greater need to take steps in indigenous language preservation and language elaboration through the compilation of monolingual and specialised terms dictionaries. This can be done by employing various term creation strategies that ensures appropriate and effective terms in their compilations. Such a step will ensure that, indigenous languages will not shift to more prestigious languages as shown above in any given time.

2.2.1.5 Pidgins

According to McMahon (1994:233) “a Pidgin is essentially a contact language, developed in situations where different groups of people require some means of communication but lack any common language”. Wardhaugh (1992:58) defines a pidgin as a “language that has no native speakers; it is no one’s first language, but a contact language”. In other words a Pidgin is a language variety created out of two or more languages in contact for the purpose of doing business. A Pidgin can also be called a trade language since it is the need to exchange goods and money that mainly cause them to develop. This is aptly defined in Schuchardt’s words; “pidgins are languages of necessity, exigency ... languages of trade” (Schuchardt 1909:68 cited in DeGraff 1999). In a similar study Muhlhausler (1995 in Kaplan et al 1977: 287) remarks that pidgins are incidental modes of communication. However, not all Pidgins are for trade, others emerge through various types of language contact such as work co-operation between groups of comparable power and social status, military recruitment, slave and master, labour migration, population displacements and plantation economies. Thus the Pidgins generally emerge from extended or repeated social contact among such groups that have no language in common. In Zimbabwe such a Pidgin language evolved and was called Chilapalapa in Shona but it is almost dead because Zimbabweans despised it as a colonial instrument of subjugation. Fanakalo is another example of a pidgin in South Africa (Nakin, 2009). Gradual development of a pidgin results in a Creole. The Creole is defined as a Pidgin that has become a native language for a new generation of speakers (Wardhaugh, 1992:59). It should be noted that Creole is normally a language with all grammatical structures well-constructed. The vocabulary of a Creole can be used in formal and informal domains. The study on Pidgins clearly show that people have some capabilities and strategies of creating

new terms to satisfy their communicative needs, a fact that can be fully utilised by terminographers in their efforts to develop indigenous languages.

2.2.1.6 Interference

Language contact also causes interference. Interference is regarded by Weinrich (1968:11) as “those instances of deviations from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language.” Thus, for interference to take place there must be a degree of bilingualism in the community. In this vein, Archibald (1998) notes that in most cases of bilingualism, phonological interference is overwhelmingly observed. Related literature on interference, thus, highlights some of the challenges lexicographers may face in their endeavour to elaborate a language through term creation. Thus, in the Shona language, due to interference from the English and Ndebele languages, there are some modifying processes being brought about by these languages, and hence, this may complicate standardisation efforts of the Shona language. It is therefore important that terminographers should be able to identify them so that there will be no typical errors and mistakes due to interference from other languages.

2.2.1.7 Convergence

Reviewed literature, show that, another linguistic change, induced by language contact is convergence. Convergence occurs when two or more languages come to resemble each other structurally, while retaining their distinct lexicons and typically continuing to be regarded as distinct languages (Garret 2004:56). According to Emeneau (1959:16) convergence takes place within a convergence area, a linguistic area, sprachbund, which includes languages belonging to more than one family but showing traits in common which are found not to belong to the other members of one of the families. It occurs only in cases of widespread and stable bilingualism and requires the participating language to be perceived as social equals, since if one gains significantly in prestige, it is likely to cause the death of the other (McMahon, 1994:213). Garret (2004) adds that convergence tends to occur in multilingual situations in which language functions as a salient marker of ethnic or other group identity but in which intergroup communication is necessary. Thus, from the above contentions, people living in such communities commonly speak two or more languages, though they may consider only one to be the language of their own group. This may result in the mixing of languages. Consequently, this shows that, convergence may pose problems to

terminographers, as coming up with a standard language in such circumstances may be difficult.

2.2.2 Language change

Winter (1973:44) says no component of a natural language is totally immune to change under the impression of outside languages. In a similar view, Thomason (2001) argues that, languages always change, no matter what and no matter how much effort is put in to preserve it. King (1969) aptly puts it as he says that generation by generation, pronunciation evolve, new words are borrowed or invented, the meaning of old words drift, develops or decays. This means that language change is therefore inevitable. Languages change for a variety of reasons. They can change as a result of social, political and economic processes such as encounters with new technology, migration, intermarriages, new experiences, communication, media, colonisation and new life styles. Nakin (2009) remarks technological innovation contributes greatly towards language change as it applies across all social functions. Thus, societies and their languages change in response to internal and external circumstances and hence the needs of speakers derive language change. In as much, a society that is robust with the resources to develop economically, socially and culturally also give rise to language expansion, hence, the relevance of term creation in such endeavours.

2.2.2.1 Phonological changes

When a language comes into contact with another, phonological changes are observed in the recipient language. Phonological changes can be referred to as being simply the replacement of complete segment (phones or allophones) by another complete segment and a phonological system ... (Bynon, 1997:80). According to King (1969) phonological change is any sound change, which alters the pronunciation of a word. One typically regular conditioned type of phonetic change is assimilation, referred to in this study as phonologisation. Words borrowed from other languages get assimilated in the recipient language style of pronunciation and are given a foreign kind of pronunciation; for example, <plate> has been assimilated in the Shona language as <pureti>. According to Mutasa (2006), Shona assimilated thousands of English words without taking into account the consequences for the language. In this vein, Chimhundu says, the tendency to interpret features of another language in terms of one's native phonology is well known, (2002:205). Related literature shows that in the process of acquiring bilingual competence, the version of second language spoken by such people

contains phonological features derivable from native language. This means that when terminographers borrow words in term creation, they need to rephonologise them so that they are well adapted into the receiving language.

The researcher gained a lot of insight into linguistic literature in the section of phonological change from McMahon and Chimhundu's works. They both provide a research framework and an insight on how languages change although McMahon gives a wealth of examples from the English language yet this study focuses on the Shona language. The researcher also learnt that the issue of phonological changes in a language poses a big challenge to lexicographers, in the sense that loan word may bring in lexical sounds that previously were not in the language, making it difficult to represent them in writing. For example, in the Shona language, the /th/ > theatre > *thiyeta*, phonological combination causes spelling and pronunciation problems in the Shona language. Furthermore in terms of phonology, widespread borrowing may introduce new phones into the borrowing language or alter the distribution of existing ones. The introduction of Shona lexemes such as *reza* (razor) and *shamwari* (friend) has effectively introduced a new phoneme /ɾ/ into the Ndebele phonemic inventory. Also such words as lorry < *lori*, loan < *loni* has effectively introduced a new phoneme /l/ which is predominantly Ndebele into the Shona phonemic inventory. The assertion holds, because in most indigenous languages in Zimbabwe, borrowing of phones from other languages is very common.

2.2.2.2 Morphological changes

Morphological changes are language changes that affect the morphology of a word. Thomason and Kaufman (1998) say studies of morphology changes attributed to language change are very limited. This is a generalisation supported by the relative scarcity of documented cases of contact induced morphological changes. On the other hand, Anderson (1992:365) says theories of morphological changes are not well developed and real results or established principles are hard to find. Hence, after reviewing related literature, the researcher is more convinced than ever that this is true because only a few cases came to light.

2.2.2.3 Lexical changes

Due to language contact there is a general expansion of vocabulary in many languages because of borrowing and coining of new terms to name new concepts being introduced into a language and this expansion seems to be going on at a great rate in many countries

especially in third world countries. Hence, in most developing countries, indigenous languages are now heavily loaded with lexical borrowing from foreign languages such as English, resulting in widespread lexical changes. However, according to Thomason and Kaufman (1988:38) although, most languages are heavily loaded with foreign lexical items, the native languages is maintained, but is changed by the addition of incorporated features. In addition, related literature shows that of all the components of language, the lexicon is mostly easily and radically affected followed by phonology, morphology, semantics and then syntax. The area of foreign lexical elements that appear in the everyday discourse of speakers of a language is carefully researched by linguists, (Haugen, 1950; Weinrich, 1953; Winter, 1973; Lehiste, 1988; Thomason and Kaufman, 1988) who concludes that of all contact induced language changes, vocabulary changes are quickly than any other forms of language change.

2.2.2.4 Semantic expansion or broadening

Semantic changes are changes involving the meaning of words. In other words, it means that the use of language instantly change in order to accommodate and convey a new range of meaning, concepts and values, (Beard, 2004:19). Chimhundu (2002) says the process of semantic change involves a foreign concept being taken into a language by modifying the semantic range of an item of similar meaning in the native vocabulary, or by expanding it so as to accommodate the new meaning alongside the original one, for example; *mutenges* in Shona originally meant a storekeeper but the meaning has been broadened to mean a “sell out”. Expansion generally increase the number of contexts or meaning in which a word can be used, thus the semantic scope of a word is extended. In the same vein, the meaning of a word meaning can be elevated in such a way that connotation becomes positive. In Shona the word “*mudhara*” usually meant an old man but now it has been elevated to mean a well-respected male adult. In English the word servant was elevated to “knight”. Relatedly, a word can be degraded, so much that the connotation becomes negative. The word *mistress* in the English language original meant bride, but now, it connotes a whore, thus the meaning has been narrowed. This is one of term creation strategies terminographers can utilise in specialised term creation, in order to elaborate or develop a language. On the other hand, semantic restriction narrows the range of meaning conveyed by a word.

In addition, it is therefore of paramount importance that terminographers should take into account, the fact that, words can connote different meaning and should be aware of all the existing meanings of a term before including a term in a specialised dictionary to avoid

ambiguity of meaning of the term. Therefore, they should guard against creating terms that are ambiguous and not credible.

2.2.2.5 Agents of language change

Terminographers and linguists are agents of language change. They promote language change through lexical engineering. According to Hadebe (2006) lexical engineering involves the use of term creation strategies to elaborate a language; it is an ideological act that motivates language change. Hence, consequently linguist and language policy planners, educationalists, government are all agents who can promote language change by designing policies which are favourable to language development. Newly created specialised terms may gain popular acceptance if they are utilised more widely in the education process, because with respect to language change, students can play that most important part. In this regard, related literature has shown that languages are fundamentally equal, and linguistic innovations can be applied to indigenous languages in Zimbabwe to make them function in all spheres of life.

2.3 Language contact situation in Zimbabwe

The main language contact situation in Zimbabwe was necessitated by colonialism and the advent of Christianity and industrialisation. In such an unequal situation, one direct result was the automatic establishment of the English language as the dominant official language. The other language contact situations were as a result of trade and ethnic wars: and these were Ndebele, Cewa, Sena, Afrikaans and Portuguese, (Chimhundu, 2002:241). These languages mildly influenced the Shona lexicon while influence of English on Shona was very extensive. Hadebe (2002), comments that, the Shona language just like Ndebele, borrowed extensively from English, especially, words relating to modern fields ranging from agriculture, industry, commerce, sports and religion. This obviously led to language elaboration, so as to allow a language to function in a greater range of circumstances. As a result, it also led to coining, borrowing, compounding, derivation, blending, code switching, interference and convergence, language shift, and pidginisation. Hence, in Zimbabwe there arose a great need to translate or create new terms so that the Shona and other indigenous languages could be used widely in all spheres of life in the language contact situation. Unfortunately the colonial government language policy divorced the indigenous languages from being used in spheres of influence since it was biased towards the colonialists and serving their interests (Zvobgo,

1992:77). There was seemingly a denial of indigenous languages in Zimbabwe to be given a chance to flourish and to help promote culture and national identity.

2.3.1 The missionary era

The missionaries made the first initiative to develop the Shona language in Zimbabwe. As from 1931, after professor Doke's unification of the Shona dialects, they introduced formal Christian education. Thus, they brought Western education to Zimbabwe and set up educational institutions throughout the country. The intention of the missionaries was to spread the word of God and they wanted the converts to be able to read the bible. This marked the beginning of terminological efforts to develop the Shona language as the biblical Shona terms were created to support the missionary work. Actually, the bible has been translated into most indigenous languages in Zimbabwe. Apart from translating the English bible version into the Shona version, new words for Christian concepts were coined and disseminated during church services, thus promoting wider usage of the created terms. Furthermore, the missionaries established a printing press to produce backup preaching material. Chiwome (1996) observed that printing presses like, for example, the Catholic driven Mambo Press encouraged authors to write literature that mirrored Christian vision of life. This therefore indicates that during the advent of Christianity, the Shona corpus was biased towards religious materials. Consequently, this stifled the growth of the Shona corpus in scientific and technical vocabulary.

In addition to the above, the missionaries published some bilingual dictionaries, which were meant to assist the Shona language speakers comprehend unfamiliar English language terms, encountered in speaking, reading and writing. In other words Shona terms were translated to English terms; this means that the dictionaries provided both Shona and their English equivalent terms, (although there is often no equivalent in the target language for entry word in the source language... (Landau, 2001:9). The dictionaries were also to help in the standardisation of the Shona dialects and facilitate the natural growth that would lead ultimately to the natural development of Shona as a literacy language (Doke, 1931: 29). Hence, the slogan, *unify the dialects and pool the vocabulary* (Rev Barnes cited in Doke, 1931:32). Some of the dictionaries were according to Doke (1931): *Dictionary of the Ndebele and Shona languages* (Elliot, 1887), *English-Mashona Dictionary* (Hartman 1894), A

Vocabulary of the Mashonaland Dialects in the New Orthography, (Rev H Barnes 1932), *A Shona Dictionary With An Outline Of Shona Grammar*, (Rev E Beihler, 1950), *Standard Shona Dictionary*, (Hannan, 1959). The missionaries' effort is of great significance in this study in that it gave a basis on which Shona language is developing today. It is however, sad to note that, these efforts to develop the Shona language were made under a legacy of colonial language policy, which promoted English to a superior status.

2.3.2 The colonial era

During the whole colonial era, the Shona language was relegated to the status of vernacular. In this regard a vernacular is a language of a group, which is politically and/or socially dominated by another, (Bell, 1976:153). Thus, the colonial government in Zimbabwe contributed in a very significant way to the undermining of the development of the Shona corpus, as its language policy promoted the English language to official status. As a result, non-usage of the Shona language, particularly in the educational sector, led into insufficient scientific and technical terminology and teaching resources, as compared to the English language. Since the colonial era, English has dominated all spheres of life including education, (Hadebe, 2007). In other words, Shona failed to develop, because it was not given the platform to achieve the same footage as English because of its limited usage in the public arena. As a result, technical terminology has therefore, been lacking in in the Shona language since then. This is supported by Mtintsilana and Morris (1988:109 cited in Hadebe 2002) who state that “terminology development in the African languages has been retarded by a number of ideological, historical and educational factors; the most fundamental of which are the language policies adopted in the republic of South Africa”. The same can be said of colonial and post-colonial Zimbabwe. The colonial language policy is thus, one of the leading factors that retarded and continue to retard terminology development in the Shona language, in many technical disciplines. As a result there exists a distressingly wider gap between English and Shona scientific and technical terms.

2.3.2.1 The literature bureau

In addition to its unfavourable language policies, the colonial government introduced a censorship board in 1956, the Literature Bureau, so that written art could not be used to justify the underprivileged condition of its readers, (Chiwome, 1996:22). It created and

disseminated propaganda to facilitate the peaceful administration of the African, hence writers were nurtured to write creative, fictitious and moralist work that did not explore more important every day issues or socially motivated behaviour. Authors were conditioned to think that creative writing was the only form of writing textbooks. In addition, the Literature Bureau prescribed works which mostly constituted creative writing and primary school readers and never focused on scientific and technical books. This created a situation where the Shona language was continuously dependent on the English language for technical terms.

Moreover, during this era, the book industry was in the hands of missionaries and western owners who were concerned with profit making. They did not promote the publication of Shona textbooks as they argued that they were responding to the market forces, which were English biased. In other words indigenous languages lacked commercial value to the colonial establishment, which served its interests with little or no impact in the indigenous society's privilege. The market was influenced by the language policy, which promoted English as the official language. Shona writers with potential switched to writing books in the English language, which had an established market. All this stifled and compromised the production of Shona textbooks. This situation continued up to when Zimbabwe attained its independence in 1980.

2.3.3 Post-colonial era

After attaining independence in 1980, the Zimbabwean government made an effort to promote the Shona language by allowing students who had passed Shona to proceed to tertiary education. Prior to the attainment of Zimbabwean independence, one was required to have passed English so as to gain entry into colleges and job employment. However, the promotion of Shona was short lived because the colonial requirement of making the English the gate pass to various opportunities was revoked. English thus, became the lingua franca despite the fact that, independence is supposedly to have brought tremendous development in African languages (Mutasa, 2006:115). Hence, the government of Zimbabwe is still reluctant to implement language policies that would develop and maintain the status of indigenous languages. The Education Act of 1987 states that, English is the language of official use in Zimbabwe, and Shona and Ndebele are national languages relegated to unofficial use, (Roy-Campbell and Gwete, 1998). Thus Viriri (2003) remarks that the post-colonial language

policy is just an appendage of the colonial era. Hence, the language policies of colonial and post-colonial Zimbabwe are one historical factor that has marginalised African languages and restricted them to the periphery. Hadebe (2002) argues that Ndebele together with Shona are the recognised national language of Zimbabwe while English enjoys most exclusively monopoly as language of administration and medium of instruction. He goes on to say African languages have for a long time been used in a narrow sense in the official arena, while specialised fields like education, law, science and technology have been reserved for European languages (Hadebe, 2002:226). Even across Africa, in spite of political independence of African nations, the legacy of colonial educational policies still retains influence, as the English language is still the official language in most countries.

Colonial and post- colonial language policy and planners justified the scenario by arguing that the wealth of knowledge available in English in most fields of knowledge makes its use in the education system and wider communication virtually mandatory. This argument can be contested as any language has the ability to express any concept if they are developed to do so. The continued dominance of English on Shona is in a way destabilising efforts to develop the indigenous languages, more so because of attitudes its speakers may have towards it. So long as English remains the official language of communication; practical considerations will force indigenous language speakers to despise their own language. This is observed by Mutasa, (2006) who argues that due to the prestige attached to the English language, indigenous languages are still regarded by their own people as incapable tools for efficient communication in any formal sphere. Those who are committed to developing the indigenous languages are frustrated by the dominance of the English language because it heavily deters influences of term creation activities and this poses a lot of difficulties for terminologists. This again is a major challenge terminographers have to face, because unless corpus is representative and balanced; it is an unreliable means of acquiring lexical knowledge.

2.3.4 The Shona corpus

Linguists and terminographers use the corpus as reference work so as to publish dictionaries and other reference work that would enhance the development of the languages. The Shona corpus has more novels and Christian materials than educational textbooks, let alone

dictionaries (Chiwome, 1996). As a result terminographers, encounter difficulties when using the corpus to build Shona dictionary materials in technical subjects, and hence the need for term creation, because there is little written material in Shona from which terms would be derived. For instance, there are no Shona textbooks in geography, business, history, law, medicine, science and technology (Hadebe, 2002). Specialised dictionaries are now being produced to make the Shona corpus representative in all spheres of life. Through term creation, technical books can be developed in the Shona language and these can be used as education materials up to tertiary level. Through term creation, gradually the Shona language can achieve the same footage as the English language which has more publications than Shona and for that reason it is being used widely in all spheres of life. It is worth noting that ALRI has published some specialised terms dictionaries and they have made some notable inroads in the promotion of indigenous languages. ALRI have prioritised the making of specialised dictionaries as the most immediate urgent activity in the area of language development. This initiative can ultimately result in the elevation of indigenous languages in the education system and public life. Hence to date, the most productive area of linguistic innovation in Shona is probably in science and technology, through term creation efforts.

2.4 Term creation:

2.4.1 Works by scholars of non-African descent

The process of creating new words and giving them new meaning is referred to as term creation. It is concerned with collection, description, processing and presentation of terms, that is lexical items belonging to specialised areas of usage of one or more languages. According to the International Standardisation Organisation, (ISO 1087), a term is the linguistic denomination of a concept, or is a “designation of a defined concept in a special language by a linguistic expression. Rey (1996), states that, a term is a one to one representation of concepts, which are organised into systems. ISO (1087- 1: 2000) defines the concept as a unit of knowledge created by unique combination of characteristics. According to Sager, (1990: 80), two types of term creation can be distinguished: primary term creation and secondary term formation. Primary creation accompanies the formation of a concept and is monolingual. This strategy uses new forms or new lexical entities that did not exist in the lexicon before. Some of the term creation mechanisms, which can be used,

are: compounding, derivation and neologism/coinages and semantic expansion. Secondary term formation occurs when a new term is created for an existing concept, hence with secondary term formation there is already an existing term, which is the term of the source language and which can serve as the basis for the secondary term formation, (ibid). Secondary term formation therefore requires of the terminographer a thorough understanding of linguistic mechanisms such as word-formation processes that are available to him/her to expand the terminology (Cluver, 1989: 254, Carstens, 1997: 10). Term creation is a linguistic mechanism that could be used to develop languages so that they can be used effectively in all spheres of life.

According to Sager (1990) borrowing is one term creation strategy that maximises existing terms to form new specialised terms for a language. Greenberg (1971) defines borrowing as the acceptance of a form both in sound and meaning from another language usually with phonetic and semantic modification. The borrowing language is called the receiving language. The language from which the borrowing is made is referred to as the source language; it can also be termed the lending, secondary, model or donor language. For purposes of this study, these terms are used interchangeably by the researcher. The borrowed element, as it was in the source language and as it was in the receiving language, is the replica or the loan word. According to Sager (1990:80) borrowing occurs when a new term is created as a result of transferring knowledge to another linguistic community in which a corresponding term needs to be created. If that language is deficient then the receiving language the term as it is. It should be noted that borrowing is the only term creation strategy that brings in foreign lexical elements in the lexicon of any given speech community.

Rayfield (1970) made a significant contribution by giving an analysis of the borrowing term creation strategy of which this study immensely benefitted. He argues that, the initial act of borrowing is more likely to be an adoption, since the borrower will almost certainly have some knowledge of the donor language. The loan word will eventually be adapted, as the bilingual speaker will use it with monolingual speakers, in the speech community as they (monolingual speakers) acquire the loan word. According to Valentois (1997) the process of designating a concept in a target language must take account of the corresponding processes operated in the source language just as these are reflected in the form of the primary term. Joseph (1984: 44) distinguishes between two stages of elaboration of the vocabulary of a language through borrowing: an initial period of transference during which heavy borrowing takes place; and a nativisation period during which the borrowed elements are changed so

that they are incorporated into the indigenous system or are replaced by indigenous terms. Speakers will general adhere to particular methods of borrowing or routine. Routines are productive processes by which speakers with at least some bilingual competence introduce new borrowing from donor language into the native languages (Heath, 1984:372). In the Shona language verbs borrowed into the language often have a particular native suffix added and nouns are assigned grammatical gender, when they are brought into the language for example:spoon <*chi + punu*

spoons< *zvi + punu*

Hence, adopted loans fit into the phonetic patterns and follow the phonological processes of the recipient language. In this respect, borrowed words could become familiar that they are completely seen as native ones, and linguists need to be aware of such scenarios. In other words they are seen as foreign for a time but then accepted subsequently like native elements. The following are examples of English words nativised into the Shona language:

Laboratory-*rabhoritari*, influenza-*furuwenza*, alphabet *arufabheti*, amplifier- *amburifaya*, cartoon –*katuni*, director – *dharekita*

One form of indirect borrowing is loan translation. According to Rayfield (1970:60) loan translation is one form of term creation. This is a process of literal translating- word for word- morphological elements of a term or whole words from the source language in order to form a new term in the target language (Valentis, 1997). In other words, there is a direct translation of a foreign word into the borrowing language. Thus loan translation is where by a terminographer translate the morphological element of a term or whole words from the source language are translated literally (word for word) in order to form a new term in the target language. Thus, it entails a process of borrowing a word and rendering its meaning in the recipient language by paraphrasing it. The Shona musical specialised terms dictionary compilers have done this successfully in a number of cases as the examples below show:

chiuno chegitare (page 23) < guitar waist,
chitsigiro chembira (page 23) < metal that holds *mbira* keys together
musoro wegitar (page 74) < guitar head
mubatanidzwa wevaimbi nezviridzwa (page 66)<ensemble
mitsara yakawanda yemimhanzi, (page 79) <whole tone scale

As is shown in the examples given above, borrowed terms were loan translated thus, instead of adopting a term as it is, its meaning was paraphrased as a way of exploiting indigenous

Shona language resources. However, as seen from examples above, they do not capture all the conceptual dimensions of the notion being designated by the relevant term.

Compounding is another strategy of term creation. Spencer (1991) did a crucial study on compounding term creation strategy. He asserts that compounding is the concatenation of words to form other words to produce a single form. In other words, it is a strategy of word formation effected by combining existing words or lexical items, leading to a new form. Crystal (1997:63) refers to compounding as “consisting of two or more free morphemes” that can easily combine. Spencer (1991) asserts that compounding is an important area in term creation or morphological processing because it is one of the most frequent and robust strategy found cross-linguistically. He argues that this system has the greatest amount of flexibility and simplicity, as far as term creation is concerned. In a similar contention, Chimhundu (2002) remarks that, one advantage of compounding is its maximisation of existing terms, to derive new words and meanings. This means that new words can be easily formed from the source language to the target language.

One notable property of compounds is their productivity and therefore, it can be argued that the compounding term creation strategy, if fully utilised, has the capability of producing numerous new specialised terms for a language. However, although this is a very productive and common linguistic process in Shona, it nevertheless, has the problem of heavy lexical loading and lengthy coinages (Chiwome, 1996). The study by Spencer has shown that in formulating compounds, terminologists may face a difficulty in adhering to the principles of conciseness, which advocate for the conciseness, brevity and shortness of a term. Furthermore, a term formed by the compounding term creation process has no problem with the inflectability and derivability principles. It is easy to derive formatives from a compounded term (Sager, 1990:89-90). In addition, the compounding term creation strategy, allows descriptiveness of a term in the sense that compounds are aptly created to match the intended meaning, as they are descriptive in nature.

In the Shona language, compounding is very common and was one method used to coin new words, in the first phases of the Shona language contact with English language. New indigenous words were particularly coined for the new concepts and material culture being brought by colonialists, using the compounding term creation strategy, for example; *svutugadzike* (tea), *hambautare* (motorcar), *bhizautare* (bicycle), *chiringazuva* (watch) However, these compounded terms never gained currency, because they had to compete with

the imported name for the new concepts, for example *tiyi* < tea > competing against *svutugadzike*. Hence, the popular argument that created terms gain currency in the language or culture in which they were created.

In another study conducted by Spencer (1991) derivation is found to be a morphological process that involves creation of new words from old words. In other words new terms are coined by deriving items from existing words. Derivation is the most common term creation strategy to be found in the production of new words in many languages by means of prefixing and suffixing. Suffixes and prefixes are morphemes used to make new words in the language, for example, the morpheme *-tion-* changes the verb *create* into a noun *creation*. The English language, like the majority of European languages, use Greek and Latin words as the basis of deriving terms from a number of disciplines like medicine, chemistry and biology, (Hadebe, 2006). In the Shona language, especially, in educational system, terms are derived from Shona verbs, adjectives and nouns to express new concepts brought in by the education system, for example:

Bvunzo—examination,
Rebeso yepikiso —reversive verbal extension,
Chidzidzo-theme

From the review of literature that was done in this section by the researcher, it emerged that, derivations fit well in the principles of term creation because it allows inflectability of terms by way of prefixing and suffixing. In addition many related terms can be derived from nouns, verbs and adjectives. It can be argued that derivation and compounding are productive term creation strategies since they use opportunity maximisation of indigenous terms to create terms for foreign or new concepts adding new specialised lexical terms to the Shona vocabulary.

Yule (1996) carried out a study on coining of new words (neologies). According to Yule (1996) coining is a process of word formation that involves the invention of total new terms. Coining is very necessary, because it can be argued that the introduction of new concepts into a subject field unavoidably involves its designation with a new term. Usually, scientific and technological development drives the need for coining new words. Coinages are also referred to as neologisms. ISO TC 37, (1087-1:2000) says, the term neologism refers to new terms coined for a given concept, that is, new coined terms appearing for the first time in a language. Sometimes these terms are coined to replace adopted foreign language terms.

From the definitions above, borrowed terms, compounded terms and derived terms cannot be considered neologies since their strategy is to utilise terms that already exist in a given language. However, if the compounded terms do not exist in the language, then they may be referred to as neologisms. In addition, the term creation strategies must be oriented towards the solution of specific needs and therefore, it must take into account the recipients of the created and the activities they plan to carry out.

In her study to explore terminology, Cabre (2002) provided a theoretical view of terminography, which benefited this study significantly. The communicative theory of terminology (CTT) enables the development of standardised international principles for the description, formulation and recording of specialised field terms. Thus, Cabre highlights that a theory of terminology helps to eliminate ambiguity in term creation. Cabre posits the fact that terminology theory should focus on the user (Cabre, 2002:180) hence a terminological work like compilation of a specialised dictionary must be oriented towards the solution of specific needs of the target users. Therefore, it means that products of terminology specifically intend to satisfy the needs of the user. Cabre argues that it is the circumstance of each communicative situation, which determines term creation activities and strategies. Cabre's work plays a pivotal role for this study, opening new vistas of knowledge on the terminology discipline. The researcher is deeply indebted to the role CTT played in expanding the researcher's terminological horizons. The researcher used Cabre's work to gain an insight in conjunction with the other terminological theories like the general theory of terminology by Wuster (1979) sociocognitive theory of terminology (SCTT) by Temmerman, (2000) which explores cognitive potential of terminology as related to verbal situational cognitive contexts in discourse and in wide range of communicative environment. In addition the researcher used the frame based theory of terminology by Faber et al (2005) which shares the same premises as CTT and SCTT and it applies sociolinguists' principles to terminology and looks at different usage contexts. These theories played a vital role on the researcher's understanding of term creation strategies as a whole.

In many developing countries, language development goes hand in glove with language planning. Thus, any language revitalisation process is interrelated to language policy, language planning and their various respective categories: status planning, corpus planning, and acquisition. Therefore, the language development process must be approached from multiple fronts, taking into account the social networks that intertwine home, school, and community (Fishman, 1991, 1996, 1999, and 2001). For instance, there should be relevant

language and technology planning and policy and innovative educational reforms, which should include “restoring” indigenous language use in all spheres of life. Coronel-Molina (2011) believes that language revitalisation can involve teaching, developing, cultivating, strengthening, and disseminating a language to make it a vital instrument of communication in daily life; in other words, restoring and strengthening its pragmatic functions in various spheres of society. It is against this background that specialised term creation plays a significant role in language development efforts. This means that governments should allow indigenous languages occupy the place that truly belongs to them in society. It can be pointed out that since time immemorial indigenous languages were able to communicate natural scientific and technical concepts, and can still do so today. Burnaby (1996) adds that development efforts should be carried out with the active participation of indigenous peoples, as well as other sectors of society. In addition to all this, historical, social, political, economic, educational, and technological factors should also be considered. This will make sure that indigenous-language speakers do not continue to condemn any indigenous language development efforts engaged by linguists or governments. The researcher is of the view that, developing countries governments should also promote literacy in indigenous languages. They should develop materials in indigenous languages and make them available, in print and electronic media as well.

Greymorning (1999) is another linguist who laments the lack of instructional materials as one of the key obstacles to indigenous language development in Australia. He highlights that, efforts by linguists are never effectively utilised yet it is ironic that terminologists create their own gauntlets, like the books in the Arapho language. Despite the fact that the materials produced for this indigenous language represent excellent tools for language learning and development, they unfortunately have also presented a problem in the sense that once completed, they have not been put to use. Instead they have sat on shelves collecting dust. Even though language instructors receive training on how they could be used, the very instructors who created the material resist using them. Greymorning notes that, efforts to revitalise indigenous languages can at times bring about opposition from the very people the project is meant for. He laments that:

As our language efforts intensified so did the criticism. We have been given something sacred, and we recognise its sacredness, but instead of blessing our children with this sacred gift, a vast majority of speakers seemed to have buried their language out of reach from our children and out of reach from our future (Greymorning, 1999:3).

Although the basic strategy is to try and bring about terminological developments that would strengthen indigenous languages, Greymorning believes that no matter how hard people may try to develop indigenous languages, they continue to get beaten down by the English language in technical and scientific terms. He further argues that to achieve the goals of language recovery and revitalisation, it is necessary to take draconian measures at all levels and it is also fundamental to strengthen, unite, articulate, and multiply efforts. The researcher notes that the study by Greymorning is valuable to this study in a great way because it analyses and clarifies the challenges that terminologists face because of negative attitudes by the people which development is meant. Hence, the researcher's understanding of term creation endeavours is widened by Greymorning's work.

Sonneveld and Loening (1993) Burnaby (1996), Denzer King (2008) Brisson (2009), Ahmad (2011) note that the need to communicate data effectively and precisely has given a boost to research in terminology. By presenting various approaches and applications of terminology development, these scholars raise fundamental questions about the use of concepts and the ordering of terminological knowledge. Thus their work deals with linguistic problems and technical aspects of terminology relating to terminology development in specific subject fields such as lexicography, physical sciences, chemistry, social sciences and medicine. Moreover, they presented important new insights into the principles and methods employed in terminology development as well as the ways in which various terminographers have tackled problems of terminology in their specific specialised subject fields. This greatly benefited this study especially in the analysis of the specialised Shona medical terms dictionary (DRN).

2.4.2 Works by scholars of African descent

Van Huyssteen (1999) highlights the problems that African languages face with regards to term creation. She focuses on South African indigenous languages which she regards as developing languages, and how they experience problems in term creation. The problems identified by Van Huyssteen are related to; time, euro-centrism, standardisation, foreign sounds, trendy words, multilingualism, etymological purity, lack of terminological efforts coordination and abundance of synonyms. Van Huyssteen is of the opinion that, although, African languages have a low status and have been underdeveloped, this state of affairs can

change if action is taken towards the development of indigenous languages. Van Huyssteen's work is significant to the current study because it gives clarity on term creation and the challenges terminographers face during language elaboration processes. In a related study, Jansen (1992) realised that, although English and Afrikaans were *at that stage* the official languages of South Africa, "the different indigenous languages could not be ignored but had an important role to play in legal procedure" (Jansen, 1992: 2). The problem *at that stage*, however, according to Jansen, were that the indigenous languages could not meet this demand placed on them, because legal terminology in the various indigenous languages of South Africa were lacking or were not sufficiently complex to deal with the legal concepts of modern developments. This is regrettable when compared to Afrikaans which has about 250 technical dictionaries and terminology lists, (Madiba, 1998). The study by Jansen (1992) shows that, indigenous languages are limited in scientific and technical development, and if they are to compete with the English and Afrikaans languages there is need to develop their terminology in these areas. In other words, the study by Jansen is advocating for the effective and swift development of African languages so that they may be able to transmit technical and scientific terms.

Other terminographers whose works inform this study very significantly are Mtintsilana and Morris (1988). They focus on the process of language development through term creation strategies such as paraphrase, compounding, deiphonisation and borrowing as applied to Zulu, Ndebele, Sotho and Xhosa languages. Of interest to this researcher, is the strategy of deiphonisation, whereby a prefix is added to the proto-typical perception of the sound made by an object, for example;

Motor-cycle >*isi-thuthuthu* (Xhosa)

This strategy can as well be useful and can be utilised by terminographers in the Shona language as exemplified below;

Motor-cycle >*chi-mu-dhudhudhu*

In addition to this, they highlight the most significant problems surrounding special field terminologies for African languages of which most are sociolinguistic factors such as lack of sufficient terms in a language, social attitudes, lack of resource materials, lack of reading materials and lack of competent human resources. Mtintsilana and Morris (1988) also add the lack of commitment by government policies to develop indigenous languages. Terminology

development in South Africa has been retarded by a number of ideological, historical, and educational factors, "the most fundamental of which are the language policies adopted in the Republic of South Africa" (Mtintsilana and Morris, 1988: 109). The national and self-governing states that were created by the previous government led to the adoption of certain African languages either as the official language or as the de facto dominant language of these states. To this end they are supported by Madiba (1998) who argues that despite the contributions made by the Language Boards towards the development and standardisation of the African languages: unfortunately, the activities of these boards were undermined by their lack of legitimacy, as they were perceived as the agents of the apartheid government (Madiba, 1998: 64). However, a substantial demand for terminology creation arose from this, since various business matters (civil service departments, local administrative bodies, courts of law, etc.) were conducted in the vernacular (Mtintsilana and Morris, 1988: 109). Thus, to a very large extent, Mtintsilana and Morris (1988) and Madiba (1998) advocate the full commitments of governments in any language development efforts meant for their nations.

Alberts (1999)'s notable contribution for the development of indigenous languages is the emphasis on development of terminology and terminography in South Africa. She postulates that terminology is a strategic resource of any nation, and this resource should be preserved by all means. Her works focuses on the dimensions of terminology, namely the cognitive, linguistic and communicative dimension. Alberts argues that terminologists need to consult with subject specialists, linguists, language users and mother-tongue speakers during different phases of the terminography process. Thus, she stresses the role of consultation in terminology work. It is therefore essential for collaborative effort between all people in the communication process, that is the subject specialists and people at the grassroots. Alberts (1999) is of the view that it is important to document terminology in a systematic way to enable subject specialists, language practitioners and lay-people to communicate by using standardised terminology. In addition, she highlights the fact that Terminographical principles need to be applied skilfully for people to be able to document information on concepts and their related terms. Therefore, unified guidelines should be applied to facilitate the exchange of scientific and technical information on various levels of communication. Through the use of correct terminology, the effective scientific and technical communication skills of all the citizens of South Africa (This is also applicable to Zimbabwe) can be developed. The effective management of terms is essential. It can be argued that collecting information on concepts may seem superfluous, but a lack of systematic terminology

management leads to considerable costs and diminished utility or functionality in the long run (Sonneveld, 1997). This study informed the researcher more about the importance of terminological development, collaborative work in term creation, term creation principles and guidelines.

It against this background that a bottom up approach in creating specialised terms is needed, such that they will be referred to as terms for the people by the people. This makes the created terms more popular in usage, and as such, they gain popular acceptance by the users. Such created terms will be characterised by a high level of ownership and participation by motivated users, who may have gained an appreciation, through the participation process, of the importance and value the created terms have to national goals for indigenous language development. As a result the linguistic research findings will be relating to important issues of society, and as such the created terms will be accepted by the intended users. This contention is supported by Cabre (1992) who purports that naturally terminology expansion depends more on pragmatic factors such as the recognition of the significance of terminology on the part of the users. The suitability of the particular language for the performance of any particular role should depend not on the language but on the user (Ogutu, 2006:53). On the same contention, Hartman (1985:59) postulates that all dictionaries are judged against the lexical needs of those who consult them. These contentions imply that terminology can be evaluated in terms of acceptability to speakers. In other words, it means that the user becomes of paramount importance.

Premrirat and Malone (2003) examine what language revitalisation and planning mean both as development on their own right and as part of the nation-building. They outline and discuss the above mentioned issues in detail. They argue that language development activities must precede and contribute to the literacy and mother tongue education activities. Lecturers and teachers in applied linguistics and minority language education therefore, should develop participatory ways of in the activities meant for language development efforts. The study by Premrirat and Malone (2003) provide the researcher with an overview of language development efforts around the world, emphasising the interactive aspects of language development and the facilitation of minority language literature development. The description is similar to efforts by ALRI revitalisation project for the Shona language development in Zimbabwe.

In a similar study, Nakin (2009) examines and analyses the issues related to corpus, status and acquisition planning in Sesotho and IsiXhosa. In corpus planning, Nakin elaborates and discusses the categories in which new terms can be created through the term creation strategies of borrowing, compounding, coinage, blending, clipping, acronyms, prefixation, suffixation, and infixation among others. Through compounding, new words have been made by joining the two aspects of the language, that is, noun plus noun or the verb plus noun vice versa and verb plus verb vice versa. This study benefitted where she examines and discuss the compounding term creation strategy. In addition, Nakin focuses on how new words in Sesotho and isiXhosa can be formed through suffixation, that is the addition of a morpheme after the operand or base. This is also applicable to the Shona language, for example;

Verb radical	Noun stems
<i>famb-a</i> >walk	<i>Mambo</i> > <i>king</i>
<i>famb-is-a</i> >walk quickly	<i>ma-dzi-mambo</i> >kings
<i>famb-ik-a</i> >possible to walk on	<i>chi-mambo</i> >small king
<i>famb-ir-w-a</i> >be visited	<i>twu-mambo</i> >small kings

Table 0-3 : Showing how words can be created through the derivation term creation strategy

Nakin argues that compounding is a special way of derivation in which, instead of adding affixes (bound forms) to a stem , two or more words (or bound bases) are put together to make a new lexical unit. It is in this category that new words have been made by joining the two aspects of the language, that is, noun plus noun combination, for example:

baba + mukuru> *babamukuru*
nhare + mbozha> *nharembozha*
shura +Matongo > *shuramatongo*

or the verb plus noun combination,

Baya + moyo> *chibayamoyo*

or the verb +verb combination

Svuta + gadzika >*svutugadzike*
Gara + sungwa > *mugaradzakasungwa*

Nakin (2009) also highlights the use of acronyms as another method of term creation, which makes use of existing words. Acronyms are created by omitting words or parts of words of which a term consist, (Valentois 1997). It uses fewer words in order to designate the same concept, for example, Video Cassette Recorder – VCR. Acronyms have got an advantage in that shortening of terms serves the purpose of creating more concise forms, which speakers prefer, especially for frequently used terms. In other words, this process creates terms that are easier to remember than lengthy ones. Acronyms have an advantage in that after some time, they can be integrated into a language as full-fledged words and they become words and part of the lexis of the language concerned. The new word formed thus will have new meaning. Nakin added vital information; that specialised terms can be named according to their functions, physical attributes and appearance (Wababa, 2009). Thus Nakin (2009) shows that term creation is a deliberate means and conscious effort for language elaboration.

Onyango (2005) examines issues that emerge in the attempt that have been made in national language policy on language terminology in Kenya by linguist and scholars. Onyango views terminology development as a process that entails the formation of a language institute, setting up of goals, the actual engineering of the specialised terms, the mode of their dissemination and their evaluation. Onyango explains that the major challenge in language elaboration is the national language policy which has negative characteristics of avoidance, vagueness, arbitrariness and there is no organised structure to undertake terminology planning. Onyango sadly notes that all attempts on language development have not been seriously recognised in the education sector which is the most important agent for stabilising and standardising language usage. By presenting various approaches and applications of terminology development, Onyango (2005)'s work raises fundamental questions and discussions about the interrelatedness of socially, economically, politically and ideological factors in term creation and the ordering of terminological knowledge. Moreover, important new insights into the principles and methods employed in terminology development are offered by the ways in which contributors have tackled problems of terminology in their specific subject fields.

2.4.3 Works by scholars of Zimbabwean descent

In his study Mutasa (2002) puts forward strategies that can be implemented for the rejuvenation and revitalisation of African languages in sub-Saharan Africa. Some of the strategies are the compilation of languages from the grassroots, using term creation strategies such as borrowing, compounding and coinages. The study advocates the use of loan words as they can fill terminological gaps. This is supported by the contention that English language developed as a result of loan words from Latin and French languages. As such the study justifies use of borrowing term creation strategies in Shona specialised dictionaries, although the magnitude of borrowing may be a decisive factor. Mutasa added that a language also grows through appropriation, transformation and integration.

However, Mutasa (2002) is of the view that successful implementation of language change depends on the attitudes. Attitudes are difficult to change and hence Mutasa proposes that the language users should be conscientised about the benefits of using their own language in education and administrative domains, and how this will improve their own lives. This can be done by cultivation through the media, that is, indigenous languages should be used in the media and that government should take an active role. Linguists and language users should be aggressive and radical in their endeavours to develop and promote indigenous languages in major domains like print and electronic media and as a medium of transmission in the education system. In other words, Mutasa (2002) hopes that, post-colonial Africa would employ a radical shift, giving impetus to a resurgence of African languages so that they may carry philosophical and scientific discourse to unprecedented heights.

Similarly, Mutasa (2005) and Mutasa & Ogutu (2008) advocate for the use of African languages in the economy and science, as well as educational system. Findings by Mateene (1980 cited in Mutasa 2002), supports this contention, as he pointed out that, African languages are under-developed in scientific and technical expression because they have not been used in these fields. The African languages in general and Ndebele included are still regarded by their own people as incapable tools for wider usage, (Hadebe, 2002: 145). This is rightly observed by Mutasa (2006:74) who says,

African languages will not be implemented at present because of resistance from vested interest, hardened attitude or corrosion of minds or in fear of the unknown --- regardless of the government and language policy planners, the implementation of a language policy depends to a large extent in the people's perception of attitude towards a language. It is therefore, difficult to introduce indigenous language as languages of learning and teaching which have a low ... value and limited use.

Bokamba (1933:30) strengthens this viewpoint as he argues that, “African people are to blame for the language situation they find themselves”. He sees the African as the main culprit as he has doubts about his capacity to recognise the vitality and equality of his language and to transform and develop it and his cultural environment. Mutasa’s (2002, 2005, 2006) studies show that, the attitude both of speakers and government on indigenous language development is worrying. The development of national terminology cannot be left to individual effort; government should play a greater visible part. It has been observed by this researcher that the use of English language in all spheres of life has psychologically conditioned people to think that the English language is the only language for wider communication.

Magwa and Mutasa (2007) contend that, the role of African languages in development in Africa can never be achieved without serious considerations of the role of African languages. They posit that “the position of former colonial languages, such as English, French and Portuguese, condemned African languages to a periphery in socio-economic development in Africa.” This has led to their undermining and marginalisation “in the mainstream of the economy, which appears to be one of the reasons for Africa’s underdevelopment” (Magwa and Mutasa, 2007). This is hinged on the premise that language is the key or prerequisite in all facets of development. It is contended that the present situation in most African countries, particularly Southern Africa, where communication relies heavily on foreign languages, slows down indigenous people development since the parties involved in the development process cannot interact effectively (Kishe, 2003). The major contention of their study is to show how indigenous languages can facilitate national development in Sub-Saharan Africa and they gave examples of how Asian countries such as Japan, China and Malaysia, which were formerly western colonies, have developed on the basis of their own languages and indigenous culture. They argue that, according to Roy-Campbell (2006) Japan and China are recognised internationally as economic powerhouses the world over and China, in particular, developed in most fields like the textile industry, and the field of medicine with acupuncture, acupressure, and Chinese herbs, which were all developed using the Chinese language.

Magwa and Mutasa (2007) study, provides a foundation or some valuable groundwork on language development through term creation for the current study. This study has given an insight to the current researcher, to the fact that there is a close relationship between term creation and language development and that meaningful socio-economic development cannot take place where linguistic barriers exist. Basing on the postulations by the above scholars,

the researcher can safely conclude that indigenous languages can play a key role in national development, either socially, economically or whatever kind. As it is, the situation in Zimbabwe is that, linguists together with ALRI constantly coin terms in specialised dictionaries, but the irony is that, they do not know when and where these terminologies are going to be used in the education circles. It can be assumed that, in their eyes there is no market for the results of the standardised work.

Rwambiwa (1996) views language revitalisation as a worth exercise that would empower indigenous languages to be used in Science and Technology. Magwa in Mutasa (2006:24) asserts that such an enhanced role is likely to lead to the development of a healthy indigenous language industry. By so doing, linguists are responding to this need by employing various term creation strategies, as a language elaboration exercise, so that the Shona language is not found lagging behind other languages of the world, in terms of technical and scientific terms. In other words, it is the desire for self-sufficiency in the Shona language vocabulary that drives linguists to coin and disseminate Shona specialised terms. This study shows that with appropriate language policy towards corpus planning in Zimbabwe, it can be asserted that, there will be no discipline that cannot be handled in the Shona language in terms of technical vocabulary.

Hadebe (2002) assesses the contribution of dictionary-making in Ndebele on the standardisation of the language. Language standardisation as part of language planning is usually sanctioned by government departments or similarly authorised language boards, but other agents of standardisation like lexicographers are equally important. That is why the thesis focuses on the role of the *Isichazamazwi SesiNdebele* (Ndebele Terms Dictionary) on the standardisation of Ndebele. ..." Hadebe highlights that standardisation of a language is very important, because some challenges that terminologists face, are on how to come up with the best term at once, and as a result they end up accepting synonyms. It can be argued that, there are instances where very many terms are used as synonyms in the dictionary and this obviously create confusion on the part of the Dictionary user as to which term is more correct. Some terminologists argue that basically, there is nothing wrong or curious about the existence of synonyms of technical vocabulary. However if not harmonised or standardised, such random usage hinders wider efficient communication among language experts and language users. Standardisation of terms makes it easier for language users to adopt the created terms. As a result, many linguists highlight the need for the standardisation of

synonyms in a specialised dictionary.

In addition Hadebe (2002) highlights lexicographic challenges which include the standardisation of loan words because of etymological purity concerns, editors had to make decisions on vocabulary selection, on senses, pronunciation, spelling and terminology, as well as which loan-words to include in the dictionary. Thus he notes that while loan words from Zulu and other Nguni languages are generally accepted in Ndebele, those from other African languages, such as Shona tend to be resisted. The ISN lemmatised words with <r> symbol representing a sound that some Ndebele speakers believe is of the Shona phonology, for example, in the words, *shamwari* and *reza*. He concludes that, there is also resistance of loan-words from European languages like English and from Afrikaans although many words from these languages have become part of the Ndebele lexicon. Therefore, decisions made in the ISN as well as on Ndebele language standardisation were influenced more by sociolinguistic reality as perceived by editors than purely academic and linguistic factors.

Hadebe also observes that the Zimbabwean language policy confines African languages to the unofficial domain, which have led to the under-development of terminology in almost all the fields. According to Hadebe (2006) one of the problems that deny indigenous languages their rightful function among its people is the politics of terminology or lack of it which is used as a pretext to keep indigenous languages out of the domain of modern technology confining them to informal roles in society. He comments that the problem is made acute by the non-usage of indigenous languages in formal situations, like industry, commerce, education and law. These are the areas where corpus planning should be emphasised. Similar findings were also obtained in studies conducted by Zvobgo (1992), Prah (1997), Magwa (2006), Mutasa (2006), Ogutu (2006). Thus, language development needs urgent attention from all concerned government departments, Language planners, Academics and Linguists.

Hadebe's works is of great significance to the current study as both studies identify and point out that there is urgent need to develop and use indigenous languages through such processes as term creation. Hadebe (2002, 2004, 2006) works provided the current research with hints on barriers to term creation that specialised dictionary compilers may face during the transmission process and that some of them are closely linked to a number of historical, social, political economic and socio-linguistic factors. By this, the current study gained some insight into the fact that creation of fair terms may be hindered by sociolinguistic realities. Usually problems faced by terminographers in lexical engineering in any language, are

equally the same and these problems may be generalised to the Shona language as well. This focus is important to the current study as the researcher benefited some knowledge on term creation principles and guidelines. In addition, Hadebe (ibid) purports that specialised and general purpose dictionaries are compiled on the basis of the needs of the users according to their academic and professional needs. Thus, the current study drew a lot of insight from the monolingual Ndebele dictionary-making experience, so it enabled the discussion and analysis of term creation strategies used in the selected specialised Shona dictionaries. Hadebe's study thus, widened the researcher's abstractive horizons on term creation strategies and, hence, their analysis.

One of the significant studies on nativisation was conducted by Chimhundu (2002). His work has contributed valuable ideas and useful information especially on the issue of treatment of loan words, which he prefers to call adoptives, in a receiving language. Emphasis of his study is on the process of transfer and continuity with related processes. Chimhundu (ibid) mainly focuses on the phonological level where it has been found that transferred elements undergo a process of assimilation before they become fully integrated. Findings by King (1969), Mwasoko (1989) McMahon 1994, Archibald (1998), Thomason (2001), Hadebe (2002) also echo postulations by Chimhundu (2002) that loan words are morphologically and phonologically adapted in the receiving language. Thus, loan words which are modified by substitutions of native habits are referred to as nativised loan words. Chimhundu (2002:302) also revealed that coined words have a problem of acceptance by the speakers as he says "the new terms are coined after whatever is referred to have already been introduced in the speech community with its non-indigenous label." Consequently this gives the borrowed lexical item some advantage as far as its usage is concerned, as people would have familiarised with the borrowed term. Therefore in this case, even if lexicographers may coin good terms, with the prevailing language policies in many developing countries, the problem of acceptance still remains. Another big issue towards acceptance of coined words is that of social attitudes towards a language. For example, in Zimbabwe language users are psychologically conditioned to associate the English language with prestige, and they want to be part of the prestige surrounding it, thus, blinding them to the importance of their own language. Hence, social attitudes trigger borrowing of foreign lexical items at the expense of indigenous lexical items. In as much, term creators should have the issue of acceptability of terms they create in mind.

Chimhundu (2002) also describes how the Shona language is coping in the contact situation with other languages like English, Swahili, Portuguese, Ndebele, Sotho, and Cewa, Zulu, Xhosa and Afrikaans, (Chimhundu, 2002: 32). He posits that:

As the vocabulary is elaborated via adoption, one result is the specialisation of meanings of indigenous terms. There is always need to expand the vocabulary of a language as the culture it represents develops (Chimhundu, 2002:4).

In addition, Chimhundu notes that the contact languages, especially the dominant English language do not threaten the existence of the Shona language as they are operating with positive effect at the lexical levels and it will not die or shift to other languages. Chimhundu, views the notion of borrowing as enriching the receiving language.

Chimhundu's work is particularly useful in that it sheds light into the overall language situation by studying speech habits, thus providing the researcher with detailed analysis of attitudes of language users on adoptives and coined words to replace the adoptive. This is helpful and relevant for this study's component of terminology and social attitudes of speakers. It is against this background that the issues of term creation strategies in the current study emerges although the purpose of this study is however, to provide an analysis of the term creation strategies used in the selected Shona specialised dictionaries.

Chiwome (1992) highlighted that some of the issues that could be addressed by terminologists in Zimbabwean schools are the adherence to principles of term-creation and the standardisation of the Shona language. These are consistency, precision, adhering to linguistic rules of the recipient language and to have a particular level of education in mind. Chiwome gave term creation strategies that could be used by terminologists for example adoption, loan-translation, and compounding. Chiwome argues that although, compounding is a very common linguistic process in Shona, it nevertheless has the problem of heavy lexical loading and lengthy coinages and thereby being unpopular. Another term creation strategy he discusses is derivation. This is a process whereby new terms are coined by deriving items from existing Shona expressions, for example, *patsanuro*: word-division, *bvunzo*: examination. Chiwome concludes that one common strategy which is very productive is semantic expansion, a process whereby existing words get specialised meaning for example *zita*>noun, *muiti*>-subject, *miitirwi* > object. Lastly, the other strategy is to coin indigenous words particularly for the items which are part of the new material culture of the country. Chiwome urges terminographers to adhere to term-creation principle if they are to create

acceptable terms for the receiving language. Chiwome's (1992) study is very significant to the current research, because it reveals the different term creation strategies that can be used to elaborate and revitalise a language. Chiwome is of the view that there is need to temper the concept of language purism with the realisation that it is just a patriotic gesture (Chiwome, 1992). Thus, according to Chiwome, etymological purity is not very useful in linguistic senses; it can actually impede the process of term creation by being unrealistic conservative. Chiwome urges linguists to accept that term creation is an exercise in innovation, and by so doing, they would find themselves with fewer worries as custodians of language. Hence the borrowing term creation strategy is regarded as contributing to the growth of indigenous languages in Zimbabwe, by language users and linguists by Chiwome.

Basing on these contentions, the researcher feels that the specialised dictionary compilers should deliver a broad base of awareness for their projects, which can be regarded as an activity of national significance. The elite should not be left at the helm and people at the grassroots should take a major role in this project, so that the majority are not left out. Mutasa (2006:71) laments that:

It is definitely unfortunate that language development and standardisation are left in the hands of a few language boards and centres or institutions leaving out hordes of stakeholders who could make a major contribution to language revalorisation on the continent.

In other words, there can be no meaningful developments without the participation of the majority by which development is meant. However, this is an ideal situation, which is difficult to implement due to economic constraints. Attitudes of users towards created terms are a vital determining factor for their acceptance by the users. Social attitudes of a language lead to its embracement or rejection, (Labov, 1972). It is against this background that the researcher has learnt that some Shona created terms may either face rejection or embracement by speakers of a language. Such attitudes from the target users complicate the task of teaching and learning of any subject in the Shona medium. Speakers of a language need to realise that, term creation strategies such as coining and compounding are undoubtedly a key component in the struggle to preserve, maintain and develop the indigenous languages, and terminologists should make a lot of awareness campaigns for this cause.

Nkomo (2008) postulates that, creative efforts by Afrikaans scholars in the 1950s contributed significantly to the development of the Afrikaans language and its terminology. This partly

made it possible for the language to be used on the same scale as English in South Africa. This demonstrates creativity as a property of all languages, especially African languages which have been marginalised from specialised and advanced communication on the premise that they are not developed to express modernity. Nkomo further argues that, dictionaries, unlike individually produced glossaries, can reach a wider population of language speakers and, hence, have better prospects of facilitating the development and standardisation of Shona terminology. One of the major findings from Nkomo (2008) is the fact that, specialised dictionaries will exacerbate the democratisation of science and technology by making this knowledge more accessible in the languages which people understand better. In this regard, the vital importance of term creation to the development of a scientific and technical capacity of a nation that can template economic development cannot be over-emphasised. Nkomo adds that, specialised dictionaries need to play a role of preserving and imparting such linguistic and cultural knowledge for posterity, in their role as knowledge containers. This should be implemented as a matter of urgency, as globalisation can easily and quickly discard and uproot old values and systems. Thus, it can be noted that specialised dictionaries are only reference books and they should not be an end in themselves, but rather a means to an end. It would therefore be of little significance for dictionaries and terminologies to be produced without being given space for their use.

However, the current researcher concedes that, whilst efforts by many linguists, for example ALRI projects, to develop indigenous languages are commendable, the issue of their status need to be addressed. It has been noted in this study, that these projects have started with corpus planning, while status of indigenous languages has not changed. In other words, in Zimbabwe corpus planning is being implemented in an environment where indigenous languages have got no space or meaningful role to play in the public sphere where English is dominant.

Nyota and Mapara (2011) discuss the impact of current lexicographical works in Zimbabwe on some sectors of Shona language use, namely education, media, medicine and local government. They analyse the responses of Shona users in to the different lexicographical products published by ALRI. Their study maintains that, the creation of specialised dictionaries have resulted in Shona language raising and awareness. The study, however, give an insight into the fact that Zimbabwe has no language policy which reflects the government's lack of seriousness on issues of language development. As a result, Nyota and Mapara (2011) advocate a solid language policy framework that is conducive to language

development. In other words, Zimbabwe needs an authoritative body to deal with language matters that has the power to create, standardise and disseminate terms in the indigenous languages of the country. This absence of an official authorising body partly explains why some writers have described the official language policy as a non-policy approach, (Chimhundu, 1997). At times when governments ignore such linguistic initiatives, the initiators then turn to donors. Consequently, the initiative of producing specialised dictionaries and lexical engineering become a foreign initiative, because researchers will not be able to select their own research designs. Their choice is limited and governed by available funds. Under such circumstances, the accumulation of knowledge follow pre-determined patterns over which individuals researchers have no control. The study by Nyota and Mapara is specifically valuable to this researcher and terminographers in specialised dictionary making activities. The potential of the indigenous languages growth need to be explored more aggressively in building scientific and technical terms. Hence, term creation and only this step will enable indigenous languages in the scientific, technological and educational fields to take their rightful place in the next millennium.

Viriri (2004) discusses the developments in Shona lexicography during the colonial era and the contribution made by the missionaries in general, and Father Hannan in particular. Their effort later resulted in the on-going process of compiling Shona specialised dictionaries by the African Languages Research Institute (ALRI) (into which the ALLEX project has been transformed). Viriri further postulates that the missionaries employed various methods that did not only signal the beginning of an economically exploitative relationship between "the West and the rest of us" but also had ancillary cultural consequences (Dathorne, 1975:3). Their motives towards the development of African literature in general and Zimbabwean lexicographic work in particular was primarily evangelical and not to further creative writing. Great effort was made by missionaries to create relevant terminology in the area of Christian religion. In addition the missionaries published some bilingual dictionaries. The dictionaries were also to help in the standardisation of the Shona dialects and facilitate the natural growth that would lead ultimately to the natural development of Shona as a literacy language (Doke 1931:29). Whilst Viriri commends missionaries for their role in Shona language development, this researcher argues that whilst missionary initiatives were purely evangelical, they, to a larger extent contributed to the undermining of indigenous languages in the sense that the Shona corpus was biased towards religious materials. This undermined the indigenous Shona languages in scientific and technical terms.

The study by Mazuruse and Nhira Mberi, (2012) posits that, the notion of the promotion of indigenous languages should not just be a “talk show” but should provide tangible products that enable the speakers of these languages to transmit any linguistic concept in their language. They stress that such tangible products can be as follows: dictionaries, glossaries, electronic corpora and other reference works. Mazuruse and Nhira Mberi further elaborate on the efforts played by the Great Zimbabwe University in Masvingo, on the promotion of indigenous languages in Zimbabwe. They mainly discussed the challenges faced by this institution and the development of terminology strategies being employed in the efforts to equip the indigenous languages with the abstractive powers that are needed by academics and students to be able to engage all Shona courses at tertiary level in the medium of Shona. Thus they believe that the use of these languages at tertiary level will raise their status at national level. However, it can be noted that their contentions may not be realised since the language policy in Zimbabwe does not promote the growth of the Shona language. Although the Shona language was declared a national language in (1987) and even in Zimbabwe’s new constitution of 2013 which declared that all languages in Zimbabwe have been given official status with recommendations that they all be given equal recognition including in education, no major step is being taken to develop the technical domains of the language and its use is neglected to mostly informal circles up to now. The recommendation by the Zimbabwe constitution can be referred to as mere rhetoric as no suggestions are given as to how this should be done. Thus the Shona language has not been given an academic platform where indigenous technical terms can be widely used. It can be pointed out that this current situation, impacts negatively on term creation activities in Zimbabwe. The study by Mazuruse and Nhira Mberi provides some insight into, and sheds light on language problems facing higher education in multilingual contexts, which benefitted this study significantly.

Ndhlovu (2012) remarks that, it is important to acknowledge that the process of creating new terms is not a simple and straight forward one as translators resort to different methods and strategies to formulate new terms. She further adds that, the complexity of the process is more apparent when translating scientific terms. This is so because unlike ordinary language, technical language shows a one-to-one correlation between concept and term (Cluver 1975:333 in Van Huyssteen 1999:173). Moropa (2005:169 cited in Ndhlovu (2012) explains that:

a translator needs a thorough understanding of the linguistic mechanisms available to him/her in order to be able to create terms. That is, a translator has

to have a thorough understanding of both the target language and source language, as these are the foundations upon which new terms are built.

Ndhlovu (2012) goes on to say that for successful translation to take place translators need to 'align' themselves with the target language and also the borrowing (source) language.

In addition, Ndhlovu (ibid) made an analysis of language elaboration, which refers to the creation of new terms in order to meet the scientific, educational and technical demands of a language (Van Huyssteen, 1999:173). Ndhlovu is of the view that all languages are "dynamic and have the ability to respond to new demands that result from technological and scientific changes. Ndhlovu postulates that "language elaboration is a necessary part of any growing language or every language in contact with other languages, as it ensures that the language in particular is able to express and explain new concepts". Although Ndhlovu's (2012) study did not highlight term creation for specialised Shona dictionaries, the study yielded results that have a significant bearing on the current study. The end result is a new term, whether equivalent or not equivalent, translated or created. It is of interest to this researcher to learn how the translators encountered and navigated the translational challenges.

In a related study, Mheta (2007) analyses Shona specialised musical terms that were created through translation processes and strategies such as borrowing, coining, compounding and derivation. The study offers recommendations on how best to come up with systematized terminology in music and other specialised fields. On the same issue, Mheta (2009) focuses on the use of loan translation as a term creation strategy for solving language gap problems in the indigenous languages and gives a justification of its use in *Duramazwi Remimhanzi*. Mheta supports the utilisation of the borrowing term creation strategy in Shona terminology pointing out that, this demonstrates that "borrowing is not a random or unsystematic linguistic practice, but a systematic process that operates within the rules that govern the Shona language. However there are some critics who argue that, vocabulary developed through borrowing is solely for the elites and as such ordinary people would not benefit from the endeavour. This means that in most cases the language users become passive recipients of language development efforts, whether they understand what is taking place or not.

However, considering the views from related literature, it seems terminologists are justified for their use of borrowed words, because of the under-development of the Shona language by unfavourable language policies in the country as they borrow terms to fill in the lexical gaps.

Chimerah (1995) asserts that, any developing speech communities borrow from different communities that it interacts with and it is specifically for this reason that some known international languages, such as English acquired their sophistication. The presentation of the Shona linguistic terms into domains that were mainly strong-holds of the English language gives the development of the Shona corpus a major victory. It is commendable that the Shona specialised dictionary has made substantial progress in corpus development and it is a necessary step for the gradual taking over from the English language, the role of the national official medium of communication in the country should such an opportunity arise. Studies by Mheta are of great value to the current study because he discusses term creation strategies available to terminologists who wish to engage it as a language development tool. The current study draw a lot of insight to challenges of term creation strategies and how lexicographers navigate them.

2.5 Literature on linguistic principles of term creation

In the following section a brief analysis of literature on term creation principles is carried out. A detailed analysis of these term creation principles is given by the researcher in section 3.5 of Chapter Three of this study. According to Sager (1990) the guiding principles endeavour to make the process of designation systematic, based on certain specific rules so that terms reflect the concept characteristic they refer to as precisely as possible. In other words these principles make term creation transparent and consistent. There are a number of theories, principles and practices in terminology. The underlying fact is that they are all specific to particular languages that they are describing, although generalisations can be applicable to other language situations (Hadebe, 2002). Term creation guidelines and principles are certainly an ideal, which all terminologists should strive to achieve. The researcher is going to analyse term creation principles using Gilreath's onometric battery as the point of reference. The principles are grouped into seven categories namely vocality, semantics, efficiency, morphology, uniformity, phonetics and diction.

2.5.1 Vocality

This term creation guidelines refer to a one to onerelationship between terms and the

concepts they designate, both in terms of form and meaning. To achieve vocality, the following underlying factors should be critically considered i) mononymy, ii) appropriate register and iii) unequivocalness

② Mononymy,

According to Gilreath (1993:87) mononymy refers *to the quality of a term, which is the one and only formal name for a given concept*. It basically states that the term should be monosemous. In other words, one concept is expressed by one particular term throughout the terminology system. It means that during the process of term formation terminologists should ensure a one to one correspondence between a concept and the term used to signify that concept.

② Appropriate register.

Gilreath (ibid) postulates that *“a term’s style is consistent or compatible with the context of usage”*. This principle is a prerequisite for terminologists who are involved in the compilation of specialised terms. It means therefore, that terminologists should take into cognisance the level of abstraction of the users, thus they should coin appropriate terms that appropriately correspond to their level of understanding. In this regard, it means therefore that terminologists should consider the needs of the users. Terminologists should not just coin a term without considering their appropriateness; otherwise the users will reject them.

② Unequivocalness

This principle *“is the quality of a term which has only one meaning within a particular field of knowledge or within a particular nomenclature”* (Gilreath 1993:85). This means that a designated term should denote one meaning not several meanings (polysemy). Polysemy occurs when a term denotes two or more distinctive concepts, which are either related or not related in some respect, although they may not necessarily belong to the same system of concepts. This principle ensures efficiency and effectiveness in the understanding of the created term by the target users. However, the principle have presented some challenges to terminographers because there are some terms in many languages, which do not adhere to the principle of unequivocalness, as they are polysemous in meaning. Another challenge terminographers face as regards the principle of unequivocalness is that of semantic change. It is an acknowledged fact that *words change in meaning*. Some words shift in meaning from what they originally meant and take a certain connotation that is, their meaning either broaden or narrows. Terminographers should take this into account when creating terms for their respective special fields.

2.5.2 Semantics

Terminology should ensure that all new terms created correspond to already existing related terms on semantic level. A correspondence should exist between related terms on both a morphological and semantic level. Therefore proposed terms should follow familiar and established patterns of meaning, which are in use and below are the principles, which terminologists should adhere to:

② Descriptiveness

Descriptiveness is “*the degree to which a term’s literal meaning matches its intended meaning*” (Gilreath 1993:83). Descriptiveness allows the identification of all linguistic variants of a term (it is assumed that these variants should be cross referenced). In addition every word in a specialised dictionary should be defined or self-contained. In other words, a target user should not look for a definition of a word in another dictionary or other source. In most cases the created terms should be able to define themselves, in other words you can easily understand the meaning of the term through its form. This contention mostly apply to terms created through literal transliteration and compounding, for example, the following compounded terms are descriptive,

Chiringazuva <watch
Chiwedzeramutinhira <resonator
Chipaupenyu <oxygen

However, as can be noted from the examples given, the coined terms in most cases violate the appropriate simplicity principle, and this put terminographers in a very compromising position.

② Precision

Precision refers “*to the degree to which a term clearly designates its concept*” (1993:83). This principle shows that a term should reflect the concept characteristics they refer to as precisely as possible, and should not be given a general and widely inclusive meaning. In other words all created terms are to have a precise form and meaning, based on certain specified linguistic needs so that terms reflect designated concepts as precise as possible and ambiguity is to be avoided. This contributes to the capability of the term to be understood by the language users. However, this guideline has a problem in that language is dynamic and is constantly evolving. Categories are not clear-cut, but evolve over time and adapt new meanings and

perspectives. Words either broaden or narrow in meaning. A concept described by a term may change over time because terminology is developing at a faster rate, that certain terms, which were suitable four to six years ago, are no longer representing the concept for which they were devised. In such a case the term has to be changed. This is a problem terminologist's face; language is dynamic and constantly evolving.

② Accuracy

According to Gilreath (1993:84) "*all created terms should be free from mistakes or errors*. He further postulates that "*the quality of the term is determined by the absence or presence of incorrect elements*." Consequently, terminologists should take this simple principle into serious consideration; they should create terms that are error free. A dictionary user is satisfied by his /her ability to properly interpret a new term that is transparent and error free. Terminographers should cross check on issues of spellings, grammar and presentations of the created terms. The accuracy principle significantly contributes to the credibility and usability and acceptability of terms by the target users.

2.5.3 Efficiency

It is generally expected that created terms should be efficiently used by the target users. Terminologists should aim at efficient acquisition by users and effective dissemination of terms. In other words, they should create terms that ensure effective and efficient communication. As such terminologists should abide by the principles below:

② Precedent

This principle refers to "*the extent to which a proposed designation is in harmony with established designations*" Gilreath (1993:87). This principle states that proposed terms should follow familiar and established patterns of meaning, which are in use. ISO (704:200) refer to it as "linguistic appropriateness" whereby proposed terms should follow familiar and established designations in use. In other words, for the proposed term to be acceptable and valid, it must be based on sound knowledge of the target language's rules of lexical formation. The created term must harmoniously be integrated into the existing set of terminology, (Pavel Tutorial online, 2005). This principle present challenges to terminographers in the sense that in most indigenous languages it is difficult to follow any established order, because already, there is deficiency of scientific and technical vocabulary due to unfavourable language policies, which continuously undermine the growth of African

languages. Terminologists, however argue that they have a right and a duty to serve the specificities of concepts of the field represented by the term and as such terms do not necessarily have to be similar to established patterns. Newly coined unknown terms are not necessarily wrong because they are unknown.

② **Conciseness,**

According to Gilreath (1993:88) “*conciseness refers to the orthographic length of a term. In other words it is brevity or shortness.*” It is generally believed that in terminology, concise terms are very important. They facilitate efficient communication, as opposed to lengthy terminological data. Due to the conservation of effort in articulation (Sturtevant 1917 cited in Chimhundu, 2002) the longer the word the less likely it is to be used. In this regard, terminologists should endeavour to create short terms, so that they grow to enjoy popular usage. However, the challenge is that accuracy and conciseness of a term is questionable, in that terminology is determined by various factors, some of which are peculiar practices and tradition within a particular field. In this regard, this principle is inappropriate for the medical and legal language, which has long sentences and archaic morphology. It also undermines the productive compounding term creation strategy in the Shona language, as terms created through this strategy are heavily lexically loaded and lengthy coinages. This compromises etymology purity since terminologists will turn to loanwords which adhere to this principle more easily. It means therefore indigenous sensitivised term creation strategies cannot be effectively implemented for the growth of most indigenous languages.

② **Appropriate Simplicity**

This principle states that “*the number of words in a term is appropriate for the level of importance of the designated concept. As a rule, the more important the concept, the simpler the term should be*” (Gilreath, 1993:89). It means that terminographers should coin simple and comprehensible terms by the target user. Difficult terms maybe disregarded for rather simple explanatory terms (target users mostly stress that they prefer English terms because they are simple as compared to indigenous terms, especially compounds)

2.5.4 Morphology

Created terms, either borrowed or coined, should be structured morphologically to bear the likeness of the target language. Sager (1990:89-90) states that the term must conform to the general rules of word formation of the language. Below are the principles, which clarify the

above postulations.

② Form Correctness

This principle is also called “*linguistic or grammatical correctness*” which refers to the ‘*extent to which a term has no grammatical errors, such as misspellings, wrong hyphenisation and inadmissible wrong number and wrong part of speech*’ (Gilreath, 1993:89). This is a simple and clear principle that terminologists should follow, for the credibility of the created terms. Hadebe (2002:196) says dictionaries cannot afford to be inconsistent in spelling. By their nature dictionaries guide users in spelling and terminographers have therefore to seriously address spelling problems of a created term. Some spelling problems are brought in a lexicon due to language contact. Terminologists have to change spelling of loan words to suit the borrowing language. In most cases loan terms are Africanised by transliteration, that is, by changing their phonological and morphological structure to accord with African language structures (Mtintsilana and Morris, 1988: 111). In addition to the spelling problem, loan words bring into the language sounds that previously were not in the language, making them difficult to represent in writing, and thereby causing pronunciation problems. Furthermore, new phonemes may not be acceptable to speakers of a language and this is a big challenge for terminographers and should be taken into account when creating new terms.

② Etymological Purity

This principle states that, “*a word constructed from elements derived from a single language is usually preferable to a hybrid word which combines elements derived from more than one language*” (Gilreath, 1993:90). This implies that, when creating linguistic terms, in the case of choice between loan terms and indigenous terms, priority should be given to indigenous terms as much as possible. However, linguists contend that preservation of language purity should not be at the user’s expense. It would be better to adopt popular terms in use rather than coin an indigenous term where a loan term already exists. Thus, the dilemma of terminologists is whether to consider a loan term popular in usage over indigenous term less popular in usage. On another dimension, partly due to colonial mentality, language policies, social attitudes, most indigenous languages’ speakers are not concerned with etymology purism, so terminologists mirror the correct usage.

2.5.5 Uniformity

There should be a systematic approach when dealing with terminology. It helps maintain

consistency of usage. Consistence maintenance is an indispensable part in terminology function. Users will find it difficult to conceptualise inconsistency and inappropriate terms. Terminologists are encouraged to make the process of concept designation as systematic as possible. The following guidelines serve to explain the above principle:

② Derivability

According to Gilreath (1993:91) “*derivability is the quality of terms, whose elements can be used in naming a variety of related concepts*”. Terminologists should be able to derive terms from verbs, nouns, adjectives and idioms existing in the concerned language in the creation of new terms. Derivatives are very productive in term formation since they make it possible to designate new concepts derived from an existing term. To this end (Hadebe, 2002:152) posits that foreign terms derived into the language cannot easily inflect or derive other related terms or concepts.

② Inflectability

Inflectability refers to “*the quality of the terms, which inflect well in the forms such as comparatives and negatives*” (Gilreath, 1993:91). Terminologists should create terms that allow inflectability. Just as in derivation, inflects are very productive in term formation since they make it possible to designate new concepts inflected from an existing term. Thus derivability and inflectability are possible when one uses indigenous terms, as loan words are difficult to derive terms from.

② Series uniformity

This principle refers “*to the quality of a group of terms, which use common elements in naming related concepts*” (Gilreath, 1993:91). All terms should be constructed in a uniform way as possible. Consistency is important in that all users will use the terms with effectiveness and efficiency. Terminologists will achieve user friendliness with consistency. According to Valeontis (1997) the processes operated in during primary terms formation, can provide valuable guidance for the creation of terms on a secondary level. In this regard terminologists should ensure that the processes of designating a concept in a target language must take account of the corresponding processes operated in the source language.

2.5.6 Phonetics

Terms should conform to the phonological and phonetic patterns of the language into which they are coined. This is explained in the guidelines below:

② Euphony

According to Gilreath (1993:92) “*euphony is the phonetic quality that gives a term a pleasant sound*”. Terminographers should coin pleasant terms. However; this principle is relative because it may be difficult, for terminographers to judge the pleasantness of a term. That depends with each individual user. The need to refer to something terms more pleasant may lead to a multiplicity of terms as each user has a different opinion of a pleasant term. This will cause a problem on the selection of terms by terminographers.

② Pronounceability

This principle refers “*to the ease of pronunciation of a term*” (Gilreath, 1993:92). Terminographers should create terms that are easily pronounceable. Pronunciation must conform to the orthographic and grammatical conventions used in the language. The following examples further validate this fact:

School < *sikuru*, Phone < *foni*, Plate < *pureti*, Bus < *bhazi*

This is a crucial pre-requisite for the proposed denomination to be recognised by native users as a component with acceptable internal structure. Phonologisation makes the borrowed terms easy to pronounce. Through phonological adaptation, loanwords become part and parcel of indigenous languages, so much that speakers may not notice that they are not original to the language. Therefore the basic aim of the terminographer is to guide the user in respect of the properties of a term. Pronounceability makes the term to be user friendly.

2.5.7 Diction

Terms should be simple and not difficult to comprehend. Choice of terms should take into account the level of abstraction of the target users.

② Acceptability

The principle of acceptability refers to the quality of terms which are not emotionally charged, obscene, morbid, gender biased, informal, strange, awkward, corny, silly etc (Gilreath, 1993:91). This means that terminologists should be sensitive to the inclusion of offensive or sensitive terms in the database or terminology list. However, some words are judged unacceptable on social grounds and suppression of unaccepted terms does not mirror usage. It is against this background that linguists argue that this principle is too prescriptive.

2.6 Conclusion

In a nutshell this chapter has concentrated on literature on linguistic outcomes of language contact and language change, term creation and principles of term creation. Literature reviewed has shown that language contact and language change are contingent upon multiple factors such as structural, historical, political, economic, social and cultural. Consequently literature reviewed has shown that in Zimbabwe, the dominance of the English language, the legacies of colonial and post-colonial educational policies and their effects, the desire to regain and maintain indigenous languages have become major issues in the field of language development, hence term creation. In as much, it is noted that language expansion is being taken seriously by linguists, gearing it for scientific and technical language development and independence and not interdependence on foreign language terms. Reviewed literature has also focused mainly on linguistic principles and the linguistic mechanisms that set the patterns for term creation principles using Gilreath (1993)'s onometric battery as well as ISO 1087 and ISO/TC 37 terminology standards. It has been noted from literature reviewed in this chapter that the basic principles of term formation is to consider the requirement placed upon a newly created term. Overall, the reviewed literature has to a larger extent shown that term creation is one significant way of improving or developing the language of a people, especially in developing countries such as Zimbabwe.

Chapter 3: THEORETICAL FRAMEWORK

3.1 Introduction

This chapter presents the theoretical framework to guide the study. Currently, there are a number of theories, principles and practices of terminology, although there are still some debatable questions about these theories. The underlying fact is that they are all specific to particular languages that they are describing, although generalisation would be applicable to other language situations (Hadebe, 2002). According to L'Homme (2003), examples of some such theories are Socioterminology (Gaudin, 1990, Guespin 1990), the Communicative Theory of Terminology (Cabre 2000), and Sociocognitive Terminology (Temmerman, 1997) Cognitive-based Theory of Terminology (Kageura, 1999) to mention but a few. The mentioned theories subsequently arose mainly in reaction to Wuster General Theory of Terminology (GTT), which is mainly prescriptive, and they show an increasing tendency to incorporate premises from communicative, social and cognitive linguistics aspects of terminology. Therefore, as opposed to GTT, these theories are largely descriptive; as they take into account different terminological activities carried out under different conditions. This chapter also focuses in general on the linguistic principles of term creation, exploring some of the basic processes by which new terms are formed. In this study, the Communicative Theory of Terminology (CTT) by Theresa Maria Cabre, is employed as a framework to provide guidelines for the analysis of term creation strategies used in the Shona specialised dictionaries; *Duramazwi Reurapi Neutano* (Dictionary of medical terms), *Duramazwi reMimhanzi* (Dictionary of musical terms) and *Duramazwi reMutauro* (Dictionary of linguistic and literature terms). The principles provided the researcher with regularity in the word formation processes that enabled the analysis of term creation strategies used in the selected Shona specialised dictionaries, so as to determine their appropriateness and adequateness for both Shona language development and the dictionaries target users.

3.2 Defining theoretical framework

A theory is a group of related ideas that provide guidance to a research project or business endeavour. Cabre (2003: 179-180) claims that a theory is “a system of propositions deducted

from a small number of principles whose objective is to represent in as simple, complete and precise form as possible a set of experimental laws.” As such, a theoretical framework therefore, provides a logical and consistent approach to research. Therefore, a theoretical framework serves to develop a common understanding of which issues should be included in an assessment, thus; it is used as a guideline of principles for conducting research. All attempts that have been made so far to establish theories in this field of terminology can be characterised by a strong orientation towards practical problem solving and to establish methods with scientific justification in order to make these problem solving efforts more efficient (Budin, 2001:14–15). Hence, the CTT provided a basis for the analysis of researched issues and linkages and enabled the research analysis to combine in a logical manner in an overall assessment. Overall, CTT allowed for clear and general applicable research findings for this study.

3.2.1 Defining terminology

Termmerman (1997) sees terminology as practice or the process of compiling, describing, processing and presenting the terms of special subject fields with the aim of optimising communication among specialists and professionals concerned with the standardisation of a language. Strehlov and Wright (1993) says that, it is the art of analysing terms in context and the systematic study of naming and labelling concepts with the aim of developing vocabulary for a given field. According to Ahmad, (1994) terminology is the work performed in the creation or documentation of terminological resources. Therefore, terminology is a phenomenon of specialised subject areas (Wuster, 1979). It is safe to argue that terminology is not a completely new field of study, but rather it has developed out of a basic human need, that of identifying and labelling or naming things, since time immemorial.

According to Sageder (2010) development of technology required not only the naming of new concepts but also agreement on the terms to be employed, thus as a result, terminological work began to be organised in certain specialised fields, mostly in science and technological fields. Terminological work began to take shape in the eighteenth to the twentieth centuries when scientists, engineers and technicians became involved in the creation and naming the things they had invented. Thus, as a subject field with explicit premises, terminology emerges from the need of technicians and scientists to unify the concepts and terms of their subject fields in order to facilitate professional communication and the transfer of knowledge (Cabre, 2002: 37). Basing on Cabre’s postulation, terminology therefore, can be regarded as

twofold; firstly need filling and secondly the methodologies that are employed to resolve the needs. It can be argued that, terminological collections may and may not be adequate and appropriate, well innovated, vague and unstructured conceptual and linguistic information, hence, the need to analyse them, which is the major objective of this study.

Wuster (1979:67) writes that work on terminology takes the concept as its point of departure. This is supported by Picht & Draskau (1985:36) who observe that in “the theory of terminology there is widespread agreement that the concept occupies a central position”. In other words it means that, in terminology; the nature of concepts, conceptual relations, the relationship between terms and concepts and the designation of terms to concepts are of prime importance. Sager (1990:29) says “terminologists are concerned with concept system only to the extent that they facilitate the task at hand. In the naming process, terminologists started from the concept, which they placed into a concept system, on the basis of which it would have been defined before being named as a term (the onomasiological approach). Onomasiology is the name given to the totality of strategies by which terminological analysis unlocks the ontology of knowledge in specialised knowledge areas in a manner that is independent of a given language, but lets the analyst identify any biases of a given subsection of the knowledge community - whose self definition may very well coincide significantly with a given language space (Antia, 2000: 84). Therefore, in terminology it is evident that the concept holds a key role.

3.3 An Overview of Wuster general terminology theory (GTT)

The researcher feels that, before delving into Cabre’s communicative theory, it is fair to start by giving a brief overview of Wuster’s general terminology theory because Cabre’s communicative theory of terminology arose in reaction to it (GTT). Wuster is the proponent of the General Terminology Theory (GTT), is by virtue, the first theoretical proposal in the terminology area, and is essentially prescriptive in nature. The main purpose of his general theory of terminology was to assign a new term to a new concept that appeared in a language. Wuster, who is considered to be a father of terminology, played a crucial and very important role for the development of modern terminology. According to Cabre (1992:5):

Wuster drew his strength from his predecessors Alfred Schlomann from Germany, the first one to consider the systematic nature of special terms; the Swiss linguist

Ferdinand de Saussure, the first one to have drawn attention to the systematic nature of language; E. Dresen, a Russian, a pioneer in underscoring the importance of standardisation; and J. E. Holmstrom, the English scholar from UNESCO, who was instrumental in disseminating terminologies on an international scale.

Wuster regards concepts as the cornerstone and the starting point of any terminology work. In the eyes of the general theory, a concept is the sum of common characteristics that is identified with a majority of objects and which is used as a method for mental ordering and consequently as a method for communication (Wuster, 1979:8). As concepts are given natural predominance over terms, terminology work always starts with the concepts and works its way from concepts to terms. Wuster's terminology theory is anchored on two major premises: one side is occupied by systematised concepts of a specific subject area, whereas the other belonged to the designations (Wuster, 1979). Therefore, Wuster's postulation suggests that specialised terms dictionaries can either be systematic or alphabetical. The other main focus for Wuster was to highlight that terminology should be efficient and unambiguous as much as is possible. Wuster's main goal therefore, was to eliminate ambiguous and unclear communication, in terminological works, and this means that he was mainly concerned with the principle of monosymy (the precision of concepts) and univocity of term (absence of synonymys) (Sageder, 2010:25). This has led Nedobity (1983: 74) to comment that, if terminographers are competent in a specialised field and willing to make that effort (standardisation of created terms), they can contribute considerably to the development of certain disciplines by providing the tools for unambiguous subject communication.

However, critics of Wuster's general theory of terminology argued that the structural approach to Wuster's general theory of terminology was too restrictive and oriented towards formal aspects of languages to be able to account for the specificity of the semantic aspects of specialised signs. Critics argued that his main focus was to eliminate ambiguity of terms and he paid little attention to what terminology really is. For this reason, Cabre (2003:167) claims that:

Wuster developed a theory about what terminology should be in order to ensure unambiguous communication, and not about what terminology actually is in its great variety and plurality.

Another problematic principle of the general theory is the statement that the rules of syntax are not relevant to terminologists (Packeriser, 2009:17). There was a general outcry of Wuster's contention by linguists because in many different ways terminology makes use of syntax. It can therefore, be argued that Wuster's terminological theory paid relatively little

attention to usage in communication. However, on the issue of standardisation of the created, Wuster received support from some terminologists, who felt that indeed scientific and technical terms need precision or one-to-one reference between term and concept, but however others advocated for a descriptive approach towards term creation.

3.4 Cabre's Communicative Theory of Terminology (CTT)

Cabre presents the communicative theory of terminology (CTT) which provides terminology with the status of being a separate discipline in its own right. According to Cabre (1992: 68) this theory (CTT) is capable of integrating basic justifications, principles and conditions which adequately describe terminological elements, their characteristics and properties, the relationship between their intrinsic components, their function, the relation they establish among themselves and with other units. This is so because terminology formation processes vary, depending on the ensuing socio-historical, economic and cultural environment. In other words, Cabre emphasises on the communicative side of terminology. Using a language is thus understood as selectively activating linguistic resources in accordance with the task at hand.

Cabre's CTT is very descriptive in nature. Cabre (2002) is of the view that a theory can never be prescriptive because a theory is a unit of coherently integrated axioms or essentials which permit the description of an object, its properties, its relations and operations within a specific framework. Cabre (1992: 63) comments that, "this theory is characterised by a strong orientation towards practical problem solving and establishing methods with scientific justification in order to make problem solving more efficient". To this effect, CTT has led to a valuable body of research on different aspects of terminology such as conceptual relations, terminological variation, term creation, and the application of different linguistic models to terminology. It can be argued that Cabre developed a terminology theory from a more holistic and integrative point of view. CTT mainly focuses on the transfer of knowledge, which is the communicative side of terminology. The communicative theory of terminology is significantly influenced by Wuster's general theory of terminology, as both the theories regard terms as the starting point for terminological analysis.

Cabre's communicative theory of terminology has a number of communicative scenarios aiming at transferring specialised knowledge. The CTT has two major premises or assumptions (Cabre, 2003:182) which are assigned to terminology:

3.4.1 The first assumption

Cabre's first assumption is that terminology is simultaneously a set of needs, a set of practices to resolve these needs and a unified field of knowledge. With regard to this, Cabre (2003:182) states that:

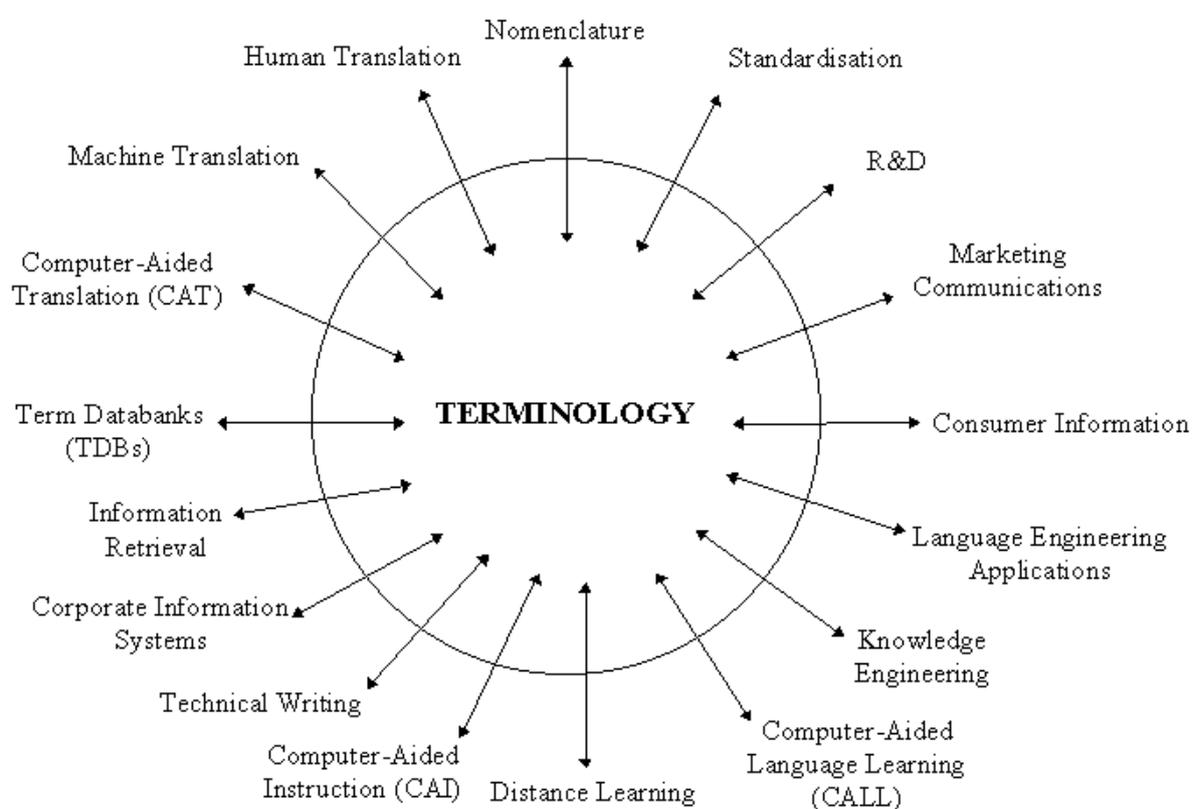
Firstly, terminology presupposes a need for all the activities related to the representation and transfer of specialised knowledge such as technical translation, the teaching of languages for specific purposes, technical writing, the teaching of special subjects, documentation, special language engineering, language planning, technical standardisation, etc. We note that all professions dealing with special knowledge need terminology.

In as much, the need in many languages, especially indigenous languages such as Shona is to develop scientific and technological terms. This is because of rapid progress and the development of science and technology, which require the naming of new concepts introduced in an economy, and this gives rise to term creation. According to Packeiser (2009: 44) only the existence of terms allows the development of terminology work from mental constructs to pieces of information that, due to communication, can be used to improve the knowledge in a specific domain or subject fields" This obviously efficiently manipulates the knowledge of a particular subject (Cabre, 2003: 182). This includes the systematised working methods and principles to be adhered to in term creation. In the same vein, term creation is conceptual in nature and is a means of extending a language's resources. Furthermore, according to Felber (1984) term creation presupposes a need for all activities related to the representation and transfer of specialised knowledge such as translation, documentation, special language engineering or term creation, technical writing, language planning, technical engineering and the teaching of languages for specific purposes. This clearly underlines the importance of terminological development for all nations, especially developing countries whose scientific and technical vocabulary is deficient.

On the same note Bamgbose (1991) notes that language is a powerful symbol of society, as it contributes towards nationhood and national development. Furthermore, the use of various mechanisms and techniques provides the language with relevant and adopted terminology,

required for self-actualisation and national development, (Chumbow and Tamanji, 1998:53). Banking on these notions, term creation, should be employed by terminologists to harness languages to be major vehicles of scientific and technological knowledge dissemination and development, especially indigenous languages in Africa. Thus, through terminology, knowledge becomes information which can be transmitted, stored and used in all different kinds of ways. This is aptly illustrated in Figure 3-1 below:

Figure 3-1: Terminology applications and products



Source: Ahmad (1994)

Terminological activities can result in a number of terminology products, such as those given in figure 3.1 above. It is a fact that terminology is becoming increasingly important every day, and therefore, specialisation and innovation in all subject fields necessitates careful engagement of terminological applications that are capable of expressing adequately and accurately scientific and technologic terms in any language even indigenous languages. The most important characteristic of such products is their *appropriateness*” (Cabre, 2003:183). It is against this background, that this study is paying great attention to the analysis of term

creation strategies in selected Shona specialised dictionaries to determine their adequateness and appropriateness. Whoever is involved in terminology activities should engage in appropriate practices that aim to resolve terminological needs of his/her country. The major question in the analysis is: are the terms in the Shona specialised terms dictionaries under study appropriate and adequate to be used in schools, colleges and the public sphere as a means to develop the Shona language?

Accordingly, terminological applications should therefore, provide answers to all language development initiatives, being carried out in many developing and developed countries. Furthermore, these terminological applications can be achieved through a more purposeful system of education, which should encourage the teaching, and learning of the indigenous languages in all spheres of life. By postulating that terminological units are units of language because they are explained as meanings of lexical units, we only claim that these special meanings are acquired through systematic learning in a professional environment (Cabre, 2003:191). In Zimbabwe, terminologists have made dictionaries for specialised areas, such as music, medicine and linguistics to be used in higher and lower institutions of learning. The major aim of making these dictionaries is that, through term creation, Shona terminology can be developed in technical and scientific fields. In addition, through terminological activities, Shona computer databases can be created and accessed such that the language can be very competitive to other languages as English, thus filling a need. Thus, creation, capturing, processing, storing, archiving, retrieving, and subsequent evaluation of documents will be made easy and possible through specialised language development which is based upon communicative efficiency of created terms. The researcher therefore, contends that the wide range of applications and products of terminology is very significant given the ever increasing technological and scientific developments in the world.

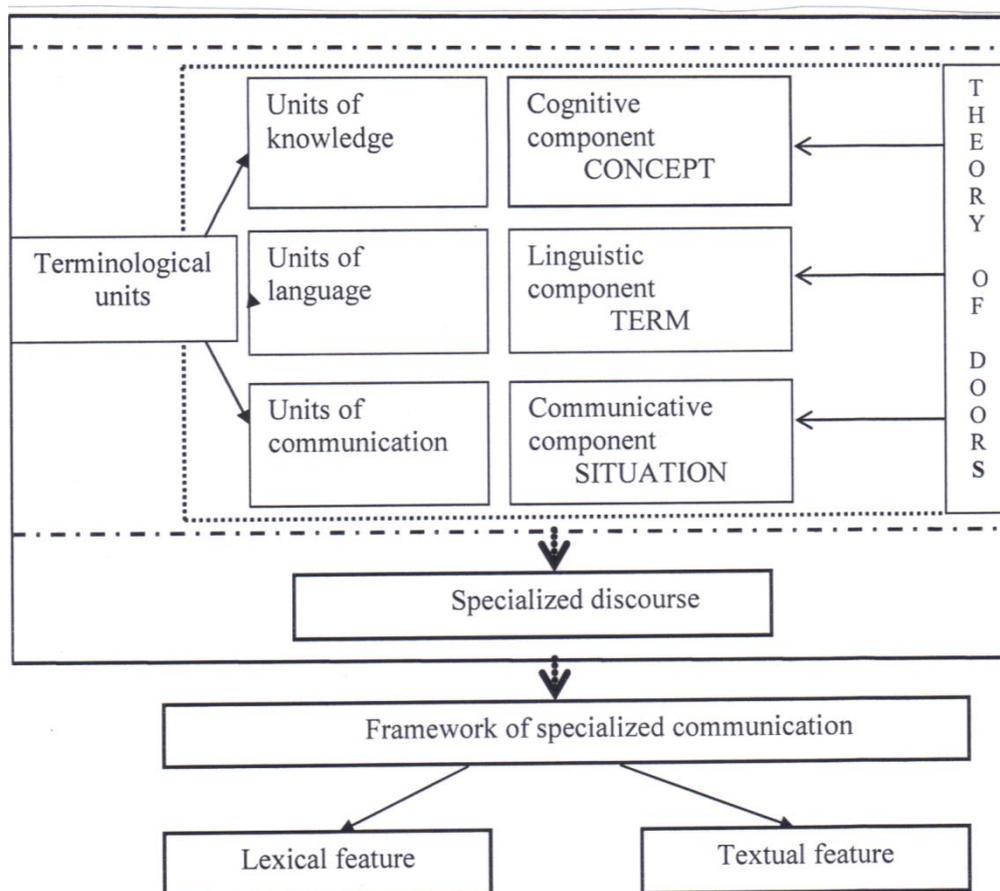
3.4.2 The second assumption

Cabre's second assumption is that the elements of terminology are the terminological units which are the necessary link to enable specialised communication. According to Cabre (2003:182) "terminology operates with terminological units which are multi-dimensional and which are simultaneously units of knowledge, units of language and units of communication". Cabre's second assumption emphasises more on the communicative nature of terminology. Thus she introduces the theory of doors to further justify this communicative nature of terminology. Cabre (2003:186) says that:

Since it is impossible to approach the many facets of a multidimensional unit all at once, my approach has been one of developing separate means of accessing this unit. The theory of doors model represents the plural, but not simultaneous, access to the object in a way that directly addresses the central object – the terminological unit, whether starting from the concept, term or the situation. Each is a separate door through which terminological units can be accessed.

According to Cabre, the CTT approaches units through the language door, but always within the general context of specialised communication. Figure 3-2 below aptly captures the mechanisation of the theory of doors as proposed by Cabre (2003):

Figure 3-2 : The theory of doors as described by Cabre, 2003.



Adopted from Sageder, 2010:129

Furthermore, Cabre (2003;190) refers to terminological units as ‘units of special meaning’ and that they cover, for instance, communication among specialists, between specialists, semi-specialists or technicians, between specialists and learners, as well as popularisation of science and technology.

Cabre (ibid) is of the view that it is the circumstance of each situation, which determines terminology processes. Terminological units are thus subject to linguistic analysis and the analysis can be carried out in a number of ways, and therefore, it is necessary to choose the linguistic approach most in consonance with the object of study. According to Cabre (2003:183) their description must therefore cover the cognitive (the concept), linguistic (the term) and sociocognitive / communicative / pragmatic (situation) components. Faber (2009:114) aptly sums it up:

She (Cabre) compares a terminological unit to a polyhedron, a three-dimensional solid figure with a varying number of facets. She underlines the fact that specialised knowledge units are multidimensional, and have three dimensions: a cognitive dimension, a linguistic dimension, and a communicative dimension.

Cabre's theory of doors shows that terminology, being a component of language and it being a complex phenomenon, can be approached from various angles and by means of different methods: logical, philosophical, sociological, psychological, statistical and others, not to speak of specially established ways of treating terminology in individual subject fields (Termmerman, 2000). The description of these terminological units should cover the concept, the term and the situation components.

Basing on the theory of doors as proposed by Cabre, one can choose various term creation strategies such as borrowing, compounding, coining, and language elaboration, derivation, inflection, semantic expansion depending on the communicative situation one is in.

This leads us to think that, despite of what is usually said about standardised terminological glossaries, it is the circumstances of each situation which determine the type of application (glossary, lexicon, dictionary, software, text, poster, standard, etc. in one or several languages), the information they must contain (terminology, phraseology, definitions, variants, contexts, phonetic or phonological representation, foreign language equivalents, illustrations, etc.), their representation and even their means of dissemination (Cabre, 2003:183-184).

Relatedly, it can be contended that the function of the dictionary therefore, determines the nature and extent of terminologists' approach to term creation. According to Sageder (2010:129):

... if we approach terminology via the door of communication we are faced with different communicative situations in which linguistic units share the expressive space with those of other systems of communication.

It also means that different user needs, must be taken into account when compiling a specialised dictionary, and as such the specialised dictionary should be lexically centred and usage-based, and should as well focus more on conceptual representation and meaning. Therefore, basing on Cabre's theory of doors, it can be concluded that, the use of terms in a specialised dictionary is a communicative act between the terminographer and the dictionary user.

3.5 Description of the process of formation of new terms

Communicative Theory of Terminology (CTT) makes it explicit clear that terminology makes use of certain principles and approaches provided by linguistics and applied linguistics respectively. According to Cabre (2003:183):

Terminology is a discipline and as such it is an organised set of basic essentials about an object of knowledge. And a theory of terminology must describe this object and provide a sufficiently broad methodological framework which includes the practises intended for the satisfaction of diverse needs.

CTT further describes and explains how terminological units should clarify how new and special knowledge is produced and synthesised in a terminological unit. Cabre (1992:68) says:

in the general framework of specialised communication this theory (CTT) integrates basic justifications, principles and conditions which adequately describe terminological units, their characteristics and properties, the relations between their intrinsic components, their functions, the relations they establish among themselves and with other units of specialised knowledge and the processes they follow.

Thus, this is made dynamic by introducing the description of the process of formation of new terms" (Cabre, 2003:168). Therefore, the paragraphs below are going to describe some of the principles and conditions which adequately describe terminological units.

3.5.1 Derivations and inflections

Choice of terms should allow for the systematic formation of many linguistic forms. It should give room for future concept development. Sager (1990:13) postulates that:

knowledge structure consists of various interlinked concepts. In terms of this knowledge structure, it should be possible to transform a noun into a verb or adjective

and it should be possible to use it as a constituent in a compound word. It should be easy to derive formatives from the term.

Basing from the contention above, terms can be created by allowing for potential derivatives and inflectabilities from nouns, verbs, adjectives and even compounds. According to Gilreath (1993:91) “derivability is the quality of terms, whose elements can be used in naming a variety of related concepts”. This explains that inflections and derivatives are some of the term creation strategies which use general and special knowledge of the lexicon already acquired. Terminologists can derive or inflect terms from verbs, nouns, adjectives and idioms existing in the concerned language. The following are examples of Shona terms, created through the derivation strategy:

<i>mufundisi</i> (teacher)- <i>fundisa</i> (teach) noun to verb
<i>famba</i> (walk)- <i>mufambi</i> , (a walker) verb-adjective
<i>vhangeri</i> (evangel)- <i>muvhangeri</i> , (evangelists), noun to noun
<i>svetuka</i> (jump) - <i>svetu</i> (act of jumping) verb-idiom

Table 0-4 : Showing Shona terms derived from nouns, verbs and idioms

This implies that terminologists should prefer indigenous terms as they allow derivability. These enhance the productivity, since many terms can be derived from one term as is shown in the root /*imb*/ for (sing) in the examples given below:

<i>/imb/a</i> - <i>sing</i>
<i>/imb/ika</i> - <i>be able to sing about you</i>
<i>/imb/iwa</i> - <i>sing about you</i>
<i>/imb/isa,</i> - <i>sing loudly /cause to sing</i>
<i>/imb/ana</i> - <i>they sang for each other</i>
<i>vacha/imb/a</i> - <i>they will sing</i>
<i>twakazo/imb/isana</i> - <i>they sang together/ caused each other to sing</i>

Thus, an inflection is just a variant of one and the same word, for example; sing, singing, sang, sung, because they allow inflectability of terms by way of prefixing and suffixing. Derivatives are very productive in term formation since they make it possible to designate new concepts derived from an existing term. In support of the above arguments, Cabre puts it that:

acquiring a terminological unit would therefore be a dynamic reuse of information already present in the learner’s lexicon, and in some cases the partial selection of

existing information, the widening of this information or its reorganisation for the active and dynamic construction of what would constitute the meaning of the terminography unit (Cabre, 2003:191).

In this vein, it is noted by the researcher that the derivation term creation strategy is a very productive term formation process, which terminographers should full utilise. In addition, by following this principle, a learner's acquisition of new terms, associated to existing forms as well as the incorporation of totally new units, is efficient and effective because the terms share the general properties of the lexicon.

3.5.2 Mononymy

Most theories of terminology advocate for adherence to the principle of mononymy. Mononymy means that one concept is expressed by one particular term throughout the terminology system. The same concept can often be designated by more than one term, and the same linguistic form can be used to refer to more than one concept. For example in the Shona language, there are several terms denoting a door, *i) musuo, ii) sasa, iii) gonhi, iv) mukova v) budyo*. The issue of synonyms therefore means that, during the process of term formation terminologists should ensure a one to one correspondence between a concept and the term used to signify that concept. Felber (1980: 74) adds that:

the situation in which one concept is represented by one term in the entire system ensures that there are no synonyms, although homonyms cannot be altogether be avoided. Terminology demands that linguistic expression be unambiguous, that is a single term should be assigned to one concept only and vice-versa.

Hence, according to Felber (ibid) the principle of mononymy helps terminographers to be consistent in term creation. This assertion is supported by Sager (1990) who says that the theoretical basis for any control regarding terminology consistency is the one concept one-term rule. This gives the created terms clarity, which is achieved by the avoidance of ambiguity. This means that a term will be free from obscurity by another similar term and will be easy to understand. It is therefore relevant to understand the subject matter of the field terminologists are working on. Thus, Felber and Sager postulate that terminologists must be familiar with concepts within the subject field so that ambiguities are eliminated.

However, in reality this scenario is sometimes difficult to adhere to in terminology, in such a way that at times terminologists are forced to violate the principle of mononymy. Cabre (2003) argues that polysemy and synonymy frequently occur in specialised language, and

must be included in any realistic terminological analysis, (Cabre, 2003:168). Hence, she notes that polysemy and controlled synonymy are inevitably present in terminology and specialised texts. Furthermore, according to Cabre (2000) terminology principles should not be prescriptive, because they are a unit of coherently integrated axioms or essentials, which permit the description of an object, its properties, its relations and operations within a specific framework. This shows that in terminology, the communicative function of the term must take the centre stage. According to Valeontis (1997) terminographers now advocate a descriptive approach with regard to the identification of all possible linguistic variants of a single linguistic form, such that the trend allows for the existence of synonymic expression and term variations, thus rejecting its narrow prescriptive attitude of the past, which insisted on connecting one concept to one term.

Temmerman (2000:16) supports this contention as he argues that, ‘polysemy, synonymy and figurative language do occur and are functional in special language’. Gaudin (1990:216) argues that, “parameters of variation are based on the social and ethnic criteria in which communication among experts and specialists can produce different terms for the same concept and more than one concept for the same term”. This may be caused by social and situational aspects of specialised language communication, which may affect expert communication and give rise to term variations. In this regard, it has been recognised that one concept can correspond to a variety of linguistic representations, which can serve various communication needs; hence a one to one correspondence is an ideal situation. To this end, Temmerman (2000) adds that, a certain degree of synonymy is accepted though its avoidance is recommended in terminology intended to be standardised. This holds for scientific and medical terms where precision of a term is an important consideration. These factors were taken into account by researcher in the analysis of term creation strategies used in the selected Shona specialised terms dictionaries. Hence, this study drew a lot of insight from CTT in analysing term creation strategies used in Shona specialised dictionaries.

3.5.3 Precision

According to Cabre (2003) terminology is a set of useful communicative units which must be evaluated from the point of view of economy, precision and suitability of expression. Cabre is supported by Gutierrez (1998:88 cited in Pavel and Nolet, 2001) who says that, “the characteristics of terms are precision, emotional neutrality and stability over time”. In other

words, all created terms are to have a precise form and meaning, based on certain specified linguistic needs so that terms reflect designated concepts as precise as possible and as such, ambiguity is to be avoided. This contributes to the capability of the term to be understood by the language users. There are several factors that can influence this choice, e.g. economic reasons (a term might be chosen because it is less cumbersome than others), precision (one term might have greater clarity or transparency than others (Cabre, 2000:50). In addition, Sager (1990:89) says, “without sacrificing precision, terms should be concise and should not contain unnecessary information and not overlap in meaning with other terms”.

In the scientific and medical field, meaning has to be monosemic and there has not to be any synonym. In a medical field, a term is monosemic when it has only one meaning, representing a single concept. If a monosemic term has, in addition, no synonym, there is a univocal relation between term and concept leading to precision. This univocity is more usual among terms in specialised communication than in the standard register in which polysemy and synonymy are numerous. This is clarified by Gutierrez as he says:

If a term is precise, then its communicative dimension is unchanging, it means, its meaning does not depend on the context, the discourse in which it is inserted nor the sender of the message nor any other factor of a communicative event For instance, “aplasia” is a medical term meaning incomplete or faulty development of an organ; it is monosemic which implies precision; it is neutral emotionally; and finally, it is stable over time since it has been used without any variation in use, form and meaning for a long period of time in scientific documents (Gutierrez, 1998: 88 cited in Pavel and Nolet, 2001).

In the medical field, precision or standardisation of terms plays an essential role, particularly because safety in the administering of the medical duties is a very important consideration. The issue of precision will be taken into account by researcher when analysing terms in the Shona medical dictionary: (*Duramazwi reUrapa neUtano*). . In addition to the medical field, there are other fields where definiteness and precision are inevitable. According to Weissenhofer, (1995) these fields include, among others mathematics, physics and engineering.

CTT has given researcher a guideline, that any term should be evaluated by the criteria of equivalence, adequacy, precision and economy. However, with regards to African languages and Shona in particular, it can be noted that loan words are more precise than some Shona terms which are sometimes descriptive, lengthy and cumbersome, whereas loan terms tend to be more specific in reference, and are concise and simple. This gives the loan term

acceptance by users, over indigenous terms. Terminological variation also points to the fact that concept systems and definitions are not static. It is an acknowledged fact that words change in meaning. Language is dynamic and is constantly evolving. Some words shift in meaning from what they originally meant and take a certain connotation that is, their meaning either broadens or narrows. Meaning should not be generalised because users will be deprived of deep understanding of the term, whether the term is affective, reflective, collocative, connotative, stylistic, and thematic and therefore, terminographers should take this into account. According to Pikhala (2001) it should be noted that the meaning of a term is not inherent in the term itself, but is anchored in the conceptual structure of the social meaning from which it stems, in other words the contextual meaning should be considered. This means that terminology should be analysed in its linguistic context, a means contributing to the precision and systematicness in transferring knowledge in various pragmatic situations. However, for scientific fields precision is very important.

The other challenge is of research which is still on-going, therefore, categories are not clear-cut, but evolve over time and adapt new meanings and perspectives. Words either broaden or narrow in meaning. A concept described by a term may change over time because terminology is developing at a faster rate, that certain terms, which were appropriate four to six years ago, are no longer representing the concept for which they were devised. Therefore, terminographers should take the communicative situation of each term into account in the formation of new terms for their respective special fields. This is a reality that any theory that aspires to be explanatory adequate must deal with.

3.5.4 Precedency

In terminology, precedency means that proposed terms should follow familiar and established designations in use in the lexicon.

Therefore, it also presupposes that the acquisition of terminological units always relies on knowledge of the principles, conditions and restrictions governing the general lexicon, and that, only in some of the cases it relies on previous knowledge of a lexical unit already present in the lexicon. (Cabre, 2003:191).

ISO (704:200) refers to the principle of as “linguistic appropriateness. This principle refers to “the extent to which a proposed designation is in harmony with established designations (Gilreath, 1993:87). Furthermore, Gee and Goodhart (1985) say that, new denominations

should incorporate and demonstrate the properties innate to the language mechanism of vocabulary organisation and word formation practices. In as much, it therefore means that, the proposed term must be based on sound knowledge of the target language's rules of lexical formation. This is supported by Cabre (2003:92) who asserts that,

... acquisition of lexical units occurs from innate principles present in the neuronal system of mankind and that these principles configurate the common basis of knowledge of all speakers, independent of the language they speak.

Precedency is more pronounced in the indigenisation or rephonologisation of the loan or borrowed words. In other words, pronunciation must conform to the orthographical and grammatical conventions used in the language. For example, an English musical term, *amplifier*, when adopted into the Shona language the phonological combination /mp/ changed into an acceptable /mb/ Shona phonological combination to *ambirifaya*. Thus rephonologisation removes some of a loan word, as its spelling adjusted according to the orthography and syntactical rules of the language which is borrowing the word (Wallmach and Kruger 1999:281). In most cases foreign loanwords are Africanised by transliteration, that is, by changing their phonological and morphological structure to accord with African language structures (Mtintsilana and Morris, 1988:111). Through phonological adaptation, loanwords become part and parcel of indigenous languages, without the speakers even noticing that the words are not original to the language. Pronounceability makes the term to be user friendly. This makes the loan term easier to pronounce while at the same time, the loan word still maintains the its original meaning.

However, terminologists face a challenge in the process of changing the spelling of loan words to suit the structure of the borrowing language. Some spellings bring problems to the receiving language as the loan words bring into the language sounds that previously were not in the language. This makes them difficult to represent in writing, and thereby causing pronunciation problems, for example in Shona, there are no such phones like /*thi*/yeta (theatre)/*thi*/rii (three), *fotosi/nth*/esisi (photosynthesis) and these words brings with them spelling and pronunciation problems to the receiving language. It means that term creation requires terminographers who are competent in the language where new term are to be created, so that the terms conform to the general rules of word formation of the language. Term creation thus, requires terminology with specialised knowledge; those who can create credible terms which satisfies the needs of the speakers. Hence, through the borrowing term creation strategy, a language is set to change in terms of vocabulary. He who controls the

vocabulary controls the knowledge, (Orwell, 1984 in Antia, 2000:100), meaning that the substance of all knowledge resides in a sufficient and detailed terminology of a field.

However, in most indigenous languages it is sometimes difficult to follow any established order in a lexicon, as in most cases; there is deficiency of scientific and technical vocabulary due to unfavourable language policies, in most African countries which continuously undermine the growth of African languages. However, terminologists have a right and a duty to serve the specificities of concepts of the field represented by the term and as such terms do not necessarily have to be similar to established patterns, especially the borrowed ones. In other words, when terms are natural or are adapted to the receiving language, their acquisition becomes easy.

3.5.5 Series uniformity

This principle refers “to the quality of a group of terms, which use common elements in naming related concepts” (Gilreath, 1993:91). This is done to achieve transparency and consistency. All terms should be constructed in a uniform way as possible. In other words, there should be a systematic approach when dealing with terminology. Consistency is important in that all users will use the terms with effectiveness and efficiency. Consistence maintenance is an indispensable part in terminology function. According to Cabre, (2003:192)

when required by a professional learning situation, the speaker re-uses the already acquired information to learn new information... With all this baggage he then “constructs” the meanings of the new units or of the already existing units in his Lexicon which acquire new meanings in subject-specific context.

Users will find it difficult to conceptualize the inconsistency and inappropriate terms. In this regard terminologists should ensure that the processes of designating a concept in a target language must take account of the corresponding processes operated in the source language. According to Valeontis (1997) the processes operated in during primary terms formation, can provide valuable guidance for the creation of terms on a secondary level. Hence the namer’s first choice should be to apply a term formation mechanism analogous to the term – formation mechanism used for the source language term, (ibid). This can be analysed in Shona from the morpheme <ana> which depict an animal’s offspring in the following examples:

Imbwa- mbwanana (dog-puppy)
Mbudzi- mbudzana (goat-kid)
Huku- hukwana (hen-chick)

The editors of the Shona musical terms dictionary, (Duramazwi reMimhanzi, 2005) adhered to this principle as they coined these new musical terms for a small drum:

Ngoma- chingomana
Dumba- chimudumbana,
Dumba- chidumbana

However, the series uniformity principle does not always apply in all cases, as the Shona examples below are not analogous to series uniformity term formation mechanisms above:

Mombe-mhuru *Gudo-rushiye*

The series uniformity principle is of paramount importance in term creation, such that terminographers should adhere to, if the created terms are to be acceptable to the target users. It has been noted by the researcher that through Cabre's communicative theory of terminology, the notion of term creation in a given dictionary is described as the endeavour and ability of the dictionary to cover complex needs that arise in a particular user situation. Therefore, the strategies used in term creation should be adequate and appropriate to resolve linguistic needs. Hence, in the analysis of the term creation strategies used in the selected Shona specialised dictionaries, the researcher considered the communicative situation of the terms, in assessing their appropriateness and adequateness, with of course, the layperson in mind.

3.5.6 Language purism

Much debate is placed on necessity for linguistic purism when discussing formation of new terms for a particular language. Inclusion of loan terms in a language is rejected by some language purists who argue that, if terminologists consider issues of popular usage without modifications, words would just be expansively borrowed at the expense of indigenous terms. They further argue that loan terms may contaminate the indigenous language, even though they may be more popular in usage. This is a dilemma that terminologists face; whether to consider a loan term popular in usage over cultural considerations in term formation. However, descriptivists postulate that in the case of choice between loan terms and

indigenous terms, priority should be given to indigenous terms as much as possible. This is supported by Cabre (2000:50) who says, “in linguistic planning, terms are lexical units requiring intervention in order to support the existence, usefulness and survival of a language as a means of expression”.

It can be argued that, the issue of language development cannot rule out loan words. Canagarajah (2006:159) points out that, purist ideals disempower vernacular forms spoken in everyday contexts, making a “purified” language less suitable as a medium for contemporary purposes. In other words, language purism seeks to avoid loan words and influence from other languages. Purism, therefore acts as a form of resistance against borrowed terms, but this can be quite counter-productive to effective language development. Although Shona terminologists may aim at indigenous terms for improving the Shona vocabulary they cannot surmount the English vocabulary, especially in scientific and technological terms. Hence, they end up borrowing or deriving terms from the English language. This is how the English language developed; as it derived most of its scientific and technical terms from Greek and Latin for its growth. Sager (1990:8) supports this contention as he says:

the principle of naming technical concepts and similar work was furthermore oriented towards the industrial advanced countries---group of engineers and scientists who accepted Greek and Latin words elements as the most suitable means of developing systematic patterns of terminology.

Some linguists argue that preservation of language purity should not be at the user’s expense (Chiwome, 1992, Chimhundu, 2002). Consequently, terminographers should offer the dictionaries’ target users, the terminological units that they need as well as provide them with a knowledge load that corresponds to their needs (Tarp, 2005: 8). Hence, these linguists argue that it would be better to adopt those terms already known and used by the people and then coin new terms where there is a need, rather than coin an indigenous term where a loan term already exists.

On another dimension, the researcher observed that partly due to colonial mentality, language policies, social attitudes, most indigenous languages speakers are not concerned with issues of etymology purity, so long as the term used mirrors the correct usage. Hence, social attitudes and economic factors play a pivotal role in determining the strategies to use for the practices of term creation. The strategies chosen may either trigger or hinder a language’s natural growth. Furthermore, lexical items coined from the internal resources of a language

are preferable; because they are transparent, even when the term itself is unfamiliar... a native speaker can often deduce its meaning (Mtintsilana and Morris, 1988: 111). In addition, construction of new terms from an indigenous language has got an advantage in that it ensures derivability and inflectability. Since the rural masses do not know European languages, obviously the best way of reaching them educationally for purposes of science and technological development is by means of their languages (Magwa, 2015). In other words, concepts and terminology in science should be constructed within indigenous languages and should engage the reality in which the rural population lives (Magwa and Mutasa, 2007: 62). This means that indigenous sensitivised term creation strategies are very important for the natural growth of the indigenous languages to very high levels, as they can communicate efficiently and effectively with the majority of the people. As such, the researcher took into cognisance the deficiencies of indigenous languages caused by unfavourable language policies in technical and scientific terms the analysis of terms born out of foreign sensitivised term creation strategies.

3.5.7 Language competence

Most terminology theories posit that the quality of the term is determined by the absence or presence of incorrect elements (Gilreath, 1989:84). This principle is also called “linguistic or grammatical correctness” and it refers to the ‘extent to which a term has no grammatical errors, such as misspellings, wrong hyphenisation, wrong number and wrong part of speech” (Gilreath, 1993:89). Consequently, terminologists should take this simple principle into serious consideration; when engaging in term creation activities. Hadebe (2002:196) says:

... dictionaries cannot afford to be inconsistent in spelling. By their nature dictionaries guide users in spelling and terminographers have therefore to seriously address spelling problems of a created term.” Some spelling problems are brought in a lexicon due to language contact.

A dictionary user is satisfied by his /her ability to properly interpret a new term that is transparent and error free. The accuracy principle significantly contributes to the credibility and usability of terms by language user. In as much, special communication produced in professional situations, should by all means reflect professionalism. Professionalism is a prerequisite for terminologists who are involved in the compilation of specialised terms. Coinages by laymen are difficult to promote. ...they are known to be vague and artificial, (Chimhundu, 2002:302). Deficient terminologies endanger the information flow not only

between people, but from people to machine and machine to machine as well (Nedobity, 1983: 69). Hence, the analysis of the term creation strategies is going to take into account issues of qualification of dictionary compilers against terms produced.

In addition, Cabre (2003:184) regards terminological units as, “sets of conditions” derived from, *inter alia*, their particular knowledge area, conceptual structure, meaning, lexical and syntactic structure and valence, as well as the communicative context of specialised discourse. It means therefore, that terminologists should be competent in the subject specialised area they are working on. Terminologists should collaborate with subject field experts and this is crucial to the success of any terminology project. Terminologists should ensure that the created terms will be acceptable by the users and are simple enough to be understood by people at grassroots level. If not, it will give rise to controversy and ambiguity. Thus, specialised terms dictionary compilers should adhere to the principle of efficiency. Language competence facilitates effective, accurate, credible and appropriate communication with the target users.

3.5.8 Term simplicity

Terminology theorists advocates for the creation of simple terms in specialised dictionaries. According to Gilreath (1993:89) “the number of words in a term is appropriate for the level of importance of the designated concept”.As a rule, the more important the concept, the simpler the term should be”. The researcher feels that this is an ideal situation, which every terminographer should strive to achieve, but however, it has its own shortcomings. Demands of appropriate simplicity are relative; they depend on the subject field. It is difficult for terminographers in subject fields such as law and medicine to adhere to this principle, because they have archaic terminology and long phrases and sentences. It is also difficult to pinpoint simplicity because what might be simple to one may be difficult to another or to pinpoint which term is more important and more appropriate than the other. Hence, terminographers are put in a very difficult situation as regards the choice of terms in indigenous languages to designate special field term. It is also very difficult for indigenous languages terminographers to coin simple terms in indigenous languages as they depend more on loan translation for borrowed technical and scientific deficiencies, of which terms end up being statements, descriptions or explanation rather than simple terms. Thus, some linguists (Cabre) argue that all specialised terms should be regarded equally important as long as they

are able to communicate an intended message effectively. Phraseology is added to the study of terminological units (Cabre, 2003:168) and has thus, the potential of being a terminological unit. The following taken musical terms in Table 0.5 are good examples of the above contention:

Resonator:	<i>Chiwedzerwa mutauro, p 22</i>
Clef:	<i>Chiratidza chidemamhanzi, p 21</i>
Cassette:	<i>Chichengeta mhanzi, p 12</i>
Polyphony:	<i>Mitsara yakawanda yemimhanzi, p 65</i>
Ensemble:	<i>Mubatanidzwa wevaimbi nezviridzwa, p 66</i>

Table 0-5: Showing loan translated terms which are phrasal statements in DuramazwiRemimhanzi

The researcher encountered a lot of loan translated terms in the selected Shona specialised terms dictionaries. However, the researcher feels that the magnitude of phraseology in specialised dictionaries should be minimised and should be adopted only when necessary.

3.5.9 Acceptance of coined terms

Cabre's communicative theory is descriptive, and shows an increasing tendency to incorporate premises from cognitive linguistics since they focus on the social, communicative, and cognitive aspects of terminology. The task of terminologists, however, is to create terms that are acceptable by the users; otherwise vague, meaningless and complicated terms would be disastrous to the acceptability of the term. Furthermore, terminographers should consider whether a term may have disturbing or political connotations associated with it, emotionally charged, obscene, morbid, gender biased, informal, strange, awkward, corny, silly (Gilreath, 1993:91). Terminographers should pay a great deal of attention to the needs of the users of the terms they create. In other words, they should like any good author, have the users of the created terms very much in mind when engaging the term formation process. However, some words are judged unacceptable on social grounds and suppression of unaccepted terms does not mirror usage. In this regard, Bejoint (2000:101) argues that "...totalprescriptiveness does not work if it is estranged from the realities of usage". Therefore, terminographers should not exclude terms (cultural taboo) they fear could be rejected by the speakers of the language as they have a duty to society to include the varieties that reflects on usage; that take into cognisance the user's demands. This

is as Cabre (2002) puts it that, within a broad theoretical scheme, different conceptions can be accommodated as long as there is no internal contradiction and as long as the data can be described and possibly explained.

However, the major challenge is that of acceptability and usage of the new created terms by the language users. In as much, this is supported by Mutasa (2003:6), who says that, “the people do not see much value in African languages”. Chimhundu (2002:302) adds that, “coined new words have a problem of acceptance by the speakers as he says “the new terms are coined after whatever is referred to have already been introduced in the speech community with its borrowed label.” Consequently this gives the borrowed lexical item some advantage as far as its usage is concerned, as people would have familiarised with the borrowed term and the term would have acquired popularity in usage. Therefore, in this case, even if terminographers may coin new good terms, with the prevailing language policies in many developing countries, the problem of acceptance still remains. The development of technical terms must involve local people and local language resources, as well as various specialists in technical fields. This makes the created term more acceptable by the users. Terminographers should consider their ... “social cohesiveness and the acceptance by others ... (Mutasa, 2005: 23). The point of departure of this study is to analyse the effectiveness of term creation strategies used in the three specialised dictionaries as given in Chapter One. Thus, the issue of acceptability of created terms is one of the aspects the researcher critically analysed, in consideration of all the factors raised in the above paragraphs.

3.6 Weakness of Cabre’s Communicative Theory of Terminology

Cabre’s theory of terminology has a weakness in that it claims that, the rules of syntax are of no consequence to terminologists. For terminology, specialised terms are of interest on their own account, and neither inflection (provided by the morphological form appropriate for its use in context) nor syntax (which inserts them in the proper grammatical context) is of consequence (Cabre, 1998:33). To this end, she is supported by Felber (1984:98) who states that: “only the terms of concepts, that is, the terminologies, are of relevance to the terminologist, not the rules of inflections and the syntax.” This is flatly rejected by Kageura (2002:18) who contends that “the claim that only the terms of concepts are of relevance to terminology, while the rules of inflections and the syntax are not, cannot be accepted without

reservation.” In other words Kageura (ibid) is arguing that as terms are placed in the sphere of parole, they are affected by the rules of syntax, as the “actual distribution of the morphological or syntactic rules in terminology belongs to the sphere of parole”. In this view, it seems he has a strong contention because terms are a vehicle of communication and as such communication cannot be successful without observing the rules of syntax. The theory of terminology, therefore, cannot reject syntactic rules.

3.7 An Overview of the significance of CTT to this study

Basing on the discussion presented in this chapter, CTT provided the researcher with guidelines that enables the analysis of term creation strategies used by Shona specialised dictionaries compilers. Specialised terms dictionaries are important because in terminology, terms are the vehicles of communication. Hence, the researcher analysed communicative efficiency of the created terms in the Shona specialised dictionaries basing on the communicative theory of terminology. Communicative theory of terminology presented a more realistic view of terminology since it bases its description on how terms are actually used in communicative contexts. Cabre (2002) also maintains that trying to find a distinction between terms and words is no longer fruitful or even viable, and that the best way to study specialised knowledge units is by studying its communicative value. As such, Cabre’s CTT has provided some insights with which to carry out the work at hand. Worth noting is the fact that the communicative theory of terminology provided a readily understood, logical and consistent approach to term creation, so as to enhance coherence across all chapters in this study and permitted the derivation of clear and generally applicable conclusions. In addition, Chabata (2007:187) contends that, “it is in this regard that the functional linguistic approach to language aims to bring about a cognitive plausible account of what it means to know a language; of how a language is acquired and of how it is used”.

Furthermore, Cabre’s communicative theory of terminology provides the researcher with an understanding of how terminologists work with the skills that enables them to engage in lexical engineering. In other words, CTT provided the researcher with a theoretical framework with which to descriptively analyse terms in the selected Shona specialised dictionaries taking the discussion held in this chapter into cognition. This theory made the researcher to be able to understand the problems that terminologists encounter in term

creation, including the strategies they use and the justifications for adhering to these strategies. The information gained made the analysis of term creation strategies used in selected Shona specialised dictionaries easier to engage. Overall, CTT had the capacity of enabling the researcher to describe real data; it is internally consistent and had the potential of being predictive. It had an applied side from which data could be generalised to solve terminological problems. The vision that communicative theory of terminology offers is more realistic because it enabled the researcher to analyse terms as they are actually used and how they behaved in texts. It is a fact that terminology is becoming increasingly important every day, and therefore, specialisation and innovation in all subject fields necessitates careful engagement of terminological applications that are capable of expressing adequately and accurately scientific and technologic terms in any language even indigenous languages. CTT was the relevant theoretical framework to provide guidance in the analysis of the strategies that were used by terminologists to create Shona specialised terms for the disciplines of medicine, music and linguistics.

3.8 Conclusion

This chapter has presented the theoretical framework for this study. Cabre's communicative theory of terminology guided the major objective of this study, which was to analyse term creation strategies used in some selected Shona specialised dictionaries. This chapter has indicated that, in Cabre's communicative theory of terminology, terms are identified as parts of the lexicon, language units, vehicles of communication and cognitive elements. Thus, terms as vehicles of communication indicate the significance of communication and acceptance of the created terms in terminology. The theory has also shown that, terms in their widest sense, are the units which most efficiently manipulate the knowledge of a particular specialised subject. Cabre's CTT has shown that terminologists should apply specific terminological principles when denoting concepts and that no terminologist can coin a term if he/she does not know the basic word-formation principles of a language. It is now the task of the researcher, in the next chapters, to analyse the term creation strategies used in the Shona specialised dictionaries, as guided by the CTT theory, in such a way so as to describe their exhaustiveness with respect to coverage and accounting of both the CTT's conceptual side and communicative side. It should be noted that Cabre's CTT goal is not to create an absolute system in terminology, but to have a working frame. It can be pointed out by the researcher

that the communicative theory of terminology “is a means to an end not an end to a meaning. If terminologists adhere to term formation principles, they will help in language development and this will be good news in many countries such as Zimbabwe, where English language continues to play a predominant role in all spheres of life. Indigenous language development will up-lift the marginalised sectors of society and helps integrate millions of people economically, politically and socially. Hopefully, Cabre’s CTT can help provide the best strategies to terminologists for the first steps in that direction; so as to enhance the effectiveness of communication in scientific and technological fields.

4.0 Introduction

This study explored, investigated, analysed and documented the term creation strategies used in the Shona specialised dictionaries. As such, chapter four presents the methodology for the data gathering for this study. The term “methodology” defines how one goes about studying any phenomenon (Silverman, 2000:79). Methodology fulfils the research design, and should include all the information about the nature of study, and the methods that are to be used to achieve aims and objectives of a research study. According to Fink (2005:152) “a study’s validity depends on the rigor of its research method”. Fink (ibid) further explains that the methods include; (a) the research design, (b) the sampling strategies, (c) the data collection procedures, and (d) the data analysis methods. As such, issues like the research design, data collection instruments, their reliability and validity, ethical considerations as well as population and sampling techniques are discussed in this chapter. The term data refers to the rough materials researchers collect from the world they are studying; they are particulars that form the basis of analysis, (Bogdan and Biklen, 1992). Therefore, basing on the above postulations, the researcher, as the key instrument in the study, chose a more appropriate methodology that allowed for the collection of candid data to answer the research questions. In the subsequent sections, the researcher justifies or gives a rationale for selecting this research design.

4.1 Qualitative research design

This research study employed the qualitative research design. Borg and Gall (1990) postulates that qualitative research involves holistic inquiry of a research study and is usually carried out in natural settings, where humans are the primary data gathering instruments and the researcher, the key instrument. Creswell (2007) and Leedy and Ormrod (2005) describe qualitative research as aiming to answer research questions through exploring and examining issues around the topic as a way to get at a full and deep understanding of the phenomena being studied. In addition, Creswell (2007) says that qualitative studies focus on phenomena that occur in natural settings and therefore involve exploring the phenomena in all their

complexities. This can be the reason why Eisner (1991) purports that, qualitative approach is a descriptive research tradition for things that cannot be measured such as feelings, behaviour, speech and thought and culture. In addition, the adoption of the qualitative design is based on Moustakas’ (1994:21) recommendation that because studies of human experiences are difficult to approach through quantitative methods, they should be approached through qualitative methods. Qualitative methodology, therefore, facilitated an open and extensive exploration of those experiences. In addition, a qualitative approach is followed when the researcher attempts to gain a first-hand, holistic understanding of phenomena of interest by means of a flexible strategy of inquiry (Reid and Smith, 1981 in De Vos et al, 2002: 710). This is explicitly stated by Bell (1993:141) who says, “the mark of judging qualitative evidence is the extent to which the details are sufficient or appropriate to the problem under investigation.” As such, this qualitative research method largely followed Creswell’s (2007) outline of some of the characteristics of qualitative research in the following eight points as presented in Table 0.6 below:

Characteristic	Description
One	Qualitative research takes place in the natural setting
Two	Qualitative research use multiple methods that are interactive and humanistic
Three	Qualitative research is emergent rather than tightly prefigured
Four	Qualitative research is fundamentally interpretive
Five	The qualitative researcher views social phenomena holistically
Six	The qualitative researcher systematically reflects on what is being investigated
Seven	The qualitative researcher uses complex reasoning that is multifaceted, iterate, and simultaneous
Eight	The qualitative researcher adopts and uses one or more strategies of inquiry as a guide for the procedures in the qualitative study

Table 0-6: Characteristics of qualitative research, modified from Creswell (2007:181-182)

According to Banister, etal (1994:142) qualitative research seeks to gain valid knowledge and understanding by representing and illuminating the nature and quality of people’s experiences. Basing on the above contentions, the researcher selected to use the qualitative research design because it was the most flexible and most appropriate to answer the research questions for this study.

These characteristics from Creswell (2007) added more to the understanding of what qualitative research design is all about and thereby effectively informed the researcher on

how to conduct this study. Thus the chosen research design helped the researcher in the collection of credible and qualitative raw data without distortions from the target population. As a result, linguists, medical and musical experts, university, college and high school students, (because they are the users of the dictionary of linguistic terms), largely constituted the survey because they were knowledgeable in this area of study. This is supported by Moon et al (1990:358), Moustakas (1994:210), Lester (1999:1) and Denzin and Lincoln (2000:7) who posit that, all qualitative methodologies seek to understand the meaning of events from the point of view of participants involved. Furthermore qualitative approach “offers richness and precision needed in a research study since it provides for the interpretation and analysis of data” (McEnery and Andrew, 1996:54).

4.1.1 Triangulation

Qualitative research is inherently multi-method in focus (Denzin and Lincoln, 1998:3) and therefore the use of multi-methods; triangulation reflected an attempt by the researcher to secure an in-depth understanding of the phenomenon in question. In addition, according to Polit and Hungler (1999:259) a researcher can be much more confident about the validity of the findings when they are supported by multiple and complementary types of data. Basing on the above contention, a qualitative approach was used on the data collection phase of this study and a quantitative approach was used in the phase of data analysis where evidence of data gathered was translated into numeric information and analysed using statistical procedures. Through the process of triangulation, any finding or conclusion by the researcher were found to be much more convincing and accurate in such a way that the data was analysed objectively to avoid bias.

4.2 The Research traditions

Leedy and Ormrod (2005) and Creswell (2007) encourage researchers to have a clear understanding of the different research traditions they choose, so as to effectively execute their studies. In view of this, the researcher carefully examined and compared the research designs over and against the study’s purposes and research questions to determine which research tradition to select for this study. The selection of a research method to employ in

research studies was then made from an informed perspective as to the viability on the type of study. Hence, the researcher narrowed the research design, to partly three research traditions. These are the content analysis, phenomenology and ethnography traditions, for they were the most suitable to fully address the research questions and issues being investigated in this study. These were collectively used in the study, because qualitative research traditions, though different and distinct, all have many common and overlapping elements. Sellitz, et al in Terre Blanche and Durrheim, (1999:29) rightly put it as "... plans that guide the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purposed ...". Triangulation of research traditions, therefore, helped the researcher in the selection of the most appropriate method to employ in different circumstances and in matching the study to the most effective methodology from an informed perspective.

4.2.1 Content research

For this study, which analysed term creation strategies in Shona specialised dictionaries, content analysis was one of the most appropriate research traditions to employ. Content analysis is described as an approach of empirical, methodological controlled analysis of texts within their context of communication... (Mayring, 2000: 2). Texts in this study are defined as books, articles, newspaper articles, book chapters, essays, newspaper articles historical documents, conference papers and speeches, journals and magazines. This fact is supported by Krippendorff (1980), Weber (1990) GAO (1996) as they say that, content analysis is a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding. Thus, it allows researchers to search data through large volumes of information easily. This was very appropriate for this study, since the researcher critically analysed term creation strategies in the three selected Shona specialised dictionaries. Much content analysis research is motivated by the search for techniques to infer from symbolic data that would be either, too costly, no longer possible, or too obtrusive by the use of other techniques (Krippendorff, 1980:51). As the researcher analysed term creation in Shona specialised terms dictionaries, other methods were found to be too obtrusive when it comes to text analysis.

The major advantage of content analysis is the fact that it is a systematic, replicable technique for compressing many words of text into fewer content categories (GAO, 1996) based on explicit rules of coding. Also, since this study triangulates qualitative and quantitative research methods, content analysis is the best method for this study as it may be used with either qualitative or quantitative data and in an inductive or deductive way. This is supported by Weber (1990) who points out that, the best content-analytic studies use both qualitative and quantitative operations. Furthermore, content analysis may help direct a collection toward sources that are more useful for addressing the research questions (Miles and Huberman, 1994), because samples for qualitative content analysis usually consist of purposively selected texts which can inform the research questions being investigated. As such, this study samples three Shona specialised dictionaries for the analysis of term creation strategies used by the various dictionaries' compilers, and content analysis is therefore, an apt research tradition for this study.

The results of content analysis are numbers and percentages. After doing a content analysis, the researcher presented the results quantitatively in percentages. This is one of the strength of content analysis, as it emphasises on the systematic coding, counting, and analysis of content. Thus, this enabled easy understanding, as (Berg, 2001) puts it that, the research results can be better understood by the investigator as well as the readers of the study's results. In as much, the procedures of any content analysis study should be explicit, precise, and replicable so that other researchers can verify the results of the research (Neuendorf 2002, Leedy and Ormrod, 2005, Berg and Latin, 2008). Given all the arguments above, content analysis, therefore, is one appropriate research tradition used for this study, because the researcher analysed term creation strategies by identifying lexical items in *Duramazwi Reurapi Neutano* (Dictionary of Bio-medical Terms), *Duramazwi Remimhanzi* (Dictionary of Shona Musical Terms), *Duramazwi reDudzira Mutauro neUvaranomwe* (Dictionary of Shona Linguistic and Literary Terms).

4.2.2 Phenomenology

Being qualitative, this study also falls under the phenomenological method (Aspers, 2004:2, Lester, 1999:1). This method was employed in the second phase of this study. According to Best and Khan (2006:255) the central question under the phenomenological method is; "What

is the meaning, structure and essence of the lived experience of this phenomenon for this person or group of people? Thus, this research tradition focused on interpretation of the people's beliefs, ideas, and attitudes to make sense of the meanings people bring to their lives. In a similar vein, Fouche (2005:270) states that phenomenology "aims to understand and interpret the meaning that subjects give to their everyday lives". In the human sphere, this normally translates into gathering "deep" information and perceptions through inductive qualitative research methods such as interviews and observation, representing this information and these perceptions from the perspective of the research participants (Lester, 1999). This study was interested in investigating the experiences of Shona specialised terms dictionary users, compilers and linguists through interviews and questionnaires. Through phenomenology, the researcher got research participants to relate their experiences and how they felt about the term creation strategies and the Shona terms in the selected specialised terms dictionaries. The researcher then analysed the participants' experiences, looking into their perceptions, their attitudes, their conceptions, their feelings, and their thoughts about using these dictionaries and the created terms.

Furthermore, phenomenological method emphasises subjective meaning. This is supported by Rubin and Babbie, (1997:376) as they posit that, phenomenology is the approach that aims to emphasise a focus on people's subjective experiences and interpretations of their world. Aspers (2004:5) adds that, "if we are to understand the social world and meet the demands of phenomenology, we must produce explanations that are grounded in the subjective experiences of real people". Basing on the views above, phenomenological research strategy was very efficient and effective as it digs in the experiences and perceptions of research participants thus challenging suppositions or assumptions from the research participants and the researcher.

4.2.3 Ethnography

The ethnographic research tradition is another qualitative research design which was partly employed in the second phase of data collection. The study carried a survey with the target dictionary users to find out their opinions, perceptions and attitudes towards the term creation strategies in the Shona specialised dictionaries. This suits Leedy and Ormrod's (2005) postulation that, ethnography involves one on one in depth interviews with the participants.

Furthermore, as according to Creswell (2007) ethnography also studies people in their natural settings, which this study did. However, although, according to Leedy and Ormrod (2005) ethnography is research that focuses on describing the culture of a group of people, this study did not study the culture of a people. However ethnography was employed in this study, because it enabled the researcher to analyse the shared attitudes, the values, the perspectives, and the issues surrounding term creation strategies used in the three selected Shona specialised dictionaries.

4.3 Site of the study

The study was conducted in Zimbabwe which is geographically located in the south central part of Africa. Extensive travelling was undertaken in an effort to visit and distribute questionnaires to research participants and to interview selected participants for this study, from institutions of secondary and higher education. The sites of this study were: Gweru; Midlands State University, Midlands College of Music and Mkoba Teachers College, Regina Mundi High School and Midlands Christian College, Bulawayo; United Teachers College, Harare; University of Zimbabwe, ALRI, Masvingo; Great Zimbabwe University and Mberengwa; Chegato High School.

4.4 Selection of research participants

After mapping out the research methodology, the researcher selected the participants. Crabtree and Miler (1999:82), Lester (1999:1), Strydom and Delpont (2005:328), Schutt and Chambliss (2006:1670), Charmaz (2006:15) stress that the researcher should critically think about the parameters of the population before a sample is chosen. Basing on the contentions, the researcher set the following parameters: All research participants were Zimbabwean, black, students and linguists and belonging to the Shona ethnic group. The study involved the compilers of the three selected specialised dictionaries for they were the ones in a better position to explain how they employed these term creation strategies, during the compilation of Duramazwi reUrapi ne Utano. Language experts at African Languages Research Institute

(ALRI) were also invited to participate in this research, since they were working on projects to develop indigenous languages.

4.4.1 Sample

Sampling is the process of selecting a portion of the population to represent the entire population (Polit and Hungler, 1999:714). In other words, a sample in this research study is the group on which information is obtained (Babbie, 2004:189). Punch (1998:6) concurs with this as he says; “we cannot study everyone, everywhere doing everything. Even a case study will require sampling within the case”. The main purpose of sampling is to achieve representativeness of the population from which it is taken (Gilbert, 1997, Jennings, 2001). This is supported by Holiday (1995:103) who highlights that a sample is a group from whose responses shall be considered to be representing the pattern of responses in whole target population. In this study the researcher ensured that the sample chosen was as representative as possible of the desired population, so that conclusions were an accurate representation of how the larger group of people acted. As such, the researcher identified a balanced and representative population frame in a way that made it possible to make a relevant study; given that a successful research endeavour involves choosing prospective participants who have the right information for the study (Neuman, 2006:222; McBurney, 2001:246). Furthermore, the researcher selected a sample or sub-group of people whom he/she asked questions about issues related to the research. The answers to these questions were then regarded as a description identifying the opinions and attitudes of the whole population from which the sample was taken (Collins et al, 2000:133). Therefore, the unit of analysis to be identified by the researcher was representative, balanced and focused to the research study.

As in all social science research endeavours, the object of research need to be defined (Baxter and Jack, 2008:545). Largely the overall populations of interest were five compilers of the Shona specialised dictionaries, sixty University and College students of African languages, fifty University and College students of Music and Musicology, and twelve lecturers of African Languages and Music and Musicology at selected institutions of higher learning and four researchers from ALRI. Thus the researcher involved a target population of one hundred and sixty participants. The number one hundred and sixty was deemed adequate, representative and balanced for this study by the researcher. The ages of the participants ranged from between sixteen and seventy and were legally capable of consenting to participate in the study. In order to keep this study as naturalistic as possible (Creswell, 2007)

each survey was carried out at the schools and workplaces of the research participants. A breakdown of the selected questionnaire and formal interview participants' composition is presented in Tables 0.7, 0.8, 0.9 and 0.10 below.

Table 0.7 below shows the number of research participants who were sampled from a pool of university and high school students of Shona and African Languages by the researcher:

Institution	No Of Participants
MSU - African Language Students	10
GZU - African Language Students	10
UZ - African Language Students	10
Regina Mundi High School Students	10
Chegato High School Students	10
Midlands Christian College Students	10
Total	60

Key: *MSU – Midlands State University*
GZU – Great Zimbabwe University
UZ – University of Zimbabwe

Table 0-7: Total number of research participants for the Shona linguistic and literature terms dictionary

Questionnaires were distributed to this group of research participants, basing on all the three selected Shona specialised dictionaries for university students and the dictionary of linguistic terms; *Duramazwi reDudzira Mutauro neUvaranomwe* for O and A level students. Table 0.8 below shows the distribution of the research participants:

INSTITUTION	NUMBER OF PARTICIPANTS
Hillside Teachers College Music Students	10
Mkoba teachers College Music Students	10
Kwanengoma College of Music	10
Midlands State University Music Students	10
Midlands College of Music Students	10
Total	50

Table 0-8: Total number of research participants for the Shona musical terms dictionary

The target population for the analysis of *Duramazwi Remimhanzi* were more concerned in the area of interest of the study (musical terms) and as such their level of analysis was anticipated by the researcher to be very high compared to non-experts.

The research participants who were sampled for the analysis of *Duramazwi reUtano NeUrapi* were knowledgeable in the area of medicine and as such their level of analysis of medical terms was very high compared to non-experts. The target population is shown in Table 0.9 below:

INSTITUTION	NUMBER OF PARTICIPANTS
University of Zimbabwe Medical Students	10
United Bulawayo Hospital Nursing Students	10
Gweru Hospital Nursing Students	10
Total	30

Table 0-9: Total number of research participants for the Shona medical terms dictionary

Questionnaires that were distributed to this group of research participants focused on the analysis of *Duramazwi reUrapi neUtano*.

The interview sample for this study was a small group of linguists and lectures, since relatively small numbers are adequate for qualitative research that employs in-depth interviews (Whittaker, 2009:34). The population is shown in Table 0.10 below:

INSTITUTION	NUMBER OF PARTICIPANTS
University and College Lecturers	12
ALRI	3
Dictionary Compilers	5
Total	20

Table 0-10: Total number of professional and linguists research participants

Interviews were for the university and college lecturers, linguists and lexicographers, each in his/her area of expertise. Only twenty participants were involved in the interview session for this study. Purposive and random sampling was adopted in choosing prospective participants who had the right information for the study. Both sampling techniques were found to be appropriate for this study by the researcher.

4.4.1.1 Random sampling

Random Sampling relies on random selection of research participants, in such a way that each element in a population has an equal chance of selection. Participants were randomly selected so as to eliminate all bias that could lead to selection of a population against others. In this study, one hundred and ten university and college students from the department of

music and musicology and African languages and thirty high school Shona students were randomly selected to answer questionnaires meant to solicit data for the research study.

4.4.1.2 Purposive sampling

In this study, research participants were purposefully selected, since they were experts in the field of language, culture, lexicography, medicine and music (see Tables 0.7, 0.8, 0.9 and 0.10). Purposive sampling is a non-probability sampling method which involves the conscious selection of certain subjects to be included in a research study. Burns and Grove (2003:255) emphasise that, “purposive sampling method enables the researcher to select specific subjects who will provide the most extensive information about the phenomenon being studied”. Thus, it had an advantage in that it targeted people who were conversant in the relevant field of study. For the purpose of the study, participants were selected because they were knowledgeable in the subject area, although this approach increased the possibility of samples that were not representative (Burns and Grove, 1999:238). However, Henning (2004:71) maintains that purposive sampling is effective, since “the people most suitable to ‘wander with’ on the research journey are selected at the time they are needed.” Purposive sampling enables the researcher to ensure that the sample chosen is the best to serve the researcher’s interests and stated goals. In this study, purposeful sampling technique was used to give questionnaires and to hold interview with the potential users and of the selected Shona specialised dictionaries. The researcher envisaged that, these had no problems since they were the people on the ground and chances of obtaining authentic data were high, hence, purposive sampling helped the researcher to work towards the ultimate goal of research credibility.

4.5 Data collection

The whole process of data collection is called instrumentation. It involves the selection or design of the instruments and the procedure and the condition under which the instrument will be administered (Frenkel and Wallen, 2003:119). It addresses the location of data collection, when it would be collected and the time of collection and how often. The research method that is proposed in a study also implicitly determines the instruments to be used for data collection. This study is mainly qualitative. The two commonly used instruments for data collection in a qualitative study are the questionnaire and the interview. Accordingly, the

researcher used the questionnaire and interview as research instruments in this study. Desk research was used as well, since content analysis was employed to study the three specialised dictionaries. Creswell (2007) and Leedy and Ormrod (2005) presented observations as another data collection method for qualitative research. During the field work, the researcher was able to see and observe the phenomena of this topic personally, composing field notes on the observed perceptions. However, whatever data collection method the researcher employed, it had to bring in optimum results for the study.

4.5.1 Interviews

Creswell (2007) described one of the data collection process for qualitative studies as interviewing participants. One of the data collection methods used in this study was conducting face to face interviews with the study participants. Oral interview were conducted with researchers at African Languages Research Institute (ALRI), African language lecturers from Midlands State University, Great Zimbabwe University and University of Zimbabwe, and the three dictionary compilers. The compilers of the Shona specialised terms dictionaries were interviewed, because they were in a better position to justify the term creation strategies they employed in their dictionaries. As according to Moustakas (1994:21) the interview situation was approached with an open mind, considering every response and information given by research participants as having equal worth. In support, of the above contention, the researcher concedes that the research participants' insights and co-operation were essential parts of the discussion process for this study, and it revealed and displayed a lot of enthusiasm and zeal towards the topic under study. It is the responses of the research participants and the discussion held with the researcher that formed the basis of interpretation of the collected data. Appendix D contains the interview protocol for the interview participants.

As the qualitative method places emphasis on first person reports of life experiences (Fouche, 2005:270) in-depth interviews were employed for this study. The participants' life worlds were entered through contacting them personally and conducting in-depth semi-structured interviews which involved listening to their analysis, beliefs, opinions and attitudes towards term creation strategies used in the selected Shona specialised dictionaries. Basing on this contention, this study considered the participants' objective and subjective perspective on

term creation strategies and the terms for the Shona technical lexicon as the basis of the analysis.

Use of interviews assured the researcher of reliability and validity of responses, as it afforded the researcher with a chance to probe respondents so as to get more information and clarity on the responses given. The kinds of questions asked were objective and related to term creation strategies used in the Shona specialised terms dictionaries. The researcher tape-recorded the interviews, as well as taking notes during the interviews. This was done with the participants' permission. The interviews were recorded to allow for a more complete record and to ensure every detail is captured. Researcher used both the structured and unstructured interview questions, for the same groups of respondents, to gain a more comprehensive picture of the research study. Forty minutes were given to the interviewees. This made it possible for the study to obtain thick descriptions from the participants. An interview protocol was used to guide the interview process. This ensured coverage of all intended and follow-up questions.

4.5.1.1 Structured interview questions

A structured interview makes use of some pre-determined questions or key words used as a guide (Tutty et al., 1996:56) in an interview process. In this study, structured interview questions were prepared in advance and were neutral in such a way that they did not lead the interviewee to some expected answers. Questions were asked in an open-ended manner and at appropriate times. The structured interview questions were directed by the interview guide (Appendix D). The structured interviews were based on some predetermined questions although there was flexibility on how questions were asked. Thus, the structured interviews allowed the interviewees an opportunity to shape the flow of the information (Wilkinson and Birmingham, 2003:45, Aspers, 2009:7). The structured interview questions were also open-ended so as to allow and encourage open answers from respondents (Charmaz, 2006:26). Furthermore, open ended questions allowed comparability of study results and consequently allowed the researcher access to rich data (Best and Khan, 2006). Such questions assisted in demarcating the area of interest of the researcher. Thus, structured interviews are an effective means of gathering data on people's experiences (Moustakas, 1994:21, Denzin and Lincoln, 2000:7; Aspers, 2009:8) and as such, they were chosen by the researcher as a means of gathering qualitative data for this study.

4.5.1.2 Unstructured interview questions

According to Charmaz (2006:14) the flexibility of qualitative research makes it particularly appropriate when using the interview as a data collection instrument because there is room to adjust the order of questions, as well as the phraseology of questions, as the research progresses. As such, the use of unstructured interview questions enabled the researcher to use a more conversational style, prompting and probing the respondents and developing questions as the situation demanded in order to get rich data from respondents. Furthermore, the unstructured interview questions in this study helped the researcher to draw out information, attitudes, opinions, ideas and issues around term creation strategies and language development in Shona specialised terms dictionaries without the aid of pre-determined questioning.

4.5.2 Questionnaires

A questionnaire is a document designed to solicit information for analysis from research participants. This is aptly put by Tuckman (1978) who says, a questionnaire is a document containing questions designed to solicit information appropriate for analysis from research participants. Burns and Grove (1999:272) point out that a questionnaire is mostly used in descriptive studies designed to gather a broad spectrum of information from subjects. And as such, the questionnaire was a suitable, data collecting instrument for the analysis of term creation strategies used in the selected Shona specialised dictionaries, so as to realise the overall aims and objectives of the research study.

The questionnaires were employed in such a way that they complemented the interview method, to give adequate and accurate information that was needed for the success of this study. The advantage is that questionnaires can be distributed to a large sample of the population within a brief period of time (De Vos et al 2002:172). As this study involved a large number of research participants, it was appropriate to use the questionnaires, so as to obtain information within a short period of time at a relatively cost effective way. In this study, one hundred and forty questionnaires were distributed to gather different views from the potential users of the dictionaries, who were; 30 African languages university students, 30 Shona high school students, 50 music and musicology students and 30 medical students (see Tables 0.6, 0.7, 0.8 and 0.9 above). This population was targeted because they were the ones

in a better position to make an analysis of the term creation strategies and the terms used in the three Shona specialised dictionaries.

The questionnaire was very convenient to the respondents because it ensured privacy and confidentiality. This helped the researcher in obtaining credible data. Babbie and Mouton (2001:262) postulate that, respondents are sometimes reluctant to report controversial ideas in interviews but are willing to respond to an anonymous self-administered questionnaire. Thus research participants enjoyed a high degree of confidentiality in completing the questionnaires. The questionnaire also eliminated interviewer bias (Lo Biondo-Wood and Haber, 1994:357) in the view that there would be no interviewer to influence the data from research participants. In addition, the questionnaire allowed the researcher to convert data into information, as the gathered information was organised into tables and graphs for analysis and discussion. However, one of the disadvantages is that, the researcher had no control over whether the correct person completed the questionnaire (De Vos et al 2002:172). Other research participants could have read differently into each question and therefore responses could be based on their own interpretation of the question. Therefore, there could have been a level of subjectivity which was not acknowledged by the research participants. The questionnaire for this study consisted of three main sections, which served as primary research tools for the study; the demographic, hypothetical and the open ended questions.

4.5.2.1 Demographic questions

In this study, demographic questions enabled the researcher to obtain such information as age, education level, gender and profession of respondents. The responses to these questions gave the researcher an insight into the social, cultural and educational foundations of the respondents towards the issues of term creation in the selected Shona specialised terms dictionary. This enabled the researcher to consider whether such factors influenced the manner in which the target population responded to the hypothetical and open ended questions.

4.5.2.2 Hypothetical questions

The hypothetical questions enabled the researcher to measure the attitudes of research participants towards various aspects of indigenous language use, including scientific and technical terminology in all spheres of life including schools and universities. The questions also allowed the researcher to gauge participants' attitudes towards socio-linguistic factors

such as the phenomenon that English is a superior language over the indigenous languages and the adequacy and relevance of term creation to the general development of a people's lives. The hypothetical questions were measured on a plus minus likert scale of "Agree" and "Disagree" to determine the degree to which research participants were influenced by such factors as cited above.

4.5.2.3 Open ended questions

The open-ended question on the final section of the survey enabled the research participants to expound on issues related to the study intensively and extensively, hence, they generated candid data. Thus, open-ended questions provided the researcher with rich qualitative data. In essence, the open ended questions provided the researcher with an opportunity to gain insight on all the opinions on a topic. However, there were a few drawbacks to open-ended questions as well. Though respondents' answers were almost always richer in quality, the amount of effort it took to digest the information provided was sometimes overwhelming. Also, being qualitative in nature made these types of questions lack the statistical significance needed for conclusive research. Nevertheless, the open-ended questions were incredibly useful in several different ways. The questionnaires were presented as follows:

- ◆ Questionnaire for African Languages Students (Appendix E)
- ◆ Questionnaire for High School Students (Appendix F)
- ◆ Questionnaire for Medical Students (Appendix G)
- ◆ Questionnaire for Musical Students (Appendix H)

4.5.3 Desk research

In addition to the data collection instruments cited above, the researcher used various literatures to make a thorough and critical analysis of term creation strategies in selected Shona specialised terms dictionaries. For instance, journals, textbooks and the internet were consulted as secondary sources. This was mainly done in Chapter 2, and in other subsequent chapters. These included the works, both print and electronic, of scholars and researchers such as Mutasa, Hadebe, Chimhundu and Magwa among others. The different articles and books provided an insight into term creation strategies; such as borrowing, compounding, coining, derivation and term creation principles and guidelines. Robson (2007) says that, desk review of literature has an advantage in that it is not difficult to get hold of relevant

documents for little or no cost. Thus, Chapter 2 provided good background information on indigenous language development and term creation, and from these sources, a set of major topics for investigation in this study was gleaned. The primary sources, *Duramazwi Reurapi Neutano (2004)*, (Biomedical Terms Dictionary) -DRN, *Duramazwi Remimhanzi (2005)*, (Dictionary of Musical Terms) -DR and *Duramazwi reDudzira Mutauro neUvaranomwe (2007)*, (Dictionary of Literal Terms) -DRU were used for the term creation strategies showing how the different specialised terms were created, described, explained and analysing the examples that were given for created terms using the various term creation strategies. In other words, the primary sources provided the information for the analysis of the effectiveness and appropriateness of the term creation strategies used by the dictionary compilers.

4.6 Letter of consent

Given that the question of gaining entry into the participants' lives might be a great challenge, the researcher presented a letter from the University of South Africa for confirmation of the study. The letter testified that the researcher was a *bona fide* doctoral student doing an academic study purely for academic purposes, with no intention whatsoever of exposing the participants' details. The consent form spelled out the procedures and purpose of the study and how the information supplied would be used. The letter was presented in Appendix A. This gave the respondents enough information to make a decision to participate in the study or not. Since getting the informed consent of participants is an ethical necessity (McQueen and Knussen, 1999:232), the researcher ensured that the research participants gave their informed consent before participating in the study. The consent form is presented in Appendix B. All the research participants who agreed to take part in this study were asked to sign consent forms to indicate their willingness to take part in the study. As such, all the participants in this study gave their written consent. In addition, it was important for the researcher to maintain complete anonymity of research participants to guard and protect their privacy, and as such Appendix C contains a formal Confidentiality Agreement shared with participants. No names of research participants were used by the researcher in either data collection or reporting of the results.

4.7 Date, time and venue

Arrangements pertaining to the date, time and venue for each interview were made in consultation with the individual participants. This was necessary in order to avoid inconveniencing the research participants. Furthermore, in order to keep the study as naturalistic as possible, each survey was conducted within the natural settings of the research participants.

4.8 Data verification

Data verification involves checking the collected data for biases that might affect the process of drawing dependable conclusions (Poggenpoel in De Vos et al. 1998:351). The actions that were taken to ensure dependability in this study included: peer examination, a description of the research methodology, triangulation of methodologies and data sources, and conducting a tape recorded interview procedure. In this study, triangulation and reflexivity of data collected were employed to achieve confirmability, (Krefting, 1991:221) of research results. The interview participants were asked to review their own interview transcripts to check for accuracy. The researcher's peers were also asked to review the transcripts as a means for triangulation. These measures ensured credibility and objectivity of the study.

4.9 Data Analysis

After collecting the data, the next step would be to analyse the data. Qualitative data analysis begins at the data collection stage (Schutt and Chambliss, 2006:194). Neuman, 1994:426) describes "data analysis as a search for patterns in data-recurrent behaviours, objects or a body of knowledge." Relatedly, Bogdan and Biklen (2003:145) define qualitative data analysis as an act of working with the data, organising them, breaking them into manageable units, coding them, synthesising them, and searching for patterns". In support of the above contention, Creswell (2007) explained that data analysis also include categorising the data according to their meanings and identifying patterns, regularities, and critical events. In as much, this section analysed data from both interview questions and questionnaires. It is the

analysis and discussion of the collected data that made this study a worthwhile activity. Through data analysis, information collected by the researcher was given some meaning.

4.9.1 Analysis of data from the interview process

Consequently, these were the ideas that informed data analysis from the interview process for this study:

- ◆ reading all field notes, and composing journal entries multiple times to get a full grasp of what was said and observed;
- ◆ listening to all audio tapes multiple times and transcribing the taped messages verbatim;
- ◆ reading of all interview transcripts multiple times;
- ◆ coding all data that was gathered by interview manually;
- ◆ composing the final report.

In addition to the ideas given above, data analysis for this study followed these three steps as according to Leedy and Ormrod (2005) and Creswell (2007:148):

- ◆ Step 1: involved organisation of data analysis in qualitative studies, required organisation of data into a logical structures.
- ◆ Step 2: involved reducing the data into themes through a process of coding and condensing the codes.
- ◆ Step 3 involved representing the data in figures, tables, or a discussion.

Basing on information given above, the data analysis from interviews for this study followed a structured procedure that started with listening intently to the audio recorded interviews. The next step in the analysis process was to code the data. At this stage, which De Vos (2005:335) refers to as ‘the heart of qualitative data analysis’, correlations between the different postulations of participants were identified. After completing all the interview questions, the transcribed data was analysed, using tables to summarise all the information on each of the different issues that formed the focus of the interviews.

Given that qualitative data tends to be inductive (McQueen and Knussen, 1999:222, Schutt and Chambliss, 2006:194), it was necessary to identify important categories in the data. Thus, information from interview participants was placed into different categories and themes by the researcher. Coding was done by the researcher manually. The codes follow thematic patterns that emerged as the researcher interrogated the data. The coded emergent themes were assigned numbers for easier identification by the researcher. The analysis also incorporated the researcher’s own perceptions, understanding and observations made during

the fieldwork. Presentation of the results of this study was done in discussion form and each of the identified themes was discussed. These themes became the results of the study and they are presented in Table 0.11:

Code Number	Core Theme
One	Borrowing
Two	Loan translation
Three	Compounding
Four	Coining
Five	Derivation
Six	Semantic expansion
Seven	Synonymys and polysemy
Eight	Indigenous Languages as medium of instruction
Nine	Government effort in language planning
Ten	Attitudes of target users
Eleven	Etymology purity

Table 0-11: Codes and emergent themes of the study

The discussion was based on the responses to the research questions of this study.

4.9.2 Analysis of data from questionnaires

Data that was collected from the participant questionnaire was analysed following ideas from Merriam (2002) and Trochim (2006). They focus on the description; discussion and reporting of these qualitative survey data sets. Firstly, the researcher manually transferred the responses from the questionnaires into items and these were tabulated. In the Table the column headings were in the form of question number and the rows showed each person's responses. Each possible response was assigned a number or 'code'. The researcher then went through each respondent's questionnaire in turn, adding in the codes. This is called data coding, which means the transformation of questionnaire answers into a format that the researcher would easily understand. The research assistants were then asked to check some of the data for accuracy. When all the data was verified and presented as correct, the researcher then calculated how many people had selected each response. This was counted up manually. The researcher then set up tables and figures to display the data. At this stage, the researcher also checked for any missing data on the questionnaire so that data collected could be easily verified. Then the resultant data was presented and discussed in this study.

The discussion brought out the story the data was telling and what it meant with regard to the aims, objectives, research questions of the whole study. In fact, the analysis of questionnaire responses required that the researcher go through a number of interrelated processes that were intended to summarise, organise and transform data into information for the final report of the research findings. The research findings were best presented in table format and graphs followed by discussions. The researcher particularly referred back to the original aims and research questions of the study during the data analysis process so as to keep this analysis focused.

Table 0.12 below gives an example of how the tabulated results were presented item by item in the form of a Table or Chart:

Item #	Agree	Percent	Disagree	Percent
Item 1	x/30	x/100	x/30	x/100
Item 2	x/30	x/100	x/30	x/100
Item 3	x/30	x/100	x/30	x/100
Item 4	x/30	x/100	x/30	x/100

Table 0-12: Showing an example of results tabulation from the questionnaire and interviews

During the analysing process, open-ended questions were coded in the same way as closed response questions, so that the data was easily captured for analysis. Interesting responses were quoted verbatim in the final report.

4.10 Ethical considerations

It is postulated that, research in the social sciences studies needs to consider ethical issues (Mouton, 2001:238), and as such ethical guidelines were followed as an integral part in the implementation process of this study. The main purpose of considering research ethics is to protect the welfare and dignity of the participants. Privacy was ensured by conducting interviews at places that were relatively private, that prevented anyone from hearing the conversations. There was maintenance of anonymity and confidentiality of participants as well. In this study, the perceptions, attitudes and beliefs of the research participants were captured without making any value judgements. The participants for this study were firstly

informed about the nature of the study and what would become of the findings once the study had been completed. In other words, at the start of each interview, the researcher restated the purpose of the study, to allow the research participants to fully understand the research in which they were participating. Participants were informed and reminded throughout the study that their participation was voluntary and that no name of individuals or institutions was to be linked to any response. Thus, maintaining anonymity in the report. The data in the form of interview transcripts along with researcher field notes were kept under lock and key in the researcher's home office. Electronic data was kept on the researcher's password protected computer. Peer reviews and checks were used as forms of triangulation.

4.11 Validity

Welman and Kruger (2001) describe validity as a mechanism that ensures that the data collecting process has successfully collected the data needed. Validity in qualitative research is associated with the notions of credibility and trustworthiness (Steyn, 1994:16; Holstein and Gubrium, 1995:83; Cresswell, 1998:196; Golafshani, 2003:560). Participants in this study were allowed to validate the research finding, that is, they were given an opportunity to confirm whether the researcher had accurately described their experiences, opinions, attitudes and beliefs before results were coded. In addition, the researcher took the following steps to ensure validity of study:

- ② Undertaking an intensive and extensive literature review to understand how personal in-depth interviews and questionnaires should be conducted.
- ② Clearly explaining the purpose of study to the respondents
- ② Assuring of anonymity and confidentiality to research participants.

Milne (1999:640) believes that the respondents answer questionnaires and interview questions more frankly because of greater feeling of anonymity. The researcher also concurs that privacy increases the rate of response and may increase the likelihood that responses reflect genuinely held opinions.

4.12 Reliability of the data

Babbie (1995) describes reliability as a condition in which the same results would be achieved whenever the same technique is repeated to do the same study. In other words, a reliable instrument is one that gives consistent results. Hence, the consistency gave the researcher confidence that results actually represented the responses of the individual involved. The researcher achieved this by:

- ② A uniform questionnaire that was used for all research participants to ensure consistency and reliability of data collected. Questions asked did not vary for different respondents.
- ② The researcher established rapport with the respondents and hence a relationship of trust was built and the credibility of the research reinforced.

4.13 Conclusion

In summary, this chapter presented and discussed the methodology used to collect and to analyse data for this study. The research design is to a larger extent, qualitative and used the interview and questionnaires as data collection instruments. Content research, phenomenology and ethnography were the research traditions chosen, so as to effectively plan and execute the research process for this study. The total number of research participants for this study was hundred and sixty, and these were randomly and purposively sampled. The interviews were directed to lecturers in the departments of African languages, medicine and music and musicology at various selected colleges and universities. The questionnaires were addressed to students in African languages, music and musicology and medicine, in institutions of higher learning and secondary education. The researcher used visuals in the form of charts, graphs and tables, to analyse, interpret and present quantifiable data. Triangulation of research methods led to a reliable data collection strategy, and as such, increased the validity and reliability of research results and lastly the validation of the research findings. Thus the researcher made sure that the selected methodology was the most suitable for this kind of study. The next Chapter presents the analysis and discussions of the research findings.

5.1 Introduction

This chapter and two other subsequent chapters present an analysis and discussion of the research findings of term creation strategies used in *Duramazwi Remimhanzi*, *Duramazwi reUtano neUrapi* and *Duramazwi reMutauro neUvaranomwe*. The three chapters provide an analysis and discussion of term creation strategies and an exploration of some of the basic processes by which new terms are created. Specifically the term creation strategies analysed include; borrowing, loan translation, compounding, coining, derivation and semantic expansion. Special attention is given to their adequacy, efficiency, appropriateness, and effectiveness and user friendliness. This chapter focuses on users' perspectives pertaining term creation strategies used in *Duramazwi Remimhanzi DR* (Shona musical terms dictionary), using information gathered from fieldwork research and content analysis in light of the aims and objectives of this study. Furthermore, the researcher analyses how the selected term creation strategies in the specialised terms dictionary contributes to indigenous Shona language development. In addition, the researcher assessed the user perspectives on whether the created terms in the DR satisfied the users' needs and also to assess the extent the DR compilers adhered to the principles and guidelines of term creation. Factors influencing the dynamics of term creation are discussed in this chapter, in relation to the theoretical framework of term creation as presented in chapter 3.

5.2 The target users of the DR

The DR compilers targeted dictionary users at secondary and tertiary levels of education, college and university lecturers and students, music experts and artists and all those interested in Shona music. These are the target population, whose musical needs dictionary compilers strive to satisfy:

...nekudaro tinotarisisira kuti richashandiswa muzvikoro, mumakoreji nomumayunivhesiti... naani zvake anokoshesa kusimudzirwa kwemimhanzi ...tinoedza nepose patinogona kubudisa chinyorwa chinogutsa zvose vadzidzisi nevadzidzi vechidzidzo chemimhanzi, vanagwenyambira, uye ruzhinji rwavanhu vanoshuvira

kusimudzirwa kwemimhanzi, (We expect that it is going to be used by students at secondary and tertiary levels of education, college and university lecturers, music experts and artists and all those interested in Shona music(Mheta, 2005: xi).

Hence, the DR is expected to be valuable and important to the growth of the Shona musical technical terms.

5.3 The DR compilers

The Shona Musical Terms Dictionary project was carried out by Gift Mheta, the editor, Bridget Chinouriri, an ethnomusicology expert and William Zivenge, a Lecturer of African Languages and Culture. All of them are well versed in their subject field. They did research and lexical engineering in musical terms which enabled the birth of the DR. The compilers got lexicographic advice from, Professor Herbert Chimhundu, the then ALRI leader, who to his credit has produced two Shona specialised dictionaries; *Duramazwi ReShona (1996)*, *Duramazwi Guru ReShona (2001)*, *Duramazwi reUrapi neUtano (2004)*, *Duramazwi neUvaranomwe neMutauro (2007)*. In addition the compilers consulted the Shona, English, and the Ndebele dictionaries, musical professionals, experts and artists, college and university lecturers and students, musical instruments technologists, music promoters and the general Zimbabwean populace interested in Shona music. It is the assumption of the researcher that with such a team of language experts, terms in the DR are presumed highly qualitative. Sager (1990:80) postulates that, term creation is usually influenced by the subject field in which it is carried out, by the nature of persons involved in the process of term creation, by the stimulus causing the term creation and ... It is against this background that the researcher gave a brief history of the DR compilers, so as to get a better analysis of their work.

5.4 Term creation strategies in *Duramazwi Remimhanzi*

The DR compilers used various term creation strategies to come up with musical lexical items to include in the dictionary. The DR compilers made an initial step of surveying existing Shona musical terms. That served as a foundation for their terminographical work. Apart from the use of indigenous terms in compiling the DR, the other terms were derived by

compounding, coining, borrowing, deriving and loan translation. As illustrated in Table 0-13 below the dictionary consists of 1194 lexical entries, and a closer analysis shows that 581 of the lexical entries listed in the dictionary have been a result of collecting available resources or repackaging, 370 are a result of creation of new terms through using foreign sensitivised term creation strategies; borrowing and loan translation and 243 terms are a result of indigenous sensitivised term creation strategies which are coining, derivation, compounding and semantic expansion.. Table 0-13 below shows how the compilers manipulated the term creation strategies at their disposal:

Term creation strategy	Loan translation	Borrowing	Coining	Derivates	Compounds	Semantic expansion	Repackaging indigenous terms
No of entries	146	224	82	52	101	08	581
Percentage	12.3%	18.7%	6.8%	5%	8.4%	0.67%	48.8%
Total lexical entries							1194

Table 0-13: Term creation strategies used by the DR compilers

From the information on Table 0-13 above, repackaging of indigenous terms leads the pack, taking 48.8% of all the lexical entries. The researcher attributed this, to a larger extent, to lack of commitment by the DR compilers to utilise various term creation strategies to create new musical specialised terms for the Dictionary. Borrowing is second with 18.7%, then loan translation with 12.3%, followed by compounding with 8.4%, then coining with 6.8% followed by derivation with 5 % and semantic expansion with 0.67% of all lexical entries in the DR dictionary. It should be clear that the DR represents an important contribution to the analysis of term creation or lexical productivity in a language contact situation. This is achievable through the dictionary compilers' ability to find adequate, effective and appropriate terms. This is a very important function in term creation so that the created terms are easily accepted by the target users. The sections that follow provide an overview of all the term creation strategies used in the DR:

5.4.1. The borrowing term creation strategy

One of the strategies that the DR compilers used is the borrowing term creation strategy.

Borrowing refers to the adoption of terms from other languages for contemporary language during the process of secondary term formation (Valentis, 1997). Sager (1990:80) says many terms in a dictionary are simply borrowings or loan translations. This is the case in the DR as the borrowing term creation strategy has a total amount of 224 lexical entries, which account for 18.7% of all the lexical entries in the DR. Table 0-14 below shows the statically data of the utilisation of the borrowing term creation strategy in the DR:

Strategy	Borrowing	Other strategies
Lexical entries	224	970
Percentage	18.8%	81.2%

Table 0-14: The borrowing term creation strategy as used in the DR

Taking statistics on Table 0-14 above, it seems that, despite the fact that Shona language does not have a broader base of musical terms as compared to widely used languages such as English, whose terms are already established; the compilers used the borrowing strategy extensively. Hence, it can be asserted that, the DR compilers sparingly utilised indigenous term creation strategy such as compounding, coining, derivation and semantic expansion as they uncritically borrowed specialised musically terms from the English language. If it was not the case, indigenous sensitivised term creation strategies could have dominated the specialised terms in the DR. Hence, it is sad to note that borrowing term creation strategy was prioritised by the DR compilers at the expense of indigenous terms that are basic to the development of the indigenous Shona language. On this point, the DR compilers are criticised for having a bias towards loan terms, hence their dominance in the DR. This shows a lack of determination by the compilers to minimise foreign influences on the vocabulary stock of the Shona language and to develop and promote its use in all spheres of life.

It can be claimed that borrowing of major terms from the English language into the Shona language mostly serves to perpetuate and affirm its superiority over indigenous languages. Hence, this may cause the target users of the Shona language to shun indigenous terms and prefer borrowed ones. Given the significant status of the DR compilers, the target users can be influenced by ‘the significant others’ in terms of behaviour and attitudes towards the indigenous languages. The researcher is of the view that whilst borrowing of terms from other languages is unavoidable, its extent should be minimal if the indigenous languages are to be given a chance to grow in their own essence.

If a specialised dictionary in question is treating a subject that has developed in a different culture or from one country to another, then the dictionary's proper borrowing tendency is justified as terminographers have the function of giving the users information on the subject concerned (Bergenholtz and Tarp, 2003). In addition, if the borrowing of foreign terms is considerably done, there is gaining of some new meanings and new words, leading to the growth of the indigenous language. In any case, Hadebe (2000:229) expands by stating that it should be noted that in general, languages develop terminology from two sources: processes from within the language or borrowing from other languages. Mtintsilana and Morris (1988:110) concur with this assertion saying that "in order to create terms a language has to draw from both internal and foreign sources." It should be taken into account that this researcher is not condemning the borrowing term creation per se, but the manner in which it is done in the DR. The uncritical tendency of borrowing in the DR can result in some very negative effects on the whole issue of using term creation strategies to develop Shona indigenous scientific and technical terms so as to fight the dominance of the English language in all spheres of life in Zimbabwe. Hence the researcher is of the opinion that the DR compilers should have minimised the use of the borrowing term creation strategy.

Thus, it can be conceded that uncritical acceptance of borrowed scientific and technological terms into Shona language could in the long run, stunt the language's development. According to Mtintsilana and Morris (1988:111) "although it is the most productive method of developing terms, a language may run a risk of losing its character if it allows transliteration to fill lexical gaps". Thus, borrowing ... should not be considered as the first but the last solution in term creation (Mabasa 2005:16). In other words, it should be engaged when all the other indigenous sensitivised term creation strategies have failed. The function of a specialised dictionary such as the DR, in most cases is to preserve a purer form of the language in the face of inroads being made on the language by influential foreign languages like English (Svesven,1993). Accordingly, Bergenholtz and Nelson (2006) support this line of thought, when they post that, to affirm the status of borrowing by incorporating loanwords in a specialised dictionary is counterproductive. In this regard, it can be suggested by the researcher that, DR compilers could have undertaken intensive and intentional indigenous language engineering, thus, aiding language development activities towards the deliberate creation of new Shona terminology for areas of introduced culture and technology.

The researcher supports the fact that the Shona language is deficient in scientific and technological terms, and it was necessary for the compilers to borrow English musical terms

in order to fill in the lexical gaps. In addition, borrowing was necessitated by the fact that some types of music are culture specific and there they had no choice but to borrow the specialised terms as they are. In other words, given such a scenario, it could be conceded that DR compilers borrowed some specialised musical terms out of sheer necessity. Some of the English musical terms have no equivalence in the Shona language. However, in as much borrowing should not be substituted, or taken as an excuse for lack of linguistic creativity and research on the part of the DR compilers, for example, where <*chiimbiriro*> the Shona word for songbook is not captured but <*himubhuku* (p 39)> instead. Such an attitude as displayed by the DR compilers helps underdevelop indigenous terms because of lack of usage at the expense of borrowed terms. It is a fact that the Shona language has been underdeveloped by the continuous use and dominance of the English language in all spheres of life in the colonial and post-colonial Zimbabwe as was expounded by the researcher in Chapter 2. It is unthinkable and rhetoric that the people who society look up to for the promotion and propelling of Shona language growth are the ones who seem to be undermining it by promoting use of foreign languages instead.

The way the borrowing term creation strategy was handled in the DR leaves a lot to be desired. It leaves one to ask many questions than answers. This borrowing tendency belittles the essence of term creation and can lead many to view it as an unworthy exercise in language development. One would question whether or not term creation can be a worthy instrument in the struggle against the hegemony of English. The way term creation is done in Zimbabwe is partly haphazard and partly too elitist (Charamba, 2012). In the case of the DR, one would conclude that borrowing does not help to develop indigenous Zimbabwean languages but undermines them. Yet term creation strategies should not undermine a language but should give its growth. A language that does not resort more to indigenous term creation strategies has a possibility of being irrelevant and not all encompassing.

However, the researcher commends the ability of the DR compilers to borrow English musical terms and indigenised them so that they suit the Shona phonological structure. In this case, the loan terms will no longer “look like” English. The compilers abided by the principle that state that all new terms must conform to the orthographic and grammatical conventions used in the target language. In other words, a term would enter a language as foreign, with its foreign linguistic characteristics which are adapted into the receiving language in order to fit

into the new linguistic environment. The word is integrated in such a way that it will be difficult to perceive it as foreign. In Chapter 3, indigenised borrowing was explained as a concept that involves adopting a word from the source language and changing its structure to suit that of the target language, but the sound and meaning remain the same (Sager, 1990; Thomason, 2001; Chimhundu 2002). Mtintsilana and Morris in Hadebe (2002) further postulate that borrowed words change their phonological and morphological structures to accord with indigenous language structure. This makes pronunciation easier for the receiving language speakers. Hence, Gilreath (1993:92) postulates that, a created term should be pronounced easily. Furthermore, the compilers of the DR demonstrate how loan words can interact with phonological and morphological rules of the receiving language as is shown in the spelling of loan words in Table 0.15 below:

Loan word	Indigenised loan word
baritone	<i>bharitoni</i> p 16
afrobeat	<i>afurobhiti</i> p 1
acapella	<i>akapera</i> p 11
acapello	<i>akapero</i> p 11
remote	<i>rimoti</i> p 197
country	<i>kandiri</i> p 145
bass	<i>bhesi</i> p 17
style	<i>sitayera</i> p 103

Table 0-15: Showing indigenised loan words in the DR

Thus, borrowed musical terms in DR conformed to the orthographical and grammatical conventions used in the Shona language and their pronunciations conform to the phonological and phonetic pattern of the Shona language as well.

However rephonologised borrowed terms have a major weakness in that they cannot be truly integrated into the receiving language as discussed in Chapter 2. They do not fulfil Gilreath's inflectability and derivability principles (Gilreath, 1993:91). As such, most of the borrowed terms cannot easily be inflected or derive other related terms for related concepts, for example; <*kway*-+-*a* <> *kway*-+-*ir*-+-*a*>. Furthermore, a learner or a speaker cannot deduce their meaning from their structure, for example; in Shona language you can deduce meaning from these terms: <*kindikitsa*, *topotera*, *hon'era*> yet you cannot do the same with indigenised borrowed terms like <*konzati*, *simufoni*, *rekodha*>. In other words, loan words are less productive. Furthermore, even if the borrowed term is rephonologised, the content which the loan words bring into the receiving language will remain foreign and not

indigenous. Thus, through borrowing, terminographers will be indirectly undermining the role of the Shona language to transmit scientific and technical knowledge through non-usage of Shona terms. Hence, it would be an ideal situation if terminographers are able to ‘fight’ for the development of indigenous terms so as to uplift their status and functional value. In addition, borrowed terms exclude indigenous people from using the created terms in various discourses because they are mostly for use by the educated and the elites since in most cases they are far removed from the majority of the users of the indigenous Zimbabwean languages (Charamba, 2012). Such a kind of scenario slows down a country’s development initiative through language use since the majority of people will be excluded from participating.

Research findings show that, the total body of adoptives in a language gives a fair picture of the material and other cultures, its speakers have acquired from outside their own group, (Chimhundu, 2002:230). The borrowing percentage in the DR (18.8%) is a cause for concern in as far as indigenous languages are concerned and it is not a true reflection of effects of the Shona language contact with other foreign languages, for example, English. It can be pointed out that the borrowing term creation strategy in the DR is too extensive. The tendency of borrowing in the DR shows that there is more to the use of this term creation strategy than meets the eye. This confirms postulations from some research participants that the specialised dictionary project was donor funded and had a time limit. This could explain why the term creation exercise in DR was hurriedly done. So it can be concluded that due to the time factor, they just ‘grabbed’ foreign musical terms and rephonologised them into the receiving language without even considering other alternative term creation strategies. So in short, it can be concluded that this project was hurriedly done for monetary benefits rather than for the growth and development of the Shona language. However, monetary gains should not supersede linguistic gains. In addition, lack of commitment in the use of the borrowing term creation strategy could also mean that maybe this project was done so as to fulfil certain promotion criteria, yet in disguise the DR compilers claimed the project was meant for the growth of indigenous languages. In other words it can be claimed that the DR compilers did this project so as to ‘develop’ themselves rather than the Shona indigenous language.

Research findings on the use of borrowing strategy is very important to this study since this research was carried out on the understanding that term creation would help to solve the problems of Shona language deficiencies and lack of functional use and value. However, the utilisation of the borrowing term creation strategy in the DR would lead someone to think otherwise; that without borrowing Shona language development cannot be realised and

without the English terms the Shona language cannot grow scientifically and technically. The question is, is it only through borrowed words that the Shona language becomes more expressive? To the researcher, it can be conceded that the borrowing term creation strategy in the DR further exacerbates and undermines this language situation.

5.4.1.1 Borrowability

The borrowed lexical items in the DR, confirmed the hierarchies of borrowability that other investigators have postulated (Chimhundu, 2002; Thomason, 2001:127; Poplack and Meechan, 1988:127; Mysken 2002). The general trend is that nouns are more likely to be borrowed, followed by verbs and then adjectives. Hence, Chimhundu (2002:51) remarks that it is evident that adoptives used in Shona are many and varied, but the noun is well represented. The Table 0.16 below illustrates the borrowing pattern in DR:

Lexical Items	Nouns	Verbs	Adjectives
No of Entry	198	23	3
Percentage	88.39%	10.26%	1.33%

Table 0-16: Patterns of borrowed lexical items in the DR

This illustrates that some lexical items are more borrowable than others. Thomason (2001:170) indicates that non-basic vocabulary items are the easiest to borrow while inflectionary morphology is hard to borrow. In the same view, Poplack and Meechan (1988:127) add that, major class content such as nouns, verbs, adjectives are the most likely to be borrowed. After reviewing various literatures, it is evident that morphology and syntax are the linguistic features least susceptible to borrowing. The lexicon is easily borrowable and can subsequently lead to structural change at every level of linguistic structure, as is the case in the DR. Chimhundu (2002) goes on to say, in our contact situation the influence of English on Shona is strong lexically, moderate semantically, weak phonologically and structurally minimal. This assertion means that the greatest impact is left on the lexicon. Such a scenario does not lead to the corruption of the borrowing language by the loan words.

5.4.1.2 Acronyms

New words can also be created by adapting acronyms into a language. Acronyms are words that are created by omitting words or parts of the words of which a term consists, as was clarified in chapter 2. The researcher notes that Acronyms borrowed from the English

language are part of lexical entries in the DR. Acronyms therefore, are analysed under the borrowing term creation strategy. Table 0-17 below shows the acronyms that are in the DR:

<i>dhiijeyi p 30</i>	DJ	Disc Jockey
<i>dhiisii p 30</i>	DC	Da Capo
<i>dhiivhiidhii p 30</i>	DVD	Digital Video Decoder
<i>dhivhiidhiara p 30</i>	DVDR	Digital Video Disk Recorder
<i>siidhiip 102</i>	CD	Compact Disc
<i>tivhitivhi p 108</i>	TV	Television
<i>vhidhiyotepi p 112</i>	VT	Video Tape
<i>vhisiara p 112</i>	VCR	Video Cassette Recorder
<i>vhisiidhi p 112</i>	VCD	Video Cassette Decoder
<i>vhisidhiara p 112</i>	VCDR	Video Cassette Disk Recorder
<i>vhitiara p 112</i>	VTR	Video Tape Recorder

Table 0-17: Showing acronyms that are in the DR

The situation is that these new musical terms are words which emerged as acronyms in the English language. When they are adapted to the Shona musical terms, they emerged as independent words. This means that acronyms are a means of word formation. The average Shona speakers may not even be aware that the musical terms are acronyms. As alluded to in Chapter 3 acronyms serve the purpose of creating more concise forms as opposed to lengthy forms. In addition lexical terms are easy to remember. Acronyms are a form of language change, as can be observed from the above examples, the morphology of words are changed. As alluded to in Chapter 3, concise terms facilitate efficient communication, and the DR compilers, as far as acronyms are concerned, adhered to this principle. Some of these acronyms through constant use, will then come to be accepted and integrated as full indigenous words, for example, <*siidhii*(102), *dhiivhiidhii*(30) and *dhiijeyi*(30)>. Term creation through acronyms is a lexical engineering strategy which contributes positively and enormously to the development of the Shona language. The abbreviations and acronyms are more likely to be retained in their original form in the target language. The DR compilers provided both the coined term and the acronyms in their original form as shown in Table 0-17 above. Providing both the original form and the created word makes the term clearer to the target users of the dictionary. The longer term is used if the situation is more formal and shorter if the situation more is informal. However, the new term may entirely replace the longer original word. Conversely, the indigenised word <*tivhitivhi*, (page 108)> does not mirror usage, as the word <*terevizhini*> is popularly used in the Shona language.

5.4.1.3 Overview of the research participants on borrowing strategy

Although the majority of research participants generally agreed that term creation is a process for language development, there was however mixed reactions on the borrowing term creation strategy used by the DR compilers as is shown in Table 0-18 below:

Category	Agree	Percentage	Disagree	Percentage
Adequate	49	75%	16	25%
Effective	35	54%	30	46%
Efficient	42	65%	23	35%
Contaminating	10	15%	55	85%
Enriching	43	66%	22	34%
Appropriate	52	70%	13	30%
User Friendly	44	68%	21	32%

Table 0-18: The target users' perceptions on borrowing in the DR

Table 0-18 above shows that, most of dictionary users and linguists (78%) were satisfied with the borrowing term creation strategy. They embraced the use of borrowing strategy in the DR, explaining that Shona musical terms on their own cannot be adequate in addressing users' needs. Furthermore, they argued that Shona language is deficient in scientific and technical terms. Thus, the borrowed terms cover up for the lack of equivalence of English musical terms in the Shona language and hence, their appropriateness. On the question of adequacy of the borrowed terms, the majority of research participants (76%) concurred that borrowed terms were adequate because they were adapted to suit terminological patterns of Shona language. There is adequacy and appropriateness of the created terms using the borrowing strategy because the compilers followed the precedence of term creation principle, as is postulated by Cabre (2003:191) that "new terms should adhere to rules of lexical formation of the receiving language" when they indigenise or rephonologise the loan or borrowed term.

Findings from music and musicology students and lecturers who participated in this study, (who were given a photocopy of the musical terms in the DR by the researcher) show that, loan words borrowed by DR compilers are adequate, effective and efficient. The students and lecturers postulated that by indigenising these musical terms, the DR compilers empowered them to express elegantly the Shona musical concepts DR compilers wanted to convey and the ideas they wanted to capture. In addition, by indigenising borrowed musical terms, it is clear that DR compilers are capable of creating adequate terms and expressions to

accommodate new concepts that come through scientific and technological innovations. A speaker or hearer of Shona language can easily identify with the Shona musical terms for they are closely linked to real appropriate images of the language. Terms in the DR reflect consistency of usage. However, remorphologising and rephonologising would also mean that the spoken text is edited, this in turn, contradicts the principle that spoken corpora should mirror speech (Chabata, 2000). This confirms postulations by a minority of research participants (15%) who are of the view that borrowing of foreign terms can indeed lead to the contamination of indigenous languages thereby deterring the growth of indigenous languages. If a borrowed term is indigenised to express a foreign concept, that term may certainly fail to perfectly convey and transmit the meaning of the concept, therefore, a new coinage in the receiving language for that concept is the best alternative instead.

One music and musicology student explicated that, borrowing of terms from other languages is complimentary to the indigenous terms. This is in the sense that some musical types require the use of indigenous terms; like ethnography, ethnomusicology, and organology. In the same vein, western music requires English musical terms like in country and western music. In other words preferability of either English or Shona musical terms depends on the style, form or genre of the music. In any case, most students for music and musicology (70%) conceded that if term creation is a means to extending a language, then, borrowing is the most appropriate strategy to use, explaining that there is nothing wrong with borrowing terms from other languages to develop the Shona language especially considering the language contact situation many countries are today. Thus, the use of the borrowing term creation strategy in specialised terms generated some debate from the research participants. As such, during the data gathering process most participants (68%) emphasised the importance of borrowing in a language contact situation. In support of this assertion one lecturer at Midlands State University expounded that:

in a language contact situation, speakers work mostly from English to vernacular, because English is the official language in most African countries. In other words, most scientific and technological concepts originate from the English language, where western countries are far advanced than in most development countries such as Zimbabwe. Thus, it is a fact that Shona terminology is limited in scientific and technological terms and therefore, borrowing fills in the gaps and in this way the indigenous language grows. As such, it is inevitable that the borrowing term creation strategy is utilised in most indigenous languages, because of lack of Scientific and technical terms in these languages.

However, there were other research participants (42%) who felt that although borrowing is

gap-filling the deficiencies of Shona scientific and technical terms it may not adequately present the way in which most Shona people use their language. Therefore, the researcher feels that, the DR compilers should consider where possible replacing some loan terms that are not complicated with indigenous terms.

In addition some of the research participants (68%) felt that the use of loan words by DR compilers may indeed be justified by the fact that the function of the dictionary is to satisfy the needs of the users. They explicated that a dictionary should be user based; a communicative act between terminographer and the dictionary user. If the borrowed musical terms satisfy the needs of the users, then there is no problem because the dictionary would have served its functional and genuine purpose. This is highlighted in chapter 3, where Cabre's theory of doors shows that terminology, being a language and it being a complex phenomenon can be approached from various angles and by means of different methods, (Cabre, 2003) of which borrowing is one of them. In other words, it is the circumstance of each communicative situation that determines the type of term creation strategy one would apply. In this case, the communicative situation which prompts borrowing in DR is the deficiency of Shona musical terms to describe musical concepts coming in from different countries and different cultures. The researcher feels that the argument above is valid but it can be pointed out that, the fact that English is the official language and medium of instruction in almost every education system in Zimbabwe could have influenced research participants to appreciate the use of the borrowing term creation strategy without noticing the fact that it may be detrimental to Shona language growth. Looking closely at the answers being given by the research participants, one can note some strong links between the responses given for the borrowing term creation strategy as being influenced in part by the language policy of Zimbabwe which places the English language at the centre and the indigenous languages at the periphery. These responses show that any language that is not of any functional value may be shunned by its speakers for a prestigious one language which opens gates to gainful employment and success in life.

Concerning adequacy of borrowed terms, the researcher supports the responses of research participants in the sense that the DR compilers followed the precedence of term principle, as is postulated by Cabre (2003:191) that "new terms should adhere to rules of lexical formation of the receiving language". Thus, they followed the rules of the receiving language making the borrowed terms adequate and efficient. However, this study shows that although the DR compilers indigenised English musical terms, they need to deal, in some cases, with spelling

problems. In spelling, compilers should show differences between voiced and voiceless [r] >< [rh] phonetic sounds. For example, in Table 0-19 below, they should have shown the difference between voiced/breathed and voiceless/unbreathed sounds.

Voiced	Voiceless
<i>rabha</i> < <i>rhabha</i> >	<i>raisenzi</i>
<i>raga</i> < <i>rhaga</i> >	<i>raudhisipika</i>
<i>redhiyo</i> < <i>rhedhiyo</i> >	<i>regato</i>
<i>redhiyogiramu</i> < <i>rhedhiyogiramu</i> >	<i>ribhureto</i>
<i>rege</i> < <i>rhege</i> >	<i>rigecha</i>
<i>rekoda</i> < <i>rhekodha</i> >	
<i>rumba</i> < <i>rhumba</i> >	

Table 0-19 Examples taken in the DR from pages 95-97 showing spelling problems for the Dictionary compilers

A borrowed term, therefore, should conform to the morphology, spelling and pronunciation conventions of the language for which it is intended (Mberi and Mazuruse, 2012). This implies that when everything has been done perfectly there should be no synonyms and morphological or spelling variants for any specific term.

In addition, some research participants (54%) who acknowledged the use of the borrowing term creation strategy as effective postulated that, rather than waste resources in coining new musical terms to replace borrowed ones, technical vocabulary experts should readily accept the loan terms, so long users are happy with them and use them with ease. They felt that it is time wasting to coin new terms which already have other existing terms (foreign terms). One African Languages student aptly stated that a loan word is a case of reinventing the wheel. Worse still, they further expounded that, the new rephonologised loan terms may introduce unnecessary terminological competition with indigenous terms and this may result in the complication of indigenous language development efforts.

Furthermore, the research participants felt that, where technical and scientific terms are already in use, it is better to adopt them rather than creating new terms in the indigenous language. The research participants pointed out that, borrowed musical terms, especially from the English, language are easy to pronounce and are more familiar and less confusing than indigenous coined terms for the same concept. They added that what is needed is to rephonologise the borrowed terms so that they adapt to the receiving language rules well. The responses of these research participants show that they have a positive attitude towards the

use of loan term, especially English terms. The status of the English language in Zimbabwe may have influenced some of the views of the research participants towards the borrowing term creation strategy in the DR.

However, some research participants (65%) stressed that, Shona musical terms are efficient and appropriate to use in music and musicology since they make the Shona students understand musical concepts comprehensively. This is so because the Shona terms will be familiar to the students and are easier to grasp than English musical terms. Others, not so radical in this group, felt that the lectures may use English musical terms and switch on to Shona musical terms (code-switching) for emphasis. As it is, some of the modules in music and musicology contain Shona musical terms especially in Organology (classification of African instruments) and Ethnomusicology. Basing on views raised by these participants, the researcher therefore, encourages terminographers to identify Shona scientific and technological terms to include in specialised dictionaries without having to over-rely on English terms. There is nothing wrong with borrowing, but too much of it is worrisome to those who are concerned with the issue of indigenous language development. Too much use of loan terms may indirectly undermine and under develop Shona indigenous terms because of non-usage.

Although most research participants held the view that borrowing of musical terms is necessary in the Shona language which has limited terminologies, conversely, some other research participants (15%) condemned it as a process of corrupting and contaminating the indigenous languages. They argued that, rather than borrowing terms from other languages, the compilers should have coined Shona terms to express every musical concept in the Dictionary. They further stated that, the borrowing term creation strategy compromises the purity of the Shona language and it militates against national identity and pride. Most of them castigated the use of the borrowing strategy in the DR saying that it is a sign of laziness and decadence. Worse still, they expounded; the borrowing term creation strategy is detrimental to indigenous language development since the creative genius of the people is enshrined in their language. Hence, they argued, continuous borrowing sabotages growth of indigenous languages. .

One other important point raised by the research participants (32%) was that, the borrowing term creation strategy in the DR poses a problem of whether or not borrowed terms have any advantage or disadvantage for the target user. Mainly, the participants noted that, vocabulary

developed through borrowing is solely for the consumption of experts in such a way that the ordinary people/user would not benefit as expected (although they are not the target users). Hence, the research participants felt that this strategy alienates the majority of the people from participating in developing processes that are meant for them, as language enrichment only focuses on the educated.

The argument put forward by the research participants is that, when terminologies engage such term creation strategies as borrowing, they presume knowledge of English language on the part of the user. They do not consider whether the ordinary Shona speaker will be expected to use and understand them as reiterated by research participants. Thus Cabre (1992) comments that, in science and technical vocabulary, for example, less developed societies become receptors of different kinds of borrowing: cultural, scientifically, technical and linguistic innovations. Thus in most cases the language users become non-participants or passive recipients of whatever language development which is taking place in their own country.

On the other hand, some lecturers and linguists in the Department of African Languages at MSU conceded that, whilst they think it is ideal for terminographers to coin an indigenous term for a foreign concept coming into the Shona culture, they were concerned that the newly coined equivalent term may have challenges of displacing the loan word and may face rejection by speakers of a language. This can be evidenced by the situation in the earliest stage of 'modernisation' or language contact with the English language in Zimbabwe where Shona equivalent terms were coined, for example; tea <*svutugadzike*>*tiyi*, motor-car <*hambautare*> (*motokari*), bicycle <*hambautare*> *bhasikoro*, the bolded new coinages never gained currency as they were rejected by the target users in preference for loan terms and as such, they failed to displace the borrowed term. This, they professed that a term gains currency in the language in which it originates. This is supported by Cabre (1992) who posits that, we should not forget that most terms get currency and widespread use in language in which they are produced. Consequently, the DR compilers might have thought or felt that language users may prefer established terms to new coinages, thus they over utilised the borrowing term creation strategy. However, this does not exonerate them from the excessive and unwarranted utilisation of the borrowing term creation strategy in the DR.

When asked by the researcher why they borrowed foreign terms so heavily, the DR compilers claimed that coining new terms to replace the borrowed ones proved very difficult, since even more, some musical terms are culture specific. They added that if a new term is coined to express a foreign concept, that term will certainly fail to perfectly convey and transmit the meaning of the concept, therefore, borrowing of term is the best alternative instead. Hence, in view of this fact, the DR compilers had not much option of coining a Shona musical term but to borrow the already existing English musical term. McCarthy (1990) adds that, borrowing acts as a fertilizer to the communicative techniques of the target language; especially in terminology where borrowing seems better than artificial coinages. Thus the DR compilers justified their excessive use of borrowing term creation strategy. The other justification is that because of the underdevelopment of the Shona language, the use the borrowing term creation is gap-filling and hence loan terms are for the enrichment and growth of the Shona language. So by using the borrowing term creation strategy the DR compilers were acting as gatekeepers of the English language, promoting and protecting its use by alleging that the Shona language is deficient in scientific and technical terms, which is not always the case.

The compilers further declared that a living language is dynamic. They argued that the English language borrowed extensively Greek and Latin loan words, a process that accounts for its vast growth especially in scientific and technical terms. However, the researcher feels that the assertion by the DR compilers is valid, but only if it is perfectly and systematically done. The way the borrowing term creation strategy was uncritically utilised in the DR can become an impediment to the natural growth and development of the Shona language. After carrying out this study, the researcher can now confirm that, if done properly the borrowing term creation strategy can be regarded as an enrichment tool for indigenous language growth but has disastrous effects to the growth of indigenous languages if it is haphazardly engaged. Le Page (1964:98) says, “all languages derive their terms from some other languages for their growth ... and in order to handle new concepts introduced by contact with other societies ...” The borrowing of English musical terms into the DR shows that change in socio-political, cultural and economic environment demands that society creates new terms to describe and nominate them.

Some of the lecturers in various Zimbabwean universities who participated in this study pointed out that the function of the specialised dictionary determines the type of terms to be included in it. If the dictionary is going to be used for educational purposes, there is no way the DR compilers could have avoided borrowing foreign terms. Following the same line of

thought, Bergenholtz and Kaufman (1997) say the difference between the various dictionaries, is what they intend to inform not which information they may contain. Hence, Bergenholtz and Nielson (2006) postulate that, if the monolingual dictionary is intended to be an educational resource in the process of standardisation of the language, then the place of both established and even newer borrowings in the lexicon of the language should be recognised. As such, the lecturers highlighted that they do not care about the inclusion of loan terms in a Shona specialised dictionary, for as long as the intended message is put across. Furthermore, Gouws (1996:100 in Nkomo 2008), notes that, the aim of any lexicographic project, should be production of dictionaries to satisfy the needs of the target users of a specific language community.

Overall, the use of the borrowing term creation strategy has shown that the views from research participants are largely influenced by the prestigious status the English language is given in Zimbabwe in all spheres of life; education, employment, work place, public places, government to name but a few. Therefore, due to unfavourable language policy created terms in the Shona language may be irrelevant as they do not contribute anything to the well-being of both the target user and the society. As a result the researcher is of the view that the research participants are therefore, conditioned to think that consistent use of the English language, either written or spoken, does not have any harm to the growth and development of their own indigenous languages. In addition, the research participants are also mentally colonised to think that the English language is the only language that is able to perfectly express scientific and technical terms than the Shona language. Hence, it is not surprising that the subjugation of Shona terms can be manifested even in textbooks and dictionaries. Therefore, the researcher feels that there is need to decolonise such attitudes through indigenous language use in all spheres of life. There is need to conscientise the Shona speaking people of the fact that any language in the world has the capability of being developed to express any concept under the earth, taking the fact that such countries like Japan, China, and Malaysia developed their languages to such heights.

5.4.2 Loan translation

Apart from direct borrowing term creation strategy, the DR compilers used loan translation for the creation of some musical terms in the dictionary. Loan translation term creation strategy is when the morphological element of a term or whole words from the source language are translated literally (word for word) in order to form a new term in the target

language. According to Chabata (2000) loan translation can be regarded as a term creation strategy that is meant to make the message clearer by explaining foreign concepts, culture-specific concepts or taboos using one's own indigenous language. Madiba (2000:200) adds that, "it is a productive way of engineering knowledge and describing foreign concepts easily". Thus, the loan translation term creation strategy entails a process of borrowing a word from a source language, then rendering its meaning in the recipient language by paraphrasing it. The basic rule is that the term-creator should understand his role as that of constantly moving in and out of the source language and target language to find or create equivalent terms and then match or balance these terms (Mheta and Muhwati, 2009). In addition, Sager (1990) says, the loan translation term creation strategy shows that, terms can share the expressive space with those of other systems of communication. All the definitions above give the researcher an impression that the loan translation term creation strategy can be utilised for the constant evolution of new terms in the Shona language as it shows some vitality and creativeness in the way a language is shaped by its users. There is a significant use of loan translation in the DR, as statics on Table 0-20 show:

Strategy	Loan Translation	Other Strategies
Lexical entries	146	1048
Percentage	12.3%	87.7%
Total No of Lexical Entries	1194	

Table 0-20: Showing the utilisation of the loan translation term creation strategy in the DR

Indeed, it can be noted that the loan translation term creation strategy allowed the DR compilers to express complex foreign expressions using their own indigenous resources to match the meaning and structure of the foreign expression in their own language. In addition, this strategy helped the DR compilers to address scientific and technological lexical inadequacies of the Shona language. However, the researcher notes that the loan translation term creation strategy has some disadvantages to the target users in the sense that the created terms are heavily lexical loaded making them hard to master or remember and to understand the message the DR compilers were trying to put across. The researcher feels that while loan translation is a good term creation strategy, it not very suitable for the promotion of Shona language development but comparably can be very productive and appropriate for other languages like the English language because terms produced through this strategy are not as heavily lexical loaded as is the case in the Shona language. Sometimes the loan translated terms in the DR are simple explanations or definitions of the loaned word. Therefore, it can be

confirmed that this term creation strategy does not promote the growth of the Shona language as it fails to create simple and concise specialised terms. Thus, there is no productiveness as it is only the meaning of loan terms that are clarified, but no new terms are added to the Shona vocabulary. The DR compilers mistranslated the meaning of the loan word in a number of cases as is shown by a few selected examples in Table 0-21 below:

<i>chiuno chegitare</i> p 23 – guitar waist
<i>chitsigiro chembira</i> p 23 – metal that holds <i>mbira</i> keys together
<i>musoro wegitare</i> p 74 – guitar head
<i>mubatanidzwa wevaimbi nezviridzwa</i> p 66 - ensemble
<i>mitsara yakawanda yemimhanzi</i> p 65- polyphony
<i>neramhanzi rine toni yakazara</i> p 79 - whole tone scale

Table 0-21: Showing examples of inadequate loan translated terms in the DR

The examples given above, has shown that the DR compilers at times failed to adequately capture the apt meaning of the loan terms, for example; *neramhanzi rine toni yakazara* (whole tone scale) The paraphrase above shows that they failed to use fully fledged indigenous terms as the word *toni* (tone) which is in the paraphrase needs some further translation since it is a loan term as well. Then the paraphrase <*mubatanidzwa wevaimbi nezviridzwa*> ensemble) is ambiguous, the message they would want to put across to the target users is not clear; it sounds like a combination of singers and musical instruments which is vague and ambiguous. Furthermore, this method is criticised by linguists such as Baker (1992), Madiba (2000), Mabasa (2006) for giving rise to long terms. As such, the researcher asserts that, judging by the loan translated terms in the DR, the loan translation term creation strategy is not an adequate and appropriate term creation strategy for the promotion of the growth and development of Shona specialised terms.

If the Shona language is to be developed so as to express scientific and technical terms, the researcher feels that terminographers should use indigenous sensitivised term creation strategies such as compounding and coining because these have got the potential of uplifting the status of indigenous languages. As postulated above, some loan translated terms fail to adequately capture and convey the meaning behind the translated term in the receiving language. However, as can be seen from the examples above, the major disadvantage is that the loan translated terms do not capture all the conceptual dimensions of the notion being designated by the relevant term. In the DR there are some more cases, other than the examples given, of ineffective loan translations noted by the researcher. For example, where DR

compilers failed to capture the original meaning of the source loan terms in the target language > ensemble – *mubatanidzwa wevaimbi nezviridzwa* (Mheta 2005:66). On the other hand, it can be purported that the longish structure of the paraphrased term automatically leads to its rejection by the target users, who may prefer a borrowed term which is short and precise instead. It is a fact that the DR compilers are aware that the loan translation strategy does not have the capability of ‘fighting’ the dominance of the English language in all spheres of life. The loan translation term creation strategy cannot produce simple, precise and concise terms to add to the Shona vocabulary or corpus; such that this will enable textbook writers to produce scientific and technical texts for use in education system. Production of Shona textbooks in the education system will promote the Shona language to be used as a medium of instruction from primary up to university level. As has been alluded, the use of the loan translation strategy by the DR compilers shows lack of dedication, commitment, creativeness and innovativeness on the party of the DR compilers. The compilers just took a loan term and rendered its meaning into the indigenous language or the Shona language which did not require them to expend their effort or putting much energy on this exercise.

5.4.2.1 Overview of research participants on loan translation

Most research participants were not happy with the heavy presence of loan translated terms in the DR. They argued that over-use of foreign sensitivised term creation strategies implies that the war against indigenous language imbalances brought about colonialism and perpetuated into post- colonial era will never be won. Statistics in Table 0-22 below shows the attitudes of research participants on loan translation in the DR:

Category	Agree	Percentage	Disagree	Percentage
Adequate	18	28%	47	72%
Effective	22	34%	43	66%
Efficient	20	31%	45	69%
Enriching	10	15%	55	85%
Appropriate	25	38%	40	62%
Term Simplicity	12	18%	53	82%
Less Expressive	15	23%	50	77%
User Friendly	24	37%	41	63%

Table 0-22 : Showing attitudes of research participants on loan translation in the DR

Basing on the results on Table 0-22 above, the majority of research participants (69%) complained that, the loan translated terms are not efficient, as the DR compilers used phrases

which are sometimes difficult to understand. At times it seems as if the DR compilers gave definitions of English musical terms, using the Shona language. Some other research participants (72%) pointed out that some Shona words used to translate the musical terms are too ‘deep’ so the loan translation strategy is not an adequate term creation strategy. The research participants underlined the following loan translated Shona terms in the DR as being difficult to understand as shown in Table 0-23 below:

Borrowed musical term or phrase	New musical terms coined using loan translation term creation strategy
polyphony	<i>mitsara yakawanda yemimhanzi</i> , (p 65) (many lines of music)
whole tone scale	<i>neramhanzi rine toni yakazara</i> , (p 79)(neramhanzi with a full tone)
western renaissance	<i>nguwa yerumutsidziro kumavirira</i> (p 82 (time of continuity in the West)
ceremonial clay pot	<i>hari yegudubugudubu</i> (p 39) (pot of disturbing noises)
ensemble	<i>mubatanidzwa wevaimbi nezviridzwa</i> (p 65)(combination of musicians and musical instruments)

Table 0-23: Examples of loan translated terms in the DR research participants failed to understand.

In fact, research participants (82%) emphasised that, the paraphrased terms are difficult to refer to as musical lexical terms but rather as explanations of English musical terms in the Shona language. As such, the research participants argued that the created terms are not efficient to use in their music and musicology modules. In addition, the research participants noted that, during the translation of the loan musical term from the source language into the target language, in the DR, the meaning of the term was changed or distorted as shown in Table 0-23. The musical terms identified by the research participants as being distorted by the DR compilers are similar to those that were identified by the researcher as being distorted, vague and difficult for the readers to capture their essence of meaning. In other words, the loan translated terms lack term simplicity. This means that terminographers should be very cautious and careful on the use of the loan translation term creation strategy, lest many of the created terms through this strategy will be distorted. Another research participant added that in loan translation, the form of the term is compromised at the expense of meaning, for example where a single noun in English yields a phrase in Shona, for example, <ensemble, page 65> *mubatanidzwa wevaimbi nezviridzwa*. Therefore, as alluded to earlier this loan translation term creation strategy is most suitable for the English language and not the Shona language. This means that it is not a means to an end for the Shona language developmental efforts.

Furthermore, some research participants (24%) in the African languages department contended that, in loan translation, created terms violate the principle of precision because of the long and vague phraseology. To add on to that, respondents (62%) felt that the loan translation term creation strategy diminishes the capacity to make use of native material at hand, as the terminologist's role is relegated to that of a translator; always translating English terms into Shona, instead of creating new ones. Therefore, the resultant terms from loan translation term creation strategy were regarded as inadequate and inappropriate by the research participants. When asked whether terms created through loan translation strategy are user friendly, the researcher noted that it was difficult for the majority of the research participants to say whether loan translated terms in the DR are adequate or whether they serve their purpose, but one could likewise judge from their hesitance that loan translated terms are not user-friendly.

Some research participants (66%) added that, the compilers of the DR should have limited loan translated terms by resorting to compounds, derivatives, borrowed and coined terms. In that way, they would have avoided including terms that are inadequate in the dictionary. Furthermore, 85% of the research participants pointed out that the loan translation term creation strategy does not result in the increase of the Shona vocabulary; therefore the term creation strategy is not adequate. However, the compilers of the DR postulated that, by resorting to the loan translation term creation strategy, they were evading too much direct borrowing of musical terms from English language. They added that this term creation approach is, in any case, meant to coin terms that are descriptive and therefore, the communicative function of the term should take the centre stage. To this end, they are supported by Cabre (2003) who says that, terminology used by experts in a language in the process of development and elaboration, must be described and analysed from a dynamic and functional perspective. The DR compilers further explained that as far as loan translation is concerned, it depends from which angle you are looking from, when we look from the angle of descriptiveness, loan translation is descriptive functional, then if we look from the prescriptive angle it becomes prescriptive non-functional.

The DR compilers' reasoning could be justified, since according to Cabre's theory; a situation can determine the communicative act. Therefore, it is a fact that a dictionary should cover complex needs that arise in particular user situations. However, the researcher cannot exonerate the DR compilers from too much utilisation of the loan translation term creation strategy, since even a communicative act requires one to create adequate terms that are user

friendly and not meaningless as those given in Table 0-23 above. The DR compilers purported that by using the loan translation term creation strategy they were running away from too much borrowing. The researcher feels that this is taken as a 'lame excuse' by the DR compilers to cover up for their 'wrong deeds. It is of no use for one to run away from a bad situation into another bad one again, the ideal situation is that it should be from bad to good. It is rhetoric for one to run away from borrowing of loan terms through the use of the loan translation term creation strategy.

All the facts raised above by the researcher and the research participants points to need therefore, to upgrade the standard of loan translations in the DR so that the compilers are seen to be providing adequate, efficient, effective and user friendly musical terms to the DR target users. The researcher also suggests that there should be a limit of the use of foreign sensitivised term creation strategies and that only a certain small percentage should be allowed in a specialised dictionary and the rest should be from term creation strategies that promote the growth of the Shona language in its natural and entirety state. The researcher feels that such a stance will uplift the status of indigenous languages and challenge the dominance of the English language in every sphere of life in Zimbabwe. Overallly, research findings on loan translation term creation strategy from research participants for this study and the researcher is that in as far as the Shona language is concerned, the loan translation term creation strategy is inadequate to use for the creation of specialised terms. Term creation efforts to develop the indigenous language will forever remain a futile exercise in Zimbabwe if the borrowing and loan translation term creation strategies are over relied upon by terminographers. Even if the current constitution (2013) of Zimbabwe has promoted indigenous languages into an official status, the implementation of this ruling will be very difficult if there is not enough terminology to carry out these stipulations. Therefore, the researcher is of the opinion that the loan translation term creation strategy is inadequate to use in the effort to develop indigenous languages.

5.4.3 Compounding

Compounding is one of the term creation strategies in the DR. Sager (1990:265) states that, compounds in a special language dictionary are created more systematically and regularly to fit into terminology and system of the language. This has a very big advantage for indigenous

language growth, since according to Mtintsilana and Morris (1988: 111) “lexical items coined from the internal resources of a language are preferable; because they are transparent, even when the term itself is unfamiliar... a native speaker can often deduce its meaning”. Statistics in Table 0-24 below show the utilisation of the compounding term creation strategy:

Strategy	Compounding	Other strategies
Lexical Entries	101	1095
Percentage	8.4%	92.6%
Total No Of Lexical Entries	1194	

Table 0-24: Total number of compound entries in the DR

Overall, there are 101 lexical entries of compounds in the DR which is 8.4 % of the 1195 lexical entries. To this end the researcher feels that the DR compilers should have created more compounds than the given in the DR, considering the fact that the compounding term creation strategy is more productive and apt for the Shona language development taking into cognisance the facts raised by the above mentioned scholars. As has been already alluded to, this term creation strategy is suitable for the promotion of the Shona language which has a deficiency of scientific and technological terms to express musical concepts. The compounding term creation strategy mostly utilises internal resources of a language. However, even though compounds are supposedly designed to efficiently permit specialised knowledge transfer, they lend themselves to more complications owing to the fact that they have a complex packaged structure. This is a dilemma and a very critical factor, which hampers the development of the Shona language using the compounding term creation strategy. Table 0-25 below shows examples of compounded terms in the DR:

<i>chirongamhanzi</i> p 22 rhythm	<i>chiwedzeramutinihiro</i> p 22 resonator
<i>chiratidzasimbaradzo</i> p 22 accentuation	<i>chiratidzachidenhamhanzi</i> p 21 clef
<i>chichengetamhanzi</i> p 12 cassette	<i>munongedzabenzi</i> p 71 index finger
<i>chienzanisamutinihiro</i> p 14 graphic equalizer	<i>nhembayemwana</i> p 82 ring finger

Table 0-25: Showing examples of compounded terms in the DR

This shows that while the compounding term creation strategy reflects usage of language and the people’s own values, thinking knowledge and world-views, it has a potential of having

widespread rejection by the people (Chimhundu, 2002:40). This is mainly due to the length of its products. Allen and Guy (1974:102), postulate that, the longer the word, the less likely it is to be used by speakers. Some of the compounds in the DR are very long, and there is a less likelihood that the language users will accept them.

Gilreath (1993: 88) explain that a term should be concise, “conciseness refers to the orthographic length of a term, in other words its brevity or shortness”. Therefore, lexical terms should be concise in order to facilitate communication in specific situations in which they should. Judging from the examples given above, the length of the compounds in the DR can lead to their rejection; for example <*chiratidzachidenhamhanzi* (p 21)> in preference to the shorter English musical term <clef>, which may be regarded as simple and straight forward by target users. In support of this contention, Katamba (1993) avers that,

this process can be relatively constrained by cognitive considerations which boil down to the general tendency of language users to produce cognitive trackable comprehensive or precisable linguistic utterances that explains why speakers refrain from verbalising too long nominal compounds.

Allen and Guy (1974:128), further explain that, “this is not to suggest that the shortest possible alternative should always be selected, but rather that; there is constant tendency to use the shortest alternative, in consistency with the objective of the speaker”. Therefore the target user should take the centre stage.

However, the rejection of compounded terms may be further exacerbated by mere manifestations of attitude problems towards a language regarded as inferior, in preference to that regarded as superior. The researcher is of the opinion that unless the status of the Shona language in Zimbabwe is changed, the newly coined terms may face rejection; no matter how good they are, because the Shona language does not have any functional value in society, except that of being the language for the home. Rejection of compounds by Shona speakers is caused more by the language policy which promotes a negative attitude among Shona speakers who inherently tend to shun their own mother tongue. Hence, Chimhundu (2002:18) comments that,

the status enjoyed by such innovation is reminiscent of that enjoyed by those bookish or learned forms. The compounds coinages are typically used in formal speech where the speaker has reason to avoid interference from a foreign language. But in ordinary conversation, the speakers ... tend to prefer an adoptive equivalent.

This contention fits well into Cabre's communicative theory as expounded in Chapter Three of this study, that when compiling specialised terminology, the target user of the dictionary should take the central considerations. This is aptly expressed by Dubuc (1997:4) who points out that, terminology development is a discipline that is aimed at systematically identifying specialised terms in the context in which they are used, analysing the concepts they represent in that context and creating and standardising terms to meet the user's need for means of expression.

The utilisation of the compounding term creation strategy shows that the DR compilers were at some instances very creative and innovative with use of their mother tongue. They have set out to undertake intentional language engineering or language development activities towards the deliberate creation of new specialised terminologies for the musical field. Thus, the researcher commends the DR compilers' effort. They worked independently in creating terms in a specialised field like music, because they realise the importance of music as a possible tool for economic development. In the case of utilising the compounding term creation strategy, the DR compilers were responding to this need, so that the Shona language is not found lagging behind other languages of the world in terms of technical and scientific terms. In other words, it is through the compounding term creation strategy that the DR compilers have shown the desire and commitment to Shona language development. This effort shows that with an appropriate language policy, there is no discipline that cannot be handled through the compounding term creation strategy in the Shona language in terms of technical and scientific vocabulary. Thus, the DR compilers have shown that created terms are not being created from nowhere but are a result of the terminologists' understanding of their environment and their indigenous languages.

5.4.3.1 An overview of the compounding distribution pattern in the DR

Compounds in the DR have been made by joining two or three aspects of the language, that is, nouns plus verb or the verb plus noun, noun plus noun, verb plus verb and nominal compounds. The combinations can either be in Shona plus Shona language, or a hybrid term; Shona and English languages and English plus English as clarified later on in the next paragraph. Topping the compounding term creation pattern in the DR, is the verb- nouns combinations with 61 entries accounting for 61.617% of the compounds in the DR, followed by noun-noun compounds with 32 lexical items accounting for 32.32% and verb-verb compounds with a total of 4 lexical entries accounting for 4.04%. The indigenous- borrowed

combination has only 3 entries which amounts to just 3.03% and lastly nominal compounds have only 1 entry which is, 1.01%, as is shown in Table 0-26 below:

Type of compounding	Number of lexical entries	percentage
Noun +noun	32	24.8%
Noun +verb	61	47.29%
Verb +verb	04	3.1%
Shona +English	03	2.33%
English+ English	28	21.7%
Nominal compounds	01	0.78%

Table 0-26: The compounding term creation strategy distribution pattern.

The Tables below presents a summarised compounding term creation strategy distribution pattern as presented in the DR:

② Verb + noun compound combinations

The Table below shows a few examples of the verb-noun compound combinations of musical terms as presented in the DR. All together, the verb-noun combination has 61 lexical entries. This combination is very productive in the compounding term creation strategy. This is also reflected in DR as compilers invented Shona musical terms as is shown in the Table below:

<i>muimbirapamwe p70</i>	<i>chidenhamhanzi p 12</i>	<i>chikokotamugoti p 16</i>	<i>nhurafemo p 83</i>
<i>chichengetamhanzi p12</i>	<i>mudapakati p 68</i>	<i>maridzangoma p 57</i>	<i>maridzambira p 57</i>
<i>chibatanhepfenyuro p11</i>	<i>mukurahunde p70</i>	<i>dapamazwi p 28</i>	<i>batamutsindo p 4</i>

The verb - noun combination in compounds is the most utilised by Shona language speakers and they produce very descriptive terms.

② Noun +noun compound combinations

The noun-noun combination follows with 32 lexical entries in DR. The Table below shows some of the noun-noun compound combinations of musical terms as presented in the DR

<i>chivaramhanzi p 23</i>	<i>mupombotyori p 72</i>	<i>hwaromutsindo p 42</i>	<i>nhembayemwana p 82</i>
<i>chivhirimutamba p 24</i>	<i>musungachityu p 74</i>	<i>ndongamabwe p 78</i>	
<i>dzimudzangara p33</i>	<i>mutinhironyina p 75</i>	<i>mupomboshori p 72</i>	

This combination is fairly utilised, but it can also be regarded as being productive in the

creation of scientific and technological terms in Shona language. The noun and noun compound combination have the potential of effectively filling in language gaps in Science and technological concepts, thereby, enhancing productivity and effective Shona language growth.

❷ Noun + adjective compound combinations

As is illustrated in Table below, the researcher observed that noun and adjective compound combination is not productive in Shona. There were only 3 lexical entries denoting this combination as shown in the Table below:

<i>detemhanzi p 29</i>	<i>gurumatukwe p 38</i>	<i>jenaguru p 43</i>
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However, if utilised effectively, the noun and adjective combination have the potential of producing terminology which can enable the Shona language to cope with new developments and changes in modern society, especially in specialised terminology.

❷ Borrowed word + borrowed word combination

According to Mheta (2007:111) “the co-existence of the English language as a prestigious medium of communication with the Shona language has had some effects on the borrowing of technical terms”. This is evident in the DR where the compounding term creation strategy used combination of borrowed and borrowed term, to create new terms for musical concepts deficient in Shona language. The Table below shows that in compounding, most compilers are not concerned with the preservation of the pure forms of a language:

<i>kwayamasita p 49</i>	<i>kwayamisitiresi p49</i>	<i>koriyogirafu p 48</i>	<i>kaundapoindi p 46</i>
<i>homofoni p 40</i>	<i>hedhifoni p 39</i>	<i>himubhuku p 39</i>	<i>girafikiikwaraiza p 36</i>
<i>giramafoni p 36</i>	<i>giramufoni p 36</i>	<i>gamubhutu p 35</i>	<i>dhisikodhenzi p 31</i>
<i>bhurekidenzi p 9</i>	<i>bhesidhiramu p 8</i>	<i>bhesidhuramu p 8</i>	<i>bhegipaipi p 7</i>
<i>bhavhadheyi p 6</i>	<i>bhavhadhe p 6</i>	<i>aforbhiti p 3</i>	<i>penihwisiri p 94</i>
<i>raudhisipika p 96</i>	<i>redhiyogiramu p 96</i>	<i>terevizhini p 106</i>	<i>tepirekodha p 106</i>
<i>vhidhiyokaseti p 112</i>	<i>vhidhiyorekodha p 112</i>	<i>vhidhiyotepirekodha p112</i>	<i>vhidhiyotepi p 112</i>

However, the researcher entered these borrowed compounds under borrowing term creation strategy and hence their statistical data is not accounted for under compounding. If it were in mathematics, then, these borrowed compounds will be in the intersection.

❷ Borrowed + indigenous compound combinations

Usually in compounding, borrowed words are used together with indigenous elements. In the DR cases very few cases were noted which means that this combination is not popular with the compilers. It seems dictionary compilers use part of meaning of word which is found in Shona and combine it with a loan word which does not have a Shona equivalent as is illustrated in the Table below:

<i>mushayatoni p 74</i>	<i>muzvinatoni p 77</i>	<i>siimukuru p 102</i>
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The combination of borrowed and indigenous terms goes contrary to Gilreath (1993:90) who states that, words constructed from elements derived from a single language, which combines lexical elements derived from one language, are usually preferable to a hybrid word. Seemingly, this response is a result of language etymological orientations or lack of creativity on part of DR compilers.

❷ Verb +verb compound combinations

Research findings show that the verb and verb combination is also not a common compound in Shona language. There are only 4 lexical entries of this type as given in the Table below:

<i>gumbakumba p 37</i>	<i>mahuyauone p 54</i>	<i>mazauone p 59</i>
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If verb and verb compound combination is effectively utilised in Shona language, it seems they are easier to capture and to internalise contrary to loan words where one has to first internalise the concept then the term.

❷ Nominal compounds

According to Sager (1990) nominal compounds are lexicalised noun phrases. As can be shown by the one example below, nominal compounds are rare in the Shona language, and hence, in DR: *chiratidzachidemamhanzi*. However, despite its shortcomings, the compounding term creation strategy is a very productive technique of utilising or unpacking existing forms of the Shona language.

5.4.3.2 An overview of research participants on compounding

Table 0-27 below shows the reaction and attitudes of research participants on the

compounding term creation strategy in the DR.

Category	Agree	Percentage	Disagree	Percentage
Adequate	26	40%	39	60%
Effective	29	47%	36	53%
Efficient	28	43%	37	57%
Enriching	54	83%	11	17%
Appropriate	24	37%	41	63%
Term Simplicity	12	18%	53	82%
Less Expressive	19	29%	44	71%
User Friendly	22	34%	43	66%

Table 0-27: Overview of research participants on the compounding strategy in the DR

From the statistics obtained by the researcher, it is clear that the majority of the DR target users do not prefer terms that are as a result of the compounding term creation strategy. Although the research participants (83%) agreed that the compounding term creation strategy leads to language development, the compounds themselves are not very popular in usage. The reasons given by the research participants (82%) for this reluctance is that the compound words are too long and too complex to the extent that they are difficult to use as compared to English musical terms they seek to replace. Thus, although, coinages and compounds are familiar and are packaged from within indigenous languages, they are not generally accepted by target users as compared to loan words. This is supported by Chiwome (1992) who argues that, the heavy lexical loading that come as a result of loan translation and compounding can lead to undesirably long terms which are user-unfriendly. In addition, according to Chimhundu (2002:303) they are not popular in usage because they compete with adoptives, which are structured simpler and are therefore, less cumbersome. Allen and Guy (1974:102) confirm this as they say, the longer the word, the less likely it is to be used. This is in line with research findings which show that, compounds are not popular in use in the Shona language. Some research participants (66%) expressed that, terms that are created through the compounding term creation strategy are user unfriendly. The main reason given by research participants for their rejection is that they are too lengthy and cumbersome. However, as have already been pointed out the responses from research participants were largely attributed to the promotion of the use of the English language in every sphere of life. This shows that unless the use of all languages in Zimbabwe is balanced, the Shona language is going to remain at the periphery and not even any term creation strategy will be able to can redeem it Terminologists have undertaken to develop the Shona corpus but alas! The status of

the Shona language in Zimbabwe is a major challenge in as far as it engenders negative attitudes towards the created Shona terms which consequently lead to their rejection.

Judging by the negative responses from research participants, the researcher feels that the language policy of Zimbabwe need to shift towards the promotion of the Shona language. Thus only then can the compounded terms become popular because they will be in use. Therefore, with the current language situation in Zimbabwe, the compounds in the DR are not likely to gain any popular acceptance. This is one difficult and strong challenge that terminographers who want to use compounding term creation strategy as a language development tool face in Zimbabwe. This means that the problem is not only for the Shona language, but affects all other indigenous languages equal the same because of the promotion or the perpetuation of the dominance of the English language in all spheres of life. Therefore, with regards to term creation efforts, the major issue that need to be decisively dealt with is the language situation many developing nations find themselves in. It is the hope of the researcher, that the recommendations in the constitution of Zimbabwe (2013) for the promotion of all indigenous languages be implemented as soon as possible so that term creation will be a worthy cause.

What the research participants outlined and categorised and the content analysis for compounds in the DR helped the present researcher to get a deeper understanding and overview of the compounding term creation strategy a great deal. From this study, the researcher can conclude that, although the compounds in the DR are original, Shona musical terms which can easily be readily accepted by target users have a problem in that they are heavily competing with the English language in terms of use. As such, many of the compound terms, no matter how good they are, have the potential of being redundant. However, the level of redundancy can only be reduced with a language policy that creates positive attitudes among the target users towards their use. Again, the DR compilers should be prepared to make a concession or judgment as to whether or not they feel the compounded Shona specialised musical terms will make an impact on Shona language development if they remain in the cumbersome form. For example, the compound term, <*chiratidzachidemamhanzi*> can be reduced to <*chide* or *chiratidzachide*>. The DR compilers need to take an aggressive step towards the promotion of the Shona language. In addition to favourable language policies, if compounds are well constructed, they have an advantage of conveying musical concept to the target users in a very descriptive and

comprehensible manner. As pointed out in the theoretical framework, “any study related to the communicative function of terminology must necessarily have a descriptive starting point” (Cabre, 2001:27). Hence, the researcher feels that if compounding is properly done it has got the potential of taking an indigenous language to unprecedented heights in as far as the Shona language development is concerned. The researcher feels that the compounding term creation strategy is adequate since it uses indigenous sensitivised term creation strategies meant for the development of true and original Shona terms needed for a language to grow in essence.

5.4.4 Coining

Besides the compounding term creation strategy, new musical terms in the DR were invented or coined. Coinages are new forms or lexical entries that did not exist before in a language and these are original terms. They are referred to as neologisms that are coined for a given new concept, either in simple or complex term. These are indigenous creations which compilers made in place of foreign musical terms of which Shona had no equivalent. The use of this term creation strategy reduced the borrowing of foreign musical terms in the DR hence reducing the dominance of foreign terms in the Shona lexicon. Furthermore, by the coining term creation strategy, the DR compilers managed to fulfil the principle of one concept one term. Thus, the problem of synonyms encountered in most indigenous languages is eliminated by coining. This is supported by Hadebe (2002:170) who contends that, terms that have never been used before in a language fulfil the principles of mononymy and descriptiveness. In other words, speakers are more likely to find a word acceptable in the primary language if its source language is unknown or obscure (Chimhundu, 2002:42). Basing on this postulation, loan words have therefore, an advantage of being readily accepted by target users, since they will be no other known term for the same concept that the coined term will be expressing.

In addition, coined terms can easily derive other terms with related concepts as indicated :<*mutopota*><*mutopoteri*> (page 76) leading singer. Thus, by coining new terms, the DR compilers fulfilled the principles of derivability and inflectability as well (Gilreath, 1993:91). In contrast, borrowed terms cannot easily be inflected or derive related terms for related concepts, even in terms of pronunciation, the terms retain their foreign elements (Mwasoko,

1989). Coined musical terms amounted to 82 lexical entries, which accounted for 6.8 % of the total number of entries in DR as is indicated in Table 0.28 below:

Strategy	Coining	Other strategies
Lexical entries	82	1112
Percentage	6.8%	93.8%
Total no of lexical entries	1194	

Table 0-28: Coinages in the DR

Thus, instead of over relying on the borrowing strategy, the compilers preferred to coin, to use their own native morphemes to make up new words for foreign objects and notions as has been expounded for compounding term creation strategy. Although, DR compilers did not maximise the coining term creation strategy, their effort is viewed by the researcher as very important, specifically, realising the fact that language development is part of infrastructural development of any country. In as much, coining indicates that, there is a large stock of words and idioms for expressing any linguistic concept in the Shona language.

When coining new terms, terminographers are encouraged to involve all the stakeholders so that the likelihood of their acceptance by the target users will be very high. The probability of satisfying various terminological principles and meeting acceptability of terms by users is higher with a collaborative approach (Nkomo, 2008:59). Therefore, “to realise the goals of scientificating African languages, all stakeholders should be involved for the whole question of language development and promotion is like a battle which is not won by one soldier but by an army” (Mutasa, 2002:246). Just as Mberi and Mazuruse (2012:2029) caution: “but, there are certain dangers when terminographers work in isolation or employ new coinages unofficially, because it results in lack of uniformity and consistency with regard to the new terms and their application”. Thus, the more the involvement of all stakeholders, the more the created terms’ popularity, and as such, they gain popular acceptance by the users. The terms will be characterised by a high level of ownership and participation by motivated users, who may have gained an appreciation through the participation process, of the importance and value the created terms have to national goals for indigenous language development.

However, compilers of specialised terminology should endeavour to introduce widely accepted terms because if not, it can prove extremely difficult to displace loan terms even if the coined term is more accurate. In working on terminologies, therefore, language

practitioners should not create or resort to farfetched words. Such words do not become current in the language for they are not popular with people (Mutasa, 2002:245). This is reiterated by Mberi and Mazuruse (2012) who explicate that although various ways can be implemented, all should have the ultimate goal of creating terms that are clear, understandable, apt and accepted.

New coinages in the DR followed established patterns of the lexicon; the principle of precedence (Gilreath) as shown by the given examples:

<i>chimudumba</i>	<i>chimudumbana p 18</i>
<i>chingoma</i>	<i>chingomana p 19</i>

The DR compilers were consistent in their work as they followed a systematic approach, hence, users will use the coined terms with efficiency and effectiveness. As such, the terms will be easy to familiarise with as they conform to the rules and principles of their lexicon. According to Mberi and Mazuruse (2012:2028) this should be done “so as to avoid violating the natural word formation techniques of the Shona linguistic community”. Felber (1984), Pritch and Draskau (1985) and King (1969) stress that technical terms development ought to satisfy the principles of morphological resemblance to the adopting language, acceptability by the speakers, conciseness and preciseness specificities, brevity, productivity (derivability and inflexibility) and morphological adherence to the structure of the receiving languages.

One challenge for the DR compilers is that, new coinages are competing with loan words. Against this background, a new word struggles to upstage the older or the borrowed words, which already enjoy popular acceptance by the language users. Such unfavourable environment may affect the acceptance of DR by the users, consequently impacting negatively on developmental efforts for Shona language. This is a very big challenge for terminographers in the sense that, their coined word will struggle against borrowed terms which are readily acceptable to language users. Had it not been for this reason, coined terms would gain popular acceptance; they have the initial advantage of enjoying direct association with the language users. From the above postulations, it can be pointed out that, for any term creation strategy to work, the government of Zimbabwe needs to implement 2013 Zimbabwe constitution recommendations that the Shona language (and other indigenous languages) should be elevated to official and prestigious status. Unless this is done, lexical engineering efforts by terminographers will not be effective as terms created can be rejected by the target

users. Lack of prestige of the Shona language may result in the rejection of these coinages. However, Masoko and Mdee(1984) say as far as the adoption or acceptability of new terms is concerned ... this is best left to the speakers or users, suggesting that terminographers should not stop their lexical engineering efforts. Popular acceptance and integration of new forms are always a possibility; hence scholars should not lose hope. According to Mutasa (2002:239) linguists should make every effort available to promote indigenous languages and appealed for renewed zest of effort and vigour in charting a revolutionary warpath for the promotion and development of African languages towards modern efficiency. Basing on this encouragement, what the DR compilers have started is a step in the right direction. They should match term simplicity of the coined terms appropriately to level of abstraction of the dictionary users.

However, the researcher feels that the DR compilers did not consult the target users widely, before coming up with the dictionary. It means that the DR compilers were not sincere when they claimed that they had consulted extensively for this project: *patsvagurudzo yedu takashanda nedare renyanzvi dzemimhanzi kusanganisira vadzidzisi nevadzidzi vemumayunivhesiti, makorichi nezvikoro zviru mumatunhu akasiyana-siyana*. (In the research for this project we worked with musical council including university lecturers and students and various schools throughout Zimbabwe (Mheta, 2005: xi). However, basing by the answers given, many research participants were not even aware that such an initiative took place. Therefore, the point that this dictionary was hurriedly done for monetary gains over linguistic consideration seem to be confirmed by the way the whole term creation process was done in the DR. This is because many people at the grassroots did not take a major role in the DR project. Mutasa (2006:71) laments that,

it is definitely unfortunate that language development and standardisation are left in the hands of a few language boards and centres' or institutions leaving out hordes of stakeholders who could make a major contribution to language revalorisation on the continent.

Otherwise, specialised terms in the DR can be regarded as elitist as most of the terms did not come from the people and as such, very few people will use them. Even if they do, still they will find it difficult to learn and use them. It is because of this background that, research participants advocated a bottom up approach in creating terms meant for national language development; such that they will be referred to as terms for the people by the people.

5.4.4.1 An Overview of research participants on coining

From Table 0-29 below it is clear that the majority of target users do have some strong sense of language loyalty.

Category	Agree	Percentage	Disagree	Percentage
Adequate	32	49%	33	51%
Efficient	22	34%	43	66%
Enriching	37	57%	28	43%
Natural	29	45%	34	55%
Term Simplicity	34	52%	31	48%
User Friendly	35	54%	30	46%

Table 0-29: Attitudes of research participants towards coinages.

From the statistics presented in Table 0-29, there is at least some balance in responses given to the research participants for the utilisation of the coining term creation strategy in the DR. The research participants (49%) who accepted the coining term creation strategy as being adequate strongly emphasised that linguists should emulate countries like Japan, Malaysia, and China among others, who developed their own languages for use in all spheres of life. These respondents argued that, as speakers of the Shona language there is need to be more creative and use indigenous terms for language expansion purposes. This is supported by Jafta (1987:127) who postulates that,

the internal resources of the language should be used, thereby promoting natural term development ... terminologists should not always search beyond their languages for suitable terms, since they are embedded in their language, and in other words there are sufficient words available in the indigenous language to opt for coinage instead of borrowing.

If the Shona language continuously and extensively borrow English musical terms, the participants who are of the view that, it may eventually become an appendage of the English language. This shows that all things being equal (language policy, social attitudes, market) indigenous coinages are a positive sign that people or speakers of a language should take pride in. Coining of new terms shows that indigenous languages have elaboration mechanism capacities, young, as they are, to match developed languages like English. It is interesting to note that, the majority of the research participants (54%) asserted that, musical terms in the DR are simple and straight forward. The DR compilers adhered to 'term simplicity'

guidelines for term creation. Thus, the research participants (52%) were satisfied with the strategy and regarded coined terms as user friendly. However, they pointed out that, although term creation is a relevant language development strategy, the language policy in Zimbabwe does not encourage them to use these terms in their education system. It would therefore be of little significance for dictionaries and terminologies to be produced without being used (Nkomo, 2008:56). This situation points to a more urgent action needed to promote the status of indigenous languages in all spheres of life by the government.

Those research participants (55%) who rejected coinages argued that coinages are vague and artificially created, thus they are not natural. They further argued that many coinages tend to be translations of loan words and therefore, are artificial. This is confirmed by Mberi and Mazuruse (2012:2028) who argue that, it is possible that localised term creation efforts may be too artificial and end up imposing new terms on speakers resulting in an exclusive short-lived lexicon which may not be acceptable. This is supported by Chimhundu (2002:302) who postulates that “indigenous equivalents are usually arrived at by ‘indirect means’ and therefore tend to be less specific in reference than would be adoptives”. It seems that rejection of coined musical terms by target users is that, they prefer borrowed musical terms because, it is their utility more than anything else that earns them popular acceptance. Chimhundu (2002) further asserts that, “coined words have a problem of acceptance by the speakers as the new terms are coined after whatever is referred to has already been introduced in the speech community with its non-indigenous label, in most cases, an English term. Consequently, this gives the borrowed lexical item some advantage as far as its usage is concerned and terminographers should critically avert this. Overall the use of the coining term creation strategy in the DR, as according to the researcher and the research participants is adequate.

5.4.5 Derivation

Also noted by the researcher in the SMTD, is the derivation term creation strategy. Thus, the DR compilers have shown that it is possible to designate new concepts from an existing term. Musical terms in the DR were obtained by converting nouns into verbs or adjectives and verbs into nouns, as it was possible to use either as a constituent in a compound word. Cabre (2003:191) calls such strategies like derivation and compounding as a “dynamic reuse of information already present in the learner’s lexicon.” From information gathered in Chapter

4, it means therefore, learner's acquisition of the new terms depends more on what s/he already knows. Table 0-30 below shows how this term creation strategy was utilised:

Strategy	Derivation	Other strategies
Lexical entries	52	1142
Percentage	4.35%	95.65%
Total no of lexical entries	1194	

Table 0-30: The utilisation of derivation term creation strategy in DR

In derivation choice of terms allows for the systematic formation of many linguistic terms. Most of the derived terms in DR are from verbs and very few are from nouns as can be noted in Table 0-31 below:

<i>banda</i>	<i>bandamura p 4</i>	<i>kwaya</i>	<i>kwayera p 49</i>
<i>banda</i>	<i>bandamuka p 4</i>	<i>kwaya</i>	<i>kwayira p 49</i>
<i>bhiti</i>	<i>bhitisa p 8</i>	<i>mutopota</i>	<i>mutopoteri p 76</i>
<i>chimudumba</i>	<i>chimudumbana p 18</i>	<i>vamba</i>	<i>muvambi p 77</i>
<i>chingoma</i>	<i>chingomana p19</i>	<i>amba</i>	<i>muambi p 65</i>
<i>daira</i>	<i>mudairwa p 68</i>	<i>tepfenyura</i>	<i>mutepfenyuri p 75</i>
<i>dandau</i>	<i>dandaura p 27</i>	<i>tema</i>	<i>mutemi p 75</i>
<i>dandau</i>	<i>dandauka p 27</i>	<i>shima</i>	<i>shimanda p 102</i>
<i>deketa</i>	<i>mudeketeri p 68</i>	<i>tinha</i>	<i>tinhidza p 107</i>
<i>jeke</i>	<i>jeketera p 43</i>	<i>uya</i>	<i>mahuyauone p 54</i>
<i>kokera</i>	<i>mukokeri p 70</i>	<i>za</i>	<i>mazauone p 59</i>
<i>kindi - kindi</i>	<i>kindikitsa p 47</i>	<i>kindi- kindi</i>	<i>kindingidza p 47</i>

Table 0-31: Showing different types of derivates in the DR

Thus, the use of indigenous words allows derivability of many linguistic forms and is a very productive strategy for term creation. Employing semantic shift is also advantageous because the terms are transparent to the users and the method draws on the internal resources of the language (Van Huyssteen, 1999:183). The method of extending the meaning of ordinary words to specialised meanings is very common in the Shona language. However, according to Nkomo (2008:58) "assigning new and specialised meanings to words of a language may also yield terms that have different connotations in a special domain of knowledge". For instance, in DR <*bandamura, dandaura, tinhidza, kindikidza*> means playing a drum yet in some instance it can mean beating a person thoroughly. As a result, terminographers need to take all this into consideration so that they create clearer terms which do not create confusion among dictionary users.

5.4.5.1 An Overview of research participants on derivation

From the statistics in Table 0-32, it seems the research participants have no major issues with the derivation term creation strategy in the DR:

Category	Agree	Percentage	Disagree	Percentage
Adequate	34	52%	31	48%
Enriching	38	58%	42	42%
User Friendly	36	55%	39	45%

Table 0-32: Attitudes of research participants towards derivations term creation strategy in the DR

Most research participants (52%) said the terms are adequate to express elegantly Shona musical terms without any difficulties. The other research participants (58%) professed that this strategy is the most enriching of all the term creation strategies, as many terms as possible can be inflected or derived from nouns or verbs already in the lexicon. Moreover, 55% of the research participants said that the derivated terms are user friendly. The researcher notes that the good results from the research participants could point to the fact that the derivation term creation strategy utilises internal resources already existing in the lexicon so there are no major issues of acceptability of such terms. The target users were familiar with the words where the derivated terms originated. In terms of language empowerment, the researcher asked the research participants whether they felt derivated terms in the DR were user friendly, adequate, enriching and appropriate to spearhead Shona language development.

5.4.6 Semantic expansion

Semantic expansion is a process whereby existing words get specialised meaning. In other words a word that already exists in Shona language can have its meaning broadened or expanded to express a new concept. Yule (1996:36) explains that, this is a process whereby existing words get specialised meaning to mean new things. Hadebe (2000) further explains semantic shift as a process whereby, there is a shift in reference but not in sense, such that the coined term is used in the specialised field, although in ordinary speech the original and the new one co-exist:

In semantic specialisation a word acquires a specialised technical sense different from the one it previously held in ordinary speech, whereas in generalisation

the semantic field of the word expands to refer to senses previously not covered by the particular term in ordinary speech. The new meaning springs from the original meaning and the relationship between these two does not fade (Hadebe, 2000:229).

Table 0-33 below show the utilisation of the semantic expansion term creation strategy in the DR:

Strategy	Semantic Expansion	Other Strategies
Lexical Entries	8	1186
Percentages	0.67%	99.3%
Total Number of Lexical Entries	1194	

Table 0-33: Showing the utilisation of the semantic expansion term creation strategy in the DR

Since the words are already in use in the indigenous language, they are common and accessible to most of the Shona speakers (Mberi and Mazuruse, 2012:2032). This process is predictive in producing basic vocabulary. This new meaning created through the semantic expansion term creation strategy becomes specialised in form. This can be seen in the examples given in Table 0-34 below which shows original and specialised meaning of existing words. This area has little potential for the growth of the Shona and other African languages. Most terms expanded in meaning are short lived and one and can conclude that they are not dependable. Semantic expansion is deliberately contrived in the DR dictionary to produce musical technical terms intended to match the designations in English or to expand the meaning of a term using existing words as illustrated in Table 0-34 below:

Original meaning	Semantic expansion	Specialised meaning
chew	<i>banda</i> p 4	play an instrument with great skill
shoes	<i>bhutsu</i> p 9	church dance
cry	<i>chema</i> p 11	sound of chordophone
a small bicycle	<i>kabhasikoro</i> p 44	bicycle dance
cabbage	<i>kabheji</i> p 44	cabbage dance
scratch	<i>kwenya</i> p 50	play instrument
crocodile	<i>ngwena</i> p 82	bottom nhare mbira keys
crocodile following	<i>nheverangwena</i> p 83	nhare mbira keys

Table 0-34: Showing musical terms that are a result of semantic expansion strategy in the DR

Because of the dynamism in life, some terms in the general Shona lexicon are no longer suitable to make reference to for example, *chibhanzi*, *asinairombe*, *nharembozha* (cell phones

were for the rich, but now everybody has one, even in the rural areas). Furthermore, according to Chiwome (1992) when a term assumes two meanings, one mundane and the other specialised, the meaning of the common term can get mixed up with specialised meaning. Moreover, this strategy violates the one concept one-term principle. Terminology demands that linguistic expressions be unambiguous, that is, a single term should be assigned to one concept only and vice versa (Felber, 1980:74). As can be seen in Table 0-34 above, the researcher notes that semantic term creation strategy is not fully utilised in the DR, a fact that can point to the fact that, maybe the DR compilers are aware of the major drawbacks of this strategy in new word formation processes. Overall, this term creation strategy can be regarded as being not very productive in the Shona language as it does not increase lexical items in a vocabulary. The semantic expansion term creation strategy only increases the sense or meaning of an already existing term.

5.4.6.1 An overview of research participants on semantic expansion

Research participants had little to say about the semantic expansion term creation strategy. It seems as if the research participants are not familiar with this term creation strategy. Just as the researcher pointed out, most research participants observed that semantic expansion is not a productive term creation strategy. Some research participants pointed to the researcher that terms can also be narrowed in meaning, for example, the term ‘mistress’ originally meant a lady or lady teacher, but is now narrowed to mean a prostitute or what is popularly known as “a small house” in Zimbabwe. The researcher explained to research participants that, this dimension was not taken aboard this study, because there are no examples of semantic narrowing in the DR.

5.5 Synonyms

Term creation; sometimes result in synonyms, the reason being lack of standardisation of created terms. A synonym is a term that designates the same concept as another in the same language and which can be used interchangeably with the other term in context (Sager, 1990). The researcher has noted that there are multiple entries for lexical items referring to one concept in the DR. The compilers used different words for the same specialised term, for instance, the terms mouth-bow, small drum, big drum, index finger, and small finger has numerous musical terms that denote them as given in tables below:

② Small drum

There are 22 synonyms for musical term small drum as is shown in the Table below:

<i>chidumbana p12</i>	<i>gandira p 35</i>	<i>mbarure p 60</i>	<i>mudairirwa p 68</i>
<i>chiharamba p15</i>	<i>gurumatukwe p 38</i>	<i>mbetembete p 62</i>	<i>nhandiga p 82</i>
<i>chimudumbana p18</i>	<i>jenje p 43</i>	<i>mbirimbidzo p 62</i>	<i>nhungudzi p 83</i>
<i>chingomana p19</i>	<i>kamutumba p 45</i>	<i>mhiningo p 64</i>	<i>nhungudzo p 83</i>
<i>dandanda p 26</i>	<i>kamudumbana p 45</i>	<i>mhito p 64</i>	<i>usindi p 110</i>
<i>dandi p 27</i>	<i>kangwiru p 45</i>		

② Index finger

There are 7 synonyms for the term index finger as is shown in the Table below:

<i>chikokotamugoti p 16</i>	<i>munongedzo p 72</i>	<i>mutondeka p 76</i>
<i>munongedzabenzi p 71</i>	<i>mutendeka p 75</i>	
<i>munongedzazvose p 72</i>	<i>mutendekahama p 75</i>	

② Aerophone

There are 15 synonyms for musical term aerophone as is shown in the Table below:

<i>chifuridzwa p 14</i>	<i>humbwe p 41</i>	<i>mupombotyori p 72</i>
<i>chigufe p 15</i>	<i>kanyongwe p 45</i>	<i>mutopota p 76</i>
<i>chirupe p 22</i>	<i>mikwati yenyere p 65</i>	<i>mutoriro p 76</i>
<i>dhobhi p 32</i>	<i>mukurahunde p 70</i>	<i>ombwe p 91</i>
<i>gufende p 37</i>	<i>mupomboshori p 72</i>	<i>tserera p 106</i>

② Mouth bow

There are 17 synonyms for musical term mouth bow as is shown in the Table below:

<i>chidandari p 12</i>	<i>chinyamadzimbi p 20</i>	<i>dimbwa p 32</i>
<i>chimatende p 17</i>	<i>chipendani p 20</i>	<i>kamukubhe p 45</i>
<i>Chimazambi p 17</i>	<i>Chitandari p 23</i>	<i>muzambi p 59</i>
<i>Chimukube p 18</i>	<i>chitende p 23</i>	<i>mukube p 70</i>
<i>chimukubhe p 18</i>	<i>chizambe p 24</i>	<i>mukubhe p 70</i>
<i>chinyamazambi p 18</i>	<i>chizambi p 24</i>	

② Small finger

There are 7 synonyms for the term small finger as is shown in the Table below:

<i>chimwahumwani</i> p 18	<i>karavi</i> p 45	<i>tekwe</i> p 106
<i>chipfari</i> p 21	<i>kasiyanwa</i> p 46	
<i>kamandidyarirei</i> p 45	<i>nyakasiyanwa</i> p 85	

② Big drum

There are 7 synonyms for musical term small drum as is shown in the Table below:

<i>bhurubhesi</i> p 9	<i>mutandarikwa</i> p 75	<i>nhumba</i> p 83
<i>mugonzi</i> p 69	<i>mutumba</i> p 77	
<i>mupepe</i> p 72	<i>nhiura</i> p 83	

Taking statistics presented by the researcher on the above Tables, it means that only [6] musical concepts are represented by [75] synonymic lexical entries in the DR. The examples given by the researcher above are only a small fraction of [1194] lexical entries in the dictionary. Judging by this trend which is prevalent throughout the dictionary, the researcher argues that the work by the DR compilers is very unsatisfactory, since it has been diluted by the presence of too many synonymys. One cannot be satisfied with a dictionary full of terms denoting the same musical concept through and through. The situation clearly shows that the synonymic terms or the multiplicity of terms points to the need for standardisation of musical terms in this dictionary. The numerous synonyms in the DR illustrates that the principle of one concept one term is violated, that is the principles of mononymy. According to Gilreath (1993:87) a concept should be designated by one term: “which is the one and only formal name for a given concept”. To augment the above argument, Pritch and Draskau (1995:123) postulate that terms are the linguistic representation of concepts, which can be controlled by one concept one term relationship. If a monosemic term has, in addition, no synonym, there is a univocal relation between term and concept leading to precision (Cabre, 2003). The presence of so many synonyms shows that, DR compilers did not adhere to this principle. It also seems that the DR compilers were not committed to creating new musical terms coming into the Shona language via the English language. They included as many synonyms as was possible to boost the number of lexical entries in the DR, in such a way that one would think that they had worked hard in coming up with Shona musical terms for the DR.

5.5.1 Synonymys as a result of dialectal variations

Furthermore, there are synonyms which are as a result of dialectal variations in the DR. Otherwise looking from a very close angle, the dictionary has, in fact, very few musical terms entries as most of the terms entered in the DR are just synonyms based on Shona dialectal variations. The few examples taken from the DR below shows this:

ferengwana<>*ferengwani* p 34
firikwenzi<>*furukwenzi*, p 34-35
hobwa<>*hobwe* p 3
deedza<>*daidza* p 26-28
kambo<>*karumbo* p 45
furete<>*fureti* p 34-35
kindikidza <>*kindingitsa*<> *kindingidza* p 47
kwaya<>*kwayera*<>*kwayira* p 49
makwaya<> *makwayera*<>*makwayira* p 55
mahon'era <> *mahonera*<> *mahonyera* p 54
hon'era <> *honera*<>*honyera* p 40

The researcher feels that such a situation as above is very undesirable, and is detrimental to efforts for terminological developments. Only one term could have been chosen as the headword for the musical concept, and the other variants could then be indicated below the headword, rather than entering them all the terms as independent entries. In so doing, the researcher concedes that, a single concept principle makes a term gets efficient and effective stabilisation. Instances where many musical terms are synonymic obviously create confusion on the part of the dictionary users as to which term is more authentic. It means therefore, that if terms are not standardised, such random usage of specialised terms can hinder wider communication among language experts and language users. Instead of one term being used and gaining popular usage, so many terms will be competing as it were, to be used, consequently spoiling the vitality and stability of the created terms. Created terms will be free from obscurity and will be easy to popularise and at the same time ambiguity will be eliminated. This observation calls for the attention of the DR compilers. The DR compilers could have avoided such a situation by using a concept arrangement presentation of terms system, whereby terms, which for example, designate the same concept like a mouth bow are grouped together, and various diversification are discussed in the definitions. The DR

compilers should have chosen the main entry, a preferred term which is entered first among the other synonymous entries, and all synonyms of the word cross-referenced, although they may differ in terms of formality. This eliminates ambiguity. The researcher feels that the presence of synonyms in the DR is just too much and, hence, recommends that compilers reduce the use of synonymy. The researcher also recommends that the compilers standardise the created terms because it is only through this process that a language can further be developed so as to be able to function in all spheres of life.

5.5.2 An overview of research participants on synonymys

During the interviews, the researcher asked the research participants their sentiments in view of the heavy presence of synonyms in the DR, more specifically, their adequateness, effectiveness and appropriateness. The statistics in Table 0-35 above shows that research participants were not satisfied with the presence of so many synonyms in the DR.

Category	Agree	Percentage	Disagree	Percentage
Elimination of Synonyms	44	68%	21	32%
Standardisation of Terms	48	74%	17	26%

Table 0-35: Showing perceptions of research participants on synonymys

The research participants noted that there was need to standardise the musical terms in the DR. These findings mirrored those noted by the current researcher on synonymys. As can be noted on the presented statistics on Table 0-35 above, most research participants (74%) were not happy with the presence of synonyms in the DR. They argued that, too many synonyms can result in confusing the target readers as to which musical term is more correct. The target users felt that it will be an ideal situation to have one concept represented by one term. They (74%) confirmed that the principle of mononymy is certainly a reality which all terminologists should strive to achieve when compiling terms for a specialised dictionary. However, the issue of synonyms is sometimes difficult to avoid. Hadebe (2002) postulates that a certain degree of synonymy is accepted though its avoidance is recommended. Polysemy and synonymy frequently occur in special language but should be minimised.

In response to the views by the research participants, the DR compilers postulated that one challenge that they faced on the issue of synonymys was on how to come up with one best Shona musical term at once. As a result they ended up accepting synonyms. Furthermore, they pointed out that, basically there is nothing wrong or curious about the existence of synonyms of specialised technical vocabulary. In as much, since the Shona language has five dialects; it means therefore, that therefore synonyms make it easier for each and every user to find a term in his or her dialect. This creates dictionary efficiency and effectiveness. In addition, they posited that dictionary users would want compilers to unpack as many musical concepts as possible as this promotes the language and it would be, in most cases, user friendly. Nonetheless, the researcher strongly feels that the issue of synonyms is an area that compilers of DR need to focus more on. A technical dictionary must contain standardised terms of a particular subject field. As reiterated before, synonyms can be easily confusing to the dictionary users who will be learning new concepts and do not have the expertise to judge whether it is a synonym or whether it's a term that is referring to a different concept. Thus, the excuses given by DR compilers on why the dictionary has so many synonymys is justly dismissed by researcher.

5.6 Polysemy

The researcher also noted a heavy presence of polysemy in the DR. Polysemy occurs when a term denotes two or more distinct concepts, which are related in some respects although they do not necessarily belong to the same system of concepts (Pritch and Draskau, 1995:120). The DR compilers seem to have encountered a problem of polysemy as given in the examples below:

Mita

1. *Mita, mutsindo wezwivaramhanzi nemabhiti, une patani unoratidzwa nechiratidza nguva.*

2. *Mita kanhu kari muwairesi, kanofambiswa kana munhu achitsvaga nhepfenyuro yaanoda kuteerera (Mheta, 2005: 65)*

Nhuzu

1. *nhuzu zviridzwa zvinosungirirwa mumakumbo*

2. *nhuzu- mutambo wechirume wakatekeshera kurudzi rwechindevere (Mheta, 2005: 84)*

Mabvumira

1 *.mabvumira kuimba kunoita vashauri nevanenge vachivadavira kana kubvumira mazwi avo achipindirana*, (singing by respondents)

2 *mabvumira ikiyi dziri pamusoro nechekuruboshwe kwembira inonzi nhare dzinobudisa mutinhiro wakadzika/wakadzama, dzinomirirwa nemavara anoti, G, F, E, D, C, B naA*. (Top left mbira keys, G, F, E, D, C, B and A).

Mita (Meter)

Just like synonymys, polysemy can be controlled by one concept one term relationship. In other words, one entry should always correspond to one concept. The DR compilers should have avoided use of polysemous words and created terms for each and every concept as postulated by the principle of one concept one term, so as to promote greater understanding of musical concepts by the dictionary users. This could avoid confusion of specialised terms by users as the term will not be overlapping in meaning.

5.7 Language purism

It has been widely claimed that borrowing of linguistic terms, especially, from the English language impacts negatively on national culture and identity as importation of Western languages may result in the importation of Western cultures and values, (for a language is a cultural carrier). This can result in the contaminating of indigenous cultures. However, it has been noted by the researcher that, no matter how a people may want to maintain the purity of their language and culture, in any language contact situation, that contamination of languages is prevalent in almost every country., Borrowing of linguistic terms from other languages is an inevitable exercise which, indeed, cannot be avoided. Thus, as long as the Shona language is in contact with other languages, it will continuously borrow from other modern languages. To add on this view, Chiwome (1992) is of the view that if people accept that term creation is an exercise in innovation they would find themselves with fewer problems as custodians of the language. Furthermore, a language is also like a river which picks up what it can (loan terms) along the way and drops certain items for others (Mutasa, 2002:244). The argument is that, in terminology development, the dialectic of continuity and change comes into play very prominently.

There was an argument that borrowing English terms may result in language shift or death raised in this study. This fear is allayed by Chimhundu (2002:40) who avers that,

... these influences are actually operating with positive effect at the lexical level. The basic structures of the language are left intact. Our bilingualism is not replacive. There is no possibility of the Shona language being extinct.

Judging by Chimhundu’s postulation, there is no way the Shona language can lose its grip if it is borrowing terms from other language at a minimal rate. Clearly, language purism is an ideal situation but in reality given the contemporary situation that every developing country finds itself in (globalisation) it can never be achieved. Term creation, therefore, is a multifaceted discipline that requires terminographers to harness both indigenous terms and borrowed terms (minimal) so that a language may grow technically and scientifically.

5.7.1 An Overview of research participants on language purism

When the researcher raised the issue of language purity with the research participants, contradictory answers were given. One of the significant findings in this study is that most target users and Shona speakers do not concern themselves with questions of language purity, as is shown in Table 0-36 below:

Category	Agree	Percentage	Disagree	Percentage
Contaminating	10	15%	55	85%

Table 0-36: Responses by research participants on etymology purity in the DR

As is shown in Table 0-36 above, research participants (85%) show that in contemporary Zimbabwe, people are less concerned by issues of language purity. Research participants asserted that, by borrowing terms from other languages, Shona language does not lose but gains. They emphasised the fact that a language that does not borrow terms from other languages does not grow. This point is supported by Winter (1973:138) who is of the view that, “the unifying factor underlying all borrowing is that of projected gain”. It means, therefore, that the borrower must stand to benefit in some way from the transfer of linguistic knowledge”. Therefore, borrowing of linguistic terms is enriching to the receiving language.

The above contention holds, as Chiwome (1992), Chimhundu (2002) and Cabre (2003) believes that, in as much as people may need to preserve the purity of their language and culture, they should not forget that culture is dynamic and this dynamism may also affect how people communicate. Modern technology has brought with it scientific and technological concept that never existed before in indigenous culture and therefore, there is no way one can avoid English terms in music and musicology. One lecturer in African languages added that, “the aim of a term is to communicate a message and if the loan term does exactly that, then, it is more adequate than the indigenous term. Therefore, the loan word should be given first priority in the specialised dictionary”. Hence, Cabre (1999) stresses that language purism should be taken into account minimally and should not be striven for at all cost, for instance if a loan term is more suitable.

However, some research participants (15%) felt that, borrowing of foreign musical terms means borrowing some Western values and worldviews; “it means that we will be using to celebrate our culture, values that are alien to us.” The respondents, strongly believed that a language is a vehicle of culture, and as such terminologists should use cultural sensitivised term creation strategies, which do not compromise on cultural values and heritage. In fact, one research participant postulated that,

music is part of our culture and should therefore, reflect our cultural aspects. However if we are to use Western musical technology and instruments, cultural sensitivised strategies are rendered dysfunctional, unless if we are to create indigenous terms to describe our own musical genres, musical instruments and productions then they become vital.

However, the majority of respondents differed from this view as they said, it is true that a language is a carrier of culture, nevertheless culture is dynamic, and so the creation of new terms using the borrowed linguistic terms is a reflection of this dynamicism.

The main argument behind this contention is that, music is culture specific, as long as one country import musical concepts from other countries there is no way it can avoid importing foreign musical terms. In support, culture change has a direct relation with linguistic change, (Allen and Guy, 1974). Preservation of language purity therefore, should not be at the user’s expense. One research participant in music and musicology felt that new concepts into a language are difficult to name using Shona terms, and therefore, it is important to hold on to the musical terms and culture from which you are borrowing, even if some terms are culture specific, for example, mbira, marimba, most musical instruments, dances and types of music

originate from foreign countries. Judging by the majority of responses given in this study, the researcher can safely conclude that most speakers of the Shona language are less concerned with issues of language purity. This can be generalised to other African indigenous languages as well. The issue of etymology purity depends on which side you are viewing the concept of borrowing from. If you are on the communicative function then the issue of language purity maybe a minor issue. But if you are on the purism side then the use of borrowing of musical terms from other languages like English, can be viewed as a form of domination and language corruption.

5.8 Attitudes of target users towards term creation in the DR

Social attitudes of a language lead to its embracement or rejection (Labov, 1972). As a result, some created musical specialised terms in the DR may either face embracement or rejection by the target users. This contention is supported by Cabre (1999) who contends that, naturally terminology expansion depends more on pragmatic factors such as the recognition of the significance of terminology on the part of the users. The suitability of the particular language for the performance of any particular role should depend not on the language but on the user (Ogotu, 2006:53). On the same contention, Hartman (1985: 59) postulates that all dictionaries are judged against the lexical needs of those who consult them. These contentions imply that terminology be evaluated in terms of acceptability to speakers. In other words, it means that the user becomes of paramount importance. Therefore, attitudes of users towards created terms are a vital determining factor for their acceptance by the users.

5.8.1 An overview of attitudes of research participants towards term creation in DR

As was postulated in all the previous chapters, research participants for this study acknowledged that term creation is a way of expanding lexical items of a language as well as a way of responding to the most urgent practical needs of a language in the wake of globalisation. Furthermore, Felber (1984) posits that the need to develop new technical vocabulary has grown tremendously in world in the post- war era. This need arises out of the discoveries and fast developments in the scientific, industrial, socio-cultural and educational fields. Results in Table 0-37 below show that, the majority of DR users did not readily accept

the created terms using indigenous means neither did they accept the use of the Shona language as a medium of instruction in schools:

Category	Agree	Percentage	Disagree	Percentage
English is a prestigious language	56	86%	9	14%
English is easy to transmit modern knowledge	53	82%	12	18%
Shona should be made a language of instruction in schools and colleges	27	41%	38	59%
English has social and economy value	61	94%	4	06%

Table 0-37: Showing attitudes of DR users towards Shona and English language

Most research participants (86%) preferred borrowed terms from the English language pointing out that, the indigenous terms are not expressive enough of the music and musicology register. They (53%) also conceded that English can easily transmit modern knowledge, and have a big social economic and educational value. Such linguistic attitudes from the target users can complicate the task of teaching and learning of any subject in the Shona medium. One is likely to meet various kinds of problems. From all the above postulations and arguments, it can be deduced that term creation is therefore an inevitable, fundamental and immediate mechanism of indigenous technical lexical expansion and development in language use in various fields or registers in all developing countries. Term creation becomes the main driving force for the development of any vocabulary. However, overall research findings carried out for this study, show that research participants prefer terms that have been created using foreign sensitivised strategies such as borrowing, rather than those that have been created using indigenous sensitivised strategies such as compounding, coining and derivation. Research findings also show that the research participants have a positive attitude towards the use of the English language at the expense of the Shona language.

On the other hand, some research participants (41%) felt that the Shona specialised terms in DR are adequate and that Shona could be used as a medium of instruction in schools and colleges. However, those who supported that Shona should be used as a medium of instruction in the education system did that reservedly as they felt there are so many obstacles along the way to achieve this goal. They identified the language policy in Zimbabwe as the major obstacle, followed by lack of resources; both material and human and lastly the

attitudes of Zimbabwean people as a whole towards the Shona language. They pointed out that even elderly people who has never been to school think that being learned means one is able to speak the English language. As such, the researcher feels that, linguists and terminologists need to work very hard to decolonise such thinking because this kind of attitudes needs a rigorous and vigorous effort to eradicate, otherwise efforts being made by linguists to develop the Shona language will amount to zero.

The researcher feels that the DR compilers should have to “a greater extent” allowed intended users of the dictionary to participate a great deal in the creation of the musical terms for *Duramazwi Remimhanzi*. As a result, their project would have been related to corpora based on community research findings because there can be no meaningful developments without the participation of the majority by which development is meant. A cross linguistic survey in schools, colleges and universities, indicates that the dictionary is not known. Students and lecturers are not even aware that such a dictionary exists, and yet, they are the target users. Basing on the respondents’ views, the researcher also feels that the DR compilers did not deliver a broad base awareness and support for the project, which can be regarded as an activity of national significance. Though there were some language and musical experts who were consulted during the compilation of the DR, the researcher feels that the elite were left at the helm at the expense of the target users, hence, their negative attitudes.

The DR compilers confirmed that the issue of monetary constraints confined the compilers to a less geographical area and as such the majority were left out. The other more important issue is the non-participation by the government of Zimbabwe. It relegates language development strategies to individual organisation such as ALRI and foreign donors who initiate research projects that are. As a result, such projects do not address genuine language needs of the indigenous people, and to add on to that, such donor funded projects result in half-baked results, a conspiracy to stifle the indigenous language development by either under funding the projects or dictating the research design, and since the donors will be providing the money, the researchers will have no option but to dance to the tune. It is against this background that respondents mostly language experts and university and college students stated that the government should seriously consider its involvement in national language matters, for the good of national development. Cooperation between all stakeholders strengthens, unite, articulate and multiply effort. On the other hand, some research participants felt that research on terminology is largely the result of individual effort and the

desire by individual academics to achieve the level of output that satisfies promotion criteria or academic achievements. As a result the study and the research findings do not relate to important issues of society, and as such, the created terms may not be accepted by the intended users. However, most of the research participants said that, although a dictionary of Shona scientific and technical terms empowers them linguistically; most felt that efforts by DR compilers is a futile exercise, since the created terms are not adequate and, hence, there are no situations where the target users can use such terms in their academic work. They would gain much if created Shona musical specialised terms were usable such that they would be used as terminology for instruction in their academic work. This may lead one to conclude that the effort of the DR compilers is only a beginning of an extensive exploration of Zimbabwean musical language needs that started on a wrong footing.

5.9 Strengths and Weakness of the DR

During the analysis of the term creation strategies in the DR, the researcher identified some strength and weaknesses of the dictionary:

5.9.1 Strengths of the DR

Despite all the shortcomings of term creation in the DR as pointed by the researcher, there are some strong points that the researcher wishes to highlight. The strength of the DR is the ability by the compilers to provide comprehensive definitions of lexical entries. These were comprehensively explained in such a way that users will easily grasp concepts, either indigenous or borrowed. This shows that the DR compilers have got a mastery of the Shona language. The use of compounding and coining by DR compilers shows that word formation is not merely an artificial creation but is a real time process. Despite the shortcomings, the DR will assist the user in solving some problems related to musical terminology. The good side is that, the DR compilers provided both the Shona and English term for better comprehensibility. It gives both the source and target language meaning, in turn, clarifying the message. Hence, providing a balance of the text according to the function of user profile, as the intention is to help Shona language users get their musical terms more readily available in their indigenous language. The form used was correct and appropriate. It suits the level of

abstraction of the intended users. Accordingly, Gilreath (1993:89) states that created terms should have “no grammatical errors, such as misspellings, wrong hyphenation, wrong (inverted order), inadmissible variant, wrong number and wrong part of speech”. This effort is commended by the researcher.

5.9.2 Weakness of the DR

However, according to the researcher the major weakness of the DR is in the presentation of lexical items. The researcher is of the view that the presentation was poorly done, yet presentation of terms belonging to specialised areas of usage is very important. The compilers should have realised that the Shona language is still a developing language and as such, it may lack English musical equivalents, hence, they should have grouped and presented related terms designating similar concepts systematically so as to avoid the issue of synonyms. They did not take into account the issue of representation of the concepts, and so they ended up with many terms which designated fewer musical concepts. The aim of systematisation of these related concepts is to achieve transparency and consistency. In other words, the knowledge structure consists of various interlinked concepts. Hadebe (2004) points out that the effectiveness of presentation of lexical items is crucial to the usability of the dictionary. Furthermore, in terms of breadth and depth, the DR compilers did not capture all the musical terms as they are reflected in the English language. Musical terms such as *loud*, *moderately soft*, *moderately loud*, *musical dynamics*, *decapo*, *very loud* were not captured. In the presentation of terms in the dictionary, the DR compilers did not show word structure, for example <*chidemamhanzi*> should have been presented as <*chidema+mhanzi*>.

One burning issue is that of over-utilisation of the borrowing and loan translation term creation strategy. The researcher feels term creation using this strategy was not adequately done and a lot of effort is still needed in this area so that appropriate terms are created much to the benefit of the user. The researcher also feels that, should the DR compilers think of producing a revised second edition of the dictionary, they should reconsider the use of the borrowing and loan translation term creation strategies. They should also consider where possible, to substitute loan terms with indigenous terms. The researcher feels the compilers of the DR should do everything possible to market this dictionary to the target users. It will go a long way in assisting students and lecturers in the teaching and learning of music and musicology.

5.10 Conclusion

In this chapter an analysis and discussion of research findings has been presented.. Major findings are that the majority of respondents regarded term creation as an inevitable process in language development. If Shona scientific and technological terms are not well developed, it will be a loss to the language community as its music will remain retarded and marginalised. This, then, is one of the most important justifications for putting greater emphasis on the need for the use and development of adequate and appropriate Shona modern terms. In as much, the researcher concludes that some of the term creation strategies in the DR are not adequate, effective and have not been accurately identified to designate musical concepts within the Shona language. These term creation strategies are borrowing, loan translation and compounding

It has also been noted that, language users prefer borrowed words than indigenous coined ones and this has been largely attributed to the unfavourable language policy towards the indigenous languages in Zimbabwe. Research findings show that although the compounding strategy produced original musical terms, compounds are not very popular in use and they may face rejection by the users, as they are too descriptive and lengthy. Coining is acceptable to a lesser extent, due to the language contact situation in Zimbabwe. In addition, the DR compilers have to deal decisively with the issue of synonyms. There are just too many synonyms such that their good work is being overshadowed by the presence of too many synonyms in the DR. They also need to undertake intentional indigenous language engineering in place of loan translations which for some are mere definitions of English terms and many of them are vague. It seems as if whenever they were faced with a foreign concept, they failed to find an equivalent. As a result they would often resort to loan translation in the Shona language instead of creating new terminologies for the musical field. Thus, although, DR compilers have worked very hard to come up with a specialised musical dictionary, they need to fix or address concerns raised by research participants and the researcher. They should not take short cuts (too much borrowing, loan translation, synonyms,) to achieve a sound outcome.

6.1 Introduction

Chapter 5 investigated the term creation strategies that were used in the compilation of the Shona specialised musical terms dictionary, *Duramazwi Remimhanzi* (DR), by the DR compilers. The researcher analysed the adequacy and effectiveness of the created terms and how they contribute to the Shona language development. The researcher also analysed the reception of the created terms in the DR by the target users. Accordingly, this chapter continues with the presentation of an analysis and discussion of the research findings for term creation strategies for the second dictionary, medical terms dictionary “*Duramazwi reUtano neUrapi* (DRN). Specifically, the term creation strategies investigated include; borrowing, loan translation, compounding, coining, derivation and semantic expansion. Special attention is given to their adequacy, efficiency, appropriateness, and effectiveness and their user friendliness. Furthermore, the researcher analyses the mentioned term creation strategies in light of the aims and objectives as provided in Chapter One. As alluded to in Chapter Four, the total number of respondents who participated in the analysis of DRN is fifty, and these were mainly drawn from linguists, medical practitioners and medical students in various institutions of health in Zimbabwe.

6.2 The dictionary compilers

This dictionary was published in 2004 by Mambo Press and the compilers were Nomalanga Mpfu, Herbert Chimhundu, Esau Mangoya and Emmanuel Chabata. All the four compilers are conversant in the Shona language. Bergenholtz and Tarp (1995) state that lexicographers should first of all determine the characteristics of the users of the dictionary in terms of their language competence. To achieve this, it means that, dictionary compilers should have knowledge of the target users' mother tongue, which is, for this case, Shona. The knowledge of the target users' mother language is also essential when compiling specialised dictionaries, because the compilers will be in a better position to determine the ways of creating terms to include in dictionaries.

All the DRN compilers are experts in linguistics and lexicography. To their credit, they have vast experience in dictionary compilation skills; starting from 1996 up to date (they are working on specialised dictionary projects not yet published, for example, (Dictionary of Agricultural Terms). Apart from *Duramazwi Reurapi neUtano* (DRN) (2004) they have published *Duramazwi reChishona* (DRN) (a dictionary of Shona terms 1996) and *Duramazwi Guru RechiShona* (DRG) (a bigger dictionary of Shona terms, 2001). Chimhundu and Chabata further published *Duramazwi Redudziramutauro neUvaranomwe* (DRU) (2007). Table 0-38 below shows the published works of the compilers in lexicography:

Herbert Chimhundu	Chabata Emmanuel	Mangoya Esau	Mpofu Nomalanga
DRU 2007	DRU 2007		
DRN 2004	DRN 2004	DRN 2004	DRN 2006
DRG 2001	DRG 2001	DRG 2001	DRG 2001
DR 1996	DR 1996 (Helper)	DR 1996	DR 1996 (Helper)

Table 0-38: List of the monolingual and specialised dictionaries published by DRN compilers

Considering the information provided above, the compilers of the DRN are experienced in term creation. In as much, it is the expectations of this researcher that the work in the DRN is of good quality. Hence, the major aim for this study is to analyse the adequateness and effectiveness of the Shona medical terms in the DRN. In addition, the DRN was compiled as a result of a request from the Institute of Continuing Health Education (ICHE) because there was no effective communication between caregivers and patients.

6.2.1 The Target users of the DRN

It is important to identify the target users of a dictionary because the effectiveness of any of terminographical work is determined by the target users and their needs. Thus, Bergenholtz and Tarp (2003) posit that the function of a given dictionary is the endeavour and its ability to cover the complex needs of the target users in their particular user situations. As such, the target users for this dictionary are patients, medical practitioners, medical students and the general populace:

Duramazwi rino rakanangana nekurerutsa kunzwisiana pakubatsirana kunoita varwere, vanachiremba, varapi vachiri kudzidzira uchiremba neurapi neruzhinji rwavanhu. (this dictionary's aim is to provide any easy communication between patients, medical practitioners, medical students and the general populace (Mpofu et al, 2004: ix).

Knowledge of the target users also assists the dictionary compilers to be in a better position in determining which term creation strategies to use for term formation processes. Furthermore, knowledge of target users is very important to the researcher because analysis of term creation strategies in DRN includes the perceptions and overviews of the users and their needs. The target users also determine the aims of dictionary compilers in coming up with a specialised terms dictionary. In the case of the DRN, the aims are:

Nekudaro Duramazwi rino rine zvinangwa zviviri zvinoti, kupa kududzira mazwi anoshandiswa munyaya dzeurapi nemazera akasiyana-siyana uye kuvandudza mazwi iwaya. (This dictionary have two aims; to define medical terms used by all age groups and to develop Shona medical terms (Mpofu et al, 2004: ix)

Therefore, according to the DRN compilers, the dictionary is expected to meet the different needs of its different users. It is also noted by the researcher that Duramazwi Reurapi NeUtano is the first dictionary to cover medical terms in the Shona language. It was compiled to provide effective communication between patients, medical practitioners, medical students and the Zimbabwean public. In other words, it was a strategy to overcome communication barriers between the concerned groups.

6.3 Term creation strategies in duramazwi reurapi neutano (Dictionary of medical terms)

According to Van Huyssteen (1999:173) term creation strategies are very important in the sense that ... “they are the very linguistic tools that make technical modernisation and expansion of the lexicon possible”. The researcher supports this contention because term creation as an inevitable and important process in all languages. It is even more important as an enhancement of indigenous languages to a state where they may be used as media of instruction in the education system of a country. Supporting this assertion, Mwansoko (1989) argues that one of the problems facing African languages today is the lack of developed terminology ... Thus, term creation is the only practical approach to using human creativity to develop terminology. However, the issue of language policy is the major obstacle in carrying out a proper and perfect term creation initiative in Zimbabwe as has been highlighted by the researcher in previous chapters.

The compilers of the DRN used various kinds of term creation strategies to come up with

specialised Shona terms in the medical field. As stated previously, these strategies are borrowing, loan translation, compounding, coining, derivation and semantic expansion. The statistics in Table 0-39 below show the term creation strategies and the lexical entries thereof in the DRN:

Strategy	Borrowing	Loan translation	Compounding	Coining	Derivation	Semantic Expansion	Indigenous Terms
No of entries	114	235	56	106	27	25	662
Percent	9.3	19.2	4.5	8.7	2.2	2.0	54.0
Total no	1225						

Table 0-39: Term creation strategies in the DRN

The unpacking and repackaging of indigenous medical terms leads the pack with 662 lexical entries which translate to 54% of all lexical entries. This is followed by loan translation with 235 entries, getting a 19% share of all lexical entries in DRN. In the third place is borrowing with 114 entries which is a percentage of 9.3% of all lexical entries. In the fourth place, is coining term creation strategies with a total number of 106 lexical entries which is a percentage of 8.7% of all lexical entries. Derivation and semantic expansion are in the fifth and sixth places with 27 and 25 lexical entries respectively. These translate to 2.2% and 2.0% of lexical entries in the DRN.

6.3.1. The Borrowing term creation strategy

As indicated in 6.3 above, borrowing is one of the term creation strategies used by the DRN compilers for creating medical terms. The borrowed terms in DRN are mostly from English language which has an abundance of medical terms due to the level of development of the language. The English language has borrowed from French, German, Greek, Italian, Latin and Spanish, a fact that accounts for its fast growth and enormous development. This is one of the reasons why the corpora for many indigenous African languages will never be able to compete with the English corpus because its growth rate is always higher and faster than that of most of the African languages (Mojela, 2010).

Table 0-40 below shows the utilisation of this strategy by compilers in the Shona Medical Terms Dictionary:

Strategy	Borrowing	Other strategies
Number of Lexical Entries	114	1111
Total Percentage	9.3%	90.7%

Table 0-40: showing the utilisation of the borrowing term creation strategy

The borrowed terms were rephonologised to make them fit into the phonological structure of the Shona language. Table 0-41 below gives examples of rephonologised medical terms taken from the DRN:

Borrowed Term	Rephonologised borrowed term to suit the receiving language
mosquito	<i>mosikwito p 37</i>
bacteria	<i>bhakitiriya p 3</i>
diaphragm	<i>dhayafuramu p 16</i>
gonorrhoea	<i>gonoriya p 22</i>
chancroid	<i>changiroidhi p 6</i>
germs	<i>jemusi p 25</i>
laboratory	<i>rabhoritari p 50</i>
microscope	<i>makirosikopi 31</i>
Norplant	<i>mapurandi p 32</i>
proteins	<i>purotini p 50</i>

Table 0-41: Showing indigenised borrowed medical terms

From the examples given in Table 0-41, the DRN compilers kept the pronunciation of the borrowed terms, although the spellings were altered to suit the phonological and grammatical rules of the receiving language, which in this case is Shona. The researcher feels that, although the DRN compilers succeeded in coming up with Shona medical terms using the borrowing term creation strategy, some of the borrowed terms cannot be understood by lay people as they are difficult to comprehend because they are alien. This is supported by Charamba (2012:12) who says that, “although the borrowed terms may reflect a high degree of navitisation some of them remain as difficult to master and to interpret to the learner as what is the case with the alien terms” Thus the lay people need to have a background knowledge of the loan words, of which the majority of people in Zimbabwe do not have.

Hence, most of them will find it difficult to understand and use the borrowed term. For example, <*maikirosikopu*, (microscope) *dhayafuramu*, (diaphragm) *mapurandi* (Norplant)>. This is contrary to DRN compilers' aims and goals, which are to "provide an effective, efficient and easy communication between patients, medical practitioners, medical students and the general populace" (Mpofu et al, 2004: ix). So in other words, instead of developing the Shona language for use by all Shona speaking community as they claim, the DRN compilers, through the borrowing term creation strategy, are indirectly under developing the Shona language through non usage.

Furthermore, the researcher regards the use of the borrowing term creation strategy as an efficient process of slightly altering the dominance of the English language by disguising its identity through the rephonologisation process. The end result is that the English language mostly 'remains almost the same, but not exactly'. In fact, through the utilisation of the borrowing term creation strategy for the creation of Shona specialised terms, it seems terminologists would have done nothing real to fight the dominance of the English language but rather to indirectly perpetuate its dominance. Therefore, in this regard the researcher is of the opinion that its high time linguists and terminologists look back to the past so that they may find answers to the language development problems that indigenous languages face today. The big question is how did the Shona ancestors create new terms for the growth and development of the Shona language? Hence, indigenous sensitivised term creation strategy may provide better options to use for the creation of new specialised terms in the Shona language. The indigenous strategies may help in the struggle to develop the Shona languages for use in all spheres of life. The researcher believes that such term creation strategies are the only way to fight and reclaim the past glory of the Shona language and to embrace it in its wholeness. It is a fact that the DRN compilers regard use of the borrowing term creation strategies as an end that justifies the means. This is a clear testimony of how they justify the foreign nativised term creation strategies without considering the negative impact these strategies have on the development of the indigenous languages. In other words, these term creation strategies (borrowing, loan translation) do not help improve the status of the Shona language, but indirectly perpetuates the dominance of the English language in Zimbabwe.

The Shona language conservatives consider borrowing of terms, especially, from the English language as corrupting the language. However, the researcher feels that it may not corrupt as it were, but the borrowing term creation has the potential of undermining the natural

development of the Shona language. Thus, it can be argued that while term creation is a means of revitalisation of a language and developing it to self-sufficiency, the utilisation of the borrowing term creation strategy by terminologists will be regarding and undermining the indigenous languages as weak and not befitting to express scientific and technical knowledge. Thus, terminologists will be presenting an unreal and a lame picture of the indigenous languages lacking expressiveness, yet indigenous languages are rich and befitting and have the capacity to uplift the status of the African languages. However, modernists view borrowing as a way of developing the indigenous languages so as to match scientific and technological developments taking place all over the world today. Mojela (1991: 12) says:

when people of varied cultures come into contact, they have many things to share and these results in the process of foreign acquisition and an extensive increase in vocabulary. An increase in vocabulary is at the same time accompanied by an increase in meaning.

Therefore, the modernists are of the view that, it is inevitable that all cultures that have been in contact with other languages are likely to borrow vocabulary from each other. Hence, borrowing becomes a necessary evil, no matter how a people may want to preserve the purity of their language. Proper borrowing of terms is productive because it results in the increase of vocabulary of the receiving language.

6.3.1.1 Borrowability

Just like in the dictionary of Shona musical terms (DR), the noun is the most borrowable part of speech from any foreign language. Statistics in the medical specialised terms dictionary (DRN) show this:

Type Of Borrowed Term	Nouns	Verbs
Total No Of Lexical Entries	109	5
Percentage	95.6%	4.4%

Table 0-42: Showing borrowability of loan terms

This shows that it is the easiest to borrow from other languages. This type of borrowing does not lead to language contamination since other parts of the Shona speech are not contaminated by this strategy. Hence, the borrowed medical terms in the DRN cannot lead to

language corruption. However, such a borrowing pattern may result more in code-switching than in language corruption.

6.3.1.2 Acronyms

Bauer (1983) defines an acronym as a word formed from the initial letters of other words for example: AIDS (Acquired Immune Deficiency Syndrome). According to Maillot (1997: 318) "... acronyms are the substitution of one or several words using the beginnings". It is evident that DRN compilers used shortened terms to come up with Shona medical terms as shown in Table 0-43:

Borrowed Acronym	Acronym	Full Term
<i>bhiipii p 2</i>	BP	Blood Pressure
<i>edzi p 19</i>	AIDS	Acquired Immune-Deficiency Syndrome
<i>eidzi p 19</i>	AIDS	Acquired Immune-Deficiency Syndrome
<i>tiibhii p 59</i>	TB	Tuberculosis
<i>viidhii p 65</i>	VD	Venereal Disease

Table 0-43: Showing utilisation of acronyms in the DRN

All the acronyms in the DRN are from borrowed English medical terms. It has been noted that most acronyms retain their original form in the target language. Basing on examples in Table 0-43 above, it shows that in Shona, the acronyms are rephonologised as well so as to suit the characteristics of the receiving language. The researcher notes that, in Shona language most users prefer acronyms because they are in a shorter form such that coined terms find their way out of the language vocabulary, for example: <*eidzi (AIDS)*>. *The acronym has kicked out the indigenous coined term <mukondombera >*, as users or speakers of a language prefer a shorter lexical item to a longer one.

6.3.1.3 Clipping

The compilers of Duramazwi Reurapi neUtano (DRN) used clipping strategy to come up with Shona medical terms. Clipping refers to the process whereby a lexeme (simple or complex) is shortened, while still retaining the same meaning and still being a member of the same form class (Bauer, 1983: 233). Thus, for example the word 'dormitory' maybe shortened to 'dorm' and thereby creating a new word. It should be noted that both the clipped and the original word have the same meaning. The longer term is often used in more formal situations, (like when writing academic essays) and the shorter in more informal situations (Yule, 1996). However, it is explicated that with time, the new term may entirely replace the

longer original word. In DRN, the words that are clipped are shown in Table 0-44:

Borrowed Clipped Term	Clipped Term	The Full Term
dhepo p 16	Depo	Depo-Provera
dhiripi p 16	drip	Intravenous Drip
kemo p 27	chemo	chemotherapy
koma p 27	coma	comatose
kwashi p 29	kwashiorkor	kwashiorkor
rebhu p 51	Lab	laboratory
siza p 58	caesarean	Caesarean section
shuga p 57	sugar	Sugar diabetes

Table 0-44: Showing clipped forms in DRN

As can be noted in the given examples above, the clipping creation strategy helped the compilers in coming up with medical terms for the DRN. The clipped form is often a favourite for language speakers because it is shorter in form. Speakers of a language prefer shorter terms than longer terms. However, the clipped term for hypertension –haipo (hypo) is missing, yet it is very popular in use in the medical field.

6.3.1.4 Overview of research participants on borrowing

The researcher raised the issue of the borrowing term creation strategy; (more specifically, the adequateness, effectiveness, efficiency appropriateness and the quality of terms) with research participants and answers that show mixed feelings emerged. Table 0-45 below shows the feelings and the responses from research participants on the raised issues:

Category	Agree	Percentage	Disagree	Percentage
Adequate	39	78%	11	22%
Effective	33	66%	17	34%
Efficient	34	68%	16	32%
Enriching	42	84%	08	16%
Appropriate	31	62%	19	38%
User friendly	28	56%	22	44%
Contaminating	13	26%	37	74%

Table 0-45: The Responses from research participants on borrowing term creation strategy

From statistics reflected in this Table, most participants (78%) felt that the borrowing term creation strategy is effective and adequate because the created terms allow expression and effective communication between medical practitioners and patients. From the statistics in Table 0-45, it shows that there is a general consensus as the majority of research participants

accept and embrace the borrowing term creation strategy in the DRN. However, a minor group of research participants (22%) pointed out that, there was too much transliteration in the borrowed terms and this tends to spoil the vitality of the borrowed term. Other research participants (68%) felt that, transliteration of borrowed terms is inevitable since the compilers had to create terms in line with how they are used by the people in society and that promotes term efficiency. The researcher feels that, rephonologisation of borrowed terms makes the terms closer to the source language, and as such paving for acceptability of terms by target users. Hence, research participants (56%) felt the dictionary is user friendly.

Furthermore, some research participants (62%) felt that, the borrowing strategy is appropriate since a living language should be able to adapt to scientific and technological development taking place all over the world. A living language should mirror usage and functionality, and this is what DRN compilers have demonstrated. To this end, they are supported by other research participants (84%) who added that, borrowing of terms from other languages is not problematic, but enriching. These research participants argued that, Shona, like any other languages should borrow terms from other languages, so as to grow in scientific and technical terminology. This is how DRN compilers were prompted to consider the communicative functional variation of terminology. Thus, they were left with no option but to borrow scientific and technical terms to fill in lexical gaps in the Shona language.

Responding to a question on why they borrowed terms for the dictionary, the DRN compilers pointed out that the success of language development programmes depends upon adding new terms to the language. In most cases, the terms relate to science and technology. One of the DRN compilers explicated that:

This is more so, when one considers that Zimbabwe has high adult rate who can understand English. As such, the majority of the people are able to participate in language development endeavours, as they are able to understand what is being communicated by the borrowed term. There is a need, therefore, to borrow from other languages, especially, English so as to promote participation as this mirrors usage. In any case, borrowing is not a problem, because if the borrowed term is used for a length of time, changes begin to occur and the pronunciation and spelling become closer and closer to the users. Eventually, the borrowed term then becomes part and parcel of the receiving language.

In addition, the DRN compilers aver that, there was no point in coining an indigenous term where a borrowed one is in use because a term gains currency in the language in which the concept was produced. The compilers supported their contention by giving examples of

indigenous coined terms that never gained currency in the Shona language because they competed with borrowed rephonologised terms already in use, as illustrated in Table 0-46 below:

Coined Word	Borrowed Word	Term Popular in Use
<i>hambautare</i>	Motorcar	<i>motokari</i>
<i>putugadzike</i>	tea	<i>tiyi</i>
<i>chiringazuva</i>	watch	<i>wachi</i>
<i>nharembozha</i>	cell phone	<i>selifoni</i>
<i>bhizautare</i>	bicycle	<i>bhasikoro</i>

Table 0-46: Showing coined terms that have been displaced by borrowed terms in Shona lexicon

The examples above show that, indeed, a word gains currency in the language the concept was produced. It therefore, means that, coining a term where a borrowed term is already popular in use is a waste of time because the coined word will have a problem in displacing the rephonologised borrowed term. When one says a language is developed one would be considering its usefulness. Its usage is what makes a language a useful commodity and it is the only reason for its being. Any term that is not popular in use faces rejection.

As such, on the theoretical front, the use of borrowing term creation strategy by the DRN compilers focused on the communicative function of a term as propounded by Cabre (1999):

The new approaches to terminology, whose assumptions we have adopted in this work, have shown that terminology serves two different purposes: a strictly representational function of specialised knowledge, and the function of communication, development and transfer of knowledge (Cabre, 1999 : 40).

Thus, descriptive linguists such as Chiwome (1992) and Chimhundu (2002) point to the fact that, all languages have adopted words from other sources as an essential part of language development, despite prescriptive concerns. Moreover the most concurrent theme on borrowing, throughout the field work study, was that borrowing cannot be avoided, if the indigenous languages are to be developed to a higher level of communication. In this regard, the researcher is in agreement with research participants who view that borrowing is an inevitable term creation strategy for the modernisation and development of Shona and other indigenous languages. This is supported by Cabre (2003:27) who says that, “in situations involving natural and social communication tasks, such as the development of minority languages, a communicational approach is required”.

During the interview with the researcher, the DRN compilers claimed that, some newly coined terms can change because of the changing times, for example, the coined term <*nharembozha* (cell phone)> was coined as such because a cell phone by then, was prerogative of the rich but now even the poorest of the poor owns a cell phone. Thus, new coinages may change over time, but if one borrows the word and rephonologise it, it stays as it is in the lexicon. Therefore, the compilers of the DRN identified a term that is wide in use and if it was a loan word they would adopt and adapt it to the receiving language's phonological structure. Words gain currency in the culture in which they were created, for example, the word <*mutondo* (indigenous tree)> does not change meaning, because the word is not an importation. Furthermore, the DRN compilers added that indigenised coined words face the risk of moving out of circulation. They do not resonate with international culture. They are not compatible to the emerging cultures. Therefore, newly coined terms should have some semantic relations and semantic networks with the conceptual lexemes.

The dictionary compilers added that a technical term's naming is a prerogative of the inventor. He or she should give the name to his/her invention. They contend that it would not be justifiable for anybody to just rename the borrowed concept to suit his/her terminological needs. In other words, the specialised dictionary compilers should recognise and acknowledge the brilliance of the inventor. However, the researcher disputes this contention because, if this becomes the norm, then it means that there is going to be an influx of loan words from other languages into the Shona language. Specialised dictionary compilers would just borrow every loan word available because the concept it denotes was not invented in the borrowing country. This will reduce creativeness and innovation of terminographers in an effort to uplift indigenous languages to a higher level. The fact that a term gains currency in the culture in which they were created does not much water, it is just a flimsy justification for the uncritical utilisation of the borrowing term creation strategy. For example, there are some foreign concepts whose terms have been coined in Shona and have gained currency: <*chigayo* (grinding mill)> <*tsono* (needle)>, <*chingwa* (bread)>, <*muchinjikwa*, (holy cross)> <*mafuta* (cooking oil). This shows creativeness of the speakers of a language. Hence, the researcher feels that specialised terms dictionary compilers should not just borrow terms just for the sake of it but should only borrow when they fail to get an equivalent term in the indigenous languages. In this way, borrowing of terms for a foreign concept being introduced in a language can be minimised. The ideal situation is that a few foreign words as possible must be allowed into the language. The borrowing term creation strategy should be used only

for borrowed terms that are culture specific or when terminographers have completely failed to coin a new word when all else have been done.

It is a fact that a high variety language (in terms of usage) influences the low variety, so in the case of the DRN, one finds that medical terms have been heavily borrowed from the English language which is a high variety in Zimbabwe. Instead of entirely borrowing terms from a high variety, one can create equivalent Shona terms for a borrowed term and these can gain currency as shown by the above given examples. Whilst many research participants pointed out that loan terms modernise indigenous languages, the researcher sees mostly the negative effects of borrowing on language development as it undermines the language's natural development. Clearly the policy of undermining the Shona language through language use did not end with the colonisation of Zimbabwe. Zimbabwe may have attained its independence in 1980, but honestly the colonisation of the tongue remained.

6.3.2 Loan translation

Loan translation is a process of literally translating- word for word- morphological elements of a term or whole words from the source language in order to form a new term in the target language (Valeontis, 1997). In other words, loan translation develops meaning of terms instead of developing the vocabulary of a language. The compilers of the DRN extensively and heavily used loan translation to create Shona medical terms for the dictionary. Statistics in Table 0-47 below shows that loan translation is the most utilised term creation strategy to coin new terms in the DRN:

Strategy	Loan translation	Other strategies
Number of Lexical Entries	235	1225
Total Percentage	19.2%	81.8%

Table 0-47: Showing the utilisation of loan translation strategy in the DRN

Table 0-47 shows that the DRN compilers created 235 loan translated terms and this is about 19% of the total lexical entries in the DRN. Hence, it can be concluded that the loan translation term creation strategy has been the most preferred strategy by compilers of the DRN. The DRN compilers argue that they mostly used the loan translation term creation

strategy because they felt that the Shona language is deficient in scientific and technological terms and consequently medical terms. Thus, probably when they encountered a new concept and failed to find an equivalent term in the Shona language, they resorted to loan translation.

However, it has been noted by the researcher that Shona loan translated terms are mostly in the form of definitions and explanations or translations of English medical terms. However, this term creation strategy is a very unproductive term creation strategy as it does little to the target language's lexical production. This is in contrary to Strehlov and Wright (1993) postulation that terminographers should name and label concepts with the main purpose of developing vocabulary in specialist fields. Furthermore, the loan translated terms have a disadvantage of resulting in cumbersome, awkward and longish terms that involves filling a one-item slot with an explanation consisting of several items (Baker, 1992:40), for example <*kusada kudya muviri uchipera* – anorexia, page 28 >. In the medical field, terms have to be simple and straight forward for safety reasons. Thus, the long terms violate the term simplicity principle, which require that terms be simple in such a way that, they allow for smooth communication between medical trained staff and the public. However, the DRN compilers are aware of this disadvantage as they assert that:

this is especially cumbersome when a phrase has to take the place as headword instead of having a one word lexical entry ... Circumlocution, cannot be avoided when one is dealing with two languages such as Shona and English that do not have a one-to-one correspondence, for all the words, making a one-to-one equivalence impossible. ... Kotze (1999: 91) states that, in such cases one has to settle for equivalence of whatever kind between the two languages (Mpofu and Mangoya, 2005:122)

Thus, the DRN compilers justify their over-utilisation of the loan translation strategy, arguing that it is necessary because Shona is deficient in technical and scientific terminology. This makes creating simple Shona medical terms very difficult for terminographers. And as such, the loan translated terms end up being statements, descriptions or explanation rather than simple Shona medical terms. This creates ambiguity of meaning of the created specialised terms. According to Ahmad et al (2011) “medical students always interact with patients ... they have to council, take history, explain disease,” and hence, term simplicity in medical terms is a necessity. Therefore, medical practitioners should communicate unambiguously, as much as is possible with patients or medical students, otherwise any mistake could be fatal to the patients. Thus, in the medical field, precision or standardisation of terms plays an essential role, particularly, because safety in the administering of the

medical duties is a very important consideration. Like in a situation where a patient can be given wrong medicine for saying <*ndinonzwa muviri wese*> taking the example that compilers of DRN gave (I feel pain all over the body). It is against this background that the dictionary compilers are encouraged to coin unambiguous and transparent medical term for efficiency and apt comprehension by the target users. The best way to disseminate medical information to the layperson is therefore, to create unambiguous terms by using adequate, simple and effective medical terms.

On the other hand, the advantage of loan translated terms is that concepts are comprehensively explained and this aids understanding of terms by target users. A word is transparent if the concept it represents is understood without further explanation, for example, <*kupera kwemvuramumuviri* (dehydration)>. This concept is easy to understand because the meaning has been comprehensively defined within the term itself. Thus, loan translated terms are self-contained. Moreover, the other advantage is that, in due course, the long explanations may be reduced when the speakers of a language have come to understand the new concept (Yule, 1996). Paraphrasing, therefore, is a vital term creation strategy in far as making the message clearer to the target users. However, whilst this paraphrase strategy can make things clearer, it has a limitation of being lexical loaded. As a result, the researcher notes that, some of the term creation principles and guidelines contradict each other, resulting in controversy. This is evident where descriptiveness in the DRN contradicts term simplicity and term conciseness (Gilreath, 1993:88-89). This shows that in the field of linguistic terminology, some guiding principles are very contradictory, and there is need for terminographers to come up with a common position and understanding, so that they come up with guidelines that are not confusing.

Furthermore, the researcher notes that, there are instances where the DRN dictionary compilers used loan translated terms that are less expressive or have less impact than the source words. An example is the term <*mudumbu munopisa* (pelvic inflammatory disease hot abdomen, page 38)>. This definition refers to pain in a woman's ovaries or pains in the abdomen why not use <*chibereko chinopisa*> instead? Furthermore, instead of having a loan translated term <*tora mushonga wakawandisa* –(overdose, page 60)> compilers of DRN should have borrowed the term 'overdose' and transliterate it to <*ovhadhozi*> which is more popular so as to mirror usage. There are some instances when the DRN compilers could have used other term creation strategies to create good Shona medical terms instead of resorting to

loan translation creation strategy. Table 0-48 shows suggestions by the researcher of simple terms that could have been used by the DRN compilers:

Loan Translated Term	Suggested Term	Strategy
<i>tora mushonga wakawandisa p 60</i>	<i>ovhadhozi</i>	borrowing
<i>mushonga wekupazha p 40</i>	<i>mupazhiso</i>	derivation
<i>tsvina inorwadza p 61</i>	<i>kupatirwa</i>	coining
<i>ronda mudumbu p 52</i>	<i>arisa (ulcer)</i>	borrowing
<i>remara makumbo p 51</i>	<i>mhetamakumbo</i>	compounding
<i>kuburitsa ropa rakawandisa pakutevera p 5</i>	<i>kuwanza</i>	derivation
<i>kusada kudya muviri uchipera p 28</i>	<i>svipurwamwoyo</i>	compounding
<i>zino rinotanga kumera p 67</i>	<i>dangameno</i>	compounding
<i>mwana akachinjika mudumbu p 42</i>	<i>mareyamhuru</i>	compounding

Table 0-48: Showing suggestions of terms by researcher which could have been considered by DRN Compilers

In as much, the researcher feels that, before dictionaries are published, there is need for reading and thorough editing of the work, by linguistics boards or associations. This will ensure professionalism, reliability and credibility of term creation services for both the target users and language elaboration efforts.

6.3.2.1 Overview of the research participants on loan translation

The researcher has largely taken the sentiments of target users into account. A brief overview of the statistics presented below shows that, the research participants were not happy or satisfied with the loan translated medical terms in the DRN. Table 0-49 shows the responses of the research participants on the loan translation term creation strategy:

Category	Agree	Percentage	Disagree	Percentage
Adequate	12	24%	38	76%
Effective	21	42%	29	58%
Efficient	08	16%	42	84%
Enriching	07	14%	43	86%
Appropriate	18	36%	32	74%
Term Simplicity	10	20%	40	80%
Less expressive	26	52%	24	48%
User Friendly	23	46%	27	54%

Table 0-49: Responses of research participants on loan translation term creation strategy

Although some research participants (26%) said they were empowered with loan translated terms, the majority of research participants (76%) felt that the terms are inadequate.

Furthermore, most of the medical students (80%) raised some concerns on the terms as they argued that: the field of medicine has a lot of sensitive information that requires apt capturing in term creation, because any inadequacy or inefficiency and any subsequent misunderstandings of a term on the part of the target users can have “grave” consequences. Term simplicity and preciseness play an essential role, particularly in the medical field where safety is specifically a primary concern. To this end, the research participants are supported by (Alberts, 1999:22) who contends that, for one to achieve this goal, “it is necessary to determine the precise meanings of terms to enable users to comprehend and use them in a universally accepted manner”. On the contrary, some research participants (42%) argued that, they feel that the dictionary is functional in as far as it allows communication to take place between medical practitioners and patients. They highlighted that the DRN is useful because it addresses the needs of patients and medical practitioners. The research participants (24%) said that, the loan translated terms are adequate, which shows that, most target users do not prefer loan translations.

Moreover, most respondents (80%) said the terms that are created in the DRN lack term simplicity. Terms in a dictionary need to be simple and straight forward so that the message they are communicating is understandable. “As a rule, the more important the concept, the simpler the term should be” (Gilreath, 1993:89). Furthermore, the research participants also felt that, in as much as the DRN is functional in providing medical communication (84%), it is rather limited in scope, in the sense that it does not represent all the medical terms available in the medical field. They advocated for a bigger Shona medical terms dictionary which deals with all medical conditions comprehensively. In as much, the DRN compilers promised that they are going to work towards the production of a bigger Shona medical terms dictionary in future.

However, some of the research participants (46%) claimed that, the loan translation term creation strategy can be regarded as a good, but the only problem is that it yields too much phraseology. These research participants explained that considering the very difficult situation that the DRN compilers confronted; that of failing to find equivalent medical terms in Shona, loan translation was the best term creation strategy to use. To this extent, these respondents are supported by the DRN compilers who remarked that loan translated terms phrase maybe a problem at the initial stage, but as time goes on the phraseology will be reduced when the speakers, later come to understand the meaning of the new concept more and more. In other words, when the terminology of a specific subject field is used

frequently, it becomes part of the language and consequently the user will disregard the long explanatory terms. Thus, through frequent use people will unconsciously reduce the longer version into a shorter version and the short term will become the standard. This shows the importance of use of the created terms. Some linguists (36%) are of the view that most specialised medical terms dictionary compilers resort more to loan translation than borrowing. It is preferable because it gives clarity to foreign medical terms being brought in the language. This contention is regarded as true but loan translated terms have a problem in terms of use because they are difficult to master than borrowed terms which are concise.

Some medical students (58%) pointed out that most medical terms were changed or distorted during loan translation. This means that the DRN compilers failed to adequately translate the borrowed word. The researcher noted the very same problem during content analysis of the DRN. In some cases, the dictionary compilers completely changed the message by omitting vital information or by simply misinterpreting the meaning of the word. Some few examples given below were taken from the DRN where misrepresentations of terms were noted by both the researcher and medical students:

< <i>pondera mwana mudumbu</i> (abort, p 50)> the word <i>ponda</i> is too strong
< <i>rukanda rweziso</i> (cornea p 52 >definition of cornea is ambiguous, why not, < <i>rukanda rwemboni yeziso</i> >?
< <i>ropa muchibereko</i> (haemotometra, p52)>give clear explanations of this medical condition
< <i>ropa muziso</i> (haemophthalmia p 52 > give a clear explanation of this medical condition
< <i>nyoka inorutsa</i> (failure to conceive p 46)> definition of term is not apt
< <i>zvimba urozvi nemuzongoza</i> (encephalomyelitis, p 68)> definition cannot make sense to a layperson

This analysis shows that, although loan translation is relevant, it did not adequately capture the meaning of the source term. In other words, the compilers are giving a definition of a term and at the same time they are failing to aptly capture the essence behind the meaning of the term. An example is <*mudumbu munopisa*> (pelvic inflammatory disease p 38). The researcher wonders why the compilers did not use <*chibereko chinopisa*> which is a more apt loan translated term for the given definition. In addition, loan translated terms are not easy to remember because of their stature.

In response to the above concerns, the DRN compilers pointed out that the medical field in Zimbabwe has limited terminologies, and as such, it is a laborious and difficult task to come

up with terms that are apt and pleasing to everyone, considering the limited resources at hand. After all, linguistic terms can occur as single words in one language but in another language they can be multilingual but designating one concept, for example, < Watch-*chiringazuva*>, <-bus-*dutavanhu*>, <-uncle-*babamukuru*>, < sister-in-law -*tete*>. Hence, one of the DRN compilers conceded that:

Term creation is a very demanding process, and we really tried our best to come up with better terms under very difficult circumstances; lack of financial and moral support from government ... because of limited funding most medical experts withdrew from the project and we were left on our own; linguists with no expertise in the medical field. By resorting more to loan translation we were running away from direct borrowing of medical terms from other languages. So we reiterate that under such circumstances we tried to the best of our ability to come up with indigenous terms for the DRN.

This study has shown that although the DRN compilers claim that the loan translation was heavily utilised because of the need to run away from direct borrowing of foreign medical terms, its engagement is not well embraced by target users. The research participants pointed out that lexical engineering in specialised dictionaries should be motivated by the need to develop the vocabulary of a language, not the meaning of source terms. There is no increase in the number of the medical lexical items, for example, in the DRN there are 235 meanings of foreign lexical item translated into Shona language. In light of this, one cannot therefore, boast of having a comprehensive data base of Shona medical terms. Furthermore, the researcher feels that, instead of numerous loan translated terms in the DRN, the dictionary compilers could have resorted more to other term creation strategies such as compounding or new coinages.

In response, the compilers of the DRN claim that, the loan translation term creation strategy helps the target users to understand the specialised medical terms more comprehensible because of their descriptiveness, thus, becoming very accessible to users. In as much, compilers of the dictionary defended their position by saying that terminology is no longer prescriptive but descriptive, in the sense that it captures the communicative functionality of a term. The loan translated terms provide users with the meaning of a term, of which is one of the main reason for consulting dictionaries. It provides them with meanings or definitions of terms in as much as is required in the medical profession. Hence, the target users should not be concerned about any further details or linguistic features of a term. Theoretically, the DRN compilers are supported by Cabre, who says:

... it is the circumstances of each situation which determine the type of application ... the information they must contain (terminology, phraseology, definitions, variants, contexts, phonetic or phonological representation, foreign language equivalents, illustrations, etc.), their representation and even their means of dissemination (Cabre, 2003:183-184).

Furthermore, the DRN compilers said that they had no any other option but to use loan translation term creation strategy although the created terms are cumbersome:

the Shona equivalents are given in the form of longish phrases which the doctor and patient have to memorise. In a way, this defeats the idea of trying to create a standardised Shona terminology. However, the given phrases were the best possible equivalents the compilers could find (Mpofu and Mangoya, 2005:122).

Even though the researcher still feels that the loan translation term creation strategy yields poor medical terms, and judging by responses given for this study, the target users are not comfortable with the loan translated Shona medical terms. The need for unambiguous communication in the medical field was a recurrent theme from most of the research participants, throughout the data collection process. However, loan translation strategy should not be done away with completely. It can be used minimally, that is, when explaining very difficult and complex terms from the source language. As a result of the research outcomes, it is clear that a lot still needs to be done to improve the engagement of the loan translation term creation strategy in specialised terminology. The loan translation term creation strategy on its own is not able to elicit developmental changes within the Shona speaking community as change can only come through language use. Loan terms in the DRN, exemplifies the DRN compilers' lack of true Shona language developmental concerns or commitment which may have been overridden by the passion for monetary gains.

However, the DRN compilers' term creation effort is commendable and the researcher applauds them for that. In life, there is a starting point for everything and the researcher feels that this starting point will yield better things to come. Nonetheless, the researcher contends that, problems encountered in using the loan translation term creation strategy point to an urgent need to develop resources and terminologies in indigenous languages in Zimbabwe. This should be dealt with by all the stakeholders, including the government of Zimbabwe, so as to lessen the burden of terminologists in term creation processes. Furthermore, the loan translation strategy in the DRN is used as a meaning conveyance and hence, there are no gains for the Shona vocabulary. When one says a language is developed one would be considering its usefulness. Hence, its usage is what makes a language a useful tool and it is the only reason for its being. By proclaiming that too much use of the loan translation term

creation strategy was a way or method of running away from too much borrowing is just a defensive approach that is used to justify an unworthy cause. It shows that the DRN compilers perceive the English language as an important and valid language. Every language has the capability to develop. It is only due to lack of political will and negative attitudes that the Shona speaking people are not adequately and effectively developing their language.

6.3.3 Compounding

It has been highlighted throughout this study that compounding is a process which involves a combination of two parts of speech, for example, noun and verb, into one unit. From the statistics given in Table 0-50 below, it is clear that the DRN compilers used the compounding term creation strategy to come up with medical terms for the dictionary.

Strategy	Compounding	Other strategies
Number of Lexical Entries	56	1 169
Total Percentage	4.5 %	95.5%

Table 0-50: Showing the utilisation of the compounding term creation strategy in the DRN

Compounding is a very productive term formation process which terminographers utilise to create new terms for new concepts in a language. This view is supported by Batibo (in Van Huyssteen 1999:184) who says “compounding...is a very productive and transparent method of term creation”. However, compared to the DR, which has 101 compounded lexical entries that constitutes 8.4%, one notes that the compounding term creation strategy is not extensively used in the DRN with only 56 lexical entries, which translate to 4.5 % of all lexical entries in the DRN. In the DRN, existing Shona words are combined to give names to medical concepts and diseases coming from the English language, so as to create indigenous medical terms. The following terms are a very good example of compounded Shona medical terms: < *chiomesashaya* (tetanus)> p 10, < *chiomesamutezo* (stroke)> p 10, < *chimotashungu* (small boil)> p 10, Most of the compounded medical terms in the DRN were created basing on the behavioural effect and stature of the disease. This shows creativity on the part of the dictionary compilers. However, the compound < *kasoronhema* (false headache, page 27)> was defined as a continuous throbbing headache < *musoro unotemera usinganyarari*> which is contrary to the meaning of the compounded terms. The researcher feels that, the compilers of

the DRN could have defined <*kasoronhema*> as a headache that cannot be clearly pronounced or should have looked for a more equivalent term to suit their definition.

Although this strategy helps in coming up with new terms for new concepts, the compounded terms are usually long and vague for example, <*nhevedzamatundo* (inner side of a woman’s thigh, page 44)> this is a disadvantage and a drawback to language development because speakers of a language prefer shorter terms to long ones. This means therefore, that the terms created using the compounding term creation strategy have a disadvantage of just remaining terms in a dictionary because of their length and vagueness. There is no doubt that the compilers of DRN are aware of this setback and this could explain why they did not utilise the compounding term creation strategy to the maximum as just 56 lexical entries are recorded as compared to 235 for loan translation. Furthermore, compounded terms are difficult to master. This is supported by Charamba (2012:13) who argues that, “... terms as these are not easy to remember, since they are very long and complex in construction”.

6.3.3.1 Combination patterns in compounding

It has been explained that compounding is a combination of two or more words in the form of, for example; a noun and a noun, a noun and a verb, a verb and a verb, a noun and an adjective, nominal compounds into one lexical unit. In the DRN this distribution pattern is reflected in Table 0-51 below:

Type of compounding	Number of Lexical Entries	Percentage
Noun +noun	24	42.8%
Noun +verb	26	46.4%
Verb +verb	01	1.7%
Shona +English	01	1.7%
English+ English	04	7.1%
Nominal compounds	00	0.0%
Total number	56	100%

Table 0-51: An overview of the Compounding patterns in the DRN

The following are examples taken from the DRN of compounded terms. The Tables below show the combination patterns of the terms.

★ Verb +verb compound combinations

The other compounding pattern is verb and verb combination. Judging from the one example taken in the DRN <*binyauka* p 57> this combination is not very effective for the creation of Shona compounded terms. The same can be said for other indigenous languages as well, but

the verb/verb compound combination can be very effective in the English language

*** Noun +noun compound combinations**

The other very effective combination for compounds is that of a noun + a noun. In the DRN, most of the compounded terms are noun and noun combinations as illustrated in the Table below:

<i>chimimbamutaku p 9</i>	<i>chinyamabwe p10</i>	<i>gavamwedzi p 21</i>	<i>motashungu p 37</i>
<i>chimimbamuteku p 9</i>	<i>chinyokamutunhu p 10</i>	<i>kasoronhema p 27</i>	<i>mutandamhino p 41</i>
<i>chimimbamutekwa p10</i>	<i>chitumbumutengu p15</i>	<i>magurumukunza p 30</i>	<i>n'angahadzi p 42</i>
<i>chimimbamutekwe p10</i>	<i>dutuwendende p18</i>	<i>makurupini p 31</i>	<i>nhembayemwana p 43</i>
<i>chimotashungu p10</i>	<i>guvhudende p 23</i>	<i>maperembudzi p 32</i>	<i>shuramatongo p 57</i>
<i>chinhumbumuteko p10</i>	<i>madzvausiku p 30</i>	<i>mashangaropa p 33</i>	

Terminographers should take advantage of this ease combination to create new terms for new concepts being introduced into the Shona lexicon. So when using the compounding term creation strategy, the Shona terminographers can heavily opt for the noun/ noun and verb/noun combinations as shown in the Table above and the Table below.

*** Verb-noun compound combinations**

The combination of a verb and a noun were used to come up with Shona medical terms in the DRN as is shown in the Table below:

<i>burunzeve p 5</i>	<i>chiparambudzi p11</i>	<i>mbonausiku p 35</i>	<i>utachiwona p 64</i>
<i>borokufa p 4</i>	<i>dundagazi p18</i>	<i>mudapakati p 37</i>	<i>tsandanyama p 60</i>
<i>chigurameno p 8</i>	<i>dzvausiku p19</i>	<i>mufuragosho p 38</i>	<i>utachiona p 64</i>
<i>chimwahumwani p10</i>	<i>jendekufa p 26</i>	<i>mukunganhoko p 38</i>	<i>zvirwarausiku p 69</i>
<i>chinyamunhari p10</i>	<i>magurumuka p30</i>	<i>mupedzazviyo p 39</i>	<i>zvirwaradzimu p 69</i>
<i>chiomesamutezo p10</i>	<i>mareyamhuru p 33</i>	<i>nhevedzamatundo p 44</i>	
<i>chiomesashaya p10</i>	<i>mhetamakumbo p 36</i>	<i>sikarudzi p 57</i>	

It can be postulated that the noun and verb combination in compounding is the most common term formation process for creating scientific and technical terms for Shona language. It has some 26 lexical entries. This pattern was also confirmed as the most effective in the analysis of the DR.

*** Borrowed word + Borrowed word compound combination**

The other combination is that of a borrowed + borrowed word combination. This is illustrated

by examples given in the Table below:

<i>maikirosikopu</i> (microscope) p 31	<i>maikurusikopu</i> (microscope) p 31
<i>maikirosikopu</i> (microscope) p 31	

In any case, the DRN compilers just used borrowed compound terms and transliterated them.

★ Borrowed + indigenous compound combinations

The DRN compilers did not use any hybridised term, which is a combination of a borrowed + indigenous words in the DRN.

6.3.3.2 Overview of the research participants on compounding

The research participants had mixed feelings towards the use of the compounding term creation strategy in the DRN. Table 0-52 below aptly captures the responses and feelings of the research participants towards compounding:

Category	Agree	Percentage	Disagree	Percentage
Adequate	18	36%	32	64%
Efficient	24	48%	26	52%
Effective	26	52%	24	48%
Enriching	35	70%	15	30%
User friendly	11	36%	39	76%
Too long	44	88%	06	12%
Vague	24	48%	26	52%

Table 0-52: Acceptance of compounds by users

In terms of the statistics provided above, it is clear that most research participants feel that compounded terms in the DRN are not adequate. The results are very disheartening considering the effort terminographers put in the compounding term creation strategy as a way of developing the Shona language. Some medical students (64%) said that, they do not consider the compounded medical terms in the DRN as adequate and efficient, because the dictionary compilers did not adhere to the specifications of medical language which are lexical monosemic, appropriateness, clarity, accuracy, objectivity and precision. Conversely very few research participants (36%) argued that, Shona compounded medical terms in the DRN are adequate because they are able to express medical concepts coming in from English

language. They feel that, the compounding term creation strategy is effective because they can now express scientific and technical concepts effectively and efficiently using the compounded terms. In addition, the research participants (52%) expressed satisfaction with the compounded terms as they can now understand medical language, which makes it easier for doctors and patients to communicate easily. As such, the researcher also agrees that, compounded terms are effective because they fulfil the function of facilitating effective communication between medical practitioners and patients.

Most research participants (70%) claimed that, the compounded terms are user unfriendly. They asserted that, development of compounded terms always violates the “ideal” expectations of medical language and principles which are accuracy, precision, brevity, term simplicity, univocity of meaning and clarity. This makes them user-unfriendly. To this end, the research participants are in line with Chiwome’s (1992:68) view that, “heavy lexical loading, as a result of paraphrasing and compounding, leads to undesirably long terms which are user-unfriendly”. This may explain why Shona speakers prefer borrowed equivalent terms to compounds. It is because they are shorter and easier to use.

However, the compilers of DRN defended their position by saying that, use of the compounding term creation strategy depends on the “real” situation on the ground, which is to consider the communicative situation between the dictionary user and the dictionary. The compilers of the DRN further postulated that, in as much as all the medical demands should be rightly observed, compounding term creation strategy shows that, modern language development is becoming more and more descriptive rather than being prescriptive. Prescriptiveness restricts the rate of language development and acceleration of its growth because it is retrogressive. The compilers claimed to have unpacked, repackaged and combined existing Shona words to create Shona medical terms for the DRN. Thus, the ultimate goal of using compounds is to make specialised language communication functional between all stakeholders concerned. From this discussion, it is clear that most terminographers consider the functions of the specialised terminologies during the term formation processes. In other words, it is the function of the created terms that determines the term creation strategy to be engaged within a specialised field of knowledge.

On a positive note, some research participants (70%) agreed that, the compounding term creation strategy enriches the Shona language. They pointed out that, unlike loan translation, compounding is a very productive term creation strategy, in the sense that it increases a

language's vocabulary. This contention points to the fact that, all languages have the potential to develop their vocabulary by applying term creation strategies such as compounding and other strategies such as borrowing and coining. The DRN compilers stipulated that, what is needed is to give clear definitions for acceptability of the compounded terms by users. In this way, compounds can be innovated so as to enable them to assume any linguistic or academic function-and as such, compounds will be available, accessible and user-friendly. This is the most important thing for dictionary users. As a result, the researcher notes that, the use of compounding term creation strategy shows that there is plenty of room for creating new terms in the Shona language through combining already existing words, to come up with new medical terms in Shona language. Thus, the researcher can conclude that term creation therefore, should be more and more guided by target users' needs and the goals of the communicative act in between.

However, basing on the statistics presented in Table 0-52 above compounded terms may face rejection by the target users. Although, compounding is a very productive term creation strategy, the "heavy lexical loadedness" of the terms is its undoing. Advisably, the DRN compilers should consider simplifying some of the complex compounds or language structures for the acceptability by the target dictionary users, should they think of a revised second edition. Overall, it has been noted by the researcher that, in compounding, terminologists face a difficulty in adhering to the principles of conciseness, which advocate for the conciseness, brevity and shortness of a term. Consequently, it means that, engagement of compounding term creation strategy for the purposes of language indigenisation is disadvantaged, as it cannot be effectively implemented for the growth of Shona language. This is because of the attitude of target users towards this term creation strategy.

6.3.4 Coining

According to Yule (1996) coining is a process of word formation that involves the invention of totally new terms. Coinages are also referred to as neologisms. ISO TC 37, (1087-1:2000), says, the term neologism refers to new terms coined for a given concept, that is, new coined terms appearing for the first time in a language. This means that borrowed, compounded, derivated, semantic expanded and loan translated terms cannot be considered neologies since

these strategies utilise terms that already exist in the lexicon. New ideas and objects imported from abroad require new coinages. An analysis of the medical specialised created terms in the DRN shows that compilers used the coining term creation strategy as is shown in Table 0-53 below:

Strategy	Coining	Other strategies
Number of Lexical Entries	106	1,119
Total Percentage	8.7%	91%

Table 0-53: Showing utilisation of the coining term creation strategy in the DRN

Coining is regarded as a highly productive term creation strategy, as it results in more and more new words being added to the Shona corpus. Pearson (1998) stresses that, coining of new terms for a language is a powerful tool to use for terminological development. Terminographers should therefore, aim at coining adequate and effective terms that are acceptable to target users. In coining, terminographers should have concerns for the permanence of the created term, because inadequate terms face rejection by target users. In addition, the coined term should be elegant and natural, and as such that they should be accurate and clear. Naturalness results from respecting the normal cadences of speech and the sounds of the words used as well as the meanings and grammatical functions of the component part (ibid). Created term should also be oriented towards the solution of specific needs, therefore, coining of new specialised terms requires terminographers with specialised knowledge; those who can create credible terms that satisfy the needs of the target users. This contention suits well into the theoretical framework for this study because terminology is both a set of needs and a set of practices to resolve those needs (Cabre, 1992). Therefore, terminographers should take into account the target users and the term creations activities they plan to carry out in order to develop their languages.

In the coining term creation strategy, a term can be formed by referring to its function or behaviour or physical attributes. In other words, terms can be developed by creating them according to what they do, what they look like, and their functions. In the DRN <*chinyamunhari* (cramp p10)>, <*chamunhari* (cramp p6)>, <*nhindivadzi* (anaesthetic p44)> are very good medical terms which were coined according their function and physical

attributes. As can be observed from the examples given above, these coined terms define themselves or are self-descriptive. In other words the target users of the DRN can easily understand the meaning of the term through their form. In support, Pearson (1998) says that, the new term should have a unique denotation within the field which it is used. This shows that in coining the communicative function of the term must take the centre stage.

As have been pointed out by the researcher in previous chapters, when coining new terms, terminographers should adhere to phonological, morphological and syntactical rules of a language. In as much, the DRN compilers applied term formation mechanisms that are compatible to the Shona language as much as possible as evidenced by terms like: <*huro-hurwana* (windpipe, pg 24)>, <*huku- hukwana* (scabies pg 24)>. Furthermore, the development of new specialised terms must involve local people and local language resources, as well as various specialists in technical fields. This is an area where DRN compilers have a shortcoming. The researcher can infer that, the making of this dictionary did not involve people at the grassroots. This is a bottom-up approach, which helps terminographers to come up with created terms that will be accepted by the target users, because they would have participated in their making. Furthermore, in as much as can be, terminographers should use local language resources as much as possible because a foreign term has a capacity to hinder the accessibility of the message, even if it is transliterated.

On the other hand, the researcher noted that, there are some coined terms in DRN which were not given apt definitions; for example, <*bubudza*> was defined as swelling out of breasts, yet aptly, this is a time when a young girl's breasts begin to grow big and in the process they harden and swell as a sign of puberty. Alberts (1999:24) says:

a definition should be aptly presented so as to designate the concept comprehensively. It is only through the definition of a concept that one is really in a position to gain enough information on the concept to be able to name such concept or to coin a term.

It means therefore, that the definitions for the created terms should be clear. In other words, specialised dictionaries should precisely provide definitions of the terms created for the specific field. The definitions should define the created term comprehensively and completely. This enhances understanding the meaning of the newly created term.

6.3.4.1 Reduplication

The compilers of the DRN used some reduplicated forms to create new medical terms as is shown by Table 0-54 below:

<i>bayabaya</i> (stabbing pain) p 2	<i>chirakaraka</i> (uvula) p 11	<i>ndimborimbo</i> (windpipe) p 43
<i>chigwigwigwi</i> (tetanus) p 8	<i>duutuu</i> (imbecile) p 18	<i>ndongorongongo</i> (inflammation) p 43
<i>Chidikadika</i> (uvula) p 8	<i>gwinagwina</i> (convulsions) p 23	<i>nhonho</i> (pseudo pregnancy) p 44
<i>chikwakwa</i> (ringworm) p 9	<i>kataitai</i> (whooping cough) p 27	<i>nyamunganganga</i> (erect penis) p 45
<i>chimwahumwani</i> (little finger) p10	<i>katyotyoto</i> (measles) p 27	<i>zvifazvifa</i> (convulsions) p 67

Table 0-54: Showing the reduplicated forms in the DRN

According to Yule (1996:36) “reduplication is a morphological process by which a morpheme or part of a morpheme is repeated thereby yielding a word with a different meaning. Repetition can, therefore, modify or intensify meaning lexical category. Deducing from the examples given above, this term creation strategy (coining) yields new medical terms and is highly productive in the development of the Shona language. Thus, through coining of new terms, a language is set to change in terms of vocabulary.

6.3.4.2 Overview of Research Participants on Coining

Compilers of the DRN commented that, the coining strategy was the most difficult of all the term creation strategies they engaged, as this strategy required competence on the side of the terminographer; both pragmatic and strategic. There were various terms suggested by group members for specific concepts, of which some were accepted and some terms were discarded so it was difficult to come up with one term easily agreeable by all at once. All in all, it seems coining term creation strategy is more acceptable to users than compounding, and loan translation strategies, judging by the reactions of research participants thereof. The researcher commends the DRN compilers for the coined terms. Most importantly, they did not coin terms just for the sake of it, but provided diversified information about the medical terms and the meaning behind the terms.

Whilst some medical practitioners were satisfied with the coined terms in the DRN, some were not so impressed. Hence, the research participants had mixed feelings towards coined terms in the DRN. Table 0-55 shows the statistics:

Category	Agree	Percentage	Disagree	Percentage
Adequate	23	46%	27	54%
Efficient	15	30%	35	70%
Enriching	37	74%	13	26%
Natural	26	52%	24	48%
Term simplicity	27	54%	23	46%
User friendly	23	46%	27	56%

Table 0-55: Participants' views on the quality of coined terms

Table 0-55 contains the results of an analysis of the research questions that were asked the research participants on the evaluation of the coining term creation strategy. The analysis show that, 54% of the research participants felt that coined terms are generally of less acceptable standards. On the contrary, most research participants (74%) said coined terms in the DRN are enriching as most of the terms represent medical concepts or objects that did not previously exist in the Shona language. Only a minority (26%) said they are not enriching but they did not give adequate reasons why they think so. Some other research participants (46%) think that the terms in the DRN are user friendly to a certain extent, as they allow efficient acquisition (term precedence) of terms by target users and effective and efficient communication. Most medical students (54%) commended the DRN compilers for a good effort, considering the fact that, this dictionary is the first of its kind in Shona. The effort goes a long way in the development of Shona in science and technological terms.

6.3.5 Derivation

Derivation is a morphological process that involves creation of new words from old words, (Spencer 1991). In other words, new terms are coined by deriving items from existing words. Sager (1990:13) postulates that:

... it should be possible to transform a noun into a verb or adjective and it should be possible to use it as a constituent in a compound word. It should be easy to derive formatives from the term...

The derivation term creation strategy is the most common strategy to be found in the production of new words, in many languages, by means of prefixing and suffixing. Suffixes and prefixes are morphemes used to make new words in the language, for example, the morpheme *-tion* changes the verb *<create* into a noun *creation*. The English language, like the majority of European languages, use Greek and Latin words as the basis of deriving terms from a number of disciplines like medicine, chemistry and biology (Hadebe, 2006). The DRN compilers used the derivation term creation minimal in coming up with some medical terms for the DRN as shown by statistics in Table 0-56 below:

Strategy	Derivation	Other strategies
Number of Lexical Entries	27	1218
Total Percentage	2.2%	97.2%

Table 0-56: Showing the Utilisation of the Derivation Strategy by DRN Compilers

Table 0-57 below shows the derivated terms created by the compilers of the DRN:

Existing Word	Derivate	Meaning of Derivated Term
<i>bukura</i>	<i>bukuro p 4</i>	vomit of regurgitated liquid
<i>fenda</i>	<i>fendesa p 20</i>	to anaesthetise
<i>fa</i>	<i>fisa p 20</i>	to anaesthetise
<i>gandi</i>	<i>gandira p 21</i>	scrotum
<i>huro</i>	<i>hurwana p 24</i>	windpipe
<i>jende</i>	<i>jendekufa g 26</i>	incapacitation of testicles
<i>kura</i>	<i>kurirwa pg 28</i>	advanced pregnancy
<i>mwongo</i>	<i>mwongora p 42</i>	bone-marrow
<i>tindivadza</i>	<i>nhindivadzi p 44</i>	anaesthetise
<i>rara</i>	<i>rarisa p 51</i>	to anaesthetise
<i>medza</i>	<i>rumedzo p 53</i>	windpipe
<i>ruma</i>	<i>rumwa p 53</i>	to be infected by an STD
<i>svodza</i>	<i>svodzwa p 69</i>	weakling
<i>shungu</i>	<i>shungurudzo p 57</i>	anxiety, stress
<i>shungu</i>	<i>shungurudzika p 57</i>	to be stressed

Table 0-57: Showing derived terms in the DRN

The derivation term creation strategy fits well in the principles of term creation because they allow inflection of terms by way of prefixing and suffixing. In addition, many related terms can be derived from nouns, verbs and adjectives, as alluded to, in the theoretical framework for this study. The use of the derivation term creation strategy shows the ability of the DRN

compilers to manipulate lexical forms to achieve their communicative aims and goals. It can be claimed that derivation and compounding are productive term creation strategies since they maximise indigenous terms to create terms for foreign or new concepts.

The use of the derivation term creation strategy shows that, DRN compilers were able to use existing lexical resources to create medical terms in the Shona language. Consequently, this implies that terminologists should prefer terms that allow derivability. This enhances the productivity of terms, since many terms can be derived from one term. Thus, the choice of terms by terminographers should allow for the systematic formation of many linguistic forms. It should give room for future concept development. However, preference of indigenous terms should not rule out borrowed terms. Interestingly, the researcher notes that, compilers of DRN derived terms from English terms, although, there is an assertion that one cannot derive terms from borrowed words. Compilers of the DRN derived Shona medical terms from loan terms such as <faint = fenda- *fendesa*>. This shows that foreign words can be used as productive roots for new derivations in the receiving language.

6.3.6 Semantic Expansion

Semantic broadening is the process by which the meaning of a word becomes broader or more inclusive than its earlier meaning. Hence, Cabre adds that:

acquiring a terminological unit would therefore be a dynamic reuse of information already present in the learner's lexicon, and in some cases the partial selection of existing information, the widening of this information or its reorganisation for the active and dynamic construction of what would constitute the meaning of the terminography unit (Cabre, 2003:191).

Broadening the meaning of a word occurs when a word with a specific or limited meaning is widened. Table 0-58 below shows that the DRN compilers used the semantic term creation strategy to create specialised medical terms:

Strategy	Semantic expansion	Other strategies
Number of Lexical Entries	30	1195
Total Percentage	2.5%	97.5%

Table 0-58: Showing the utilisation of semantic term creation strategy

It was noted by the researcher that the compilers of the DRN used the semantic expansion term creation strategy by taking a word from the general vocabulary and giving it a more scientific and technical meaning and consequently making it a specialised medical term. Unlike the DR compilers, the DRN compilers made use of semantic expansion significantly (DRN - 30 lexical entries, DR- 8 lexical entries), as the original meaning of <*kunzira* (on the road, pg 28)> has been expanded to mean to menstruate. Thus, a new meaning has been attached to an existing term by modifying its semantic content. Table 0-59 below shows existing Shona words, whose meaning was semantically broadened so as to yield new medical terms by compilers of Duramazwi Reurapi neUtano (DRN):

Original Shona Term	Original Meaning	New Meaning
<i>kunguva p 28</i>	to the clouds	to menstruate
<i>kunzira p 28</i>	to the road	vagina
<i>rumwa p 53</i>	be bitten	be infected with an STD
<i>gomarara p 22</i>	parasite	cancer
<i>fa musana p 20</i>	dysfunctional spinal cord	impotence
<i>kahuku p 26</i>	a small chicken	measles
<i>kunguva p 28</i>	time	to menstruate
<i>hukwana p 24</i>	a small chick	scabies
<i>kamhandara p 26</i>	a small young lady	medicine to tighten vaginal muscles
<i>kurwizi p 28</i>	to the river	menstruate
<i>marungu p 33</i>	whites	malaria
<i>mbuya p 36</i>	grandmother	measles
<i>musana p 39</i>	spinal cord	amniotic sac
<i>ngwarati p 43</i>	eland	inflation of navel
<i>ravakuru p 51</i>	for the elderly	amniotic sac
<i>nhuta p 45</i>	wild animal	cancer
<i>kutevera p 59</i>	follow	menstruate
<i>nyoka p 48</i>	snake	womb, uterus
<i>bonde p 59</i>	a mat	sexual intercourse
<i>masoja p 33</i>	soldiers	white blood cells
<i>chirema p</i>	cripple	penis
<i>mhuka p 36</i>	wild animal	penis
<i>mhuka p 36</i>	wild animal	cancer
<i>kataitai p 27</i>	fire-fly	whooping cough

Table 0-59: Showing medical terms in the DRN that are semantically expanded

Basing on the examples given in Table 0-59 above, the researcher notes that, DRN compilers were more influenced by cultural taboos where certain biological terms cannot be said

literally or plainly. Hence, they resorted to euphemism tendencies, where by a taboo term is given an existing substitute term, thereby expanding its meaning. This may explain the significant utilisation of this term creation strategy as compared to the utilisation of semantic expansion strategy in the DR. However, semantic expansion has a disadvantage of being in existence depending on the linguistic necessities of the target users. They can either last or disappear as quickly as possible.

6.3.6.1 Overview of research participants on semantic expansion

With regard to the quality of semantic expanded terms in the DRN, the research participants gave varied answers. Table 0-60 below shows their responses.

Category	Agree	Percentage	Disagree	Percentage
Adequate	25	50%	25	50%
Effective	29	58%	21	42%
Enriching	15	30%	35	70%

Table 0-60: Showing perceptions of research participants on semantic expansion

The research participants did not say much on semantic expansion. The most significant finding is that semantic expansion is not a very enriching term creation strategy. Most research participants (70%) noted that, there are no additions of lexical items to the vocabulary, since this strategy utilises words that already exist in language. Hence, it is only the meaning that changes not the number of lexical terms. Nonetheless, the meaning of terms in semantic expanded terms is clouded, because they may have some ambiguity in them, that is, the meaning of the terms may not be so clear because it becomes polysemous, since the term acquires two or more meanings. This is contrary to Kulesza (1989) who says that, the ideal situation should be that, each specialised term has a unique meaning regardless of the context it is in. This is in contrast with general language in which words may have several meanings depending on the context in which they appear. Overall, research participants felt the semantically expanded terms are adequate (50%) and effective (58%) in as much as they fulfil their communicative function. The compilers of the DRN claim that they were not affected or influenced by euphemism. Their main duty as linguists and terminographers was to create terms that mirror usage either explicitly or euphenical. They postulated that if one looks at the created terms in the DRN closely and carefully, one discovers that for every term, we have captured both categories of terms, euphonically or explicitly.

Although this strategy was not utilised to the maximum, the researcher feels that, the engagement of semantic expansion term creation strategy by the DRN compilers show creativity and innovativeness of speakers of a language in an effort to modernise their language. Indeed, the DRN compilers displayed a capacity of creating new terms introduced into the lexicon by foreign medical concepts by repackaging existing Shona terms.

6.4 Synonyms

Synonyms are different words which designate the same meaning. The ideal situation is that synonyms are unacceptable in a specialised dictionary. In a situation where there are many synonyms in a specialised dictionary, the synonyms should be grouped together as they are representing the same meaning. They should not be entered as separate entries. Therefore, the researcher proposes that, synonyms should have been included as a part of the same entry in the DRN, thus, the other synonymous terms were to be entered as alternative representations for the same concept. The popular term in usage should be entered as headwords and the other synonyms entered as alternative terms for the same concepts for example,

Checheudza-(circumcise p7) *kucheka nekubisa ganda rinovhara mberi kwemboro*
FAN chekeredza, cheudza, dzingisa, dzingiso

This could be done for some of the picked examples of synonyms from the DRN, for small finger, imbecile, amniotic sac, bone and prostitute, in Tables below: (The bolded terms are more popular in use, and should have been entered as headwords)

② Small finger

<i>chimunwe p 10</i>	<i>chipfari p 11</i>	<i>karavi p 26</i>
<i>chimwahumwani p 10</i>	<i>kasiyanwa p 26</i>	<i>nyakasiyanwa p 45</i>

② Imbecile

<i>bupununu p 5</i>	<i>duutuu p 18</i>	<i>chinyamabwe p 10</i>	<i>dununu p18</i>
<i>dutununu p 18</i>	<i>Bwarara p 6</i>	<i>dera p 16</i>	<i>nhutuwa p 45</i>
<i>dutururu p 18</i>	<i>chimbendeya p 9</i>	<i>dunda p 17</i>	<i>rema p 51</i>
<i>dutuwende p 18</i>	<i>chimbendeva p 9</i>	<i>fuza p 21</i>	<i>svodzwa p 59</i>

② Amniotic sac

<i>chavakuru p 6</i>	<i>chevakuru p 7</i>	<i>shupa p 57</i>
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<i>bvuo p 6</i>	<i>ravakuru p 51</i>	<i>rusarira p 54</i>
<i>chichenje p 8</i>	<i>musana p 40</i>	

② Bone

<i>bvupa p 6</i>	<i>godo p 22</i>	<i>fupa p 21</i>
<i>bondo p 4</i>	<i>hona p 23</i>	<i>bhonz</i> p 3

② Prostitute

<i>chifambi p 8</i>	<i>fambi p 20</i>	<i>chifeve p 8</i>
<i>chipfambi p 11</i>	<i>pfambi p 49</i>	
<i>chihure p 8</i>	<i>hure p 24</i>	

Table 0-61: Showing examples of synonyms in the DRN

Synonyms result in a “pseudo” larger corpus, In Shona they say ‘*kuverenga mbeva nemiswe yadzo*’, (to over value or exaggerate the total number of things that one has) one may look at the volume of the dictionary and think that there is now a larger corpus of Shona medical terms yet it is full of synonyms; words that are similar in meaning. Similar terms are mounted in the dictionary reducing the rate of Shona language development. They may create confusion to the target users where different synonyms refer to the same concept. In the scientific and medical fields, the meaning of a term has to be monosemic in as much as the terminographers are able to do this.

6.4.1 Synonymys as a result of dialectal variations

Apart from the normal synonyms, it also seems there are synonyms which are caused by dialect variations for example, *chifambi (p8)* - *chipfambi (p11)*, *chavakuru p6*, - *ravakuru (p51)*. This caused the number of synonyms in the DRN to be very high. Compilers confirmed that 497 of these variants and synonyms were entered in the dictionary (Mpofu and Mangoya, 2005:127). Considering that this is a specialised dictionary, the huge number of synonyms and variants is very undesirable and unacceptable, especially when one considers the high qualifications and experience of the DRN compilers. This assertion is premised by the researcher on the view that specialised terms must be univocal and that any kind of dialectal variation must be minimised.

However, the DRN compilers argue that, some of these dialects (Karanga, Zezuru, Manyika, Ndaou and Korekore) have terms more peculiar to them than those of other dialects; and this resulted in several Shona terms where English only has a single standard term so the compilers had considered and entered all the variants to find the most familiar one which should be defined (Mpofu and Mangoya, 2005:127). In response, the researcher feels this is a flimsy excuse, can a Zezuru who says <chipfambi>, not understand a Karanga who says <chifambi>? The researcher feels that the issue of peculiarity of these dialects is not as complex as the DRN compilers want the target readers to believe. The main motivation for the production of LSP dictionaries in the African languages revolves around terminology development, which will hopefully promote the languages so that they may play a more advanced role in education and other specialised domains (Chabata and Nkomo, 2010). This contention aptly puts it that the presence of synonyms in a specialised dictionary is detrimental to indigenous language growth.

6.4.2 Overview of research participants on synonyms

The issue of synonyms in specialised dictionary is a controversial one among linguists and terminographers. Table 0-62 below shows interesting responses from the research participants on the two issues raised by the researcher:

Category	Agree	Percentage	Disagree	Percentage
Elimination of Synonyms	38	76%	12	24%
Standardisation of Terms	24	48%	26	52%

Table 0-62: Showing responses from research participants on the issue of synonyms in the DRN

Statistics in Table 0-62 show that, the majority of research participants (76%) are not comfortable with the heavy presence of synonyms in the DRN, a fact which the compilers do not deny. They explained that, the multiplicity of synonyms in the DRN was caused by disagreements over selection of headwords by the project members. They added that creation and selection of a specialised term would cause some heated debates amongst the participants thereby, causing the whole term creation process to take a long time before an agreement was reached. With regard to this, one of the compilers of the DRN said:

People would fight for the consideration of their dialects. Therefore, instead of

wasting time we just included all the possible terms of a concept resulting in so many synonyms in the DRN. We hope this situation will improve with time as more and more editions are made for the dictionary. Hopefully by publishing the 2nd edition some words would have gained currency over others. Those which have gained currency will remain in the dictionary, and the less popular will go, and that is natural elimination.

Overall, the DRN compilers said that, they support the elimination of synonyms of specialised technology and the standardisation of specialised dictionary terms, and the situation in the DRN was something beyond their control as one of them claimed that:

We considered the target users – specifically the doctor and the patient. One of the major problems was what to include and what to exclude. If all of them were included, the size of the dictionary would be enlarged but the content value would be small. This would also compromise the quality of the dictionary because so many entries would have to be given for the same concept ... On the other hand, there would be a limitation of communication if either the patient or the doctor encountered such terms but cannot find them in the dictionary.

On this note, the DRN compilers have narrowed their target users to doctors and patients only, yet in the preamble, they had categorically stated that, the “dictionary's aim is to provide any easy communication between patients, medical practitioners, medical students and the general populace” (Mpfung et al, 2004: ix). It shows that the DRN compilers eliminated medical students as target users, so as to find an excuse on the issue of so many synonyms in the dictionary. The medical students would not accept the huge presence of synonyms in this dictionary (DRN). More still, the researcher feels that, there is need for the standardisation of the terms in the DRN. Its compilers are highly qualified to have dealt and to deal with the issue in an amicable way. Standardisation of terms makes it easier for language users to adopt the created terms effectively and efficiently.

Some linguists who participated in this study advocated the need for ‘linguistic rights and equality’, asserting that all Shona dialects should be represented in specialised communication. Thus they played down the need to standardise terms in a specialised dictionary. This prompted the creation of too many synonymic terms in a specialised dictionary. However, the researcher feels that, linguists should change this approach so as minimise entries of synonymic terms in a specialised dictionary due to dialectal variations. They should let go the issue of dialectal representation so that the indigenous language may be given a space to develop. A language that has too many synonyms grows slowly because

synonyms may cause confusion to the target user; for there is a multiplicity of terms with the same meaning. Creation of terms for a dictionary should have purely linguistic considerations, without taking into account social issues. It is interesting to note that, while linguists supported the presence of synonyms in the DRN, most medical students (76%) felt that synonyms should be eliminated in a dictionary especially, a medical terms dictionary. They pointed out that standardisation of medical terms should take centre stage, because standardisation of terms plays an essential role, particularly, because safety in the administering of the medical duties is a very important consideration.

The research participants (24%) who accepted the inclusion of synonyms in the DRN argued that, they do not want their dialects to be marginalised just as Doke promoted, Karanga and Zezuru, and marginalised dialects like Ndau, Korekore and Manyika. To this end, these research participants are supported by Batidzirai (1996) who explicated that the goal of the standardisation of the general language is the reduction of dialectal variation by establishing a standard variety, whereas the lexical-discursive development requires the promotion of functional variation. Thus, if a language is standardised ...and this becomes a reality, it will be true that ‘Shona is the language which everyone writes and nobody speaks... Languages are not products residing in grammars and dictionaries, but flexible interactive tools (Ansre, 1971: 691). Furthermore, Valeontis (1997) adds that, terminographers now advocate a descriptive approach with regard to the identification of all possible linguistic variants of a single linguistic form, such that the trend allows for the existence of synonymic expression and term variations, thus rejecting its narrow prescriptive attitude of the past, which insisted on connecting one concept to one term. In as much, the DRN compilers argued that, some of the synonyms in the DRN were influenced by cultural over linguistic considerations. They postulated that, it is important to stress that <*svira*>and <*bonde*> are synonyms which mean a sexual act; but the communicative act of each synonym is different. *Svira* is a direct term for sexual intercourse, whilst *bonde* is a euphemistic way of expressing a worth act of life. For them (the DRN compilers), presenting both the direct and euphemistic terms affords target users with an option to choose a term they are comfortable with when communicating sexual health problems. This scenario proves to be a dilemma for linguists, when considering issues of usage versus prescriptiveness.

Cabre’s (2003) theory of doors shows that terminology, being a component of language and it being a complex phenomenon, can be approached from various angles and by means of

different methods. Any terminographer can lean on this theory, and get a licence to produce as many synonyms as possible in a specialised dictionary. However, in as much as the researcher supports Cabre's theory, it should be pointed out that, whilst this theory allows descriptiveness, it cannot be applied the same across all disciplines. The theory is more applicable in other disciplines like music, language where synonyms can be tolerated but not in the medical field, where preciseness and conciseness of a term is a major consideration.

6.5 Polysemy

Polysemy is generally regarded as the use of the same term with different meanings in a dictionary or the existence of several meanings in a single word. Polysemy requires that terminographers have full knowledge of the etymology of the lexical items in their languages. Those with little knowledge may have problems in entering polysemous lexical items in their dictionaries, since they will not know the distinction between the meanings of the terms. Historically, the reason for the ubiquity of polysemous words is because people have preferred to take words and extend their meaning rather than create new words (Gyori, 2002). This postulation is true, considering that the DRN compilers used existing words for semantic expansion thereby creating polysemous terms. According to Murphy (2004), speakers will economise their vocabulary by extending word senses in order to conserve lexical storage space, and this is known as the law of *least effort*. This means that people extend or expand word meaning because they would be simple utilising resources that exist within the language. They would not want to expend their effort by creating completely new terms for a language.

The researcher argues that the DRN compilers were not objective in as far as use of polysemous words is concerned. They failed to explain distinctively the different meanings being denoted by each polysemous term. They only provided the meaning of the term which connotes medical concepts and ignored the other ones with no medical connotations. A term that has more than one meaning is characterised by ambiguity as single words may lead to multiple interpretations. Therefore, such actions may render the created terms inefficient because this may bring confusion to the target user. The distinct explanations of the different meanings of the term will eliminate the ambiguities. In as much, the researcher strongly feels that the DRN compilers should have provided all the meanings being denoted by the

polysemous terms as illustrated in the given Table below (The researcher provided the second meaning of polysemous terms)

Ngwarati- p 43

1. *chirwere chekuzvimba kunoita ganda remwana mudiki pazasi pechiuno nechemberi* (inflammation of a navel of a young baby)
2. *imhuka inogara musango* (wild animal)

Chirema- p 12

1. *nhengo yemuviri wemunhurume inoburitsa weti neurume* (penis)
2. *munhu anege ane nhengo yemuviri kana nhengo dzemuviri dzisina kunyatsokwana pamamiro adzo* (cripple)

However, the issue of polysemy was not a big issue with research participants as they agreed that a word with two or more meanings within the same subject field should be treated as separate entries in a terminology because the definition of the concept is different.

6.6 Etymology purity

Much debate is placed on necessity for linguistic purism when discussing the issue of specialised terminology for a particular field or discipline. Purism seeks to purge a language of loan words, code switching, and influence from other languages to create a “pure” version of the language for instruction (Canagarajah, 2006). Thus, the inclusion of loan-words in a dictionary generates much interest from the mother-tongue speakers of a language. Since the rural people are part of the target users of the DRN, it would have been ideal to include indigenous terms only. This is reiterated by Magwa and Mutasa (2007) who contends that:

Since the rural masses do not know European languages, obviously the best way of reaching them educationally for purposes of science and technological development is by means of their languages

From the arguments given above, it is evident that the issue of etymology plays a more prominent role of influencing how language is used. On the contrary, however (Cabre, 1998:12) posits that, “in situations involving natural and social communication tasks, such as the development of minorised languages, a communicational approach is required” The argument by Cabre (ibid) shows that when it comes to specialised terminology, people should not have much concerns about etymology purity. They should consider the communicative

function of the terms and this has been discussed by the researcher in Chapter Three, where the theoretical framework for this study is outlined.

6.6.1 Overview of research participants on etymological purity

Basing on information gathered by the researcher, it shows that the research participants are not concerned about etymological purity in the creation of Shona medical terms. From the statistics in Table 0-63, the majority of research participants (90%) felt that the issue of language purity is not a burning issue among target users of the DRN.

Category	Agree	Percentage	Disagree	Percentage
Adequate	43	86%	07	14%
Contaminating	05	10%	45	90%
User friendly	25	50%	25	50%

Table 0-63: Sentiments of research participants on etymology purity

Furthermore, the research participants added that some words are culture specific, and as such, there was no way terminographers could find equivalent terms in the receiving language and so they had no option but to borrow the imported terms. Most research participants (86%) said the medical terms in the DRN are adequate because they allow explicit communication between medical practitioners and patients. On the issue of loan words in the DRN, the majority of research participants (90%) said that, there is need for linguistic diversity because it is through other languages that a people can communicate globally and boost their scientific, technical, economic, political, religious, moral and social and even medical ideas for the well-being of society. One can also get ideas about curing complex illnesses, and in any case, most of medical terms are in English which have developed its scientific and technical lexicon. This is supported by Bernard (1992:8) who expounds that by this reasoning, any reduction of language diversity diminishes the adaptational strength of our species because it lowers the pool of knowledge from which we can draw. The DRN compilers supported this line of thought as one of them said that:

although a group of people may want to maintain the purity of their language, loaning of medical terms from other languages cannot be avoided in the translation of foreign medical concepts. As long as the Shona language is in contact with other languages it will continue to borrow and grow through other languages. We are in a transitional phase, and we will need to borrow scientific and technical terms.

They pointed out that by importing medical terms, they are simply recording the language that people use rather than coin or create equivalent terms which people never use. Clearly language purity seems justifiable on paper, but in reality, it is nearly impossible to maintain a pure language in the face of globalisation (Ndhlovu, 2012). Thus, the researcher observes that, by being descriptive, the DRN compilers are making use of and utilising available lexical resources. They collected existing medical terms, regardless of whether they are loan words or indigenous terms. Ordering of terms should take into account user friendliness and semantic relationships for their accessibility and acceptability by target users.

6.7 Cultural purism

Just like etymological purity, cultural purism influences how a language is used very significantly. Cultural purism is also very dominant in the field of translation as Robinson (1996) posits that, “belief structures, social value systems, literary and linguistic conventions, moral norms and political experiences of the target culture always shape translations.” Furthermore, Kolawole and Salawu (2008:3) explain that “the meaning of a single word or expression is largely derived from its culture”. In as much, in every culture there are some words which are speakable and some which are unspeakable. Although these values generally operate on a subliminal level; they are, nonetheless, a major force in the shaping of each person’s self-awareness, identity, and interpersonal relationships (Scollon and Scollon, 1981). In Table 0-64 below the researcher picked out some examples:

<i>svira p 59</i>	<i>mboro p 35</i>	<i>Mbutu p 36</i>
<i>mukosho p 38</i>	<i>gongo p 22</i>	<i>kumwedzi p 28</i>
<i>mhata p 36</i>	<i>matinji p 34</i>	<i>pazha p 48</i>
<i>jende p 2</i>	<i>dako p 16</i>	<i>Tunda p 62</i>
<i>beche p 2</i>	<i>uronyo p 63</i>	<i>garo p 21</i>

Table 0-64: Showing cultural taboo words captured by DRN compilers.

An analysis for this study shows that, the DRN compilers, were however, not influenced by cultural considerations as they explicit and clearly presented sexual issues, body parts and sicknesses in the dictionary. The compilers have demonstrated that terminologists should not exclude terms they fear could be culturally rejected by the speakers of the language, as they have a duty to society to include the varieties which reflects on usage, and should take into

cognisance the user's demands. Table 0-64 above shows that DRN compilers ignored cultural norms so as to adhere to universal medical which emphasise explicitness. Therefore, cultural values did not override linguistic considerations in the DRN. However, it has been noted by the researcher that there are instances when compilers of the DRN were not as explicitly as the source terms. In addition, some of the meanings of the source language terms were watered down as well, for example, in the definition of the term <*svira* (sexual intercourse, page 59) > was defined as <*kana munhurume achisvira mukadzi anenge akarara naye pabonde* (when a man is having sexual intercourse with a woman, he would be sleeping with her on a mat)>. This definition is not clear and precise for speakers who are not Shona so there is need for explicitness. Controversy and ambiguity for the given definition above for sexual intercourse may revolve around these questions:

- ★ Does it mean that if a male and a female are sleeping on a mat they will always be having sexual intercourse?
- ★ Does sexual intercourse occur on a mat only? What about on a bed, in the bushes, in a car or any other place?

The given Shona definition for sexual intercourse shows that the DRN compilers avoided cultural taboos but at the same time, they distorted the meaning of the term. Culture, therefore, plays a big role and places boundaries on choice of terms that can be explicitly said and not said. Some words are judged unacceptable on social grounds and suppression of unaccepted terms does not mirror usage. This issue is one of the biggest challenges terminographers face in as far cultural purism is concerned. Thus, according to Mpofu and Mangoya (2005) on one hand, the Shona community avoids the explicit terms for cultural reasons whilst, on the other hand, it is mandatory that there be effective communication between patient and doctor.

Furthermore, “some medical terms are based on cultural and societal beliefs”. The DRN compilers included terms that are based on cultural and societal beliefs “to enable young doctors to enhance their understanding of the differences between traditional and Western medicine” (ibid). The definitions given in the dictionary show the cultural beliefs behind these medical terms. Examples are in the Table below:

<*chitsinga* (p 15),-*kurwadza kungaita gumbo kana imwe nhengo yemuviri kunonzi kunokonzerwa nekukandirwa kana kuteyiwa nomushonga wechivanhu unokuvadza* (form of rheumatism)

<*chitsinha* (p14), -*munyama unotadzisa munhurume kuroora kana munhukadzi kuroorwa* (inability to get married caused by bad luck)>

<*sare* (p 55) –*tunyama tunobereka muchibereko chemunhukadzi, tunenge mhopo, tunogona kumutadzisa kubata pamuviri. Tunogona kuchekwa twoisa mushonga, wokwanisa kuuchikwa kuti aite mwana* (Uterine myoma)>.

However, the researcher questions the inclusion of *chitsinha*, *chinzvi*, *chikandwa*, *chipotswa* as medical terms, since these are not clear medical conditions.

6.7.1 Overview of research participants on cultural purism

Very few research participants (14%) felt that the use of the above medical terms diminishes the cultural values of the Shona speakers. Although, these research participants felt that, the use of taboo terms in the DRN undermines their cultural values, they emphasised the need for explicitness of terms in the medical field. In other words, medical terms are governed by the norm of explicitness. The research participants felt that, including taboo terms will not make the DRN to be rejected by target users, because it's a departure from the norm. They were of the view that sometimes it is more important to adopt linguistic considerations than to pursue cultural considerations that sometimes interferes with medical communication to the target user. However, there was some controversy regarding the term <*mhata*> which research participants for this study confirmed that in some parts of Shona speaking Zimbabwe, the term refers to either vagina or anus.

6.8 Attitudes of target users towards the DRN

Shona speaking communities need to understand the relationship between the importance of Shona language development through language use and as compared to using loan words, such that they may regard issues of language development efforts as a worthy cause to resuscitate the vitality of the Shona language. During the process of data collection, the research participants were asked to give their overall perceptions of the Shona medical terms in the DRN. Some participants (24%) were of the view that the created terms were 'functional', that is, they fulfilled their intended purpose among the target users; enabling communication between medical practitioners and patients and knowledge and education to

medical students. Hence, they displayed a positive attitude towards the Dictionary. Table 0-65 below captures the attitudes of target users towards the DRN:

Category	Positive	Percentage	Negative	Percentage
Attitude	38	76%	12	24%

Table 0-65: Showing Attitudes of Research participants on the DRN

The research participants highlighted that, the use of Shona in the medical field is very significant. It shows that, specialised terms and adequate use of these terms, contributes favourably to indigenous language development in all spheres of life. However, some research participants (76%) felt that the created terms do not empower the target users at all but were created to satisfy the needs of the DRN compilers. Judging, by such negative attitudes towards indigenous terms from research participants, the Shona speaking people should be made to understand the importance of their own mother tongue so that they may embrace indigenous sensitivised term creation strategies meant for indigenous language development and for the decolonisation of all forms myths, perceptions and attitudes that continue to threaten Shona language development efforts in Zimbabwe. The researcher feels that this could be done through electronic media, the radio and television. The radio and television can ‘manipulate’ the speakers of the Shona language’s consciousness towards indigenous language development. The 75% local content in all electronic media in Zimbabwe that was introduced in Zimbabwe by the then information and technology (2002), Minister, Jonathan Moyo was a step towards the right direction. The researcher contends that the general outcry of the majority of the people of Zimbabwe against 75% local content signified the extent and level of mental colonisation against indigenous languages in preference of the English language which is of course, very ironic. The media may be able to deconstruct the myth and belief that English is the only capable language to transmit scientific and technical knowledge. Hence, the arguments by research participants who said that they prefer English terms because Shona is a deficient language to express modernity.

However, this view can be contested since time immemorial the Shona language had the capability to express scientific and technical terms; biological terms, agricultural terms, astronomical, terms, geographical terms to name but a few. One has to understanding the impact of colonisation and how it sought to undermine the African people as well as how it

sought to under develop their languages so that they are continually dependent on the borrowed languages for survival and salvation. Thus further strengthening grip on the African continent.

The other contributing factor to the negative attitudes towards the DRN is that the stakeholders were never consulted during the term creation process. According to Madiba, (2000: 329) “terminology work is a collaborative effort: linguists, terminologists, and domain experts work together in committees; they have different knowledge and expertise to contribute to a complex task”. If a top down approach is preferred, the resultant elitist terms will definitely confuse both the learner and the educationist further and further ...Elites are products of a Western education ... they were nurtured in the womb of colonialism (Charamba, 2012:13-14). These dictionaries may face ultimate rejection by the target users as they would be bearing the mark of “colonialism”. Involving all relevant stakeholders ensures that the quality and acceptability of created terms may be improved. As long as the dictionaries that are produced become superior to their predecessors only in terms of contents and ideology, the intended users will find them difficult to use (Chabata and Nkomo, 2010). This makes the use and acceptance of terminology work more difficult to the target users. However, compilers of the DRN argue that, they conducted workshops in colleges and universities in the early 2000s and they received a warm attitude towards their proposal of compiling a Shona medical terms dictionary. In as much, the researcher advises that, the next time the DRN compilers conduct such workshops, they should increase their visibility.

The other issue raised by the research participants is that the DRN was never marketed. Hence, one of the research participants pointed out that,

The fact that this dictionary is not marketed shows it was never intended to be for the target users. Every dictionary is compiled with a purpose and the DRN is no exception, it was compiled to fill in the lexical gaps in the medical field. So if this dictionary is not marketed it means that it is not fulfilling its genuine purpose. Hence, a large number of people are not familiar with this dictionary even the ones who are in medical schools and other institutes of education.

However, the DRN compilers clarified that it was not their responsibility to market the dictionary but it is the responsibility of the publishers of the DRN. The duty of the terminographer in term creation is to identify terms for the purpose of compiling them possibly in form of a dictionary, and it is the duty of the publisher to market the published

product. Marketing is for the publisher not for the compiler. The research participants (42%) further expounded that; if the dictionary was marketed it would assist in helping in societal medical needs. Shona medical terms are easy to popularise, for example, terms on HIV/AIDS are very popular with the general populace, HIV/AIDS patients and medical personnel because they have been popularised by health services. For example, the term *<varimuchirongwa>* meaning those HIV/AIDS patients who are in the programme of being given antiretroviral drugs, *<kujusa (to juice)>* means to be given another batch of Antiretroviral drugs when a patient finishes the last given batch are very popular medical terms in Zimbabwe. The point is that, it seems as if medical terms are easy to popularise in Zimbabwe and the DRN compilers should have taken advantage of this.

The status of the Shona language and other indigenous languages in Zimbabwe is a contributory factor to the acceptance of any indigenous language development efforts, like that of the DRN. Since Zimbabwe attained its independence in 1980, it has not devised a coherent language policy or put in place a language policy that promote the growth of indigenous languages like Shona. The issue of language policy has only received attention from the Government in 2012 when a new constitution for the country was crafted. To this end, the Zimbabwean constitutional language stipulations are as follows:

- ★ Chewa, Chibarwe, English, Kalanga, Koisan, Nambya, Ndau, Ndebele, Shangani, Shona, sign language, Sotho, Tonga, Tswana, Venda and Xhosa will be recognised as official languages in Zimbabwe.
- ★ The State and all institutions and agencies of government at every level must;
 - (1) Ensure that all officially recognised languages are treated equitably; and
 - (2) Take into account the language preferences of people affected by governmental measures or communications.
- ★ The State must promote and advance the use of all languages used in Zimbabwe, including sign language and must create conditions for the development of those languages. (Constitution of Zimbabwe Amendment No 20, section 6, item 3 and 4)

However, it is sad to note that the government of Zimbabwe is yet to implement this policy as English is still enjoying its superior status in every sphere of life. This means that the government is dragging its feet in as far as implementation of these recommendations is concerned. Ultimately the intended language policy and its implementation may not succeed if the attitude of the government remains like it is.

Whilst efforts by ALRI to develop indigenous languages are commendable, the issue of their status needs to be addressed. The researcher feels that DRN compilers should lobby for change of indigenous language status vigorously so that their efforts of producing specialised dictionaries are not rendered worthless. According to Mutasa (2005: 31) “*the right to use one’s own language in the activities of communal life, especially the right of students to use their own languages, even in the education system must be recognised*”. Hence, the government of Zimbabwe must implement a multilingual policy that allows for all indigenous languages as is stated in the new constitution of Zimbabwe.

6.9 Strengths and Weakness of the DRN

The researcher has noted some strength and weaknesses of the DRN as follows:

6.9.1 Strengths of the DRN

The DRN is a dictionary that testifies that any specialised terminology can be developed into Shona scientific and technical language. Thus, this dictionary has contributed to the promotion of Shona medical terms and Shona language development very significantly. Although, it is the first dictionary of its kind, it has given a good example that Shona language can be developed scientific and technological. The DRN also confirms the fact that all languages, being equal, can be used to express any idea, be it scientific or technological. And can therefore be used as language of instruction in the Educational arena. Furthermore, this dictionary is a typical example to show that, various term creation strategies are a decisive factor for the development of medical terms in Shona. As such, the DRN presents useful medical and linguistically information to Shona medical researchers, medical practitioners, patients, and the Shona students, be it in primary, secondary and tertiary education. In addition, the DRN offers a more complete description of lexical entries especially in the compounding and coining term creation strategies so much the users will get the general meaning of the term even before coming to the definition.

6.9.2 Weakness of the DRN

One of the weaknesses of the DRN is that its compilers omitted some very popular medical terms in the DRN. The following is a list of the terms that were identified by the researcher as missing from the DRN:

<i>jondisi</i> (jaundice)	<i>eyiaravhi</i> (antiretroviral drugs)
<i>kusviba mwoyo</i> (lack of appetite)	<i>jusa</i> (to juice)
<i>kuchembera</i> (aging)	<i>sitigima</i> (stigma)
<i>dzima</i> (to be blank)	<i>ofu-reya-</i> off layer (menopause)
<i>dangameno</i> (child who grows upper teeth first)	<i>chibereko</i> (uterus)
<i>chinhu/chiweti</i> (penis or vagina)	<i>bonde</i> (sexual intercourse)
<i>budisa</i> (vomit)	<i>rima kumeso</i> (seeing darkness)
<i>chikutumeno</i> (dental disease)	<i>chirongwa</i> (antiretroviral programme)
<i>kugarira</i> (waiting to give birth at the hospital)	<i>pozitivhi</i> (positive)
<i>dzenga</i> (imbecile)	<i>negetivhi</i> (negative)
<i>tsigisa nhumbu</i> (pregnancy stabiliser)	<i>siidhii 4 kaundi</i> (cd-4 count)
<i>horo</i> (vagina)	<i>donje-kotoni</i> (cotton)
<i>shuga</i> (sugar diabetes)	<i>funganyo/kufunganya</i> (depression)

Table 0-66: Some of the missing medical terms in the DRN as identified by researcher

The other weakness is that medical terms in the DRN are rather limited and there is still a need to add more terms. As such, there is a need for a bigger and more comprehensive dictionary. This is supported by Chabata and Nkomo (2010) who say that, most of those dictionaries are limited in scope, perspective and functionality and hence less effective, now that the languages are being assigned a greater social role. Furthermore, although the compilers of the DRN said they faced a challenge of finding equivalent terms for culture specific words, the researcher strongly feels that, they should have not included idioms in the dictionary. Use of idioms in the DRN for example <*cheukwa netsuro- urema* (barrenness page 7>, is a hindrance on the communicative side of the medical term considering the fact that most young medical students no longer use idioms and proverbs in their vocabulary. They will find it difficult to comprehend some of the medical concepts being conveyed in the dictionary.

The DRN compilers would explain every STD as ‘a disease of sleeping together’ without giving clear definitions, so that target users of the DRN, would clearly comprehend the difference between the types of sexually transmitted diseases. This may result in ambiguity

which at all cost be eliminated in the field of medicine because as discussed above it has “grave consequences”. The DRN compilers should have taken their time so that they construct terms that are adequate and efficient. The medical concepts should be easier to use by the medical students. Table 0-67 below gives a comparative analysis between definitions of STDs as taken from the DRN and from the Collins Dictionary.

Type of STD	Definition in the DRN	Collins Dictionary Definition
<i>gonoriya</i> (gonorrhoea) P 22	<i>Rumwe rudzi rwezvirwere zvinotapurirana varume nevakadzi pavanorara vose pabonde. Mushure mechinguva munhu abatwa nacho anozonzwa ava kusvinyiwa kana kubuda urwa kusikarudzi</i>	Greenish yellow or white discharge from penis or vagina, burning pain when urinating, conjunctivitis-red itchy eyes
<i>Sifirisi</i> (syphilis) p 57	<i>Chirwerechepabonde chinotapuriranwa uye chinogona kuzobata dzimwe nhengo dzemuviri kana chikanonoka kurapwa. Chinogona kubatazve mwana ari mudumbu kana amai vakazvitakura vakaita Chirwere ichi. Kwekutanga chirwere ichi chinoonekwa nechironda nekuzvimba uye kumagumo chaiko chinogona kuzokupengesa</i>	1 st stage starts 3 weeks after exposures with a painless sore that appears on genitals, rectum, the chancre heals on its own. 2 nd stage appears after several weeks. Rash may appear all over the body. One may have headache, fever, fatigue, loss of appetite, weight loss. These may disappear but bacteria remains. 3 rd stage can appear after a year or several years affecting joints resulting in arthritis, can affect brain, nerves, eyes, heart blood vessels, bones and liver
<i>Njovhera</i> (chancroid) p 45	<i>Chimwe chezvirwere zvinotapukirana vakadzi nevarume pavanosangana pabonde. Chirwere chinoonekwa nechironda pasikarudzi kubuda zvichena zvinonhuwa kana kuswinya uchiramba uchikwenya kwenya pamberi</i>	Appears 4-10 days after infection, with open sore on the penis or opening of the vagina. Sores may produce pus and be painful. Swollen glands in the groin

Table 0-67: Giving a comparative analysis of definitions from the DRN and Collins dictionary.

The DRN compilers should have included information like the gestation period of the STD clearly stating the symptoms that separate each different kind of STD. In the DRN symptoms are more or less the same, there is a need to add more information for clarity.

6.10 Conclusion

The use of coinage in the DRN is a very effective and important term creation strategy for developing new medical lexical items in the Shona language. This strategy requires maximum participation of all the stakeholders, otherwise created terms will be regarded as elitist and the target users may fail to embrace them. The borrowing term creation strategy makes the indigenous language to be abreast with the development of language globally, in terms of Science and technology. In addition, it increases the vocabulary of a language as new terms are added into the lexicon as loan words. This chapter has shown that most borrowed lexical terms in the DRN are transliterated to suit the demands of the receiving language for acceptability by target users. Although, on one hand, the researcher holds the view that, borrowing of terms cannot be avoided in indigenous languages which have limited terminologies, she on the other hand condemns uncritical importation of loan words into Shona language.

This chapter has also shown that DRN compilers used the loan translation term creation strategy to import the meaning of a borrowed medical term and assigned a new meaning to it. This is done through a method of literal translation whereby the borrowed term is transliterated by using lexical resources available in the Shona language. The major disadvantage of this strategy is that it is not productive as it does not increase the vocabulary of a language, but the definitions of borrowed terms. The researcher has noted in this chapter that the target users of the DRN are not very comfortable with loan translation. However, they pointed out that, the definition makes them to have a clear understand the meaning of the borrowed term. Furthermore, this chapter has identified that the compounding term creation strategy is a very productive term creation strategy. However, because of its long, cumbersome and awkwardness, it faces stiff competition from borrowed terms which are short and apt in construction. In as much compounded terms may face rejection by the target users.

The derivation and semantic expansion term creation strategies were effectively used in the DRN. However, it has been noted by the researcher that the main disadvantage of these term creation strategies is that they slow down the scientific and technical growth of the Shona vocabulary, since no new scientific and technical terms are added to the Shona vocabulary. However, all the above mentioned strategies have the potential of giving a significant growth

and development of Shona medical terms, if they are utilised perfectly.

The target users of the DRN are not concerned about issues of etymological purity, because its consideration may lead to language impoverishment. Another significant finding is that, there is a huge presence of synonyms and polysemy. This self-defeating because these term creation strategies just increases the meaning of terms not the number of Shona lexical terms in the medical field.

Although the positive factors are out-weighed by the negative ones, the DRN compilers did a splendid job of creating medical terms for the dictionary since it is the first dictionary of its kind. Thus, the compilers have laid a foundation for Shona medical terms for better things to come. The Researcher feels that, efforts by terminographers, will maybe lead Zimbabwean government to reconsider its languages policies towards the role of indigenous languages as a tool of disseminating knowledge in Zimbabwean schools and colleges.

7.1 Introduction

The last two chapters presented research findings, analysis and discussions of the medical terms and the musical terms dictionaries. This chapter continues with the discussion and of research findings for the third dictionary under analysis; *Duramazwi reDudziramutauro neUvaranomwe* (DRU). Lexical productivity of each strategy utilised in this dictionary is discussed, taking into cognisance the perceptions and attitudes of research participants. As such, an overall picture of the term creation strategies used in the three dictionaries under study is highlighted by the researcher.

7.2 The Dictionary Compilers

This dictionary was published in 2007 by Mambo Press. It was compiled by Herbert Chimhundu and Emmanuel Chabata. Most of their terminological publications are captured by the researcher in chapter six; and as such, they are not going to be outlined in this chapter as this is regarded as a reduplication of effort. However, all their works are under the auspices of the African Lexical Research Institution (ALRI). This brief historical background has been given so that this study will use this information to analyse and assess the term creation strategies in the DRU.

The dictionary compilers gave three major reasons for compiling the dictionary of linguistics and literature terms which are:

1. *Kupedzisa zvachose tsika yekuita masanganiswa emitauro pakudzidziswa nekunyorwa kwechiShona.* (To end completely the system of code switching during the teaching and writing of Shona lessons from the secondary school up to university level. (Chimhundu and Chabata 2007: xiv).
2. *Kudzidziswa kwechiShona nechishona pamatanho ose kusvikira kumayunivhesiti.* (To make the Shona language the medium of instruction in all Shona subjects from primary up to university learning. (Chimhundu and Chabata, 2007: xiv).
3. *Kunyorwa kwamabhuku ezvidzidzo zveatanho ose nechishona chete ...* (To produce all linguistic textbooks in the Shona language (Chimhundu and Chabata, 2007: xiv).

In order to achieve their aims and goals, the researcher considers that the compilers should create qualitative linguistic and literature terms, the DRU compilers must be knowledgeable of linguistic features and their characteristics. This knowledge assists them to select term creation strategies that are adequate, acceptable, accessible, effective and efficient.

7.3 The target users

The target users are disseminators of the created terms, language change agents and knowledge brokers. In the case of this Dictionary Duramazwi Remutauro neUvaranomwe (DRU), the target users are mostly high school students who study the Shona language and university students in Zimbabwe who are doing African languages. Firstly, the DRU created terminology in the teaching of Shona grammar and literature as a subject from secondary school up to university level (*kutangira pasekondari zvichikwira*). The researcher hopes that the DRU's is going to address some of the concerns of Shona deficiency of linguistic terms and literature terms.

7.4 Term creation strategies in the DRU

The term creation strategies used in the DRU are illustrated in Table 0-68 below:

Strategy	Loan Translation	Borrowing	Coining	Derivation	Compounding	Semantic Expansion	Indigenous
No of Entries	471	43	106	77	229	48	465
Percentage	32.7	3.0	7.4	5.4	15.9	3.3	32.3
Total Entries							1439

Table 0-68: Showing utilisation of various term creation strategies in the DRU

Just like the compilers of the Shona musical terms (DR) and the Shona medical terms (DRN), the compilers of the Shona literary terms and literature (DRU) used the loan translation, borrowing, compounding, coining, derivation, and semantic term creation strategies. Statistics on Table 0-68 show that loan translation was the most used term creation strategy followed by compounding, then coining, derivation and the least used is semantic expansion.

7.4.1 Borrowing

Borrowing of linguistic and literary terms in the DRU took place mainly from the English language. The borrowed terms were nativised so as to incorporate them into the indigenous system. It should be stressed that created specialised terms ought to satisfy the principles of morphological resemblance to the target language for acceptability by the speakers. In as much, borrowed terms should adhere to the structure of the receiving language; morphological and phonological and grammatical.

Related literature has shown that transliteration of borrowed terms helps to develop the language. It has been noted by the researcher that, unlike the DR and DRN compilers, the DRU compilers borrowed minimal English linguistic terms as much as possible. The DRU compilers controlled the use of borrowed lexical items because they wanted to promote the growth of the Shona language. The Table 0-69 below shows the statistics for the borrowing term creation strategy by the DRU compilers:

Strategy	Borrowing	Other Strategies
Number of Lexical Entries	43	1396
Total Percentage	3.0%	97%

Table 0-69: Showing the utilisation of borrowing in the DRU

The borrowed Shona linguistic terms conform to grammatical rules of the Shona language and this includes all the phonological, morphological and lexical adaptations of the loan words. For example:

alphabet	<i>arufabheti p 1</i>	morpheme	<i>mofimu p 94</i>
database	<i>dhatebhesi p 53</i>	spelling	<i>chiperengo p 24</i>
cartoon	<i>katuni p 77</i>	phonology	<i>fonoroji p 68</i>
correction	<i>korekisheni p 77</i>	examination	<i>zamanishoni p 182</i>

Table 0-70: Showing the nativisation of borrowed terms in the DRU

On the positive side, transliterated terms are readily available since nothing more is needed than the necessary morphological and phonological adaptation of the term in the source language. However, as has been presented in chapters five and six, such terms are

regarded as ‘elitist’ because only an educated audience would appreciate them. Hadebe (2000) says that when there are two terms, one indigenous and the other one English, the tendency is to borrow the English term. Conversely, the DRU compilers did not do that for the whole dictionary is mostly Shona terms. This shows a great determination by the compilers to minimise foreign influences on the vocabulary stock of Shona language and to develop and promote its use in all spheres of life.

7.4.1.1 Borrowability

Just like in *Duramazwi Remimhanzi* (DR) the noun is the most borrowable part of speech from any foreign language. This shows that, the noun is the easiest to borrow from one language to the other. Below are the statistics of the borrowability pattern in the DRU:

Type of borrowed term	Nouns	Verbs
Total no of lexical entries	37	6
Percentage	86%	14%

Table 0-71: Showing borrowability of terms in the DRU

It has been postulated by Chimhundu (2002), Thomason (2001), Poplack and Meechan (1998) and Mysken (2002) that such a type of borrowing as shown in the Table above, leaves the lexicon intact such that the borrowing language is not corrupted by the loan terms. The borrowing of English musical terms into the Shona musical terms dictionary resembles a stable language contact scenario as illustrated in the Table above. The total body of adoptives in a language gives us a fair picture of the material and other culture its speakers have acquired from outside their own group (Chimhundu, 2002:230).

7.4.1.2 Overview of research participants on the borrowing term creation strategies

In this contemporary society, it is unthinkable to carry out any term creation activities without considering the perceptions of the users towards the created terms and their real use. The target users are the end users or the consumers of terminological development efforts. Borrowing of terms is a very productive term creation strategy because it results in a faster growth of the number of the lexical terms thereby increasing the volume of the Shona vocabulary. Table 0-72 shows the responses from research participants on borrowing term creation strategy:

Category	Agree	Percentage	Disagree	Percentage
Adequate	55	69%	25	31.%
Effective	36	45%	44	55%
Efficient	42	53%	38	47.%
Enriching	45	56.%	35	44%
Appropriate	40	50%	40	50%
Empowering	45	56%	35	44%
User friendly	52	65%	28	35%
Contaminating	25	31%	55	69%

Table 0-72: The Responses from research participants on borrowing term creation strategy

Most research participants (50%) felt that the borrowing term creation strategy is appropriate in the sense that modern terms are used so there is no need to create terms that are difficult to understand when there are other terms that are already in use.

Furthermore, research participants (69%) were of the view that borrowing does not contaminate indigenous languages. However, they contended that it keeps the indigenous languages up to date with the latest linguistic developments taking place the world over, especially, in the scientific and technological terminologies. In addition, statistics show that most research participants (56%) feel that borrowing results in the increase in the volume of the vocabulary through the conversion of foreign lexical items into loan words in the Shona language. The research participants (53%) also further said that, because Zimbabwe is a multilingual state, with sixteen languages, the English terms which are universal are easily understood by the speakers of different ethnic languages. Therefore, the loan terms help in the understanding of the same concepts by the various ethnic languages, unlike if the term is only in the Shona language. However, others dismissed this assertion; saying it is the growth of the Shona language that is of paramount importance, not the other ethnic languages. Borrowing of linguistic terms from other languages is a functional practical approach to term creation, just as Chimhundu (2002) confirms when he says that, the primary motivation of language development has always been need filling. Thus borrowing is seen as a way of responding to the most urgent practical needs of the language communities. In any case, the Shona language is deeply influenced by the English language which permeates into every aspect of the students' lives, so it does not matter much if scientific and technical terms are borrowed from the English language.

Conversely, other research participants (69%) felt that the continued use of borrowed terms from the English language show that people are still mentally colonised, therefore, use of the master's language is a form of neo-colonialism. This contention was dismissed by some of the research participants (56%) who argued that we are now in a global village where the English language reigns supreme. Use of English terms empowers the speakers of the Shona language scientifically and technically because the Shona language is limited in as far as its usage is concerned and this does not promote scientific and technical research. As such, borrowing is an essential component of any language development initiatives. The research participants (44%) who are against the act of borrowing terms from other languages like English further argued that, borrowing and transliteration of English terms into the Shona language results in a hybridised Shona language which is unacceptable. By giving English term some Shona grammatical features, the Shona community is thus, creating a brand new means of communication which we can safely call Shonglish. Furthermore, even if most of the terms borrowed from the English language could be transliterated into the Shona language, it can be argued that the words still remain 'English' and this shows the dominance of English over other languages, this is a consummated fact that has to be accepted by anybody concerned with self-reliance of the Shona language. On the other hand, it can be explained that a transliterated term is of little value in cases where the target user has not yet internalised the concept represented by the term, since transliterated terms provide no clue to conceptual content.

The researcher reiterates the sentiments of the majority of the research participants as she feels that there is no strong reason why the Shona language should not borrow from other languages like English. However it should not be done to satisfy the needs of the elites of a society, rather it should consider the needs of all the speakers of the Shona language. Borrowing is also inevitable because of the contact situation Zimbabwe finds itself in. Issues of etymology purity should be of less consequence if the Shona language is allowed to grow. However, the borrowed terms violate term creation principles of pronounceability of term, uniformity and euphony.

7.4.2. Loan translation

Loan translation refers to coining of words or phrases for a meaning of a new concept coming

into a language. Translation is a process of transferring meaning from the source language to the target language by maintaining balance of meaning in the two languages (Nhira Mberi and Mazuruse, 2012). Loan translation usually occurs in phrases where only the meaning or the sense of the foreign term is taken. This view goes hand in hand with the perception of “language as a kind of action” where the meaning of linguistic forms is understood to be words or specialised terms. This means that linguistic forms can be activated in different ways, and all depends on the language involved and as well as observing term creation rules and guidelines. The DRU compilers used loan translation to create linguistic and literature terms for the dictionary as is shown in Table 0-73 below:

Strategy	Loan Translation	Other Strategies
Number of Lexical Entries	471	968
Total Percentage	32.7%	67.3%

Table 0-73: Showing the utilisation of the loan translated strategy in the DRU

As can be observed from the statistics above, there was an extensive use of loan transition term creation strategy by the DRU compilers. It seems as if the DRU compilers were enticed by the simplicity of the loan translation term creation strategy in such a way that whenever they encountered a loan word which they could not find an equivalent in the Shona language they just resorted to loan translation. However, the researcher notes that the loan translation term creation strategy complicates language development efforts of building a Shona scientific vocabulary which is systemic coherent to modern science needs of brevity of term, conciseness and term simplicity.

Loan translation can lead a concept to being completely distorted in the sense that some scientific explanations are difficult to define, hence specialised terms must be standardised to avoid terminographers defining the same concept according to their different comprehensions and understanding of the loan term. In other cases it is not clear whether a term is being used in its general or in its specialised meaning. This causes a lot of confusion to dictionary target users of the dictionary. As a result the target users can then replace the meaning of the loan term with their own creations, and this creates problems of synonyms and polysemy which is highly undesirable in specialised communication.

7.4.2.1 Overview of research participants on the loan translation strategy

Table 0-74 below shows different responses given by research participants on the various categories during the data collection activity for this study. As can be seen from the statistics on the table, this term creation strategy did not receive a favourable outcome from research participants:

Category	Agree	Percentage	Disagree	Percentage
Adequate	22	28%	58	72%
Effective	28	35%	52	65%
Efficient	19	24%	61	76%
Enriching	25	31%	55	69%
Appropriate	29	36%	51	64%
Term Simplicity	27	34%	53	66%
Less expressive	20	25%	60	75%
User Friendly	22	28%	58	72%

Table 0-74: Responses of research participants on loan translation term creation strategy

Specialised terms created through loan translation in the DRU are not adequate. Most research participants (72%) felt that the loan translation term creation strategy may interfere with the development of the Shona specialised terminology more specifically, in the adaptation and natural fixation of scientific terminology. The participants further argued that, the terms are lexically loaded, and are sometimes vague hence, they are difficult to remember and to internalise. In other words, this does not allow the dictionary user to acquire and internalise the loan translated terms in a more natural way, which does not require the user to apply great memory efforts. Furthermore, the research participants identified some cases where DRU would not give examples of the loan translated terms for the benefit of the target users. The research participants identified the following terms <*chidavado p 8, chibhende p 7, bembera p 2, chiratidzamupanda p 29*> among others, where the dictionary compilers gave a comprehensive definition of the terms without giving an example to further clarify their point. This shows that at times the DRU compilers did not consult subject specialist so as to enhance adequacy of the created terms.

The researcher supports the sentiments raised by the research participants as she identified some loan translated terms which are not and may not be clear in meaning to the target users because of mistranslation of the meaning of the loan word. In the Table below, the researcher

gives some examples among others of loan translated terms that she feels are ambiguous or lack precision of meaning.

Loan phrase in the DRU	Meaning of the loan phrase	Suggested loan phrase
<i>Maitiro emutambi munyaya p 84</i>	character /personality	<i>unhu hwemutambi munyaya</i>
<i>Kusundidzirwa mberi kwedingindira p 79</i>	development of theme	<i>kupetenuka kwedingindira</i>
<i>Maburitsirwe evatambi p 80</i>	characterisation	<i>Kuburitswa kweuumbwa hwevatambi</i>
<i>Fananidzo inoshandura p 65</i>	metaphor	<i>fananidzosiri</i>
<i>Mugove wemakisi p 97</i>	Allocation of marks/ marking scheme	<i>Kugovewa kwezvibozwa/ zvibodzwa</i>
<i>Mutauro unoshandiswa pamutemo p 109</i>	National official language	<i>Mutauro wenyika uri pamutemo</i>
<i>Nganonyorwa yepasi richine upambevhu p 118</i>	Colonial novel	<i>Nganonyorwa yepasi rose panguva yeupambevhu</i>
<i>Nganonyorwa yepasi risina upambevhu p 118</i>	Pre-colonial novel	<i>Nganonyorwa yepasi risati rava neupambevhu</i>

The researcher feels that these are some of the cases of mistranslation of loan terms as they fail to adequately capture the original meaning of the source terms. Lack of clarity of meaning can lead to ambiguity and as a result the created term is not precise. However, the researcher notes that not all the loan terms in the DRU were mistranslated as some loan translated terms were aptly captured, for example:

<i>Musoro webhuku p 101</i>	Title /topic
<i>Manzwiro omuverengi p 86</i>	Feeling of the reader
<i>Kusimudzirwa kwemutauro p 78</i>	Language development
<i>Kusiyana kwemutauro p 78</i>	Language variation

The example above shows that in some cases the DRU compilers created very effective and efficient loan translated terms. However, the two sets of examples given by the researcher above showing inadequacy and adequacy of the loan translated terms in the DRU show that the DRU compilers lacked consistency in the way they created the loan phrases or in the way they conducted the loan creation activities. Thus, the researcher argues that the loan

translation term creation strategy in the DRU is typically carried out in a haphazard manner and depended largely on a non-systematic creation of linguistic and literal terms by the dictionary compilers. The researcher feels such actions and tendencies should not be done by linguists who are committed to develop and promote Shona scientific and technical terms in Zimbabwe. Furthermore, in some cases, the researcher identified some loan translated terms which she argues that are clearly incorrect and these have been included in the dictionary, for example <chinongedzazita chepedo (near demonstrative)>. The researcher calls upon the DRU compilers to reconsider the use of this term because it does not make sense at all to the target reader. The purpose of all qualificative (zvidudziramazita) is to give more descriptive information about a noun for example, <*mukadzi (zita) mupfupi (dudziro)*>< a short (description) woman (noun)>. So in this sense, chinongedzazita is neither here nor there in terms of giving a description because the literal sense of the term can be taken as <to point at a noun which is near >.

Furthermore, the researcher notes that the major problems or challenges of loan translated terms are that they bring about a loss of brevity and clarity of the created term. At times the created terms are not clear in such a way that, there is no distinction between general terms of a language and the specialised terms that are to be used in specialised subject fields or disciplines within a language community. Thus, “scientific and technical communication realised by special languages differs from the texts used in general communication in these respects: semantically, they are concise, precise and not personalised” (Cabre, 2000: 50) and the specialisation condition is a condition that communication must comply with in order to be considered a special subject discourse (Cabre, 2000: 52). In other words, application of the term creation guidelines and principles gives clarity between the general lexical terms that do not realise the specificities of the specialised communication and specialised language that realise the specificities of the specialised communication. Thus, in order to have realised adequate specialised terms for all created terms in the DRU, the compilers of this dictionary should have skilfully applied the recommended terminological principles. Compliance of the principles is needed so that terms are adequate and they enable the target users to be able to easily understand information being given for concepts and their related terms.

The sentiments of the researcher were reiterated by some of the research participants (66%) who highlighted that, the loan translated term should be elegant and natural, so as to be compatible with term creation principles and guidelines of accuracy, brevity, and efficiency of a term. As it is, the DRU compilers violated these term creation principles and

requirements, and this seems to be a deliberate act judging by the massive number (471) of loan translated terms in the DRU. This big number of loan phrase shows that the compilers failed to create term phrases that can function as a whole with one specialised meaning. This phrasal structure is fixed in the language and lexicalised, becoming a word or term (Maillot, 1997: 138-148). It can be highlighted that the created terms are given terminological value when they meet communicative function to satisfy the needs of the users (Cabre, 2003) and also the terminological principles and guidelines (bid). In other words while maintaining descriptiveness in term creation, the principles and regulation should be respected.

The concerns raised by the research participants are similar to those that were identified by the researcher, as having a negative impact on the growth of the Shona Scientific vocabulary. The researcher believes that the large number of loan translated lexical items in the DRU is partly as a result of lack of expertise on part of the compilers, because the loan translation strategy, terminologists are only involved in translating the meaning of existing loan translation. Thus, there is not much linguistic effort that is expended by the DRU compilers in the loan translation term creation strategy. Furthermore, this laxity is compounded by the fact that there is lack of a “neutral” language board to monitor the term creation activities in Zimbabwe. The neutral language board is needed so that it will provide a monitoring service so as to improve the quality of published works meant for the developing indigenous languages such as Shona. The major aim of the board will be to assist with the development and modernisation of the technical vocabularies of all the indigenous languages in Zimbabwe. It is the language board that should rate, recommend and guard against publication of inadequate works for public consumption. The research argues that ALRI cannot monitor term creation activities in a neutral way, because most specialised dictionary compilers are at the helm of the Language Boards. With such a set up therefore, ALRI cannot fairly monitor and evaluate their own works which they go on to publish even if the publication are not worth their salt.

As such, the government of Zimbabwe, language experts, linguists, terminographers and lexicographers should seriously think of establishing a national language board, which would monitor the issues of indigenous languages’ development works without fear or favour. The researcher therefore calls for a training of language experts so as to gain skills to monitor and evaluate every language development effort to develop the Shona language in Zimbabwe. In that way dictionary compilers will be made accountable for their work. In terminography, this may improve the quality and adequateness of scientific and technical terms needed for the

development of the Shona language. Thus the more a terminology policy is adhered to from the beginning, the more likelihood of the acceptance of the specialised terms by the target users can become.

Although in all likelihood it is difficult to create a perfect term, the researcher argues that, it is possible to create specialist terms that are anyway less vague. What is needed are specialised terms, in this case that can be realistically and uniformly used in the education system. So in this case the researcher suggests that instead of overly depending on loan translation, the DRU compilers could have engaged other term creation strategies like derivation, coining and compounding equally the same. Obviously, according to sentiments raised by research participants, loan translated terms present challenges for the teaching of the Shona language grammar and literature before even considering constraints of cultural purism, attitudes of the target users, complacency from the Zimbabwean government towards the Shona language development efforts and lack of resources among others.

The major reason for extensively resorting to the loan translation term creation strategy, according to the DRU compilers, was to run away from direct borrowing. They added that they prefer loan translation as a positive term creation strategy for acquiring foreign linguistic and literature concepts originating within foreign languages and cultures. Of course this is a noble idea since preservation of one's language is of paramount importance. However, as reiterated by the researcher earlier on, this term creation promotes laziness since the job of the terminographer is to just simple render the loan into the Shona language through translation. They argued that the main advantage of loan translation is its descriptiveness and transparency of the terms. Hence, the target users can comprehend the meaning without further consulting other sources. However, the researcher argues that the longer paraphrases may complicate the whole communication process, in the sense that they maybe some distortions and mistranslations along the way. Thus, because of the importance of accuracy, any term that is not accurate and precise is sufficient ground for its rejection by target users. Thus this term creation strategy becomes a 'compromise' solution to rectify the deficiency of scientific and technical terms in the Shona vocabulary. From all the arguments given in this analysis, it became very clear to the researcher that the use of loan translation as a term creation strategy is a contentious issue and a topic of much, and sometimes heated debate. Since only the meanings of the foreign lexical item are added to existing indigenous lexical items, the researcher considers this term creation strategy as highly unproductive.

7.4.3 Compounding

It is evident from statistics in Table 0-75 below that the DRU compilers used the compounding term creation strategy in the dictionary:

Strategy	Compounding	Other strategies
Number of Lexical Entries	229	1210
Total Percentage	15.9%	84.1%

Table 0-75: Showing the utilisation of the compounding term creation strategy

The Table above shows that the DRU has a total of 229 compounded specialised terms. Such a term creation endeavour is commendable as it enables vast development of the Shona language. As a result of this effort by the DRU compilers, Shona grammar, and literature, in many cases are now being taught and examined in the Shona language. The researcher considers that the terms created through the compounding term creation strategy are meaningful and very significant to the Shona language development, since the use of the Shona as a medium of instruction from secondary level up to university level is a crucial steps to achieving Shona language autonomy. This is crucial for the development of specialised terminology from all different places and also for its diffusion in society through the educational system.

Most of the compounded terms are self-descriptive or self-contained in the sense that the term itself explains its meaning. It can be argued that the compounding term creation strategy, if fully utilised, has the capability of producing numerous new terms for a language. Hence, compounding is an important area in term creation or morphological processing in the Shona language, because it has the greatest amount of flexibility and creativity, as far as term creation is concerned. This system is one of the most frequent and robust strategy found cross-linguistically term creation. The compounding term creation strategy has an advantage in the sense that it can mostly generate a lot of lexical terms with resources of the same language. Hence, the compounding term creation strategy is very productive.

However, although the researcher commends the DRU compilers for productively engaging the compounding term creation strategy to create terms for the dictionary, there are instances where some of the created terms are vague and less expressive. In the Table below the

researcher gives examples of such compounds and at the same time suggested some compound terms that she feels may aptly capture the intended meaning:

Compounded term	Meaning of compound	Suggested term
<i>dongoreramberi p55</i>	flash forward	<i>mhendamberi</i>
<i>dongereramukati p55</i>	interior monologue	<i>mhendemukati</i>
<i>dongorerashure p55</i>	flashback	<i>mhendashure</i>
<i>dongoreragotsi p55</i>	flashback	<i>mhendashure</i>
<i>dzinderebeswa p61</i>	extended radical	<i>rebesamudzi</i>
<i>ravandinyore p145</i>	dictation	<i>taurandinyore</i>
<i>mafadzanhema p 82</i>	propaganda	<i>manatsanhema</i>
<i>bvekaunhu p 9</i>	personification	<i>bvekaumunhu</i>
<i>musiyapadiki p103</i>	unsatisfactory performance	<i>mupakurambodza</i>

However, it is emphasised by the researcher that, despite the negative attitudes placed upon the compounded terms in communicative approaches, the case remains that speakers of a language necessarily should continue to create their own specialised vocabulary from their own resources especially utilising the compounding term creation strategy. This strategy has got the potential to uplift the functional value of the Shona language. However, the lack of standardisation of the terms in this dictionary is still a big challenge and impediment for the development of the Shona vocabulary.

7.4.3.1 Combination patterns in compounding

It has been explained by the researcher in the previous two chapters that compounding is a combination of two or more words in the form of a noun and a noun, a noun and a verb, a verb and a verb, a noun and an adjective, nominal compounds etc into one lexical unit. In the DRU this distribution pattern is reflected in Table 0-76 below:

Type of compounding	Number of Lexical Entries	Percentage
Noun +noun	69	30.1%
Noun +verb	146	64%
Verb +verb	07	3.1%
Shona +English	01	0.4%
English+ English	02	0.9%
Nominal compounds	02	0.9%
Total number	229	100%

Table 0-76: An overview of the compounding strategy in the DRU

Of these combination patterns, the most productive is the noun and verb combination. This has been confirmed in the DR and the DRN as well. Thus, it is often difficult to determine

what compounding patterns to produce new words, terminographers may capitalise on the most common in a given language. In the case of the Shona language terminographers may capitalise on the he noun plus verb and noun plus noun compound combinations to create as many specialised terms as possible.

7.4.3.2 Reduplication

According to Yule (1996:36) “reduplication is a morphological process by which a morpheme or part of a morpheme is repeated thereby yielding a word with a different meaning”. The reduplicated forms are presented in Table 0-77 below:

<i>chidikadika p 9</i>	<i>chingerengere p 187</i>	<i>manhengatenga p84</i>
<i>chidikwadikwa p 9</i>	<i>chizvizvino p 50</i>	<i>mhishapisha p 93</i>
<i>chigumegume p13</i>	<i>hochekeche p 71</i>	<i>chin'an'a p 20</i>
<i>chimanjemanje p 18</i>	<i>mapishapisha p86</i>	<i>zvieraera p187</i>

Table 0-77: Showing the reduplicated forms in the DRU

Thus repetition of terms strategy (coining) can also yield new specialised terms and is highly productive in the development of Shona language. Repetition can, therefore, modify or intensify meaning lexical category. As such, compilers of DRU reduplicated existing Shona lexical forms to coin new medical terms for the dictionary.

7.4.3.4 Overview of research participants on the compounding strategy

Table 0-78 below shows the perceptions of the target users on the compounds in the DRU:

Category	Agree	Percentage	Disagree	Percentage
Adequate	38	48%	42	52%
Efficient	29	36%	51	64%
Effective	26	32%	54	68%
Enriching	54	68%	26	32%
User friendly	39	49%	41	51%
Too long	56	70%	24	30%
Vague	45	56%	35	44%

Table 0-78: Perceptions of the research participants on compounds in the DRU

The perception reflected on Table 0-78 shows that the compounded terms are less accepted by the target users. This reality is not pleasing at all; considering the fact that the

compounding term creation strategy is very productive and is capable of producing as many specialised terms for the Shona language as is possible. The compounding term creation strategy has an advantage in that it is common and highly productive; new compounds can be readily formed and understood by the speakers of a language.

Most research participants (68%) felt that the Shona language is a living and vital language that has the ability and capability to match any other in the world for expressiveness of scientific and technical terms. The research participants identified the compounding term creation strategy as being very enriching, and capable of lexical expanding the Shona language to greater levels. The research participants further argued that the rejection of compounds by the target users may be regarded as a lack of what may be termed the 'effective right to save their languages and cultures' (Mutasa, 2006). The effective right is regarded in this study as a means to have access to the strategies, and utilisation of the people's own resources so as to resist the dominance of the English language over indigenous languages. Thus it is intriguing that other research participants (70%) regarded the compounding term creation strategy as inefficient, ineffective, not user friendly, and vague. This is very sad indeed because this attitude shows that no matter how good the compounded terms are, they will remain just as they are; created terms unless they are accepted and fully utilised by the target users. Hence, a language can only be developed if the mother-tongue speakers of such a language work together to give the language a functional value.

Although the compounding term creation strategy is closely related to paraphrasing, it can be regarded as being more transparent than the loan translation term creation strategy, though in some cases, transparency needs to give way to term economy, shortness and preciseness. Hence, the researcher regards it as a more appropriate term creation strategy than loan translation. At least it shows creativeness, improvisation skills and innovativeness of terminologists more than the loan translation strategy in so many ways.

7.4.4 Coining

Coining is the creation of new words that have not existed in a language before. Creation of completely new scientific and technical terms in Shona is of paramount importance and has positive implications for the indigenous language growth and revitalisation. This shows that language development in the Shona language is not only realised through borrowing of terms

from other languages, but through coining of new terms basing on creativeness of terminographers. Furthermore, the continued use of coinages is thus, a vital step when one considers issues of the Shona language preservation, because if people continue to borrow terms from other languages, it may result in contamination of the target language. Therefore, the researcher regards the coining term creation strategy as the only possible way to counter foreign acquisition of lexical items. The construction of language-internal neologisms can reverse the devaluation that may occur with extensive borrowing (Denzer-King, 2008). This is rightly observed by Grenoble and Whaley (1998:181) who say that, “creating a language revitalisation program frequently involves updating the lexicon of a local language to meet the demands of the domains in which it will be used”. However, the researcher argues that this strategy may lead to undesirable widespread synonyms if the exercise is not done in collaboration with all the stakeholders of the language concerned.

The coining term creation strategy in the DRU shows that terminology is a dynamic and flexible exercise whose continually transformation is based on the zeal to develop the indigenous languages. Basing on the statistics on Table 0-79 below it is evident that the DRU compilers actively participated in the process of creation and dissemination of new specialised Shona terms and for this reason they should be surely commended:

Strategy	Coining	Other strategies
Number of Lexical Entries	114	1111
Total Percentage	9.3%	90.7%

Table 0-79: Showing the utilisation of the coining term creation strategy in the DRU

In coining of the new terms, the researcher feels that terminographers should make it a point that they give comprehensive definitions for the coined terms so as to convey to the user the meaning attached to the new term. Furthermore, it is essential to engage a collaborative approach with language experts, subject specialists and as well as the layperson. Their different experiences and knowledge can easily contribute to a complex task of term creation activities making a complex task easy to carry out. These divergent experts have different reservoirs of knowledge and experience to contribute to a complex task (UNESCO, 2005). Hence; best results are achieved through amicable process of working collaborative with all the stakeholders. Consequently, this can result in the acceleration of the Shona language development efforts. On the other hand issues of the presence of synonyms in a specialised

dictionary will be minimised since by involving every stakeholder standardisation of the created terms can be easily achieved. This will ensure that the created term gains utility value or functionality in the long run.

7.4.4.1 Overview of research participants on the coining strategy

It is clear that the coining term creation strategy is appreciated by the research participants who participated in this study, as compared to other term creation strategies such as semantic expansion, loan translation and borrowing. The statistics from Table 0-80 show that the coining term creation strategy received mixed reactions, however, the positive perceptions override the negative ones.

Category	Agree	Percentage	Disagree	Percentage
Adequate	43	54%	37	46%
Efficient	53	66%	27	34%
Enriching	50	63%	30	37%
Natural	30	37%	50	63%
Term simplicity	45	56%	35	44%
User friendly	41	51%	39	49%

Table 0-80: Participants' views on the quality of the coined terms in the DRU

Research findings for the study show that research participants (54%) argued that coined terms were adequate. They said that the best medium of instruction to use in the classroom is the mother tongue. Therefore, for Shona students the coined Shona terms are the best since they will be taught in a language which they understand. This led some research participants (66%) to add that the coined terms are efficient. Moreover, some research participants (63%) said the created terms were enriching, since the DRU compilers coined completely new Shona specialised terms to describe new linguistic and literature terms coming in the language rather than borrowing from other languages or using an older word and ascribing new properties to it. The coined terms adds to the increase of the Shona vocabulary. Other research participants (51%) said the terms were user friendly because the terms were coined in a language they can easily understand. The research participants added that the coining term creation strategy shows the creativeness and innovativeness of the dictionary compilers. This gives the created terms their effectiveness and efficiency. On the contrary, a minority of the research participants (37%) were strongly opposed to the views raised by the above

research participants. These research participants argued that some of the coined terms were not natural but artificially coined. They gave examples of the following terms:

<i>dozwa p57</i>	character
<i>tinowwana p164</i>	yields, becomes
<i>Panozobuda p141</i>	yields, becomes
<i>rumano p 154</i>	dilema
<i>rinozova p151</i>	yields, becomes
<i>mhodzano p 131</i>	rhyming of words

The meaning of the word and its intended message are not clear. Most of coined terms are auxiliary verbs which have no autonomous meaning used on their own. They get their meaning when used in context. The research participants argued that that created terms do not sound natural and are of poor quality. According to Pearson (1998) a coined term should be natural, elegant accurate and clear. Naturalness leads to the acceptance of the coined terms by the target users.

The researcher identified that the DRU compilers did not give a clear internal structure or information of how the term far demonstrative <*chiratidzakure* (p 29) >is constructed. The compilers gave the construction of the far demonstrative as: *Chiratidzakure* <*chinoumbwa nechitsigisi +chiratidza mupanda+ nenzwovera*>. According to the understanding of the researcher, the correct construction for both the far and near demonstrative is as in the examples given below:

<p>i) Near demonstrative <<i>Susukidzo + dzitsi rechiratidzi</i> >(stabiliser +demonstrative stem) <i>u- + -yu</i></p> <p>ii) Far demonstrative <<i>Susukidzo + dzitsi rechiratidzi + nzvovera o</i>>(stabiliser +demonstrative stem + terminal vowel) <i>u- + -y- + -o</i></p>

What makes matters worse is that the term *chiratidzamupanda* (p 29) is not adequately described such that the target users may not make sense of the definitions given as they lack clear examples. This is self-defeating for the DRU compilers since accurate definitions and examples are a key to concept identification. Hence, according to Strehlow (1994) a

definition serves as a tool that allows a reader to comprehend the intended sense of a term. Furthermore, Richards (1985) contends that the implication of knowing a term is the mastery of its grammatical structure or form, its basic meaning and all its options as well as phonological and morphological relations. It means therefore, terminographers should supply this knowledge so as to give clarity of the created term. The researcher feels that this knowledge significantly contributes to the comprehensibility or internalisation of the specialised term by the target users. Hence, this will have a positive influence on the acquisition of the term by the user, and consequently the development of the vocabulary of the lexicon. Some of the examples given by DRU compilers (like those outlined by the researcher) do not help the target users to comprehensively understand the created term. Judging by the qualifications of the DRU compilers one can never cease to wonder how they missed it. This shows that they did not either consult widely or were not fully committed to their work. Consequently this kind of terminological work can have a negative impact to Shona language development efforts.

Furthermore, some of the coined terms in the DRU are inadequate and ineffective because of the absence of adequate internal information about the term, for example, the quantitative stems for the term *chirevauwandu*<-ga –se –mene>- stems are not given in the DRU

-ga <Imbwa yangu Machena yaenda yoga musango > (My dog Machena went alone in the bush)
-se < vana vese vaenda kudhorobha> (All the children went to town)
-mene < aenda omene > (he/she went on his/her own)

This is the same case is also identified by the researcher for the term *chinan'anuri* (enumerator). The DRU compilers did not give an adequate definition for this qualitative. In the definition and examples they gave, the enumerative stems pi and the second –mwe are missing. In the table below, the researcher gives clear examples of the enumerative stems as according to her understanding of the subject area:

i)-mwe > Wauya nenhanga rimwe here? ii) -mwe >Uvuye nenhanga rimwe chete. ii) -pi > baba varipi ? iv) -i > Matii ?, mwanai ?
--

What the researcher does not understand is whether the dictionary compilers are not well versed in Shona grammatical concepts or is it a case of mere negligence on their part?

The issue of the presentation of the terms in a specialised dictionary is another important issue to consider in specialised terminology. In the Table below, the researcher gives examples of incidences where terms that designate the qualificative concept are spread throughout the dictionary:

chidudzirauwandu p 12	chiratidzamuridzi p 29	chisarudzi p 35
chinan'anuri p 20	chiratidzapedyo p 30	chitaridzakure p 39
chinongedzazita chekure p 22	chiratidzi chekure p 30	chiverengi p 46
chinongedzazita chepedo p 22	chiratidzi chepedo p 30	chizita cheuwandu p 47
chipauro p 24	chirevamwene p 31	chizita cheuzhinji p 47
chiratidzakure p 28	chirevauwandu p 31	dudzirauwandu p 58

The researcher feels that the presentation of terms in the DRU should have been in a concept based system for understanding and conceptualisation of the created terms by the target users. The alphabetical arrangement would make it difficult for target users to access the terms that designate similar concepts since the concepts are spread throughout the dictionary. Therefore, the researcher strongly feels that in the DRU related concepts should have been grouped together. This makes the target users to easily retrieve as much information as possible. Thus, the clustering of related linguistic items seems to favour the encoding process and contribute to the correct production and creation of new lexical items (Scalise, 1989). According to Hadebe (2004) effectiveness of presentation is crucial to the usability of the Dictionary. He further postulates that it is of no value to have a dictionary rich in entries and definitions and examples but all these poorly presented and therefore difficult to access. Bergenholtz and Nielson (2006) support this contention as they postulate that, dictionary functions are communication oriented or cognition oriented, and lexicographers must identify the relevant function, select and present the data so that the discovery satisfies the needs of the users.

Therefore, it is of no value to have a dictionary rich in entries and definitions and examples but all these poorly presented and therefore difficult to access. Specialised dictionaries, which are arranged alphabetically, provide no indication of systematic arrangement and consequently no information about the relations and dependences within a subject field. It is argued that terminology specificity lies in its use of concept systems and relations as organising features. In other words it should be the compilation of Shona linguistic and literature field terminology, which provides conceptual relationship in these concept systems. The points of departure therefore, is that linguistic terminology should be grouped and presented according to subject field rather than being language-oriented as is the case of general terms dictionary.

7.4.5 Derivation

Derivation in term creation is the naming a related concept or concepts using lexical elements from other existing words. In other words, the terminographer utilises productive morphemes in the language to generate a new word for a new item, by prefixation and suffixation of a lexical base. Furthermore, derivated terms minimises the issue of synonyms, therefore, the use of derivation term creation strategy, will therefore, spark little if any controversy. Again, the existing literature already carries some, if not all of these terms such that, to opt for totally new and different terms just for want of something phonetic‘ would not just warrant speakers‘ outcry, but would also be counter-productive... (Makaudze, 2005:3). The DRU compilers made use of this strategy as illustrated in Table 0-81 below:

Strategy	Derivation	Other strategies
Number of Lexical Entries	114	1111
Total Percentage	9.3%	90.7%

Table 0-81: Showing the utilisation of the derivation term creation strategy in the DRU

Despite all the challenges of term creation, derivation is a very innovative word formation strategy for the elaboration of the Shona language vocabulary by prefixing and suffixing new lexical items to cater for the new grammatical concepts being received into Shona from the English language. However, some people maintain that languages rich in inflections or in ways of combining basic grammatical units (morphemes) into words are perhaps too complex to function as languages of wider communication (Kinging, 2009). This is disputable because it is through derivation of terms that mostly accounts for the growth of the English language. Verb root morphemes like in the examples below can be used to create terms for use in phonetics. This is exemplified in the verbal extension where the same verb roots, is extended in such a way as realise different meaning:

<i>verb <teng- a > (buy)</i>
<i>potential verbal extension<teng- ek- a > (item being sold is cheap)</i>
<i>intensive verbal extension<teng- es- a> (buy quickly)</i>
<i>causative verbal extension<teng- es -a> (sell-out)</i>
<i>applied verbal extension<teng- er -a> (buy for)</i>
<i>reciprocal verbal extension<teng- an- a > (reciprocating the act of buying)</i>
<i>associative verbal extension<teng- an- a> (bribing)</i>
<i>passive verbal extension<teng iw- a> (be bought)</i>

Table 0-82 below shows derived terms in the DRU. The Compilers were very creative and used this term creation strategy to come up with linguistic and literal terms for the DRU:

Existing Word	Derivate	Meaning of Derivate
<i>panga</i>	<i>banganwa p 1</i>	plot
<i>bata hold</i>	<i>batanidzo p 1</i>	word division
<i>bvunza</i>	<i>bvunzo p 5</i>	examination
<i>bvunza</i>	<i>chibvunzo p 7</i>	question mark
<i>dudziro</i>	<i>duzira p 57</i>	explain, interpret
<i>dzidza</i>	<i>chidzidzo p 12</i>	lesson
<i>isa</i>	<i>chiiswa p 13</i>	affix
<i>ita</i>	<i>chiitiko p 13</i>	act
<i>nyora</i>	<i>chinyorwa p 23</i>	text , publication
<i>nyara</i>	<i>chinyarikani p 22</i>	relationships
<i>paura</i>	<i>chipauro p 24</i>	adjective
<i>ona</i>	<i>chionwa p 23</i>	scene
<i>ona</i>	<i>muonero p 99</i>	point of view
<i>ona</i>	<i>muwonop 112</i>	point of view
<i>sarudza</i>	<i>chisarudzi p 35</i>	selector
<i>chivakiso</i>	<i>chivakiso p 46</i>	formative
<i>verenga</i>	<i>chiverengo p 46</i>	enumerative
<i>muganhu</i>	<i>ganhuro p 69</i>	chapter/demarcation
<i>wedzera</i>	<i>chiwedzerwa p 46</i>	inflection
<i>bvunzo</i>	<i>chivhunzo p 46</i>	question mark
<i>deredza</i>	<i>deredzazwi p 52</i>	lower tone
<i>dudza</i>	<i>dudziro p 58</i>	gloss explanation
<i>pfupi</i>	<i>pfupiso p 144</i>	summary
<i>gadzira</i>	<i>gadziro p 68</i>	correction
<i>chera</i>	<i>jerero p 75</i>	source

Table 0-82: Showing derivated terms in the DRU

The examples given above show that if the principles of derivability and inflectability are adhered to accurately are highly productive (derivability and inflexibility). There are some advantages realised in deriving scientific terms from existing terms in a language. Firstly, since the words are already in use in the indigenous language, they are common and accessible to most of the Shona speakers. Secondly, the created terms are simple, unambiguous and precise since they are generated from words that are already in use. From

the examples given above, it shows that derivational morphemes are added to lexical items to create new terms, turning a verb into a noun and a noun into a verb.

7.4.5.1 Overview of research participants on the derivation strategy

The statistics in Table 0-83 below show the perceptions of research participants on the derivation terms created through the derivation term creation strategy. The researcher feels that since these terms are originating from the Shona language, they have no problem of acceptability by the target users. This is supported by the perception of the research participants for this study as is shown in Table 0-83 below:

Category	Agree	Percentage	Disagree	Percentage
Adequate	75	94%	05	06%
Effective	37	46%	43	54%
Enriching	73	91%	07	27%

Table 0-83: Showing perceptions of research participants on derivation

A majority of the research participants (94%) said derived terms in the DRU are adequate, especially in educational system, where terms are derived from Shona verbs, adjectives and nouns to express new concepts brought in by the education system. Furthermore the derivated terms are easily comprehensible by speakers of the Shona language. On the other hand, research participants (91%) said derivated terms were enriching since they result in the increase of the Shona lexicon. Conversely, some research participants (46%) posited that Shona derived terms are not adequate, as compared to the English ones that have inflectional simplicity. This enables the English languaget to be effective as a language of international transactions.

7.4.6 Semantic expansion

The use of the semantic expansion term creation strategy in the DRU helped the compilers to come up with many linguistically and literature terms for the dictionary. Semantic expansion is a term creation strategy that makes use of expanding the meaning of lexical elements by attaching new meaning to existing words, hence modifying their semantic content. Table 0-

84 below shows some of the semantically expanded words in the DRU to express linguistics and literature terms:

Strategy	Semantic expansion	Other strategies
Number of lexical entries	48	1391

Table 0-84: Showing the utilisation of the semantic expansion in the DRU.

This is illustrated by examples given in the Table 0-85 below:

Original Shona Term	Original Meaning	New Meaning
<i>bakwa p 1</i>	wood store place	bibliography
<i>chirapi p 28</i>	medicine	riddle
<i>danho p 51</i>	steps	a scene in a play
<i>dura p 59</i>	storehouse	source/bibliography
<i>dzinde p 61</i>	tree stem	verbal root
<i>vhunzo p 178</i>	ask	examination
<i>yemura p 181</i>	appreciate	critique
<i>zuva p 186</i>	sun	date/ day
<i>mudzi p 95</i>	plant root	root radical for a verb
<i>pfekaunhu p 143</i>	dress	personification
<i>tamba p 162</i>	dance	act/play a role in a drama
<i>vanduza p 175</i>	expand	standardise
<i>vheneka p 178</i>	give light	illuminate points from a read passage
<i>wirirano p 178</i>	harmony	concordial agreement
<i>nyukura p 136</i>	select/bring out	identify points
<i>wedzeredzo p 178</i>	increase	exaggeration
<i>rumano p 154</i>	biting one another	dilemma
<i>zviriapi p 189</i>	medicine	riddles
<i>zvizukuru p 190</i>	grandchildren	exaggeration

Table 0-85: Showing terms in the DRU that are semantically expanded

It can be observed that through semantic expansion a word from the general vocabulary acquires an additional more technical or specialised meaning. From the examples given above, it shows that through semantic expansion the meaning of an original word becomes broader or more inclusive than its earlier meaning. It is noted by the researcher that, employing semantic shift is an advantage because “the terms are transparent to the users and the method draws on the internal resources of the language” (Van Huyssteen, 1999:183). In addition, secondary term formation requires of the terminographer a thorough understanding of linguistic mechanisms such as word-formation processes, that

are available to him/her to expand the terminology (Cluver 1989: 254, Carstens 1997: 10). Therefore, the semantic expansion term creation strategy requires that the terminographer be competent in the language being developed. This increases the acceptability of the created terms by the target users.

7.4.6.1 Overview of research participants on the semantic expansion strategy

The sentiments of research participants show that the semantically created terms creation have no problems of acceptance by the target users. This may be so because terminographers utilises term that exist in the target language. This makes the specialised term familiar with the target users, hence their acceptance.

Category	Agree	Percentage	Disagree	Percentage
Adequate	44	55%	36	45%
Effective	52	65%	48	35%
Enriching	26	33%	54	67%

Table 0-86: Showing perceptions of research participants on semantic broadening in the DRU

Some research participants (33%) pointed out that semantic expansion term creation strategy results in very slow growth of the vocabulary of the language, since most of the terms originate from the same language. Hence, this strategy is neither productive nor enriching since the number of lexical items remain the same. Most research participants (65%) posited that in semantic expansion, the compilers of a specialised dictionary would just opt for the expansion of the meaning of an existing word so as to give it specialised meaning. In doing this they argue that the created term is transparent and comprehensive, rather than putting in an effort to coin a new term that can be difficult to use. On the other hand, the effectiveness of the term depends on the comprehensiveness of the meaning being communicated by the term.

However the researcher feels that while semantic expansion maybe regarded as an adequate term creation strategy, the DRU compilers in most cases simply broadened the meaning of the existing words as they are to describe new concepts, without giving the original meaning of the term so as to signify the extension of the new meaning. This is a concern that the DRU compilers should try to rectify.

7.5 Synonyms

In Zimbabwe, synonyms come from the plurality of linguistic uses in the different Shona diversified groups from different geographical areas, such as Zezuru, Karanga, Manyika, Ndau and Korekore. Synonyms are acceptable in informal speech and general dictionaries, but specialised communication require that dialectal variations should be minimised. There are plenty of synonyms in the DRU, which is a specialised dictionary meant for educational purposes. The researcher questions the presence so many synonymys since most Shona dialects are interrelated and it is easy for speakers of the Shona language to understand any Shona term from whichever dialect, for example, it easy to understand both these quantitative terms which are synonymic: *chitaridzanguva* (40) *chiratidzanguva* (29). Both the dialectal variant synonymys appear in the DRU as dictionary entries. The ideal situation is that in principle synonyms should not feature in specialised language characteristics meant for educational purposes. The large number of synonyms in the DRU tends to distort the number of lexical entries realities by exaggerating the differences existing among dialectal varieties, at the same time obscuring the headword. It can be argued that the DRU minus synonymic terms will just remain a thin volume.

The researcher feels that synonymys contradicts one of the most important principles and guidelines of specialised languages; which is univocity of meaning. Judging from the given examples, it can be deduced that the similarity and interrelatedness of the Shona dialects makes it an easy task to standardise the created terms and compilers of the DRU could have effectively standardised the specialised terms in the dictionary. Hence, standardisation is the most crucial objective of all works of terminology (Strehlow, 1994). It is sad to note that in the DRU a single literary or linguistic concept is denoted by six or more different terms; for example, the term *chirevauwandu* (quantitative) have eight synonymys as is given in the Table 0-87 below:

<i>chiratidzauwandu p30</i>	<i>chirevauzhinji p31</i>
<i>chidudzirauwandu p12</i>	<i>chiratidzauzhinji p30</i>
<i>chidudzirauzhinji p12</i>	<i>chizita chouwandu p47</i>
<i>chizita chouzhinji p47</i>	<i>dudzirauwandu p38</i>

Table 0-87: The quantitative variants

Bergenholtz and Nielson (2006) postulate that if the monolingual dictionary is intended to be an educational resource, then, the created terms should be standardised. Thus, it is through the use of correct, unified or standardised terminology that effective scientific and technical

communication skills are developed. Relatedly, the researcher proposes that only one term should be entered as headword, and the other various synonymic terms should just be cross-referred to the main entry, such that there is only one term which denotes one grammatical or literature concept. Dictionary compilers should also indicate that the cross referred terms are variants of the headword.

However, the DRU compilers highlighted that standardisation of created terms is a noble idea which can be easily implemented in terminology, but there is a problem when it comes to choosing the term to become the headword. They added that this is an issue which cause people to fight for the inclusion of terms that are from their dialects to be included in the dictionary concerned. The researcher really appreciates these arguments, concerns and difficulties that terminographers face when it comes to synonyms in term creation. Nonetheless, she calls for the DRU compilers to take a compromising position so as to promote tolerance of dialectal diversity in society. Furthermore, it is in this area where the researcher advocate for the formation of terminological boards which monitor and ensure that the term creation activities are non-exclusive and that each dialect is given a fair share of dictionary headwords entries.

Furthermore, the dictionary compilers also contend that the standardised term or headword may not be familiar with target users from other Shona dialects, such that the headword brings a challenge to such dictionary users in terms of accessing the needed information. To this end the researcher proposes that, students can make use of the index page (back matter) to retrieve the wanted or correct term they are looking for. The back matter provides an effective way of finding the information the user want. That way, the target user can be able to communicate a special language without ambiguity. On the other hand, the DRU compilers explained that the promotion of standardisation of the specialised dictionary may interfere with the natural dynamics of the language development. Therefore, they emphasise that the creation of specialised terms in the Shona language should mirror real usage and this would improve efforts to revitalise and elaborate the language. According to the DRU compilers then, the development of specialised terms requires the promotion of functional value rather than linguistic considerations.

However, the researcher feels that the presence of synonyms in specialised dictionaries makes it very clear that term creation activities in Zimbabwe are still inadequate. It also shows that the created scientific and technical terms lack acceptability which is inevitable if

ever standardisation of such terms is to take place, and hence the DRU compilers' goal of "teaching and learning of the Shona subjects and modules in the Shona language" will not be realised. Thus, if not standardised, created specialised terms can never be effective. This is an area where the researcher feels that, the government of Zimbabwe, language boards and linguists should come in together to address the issue of dialectal variations as a way forward.

7.5.1 Research participants on synonyms

The researcher noted that the issue of synonyms is a thorny and burning issue among the target users, linguists and the dictionary compilers. Statistics obtained in this study show that research participants are against the presence of synonyms in the DRU. Table 0-88 below shows the perceptions of research participants for this study:

Category	Agree	Percentage	Disagree	Percentage
Elimination of Synonyms	55	69%	25	31%
Standardisation of Terms	53	66%	27	34%

Table 0-88: Showing responses from research participants on the issue of synonyms in the DRU

Some research participants (34%) were of the view that every dialectal variation term should be included in a specialised dictionary. "We do not want a situation where other dialects suffer calculated neglect", they emphasised. They further stated that, although it is a difficult task to have a dictionary that has a balance of all the dialects, a dictionary should mirror real usage rather than an artificial one. The major problem that has been highlighted is that of trying to compile a dictionary balancing inputs from different dialects. The research participants further added that a dictionary that excludes vocabulary from other dialects or which emphasises vocabulary from a selected dialect or dialects cannot serve the linguistic needs of all people, and is therefore retrospective. The reason is that speakers from ill-represented varieties would find it difficult to identify with the dictionary. This would also have a negative impact on the marketing or acceptance of the dictionary, as well as on the general development of the language involved.

However, most research participants (69%) pointed out that in terminology, people should

not concern themselves with issues of tribal or dialectal considerations for this is self-defeating. Rather, people should concentrate more on promoting the growth of the Shona language through using a standardised language. They added that it is of no consequence for people to think that their dialects are being side-lined or are being ignored, because this is of no consequence considering the task at hand; that of developing a Shona language that is able to express scientific and technical concept. They conclude that in this case, the advantages of standardising terms in a specialised dictionary outweigh the disadvantages, so the issues of dialectal variations are of no consequence.

Other research participants (66%) postulated that the most important fact is that dialectal disunity will always be a risk in as far as language development is concerned. In this way, if synonymic considerations are abandoned, term creation activities will be viewed in light of its potential as a dividing force among the Shona speaking people. However, the research participants argued that term creation activities should be viewed as a language elaborating effort, a uniting force, rather than as a divider of the people. And as such, issues of dialects in specialised term terminology should be compromised by all those who advocate for the growth of the Shona language overall. Therefore, terminographers should aim at producing a dictionary that aim at language growth.

The researcher share the same feeling as those of most research participants on that the issue of synonyms. There is need for a paradigm shift towards more educationally sanctioned considerations in specialised dictionaries so as to minimise dialectal variations. This view emphasises the fact that in specialised terminology, being prescriptive is a necessary evil. Synonyms diminish the utility or functionality of the created terms. The lack of standardisation in African language terminology is frequently regarded as a major obstacle for the development of the African languages (Alberts, 1999). As such, efforts should be made by the relevant authorities to ensure that terms in specialised sectors such as law, medicine and linguistics are standardised as this will lead to more effective communication between terminographers and the target users as well as the their service providers and clients.

Furthermore, the researcher also feels that there is need for terminographers to consider or to adhere to the principles and guidelines of term creation, when making choices of terms to be included in a dictionary. According to basic terminographical principles a specialised term should have one and only formal name for a given concept' (Gilreath 1993:87). If a

specialised term has no synonym, there is a univocal relation between term and concept leading to precision. This is referred to as the principle of mononymy, and it requires that terminographers should not violate this principle by including synonyms in a specialised dictionary.

Although, the compilers of the DRU claim that they made a dictionary which is in a standard form:

“it is now possible teach and learn the Shona language using the standardised Shona terms everywhere in Zimbabwe” (*neduramazwi rino ... zvava nyore kuzviita nenzira yakafanana kumatunhu ose* (Chimhundu and Chabata, 2007: xiv).

The researcher notes with concern that this contention is contradictory to the real situation in the DRU. There are plenty of synonyms in the DRU which will make it difficult for the Shona language to be taught in similar way or uniformly in all the Shona speaking areas. Thus, it is impossible to teach the Shona language using standard form as they claim.

As reiterated in 7.5 the researcher contends that if the specialised terms in the DRU are to be used in the classroom, then it is important to standardise the terms as much as possible in an endeavour to promote the growth of the Shona language across the board. Once the students acquire the basic specialised vocabulary, they will be able to understand and explain grammatical and literal items. In that way, the Shona language will be assured of tremendous growth, because any meaningful linguistic change may take off well within the education system. Thus, the Shona language can only grow if the people concerned allow it to be standardised rather than being used in parallel structures.

7.6 Polysemy

This study has established that where a terminographer has used the semantic expansion term creation strategy, the issue of polysemy is inevitable. A term is polysemous when it has two or more meanings. Therefore by semantically expanding a term, automatically the term ends up with two meanings, one mundane and the other one general. Terms are relatively familiar and cause confusion, and dictionary compilers need to identify the meaning of a term both in its general sense and specialised sense. In the DRU, the compilers in some cases gave all the meaning of the term; both the general and specialised, for example;

<i>mutauro</i> 1.> any spoken language 2>specialised term for Shona grammar, p 105
<i>pira</i> 1>present case 2>perform ancestral ritual, p 145

By giving the two meanings, the compilers of a dictionary will be reducing the ambiguity of a term. The giving of meaning in the case of polysemous terms is a key element that leads the target users to understand the term semantically. Such communication is only possible if unambiguous terms are established for well-defined concepts and if these terms are known and used accordingly (Alberts, 1999). However, in most cases where the various meanings should have been identified, only the specialised meaning was given, for example bakwa < (bibliography), bazi > (branch), chidzioro> (screen), chombo>, dura > (references). The researcher urges the DRU to maintain consistence in the way they conduct terminological works. The consistent and precise use of is therefore of great importance in terminology. There are many cases of inconsistencies in the DRU such that one wonders if ever there is any commitment and devotedness to the work the DRU compilers volunteered to do. Or is it because nobody monitors and evaluates their work before it is published? The researcher takes it that language development efforts are a serious business and as such it should be done with the development of the Shona language and the nation of Zimbabwe at heart.

7.7 Etymology purity

Etymology purity refers to terminographers' preference for native terms in a specialised dictionary. In the DRU, the compilers borrowed scientific and technical terms from other languages like English. This shows that the dictionary compilers had no puristic tendencies to adopt loan words as a means of developing the Shona lexicon. It can be asserted that they regarded loan terms as enriching the Shona language by increasing the number of lexical items in the Shona vocabulary. The researcher has also observed that this is the same case with most Shona speaking people; they do not concern themselves with issues of etymology purity at all. This means that among the Shona borrowed terms do not face rejection or resistance by the target users of the created specialised terms. This gives terminographers a leeway in utilising the borrowing term creation strategy in their effort to develop the Shona

language in scientific and technical terminology. However, although the DRU compilers borrowed some English terms, they tried to minimise the rate at which they borrowed the terms by mostly utilising the loan translation strategy. However this strategy was not adequately utilised.

According to Uju (2008:26) language deficiency will lead to “retardation of social development and economic marginalisation” therefore a language can get expressive power through borrowing from other languages.

7.7.1 Overview of research participants on etymology purity

Statistics gathered by the researcher for this study show that most research participants are not concerned about issues of etymology purity. This is shown in Table 0-89 below:

Category	Agree	Percentage	Disagree	Percentage
Adequate	41	51%	39	49%
Contaminating	27	34%	53	66%
User friendly	44	55%	36	45%

Table 0-89: Sentiments of research participants on etymology purity

Most research participants (51%) said that the created terms in the DRU are adequate because they allow communication to take place between all the people in such a communication process. The target users further said that they do not care about English interference on the Shona language as long as the intended message is put across. These postulations by the research participants show that they care more for the linguistic growth of the Shona language rather than any etymological considerations.

On the other hand, some other research participants (55%) believed that the issue of etymology purity makes it easier for speakers or hearers of the Shona language to easily identify with the created specialised terms, for they will be closely linked to real appropriate images of the language. Hence, the created terms become user friendly. They argued that the students are fully capable of developing fluency in their mother tongue and they further asserted that the use of the Shona language will result in higher level of mastery of what will be taught in high schools and colleges. This is supported by Pascua (1984:1) who says that

“Our ancient language is the foundation of our cultural and spiritual heritage” and declares that “all aspects of the educational process shall reflect the beauty of our language, culture and values”

Other research participants (66%) acknowledged the borrowing of foreign scientific and technical terms in the Shona language. They felt that borrowing of terms from other languages like English does not distort or contaminate the Shona language, but rather it empowers and develops its expressive and functional value. They added that the Shona language can indeed not develop from internal resources but from external resources as well. They regard the indigenous languages as self-sufficient, able to communicate elegantly and effectively anything, either scientific or technical if it is given space to do so. Furthermore, they argued that if the dictionary is going to be used for educational purposes, there is no way the DRU compilers could have avoided borrowing foreign terms. Because of the contact situation between the Shona and English, these languages are bound to influence one another and can result in the creation of a richer and dynamic Shona lexicon.

The researcher agrees with the sentiments raised by the research participants. The use of loan words in a language provides an integration of the indigenous languages with scientific and technical terminology. This obviously leads to Shona language development and also encourages the preservation of the cultural heritage and diversity of the country. The most important issue is that the created terms must be acceptable to the speakers of the receiving language.

According to Mojela (1991:12):

When people of varied cultures come into contact, they have many things to share and all these result in the process of foreign acquisition and an extensive increase in vocabulary. An increase in vocabulary is at the same time accompanied by an increase in meaning.

Whenever two or more speech communities maintain a prolonged contact within a broad field of communication, there are cross-currents of diffusion (Gumperz, 1968: 223).

7.8 Attitudes of research participants towards the use of the Shona language in the classroom

This study has established that, there is a major outstanding problem facing the implementation of terminological efforts to develop the Shona language in class activities; which is the attitude of the target users. The target users are of paramount importance in as far as they are the ones who spearhead the implementing of terminographical efforts and developments. According to Chimhundu (2006) it is imperative that there should be positive attitudes towards indigenous languages if they are to be used greatly in all spheres of life including the electronic media and in advertising. During the process of data collection, the research participants were asked to give their overall perceptions of the Shona medical terms in the DRN. Table 0-90 captures the attitudes of target users towards the DRU:

Category	Positive	Percentage	Negative	Percentage
Attitude	42	53%	38	47%

Table 0-90: Showing attitudes of research participants on the DRU

Some research participants (38%) felt that the DRU cannot be adequately used as a medium of instruction in the classroom because its functional capabilities in terms of expressiveness are somehow limited. Furthermore, they argued that the use of Shona as a medium of instruction also limits employment opportunities outside Zimbabwean borders, because the Shona language does not have an economic value besides being the language of the home. The research participants added that it is a waste of time and opportunities to make the Shona language a medium of instruction in schools.

However, research participants (53%) argued that, if the terminological efforts are implemented, subjects such as Mathematics, Physics, Chemistry, Biology and Geography can be made easy to learn for most students, if they are explained in a language they can easily understand. Thus, most of the research participants were positive about the use of the Shona language as a medium of instruction in the classroom. However, they were not so sure if this can be achieved considering the socio-economic issues like language policy, human resources, and material resources and above the attitudes of the people, even the people at the grassroots. Hence, the research participants emphasised that if the indigenous languages are to be given a functional value the target users may positively change their attitudes towards them. As it is, Zimbabwe's new 2013 constitution categorically states that all the 17 languages of Zimbabwe, including Shona, have been given an official status and equal recognition in all sectors of human activity, including in

education. Up to now nothing has been done to effect these recommendations in Zimbabwe. If the recommendations are effected, this may have a positive impact on the attitude of Zimbabwean people on the issue of development of the Shona language.

Relatedly, in some research studies carried out in South Africa by Webb (2006) and Mutasa (2003) it was found out that government authorities seem to be reluctant to ensure that African languages, by appropriate legal provisions, assume their rightful role as of official communication in public affairs, administrative and educational domains (Mutasa, 2003: 6). This has led Webb (2006) to say, although very progressive on paper, the South African language policies has allowed English to become the '*de facto sole official language*', which benefits only the middle class and elite in society. Hadebe (2002:225) asserts that, the issue of terminology is part of the overall cultural and economic domination of the West over the third countries. This view is shared by Cluver (1980:5) who professes that, as long as the national industry and level of scientific research is underdeveloped, terms that has been created in indigenous languages at this stage are just that: created terms, (cited in Hadebe, 2002). According to Madiba (2000) all terminology work should be a collaborative effort between linguists.

From the gathered information for this study, the research notes that terminologies are accepted or rejected by the target users purely on their linguistic impact. The lack of indigenous language usage (considerably) is also a key missing link in African's development because language has always been the matrix within which any development process is socio-culturally negotiated and implemented (Kame, 2012). The issue of the issue of continued use of the English language in Zimbabwe has seriously affected economic development because language is the major source of business communication. Therefore, it means that the majority of the indigenous people are not included in the "matrix" of development, as they are not proficient in the English language. According to Israel (2010) a compromise is needed, one where the value of the African language and that of English language is recognised; where the different roles they play do not lead to one language being undermined by the other.

7.9 Strength and Weaknesses

The researcher feels the DRU have some strengths and weaknesses, which are outlined in 7.9.1 and 7.9.2 below:

7.9.1 Strength

Duramazwi ReDudziramutauo neUvaranomwe is the first of its kind in Zimbabwe to focus on linguistic and literal terms in the indigenous Shona language. The DRU concentrates on the description of Shona literature and linguistic terms, providing an overview of the entire Shona grammatical and literature subject field.

The DRU compilers also provided an index of English to Shona linguistic and literal terms at the back matter. This is an integrated outer text, in that it allows a user who is competent in both Shona and English to access information that is presented in Shona in the Dictionary. Thus the data plays a complementary role and it helps users to acquire information in the Dictionary more easily. It is notable that the microstructure of the dictionary cannot be fully studied and be comprehensively understood in isolation (Nkomo, 2003).

The DRU compilers minimised as much as is possible the borrowing of terms from other languages like English. Compared to the three dictionaries under analysis, the DRU did well in as far as minimising of foreign influence on the created terms is concerned.

7.9.2 Weaknesses

There are some instances where compilers of the DRU gave inadequate definitions of the created specialised terms. Definitions of terms are the key to understanding the specialised terms, for example. Furthermore in some cases DRU compilers did not show the relatedness of the morphological and phonological processes that make up a term. Inconsistence of usage of term creation principles and the presentation of word formation practices. At times the DRU compilers would give word formation details and at times they would not do that. Furthermore, one of the weakness of the DRU is in the compounding term creation strategy where some of the terms are not self-contained, that is you cannot get the meaning from the term itself. In other words most compound terms are descriptive. At some instances the compounded term does not aptly and accurately capture the intended meaning of the term.

Another area which reflects some weaknesses of the DRU is the presentation of terms belonging to specialised areas of usage. The researcher feels that specialised linguistic and

literature terms should be grouped and presented systematically so as to avoid the issue of synonyms. In other words related terms designating similar concepts should be presented together. Hadebe (2004) argues that effectiveness of presentation is crucial to the usability of the dictionary. The aim of systematisation of these related concepts is to achieve transparency and consistency. In other words, the knowledge structure consists of various interlinked concepts. On the other hand, the issue of the inclusion of synonyms is one of the major weaknesses of the DRU. Veldi (2014) takes the inclusions of synonyms in a dictionary as a luxury because it contradicts the principle of economy in language. In support of the above contention, Cruse (2002:448) adds that “there is very little semiotic motivation for such a state of affairs: the only possible utility for absolute synonyms is aesthetic, to avoid repetition of forms (2002: 488). In as far as specialised terminology may allow minimised synonymys; the major bone of contention as identified by the researcher is that synonyms should not be entered as headwords. The synonyms should be cross referenced to the headword. In the DRU the synonymy is cross referenced and at the same time it is entered as a headword. This results in the distortion of the total number of the lexical items in the DRU.

7.10 Conclusion

This study has established that the DRU is a specialised dictionary of linguistic and literature terms, and the major goal is to enable the Shona subject to be taught in Shona from secondary to university level of education. The DRU compilers thus utilised various term creation strategies to come up with specialised linguistic and literature terms. The term creation strategies used are borrowing, loan translation, compounding, coining, derivation and semantic expansion. The analysis of these term creation in the DRU have shown that borrowing is an important and accurate term creation strategy for revitalising and developing new lexical terms for the elaboration of Shona language. Most of the borrowed terms are nouns and to a lesser extent the verbs. This study has established that the rate of borrowing in the DRU does not lead to language contamination. The DRU compilers utilised this term creation strategy minimally as it has got the least lexical entries and are commended for that effort.

The use the loan translation term creation strategy shows that the DRU compilers more often opted for creating new descriptive phrases rather than borrowing from another language or

using an already existing terms. In addition, judging by the quality of loan translated terms in the DRU, the researcher feels that knowledge of phraseological conventions is very important and a prerequisite for one to create appropriate and accurate specialised terms. These terms may face rejection by target users because of their longish structure, their vagueness and their lack of expressive power. The researcher argues that, if target users of the DRU are able to access terminology which is precise, simple and accurate and created in accordance with the term creation principles, only will they be able to accept the terms as user friendly. The researcher also argues that the vast utilisation of loan translation by the DRU compilers indicate a lack of creativeness, innovativeness and commitment to term creation activities. Loan translation is of less labour as one just needs to translate the meaning of the loan word into the Shona language and this takes less effort. It should be taken that the process of term creation and compiling of specialised dictionaries is not only based on thorough evaluation and analysis of the created terms, but it also mirrors of the author's own commitment, passion, dedication, knowledge, views and visions.

In compounding, the verb / noun and the noun / noun combination were the most utilised in compounding terms for the DRU. However, it can be concluded by the researcher that the compounded terms in the DRU are not always satisfactory for most of the times they contradicted some term creation guidelines and principles of specialised language, namely accuracy, brevity, mononymy, univocity of meaning and clarity. This research has established that the compounding term creation strategy is a very productive term creation strategy; however it is unfortunate that these terms face rejection by the target users because of their longish linguistic structure. This term creation strategy has got a potential of creating thousands and thousands of specialised terminology, but acceptability by users limit its functional value.

Coining is the other useful and productive term creation strategy used to create terms for the DRU. However, in coining the specialised terms the dictionary compilers should have complied with term creation regulations and procedures as this is viewed as a valid base for specialised language development. Furthermore, as already suggested, the dictionary compilers should pay special attention to those areas that enhances the target users' awareness of the internal structure of words and the processes by which the terms have been created. This leads to retention of the created terms. The researcher feels that the DRU compilers should seriously take into consideration the issue of providing information attached to all of the created terms, morphological, syntactical, semantically and good definitions, as

these help the target users to understand and retrieve the created term more easily. They should also collaborate with Shona subject specialists, who have the field know how that may be very important to the understanding of the created terms by the target users of the dictionary. Basing from the experience gained in this study, all specialised terms should be followed by standardisation, so as to ensure effectiveness and the efficiency of using the specialised terms. However, the researcher feels that DRU should take into cognisance the fact that the Shona language is still a growing language, and as such the inclusion of so many synonyms in a specialised dictionary should be minimised. This will allow the Shona language to grow in such a way that it can freely express scientific and technical aspects.

The DRU compilers also utilised the derivation term creation strategy productively as they derive specialised terms from nouns and verbs by suffixing and inflecting morphological elements to create new terms. Such created terms have no problem of acceptance by the target users since indigenous or internal resources used are familiar to the target users. Relatedly, the compilers used the semantic expansion term creation strategy. The DRU compilers expanded the meaning of familiar words that already exist in the Shona vocabulary and expanded their meaning so that they could express specialised meaning. This strategy is readily acceptable to target users since they would be familiar with the semantically expanded terms.

However, all things having been said, the publication of the DRU makes it possible to do broad surveys such as the one carried out in this study. The researcher thanks the dictionary compilers because such a study of the analysis of the term creation strategies in Shona specialised dictionaries would not have been possible. Through the analysis of their work the researcher was able to discover the relevance of the communicative theory of terminology and real terminology activities therefore, it became very clear to the researcher.

Chapter 8: A COMPARATIVE ANALYSIS OF THE TERM CREATION STRATEGIES IN THE DR, DRN AND THE DRU

8.1 Introduction

In Chapters Five, Six and Seven of this study, the researcher gave an analysis of the term creation strategies used in the DR (*Duramazwi Remimhanzi*), DRN (*Duramazwi Reurapi Neutano*) and DRU (*Duramazwi Redudziramutauo neUvaranomwe*) respectively. In this chapter, the researcher gives a comparative analysis of the DR, DRN and DRU. The comparative analysis focuses on the term creation strategies used in the above mentioned specialised dictionaries as well as responses from research participants and language experts.

8.2 The term creation strategies used in the DR, DRN and DRU

The compilers of the DR, DRN and DRU used the following term creation strategies: loan translation, borrowing, compounding, coining, derivation and semantic expansion to develop Shona musical, medical and linguistic terms respectively. Further analysis in this study shows that the compilers of these three specialised dictionaries utilised internal resources (compounding, coining, derivation, semantic expansion) and external resources (loan translation and borrowing) to create Shona scientific and technical terms. Table 0-91 below shows how term creation strategies were utilised to come up with specialised terms in the DR, DRN and DRU:

Strategy	Loan Translation	Borrowing	Compounding	Coining	Derivation	Expansion	Total Term Creation	Total Repackaging	Total
DR	146	224	101	82	52	08	613	581	1194
DRN	235	114	56	106	27	25	563	662	1225
DRU	471	43	229	106	77	48	974	465	1439
Total	852	381	386	294	156	81	2150	1708	3858

Table 0-1: Showing the total number of lexical entries for each term creation strategy in the DR, DRN and DRU

The researcher divided the analysis of term creation into two main categories indigenous sensitivised term creation strategies for those strategies that utilises internal resource

(compounding, coining, derivation and semantic expansion) and foreign sensitivised term creation strategies for those that use external resources (borrowing and loan translation).

Overall, the total lexical entries for all the three dictionaries is 3858. Figure 8-1 below shows the statistical data of the total percentage utilisation of all the term creation strategies in all the three specialised dictionaries:

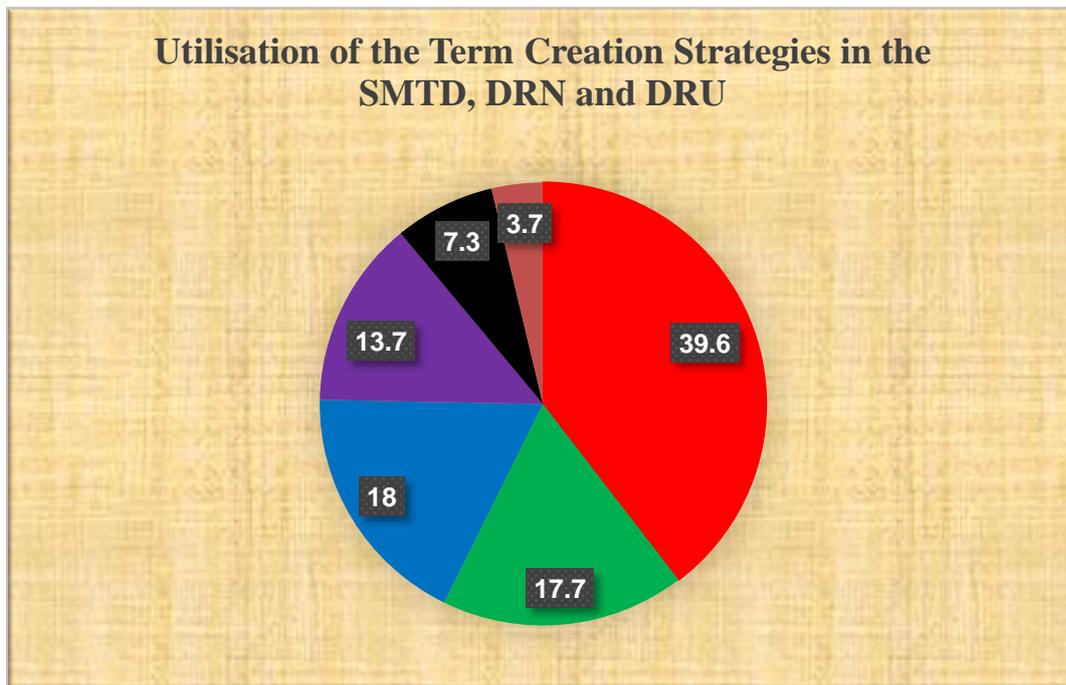


Figure 8-1: Overall analysis of the utilisation of all the term creation strategies in all the three dictionaries

Key

Loan translation	■
Borrowing	■
Compounding	■
Coining	■
Derivation	■
Semantic	■

The statistics presented in Figure 8-1 shows that out of the given number (3 858), 1708 are as a result of repackaging existing terms, and 2150 are as a result of engaging various term creation strategies as given above. Overall, the loan translation term creation strategy was highly utilised and it has a total number of 852 lexical entries; followed by compounding that has 386 lexical entries, then followed by the borrowing term creation strategy with a total number of 381 lexical entries, then coining with 294 lexical entries, then derivation with 156 lexical entries, and lastly the semantic expansion term creation strategy with 81 lexical

entries. Figure 1 also shows the utilisation of all the term creation strategies in all the three specialised dictionaries in percentages; loan translation (39.6%), compounding (18%), borrowing (17.7%), coining (13.7%) derivation (7.3%) semantic expansion (3.7%). Research findings show that borrowing, coining, compounding, and derivation term creation strategies are very productive if utilised adequately and efficiently, because they result in the increase of the vocabulary of a language. On the other hand loan translation and semantic expansion do not result in vocabulary increase but they increase the meaning of words, hence they are less productive term creation strategies. The subsequent sections below give a comparative analysis of each term creation strategy used by the DR, DRN and DRU compilers.

8.2 The borrowing term creation strategy

The DR, DRN and DRU compilers used the borrowing term creation strategy as they adopted musical, medical linguistic and literal technical and scientific terms mainly from the English language. All the three dictionary compilers contended that they borrowed specialised terms from other languages so as to address lexical, scientific and technical inadequacies and deficiencies of the Shona language. It can be contended that the majority of borrowed specialised terms within different specialised fields are probably, unknown to the majority of the Zimbabwean population because of illiteracy. It is postulated that the use of loan words depends on socio-economic groups (Stanforth, 1996) and judging by this contention, the use of loan words is fairly limited in most parts of Zimbabwe because the educated are fewer than the uneducated especially in rural areas. Hence, the borrowing term creation strategy may not have any advantage for the ordinary user.

In as much, the researcher is of the view that by heavily borrowing terms from other languages, the DR compilers exhibited a lack of commitment, creativeness and ingenuity to utilise other indigenous sensitivised term creation strategies for the development of the Shona language. The DR compilers could have utilised the compounding and coining term creation strategies more so as to avoid excessive borrowing of terms from other languages. Although the borrowing term creation strategy is accurate and productive, in the sense that it promotes the growth of the Shona vocabulary, the borrowing rate in the DR is overboard. Such an action led the researcher to think that the DR compilers took the deficiency of Shona musical terms as a substitute or as an excuse for the large scale borrowing from the English language.

This type of action and attitude should be discouraged because the abundance of borrowed terms in a specialised terms dictionary can lead to the undermining and contamination of the indigenous languages. Furthermore, the researcher notes that the borrowing term creation strategy has a disadvantage, in the sense that terms created and developed through borrowing are mostly for the use of the educated. Hence, this strategy marginalises uneducated ordinary people from participating in national issues meant for them.

Figure 8-2 below shows how the borrowing term creation strategy was utilised in the DR, DRN and DRU:

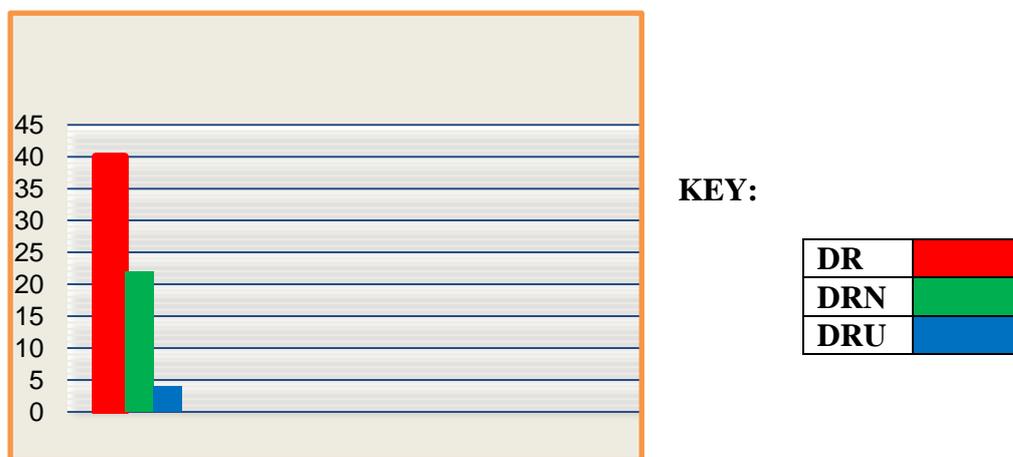


Figure 8-2: Showing the utilisation of the borrowing term creation strategy by the DR, DRN and DRU compilers

Judging from statistics given in Figure 8-2 above, the DRU compilers are commended for minimising the rate of borrowing specialised terms from other languages. They only borrowed 43 lexical terms. It shows that the DRU compilers are more concerned with the issue of Shona language development through utilising its own indigenous resources, as compared to the DR with 224 borrowed lexical terms and the DRN with 114 borrowed lexical terms. Judging by the given information, it is obviously clear that the DR compilers excessively borrowed loan terms from other languages, especially from the English language.

Some research participants added that excessive borrowing of English lexical terms such as that in the DR serves to perpetuate dominance and confirms the prestigious state of the English over the Shona language. Therefore, the strategy of using English terms at the

expense of the indigenous ones in term creation, need to change significantly, otherwise the hegemony of English will persist unabated in Zimbabwe. This means that the way in which term creation strategies are executed can be rhetoric and counterproductive, hence it impacting negatively on the whole idea of Shona or indigenous language development.

However, the DR, DRN and DRU compilers clarified that most of the terms in the musical, medical, literal and linguistic specialised terms dictionaries were not borrowed intentional but to fill in the lexical gaps or the deficiencies of the Shona scientific and technical terms. In any case, they postulated that new indigenous Shona coinages face rejection by target users where a borrowed term already exists. The rejection of new coinages over loan words has also been observed by the researcher, through discussion and interviews held with the research participants for this study and through findings in related literature. The dictionary compilers further added that if the borrowed term is used for a long time, it easily adapted into the receiving language as the pronunciation and spelling of the loan terms become closer and closer through usage. Hence, the three dictionaries' compilers contended there is no problem in using loan terms in a specialised dictionary. However, the researcher feels that this assertion should not give the terminographers "passports to uncritical import" words from other languages at the expense of the indigenous words. In term creation therefore, indigenous terms should be given first preference.

This study has also shown the researcher that the borrowing term creation strategy and the adoption of loan words through transliterating them is not an important and accurate method of creating and developing new scientific and technical lexical terms in the Shona language. It results in hybridised Shona terms. This is supported by Charamba (2012:433) who expounded that,

if indigenous languages fail to carry and transmit the content which is taught in universities to the extent that they will need to be 'developed', 'scientificated' and 'refashioned' first in order for them to be able to carry and transmit that content, that can be interpreted to mean that the content which will be on offer in universities will be foreign and not indigenous.

It means that rephonologisation of borrowed terms is a cosmetic and an artificial effort by terminographers to tailor-make the indigenous languages so that they transmit foreign philosophies, cultural practices and worldviews.

Although the use of the borrowing term creation strategy shows an overall mixed reaction in the entire three specialised dictionary, most of the research participants highlighted that it is necessary that lexical terms are adopted and adapted in a language to fill an existing lexical gap in the language or they may be borrowed for prestigious reasons. Looking at the three specialised dictionaries the researcher notes that in the DRU and DRN it was mostly for filling in (scientific and technical) lexical gaps and not for prestigious reasons but however, as for the DR the motive is not so clear. The researcher asserts that this can point to lack of creativeness and laziness to engage other term creation strategies that require rigour and vigour on the part of the dictionary compilers.

Overall, some research participants expressed that indigenous languages lack specialised terms that are needed to express modern, scientific and technical knowledge which are mostly conveyed by foreign languages, such as English. As such, they pointed out that as far as they are concerned, acceptance of loan terms is not a problem as long as they are able to carry the intended message from the sender to the receiver. They support the idea that new borrowed terms need to be rephonologised so as to enable indigenous languages to express scientific and technical knowledge. Those who were against the borrowing of term creation strategy, felt that this term creation is engaged by terminographers who are lazy and not committed to the growth, development and enrichment of the Shona language. The researcher agrees with these participants on the perceptions of laziness by the dictionary compilers, because the use of the borrowing term creation strategy is not rigorous. It requires a terminographer to just get a loan term and rephonologise it to suit the receiving language and by so doing a new term would have been created. However, rephonologisation of loan lexical items into the Shona language is very helpful as far as receptive uses are concerned. Thus, when it comes to production of Shona vocabulary for natural language development, rephonologised loan terms are far from good for productive purposes as they are just refashioned to suit the receiving language.

However, the minority of the research participants, who are radical, felt that a Shona specialised terms dictionary should only carry Shona lexical items and they advocated dropping loan terms or the borrowing term creation strategy and for the promotion of indigenous languages to that position. Whilst the present researcher has accepted that the borrowing term creation strategy can be a vehicle to Shona language development, this has been disputed by these minority research participants who claim that developing indigenous

languages through use of loan terms is rhetoric. They asserted that by so doing, one will be helping in the spread of and exalting Western-centred cultural values because a language is a carrier of culture. In fact, the colonial education system emphasised the use of the English language within the school environment and it prescribed English literature for use in schools, a deliberate conspiracy to undermine African languages. This then, is what the dictionary compilers may unconsciously perpetuate through excessive use of the borrowing term creation strategy. Approving of English lexical borrowing does not serve to challenge the hegemony in question but to perpetuate it (Charamba, 2012: 349). Therefore, those who are concerned about genuine language development, those who are patriotic about indigenous language growth, will always minimise the rate of borrowing of specialised terms from other languages.

However, in as much as the researcher agrees with Charamba (2012) that the creation of Shona specialised terms should be a struggle against the dominance of the English language in Zimbabwe, the researcher is of the view that it does not matter whether an English specialised term has been borrowed or an indigenous one has been created. The most important thing is that, are they adequate and effective to enable communication between the dictionary compiler and the dictionary users. Nonetheless, the researcher is against massive borrowing of terms at the expense of indigenous terms. Furthermore, the researcher feels that a language board should be established, so as to provide a regulatory framework for effective term creation practices; such as giving clear cut policy that limits the number of borrowed and loan translated terms in a specialised dictionary. For example, linguists can agree that out of a total number of lexical entries in a specialised dictionary, the number of borrowed and loan translated should not exceed a quarter. This means that three quarters of the lexical entries would be as a result of indigenous sensitivised term creation strategies. This will reduce the uncritical importation of foreign terms in a dictionary, thus, creating a fair advantage of indigenous specialised terms over loan terms, consequently promoting their growth.

Limiting of foreign sensitivised term creation strategies will encourage terminographers to work hard in coming up with specialised Shona indigenous terms much to the benefit of the Shona vocabulary. Term creation strategies should utilise indigenous sensitivised strategies because borrowing of foreign terms from other languages “is resorted to by terminographers who are too cowardly to challenge neo-colonialism” (Charamba 2012). Such terminographers

substantiate borrowing of lexical items from other languages as gap filling and as a means to Shona language development. It is against this background that the researcher urges the compilers of the DR to have a relook or an evaluation of the excessive rate of engaging the borrowing term creation strategy. The researcher urges all future specialised terms dictionary compilers to put aside issues of monetary benefits and considerations over linguistic considerations, or any other motives that results in term creation inadequacies.

8.2.1 Borrowability

Statistics gathered from the three dictionaries; DR, DRN and DRU show that the noun is the most borrowable in specialised dictionaries. Figure 8-3 below shows the representation of the borrowed parts of speech such as the noun, the verb and the adjective as obtained from the above named Shona specialised dictionaries.

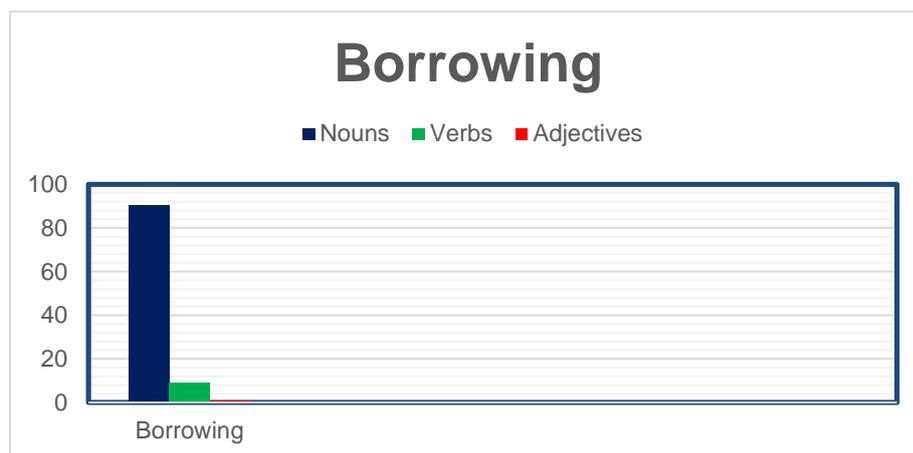


Figure 8-3: Showing graphical statistics of the borrowing pattern in the DRU

From the statistics in Figure 8-3 above, it shows that nouns are more borrowable (90%) followed by verbs (8.9%) and then adjectives (0.1%). Judging from these research findings, it can be asserted that such a borrowing tendency does not result in the contamination of the receiving language. This is so because, it is only the noun that is greatly affected and other parts of the Shona speech like semantics, morphology and phonology remain intact, hence, avoiding language contamination. The researcher safely concludes that the Shona language is not under severe threat from other languages such as English for now, but this should not make terminologists slumber in their efforts to develop the Shona language so as to fight the dominance of the English language in all spheres of life. As the situation stands, an aggressive effort by the terminographers to correct the language imbalances in Zimbabwe is

needed before it is too late.

8.3 The Loan translation term creation strategy

The loan translation term creation was highly utilised in all the three dictionaries; the DR, DRN and DRU with a total percentage of 39% of all the lexical entries in all the three dictionaries. As is shown in Figure 8-4 below, all the three dictionary compilers used loan translation extensively:

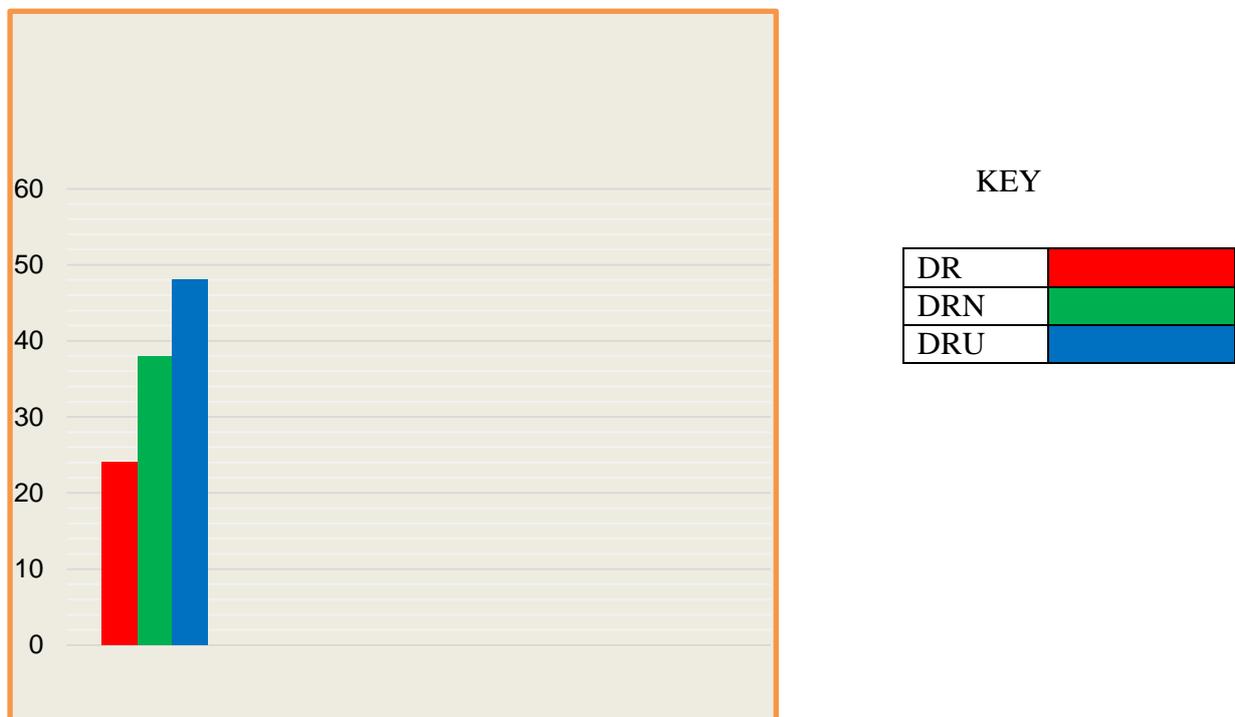


Figure 8-4: Showing utilisation of the loan translation term creation strategy in the DR, DRN and DRU

The statistics in Figure 8-4 above indicate that loan translation is the highest used term creation strategy in the DRU, DRN and DRU combined. This strategy has been extensively used by the DRU (48%) and the DRN (38%) compiler; arguing that they were avoiding direct borrowing of English scientific and technical terms into the Shona language. The DR compilers did not extensively loan translated terms (24%) because; it seems, of excessive borrowing. Still this is an undesirable situation in indigenous term creation. The extensive use

of paraphrase as a single term can be alluded to lack of creativity and innovativeness on the part of the terminographer. Hence, the researcher feels that, just like in the use of the borrowing term creation strategy, the excessive loan translation strategy shows that the dictionary compilers lacked commitment and creativeness because this term creation strategy only involves translation of the meaning of the loan word into the target language. Thus the dictionary compilers would be able to express complex foreign expressions using their own indigenous resources to match the meaning and structure of the scientific and technical terms and concepts being imported to the language. On the same note as expressed by the researcher, this study has established that there is a general consensus among research participants that loan translation is not an adequate term creation strategy. The research participants rather prefer shorter terms to phraseology. This knowledge should empower the terminographers in the process of term creation so that there is production of specialised terms that are meaningful and acceptable to the target reader. This is predicated on the fact that, the terminographer has a duty to satisfy the needs of the target users.

It is for the reasons raised above that terminographers should identify appropriate term creation strategies that would enable the creation of specialised terms that are adequate and meaningful to the target users. The researcher feels that, the excessive use of the loan translation term creation strategy points to the hurriedly nature in the compilation of the DR, DRN and DRU. It also points to the assumption by the researcher that the dictionary compilers lacked commitment and dedication to this terminology project. In fact, it can be said that the DRU compilers are the major culprits for extensively using loan translation term creation strategy arguing that these long terms may be shortened later when the speakers have comprehended the new concept, which they said is an added advantage. Furthermore, the researcher noted that, although the loan translated terms are understandable and intelligible, there are some cases of misinterpretations and distortions of the created terms when the meaning of these terms were being translated into the Shona language. Dictionary compilers must appreciate that what is known to them as terminographers is not automatically known by the target users. So the target users need good examples from a comprehensive and self-contained dictionary.

One can conclude that the DR, DRN and DRU were hurriedly done because there are many instances where other term creation strategies like coining and compounding could have been used instead of loan translation or borrowing. These foreign sensitivised term creation strategies (loan translation, borrowing) should be used as a last resort when all else have

failed. In addition, there are research participants who felt that terms in the DRN were hurriedly coined on demand from ICHE who had a deadline to beat given by the donors. Therefore, one can conclude that such a type of created terms was imposed on the speakers because people at the grassroots were not involved in the term creation processes meant for them. It is generally believed that any efforts for language development should be ultimately grounded in the acceptance of created terms by the speakers of the target language. The researcher suggests that the DRN compilers should have used indigenous sensitised term creation strategies to create medical terms. These would help the ordinary person in the expansion of knowledge about diseases and their symptoms, thus strengthening the effectiveness and efficiency of health care systems in Zimbabwe. Only then can terminology become a building block for patient safety, quality improvement and evidence based practice. In as much, the researcher suggests that terminographers should only use foreign sensitised term creation strategies only when all other indigenous sensitised strategies have failed to produce an adequate and effective term for a new concept.

It can be pointed out that the borrowing and loan translation term creation strategies can diminish the value of the Shona language, leading to the non-usage of the created terms. Thus reducing further the scope of its language development initiatives and consequently undermining its richness. Thus, the mentioned term creation strategies will ultimately fail to redeem the Shona language from the periphery given the issues of colonial historical indigenous language imbalances. The researcher concurs with one research participant who says when a language is developed through terms that are too elitist and that are removed from the workaday world, the reality then is that such a language will not be developed but will be indirectly under-developed.

Overall, judging from information from research participants and content analysis for this study, the researcher concludes that, the key negative impact of loan translation is in its inability to create specialised terms that meets the needs of the target users in a focused way. It cannot provide terms which are concise and precise; in such a way that the target users need to sift through the loan translated terms in order to get the meaning and to understand the created terms. Use of the loan translation term creation strategy in the DR, DRN and DRU, in some cases, led to the omitting of vital and important information, thus, consequently rendering the resultant terms inadequate, ineffective and seriously misleading to the target user. As such, conciseness of a created term creation play a prominent role in

making the created terms more effective and easier to use. The researcher's view is that, every language is developed by its users in the process of use. Therefore, the use of term creation strategies that are apt in the creation of adequate and appropriate terms is of paramount importance. Terminologists should choose term creation strategies that increase greatly the possibility of usability of the specialised dictionary by the target users. Also all the relevant information about the new term should be readily available. Hence, the ability of terminographers to adequately develop Shona specialised terms holds the key to their usage and consequently to Shona language development.

8.4 The compounding term creation strategy

The compounding term creation strategy was used to come up with new specialised terms for the DR, DRN and DRU. Overall, 18% of the entire combined specialised terms are compounded lexical terms. The compounding term creation strategy demonstrates that linguistic creativity is a property of all languages of the world. All the three dictionary compilers' effort is commendable because they have set out to undertake intentional language engineering or language development activities towards the deliberate creation of new terminologies for the Shona musical, medical and linguistic fields. Specialised terms which are developed using indigenous sensitivised strategies such as compounding, have the capability of "revolutionising" the Shona language and enhancing its functional role in education, economic growth and the sphere of public life at large.

However, this study noted that although the compounding term creation strategy in all the three specialised dictionaries produced original musical, medical and linguistic specialised terms, which can easily be readily accepted by the target users, the created terms have a problem in that they are lengthy and heavily lexical loaded coinages. It has been highlighted throughout this study by the researcher that any efforts for indigenous language development is ultimately grounded in the acceptance of created terms by the speakers of the target language. Hence, it is sad to note that the potential term creation strategy for uplifting the expressive value of the Shona language in Zimbabwe faces rejection from target users because of its lexical loadedness. This is supported by the analysis of responses given by research participants in Chapters Five, Six and Seven which show that compounded

specialised terms in the three dictionaries are not popular in usage. This may explain why the DR, DRN and DRU compilers did not utilise this term creation strategy to its full potential.

Figure 8-5 below shows the extent to which the compounding term creation strategy was utilised in each of the three specialised dictionaries; the DR, DRN and DRU:

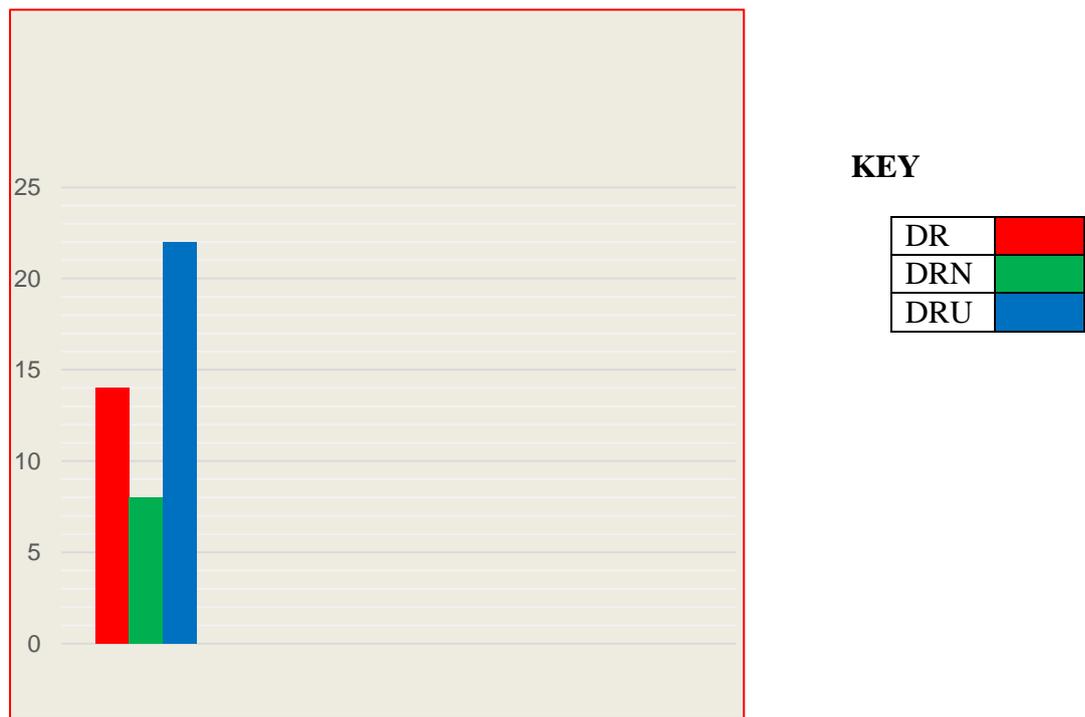


Figure 8-5: A comparative analysis of the usage of the compounding term creation strategy in the DR, DRN and DRU

Judging by the statistics in Figure 8-5 above, the compilers of the DRU compilers mostly used the compounding term creation strategy (22%). This lexical innovations endeavour shows the mastery of the word formation paradigms, by the DRU compilers. They have shown that through the compounding term creation strategy, Shona specialised terms can be developed in such way that the language may be able to express adequately scientific and technical terms coming in the Shona lexicon via foreign languages. The DR is second (14%) and the DRN is the last (8%). Content analysis carried out for this study show that the compounding term creation strategy is very productive and as such, the dictionary compilers of the three Shona specialised dictionaries should have utilised it to the best of their abilities.

Rather than expending much of their effort on foreign sensitivised term creation strategies, such as borrowing and loan translation, the DR, DRN and DRU compilers could have utilised more the indigenous term creation strategies such as compounding coining derivation and semantic expansion. Specialised dictionary compilers need to have more precision and sensitivity in term creation initiatives so as to create terms that will overcome the problem of Shona language deficiencies in science and technology, hence limiting too much borrowing from foreign languages such as English.

This study has shown that the compounding term creation strategy follows certain combination patternsnamely; the noun/noun, the verb/noun, the verb/verb, the indigenous/foreign language, the foreign/foreign language combinations. Figure 8-6 below shows the compounding combination patterns available to terminographers:

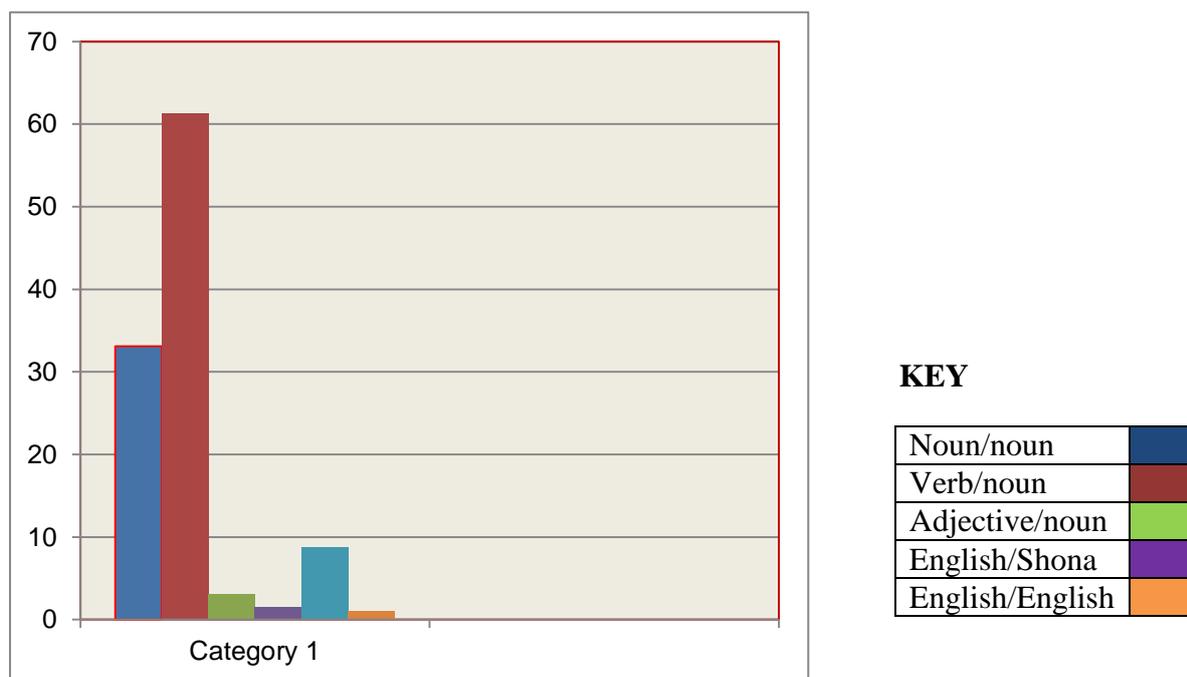


Figure 8-6: The compounding patterns in all the three dictionaries combined

Research has shown that in other languages like English, the most common compounds are formed through the noun/ noun combination, for example, < choirmaster>. However, on the contrary this study has shown that in the Shona language, the most popular compound formation is the the verb/noun combination. This means that the compounding patterns that Shona terminographers may utilise for maximum production of specialised Shona terms are

the the noun/noun and the noun /verb combinations.

The integration of all the above compounds combinations has no limit. The possible compounding relations that hold can produce numerous lexical innovations which are at the disposal of the specialised lexical term creators. Hence, this has led Hadebe (2000) to conclude that, the compounding term creation strategy is probably the most important mechanism for creating new technical terms in any language. In addition, this study has also shown that terminographers may lengthen or reduplicate terms so as to intensify or change the meaning of the compounded term.

8.5 The coining term creation strategy

This study shows that the DR, DRN and DRU compilers used the coining term creation strategy. However, the researcher argues that this term creation strategy was not maximally utilised in all the three Dictionaries, since coining is on the fourth place in terms of number of lexical items in the three dictionaries combined. The researcher notes with concern that during the coining process in the DR, DRN and, especially, in the DRU, the compilers did not give comprehensive definitions at times and examples so as to help the target users to understand the coined terms. Dictionary compilers should make sure that all the words used in the dictionary have definitions. The researcher notes that for example, the term *bonde in* the DRN is not defined neither has it been entered as a headword. It against this background, that the researcher urges the specialised dictionary compilers to appreciate the fact that what is known to them as terminographers is not automatically known by the target users. So there is need for them to give good examples and good definitions in order that the target users would easily understand and comprehend the created terms. In addition, there was inconsistency of usage of the coining term creation strategy in the DRU. Furthermore, during the term creation all the three dictionary compilers did not observe term creation guidelines and principles especially that of mononymy. The big question is; how will the target users for the specialised dictionaries be expected to understand the created specialised terms when the terminographers are not observing the appropriate guidelines and principles for term creation?

Figure 8-7 below shows the utilisation of coining term creation strategy as compared to other

term creation strategies like borrowing, loan translation, compounding and the semantic expansion.

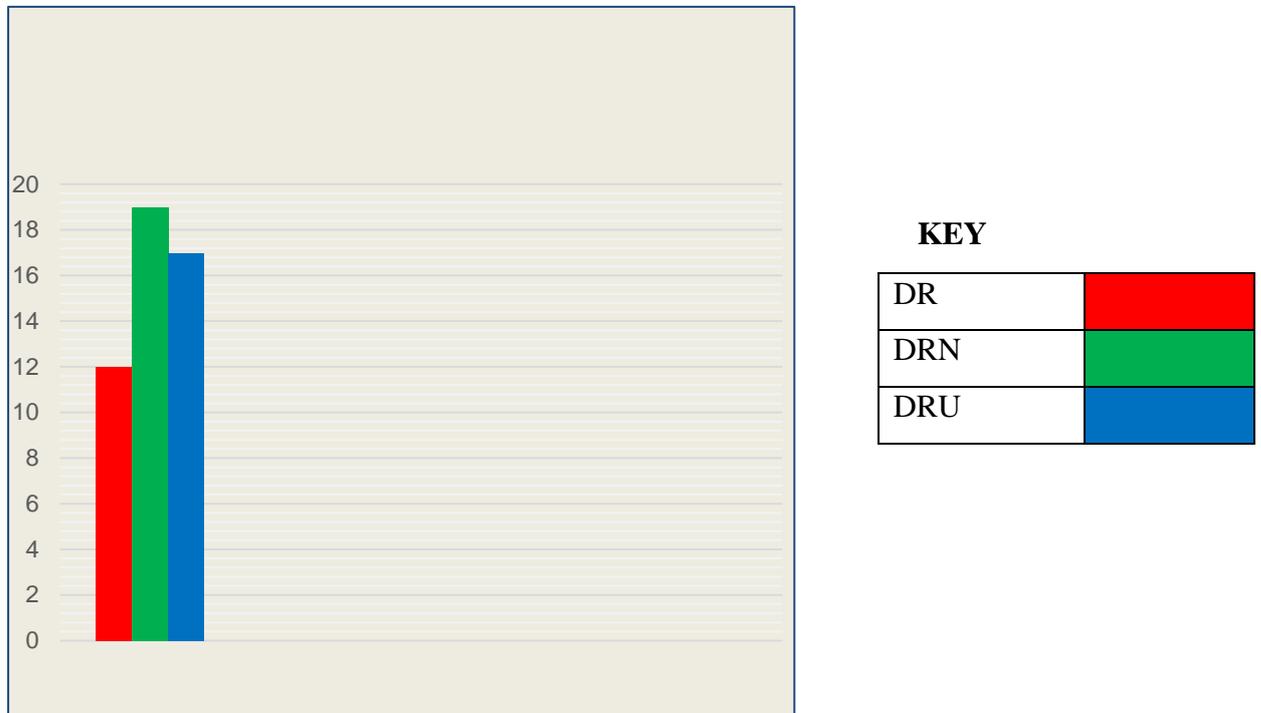


Figure 8-7: Showing the utilisation of the coining term creation strategies in the DR, DRN and DRU

Compared to other dictionaries, the *Duramazwi Remimhanzi* (DR) compilers coined very few new terms (12%) since they mostly borrowed musical terms from the English language, followed by the *Duramazwi Remutauro neUvaranomwe* (DR) compilers (17%) and the *Duramazwi Reutano Neurapi* (DRN) compilers (19%). The researcher had expected that since this term creation strategy is an indigenous sensitivised strategy dictionary, compilers would utilise it more than any other term creation strategy in these Shona specialised terms dictionaries. Since these specialised terms are coined in the Shona indigenous language they make it easier for the target users to easily access them. This easy access of the coined indigenous terms will automatically make Shona specialised terms dictionaries valuable tools as resources for the Shona language. It is generally believed that students would perform better in school if school subjects are taught in the indigenous languages (Mutasa 2003, Mazrui (1995), Magwa (2006), Prah, Ogutu (2006), Alexander (2007), Webb (2006), Fishman (1993). A South African scholar remarks that “South Africa stands to lose nothing if

we take bold steps and start positioning our indigenous languages as major trajectories for academic excellence and economic empowerment”. This is also applicable to Zimbabwean language situation; bold steps should be taken to empower the indigenous languages. This will give the Shona language academic and economic value that it needs. However, this insight cannot be realised because of lack of efficient Shona scientific and technical textbooks in Zimbabwe. These textbooks will not be compiled because of lack of adequate Shona scientific and technical terms which the researcher had hoped the DR, DRN, and DRU compilers would address.

This study shows that if the coining term creation strategy is not carefully employed, it can lead to unnecessarily significant heavy presence of synonymys in a language. Such an undesirable situation is evident in all the three dictionaries; DR, DRN and DRU. If the target user is confronted by several linguistic terms that denote one linguistic concept, they may be confused as to which one of the several terms is more appropriate. However, it can be pointed out that the many synonyms in the DRN were more or less influenced by euphemistic tendencies by the dictionary compilers. They may have felt that in the Shona language it is a taboo to refer directly to certain body parts, hence it seems as though most synonyms in the DRN are as a result of terminographers who obliquely referred to these taboo issues. However, it can be asserted that in the area of medicine, the terminology to be used by medical practitioners should be clear and precise for the sake of safety of patients, quality improvement and evidence based practice. Shona specialised terms help in the expansion of precise knowledge about diseases and their symptoms. Thus, standardisation of medical terms strengthens the effectiveness and efficiency of the health delivery and care systems. Through standardisation, the Shona medical language development can be monitored by “pooling” medical data from various and different sources of terminology. However, there are no clear reasons for the presence of so many synonyms in the DR and DRU.

Some of the coined terms in the DR, DRN and DRU are vague and artificial as was analysed and discussed in the last three chapters. The researcher rejects the idea of term creation strategies being treated as "some kind of inferior exercise” and proposes that it should be taken as a worthwhile exercise that focuses more on term adequacy, efficiency and effectiveness so as to improve Shona language development initiatives. An overview of the analysis of the coining term creation strategy shows that, when a language is developed through vague and artificial terms then the gist of the matter is that the terminographers will

be under developing the concerned language instead of developing it because the terms will not be used by the target users. Specialised dictionary compilers should remember that the Shona language is competing with the English language for space and value. Therefore, any term creation efforts should be taken seriously because any shoddy work will drive the target users of the Shona language to prefer borrowed terms from English language and some other foreign languages. Hence, the creation of inadequate term creation strategies further undermines usage of the Shona language in social, economic, scientific and technical domains. In other words, the term creator would have indirectly underdeveloped the Shona language because the created terms will be rejected by the target users. Adequately created terms can strengthen the target users' Shona linguistic skills by positively influencing their attitudes towards the Shona language.

The researcher is of the opinion that terminographers should utilise term creation strategies that fight the dominance of the English language (Charamba, 2012). The potential of the Shona language need to be explored more aggressively in building technical terms (Mutasa, 2002). Only this step will enable indigenous languages in the scientific, technological and educational fields to take their rightful place in the next millennium. As such, the extensive use of foreign term creation strategies over indigenous sensitivised in the DR, DRN and DRU should be minimised. It is true that if done properly, the coining term creation strategy can result in coming up with completely new terms for the Shona language, thereby making it grow; at the same time retaining its character and essence. Adequate and effective specialised terms will stimulate the target users and even book authors to focus more on writing Shona scientific and technical textbooks. This will improve the understating and abstraction of scientific subjects which are being done by very few high school and university students in Zimbabwe. Magwa (2006:24) asserts that “such an enhanced role is likely to lead to the development of a healthy indigenous language industry”.

Hadebe (2002:225) asserts that, the issue of terminology is part of the overall cultural and economic domination of the west over the third world countries. Unless and until African governments are economically self-sufficient, have their own means of production and the ability to name their invented products, then they will be overly dependent on Western technical and scientific vocabulary. It is in this area that the Shona language and other indigenous languages are over-dependent on imported technical and scientific terms. This

view is shared by Cluver (1980:5) who believes that, “as long as the national industry and level of scientific research is underdeveloped ... terms that has been created in indigenous languages at this stage are just that: created terms”, (cited in Hadebe, 2002). That strategy will push people from all over the world to accepting English as the ‘global’ language when in fact their concept of a global language will be based on some neo -imperialist and neo-colonialist definitions of a global and/or world language (Charamba, 2012: 349).

Furthermore, it was noted by the researcher that some of the research participants were sceptical about funds being donated to a country for issues of language development. They pointed out that donors know very well that scientific knowledge is an element of power; technical knowhow and skills are a pre-requisite for the transformation of genuine independence and self-reliance. As such, it is believed that they sabotage language development initiatives for developing countries by underfunding research projects in terminology. Hence, they will be happy if there is very slow growth in scientific and technical development in developing countries, because it means that most of the new scientific and technical inventions will be exported from developed countries. By so doing their economy will always be far ahead that of developing countries. It is generally assumed that this is a conspiracy of creating perpetual dependence of developing countries’ scientific and technical terms on developed nations. Consequently the initiative of producing Shona specialised terms dictionaries using donated funds becomes a foreign initiative because terminologists will not be able to select their own methodology.

The researcher also noted that consultations with linguists, target users and people at the grassroots were very limited in the selected Shona specialised dictionaries, presumably because of limited funds or overspending. In an interview with this researcher, the DR, DRN and DRU compilers acknowledged that that their term creation initiatives were limited and governed by available funds, of which under such circumstances, the accumulation of knowledge followed pre-determined patterns over which the dictionary compilers had no control, hence the final result of their endeavors are not adequate and half-baked (Chabata). However, the researcher is of the view that monetary rewards or gains should not supersede terminological work meant for national language development. It is also at that time when term creation will cease to be the monopoly of the elites, who currently use it as a money-spinning game (Chiwome et al, 2000: xix -xx). These assertions were also raised by some research participants who postulated that, it seems as if due to monetary gains or rewards, the term creation initiatives in the DR, DRN and DRU were hurriedly done. Linguists

interviewed speculated that the terminographers rushed in the compilation of the dictionaries because it appears, they were mainly interested in monetary benefits. This then, could be the major reason why the term creation strategies in the DR, DRN and DRU are inadequate terms as evident in all the three dictionaries.

Also observed by the researcher is the lack of collaboration of the creation for linguistic and literal terms in the DRU and some other texts on Shona grammar and literature. The researcher feels that there should have been a coordination between authors of *Jekesa Pfungwa* book 1 and 2 and Focus Study Aids. The non-collaborative approach further confuse the target users who may not be able to judge which is the more correct term to use between the different terms presented in the mentioned texts. Basing from the view-points raised above by the researcher, it can be pointed out that the government of Zimbabwe should take a more active role in terminology development. The researcher feels that a national unit for terminology development should be established by the government. This unit would be responsible for the documentation, standardisation, development and publishing of specialised terms created to cover various technical and scientific fields. Thus, it is very important for Shona terminographers to use term creation strategies that promote indigenous growth of the Shona language not hybridised specialised terms. Above all specialised terms dictionaries should not be hurriedly done, terminographers should take their time so as to build dictionaries that are trusted and respected as language repositories.

8.6 The derivation term creation strategy

Besides compounding, it was noted in this study that the DR, DRN and DRU compilers used the coining term creation strategy. The derivation term creation strategy is on the fifth place in terms of number of lexical items in all the dictionaries combined. The initiatives of the dictionary compilers have shown that, through the derivation term creation strategy, any terminological activity can be tailor-made to suit requirements of the target language (Cabre, 1999) and to make the created terms acceptable by the target users. Therefore, going by this postulation, terminographers can develop as much specialised terms as is possible through the use of the derivation term creation strategy. From the research findings and content analysis, it can be deduced that the derivation term creation strategy is very productive, and this term creation strategy can be aptly manipulated for the intervention to end the deficiency of Shona

scientific and technical terms in the DR, DRN and DRU. This will demonstrate that linguistic creativity is a property of all languages, especially African languages in general and the Shona language in particular. Figure 8-8 below shows the utilisation of the derivation term creation strategy in the DR, DRN and DRU:

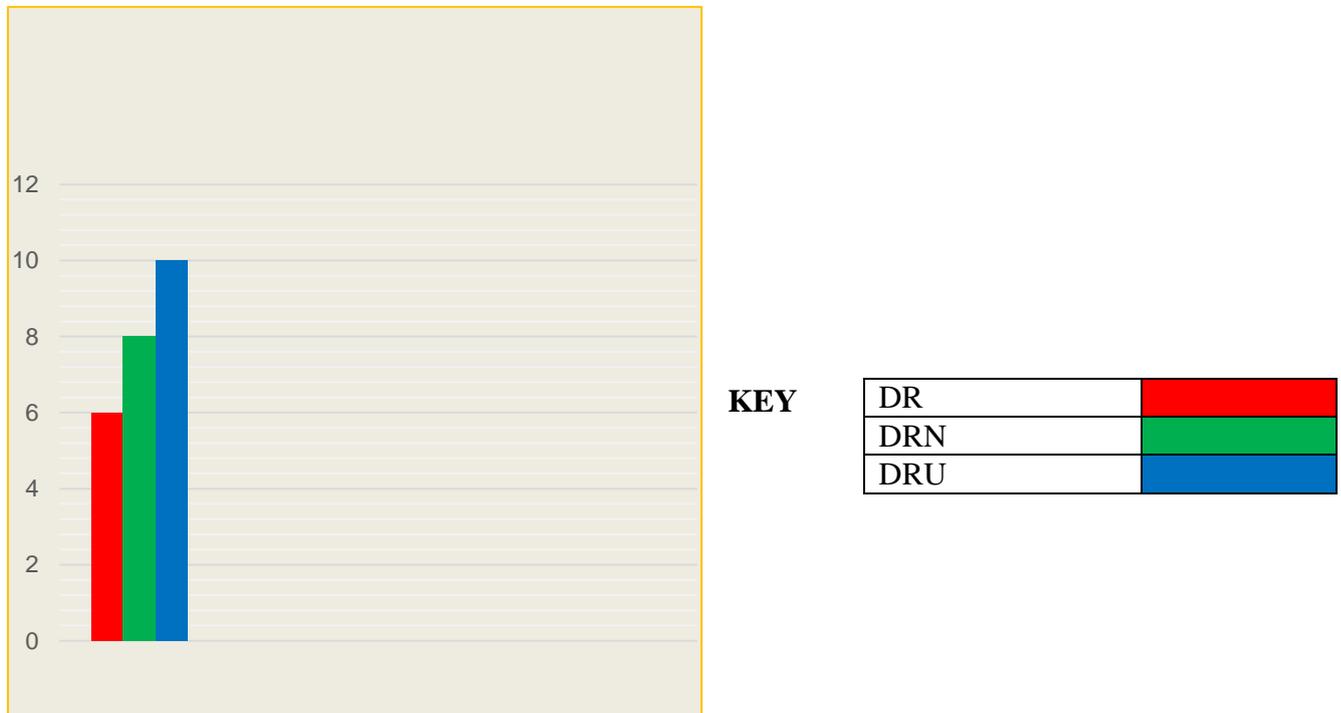


Figure 8-8: Showing the derivation term creation strategy in the DR, DRN and DRU

Overall, the researcher concludes that although this strategy was not maximally engaged, the derivated terms in the entire three dictionaries were fairly adequate. The researcher though, commends the use of the derivation term creation strategy in the DR, DRN and DRU.

8.7 The semantic term creation strategy

The semantic extension term creation strategy has been applied by all the three specialised terms dictionary compilers. In semantic expansion, the dictionary compilers attached a new meaning to an existing term by modifying its semantic content. Employing semantic shift to a term is an advantage because “the terms are transparent to the users and the method draws on the internal resources of the language” (Van Huyssteen, 1999:183). However, despite all this it has been observed by the researcher that the semantic expansion term creation

strategy was not highly utilised in the DR, DRN and DRU to create Shona specialised terms. This is so since it has the minimum percentage as compared to other term creation strategies in all the three specialised terms dictionaries. Figure 8-9 below shows the utilisation of the semantic term creation strategies in the DR, DRN and DRU:

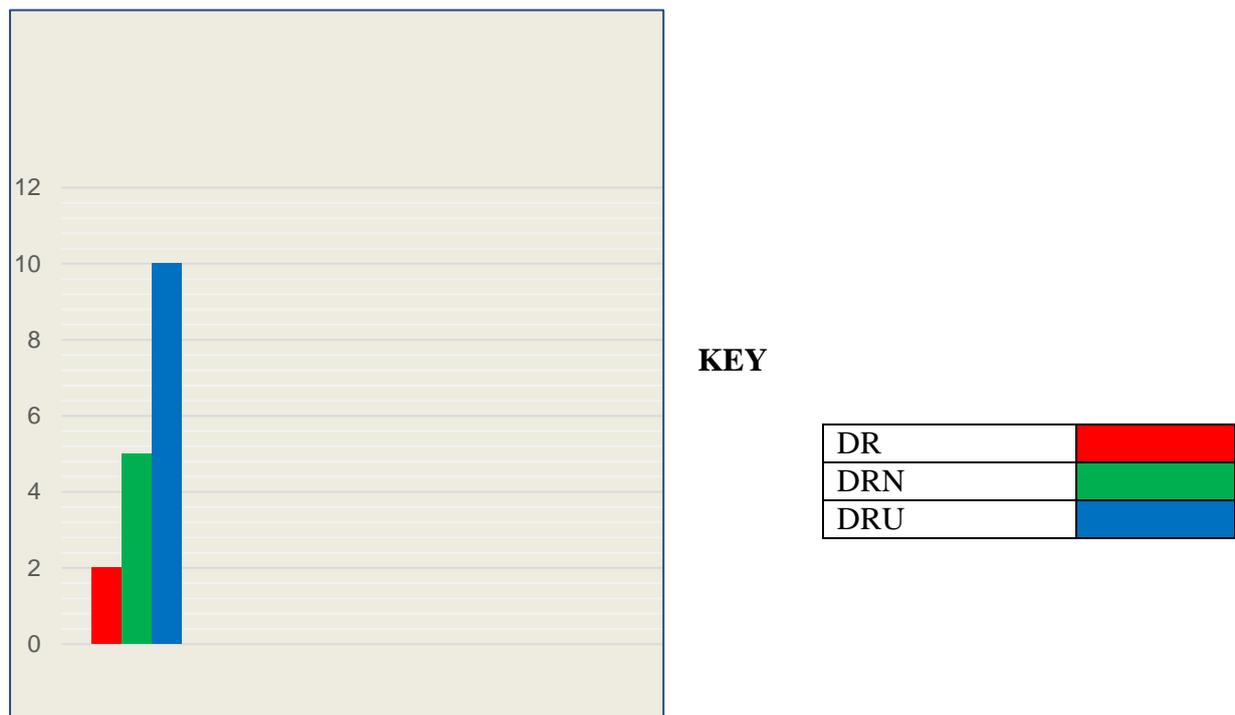


Figure 8-9: Showing the utilisation of the semantic term creation strategy in the DR, DRN and DRU

The statistical data above shows that the semantic term creation strategy was utilised more in the DRU (10%) followed by the DRU (5%) and lastly the DR (2%). Research findings have also shown that the major disadvantage of the semantic expansion term creation strategy is the creation of polysemous terms. It is believed that over a general period of time the specialised terms are integrated into the general lexicon, but however obscured by the issue of undesirable polysemy. Historically, the reason for the ubiquity of polysemous words is because people have preferred to take words and extend their meaning rather than create new words (Gyori, 2002; Murphy, 2004). This assertion implies lack of commitment and innovation to create completely new specialised terms on the part of terminologists.

On the other hand semantic expansion does not result in vocabulary increase but it expands the meaning of words. Consequently, the word meanings are extended so that the specialised

terms end up possessing multiple meanings. This obviously can confuse the target users as semantic expansion creates ambiguity because the terms can be understood in different ways as they will be having more than one meaning. As such, the researcher hence urges specialised dictionary compilers to consider using the coining and the compounding term creation strategies as the most appropriate for the creation of Shona specialised dictionaries. The researcher submits that the major aim of term creation is to transform Shona speaking students and people from negative attitudes about the Shona language to Shona language users. Hence, by so doing language use will raise the users' awareness towards the importance of using Shona scientific and technical terms, making them more proficient in using indigenous languages. The researcher is of the view that this the only way that the Shona language will be given a functional value in any professional fieldlike medicine, music, agriculture, literature, and linguistics, just to name but a few.

8.8 The overall comparative outlook of all the term creation strategies used in the DR, DRN and DRU

The DR, DRN and DRU show a variety of usage of term creation strategies by the dictionary compilers. Research findings for this study show that foreign sensitivised term creation strategies (borrowing, loan translation) were heavily used by all the three specialised dictionaries compilers at the expense of indigenised term creation strategies (compounding, coining, derivation semantic expansion). The researcher concludes that this maybe so since indigenous term creation strategies require an effort of creativeness and innovativeness on the part of the dictionary compilers which are not displayed by all the three dictionary compilers. The researcher expected that as a very learned people, the DR, DRN and DRU compilers could have displayed their acquired knowledge in language development through the more use of indigenous term creation strategies. They could have set very high standards in term creation initiatives, guaranteeing the accuracy and acceptability of their work by the target users. The specialised dictionary compilers should always be aware of the fact that the target users do not just take everything provided in the dictionaries at face value. They also develop a critical attitude towards the created terms and this can lead either to their acceptance or their rejection. That way, the adequateness of the created specialised terms will not be questionable. Figure 8-10 below gives an overall comparative outlook of all the term creation strategies used in the three dictionaries:

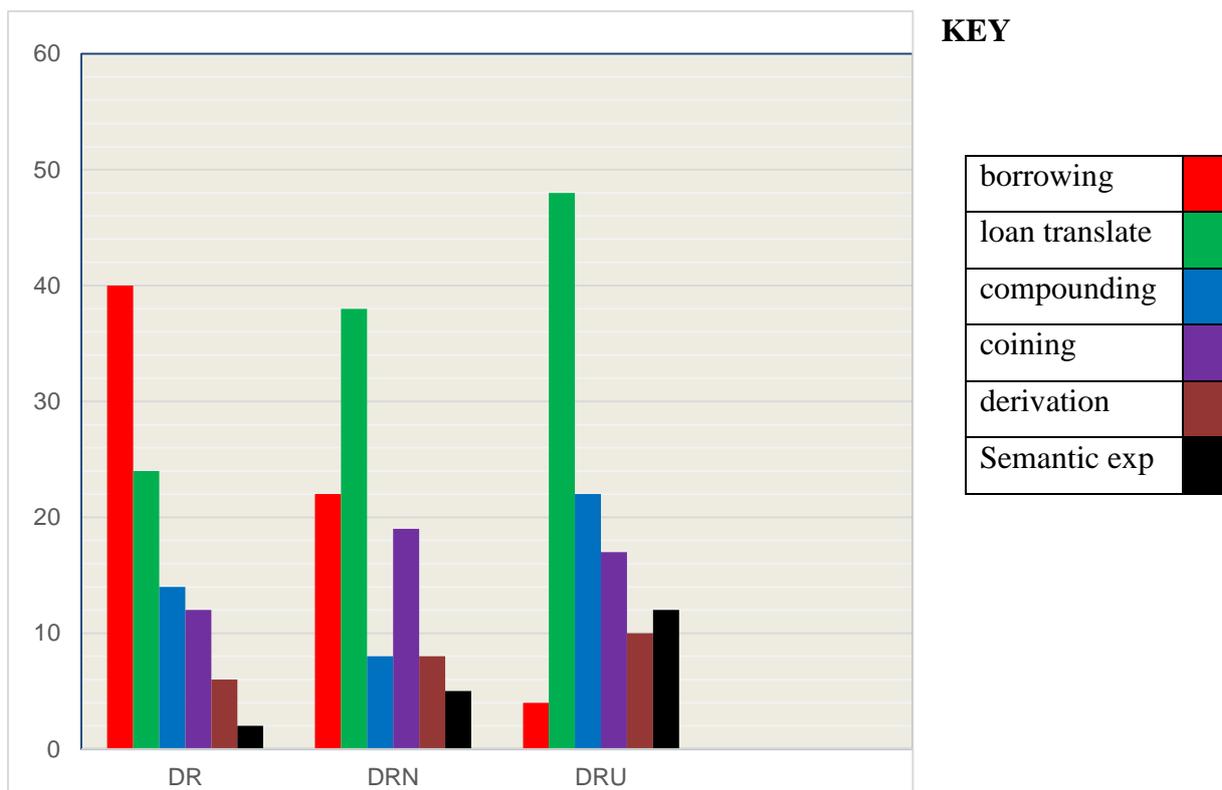


Figure 8-10: Showing a comparison of term creation strategies as utilised in the DR, DRN and DRU

Figure 8-10 shows that, out of 1194 lexical entries in *Duramazwi Remimhanzi* (DR), 146 (24%) are as a result of loan translation, 224 (40%) are as a result of borrowing. Figure 8-11 below shows that 581 (49%) are as result of repackaging Shona musical terms. This gives a total number of 951 lexical entries created from term creation strategy that requires less term creation effort on the part of the terminographers. This means that there are only 243 specialised terms in the DR that are as a result of engaging indigenous sensitivised term creation strategies. From the analysis given above, it has been generally observed by the researcher that where indigenous sensitivised term creation strategies are employed, the DR is always lagging behind in favour of foreign ones. This shows that this specialised dictionary was hurriedly compiled and therefore just collected existing Shona musical terms and rephonologised borrowed musical terms into the Shona language from the English language. Therefore, it can be concluded that there was lack of commitment to the indigenous development of the Shona language through indigenous means from the DR compilers.

Statistics in Figure 8-10 also show that from a total of 1225 lexical entries in the *Duramazwi*

Reutano Neurapi (DRN), 235 (38%) are as a result of loan translation, and 114 (22%) are a result of borrowing. Figure 8-11 below shows that 662 (54%) are as a result of repackaging existing Shona medical terms, which makes a total of 1011 created out of less effort in term creation processes. It means therefore, that only 214 were created out of engaging complex term creation strategies like compounding, coining and derivation. Again, as is the case in the DR, it appears as if the DRN compilers had no commitment and devotion to fulfil the goals they proclaimed for the compilation of the Shona linguistics and literary terms. Maybe the dictionary compilers had other hidden goals for the compilation of these dictionaries besides those that they gave to the target readers.

A closer analysis of the given statistical data for the *Duramazwi Remutauro neUvaranomwe* (DRU) in Figure 8-10 above shows that, out of a total of 1439 lexical entries; 471 (48%) are as a result of loan translation, and 43 (4%) are as a result of borrowing. Figure 8-11 below shows that 465 (33%) are as a result of repackaging existing Shona general terms, which makes a total of 979 lexical entries. The 979 were created out of an effort that does not require terminographers to expend much effort. This means that they were only actively involved in the creation of 460 lexical entries. Furthermore, out of the 460 lexical entries most of the specialised terms are synonyms. This leads the researcher to conclude that the DRU were not seriously committed to the compilation of a specialised dictionary project.

Nonetheless, the researcher notes that each of the term creation strategies has its advantages and disadvantages; therefore, terminographers need to assess every concept and decide which of the term creation strategies is the best appropriate. Hence, the researcher is not just condemning the use of certain term creation strategies by the DR, DRN and DRU compilers but with all fairness, a dictionary should at least reflect some sort of a balance of all the term creation strategies engaged.

8.9 Repackaging

Research findings show that all the three dictionary compilers; DR, DRN and DRU repackaged existing Shona terms. Repackaging consists of 40% of all lexical entries in the three dictionaries; out of a combined total of 3 858 lexical entries, 1 708 are as a result of repackaging of existing terms. Figure 8-11 below shows repackaging of existing Shona terms in the DR, DRN and DRU:



Figure 8-11: Showing repackaging rate of existing Shona terms in the DR, DRN and DRU

The analysis of the term creation strategies in all the three dictionaries shows that the dictionary compilers were less creative and less innovative; at most they repackaged existing Shona indigenous terms. As has been already shown by the researcher in previous chapters of this study, the dictionary compilers used term creation strategies that do not require much effort, innovativeness and creativity such as loan translation and borrowing to the maximum.. The researcher is of the opinion that the DR, DRN and DRU compilers need to be aware of the differences between specialised corpora as opposed to general corpora because it seems as if some of the repackaged terms do not qualify to be regarded as specialised terms. Furthermore, even if repackaging is an acceptable practice in dictionary making, the researcher suggests that it would be understandable if at least the number of new coinages surpass the existing or repackaged terms by at least three quarters. The scenario in the DR, DRN and DRU is that the repackaged and newly created specialised terms creation are almost equal and this is not good; which shows the compilers were not committed to this word formation project as reflected by above findings.

8.10 General appearance of the specialised dictionaries

Most research participants for this study were not happy with the general appearance of DR, DRN and DRU. All the three dictionaries are thin in volume which means that the compilers did not comprehensively include all the Shona specialised terms in the medical, musical and linguistic and literal terms. The DR, DRN and DRU general appearance can be likened to that of a Shona novel. The general appearance of a textbook is very important in that it motivates target users to use it. Compared to other specialised dictionaries, the maximum lexical entries for the dictionaries is not the best representative of all available musical, medical and linguistic and literal specialised terms. As a matter of interest, most desk-size dictionaries have over 162,000 references; the concise dictionaries have over 96,000 references and the pocket dictionaries have some 70,000 references (Jackson, 1987: 79). Judging by the given information, the DR, DRN and DRU total lexical entries fall far too low as compared to other dictionaries as cited above. The researcher is of the view that the reason why the specialised dictionaries are thin in volume is as a result of inadequate definitions, lack of examples and omitting of vital information by the dictionary compilers which would allow for the productive use of the Shona language by the target user. The dictionary is considered as a reference book about words designed to meet the specific needs of a group of users (Jackson, 1987: 79) and as such omitting of vital information will discourage their use by the target users. Therefore the researcher urges the dictionary compilers to improve on the general appearance and design of the dictionaries. This will improve visibility of the specialised dictionary to the target users. The DR, DRN and DRU could copy a strikingly successful example of *Duramazwi Guru ReShona*.

8.11 Collaboration

In this study, the researcher has established that the DR, DRN and DRU compilers did not have a collaborative approach with all concerned stakeholders so as to perfect the art and science of term creation. The coverage of term creation activities in the DR, DRN and DRU was confined to few schools, colleges, universities, very few selected musicians, music technicians, medical practitioners, linguists and the target users. This has led research participants for this study to conclude that term creation in Zimbabwe is too elitist since it is

in most cases removed from the majority of the users of the indigenous Zimbabwean languages. Linguistic terms that are developed in offices, during seminars and workshops organised by the elites do not help in the development of the indigenous languages, but helps to undermine them. Thus, the development of term creation should as much as possible involve local people and local language resources as well as specialists in the various technical fields. Real term creation development is not possible without involvement of the users. People at the grassroots level must be integrated into term creation processes; specialised terms in a dictionary should be created collaboratively for the people by the people. It is therefore, important that the target users should play a participatory role rather than a passive reception role in term creation projects.

8.12 Challenges faced by DR, DRN and DRU compilers during term creation processes

It is well known that term creation is a complex issue, and as such, it is not an easy task to undertake. Thus, there are bound to be many challenges that are faced during the process of term creation, but these should not be used as a scapegoat to exonerate the dictionary compilers from the shortcomings of the term creation strategies in the DR, DRN and DRU. During the process of data collection, the researcher identified specific problems that the DR, DRN and DRU compilers faced as follows:

- ◆ Adherence to some of the term creation guidelines and principles which at many times were violated in order to bring the descriptiveness of created terms at the expense of prescriptiveness.
- ◆ Lack of resources, both financial and material, thus the project was underfunded. There were financial problems since the budget was constrained, hence the project was underfunded. DRN compilers acknowledged that due to financial constraints, they lacked medical expertise in the area but ICHE wanted the dictionary as fast as possible thus, the project was badly done. Donors' far-fetched ideas made them to deviate from more pressing issues of indigenous languages; therefore, projects should not be left in the hands of donors only.
- ◆ Unfavourable language policy in Zimbabwe. The language policy still recognises English as the official language in Zimbabwe.

- ◆ Dealing with the issue of synonymys: there was infighting for dialectal representation in the DR, DRN and DRU compilation processes.
- ◆ Lack of translation equivalence for the loan words in Shona language, this led the DR, DRN and DRU compilers to engage the less precise loan translation term creation strategy extensively and borrowing of loan terms.
- ◆ Shona culture is a closed culture; therefore it was difficult for compilers to get some indigenous medical information as the herbalist refused to share the information.
- ◆ Dealing with culture specific terms coming in from other languages.

As such, the researcher feels that, it is necessary for all dictionary compilers or terminographers to come together so that, they map a way forward for the overcoming of these linguistic problems in Zimbabwe. It is the hope of the researcher that, by highlighting these challenges, the government of Zimbabwe, language boards and all stakeholders will attend to these problems among others so as to promote the development of the Shona language. The problems cited above are the major problems among many others, and the researcher has highlighted them with the hope that these will be dealt with urgently, so as to improve the quality of term creation in Zimbabwe.

8.13 Conclusion

This chapter has given a comparative analysis of term creation strategies of all the three specialised dictionaries as investigated in Chapters Five, Six and Seven. This study has shown that borrowing, loan translation, compounding, coining, derivation and semantic expansion are the major sources of term creation strategies in the DR, DRN and DRU. Besides the given term creation strategies, this study has also shown that the Shona language can make use of acronyms and shortening to create specialised terms, especially in the medical field where linguistic economy is practiced, and in the musical field. Acronyms were not identified in the DRU by the researcher. Research findings for this study show that loan translation is the most utilised term creation strategy for all the dictionaries combined, followed by compounding, borrowing, coining, derivation and semantic expansion in a descending order. In addition, the researcher has noted that coining, compounding, derivation and semantic expansion are contending term creation strategies that are undoubtedly a key component in the struggle to preserve maintain and develop the indigenous languages to modernity. The utilisation of the above mentioned term creation strategies show that any

language can be developed to express any concept to various levels of abstraction of the target users.

Basing on the views raised by the researcher and the research participants, the DR, DRN and DRU compilers should consider the promotion of awareness of their terminological work. This is of paramount importance; that the aims and goals of Shona terminological development be made clear so that potential users come to embrace and appreciate term creation efforts. This undoubtedly will make pilot projects such as the DR, DRN and DRU highly visible. The awareness campaigns should be in strategic areas where these works can be easily popularised; in high schools, colleges and universities. Information gathered in this study shows that some students in high school, musical and medical schools and universities are not even aware of the existence of such dictionaries.

The DR, DRN and DRU compilers should not always assume that the target users are familiar with the characteristics of specialised terms; hence they must ensure that the created terms are precise, clear and easily retrievable. The researcher thus recommends that the ordering systems of terms should be based on concept system in accordance with the principles of terminology work. Another sector which should be sensitivised to the needs of terminology is that of publishers of specialised dictionaries. Publishing companies often do not have their own editors for special subject books hence; it is not surprising that some specialised dictionaries sold are of poor quality. Therefore, there is need for publishing houses to have subject specialists to edit the specialised terms before the dictionaries are published.

In this chapter the researcher highlights the need for the government to avail to terminographers all the necessary resources needed for the compiling and production of properly presented specialised terms. They should not leave everything to individuals, donors and language boards, for such a scenario results in the production of different kinds of specialised dictionaries. It can be asserted that collaboration of effort between the government of Zimbabwe and terminographers would greatly enhance the development of the Shona language.

Through the analysis of the three dictionaries the researcher noted that terminology work in Zimbabwe is actually being carried out or performed by people who do not have time for the standardisation of their terminological works. More still, they do not show enthusiasm,

commitment and devotion towards the development of the indigenous languages. It seems to the researcher as if these terminological projects are just done either to fulfil certain professional conditions or promotion criteria or as some research participants asserted; monetary gains. The researcher recommends the establishment of a national language board which would assess and evaluate the created terms before they are published. The major task of this board would be therefore, to monitor all terminological activities in Zimbabwe. In addition, the researcher calls for the standardisation of all terminological work so as to minimise synonyms in specialised dictionaries.

During the data collection process research participants displayed their knowledge and understanding of various issues affecting term creation strategies issues and challenges and they suggested ways by which these challenge maybe overcome. This alone proves that there is a great need for a collaboration effort between dictionary compilers and the target users, so that term creation activities meant for Shona language development may not be carried out in vain.

Conclusively, it is hardly impossible for the researcher to tell which the best is, out of the three analysed Shona specialised dictionaries, since all of them have different types of weaknesses and different types of strengths. What can be safely be stated by the researcher, though, is that the analysed dictionaries; the DR, DRN, and DRU are not very effective and not very adequate to serve those who consult them for specialised educational purposes. However, the researcher feels that many points can and should still be improved as expounded by the researcher and the research participants in Chapters Five, Six and Seven. There is a great room for improvements and adding features that make them much more interesting and appealing. The compilers of *Duramazwi Remimhanzi* (DR), *Duramazwi Reutano Neurapi* (DRN), *Duramazwi Remutauro neUvaranomwe* (DRU) could still make more improvements in a way that the target users can directly and easily refer to thesedictionaries without having to consult extra material and sources.

Chapter 9: CONCLUSION AND RECOMMENDATIONS

9.1 Introduction

The last three chapters presented research findings and discussions pertaining to term creation strategies used in the DR, DRN and DRU. In this chapter, a research summary is given especially concerning the main focus of the study; the analysis of term creation strategies used in the DR, DRN and DRU. The research question and objectives are revisited in the light of the findings of the research study. Furthermore, this chapter will also conclude the whole study, by giving an integration of the findings and inferences drawn from the study. Lastly recommendations are given for all the stakeholders; the government, language policy and planning officials, linguists and experts in the terminological field.

9.2 A summary of the chapters in this study

Chapter 1 gives the purpose of this study; which is to analyse term creation strategies *Duramazwi reMimhanzi*- DR (Shona Dictionary of Musical Terms), *Duramazwi Reutano Neurapi*- DRN (Shona Dictionary of Medical Terms) and *Duramazwi reMutauro neUvaranomwe*- DRU (Shona Dictionary of Linguistic and Literature Terms). It gives the historical background and scope of the problem, and the methodologies that are used to solicit data from research participants. In addition, this chapter helped the researcher to highlight the significance of the study. Moreover, this chapter identifies the related literatures to be consulted by the researcher and the theoretical framework to guide this study. The objectives for this study and the crafted research questions are outlined in this chapter so as to help the researcher to get answers for the problem under analysis.

Chapter 2 provides the literature review. The literature review provided a comparative analysis between this study and other prior relevant studies. As such, it provided the researcher with information about what has been researched on, how it was researched, and what has not yet been researched so as to avoid reduplication of effort in research studies. In addition, the literature review helped to put the identified problem of research within a broader context as the researcher familiarised with other similar studies. Furthermore, the literature review provided the researcher with a mountain top view of term creation studies;

their purpose and effects, the challenges faced by terminographers, their development, term creation principles thus, it provided an overview of the field of term creation as a whole. The literature review provided a basis for arguments, contentions, assertions perspectives and worldviews for this study. Thus, it laid the foundation for the analysis and evaluation of term creation strategies in the *Duramazwi reMimhanzi*, *Duramazwi Reurapi Neutano* and *Duramazwi Remutauro neUvaranomwe*. On the other hand, the literature review gave a theoretical base for this research that helped the researcher to “whip and align” this research into the area of study.

Chapter 3 provides an overview of the theoretical framework within which this study is premised; Cabre’s communicative theory of terminology (CTT). Cabre’s communicative theory of terminology guided the researcher in the realisation of the objectives of this study, which are to analyse the adequateness of created terms, as well as accessing the acceptability of the created terms by the target users and to explore factors influencing the dynamics of term creation in the Shona specialised dictionaries. More so, CTT enabled the researcher to analyse the term creation strategies as they are actually used in DR, DRN and DRU. As such, the researcher concludes that, by embracing the Cabre’s CTT, the created terms in DR, DRN and DRU are satisfactorily adequate.

Chapter 4 provides the methodology used to gather data for the study. Data was collected using both the quantitative and qualitative methodologies. The qualitative methodology provided the researcher with the ability to interview and to use questionnaires, so as to get an in-depth picture of the term creation strategies in the DR, DRN and DRU. As such, the following issues were discussed with the research participants: adequacy of term creation strategies such as borrowing, loan translation, compounding, coining derivation and semantic expansion, etymology purity, language policy, issues of the presence of synonyms and polysemy in specialised terminology and challenges faced by terminographers in term creation. The quantitative methodology enabled researcher to compare and contrast term creation strategies in the dictionaries, overviews and perspectives of research participants on term creation strategies in the DR, DRN and DRU. During the data collection process research participants displayed their knowledge and understanding of various issues affecting term creation strategies issues and challenges and they suggested ways by which these challenge maybe overcome. This alone proves that there is a great need for a collaboration

effort between dictionary compilers and the target users, so that term creation or language development activities may not be carried out in vain.

Chapters 5, 6 and 7 presented the research findings, analysis and discussion of the term creation strategies used in the DR, DRN and DRU respectively. The analysis show that compilers of these three dictionaries used borrowing, loan translation, compounding, coining, derivation and semantic expansion term creation strategies to develop Shona musical, medical and linguistic terms. It was noted by the researcher that most of the created terms in the three dictionaries were not adequate. This researcher identified that in term creation the dictionary compilers utilised internal (compounding, coining, derivation, semantic expansion) and external resources (loan translation and borrowing) to create Shona scientific and technical terms.

Chapter 8 is the general and comparative analysis and discussions of the three dictionaries; the DR, DRN and DRU.

Chapter 9 is the conclusion. It summarises research findings and proposes recommendations for the government and future research.

9.3 Term Creation Principles

One of the research questions for this study was to establish the extent to which the Shona specialised dictionaries compilers adhered to the principles and guidelines of term creation strategies. From the research findings, this study has established that the DR, DRN and DRU compilers adhered in most cases to some of the principles of term creation. In the DR, DRN and DRU borrowed terms were rephonologised so as to be compatible with the receiving Shona language's morphological, phonological and grammatical rules, for example: < *bacteria-bhakitiriya*, *phonology-fonoroji*, *choirmaster-kwayamasita*, >. Thus, the DR, DRN and DRU compilers reflect consistency of usage of terms in the borrowing term creation strategy. The DR, DRN and DRU compilers fulfilled the principle of precedence which requires that a created term should be in harmony with established designations of the intended language.

Furthermore, the DR, DRN and DRU compilers partly fulfilled the precision principle which requires a term to clearly delineate its concept, but in most cases they did not give clear

definitions of the created terms, especially in the loan translation strategy, where mistranslation were noted in many instances. To a larger extent, loan translated terms violated the principles of precision and term brevity. Furthermore, this study established that, some of the created terms are polysemous, which resulted in a situation where one term denotes two or several meanings, which is not ideal for a specialised terms dictionary. Good and clear definitions are a necessity for the acceptability of the created terms by the target users.

The DR, DRN and DRU compilers failed to completely adhere to the principle of unequivocalness and mononymy because of a heavy presence of synonyms and polysemy in the three dictionaries. On that view, it is imperative that specialised terms must be univocal and that any kind of dialectal variation must be minimised. Considering that three dictionaries are specialised, the huge number of synonyms and variants is very undesirable and unacceptable. The semantic expansion term creation strategy caused specialised terms to denote more than one meaning. Specialised terminology demands that linguistic expressions or meanings be unambiguous, that is, a single term meaning should be assigned to one concept only and vice versa. The DR, DRN and DRU compilers adhered to the principle of descriptiveness as some of the created terms are descriptive, especially in loan translation and compounding term creation strategy where some terms are self-contained, for example, <*nhendeshure* (flashback), *guvhudende* (umbilical hernia) , *muimbirapamwe* (singing in unison)>.

On the derivation and inflectability of created term, the DR, DRN and DRU compilers largely adhered to this principle as they derived several terms from created terms in the form of nouns, verbs and adjectives. Furthermore, some of the created terms allowed inflectability of terms by way of prefixing and suffixing, for example *pereta- peretera* (spell), *panga – banganwa* (plot). Derivation and inflectability allows for the systematic formation of many linguistic terms, and this is evident in all the three dictionaries. In as much, the DRN compilers applied term formation mechanisms that are compatible to the Shona language as much as possible as evidenced by terms like: <*huro- hurwana* (windpipe), *huku- hukwana* (scabies) *bvunzo -bvunzonyana* (minor exam >. This shows their adherence to the series uniformity principle which requires that the created specialised terms should use common elements in naming related concepts. On this point, the researcher commends the DR, DRN and DRU compilers for this effort. Overallly, all the above contentions show that, term

creation principles and guidelines are basically applicable to all languages including Shona and the DR, DRN and DRU compilers adhered to some of them, either to a lesser or a larger extent as given above by the researcher

9.4 Research Findings

Research findings in this study show that the DR, DRN and DRU compilers utilised borrowing, loan translation coining, compounding, and derivation term creation strategies to produce specialised musical, medical and linguistically and literature terminology for the three dictionaries respectively. Furthermore, the DR, DRN and DRU compilers adopted scientific and technical terms mainly from the English language and to a lesser extent Ndebele terms. Thus, in this regard, it is noted that a significant number of terms came into the Shona language via the English language. An overview of this study shows that most employed term creation strategies were not very adequate, especially in loan translation, compounding and coining. The major findings are summarised and outlined in the following paragraphs:

The borrowing term creation strategy was employed in all three dictionaries; the DR, DRN and DRU. Most borrowed terms were transliterated to suit the morphological and phonological structure of the receiving language; hence, the borrowed terms were considered to be adequate by the researcher. It was evident in the study findings that rephonologisation made the borrowed terms acceptable to the target users. It was also discovered that nouns are more borrowable than any part of speech, and this results in the conservation of the indigenous languages since other parts of speech are left intact. The study has also shown that, there was too much borrowing of loan words in the DR, and this was regarded as a sign of laziness to utilise term creation strategies that uses internal resources of a language to promote the growth of indigenous languages by both the researcher and the research participants. The DRN and DRU minimised borrowing as much as could with the DRU borrowing only 43 lexical items. This is commendable. The research has established that, although, the borrowing term creation strategy is very productive in the sense that it promotes the growth of the Shona vocabulary, terms created and developed through borrowing are mostly for use by the elites, at the expense of the uneducated ordinary people who would not

benefit as expected. Hence, such terms marginalises the majority people of Zimbabwe as they cannot participate in any development activities meant for them because of language barriers. Hence, it is clear from these findings that, the borrowing term creation strategy poses a problem of whether or not borrowed words have any advantage for the ordinary user. However, in this study it has been noted by the researcher that the borrowing term creation strategy is made more prevalent by unfavourable language policies in Zimbabwe, which put the English language at the centre and relegates the Shona language to the periphery of all spheres of life. Although most of the terms in the DR, DRN and DRU were not borrowed intentional but to fill in the lexical gaps caused by the deficiencies of the Shona scientific and technical terms, in some cases, the researcher feels that the dictionary compilers borrowed terms because of laziness to engage other indigenous sensitivised term creation strategies. However, not everything about borrowing term creation strategy is bad; it has got its own advantages and disadvantages, but the researcher suggests that it should be used as a last resort when all else has failed, and not as a priority.

The loan translation term creation strategy was highly utilised in in the DR, DRN and DRU. Results from the questionnaires and interviews carried for this study have demonstrated that loan translated have a problem of acceptance by target users. Findings from this study show that loan translated terms face rejection because the target users feel that they are not adequate as they are mainly phrasal statements that communicate meaning of the loan term. Most research participants for this study contended that loan translated terms are very poor, vague and they result in longish phrases. In addition, since they are not easy to remember because of their vague and longish structure they cannot be easily internalised into the brain system of the target users of the dictionaries. However, both the DRU and the DRN compilers argued that the loan translation was a way of running away from direct borrowing of English scientific and technical terms into the Shona language which they felt that should be minimally if the Shona language is to grow using indigenous means and resources.

Nevertheless, this researcher heavily criticise all the dictionary compilers for over-utilising the loan translation term creation strategy at the expense of indigenous sensitivised term creation strategies. The researcher believes that the large number of loan translated lexical items in the DR, DRN and DRU is partly as a result of lack of commitment, dedication, devotedness and laziness on part of the compilers. This is so because for the loan translation strategy, terminologists are only involved in translating the meaning of existing loan word

and it does not require a lot of input on the part of the compilers. Furthermore, research findings from content analysis show that during the translation of the loan word, its meaning is sometimes misinterpreted and distorted. In addition, some of errors in loan strategy included omission of crucial words and examples that are vital to the understanding of the created term. The errors noted by the researcher in the three dictionaries show that there is great need to have a language board appointed to study, evaluate make corrections and recommendations for the improvement of the created terms before the specialised dictionaries are published, in other words to oversee the whole terminological project.

The compounding term creation strategy as presented in the DR, DRN and DRU is a highly productive term creation strategy since it results in the increase of Shona language's vocabulary. In this study it was noted that although the compounding strategy produced original musical, medical and linguistic specialised terms, which can easily be readily accepted by the target users, they have a problem in that they are heavily lexical loaded and lengthy coinages. Hence, compounded terms face rejection by the target users because of its lexical loadedness. Results from both the questionnaires and the interview affirmed the generally held view that most speakers of a language prefer shorter terms as compared to longer terms and this choice causes the rejection of specialised terms created through compounding because they are mostly lexical loaded. Furthermore, this research has shown that in the compounding term creation strategy, the noun/verb combination is the mostly used compound combinations to produce scientific and technical terms for new concepts introduced in a language. However, the DR, DRN and DRU compilers' effort is commendable, because they have set out to undertake intentional language engineering or language development activities towards the deliberate creation of new terminologies for the Shona musical, medical and linguistic fields. Moreover, it was noted by the researcher that, the compounding term creation strategy is very productive in the Shona language, so much that if the users could accept the compounded terms, then the strategy could take the Shona language to unprecedented heights in as far as language development is concerned. Further observations are that the compounded terms in the DR, DRN and DRU are self-contained and very descriptive. In other words, a target user can easily get the meaning of the term from the compounded term, for example <*chiomesashaya* (tetanus) DRN, p10, *nhokonyapfungwa* (brain teaser) DRU p131, *batamutsindo* (pulse) DR p 4 >. This is good for term accessibility, term efficiency and term effectiveness. The examples given above show the innovativeness of the dictionaries compilers, through combining already existing words, to come up with

new scientific and technical terms for the three specialised dictionary. Results from the questionnaires, interviews and content analysis have demonstrated that, every language, including the Shona language, has the capability to express scientific and technical concepts if given the space to do so. In other words, given a favourable language policy, there is no discipline that cannot be handled in the Shona language in terms of scientific and technical vocabulary.

It was noted in this study that the DR, DRN and DRU compilers used the coining term creation strategy. The coining term creation strategy show the creativeness and innovativeness of the compilers in coming up with completely new terms for the Shona language, thereby making it grow; at the same time retaining its character and essence. However, the researcher notes that this term creation strategy was not maximally utilised in all the three Dictionaries, since coining is on the fourth place in terms of number of lexical items in the three dictionaries combined. The researcher had hoped that, the coining term creation strategy would occupy the first place because this is the only way to counter foreign acquisition of lexical items from other languages and therefore, terminologists should have utilised it to the best of their capabilities. Nevertheless, it is observed by the researcher that the dictionaries' compilers coined terms in specialised fields of music, medicine and linguistics because they realise the importance of scientific and technical terms as possible tools for economic and national development. Through coining of new terms the DR, DRN and DRU compilers are responding to this need so that the Shona language is not found lagging behind other languages of the world in terms of technical and scientific terms. In other words, it can be argued that it is the desire for self-sufficiency in the Shona language vocabulary that drives the compilers to coin and disseminate Shona musical terms.

On the contrary, the researcher notes that, the coining term creation strategy leads to widespread synonymys in a language. This is very common in all the three dictionaries where several linguistic terms denote one concept and the researcher strongly recommends the standardisation of the terms in these dictionaries since some of the terms are in use (DRU) in Shona high schools in Zimbabwe. Further observation by the researcher during the data gathering process and content analysis reflects that, new coinages have a problem of acceptance by speakers, because they compete with borrowed lexical items for new concepts introduced in a speech community bringing their foreign names along with them.

Consequently the coined term may fail to unseat the borrowed lexical item, because terms gain currency in the language the concept was made. This is a disadvantage as far as usage of the new coined term is concerned. However, the researcher notes with concern that during the coining process, some compilers (DRU) at times did not give comprehensive definitions and examples so as to help the target users to understand the coined terms. There was inconsistency of usage of the coining term creation strategy in the DRU. The researcher concludes that overall; terms created through the coining term creation strategy in the three specialised dictionaries under study are fairly adequate.

From the research findings and content analysis, this study has established that, the DR, DRN and DRU compilers derived a lot of musical, medical and linguistics terms from existing Shona verbs and nouns. This term creation strategy is very productive as is evidenced by the created terms in all the three dictionaries. Hence, it is empowering and enriching for the target language. The researcher argues that, any terminological initiative has to be tailor-made so as to suit requirements of the target language and to make the terms acceptable by the target users. In as much, by the derivation term creation strategy, terminographers can develop any applicable terms in a language and give them a functional value. However, as statistics show, this strategy was not well utilised as the most suitable term creation strategy for the intervention of the deficiency of Shona scientific and technical terms. Overall, the researcher concludes that derivated terms in the entire three dictionaries were adequate.

Research findings from this study show that that semantic term creation strategy makes use of extending the meanings of ordinary words into specialised meanings. The method of extending the meaning of ordinary words is very common in the DR, DRU and DRU where musical terms, medical terms and linguistic terms were created by the expansion of meaning of ordinary words. Thus, language extension means growth to the Shona language. This term creation strategy is the least used in all the three dictionaries combined. The underutilisation of this strategy shows that the terminographers are able to choose the most relevant strategies that are applicable to the Shona language to make it more functional. In addition it may be that the specialised dictionary compilers are aware that the semantic expansion term creation strategy results in language ambiguities. As the word's meaning is expanded the older meaning is not discarded thereby creating the problem of undesirable polysemy. On the other hand semantic expansion does not result in vocabulary increase but it expands the meaning of words, hence it is a less productive term creation strategy. Research

participants had little to discuss about the semantic expansion term creation strategy but their sentiments indicate that the terms created through this strategy are adequate since the terms are familiar to the users. In this regard the researcher is in agreement with the sentiments raised by the research participants.

It is the submission of this study that, there is need for a collaborative effort between linguists and all stakeholders in term creation. This is a very necessary step to be taken by all terminographers for the acceptability of the created terms by target users and for the development initiatives meant for national languages as these culminate into national development. The coverage of awareness the DR, DRN and DRU project was confined to few schools, few colleges, and very few selected language, musical medical experts and technicians. Hence, terminologists should be more visible to the people who are the custodian of the indigenous languages, by carrying language development workshops in schools, colleges and universities and even the people at the grassroots.

Issues of etymology and cultural purism are not a major concern for most Shona people in Zimbabwe, and therefore, they readily accept loan terms from other languages. The DR, DRN and DRU compilers adhered to principle of etymology purity to a lesser extent as the preference of indigenous terms did not rule out borrowed terms. It is evident the compilers of the above dictionaries considered the communicative function of the specialised terms other than issues of etymology purity. This, therefore, means that etymology purity did not play a more prominent role of influencing how the specialised terms in the DR, DRN and DRU were created. Furthermore, some words are culture specific, and as such, there was no way the DR, DRN and DRU compilers could find equivalent terms in the receiving language and so they had no option but to borrow the imported terms.

9.5 RECOMMENDATIONS

Having made an analysis of term creation strategies used by the DR, DRN and DRU, the researcher came up with the following main recommendations:

9.5.1 Recommendations for governments and language experts

1. The Linguists, Language Boards, the Government and other stakeholders should come together and plan a common strategy for term creation efforts in Zimbabwe. This will ensure that indigenous languages are developed and modernised in all spheres of life through a formal way, rather than leaving everything to individual effort. With developments taking place the world over, the importance of scientific and technical vocabulary in Zimbabwe cannot be over-emphasised. It is in this area that the Shona language and other indigenous languages like Ndebele are over-dependent on imported technical and scientific terms. In this regard, term creation activities are a vital development strategy in the sense that they can template national and economic development, via the development of a scientific and technical terminology for use in all spheres of life.

2. The development of term creation should as much as possible involve local people and local language resources as well as specialists in the various technical fields. Real term creation development is not possible without involvement of the users; people at the grassroots must be integrated into term creation processes. In this regard terms should be created for the people by the people. It is therefore important that users should play a participatory role rather than a passive reception role. The new terms should not be imposed on people, but proper measures should be taken to ensure that they are properly disseminated to the speakers of the language. This can be done through workshops, seminars, meetings and so forth. All these stakeholders have different knowledge and expertise to contribute to language development efforts through various term creation strategies

3. There is need for a solid language policy framework that is conducive to language development. Major steps should be taken to implement the recommendations of the Constitution of Zimbabwe (2013) on language policy because up to now (2015) the use of the Shona language is mostly neglected to informal circles. In this regard, Zimbabwe needs an authoritative body to deal with language matters that has the power to create, standardise and disseminate terms in the indigenous languages of the country. Linguists and language boards on their own cannot cope with the amount of work that needs to be done. The fact that English continues to dominate the public sector results in a situation where most indigenous languages lag behind in terms of lexical growth as they are not being used in scientific and technical domains calls for the government of Zimbabwe to address issues of

language policies more precisely.

4. The potential of the Shona language need to be explored more aggressively in building technical terms, hence term creation should be regarded as a mechanism for promoting the development of African languages. Only this step will enable indigenous languages in the scientific, technological and educational fields to take their rightful place in the next millennium. The researcher recommends that the government of Zimbabwe should be an active participant in all terminological project meant to develop indigenous languages.

5. The government of Zimbabwe should take a more active role by forming a national unit for terminology development. The unit will be responsible for the documentation, development, standardisation and publishing of terms developed covering various fields of life. This unit will monitor publication of all terminological activities rather than leaving everything to independent language boards such as ALRI. The establishment of a national unit will ensure that adequate works are published. Thus, the neutral board will counter the proliferation of unworthy publications. In addition, a neutral language board will execute its duties without fear or favour, that even the credibility of its publications will not be questionable.

6. Promotion of awareness of terminological projects should be by the Government of Zimbabwe in both private and public sectors. It is particularly important that the economic interest of terminological efforts be made clear, to all. The potential of indigenous languages in gaining productivity through participation of the majority of people should be explained because the language barrier has been minimised should be explained to all stakeholders. For example only elites can participate in the money market project in Zimbabwe and the majority are alienated because of language use. One can never cease to imagine what it will be should the majority of people participate in such economic initiatives; how they will get a market share of the economy and how much economic productivity will be realised by the government and people of Zimbabwe. It should be taken into consideration that any development initiative depends on efficiency of communication within an organisation and development of the Shona language is a positive step towards that direction.

Thus, the researcher has put forward some recommendations on how to improve Shona and ultimately indigenous languages of Zimbabwe. The researcher hopes that these

recommendations will be effected by linguists, terminographers, language boards and the Government of Zimbabwe for the betterment of indigenous languages. Furthermore, the researcher calls for further studies in the area of term creation, so as to evaluate the effectiveness and applicability of these recommendations in the wake of the dominance of the English language in all spheres of life in Zimbabwe.

9.5.2 Recommendations for Future Research

In this section, the researcher gives recommendations for future research in the area of term creation in Zimbabwe. This will be specifically valuable to researchers and terminographers and lexicographers in future specialised dictionary making. It is the hope of the researcher that, the future research recommendations in this study will benefit language policy planners, terminologists, the government of Zimbabwe and other countries whose languages are in a similar disadvantaged position.

1. Research findings from this study show that for a successful term creation effort to take place in Zimbabwe there is need for standardisation of created terms in specialised terminology because synonyms obviously create confusion on the part of the Dictionary users, as to which term among the so many similar terms is more correct, especially if some of them are not familiar with the term used to name the concept. This, obviously, hinders wider communication among language experts and language users. Therefore, there is need for further research on how this can be done in view of the issue of ‘fights’ for dialectal representation in terminology.

2. This study shows that there is lack of professional accountability on the part of most published specialised dictionaries, hence, the researcher proposes that there is need to establish a language board to deal with this issue, if indigenous language development is to take any meaningful shape. There is need for further research how to deal with this issue.

3. It is commendable that the DR, DRN and DRU compilers have made a substantial progress in Shona corpus development and it is a necessary step for the gradual taking over from the English language, the role of the national official medium of communication in the country, should such an opportunity arise. Therefore there is need for further research into how this

may be implemented should such an opportunity arrive.

4. The issue of the status of the Shona language and other indigenous languages of Zimbabwe should be vigorously discussed between government and Shona language linguists. As it is, Zimbabwe corpus planning is being carried out in an environment where indigenous languages have got no space or meaningful role to play in the public sphere where English is dominant. Research should be carried out so that terminographers find ways to engage the government of Zimbabwe on the issue of uplifting the status of indigenous languages. Although it has been pronounced through Zimbabwean constitution, 2013, the implementation exercises have not yet taken off. There is need to study how this implementation will be effected in terms of capacity, human and material resources.

5. There is need for giving the Shona language a platform for usage, especially in the classroom so as to popularise specialised terms thus, giving the Shona language a functional value. In this study it has been largely been observed that the language policy in Zimbabwe contributes to the impediment of the growth of the Shona language and therefore impacts negatively on term creation activities. This is so because the English language is the medium of instruction in the education system, and the created Shona specialised terms are of no functional use. This researcher therefore proposes that Shona language be made the “language of the school system.”

6. This study proposes that research and effective strategies should be made so as help change people’s attitudes towards usage of indigenous languages in all spheres of life. Through the analysis of term creation strategies in the DR, DRN and DRU, it has been noted by the researcher that negative social attitudes are a big impediment to indigenous language development. This type of attitude towards one’s mother tongue is worrisome and there is need to carry out research on how to decolonise the mind.

7. This study has shown that development of terminology is a fascinating area of study from a linguistic and socio-linguistic perspective, a linguistic practice with so many unlimited outcomes. There is need to make term creation studies priority number one so that though term creation, indigenous languages status will be lifted to an official status in Zimbabwe through their communicative efficiency and availability of an adequate corpus.

8. There is need for continuous feedback between terminographers and the target users; so as to seek input of the users on terminological works on a periodical basis. Research should therefore be undertaken to find ways of greatly improving works of terminology through feedback from the target users of the specialised terms dictionaries.

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APPENDIX A- INTRODUCTORY LETTER

University of South Africa

Preller Street, Muckleneuk Ridge, City Of Tswane

P. O Box 392, UNISA 003

South Africa

16 August 2014

Dear Mr/Ms/Mrs/Dr/Prof

TERM CREATION: STRATEGIES USED IN SHONA MONOLINGUAL DICTIONARIES: Duramazwi Reurapi Neutano (Dictionary of Biomedical Terms), **Duramazwi Remimhanzi** (Dictionary of Shona Musical Dictionary), **Duramazwi reDudzira Mutauro neUvaranomwe**(Dictionary of Shona Linguistic and Literary Terms).

I am a Doctor of Philosophy student at the University of South Africa (UNISA). I am analysing term creation strategies used in the above selected Shona specialised terms dictionaries focusing on how the compilers of these dictionaries came up with Shona health, musical and linguistic terms as way of developing the Shona indigenous language technical terms. As such, I would like to find out what the target users of the dictionary, language experts, and educationists think about the created specialised terms.

You have been selected to participate in this study and I would be very grateful if you would find time to answer either questionnaires or interview questions. Your candid and honest answers will help the researcher to come up with an objective report which will contribute in a major way to language development in Zimbabwe, as term creation is the gateway to such an endeavour. You are not forced to give your name. All information gathered will be treated with confidentiality and will only be purely used for academic purposes only.

Thank you for accepting my invitation to participate in this study.

Yours faithfully

LETTIAH GUMBO

APPENDIX B: INFORMED CONSENT FORM

Doctoral Thesis- University of South Africa- UNISA

Supervisor: **Professor D. E. Mutasa**mutasde@unisa.ac.za

Dear Potential Participant

I am inviting you to participate in a research study entitled “**TERM CREATION: STRATEGIES USED IN SHONA MONOLINGUAL DICTIONARIES: Duramazwi Reurapi Neutano** (Dictionary of Biomedical Terms), **Duramazwi Remimhanzi** (Dictionary of Shona Musical Dictionary), and **Duramazwi reDudzira Mutauro neUvaranomwe** (Dictionary of Shona Linguistic and Literary Terms). You are selected as a possible participant for this study because your experiences and knowledge about this topic and as a native Zimbabwean. Your insights will greatly enrich this study. If you have any questions regarding the study, please feel free to ask them prior to your decision to participate or decline participation in the study. This study will be conducted by me; Lettiah Gumbo, a lecturer at Midland State University.

Background Information

The project examines term creation strategies in the Shona specialised dictionaries. This study will present an analysis and discussion of the research findings. It provides a discussion of term creation strategies and an exploration of some of the basic processes by which new terms are created. Specifically these strategies will be discussed: borrowing, loan translation, compounding, coining, derivation and semantic expansion. Approaches to the mentioned term creation strategies and their adequacy will be analysed. Mostly, this study focuses on users’ perspectives pertaining term creation strategies used in these Shona specialised terms dictionaries, using information gathered from fieldwork research and content analysis.

Procedures

- ◆ If you accept the invitation to participate in this study, you will be asked to allow the researcher to interview you for at least an hour. A follow up thirty minute interview may be requested of some participants for further clarification of some points.
- ◆ The interviews will be audio-recorded. You, as the research participant will be asked to review your interview transcripts to check for accuracy.
- ◆ During the interview, you will have the opportunity to edit the tape and/or stop the interview at any time.
- ◆ Prior to beginning of the interview the researcher will ask you to sign a consent form.
- ◆ You will also be asked to answer research questionnaires, which will approximately take at least 15 minutes.

Voluntary Nature of the Study

- ◆ Participation in this study is completely voluntary. Your decision to participate or not to participate in this study will not affect your current relationships at the site of this study in any way.
- ◆ If you decide to participate, you will still be free to withdraw your participation at any time for any reason without affecting those relationships.
- ◆ There are no negative consequences to you for not participating.

Risks and Benefits of Being in the Study

There are no known risks or discomforts associated with taking part in this study. However, if you should experience any stress or anxiety during your participation in the study you may notify the researcher or withdraw your participation. You will also be free to refuse to respond to any questions you may regard intrusive or stressful. Additionally, there will be no penalty for refusing or discontinuing participation in the research study. The researcher reserves the right to report data that may reveal criminal activity by the research participant to appropriate authorities in compliance with the law. It is the researcher's duty to report such information.

Compensation

No compensation in cash or kind will be provided for participating in this study.

Confidentiality

All documents and records of this study will be kept securely locked up in a safe and private place. Caution will be taken to protect the identities and privacy of participants through use of pseudonyms and numbers in both data collection and reporting. Should any part of this study be published, the researcher will make sure that no information that may make it possible to identify the research participant will be included. Should you wish to keep a copy of this informed consent form for your records a copy will provided for you.

Contacts and Questions

The name of the researcher who will conduct this study is Lettiah Gumbo. The researcher is a Lecturer at Midlands State University in Gweru, Zimbabwe. She will be able to answer any questions you may have about this research study at present. If you have questions, you may contact her via email: gumbol@msu.ac.zw

Statement of Consent

Thank you for considering participating in this study. If you have any questions in relation to my study, please contact my supervisor at this e-mail address mutasde@unisa.ac.za. To indicate your understanding of the information provided on this form and willingness to participate in this study please check the space and sign the statement below.

I have read and understood the above information. The questions I had were answered to my satisfaction. I consent to participate in the study.

Research Participant's Name: _____

Signature: _____

Researcher's Name ___ Lettiah Gumbo _____

Signature: _____lgumbo_____

APPENDIX C: CONFIDENTIALITY AGREEMENT

Name of Researcher: Lettiah Gumbo, House # 29, Senga 2, Gweru. gumbol@msu.ac.zw

Name of University- University of South Africa

Promoter: Professor D. E. Mutasa

During the course of my activity in collecting data for this research: “**TERM CREATION: STRATEGIES USED IN SHONA SPECIALISED TERMS DICTIONARIES**, I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must and will remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way, divulge, copy, release, sell, loan, alter or destroy any confidential information, except as properly authorised.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant’s name is not used.
4. I will not make any unauthorised transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I’m officially authorised to access and I will not demonstrate the operation or function of systems or devices to unauthorised individuals.

Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

Signature: lgumbo Date: 15 / 08 / 2014

APPENDIX D: INTERVIEW PROTOCOL FOR ALRI

1. How effective are the term creation strategies used in the Shona specialised dictionaries in capturing adequately scientific and technical vocabulary to facilitate Shona languages development?
2. ALRI projects have contributed significantly to Shona language development and empowerment. Can you explain how you have been able achieve this?
3. Your efforts have raised the Shona people's self-esteem and self-confidence as language revival is closely tied to the revival of the people's identity. As such, please comment on the term creation strategies used in the Shona specialised dictionary cited above.
4. In your opinion, what can be done to overcome historical, economic, political and sociolinguistic factors that constitute serious challenges that work to the detriment of the Shona language?
5. When making efforts to develop indigenous languages it is fundamental to strengthen, unite, articulate and multiply efforts of all concerned parties. Do you have a collaborative approach in this language development project? As such, in Zimbabwe what is the aptitude of the government, linguists and the target population towards Shona language development?
6. Terminologists should not always search beyond their languages for suitable terms, because there are sufficient words embedded in the indigenous language. They should use indigenous sensitivised term creation strategies such as compounding, coining, derivation and semantic expansion instead of borrowing and loan translation. What do you say about this contention?
7. Even though Shona language elaboration efforts had intensified, these efforts have little impact because the material developed is never effectively used, as most of it is just gathering dust on shelves. What do you say about this, do you foresee a time when you are going to enjoy the fruits of your labour (your efforts being put to functional use)?
8. Do you think specialised terms Shona dictionaries produced to date have the capability of changing the people's economic and social lives? Discuss.
9. Do you think term creation should be analysed in informing policies or should remain a stand-alone issue?

Thank you

APPENDIX E: INTERVIEW PROTOCOL FOR ALL DICTIONARY COMPILERS

(Dictionary compilers will apply and focus answer on the dictionary they compiled)

1. What are your professional qualifications?
2. Which term creation strategy did you employ in coming up with specialised terms for the dictionary? Justify.
3. Engaging too much borrowing and loan translation is often regarded as a sign of laziness and lack of creativity on the part of a specialised dictionary compiler. Comment on the raised issue.
4. What problems did you encounter as a team during the term creation process? How did you circumvigate them?
5. How did you come up with a preferred term?
6. Do you feel that the created terms address all lexical inadequacies in the Shona language?
7. It is generally believed that too much loan translation and borrowing of words from other languages contaminates the indigenous culture. What is your view of this assertion?
8. Can you justify the presence of so many synonyms in the dictionary? Are they not going to confuse the dictionary users?
9. Relatedly, can you comment on the issue of polysemy? Why did you fail to adhere to the principle of one concept one term?
10. What critical issues did you discover (to do with term creation) during the compilation of the dictionary?
11. Many people in Zimbabwe seem not to value Shona language. What in your opinion might be the reason behind?
12. It seems the Dictionary you compiled is not popular in use. What steps are you taking to aggressively market it?
13. Do you think terms created will be generally accepted and used accordingly? Discuss. Your discussion should focus more on compounds and new coinages?
14. Recommend any ways of promoting indigenous languages in Zimbabwe.
15. Do you have any other comments?

Thank you

APPENDIX F: INTERVIEW PROTOCOL FOR LECTURERS

(This questionnaire is applicable to all lectures participating in this study, be they musical, medical or linguistics lecturers. **The researcher will take pains to explain term creation concepts to interviewees who are not knowledgeable in this study area.**)

1. What purpose does term creation serve in language development?
2. What term creation strategies were used in addressing the issue of Shona lexical inadequacies in the Shona specialised terms dictionaries?
3. Do you think that the term creation strategies and the created terms in the Shona specialised terms dictionaries are adequate to facilitate indigenous languages development? Give reasons.
4. How effective are the term creation strategies used in the Shona specialised dictionaries in capturing adequately scientific and technical Shona terms?
5. To what extent did the Shona specialised dictionaries compilers adhere to the principles and guidelines of term creation?
6. Is there a tendency in the educational system to encourage a learner to use a dictionary for language problems?
7. Do you believe that the Shona language can be used as a medium of instruction in all subjects from primary up to university level? Discuss.
8. Social attitudes of a language lead to its embracement or rejection. In as much, do you think that Shona created terms in the dictionaries may be rejected or embraced by the Shona speakers? Give a justification for each given answer.
9. How effective are the compounded terms in expressing the concepts they denote
10. National language development such as dictionary compiling and term creation efforts should involve people at the grassroots so that they are not alienated from the developing process meant of them. Discuss.
11. Is transliteration or rephonologisation of English terms into the Shona language an appropriate in the Shona language?

Thank you

APPENDIX G: QUESTIONNAIRE FOR AFRICAN LANGUAGES STUDENTS

Part One - Demographical Questions

Fill in the correct details on the spaces provided

Age: -----

Sex: ----- Male ----- Female-----

Educational level -----

Part Two - Hypothetical Questions

Circle the correct answer

1. Borrowing lexical terms into the lexicon contaminates the Shona language.

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

2. Compounding is a productive way of creating terms

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

3. Compounded are cumbersome and lexical loaded and therefore not user friendly.

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

4. The use of the Shona language as a medium of instruction in the education system is a significant process of Shona language development

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

5. Shona is the language of the home and English the language of work

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

6. Borrowing of lexical terms from the English language results in Shona language enrichment.

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

7. Attitudes are one of the problems that deny the Shona languages an official status in society

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

8. The English language is more prestigious and useful than the Shona language

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

9. It is fundamental to develop all kinds of pedagogical resources and materials for different educational levels in the Shona language (preschool, kindergarten, elementary, secondary school, and college/university if possible).

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

10. Borrowed terms underrate the indigenous languages as possible vehicles of science and technological development.

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

11. Loan translation term creation strategy diminishes the capacity to make use of native material at hand, as terminologist's role is relegated to that of a translator

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

Part Three- Open Ended Questions

Write your answers on the spaces provided

11. What do you consider to be the major shortcomings of the term creation strategies employed in all the three Shona specialised terms dictionaries?

.....
.....

12. Did you have problems in understanding the use of any term creation strategies in the Shona specialised terms dictionary?

.....
.....

13. Do you have any reservations and suggestions regarding the term creation strategies in the Shona specialised terms dictionary?

.....
.....

14. What is your overall view on the quality of created term in the Shona specialised terms dictionaries?

.....
.....

15. Do you think terms created will be generally accepted by the target users and used accordingly? Discuss. Your discussion should focus more on compounds and new coinages.

.....
.....

16. Do you think Shona specialised dictionaries produced to date has the capability of changing the status of the Shona language, (considering the dominance of English in all spheres of life)

.....
.....

17. It is general believed that too much borrowing of words from other languages contaminates the indigenous languages and culture, since the borrowed word brings elements of the culture of the people who use it. Do you agree?

.....
.....

19. Recommend ways of promoting term creation in Zimbabwe

.....
.....

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

6. Borrowing of lexical terms from the English language results in Shona language enrichment.

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

7. Attitudes are one of the problems that deny the Shona languages an official status in society

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

8. The English language is more prestigious and useful than the Shona language

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

9. It is fundamental to develop all kinds of pedagogical resources and materials for different educational levels in the Shona language (preschool, kindergarten, elementary, secondary school, and college/university if possible).

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

10. Borrowed terms underrate the indigenous languages as possible vehicles of science and technological development.

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

Part Three- Open Ended Questions

Write your answer on the spaces provided

1. Which language do you prefer between English and Shona for the teaching and learning of Shona grammar and literature at A and O level? Support your answer.

.....
.....

2. Which language are you comfortable to speak when you are with your friends? Why?

.....
.....

3. What do you say about the compounded Shona linguistic and literal terms?

.....
.....

4. Do the borrowed Shona terms in the linguistic dictionary make sense to you, for example, *mutaurobviwa* (borrowed language) justify your answer

-
-
5. Do you think that use Shona language as a medium of instruction in all Shona courses is an act of language and economic development
-
-
6. English is necessarily a pre-requisite for transmitting modern knowledge
-
-
7. Are you against the mixture of the Shona and English languages in the learning of Shona at school?
-
-
8. Do you think it is possibly to use Shona language as a medium of instruction from primary up to university level as a way of empowerment through language?
-
-
9. What can be done to improve the term creation situation in Zimbabwe, ensuring that Shona enjoys an equal status with the English language?
-
-

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

7. Attitudes are one of the problems that deny the Shona languages an official status in society

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

8. The English language is more prestigious and useful than the Shona language

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

9. It is fundamental to develop all kinds of pedagogical resources and materials for different educational levels in the Shona language (preschool, kindergarten, elementary, secondary school, and college/university if possible).

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

10. Borrowed terms underrate the indigenous languages as possible vehicles of science and technological development.

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

11. Loan translation term creation strategy diminishes the capacity to make use of native material at hand, as terminologist's role is relegated to that of a translator

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

Part Three- Open Ended Questions

Fill in your answers on the spaces provided

1. What is your opinion of the created Shona specialised terms that are found in ***Duramazwi Reurapi Neutano*** (Dictionary of Biomedical Terms) that express and describe different types and medical conditions. Are the created terms adequate?

.....
.....

2. Term creation of indigenous languages should be bottom-up in educational and linguistic policies as well as in any language planning initiative. Were you ever consulted in relation to the creation of specialised terms in ***Duramazwi Reurapi Neutano*** (Dictionary of Biomedical Shona Terms)

.....
.....
3. Term creation has the potential to contribute, not only to terminology development in the health sector, but the economy of the nation as well. What is your opinion of the above view?

.....
.....
4. Are the Shona terms on HIV/AIDS received well by patients and medical personnel? Is it because they have been popularised by both the consumers and print and electoral media?

.....
.....
5. As a consumer of the medical terms, what are your overall views on the quality and adequateness of created specialised terms in the *Duramazwi Reurapi Neutano* (Dictionary of Biomedical Terms)?

.....
.....
6. Do you think that the biomedical terms have been simplified to make them accessible and understandable by the general public? Do they allow for smooth communication between medical trained staff and the public?

.....
.....
7. The field of medicine have a lot sensitive information that requires apt capturing in term creation, because any inadequacy or inefficiency and any subsequent misunderstandings on the part of the consumers can have grave consequences. In view of this statement, do you think the created terms are effective and adequate since the administration of drugs can be a matter of life or death?

.....
.....
8. Inadequacy of data has a capacity to impact negatively on the target readers; it may lead to embracement or rejection of the created terms. What do you say, in connection with

specialised Shona medical terms in *Duramazwi Reurapi Neutano* (Dictionary of Biomedical Terms)?

.....
.....

9. What do you say about the presence of so many synonyms in the DRU?

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

6. Borrowing of lexical terms from the English language results in Shona language enrichment.

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

7. Attitudes are one of the problems that deny the Shona languages an official status in society

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

8. The English language is more prestigious and useful than the Shona language

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

9. It is fundamental to develop all kinds of pedagogical resources and materials for different educational levels in the Shona language (preschool, kindergarten, elementary, secondary school, and college/university if possible).

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

10. Borrowed terms underrate the indigenous languages as possible vehicles of science and technological development.

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

11. Loan translation term creation strategy diminishes the capacity to make use of native material at hand, as terminologist's role is relegated to that of a translator

A. Agree B. Strongly agree C. Disagree D. Strongly disagree

Part Three - Open Ended Questions

Fill in your answers on the spaces provided

1. Do you think music has the potential to generate income that can improve the economy of the Zimbabwean nation?

-3. Are you comfortable in learning music and musicology lessons using Shona terms?-----

4. Do you think Music students will accept coined Shona specialised musical terms?

5. Are you aware of the existence of a Shona musical terms dictionary, which aims to develop Shona, terms in the music arena?-----

6. Is there anything you would like to say about the Shona specialised musical terms -----

APPENDIX K: GILREATH'S ONOMETRIC BATTERY

Here are the definitions and explanations of the terms in Gilreath's onometric battery as cited in (Hadebe 2002:149)

-Accuracy is the term quality determined by the absence or presence of incorrect elements (Gilreath 1993:82). Accuracy has also been defined as 'freedom from mistake or error: CORRECTNESS. Accuracy is a binary criterion, meaning that a name is either accurate or not. Although we cannot talk of degrees of accuracy, 'we can speak of degrees of inaccuracy, ranging from slightly to grossly inaccurate (Gilreath 1993:82).

-Precision refers to 'the degree to which a term clearly delineates its concept' (Gilreath 1993:83).

-Descriptiveness of a term refers to 'the degree to which a term's literal meaning matches its intended meaning' (Gilreath 1993:83).

-Unequivocalness 'is the quality of a term which has only one meaning within a particular field of knowledge or within a particular nomenclature' (Gilreath 1993:85).

Mononymy refers to the quality of a term 'which is the one and only (mono) formal name (nym) for a given concept' (Gilreath 1993:87). It should be noted that a term is either a mononymy or a synonym.

-Appropriate register 'means that a term's style (register) is consistent or compatible with the context of usage' (Gilreath 1993:87).

-Precedence refers to 'the extent to which a proposed designation is in harmony with established designations' (Gilreath 1993:87).

-Conciseness refers to 'the orthographic length of a term' (Gilreath 1993:88). In other words it is brevity or shortness.

-Appropriate simplicity means that 'the number of words in a term is appropriate for the level of importance of the designated concept. As a rule: the more important the concept, the simpler the term should be' (Gilreath 1993:89).

-Form correctness, also called linguistic or grammatical correctness, refers to the 'extent to which a term has no grammatical errors, such as misspellings, wrong hyphenation, wrong (inverted order), inadmissible variant, wrong number and wrong part of speech.

-Etymological purity is defined as 'A word constructed from elements derived from a single language is usually preferable to a hybrid word, which combines elements derived from more than one language. Constructive elements derived from a single language ordinarily combine more easily and euphoniously than elements taken from different languages' (Gilreath

1993:90).

-Derivability is the quality of terms whose elements can be used in naming a variety of related concepts (Gilreath 1993:91). It should be easy to derive formatives from the term.

-Inflectability refers to ‘the quality of the terms which inflect well in forms such as comparatives, superlatives, and negatives (antonyms)’ (Gilreath 1993:91).

-Series uniformity is the quality of a group of terms which use common elements in naming related concepts (Gilreath 1993:91).

-Acceptability refers to ‘the quality of terms which are not emotionally charged, obscene, morbid, gender-biased, informal, strange, awkward, corny, silly, etc’ (Gilreath

1993:91). Acceptability does not mean that a term has been or will be accepted but that it has no limitations that might affect its acceptability.

Euphony is the phonetic quality that gives a term a pleasant sound (Gilreath

1993:92).150

Pronounceability is the ease of pronunciation of a term (Gilreath 1993:92).