THE CATEGORICAL STATUS AND FUNCTIONS OF AUXILIARIES IN SHONA

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Abstract

The study examines auxiliaries in Shona. One of the most problematic issues when dealing with auxiliaries not only in Shona but also in many languages of the world is the question of their categorical status. This study argues that the taxonomic problems associated with auxiliaries in Shona are largely a result of the use of traditional approaches to linguistic categorization. Even the use of structurist and generative approaches in the last thirty years or so has not done much towards resolving the problems associated with the categorical status of auxiliaries in Shona. This study moves away from this classical treatment of grammatical categories, which is mainly based on necessary and sufficient conditions. It uses the gradience approach which argues that there is no distinct boundary between auxiliaries and lexical verbs. The study uses the grammaticalization theory to account for the nature and behavior of auxiliaries. It argues that auxiliaries in Shona, like in many other languages, have historically developed from main lexical verbs.

Having established that auxiliaries historically develop from main lexical verbs an attempt is made to try and discover the pathways of changes that may have taken place when verbs grammaticalize in Shona. In this effort to characterize the set of verbs that change from the major lexical category to the minor category, the study takes the cognitive approach. This approach takes the view that the meaning of the verb that is being grammaticalized uniquely determines the path of grammaticalization and consequently the resulting grammatical forms. According to this view, the grammaticalization of verbs into auxiliaries is a problem-solving process which involves metaphorical extention and metonymic extension. The cognitive explanation of the motivation of grammaticalization revolves around what cognitivists refer to as the basic human strategy of dealing with our environment, that is, conceiving of and expressing experiences that are less accessible or more difficult to understand or describe in terms of more accessible concrete experiences. The metaphorical and metonymic extention involves movement from one conceptual domain to another in a unidirectional process, moving from concete domains to abstract domains.

Figures and Tables

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Abbreviations

1SG	Ist person singular
2SG	2nd person singular
3SG	3rd person singular
ALLEX	African Languages Lexical Project
APPL	Applicative
ARD	Ardverbial
ASP	Aspect
AUX	Auxiliary
CAUS	Causative
CL	Noun Class
COP	Copulative
DEM.	Demonstrative
FREQ	Frequentative
FUT	Future
FV	Final Vowel
HAB	Habitual
HORT	Hortative
INCE	Inceptive marker
IND	Indicative mood
INF	Infinitive
LOC	Locative
NEAR FUT	Near Future
NEG	Negative
NEUT	Neuter
OBJ	Object
OP	Object prefix (Object concord)
OP	Object prefix/Object concord
PART	Participial
PAS	Passive mood
PL	Plural
POSS	Possessive
PRE	Present Tense
PREF	Prefix
PRES	Present
PRES.CONT	Present Continuous
QUA	Quantitative
R	Verb Root
REC	Reciprocal
REC.PAST	Recent past
REM.PAST	Remote past
SG	Singular
SP	Subject prefix
SUB	Subjunctive mood
TAM (TMA)	Tense, aspect, mood

Pfupiso yezviri muchinyorwa chino

Chinyorwa ichi chinoongorora zviitobatsiri (auxiliary verb) muChiShona. Kune mhando dzakati kuti dzezviitobatsiri. Chimwe chezvinhu zvinonetsa paongororo yezviitobatsiri kwete muShona chete asi mune mimwe mitauro yepasi rose kuedza kuisa zviitobatsiri muzvikamu kana kuti muzvikwata zvichienderana nemaumbirwo azvo kana mashandisirwo azvo muzvirevo kana mundevo. Rimwe dambudziko riripo zvekare nderekuburitsa ukama huripo pakati pezviitobatsiri nezviito chaizvo.

Dambudziko rokuisa zviitobatsiri muzvikwata kana muzvikamu rakanyatsobuda pakupepeta DURAMAZWI RECHISHONA rakabudza mugore ra1986 iro raiva naH.Chimhundu semupepepeti mukuru. Munyori wechinyorwa chino aiva mumwe wevapepeti weduramazwi iri saka pakupepeta ipapo ndipo pakabuda dambudziko rokuisa mazwi muzwikwata. Pane mamwe mazwi ainetsa kuti tingariti chiitobatsiri here kana kuti chiito chakazvimirira choga. Pakupepeta ipapo zvekare ndipo pakazobuda pfungwa yokuti pave neongororo inoedza kunyatsojekesa mamiriro akaita ndudzi dzezviitobatsiri uye hukama hwazvo nezvimwe zviito.

Chinyorwa chino chinoedza kuratidza kuti dambudziko rokuisa zviitobatsiri muzvikwata nedambudziko rekuburitsa hukama huripo pakati pezviitobatsiri nezviito chaizvo rinobva panzira dzaishandiswa makare kare dzokuongorora maumbirwo omutauro dzeTraditional Grammar. Kunyangwe maonero ezvemaumbirwo omutauro akakurumbira mumakore makumi mashanu achangopfuura eStucturalism neGenerative Grammar haana kukwanisa kunyatsojekesa kuti zvikwata zvezviitobatsiri zvakamira sei uye hapana kunyatsobuditsa hukama hwezviitobatsiri nezviito chaizvo.

Zviitobatsiri zvakasiyana nezvimwe nezvimwe zviito pakuti hazvikwanisi kumira zvoga zvichigoreva chinhu zviri zvoga. Kana chiri chiito, unokwanisa kuti chingomira chiri choga chichitoreva chinhu chakadaro. Tingapa mienzaniso yezviito zvinotevera:

-rova
-tamba
-famba
-mhanya

Kana tikange takatarisa zviito zviri pamusoro apa tinoona kuti zvakatomira zvega zviri zvizere zviine zvazvinotoreva. Hapadi mamwe mashoko kana zvimwe zviito kuti zvizoreva chinhu chizere.

Tikatarisa kuzviitobatsiri tinoona kuti hazvikwanisi kumira zviri zvoga pasina mamwe mashoko okubatsira kuti zvireve chimwe chinhu. Ngatitarisei mienzaniso yezviitobatsiriri zvinotevera:

-va	semuenzaniso mumutsara unoti	Ndava kuenda
-ri	semuenzaniso mumutsara unoti	Ndiri munhu
-sviko-	semuenzaniso mumutsara unoti	Usvikoenda
-raro-	semuenzaniso mumutsara unoti	Akararotamba

Tinoona kuti mumienzaniso iri pamusoro apa zviitobatsiri zvinoti, -va, -ri, -sviko-, -raro- hazvikwanisi kumira zviri zvoga. Zvinotoda mamwe mashoko kuti zvive nezvazvinoreva zvizere. Pamuenzaniso wokutanga tinoona kuti -va chiitobatsiri chisingakwanisi kureva chinhu chizere pachacho choga. Chinotozoreva zvizere kana chabatanidzwa nerimwe shoko rinotevera. Ndizvo zvimwechete nechiitobatsiri chokuti –sviko- . Hachikwanisi kuva nezvachinoreva zvakazara chiri choga. Chinotoda zvimwe zvivakazwi kuti zvachinoreva zvinyatsobuda.

Pane ndudzi mbiri dzezviitobatsiri. Rudzi rwekutanga ndirwo rwatichati zviitogama (defective verb). Mienzaniso yezvitogama ndeinotevera:

-va	semuenzaniso mumutsara unoti	Ndava kuenda
-ri	semuenzaniso mumutsara unoti	Ndiri kutamba
-nga	semuenzaniso mumutsara unoti	Anga achiitei?
-na	semuenzaniso mumutsara unoti	Tina vana vashanu.

Iyi mienzaniso inoburitsa pachena kuti zviitobatsiri zvorudzi urwu rwatiri kuti zviitogama muchinyorwa chino zwakasiyana nezvimwe pakuti izvo hazvikwanisi kuvandurirwa. Mumwewo musiyano uripo ndevekuti chiitogama chacho chinobva chasara chisiri chiitogama kana chikabviswa vara rokupedzisira. Chinotofanirwa kunge chiine vara rokupedzisira kuti chirambe chiri chiitogama.. Chiitogama chacho ndicho chinenge chiri chokupedzisira muizwi rachinenge chiri, hapana chimwe chivakazwi chingazouya kurudyi rwacho. Chimwezve ndechekuti zviitobatsiri zverudzi urwu hazvibatane nechivakazwi cherudzi rwedudziramuitwi (object prefix). Chingabatane nezvimwe zvivakazwi zvakaita sechiratidzamuiti asi kwete chiratidzamuitwi.

Rumwe rudzi rwezviitobatsiri ndezviya zvine mienzaniso inotevera:

-sviko-
-raro-
-dzidzo-
-swero-

Rudzi rwepiri urwu nderezviitobatsiri zvinenge zviri pakati pezvimwe zvivakazwi asi izvo zviiine maumbirwo mamwechete okuti panenge paine dzitsi richiteverwa na -o-. Izvi ndizvo zviitobatsiri zvinonzi muChiRungu madeficient verbs.

Tsvagurudzo ino yakaburitsa kuti zviitobatsiri zvinobva muzviito. Mukufamba kunenge kuchiita nguva kwemakore akawanda zviito zvinenge zvichisanduka zvichiita zviitobatsiri zvobva zvoitazve tumwe tuvakazwi twakaita sezvitaridzanguva. Kusanduka kwezviito kunoratidzwa patebhuru iri pazasi apa:

Chiito chisati chasanduka	Chiito chava kusanduka	chiitobatsiri
-enda	-enda + ku-	-ndo- / -no-
-za	-za + ku-	-zo-
-gara	-gara + ku-	-garo-
-rara	-rara + ku-	-raro-

Pamusoro apa tinoona chiito chokuti **-enda** chakazvimirira choga. Kana chaenda padanho rechipiri chinenge chava kuteverwa nevara rinotanga na **–ku-**. Nekufamba kwenguva chinenge chava chiitobatsiri **–ndo-** kana **–no-.** Dzimwe nguva chiito chacho chinogona kubva chatoregerwa kushandiswa mumutauro kwosara chiitobatsiri chega. Semuenzaniso chiito chekuti **–za** chaimboshandiswa muChiShona makarekare. Asi ikozvino chiito ichi changosara mutsumo chete nemumazita. Mienzaniso yemazita netsumo zvinotevera ndizvo zvichiri kushandisa **–za**.

1) Mu**za**nebanga (zvichireva kuti Muuyanebanga)

2) Mu**za**nenhamo (zvichireva kuti Muuyanenhamo)

3) Garwe haridye chebamba charo chino**za** neronga

Mienzaniso iri pamusoro iyi inoratidza chirevo nemamwe mazita anoshandisa chiito chokuti **–za** chinova chisisashandiswi mukutaura kwemazuva ose. Asi **–za** ndiye anosanduka achiita chiitobatsiri chinonzi **–zo-** icho chinenge chava chitaridzanguva chezvichaitika nenguva inotevera zvakaita semushoko rokuti: Ndicha**zo**fara

Kusanduka kwezviito uku hakuvanikwe kuChiShona chete asi kuti kwakaonekwa kuchiitika mumimwe mitauro yakawanda pasi rino rose. Kushanduka kwezviito uku ndiko kunokonzera kuti kuite mhando dzakasiyana-siyana dzezviitobatsiri nokuti zvinenge zviri pamatanho akasiyana mukusanduka kwazvo zvichibva kuzviito zvichienda kuzviitobatsiri zvobva zvichiendazwe kutuvakazwi tudiki twakaita sezvitaridzanguva. Zvimwe zviito zvinenge zvichangotanga kusanduka, zvimwe zvatosanduka zvakanyanya zvimwewo zvatova zvitaridzanguva.

Tsvagurudzo iyi yakabuditsawo zvekare kuti pakushanduka kwezviito uku, hazvisiri zviito zvose zvinokwanisa kushanduka. Uye pakushanduka kwazvo zviito izvi panotozivikanwa kuti chiito chorudzi rwakati ndicho chinokwanisa kushanduka chichitipa chivakazwi chorudzi rwakati.

CHAPTER ONE

1 Introduction

1.1 The aim of the present study

The aim of the present study is to account for auxiliaries in Shona. Shona is a Bantu language spoken by about seventy-five percent of Zimbabwe's population, estimated at about twelve and half million people. As was observed by Heine (1993:26), the question as to what auxiliaries actually are has provided one of the most popular battlegrounds for disputes on linguistic theory. In Shona grammars, for example, as noted by Jefferies et al. (1994:17), auxiliaries are variously and inconsistently referred to as deficient, defective, irregular, helping and restricted verbs. This plethora of terms is a reflection of a much more deep-seated problem, that the categorical status of auxiliaries in Shona is not very clear. This problem of the categorical status of auxiliaries is not confined to Shona but it is found in many languages of the world.

The present study attempts to examine auxiliaries in Shona, identifying their various types and investigating their functions in verbal forms. Although the main focus of the study is on auxiliries, reference will also be made to non-auxiliary verbs so as to be able to come up with a set of characteristics that distinguish auxiliariess from verbs and other grammatical categories in Shona.

The major motivation for this study, as will be mentioned in section 1.2 below, is to come up with solutions to some of the problems faced in determining the range of items subsumed under the category auxiliary in Shona. Most of these problems are mainly a result of the use of frameworks that are traditional in origin. These traditional frameworks, as will be pointed out in the theoretical framework, fail to account for the intricacies of linguistic categorization mainly because of the use of classical approaches to linguistic categorization.

For a long time, debate on the status of auxiliaries in traditional grammar, structuralist and generative traditions tended to be centered on whether auxiliaries should be considered as a distinct category or whether they should be considered as verbs, which have minor "deviant" characteristics. The present study takes the cognitive approach in focusing on auxiliariess. The choice of this theoretical framework is based on the new findings by such scholars as Heine (1993), Heine, Claudi and Hunnemeyer (1991), Hopper & Traugott (1993), Langacker (1987, 1999), Bybee(1985), Bybee, Perkins and Pagliuca (1994), Sweetser (1990), Svorou (1994), Mkhatshwa (1991) whose studies have brought new insights into the nature of linguistic categori-

sation. Heine (1993:3), for example, argues that previous approaches to the analysis of language structure tended to base their categories on necessary and sufficient conditions, nd this only accounts for only a limited range of speech behaviour. He suggests that in addition to these necessary and sufficient conditions there is need to come up with "more flexible taxonomic principles in order to take care of such phenomena as linguistic ambiguity, polysemy and other kinds of semantic relationships."

This study makes use of the gradiance approach which will be discussed in more detail in the theoretical framework. This approach recognizes that membership of categories is, in most cases, matters of degree. According to this approach, categories in general, have best examples called "prototypes." It also recognizes that some category members are "better examples" than others, which are then regarded as the prototypes, hence the model is referred to as the prototype model. Proponents of this model argue that there is some gradience from the prototypes to the less central members of a category. This recognition that some categories have degrees of membership and no clear boundaries is the reason why this approach to categories has been referred to as the gradience hypothesis. There are members that are considered as the prototypical or core members of a category and then there is a gradience from these prototypical members to the peripheral members.

The gradience approach is applicable to any kind of category that one might think of. When it comes to auxiliaries and verbs, the gradience approach looks at the two categories as merging into one another. There in no clearcut boundary separating auxiliaries from the main verbs, there is continuum, a movement from a prototypical main verb to a prototypical auxiliary.

Like most of the proponents of the gradience approach, we will use grammaticalization theory to account for the nature and behaviour of auxiliaries in Shona. Grammaticalization refers to that process where lexical items and constructions develop grammatical functions in certain contexts. Content word categories like nouns and verbs change over time and they develop into markers of case, or they became connectives or they turn into auxiliaries. Such an approach is called for, especially in the light of many observations by Bantu scholars, as we will see in chapter 2, that there is a derivational relationship between verbs and auxiliaries.

1.2 Background

September 1992 saw the official launch of a dictionary-making project in the Department of African Languages & Literature at the University of Zimbabwe. The African Languages Lexical Project (ALLEX)[1] was born out of the perceived urgent need to produce practical reference works for speakers and writers of Zimbabwe's indigenous African languages (Chimhundu et al.1993:1). Being an experiment in Bantu lexicography in terms of its use of corpus-aided methods, it was decided that there was a need to co-operate with other institutions outside Zimbabwe that have long traditions of computerized lexicography. Lexicographers and computer experts from the Univer-

[1] The ALLEX project has since been transformed from a mere project in the Department of African Languages and Literature into a permanent research unit, now called the African Languages Research Institute(ALRI). More information on ALRI is available on the website: http://www.uz.ac.zw/units/alri/alri_home.htm>http://www.uz.ac.zw/units/alr i/alri_home.htm

sities of Oslo and Gothenburg were involved from the onset, not only in training the local team in these new methods, but also as part of the planning process at the various stages of the project.

The first phase of the project (1992-96) resulted in the production of, Duramazwi ReChiShona, a general purpose, medium-sized, monolingual Shona dictionary, targeted at the middle levels of the education system. The second phase (1996-2000) of the project resulted in the production of two dictionaries:

a) A general purpose, medium-sized, monolingual Ndebele dictionary Isichamazwi SesiNdebele (Hadebe 2001) similar to DuramazwiReChiShona. (Ndebele is spoken by about fifteen percent of the population in Zimbabwe.)
b) An Advanced Shona dictionary, Duramazwi Guru ReChiShona (Chimhundul.2000), meant for the higher levels of the education system and tertiary level. The project is now in its third phase (2001-2005), where the aim is to produce the following products:

i) A glossary of musical terms;

ii) An Advanced Ndebele dictionary; and

iii) A Shona Junior School dictionary.

The present writer was part of the team that edited this first computer-aided Shona dictionary Duramazwi ReChiShona (Chimhundu 1996). One of the problems that we encountered as an editorial team while compiling Duramazwi ReChiShona, was that of being confronted with lexical items that were difficult to put into grammatical categories. It was at this point that the present writer realized that the existing Shona grammars are not able to account for some of these anomalies related to word categorization. Hence the need to revisit these grammatical categories in the light of new findings in linguistic categorization which enable us to handle the structure of auxiliary constructions.

This problem of the categorical status of auxiliaries is not confined to Shona but it is found in many languages of the world.

1.3 Objectives

a) The main objective is to find out the range of idiosyncratic properties that distinguish auxiliaries from non-auxiliary verbs in Shona and to identify the range of items that belong to this category of verbs in Shona.

b) To investigate and determine the nature and functions of each range of the items that will have been identified as auxiliaries in Shona.

1.4 Shona as a Bantu language.

Although this study focuses on Shona, it also includes a cross-linguistic perspective. Most of the languages cited when we provide the cross-linguistic evidence are Bantu languages. In one or two instances we may cite non-Bantu examples but most of them are from the Bantu family of languages. The methodological issues related to the use of such evidence are discussed in more detail in the methodology chapter. In this introductory chapter, we will just show the place of Shona in the Bantu family of languages.

Shona, as we have already pointed out in the background, is a Bantu language spoken by about seventy-five percent of Zimbabwe's approximately, twelve and half million people. It is also spoken in neighbouring Mozambique especially in the Manica province where the majority of speakers speak Ndau, which is one of the Shona dialects. Shona is listed in the top five of the two top-ten lists of the most spoken Bantu languages cited by Maho (1999a:20).

According to Guthrie (1971), the Bantu languages belong to the Southern Bantoid languages, which are a subgroup of the Bantoid languages, which in turn form a subgroup of the Niger-Congo language family. The place of Shona in the Bantu family of languages has been documented in a number of works by such scholars as Doke (1931), Guthrie (1948, 1967-71), Hachipola (1998) and others. Guthrie's (1971) classification, which is the most most-widely cited as a standard reference for identifying individual Bantu languages, groups them into fifteen zones, Zones A to S(except for I, J, O and Q.) We will not go into a detailed description of these zones. Maho (1999a) gives a detailed review of this classification as well as other classifications. Our main interest in this study is his Zone S, not only because this is the zone in which Shona falls, but because most of the languages that we refer to in our cross-linguistic comparison, fall in this Zone. This zone is made up of the following language groups:

Zone S
Shona group
Venda group
Sotho-Tswana group
Nguni group
Tswa-Ronga group
Chopi group

We will give a list of the main languages or dialects, which fall in each of the above language groups as well as the countries in which we find the majority of their speakers. We will start with the other groups and then at then we will look at the Shona group.

Table 1.1 Guthrie's (1971) Classification of Language Groups in Zone[2]

Language group	Language	Country where we have the majority of speakers
Nguni (Guthrie's S40 group)	Zulu (Isizulu)	South Africa
	Siswati	Swaziland
	Xhosa (Isixhosa)	South Africa
	Ndebele (Isindebele)	South Africa
	Ndebele(IsiNdebele)	Zimbabwe. Note: Zimbabwean Ndebele is closer to Zulu than South African Ndebele.
Venda (Guthrie'sS20group)	Tshiphani	Zimbabwe/ South Africa
	Tsiilafuri	Zimbabwe/South Africa
	Tshironga	Zimbabwe/South Africa
	Thsimbedzi	Zimbabwe/South Africa
Sotho-Tswana group (S30 group)	Rolon	Botswana and South Africa
	Kgatla	Botswana and South Africa
	Nwatu	Botswana
		Botswana and Namibia
	Nothern Sotho	South Africa
	Pedi	South Africa and Botswana
	Lobedu (Lovhedu)	South Africa
	Southern Sotho	Lesotho
Tswa-Ronga group (S50 group)	Tswa (Xitswa)	Namibia and Zimbabwe
	Gwamba (Xigamba)	South Africa and Mozambique
	Tsonga (Xitsonga)	South Africa and Mozambique
	Ronga (Xironga)	South Africa and Mozambique
The Chopi group (S60 group)	Ndonge	Mozambique
	Tonga	Mozambique
	Lembue(Lenge or Kilenge)	Mozambique
	Lambwe	Mozambique
The Shona group (S10 group)	Korekore (ChiKorekore)	Zimbabwe
(Guthrie's S10 group)	Zezuru (ChiZezuru)	Zimbabwe
	Manyika (ChiManyika)	Zimbabwe
	Tebe (ChiTebe)	Zimbabwe
	Karanga (ChiKaranga)	Zimbabwe

Most of the languages cited in the cross-linguistic comparisons in this study fall in Guthrie's zone S. As can be seen in the third column of the above table, all the countries listed are in Southern Africa. For the purposes of this study, when we talk of Southern African Bantu languages we are referring to Guthie's zone S. When we talk

[2] The classification of language groups is according to Guthrie(1967-71), but the column of the countries where we find the majority of speakers is mine. The Comparative Bantu Online Dictionary(COBOLD) and the BL search were quite useful in finding the countries were some of the languages and dialects are spoken.(For more information on the COBOLD and the BL Search see section 3.10.2 as well as the reference section that lists internet sources.

about Bantu languages in this study, we are mainly referring to Zone S. We will specify instances where we will be referring to the bigger family of languages.

As can be seen in the table above, for most of the languages and dialects, there is more than one way of calling the same language or dialect. These problems associated with choosing a suitable name for given forms is not new and it has been discussed in a number or works. One of the problems involves choosing whether one is to use prefixes or not, for example, whether to say Shona or ChiShona, Ndebele or SiNdebele, Xitsonga or Tsonga,ChiZezuru or Zezuru etc. We will not go into this debate, save to say that, for the sake of consistency, we will adopt a system where we do not use the prefix. This system where one uses the prefixless names, as mentioned by Maho (1999a:21), is now widely used in the literature on Bantu.

1.5 Brief overview of the Shona language situation

We now move on to the Shona group, which is the main focus of this study. As Hachipola (1998:2) rightly points out, each of the Shona dialect groups listed in Guthrie (1967)'s classification, comprises several clusters which are not shown in Guthrie's tables above.

The most comprehensive description of the Shona group was by Doke (1931). Before Doke's work there was no unified writing system for Shona. Most of the written material was by missionaries who produced works for pastoral purposes. The others were the district administrators who would keep records in the course of their work. The different mission stations would produce written material in the dialects in which they were based. The Roman Catholic Church, for example, would produce most of their writings in Zezuru mainly because their headquarters was based at Chishawasha near Harare, where Zezuru is the dorminant dialect. Similarly other denominations would produce their writings in a different dialect depending on where their headquarters was based. The Dutch Reformed Church, was based at Gokomere near Masvingo had their material in Karanga, while the American Methodists where based at Old Mutare wrote in Manyika because they were in the Manyika speaking area. A situation arose in which we had varying orthographies depending on some of the factors listed below:

a) Which denomination was writing the material and in which dialect area was it based.

b) The linguistic backgrounds of the writer, what their mother tongue was.

c) The linguistic background of the writer, in terms of their own level of linguistic training.

Some of these diversities in orthographies, particularly in word division, which are a result of the individual peculiarities of the Europeans who were responsible for reducing them to writing, are illustrated in chapter four where we discuss the concept a word in Shona.

After carrying out extensive research, Doke (1931) recommended that Zezuru, Manyika and Karanga should form the core of 'Standard Shona' and this recommen-

dation greatly influenced the development of the Shona language. Korekore was not included in the 'Standard Shona' because at the time that Doke carried out his study, Korekore did not have much in terms of written sources. Dembetembe (1987:vii) argues that, as of 1967, of all the Shona dialects, Korekore had received the least attention, from a linguistic as well a literary point of view. Doke's (1931) study was mainly based on publications by different mission stations in the Shona-speaking parts of Zimbabwe, some of which have been mentioned above. The Korekore areas of Northern Zimbabwe did not, at the time, have any mission stations with written material.

Kalanga is another Shona dialect which was not included in 'Standard Shona.' According to Hachipola (1998:5), Kalanga is, from a linguistic point of view, indeed a dialect of Shona. Hachipola (1998:5) also argues that, although Kalanga is linguistically a dialect of Shona, the fact that it was not included in Doke's 'Union Shona' has resulted in Kalanga developing its own peculiar characteristics. It has attained language status and it is officially recognized as one of the so-called 'minority' languages in Zimbabwe.

Doke (1931) also recommended that Ndau should not be included in the core of 'Standard Shona' because of what he calls "Zuluisms" as a result of Nguni influence. As the Ndebeles were migrating from South Africa in the1830s, there was language contact between Shona and Ndebele, resulting in Ndau being influenced by Nguni, especially the phonology. Ndau ended up acquiring click sounds that are not found in the rest of the Shona dialects.

Recent work by the ALLEX team broke away from the traditional trend of neglecting Ndau and Korekore while considering Zezuru, Karanga and Manyika as the main dialects in 'Standard Shona.' The corpus compiled by the ALLEX team, which will be described in the methodology chapter, resulted in the inclusion of more material from these previously neglected dialects. However, despite these efforts to include more Ndau in the new dictionaries, there is still some pressure from the Ndau speakers to have Ndau recognized as a minority language. According to Hachipola (1998:2), pressure is mounting in the Ndau areas to have Shona replaced with Ndau since pupils in Ndau-speaking schools cannot cope with 'Standard Shona.' Hachipola (1998:3) adds that most Ndau speakers feel that 'Standard Shona' is nothing more than Zezuru and Karanga.

1.6 The organisation of the study

Chapter one begins with the aims and objectives of the study. It then moves on to a brief background to the study, that is, the circumstances that motivated me to carry out the study. Because the focus of this study is on Shona, we found it imperative that we place it within the larger context of the Bantu languages and give a brief overview of the languages in Zone S, from which most of the languages used in the cross-linguistic perspective are taken. A brief overview of the Shona language situation is given so that we appreciate some of the basic facts of the language that we will keep on referring to in the rest of the study.

Chapter two looks at some of the key issues that have dominated the study of auxiliaries. It starts with a Heine's (1993:20) survey of some of the important questions that one encounters in the study of auxiliaries in Indo-European traditions. It goes on to the treatment of auxiliaries in Bantu languages beginning with early grammarians in

the 1920's. It then looks at some of the key works on auxiliaries in Shona. Chapter three discusses the methods used in this study. Chapter four looks at the morphology of the Shona verb. The theoretical framework used in this study is discussed in chapter five. The data analysis is found in chapter six and finally the conclusion in chapter seven.

CHAPTER TWO

Defining *Auxiliary*

2.1 Introduction

This chapter looks at the definition of auxiliary. The ideal thing in a chapter with the above title would be to finally come up with a definition that adequately describes our conception of auxiliary and indicate how this is applicable to the Shona language. This will not be possible in this chapter because the nature of auxiliary is the subject of the whole thesis. Such a definition can only be attempted in the concluding chapter. What is possible though, which we will attempt, in this chapter, is an examination of some of the key issues that dominate the study of the notion of auxiliary. The discussion starts with Heine's (1993:20) summary of the common properties of auxiliary that feature in definitions of auxiliary in a number of languages. Having identified the key issues in the study of auxiliaries, we also make a brief survey of the treatment of auxiliaries in Bantu languages. We also look at how the concept auxiliary is understood in some selected influential Shona grammars so that we have an overview of the study of auxiliaries that enables us to find out the best approach to the investigation of the categorical status and functions of auxiliary in Shona.

2.2 The term *auxiliary*

One of the main problems that one encounters in the study of auxiliaries is the question of terminology. In Shona, for example, we mentioned in chapter one that auxiliaries are variously and inconsistently referred to as deficient, defective, irregular, helping and restricted verbs. In addition to the terms that are found in Shona grammars, other terms that are equated or associated with the term auxiliary, include the following:

serial verb
modal verb
semi-auxiliary
tense auxiliary
aspectual auxiliary
verbal particles.

This proliferation of terminology can only show that, despite the many works that have been written on the subject in the different languages, there is no agreement on the definition of auxiliary and there is no unanimity in determining the range of entities subsumed under this label. For us to come to grips with the some of the most important issues in the study of auxiliaries we will start by looking at Heine's (1993:20)

survey which reviews the definitions of auxiliary from fifteen dictionaries of linguistic terminology.

2.3 Heine's survey of definitions of auxiliary

Without going into a detailed history of the subject, Heine's (1993) survey enables us to quickly identify the wide spectrum of views that have dominated the conception of the notion auxiliary. Such a wide spectrum of views will give us an insight into some of the problems that we are likely to encounter in the study of auxiliaries in Shona. The fifteen dictionaries that Heine consulted were published in three different languages, that is, six in English, seven in German and two in French. There is no indication in Heine's work as to what languages were analyzed by the different linguists who came up with definitions that he discusses in the dictionaries that he cites. We will assume that if the these dictionaries are written in the three languages named above, they are likely to be drawing their data from Indo-European languages. Assuming that Heine's survey is based on the Indo-European tradition, there is need, therefore, to make another brief survey that focuses on Bantu languages with special emphasis on Shona.

Heine comes up with a list of properties of auxiliary that are shared by many of the definitions that he looked at. Below are some of the features that recur in the definitions that he looked at:

c) Eleven out of fifteen definitions are illustrated with examples of auxiliaries, and in all eleven instances the examples include items "be" and "have," other items being much less frequently named: "do" (5 times), "become"(4), "shall"(3), "will", "may" and "can" (each 2 times), "do" is confined to English and "become"(werden) is confined to German dictionaries.

d) The most frequently named notional domains associated with auxiliaries are tense (8 times), aspect (6), modality (5) and voice (5).

e) In three dictionaries, auxiliaries are referred to as verbs, and in another four as a subset of verbs.

f) Auxiliaries are said to have no lexical meaning according to four, and a "weakened" or "incomplete" meaning according to another three definitions.

g) Four dictionaries mention that auxiliaries can also be used as main verbs.

An examination of the above summary of the salient features of auxiliary reveals that the dominant questions that have characterized the study of auxiliaries include the following:

1) Are these elements that we call auxiliary part of a distinct category different from verbs or are they just verbs that have some deviant behavior?

2) What is the range of notional domains that are associated with the auxiliaries?

3) Do auxiliaries have any lexical meaning?

We will not pretend that by answering the above questions we will have solved the problem of defining auxiliary but we can safely say that we will have built a strong foundation to the study of auxiliary. Because these questions are so fundamental in our understanding of the notion of auxiliary, we will keep on coming back to them, not only in this chapter, but also in the rest of the study.

2.4 Auxiliaries in Bantu Languages

The issues that have been raised so far concerning the nature of auxiliaries, we assume, emanate from the Indo-European tradition. Since our focus is on Shona, a Bantu language, it is necessary to survey the views of some Bantu grammarians so that we have an overview of the issues at hand in the Bantu tradition. Mkhatshwa (1991:72) made such a survey in an effort to establish the categorical status of auxiliaries in Bantu with a special focus on the Zulu language.

In the case of the Heine survey, that we discussed earlier on (in section 2.3), we did not present actual definitions, word by word. We simply took his summary of the key issues that he picked up from the definitions. In the case of Mkhatshwa's (1991) survey, we will first of all present actual definitions of auxiliary, word by word, from some selected Bantu languages. In addition to the definitions that we find in Mkhatshwa's survey, we will also add some more definitions from other sources so as to broaden our understanding of the concept in Bantu. It should be pointed out that we found it necessary to present actual definitions because some of the definitions make use of terminology that is traditional in origin, terminology which might have been popularized in Bantu grammars, so presenting them as they are, would be useful in showing the development of the conception of the notion auxiliary in Bantu. After presenting the definitions we will summarize the key issues arising from them. We will compare and contrast them with those that we came across in the Indo-European tradition.

Jacottet (1927:118) defines auxiliary in SeSotho as follows:

> *Besides the regular tenses which have been reviewed, SeSotho possesses a large number of verbal morphemes built up with the help of special auxiliaries and verbal particles. Connected with the regular tenses of the verb, these auxiliaries impart to them a special meaning, and enable us to express many nuances of meaning, which in English are generally rendered by adverbs. Of these auxiliaries, some are notional verbs, which have, when used as auxiliaries, a value somewhat different from their ordinary meaning, and others are merely auxiliary and no longer possess any real value of their own apart from their use as auxiliaries. Most of the latter class are monosyllabic; some have even been reduced to the condition of mere particles.*

It should be pointed out that Jacottet starts his definition by saying that, "Besides the regular tenses ….." Traditional Greek and Latin grammarians recognized three tenses, "past", "present" and "future" and, for quite some time, the three-way opposition of

tense was considered as a universal feature of all languages. What then does Jacottet mean by "regular tenses?" Regular tenses here, we assume, refers to three of the commonest tenses distinguished in most languages, the ones that we said were recognized in traditional Greek and Latin grammars. What Jacottet means, we assume, is that in addition to the traditional forms of tense, there are other forms which, like tense, have reference to time which we call auxiliaries.

The following are the most important points to note about auxiliaries from Jacottet's definition:

a) They are different from regular tenses.

b) They add some meaning to the verbal form.

c) In English these meanings would be rendered by adverbs.

d) Some of them are notional verbs, which could be used as auxiliaries, and when this happens they have some different meaning, that is, different from that of the notional verb.

e) Some of them have been reduced to mere particles (presumably through diachro ic processes.)

Mkhatshwa (1991:72) notes that Jacottet's definition recognizes a close relationship between auxiliaries and verbs with some of the lexical verbs undergoing a reduction in both meaning and form compared to the their original lexical forms. According to Jacottet, some of the auxiliaries have connections with lexical or notional verbs. We take the term "notional verb" in the sense in which it is used in traditional grammatical analysis which assumed that "there existed extra-linguistic categories in terms of which units of grammar could be defined" (Crystal1980:237). One of the extra-linguistic categories in terms of which grammar can be defined is the verb. The notional definition of a verb, according to Crystal (1980:237), is that it is a "doing word." From the above definition we can say that auxiliaries are remnants of verbs, (doing words in the traditional grammarian's view). In other words they used to carry some form "action" but have been reduced by some process to the condition of mere particles.

The next definition in Mkhatshwa's survey is the one by Cole (1955:286) which looks at the auxiliary in Tswana, and says:

> *Auxiliary verbs are so termed because they do not themselves constitute complete predicates. They cannot stand alone, but must be followed by a subordinate verb or copulative formation, termed a compliment, in order to produce a complete predication.*

Cole (1955:286) argues that auxiliaries do not make up complete predicates. The question that immediately comes to mind is what is a predicate. According to Jefferies et al.(1994:18), from a functional point of view, "most verbs predicate." To predicate, in their view, is to "say something about someone or something and or to describe actions, processes, events, and states of affairs that people or things are involved in." This view

of the predicate should be looked against the background of the traditional "notional" verb that we looked at above. The traditional verb, we argued, is a "doing word" which involves some "action." It follows, therefore, that the predicate carries some action. The action in the case of the auxiliary is not complete and it would require some other subordinate verb or some copulative to complete the action. "Copulative" here is used to refer to the predicative inflection.

Coming back to Cole's definition, we can now say, he sees auxiliaries as the ones which we could argue that they do not have "complete action." Because of this lack of complete action: they cannot stand on their own, they cannot be complete predicates. Because of this incompleteness, Dembetembe (1987:135) says they form what he refers to as "unstable utterances." According to Cole, for these auxiliaries to become complete predicates, they would need a subordinate verb or copulative to complete their predication. As Mkhatshwa (1991:72) notes, Cole's syntactic definition of auxiliary shows that there is a connection between auxiliaries and verbs. This dependent nature of auxiliaries, in Cole's view, seems to be the major syntactic motivation for distinguishing the word category "auxiliary."

Another definition of auxiliary similar to the one by Cole, though not coming from Mkhatshwa (1991)'s survey, is the one by Paulos (1990:235) which says:

> *A very important feature of an auxiliary verb is that it must be followed by another verb form. The second part of the compound verb is called a complement of the auxiliary which, as the name implies, helps to complete the verb action which the auxiliary verb cannot do on its own.*

The dependent nature of auxiliary seems to feature in all the definitions that we looked at so far. It also features in another definition that Mkhatshwa (1991:73) looks at, by Ziervogel (1969.118) who defines auxiliary in Zulu as follows:

> *The auxiliary predicate is in fact an extension or modification of an action. On the one hand, it reminds one of the English auxiliary verbs such as "will", and on the other hand it expresses English adverbs. Many auxiliary verbs are ordinary verbs which assume a figurative meaning. The feature of the auxiliary predicate (a term preferred to auxiliary verb, since it is not necessarily a verb) is that it is seldom possible to use it as a word by itself like an ordinary predicate. The auxiliary verb is therefore used to form a compound predicate which although it consists of two verbs, constitutes a unit. The auxiliary predicate must always be followed by another predicate or predicative form such as an infinitive.*

Slattery (1981:1)'s definition of auxiliary in Zulu emphasizes the meaning that auxiliaries add to the main verb:

> *Auxiliary verbs are ones which must be followed by another verb whose meaning they modify in some way.*

So far, our discussion does not reflect the terminological confusion that is associated with the study of auxiliary that we mentioned at the beginning of this chapter. We will now introduce some of these terms in our discussion. As far back as 1935, Doke ex-

pressed his dissatisfaction with the term auxiliary. In his dictionary Bantu Linguistics Terminology under the entry auxiliary, he wrote:

> *Aiding, helping; particularly applied to assisting to form tenses, moods, etc. of the verb. The term verbal auxiliary can well be applied to what are commonly called verbal particles those formative elements which serve to differentiate the various tenses, etc….. But the term auxiliary verb is not strictly applicable in Bantu languages. There are, in several of them, verbs (often irregular in form) used in the formation of compound tenses; but the verbs, by which they are accompanied, are found on examination to be in some subordinate mood, subjunctive, participial or infinitive. The hitherto-called auxiliary verb is in Bantu really the principal verb of the sentence, and therefore it is more correct to use some such term as deficient verb to describe it.*

An important point coming from this definition is that auxiliaries, in some of works, are referred to as verbal particles. The term verbal particle when used to refer to the auxiliary, indicates that the auxiliary cannot be considered as a full verb, yet it has some verbness in it. This points to the problem of categorization that we have already encountered in the treatment of auxiliaries in the Indo-European tradition. The notional domains of tense and aspect that are associated with auxiliaries in the Indo-European tradition seem to be featuring in Doke's (1935:57) conception of auxiliaries, although he prefers to call them deficient verbs. In Doke's view, the term auxiliary is not strictly applicable to Bantu languages. This rejection of the term auxiliary could be a result of the fact that the meanings of these auxiliaries in most non-Bantu languages would be rendered by adverbs, a point which keeps on coming out in many Bantu works on auxiliary. We have already seen this in definitions by Jacottet (1927:118) and Ziervogel (1927:118) and we see it in others that we will review later on in this chapter.

Another concept that Doke (1935:57) brings out is his definition is the idea of an irregular form of a verb. Regular verbs in the positive form in Bantu languages would have the final vowel -a. Verbs are said to be irregular if they do not have, in the positive form, the final vowel -a. Some of the auxiliaries, according to Doke, are irregular. Doke goes on to argue that some of these auxiliaries, especially the irregular ones, are used in the formation of compound tenses. Fortune (1955:324) defines a compound predicate, in its simplest form, as "a sequence of two predicates united in one predicative whole. Of these two predicates the first is the deficient verb, the second is the complement which in Shona, is usually verbal, but which may be copulative." In some works these compound predicates are referred to as two-word tenses and there are cases where one can get multiple word tenses.

Doke gives the the following example from Zulu:

(1) saphindesabona
sa-phind-e sa- bon- a
1PL-do.again-FV 1PL-see-FV
lit. "we-did-again we saw."
"we saw again"

In this example, -phinde is the deficient verb which is incomplete and it requires a compliment in the form of sabona which helps to complete the action. Sabona, therefore, is a complimentary verb which compliments -phinde. Doke goes on to argue that the auxiliary, which he calls the deficient verb, is the principal verb of the sentence because it is the one that bears the mood and tense of the total predicate.

After dismissing the term auxiliary, Doke (1935:84), goes on to define deficient, which he says is a more appropriate term for what we are calling auxiliaries in this study. Doke (1935:84) argues that when something is deficient it is lacking in some element of completeness. Deficient verbs are "those verbs requiring a subordinated predication to complete them." He says that deficient is a more correct term to use in Bantu for what we have hitherto been called auxiliary verbs. He gives the following example in Zulu to explain the use of the term deficient.

(2) balokhu belima
ba-lokhu be-lim-a
3PL-keep 3PL-ploughing-FV
"they keep ploughing"

In the example above belima is in the participial mood and balokhu is the main predicate, but deficient in that it cannot be used as a verb standing alone.

(3) ngike ngifunde
ngi-ke ngi-fund-e
1SG-do.sometimes 1SG-read-FV
"I sometimes read"

In the above example, ngifunde is subjunctive mood, the main verb being –ke "to do sometimes."

(4) sisand'ukukhuluma
si-sand` -uku-khulum-a
1PL-just -INF-speak-FV
"we have just spoken"

In the above example, ukukhuluma is infinitive, the object of sisanda and therefore surbodinate; for this reason the verb –sanda cannot be considered an auxiliary, but must be treated as the main verb, deficient in itself, and requiring a subordinate verb to complete its predication.

Most of the points that Doke raises in this definition of deficient have already been explained in our discussion of some of the definitions that we came across earlier on. We have presented quite a number of definitions of auxiliary from Mkhatshwa's survey, plus one or two others from other sources. Below is his summary of some of the traditional views on auxiliaries in Bantu:

- All the definitions looked at recognize that there is some connection between auxiliaries and verbs.

- All of them find it necessary to distinguish the category of auxiliaries as being distinct from verbs.

- Some of them also note some properties in auxiliaries that are typically associated grammaticalization, namely reduction in form and meaning, even though they do not specifically mention grammaticalization as a process. The term grammaticalization is fully explained in the theoretical framework chapter.

- Some of them prefer to call them deficient verbs.

- In most of the languages analyzed the meanings of auxiliaries would be rendered by English adverbs.

- Some of the deficient verbs are found in compound predicates, a sequence of two predicates united in one predicative whole. The first predicate is the one which has the deficient verb which syntactically more important of the two because it bears the mood and tense of the total predicate.

- Semantically the auxiliary or deficient verb is incomplete. It carries incomplete action, action which can only be completed by another subordinate verb or copulative.

Mkhatshwa (1991:76) goes to point out that, even from the traditionalist's point of view, the widely attested fact that auxiliaries derive from verbs in many languages of the world holds also for Bantu languages.

2.5 Auxiliaries in Shona

Definitions of auxiliary in Shona are very similar to those that were presented in Mkhatshwa's survey. Fortune(1955.324),for example, agrees with Doke (1935) in the use of the term deficient verb. He sees the deficient verb as part of the compound predicate. A compound predicate being "a sequence of two predicates in one predicative whole" (Fortune1955:324). He goes on to say that, of the two compliments in the compound predicate, the first is the deficient verb and the second is a compliment which, in Shona, is usually verbal, but which may be copulative. We already explained the terminology used and the salient points coming out of this definition of the deficient verb. Fortune (1955:325) gives the following examples of compound predicates.

(5) ndanga ndatora
nd-a-nga nd-a-tor-a
ISG-REC.PAST-have ISG-REC..PAST-take-FV
"I had taken"

(6) ndiri kutora
ndi-ri ku-tor-a
1SG-be INF-take-FV
" I am taking"

(7) ava ndivo baba womukadzi
a-va ndi- vo baba wo-mukadzi
3SG-be COP.PREF-him/her father POSS.PREF-CL.1-wife
"This one(he) is the father of the wife"

In the compound predicates in examples 5 and 6 above, -nga and -ri are the deficient verbs that require complements to complete the predication. The compliment of the first example is a verbal participial ndatora while in the second example the compliment is an infinitive kutora. In the third example, -va is the defictive verb, which is followed by the copulative ndivo.

Dembetembe (1987:135) defines auxiliary radical as follows:

> *A radical which may not be followed by a compliment or an adverbial save in combination with a non-auxiliary or with a predicative (copulative) clause.*

Dembetembe(1987:135) gives the following examples of auxiliaries that require a verb phrase to form a stable construction.

(8) vanga vasida kuwuya kuno.
v-a-nga v-a- si-d- a ku- wuy-a kuno
2PL-REC..PAST-be 2PL-REC..PAST-ASP-like INF-come-FV Cl.17- here
"They wanted to come here."

(9) nguva iye taive mafuza
nguva iye t-ai-ve ma-fuza
CL.9-time DEM 1PL-past.hab-be CL.6-fools
"At that time we were fools"

(10) kunyangondizvonda hapana chaunendiyita
ku-nyango-ndi-zvond-a ha-pana cha-u-ne-ndi-it-a
INF-even.if-1SG-hate-FV NEG-there.is Cl.7-2SG-hab-1SG-do-FV
"Even if you hate me you won't do anything to me"

In the above examples given by Dembetembe (1987:135), the radicals -nga, -ve and -nyang- are auxiliaries each requiring a verb phrase to form a stable construction. When we say a "stable construction" we mean an utterance which can stand on its own without the aid of some other construction which makes it meaningful. The complentary radicals in these sentences are -d-, -ri and -zvond-. Dembetembe's definition is very similar to the Cole's definition. The main feature being the dependent nature of auxiliary, which makes them unstable utterances that would need a subordinate verb or copulative (predicative) formation to make them stable.

A look at the Dembetembe(1987:135)'s examples above, we can identify two types of auxiliaries.The first type is the one that has generally been referred to as the defective verb, as shown in examples 1-5. This type of auxiliary is of the CV type, that is, it made up of consonant(s) and a vowel. The defective verb is therefore different from other lexical verbs in that the radical of the lexical verb always ends in a conso-

nant while that of the defective verb ends in a vowel. We will, in chapter three, discuss the verb root as well as the derivational affixes that can come after the verb root.

One important characteristic that distinguishes defective verbs from lexical verbs is that they cannot take any derivational affixes. Another characteristic that distinguishes defective verbs from lexical verbs is that they do not take the object prefix as one of the inflectional affixes. The object prefix as a constituent in the conjugation of the verb will be discussed in chapter four. Mkanganwi (1995:130) gives the following examples as typical defective verb roots:

(11) -va "be" e.g.
ndava kuenda nd-a- va ku- end-a
1SG-REC-.PAST-be INF-go-FV
"I am going"

(12) -nga/-nge "seem"
kunge rombe ku-nge rombe
INF-seem CL.5-wanderer/destitute

(13) -ri " be" e.g. *ndiri kutamba*
ndi-ri ku-tamb-a
ISG-be INF-dance/play-FV
"I am playing/dancing"

(14) -ti "say that","think","do","happen", "be of a certain kind" e.g.
ndati tambira uko
nd-a-ti t amb-ir-a uko
ISG-REC..PAST-say play/dance-APL-FV DEM
"I said, Go and play there"

The second type of auxiliary in Shona has a frozen form, and according to Jefferies et al. (1994), it occurs within a verbal graphological form and it immediately follows any tense and aspect or mode markers.We use the term graphological form in the sense in which it is used by Jefferries et al (1994:1) to refer to words and forms as they appear in writing.These are the ones that are referred to as deficient verbs in a quite a number of works in Bantu. Doke (1990) looks at them in Zulu and in Shona and he calls them deficient verbs. In Hannan's (1984) Standard Shona Dictionary they are also called deficient verbs.

Dembetembe's (1987:135), example 6 above, falls in the category of deficient verbs. Below are other examples of this type of auxiliary.

(15) -do-"even if" e.g.
kudorova
ku-do-rov-a
INF-even.if-beat-FV
"even if you beat"

(16) -nyatso-"do carefully" e.g.
nyatso famba panotsvedza nyatso-famb-a pa-no-tsvedz-a

carefully-walk-FV Cl.16-ASP-slippery-FV
"walk carefully, its a slippery place"

Carter & Kahari (1972:39) also distinguish these two types of auxiliary. The first which they term auxiliary is the one the we referred to as the defective type above. This type, in their view, is found in combinations of two-word tenses which consist of the auxiliary followed by a form of the non-auxiliary. The second type which we said is found in the graphological form above, the deficient verb type, is the one which they say is made up of verbal infixes. These, in the conjugation of the verb are elements whose position is between the tense marker and the object prefix. The verbal infixes according to Carter and Kahari (1972:39) "may be glossed by English adverbials"

We noted in other Bantu languages that, what we call auxiliaries, would in English be rendered by adverbs. The same situation obtains in Shona, the only addition in Shona being that it is only one type of auxiliary that that may be glossed by English adverbials, that is, the type that we said is found in a graphological form. Carter and Kahari(1972:39) argue that these auxiliaries which they call verbal infixes usually end in -o-, so they are probably derived by contraction from verb stem + ku- of the infinitive. Carter and Kahari point out that some of the verbal infixes are cognates with some full verbs while others, especially when they are monosyllabic, cannot be "related to full verbs that are in existence today." This issue that they raise that points to the relationship between auxiliaries and verbs, we already came across in our discussion of other Bantu definitions. Carter and Kahari (1972:39) seem to be pointing at some historical development of lexical verbs into auxiliaries. Their explanation points to the process of grammaticalization, which we will come to in chapter five, although they do not specifically mention the term grammaticalisation.

2.6 Summary of chapter

Having looked at the treatment of auxiliaries in the Indo-European tradition and in the Bantu tradition we can now return to the issues that we raised in section 2.3. The first issue was the question of whether auxiliaries are a distinct category or they are just verbs that have some deviant behavior. Vonen (1997:12) observes that in any branch of science,"few theoretical notions are as fundamental as the notion of category." Being a science, linguistics is no exception; it has to be intimately concerned with the notion of "category". On the importance of categorization in linguistics Labov (1973:342) has this to say: "If linguistics can be said to be one thing it is the study of categories: that is how language translates meaning into sound through the categorization of reality into discrete units and sets of units"(cited in Taylor 1989:1). Being such a crucial notion in addressing the question at hand, we will have to come back to it after we have looked at the nature of categories. Categories are treated in theoretical framework(cf 5.2)

There is also the question of meaning, whether auxiliaries are meaningful or not. As we have noted in Mkhatswa's (1991) survey, Bantu grammarians observed that there is a reduction in both form and meaning of auxiliaries when compared to verbs. Recent studies on grammaticalisation, as will be pointed in the theoretical framework, have revealed that some lexical words tend to undergo processes where they end up assuming grammatical characteristics. This study attempts to investigate the function

of auxiliaries in the light of these new discoveries that account for problems such as linguistic ambiguity, polysemy and other kinds of semantic relationships.

The other question asked in section 2.3, tries to find out the range of notional domains that are associated with auxiliaries in Shona. In our explication of the relationship between auxiliaries and verbs we allude to the formal and semantic characteristics of Shona auxiliaries in relation to lexical verbs. This is a task that cannot be accomplished in this chapter but it features in the rest of this study. We however used, the term auxiliary to refer to those verbs that require complements to complete the predication in compound predicates as our working definition. The questions raised in this chapter are not the only ones that we have to grapple with in a definition of auxiliary. Others are discussed in the coming chapters but the ones we looked at so far form the foundation to the study of the categorical status and functions of auxiliary in Shona. The definition that we found most useful in the description of Shona auxiliaries is given in the concluding chapter.

CHAPTER THREE

Methodology

3.1 Introduction

As pointed out by Kennedy (1998:7), linguists have always needed sources of evidence for theories about the nature, elements, structure and functions of language, and as a basis for stating what is possible in language. Chafe (1992:82) rightly observes that the universe is not organised in such a way that any single tie to reality provides a sure path to the truth. Each option provides its own insights, and each suffers from its own limitations. This chapter discusses the methodological issues and techniques related to the sources of linguistic evidence used in this study. This study benefited from a judicious use of evidence from a number of sources. The following methods of obtaining data will be discussed:

a) the corpus

b) intuition

c) questionnaires

d) interviews

e) data from other written sources.

An attempt is made at bringing out the merits and demerits of each of the methods used.

3.2 The ALLEX Shona Corpus

This study makes use of the corpus collected by the African Languages Lexical Project (ALLEX) when it compiled a corpus-aided monolingual Shona dictionary. A brief background of the ALLEX project has been given in the introduction. The corpus was mainly made for lexicographic purposes and other language-related research. The study makes use of the corpus-driven approach, as one of its methods to the study of linguistics, and this method is based on the availability of a collection of texts, of written or spoken word, that is stored on computer for the purposes of linguistic analysis. The Shona corpus, which in November 2000, was about 2 224 983 tokens (running words) contains both written and oral materials from various genres collected from all

the Shona-speaking districts of Zimbabwe. One of the main guidelines in building the ALLEX corpus was the Cobuild project as described in Sinclair (1987).

3.2.1 Oral material

The bulk of the oral material was collected in 1993 over a ten-week period when the ALLEX team employed forty-one student research assistants and three education officials, to conduct oral interviews in all the forty-four Shona-speaking districts of Zimbabwe.

3.2.1.1 The student research assistants

All the student research assistants and the three officials were mother-tongue speakers of Shona. The students were selected from a group of second year undergraduate students who were taking Translation and Lexicography as a course in the Department of African Languages and Literature, at the University of Zimbabwe. This means that all of them had studied Shona as one of their subjects at Advanced Level and they had already done a year of undergraduate training in which Shona was one of their subjects. The other three education officials were already graduates who had studied Shona in the Department of African Languages and Literature at the University of Zimbabwe. The interviewers, therefore, were highly proficient in Shona such that they could competently conduct the interviews. Because these students had very little training on how to conduct research, they had to go through a one-week intensive course on how to conduct interviews. Lexicographers from the University of Gothenburg and University of Oslo were also involved in training the students in the one-week intensive course.

Most of the student research assistants conducted research in their home districts during their college vacation, and this made it easier for them to be easily accepted in the communities in which they were conducting research. This also made it cheaper in the sense that they were operating from their homes, so there was no need to arrange accommodation for them except in one or two cases. In those three districts where we could not find a student who comes from the area we then employed one or other of the education officials mentioned above.

3.2.1.2 Composition of the oral material

As was suggested by Poplack (cited by Thornell1997:50), an "ideal corpus takes into account all possible sociolinguistic, demographic and biological variables of the speakers." Every attempt was made to consider these variables in the compilation of the corpus. When conducting the interviews, the student research assistants were given a guide, which enabled them to cover quite a variety of topics and situations in order to achieve diversity in the corpus. Other variables considered in order to achieve diversity included the following:

i) Informants had to be chosen carefully, considering such demographic factors as:
   a) age
   b) sex
   c) educational background
   d) social background

ii) diversity of subject matter of discussion:
   a) hunting
   b) games
   c) myths, legends and folktales
   d) songs
   e) rites of passage etc.

iii) contexts of interviews
   a) padare (traditional court)
   b) wedding
   c) classroom
   d) panhimbe (work party) etc.

3.2.1.3 Transcription of oral material

In section 3.2.1.1 we mentioned that the student research assistants were highly proficient in Shona, such that they could competently conduct the interviews. Although these students were highly proficient in Shona, there were some problems when it comes to the transcription of the material by long hand. This was the responsibility of the student research assistant. There were problems involving phonetic transcription but these were n a major concern to us because, for our purposes, in this study this is not a major factor. The major problems that were really relevant to this study where mainly orthographic (word division) problems relating to word boundaries which involved auxiliaries.

a) Word division errors involving auxiliaries of the defective type.

Word boundaries involving auxiliaries which we classified as the defective type, such as -ri "to be" and -va or -ve "to be or to become", presented problems to some of the research assistants. These auxiliaries are supposed to be at the word boundary and they are not supposed to be combined with the next word as shown in the examples below:

ndava kuenda and not *ndavakuenda
nda-va kuenda
1SG-to.be INF-og-FV
"I am going."

ari pamba and not *Aripamba
a-ri pa-mba
3SG-to.be.at LOC.PRE-home
"s/he is at home."

The problem arises in those instances in which the transcriber does not put a boundary between the defective verb and the next verb, e.g. *ndavakuenda. Such instances are more difficult to search in the corpus because they cannot be picked up in a search like the one below:

ALLEX -- Shona Corpus (2,224,983 words)
Search for ".*va" in SHONA

adzovo ndeipi nokuti mati nyii dzinoita
afamba kubva ikoko kwamareva Mbire ikko
isati dzabereka dzinoita maruva.Runatsa
uzisango , ndokunobisa makwande nokubva
atomuti mutemazve . E-e , nokuti anenge
ire kana kuti ... zvinoitika kana munhu
chaiva chomusikana wake uya , waakanga
oses : E-e , ini ndoda kutsigira murume
a vasina kana kuti vanga vanadzo hapana
nda musango ndokundozviputsira
muminzwa
wake paya apa pakanga pataurwa nemakudo
ndokusvika munyika yavaDuma . Runatsa :
nda nemwi wainzi Madembo e-e , ari wedu
. Runatsa : Achibva ikoko ? Mugadziwa :
ikoko ? Mugadziwa : Ehe . Runatsa : Oho
uruboshwe unenge uchingovona ... anenge
nga vachiti mapurazi anofanirwa kuramba
, kana kuti Mukaro kana kuti ani wanga
o , chiri mumusakasaka chinozvinzwira ,
asimbodariki iyeye murumbi iyeye ,wanga
hu akaidza kuverenga unongodetemba kuti
a mukati mawo makaita yellow , e-e kana
yu achitiza , aiti kuti achevuke kudaio
tsa : Saka munotora movunganidza anenge
a mukumbi vakuru . Tinoavunganidza kana
zvibve vai- zvavanakidza . Uye , zvai-
Asi mawarire akatembarari tichin'i aka
u ... kuti anyatsovona kuti munhu wacho
Saka zvkaitika ndezvokuti mukomana uyu
amazimbama mamwe okuti ... kuti uti ...

,dzinowanzoibva muzhizha . Ko , idzi dzinowanzoibva nguv
,ndobva mazouya kwa ... Mugadziwa : Ndokuuya kuN
:Maruva acho anenge ane ruvara gwakaita sei?Zikh
abva achimanya zvikanzi , zvaita sei , sekuru
abva kune imwe nyika . I- , tikanyatsotaura-
abva kunotora vhunzo dzake afoira kana kuti a
abva kunoviga . Zvakakatyamadza mukomana akad
achangobva mukutaura uyu . E-e , tahwa vokutanga va
achaziva ipapo . E-e , vaingotyla zvekugwa vuye v
achibva abaiwa neminzwa nokuparwa-parwa zvikuru
achibva avuya , zvikanzi , vanasekuru , ngatichi
Achibva ikoko ? Mugadziwa : Achibva kuBehera iye
achibva ikoko achiti ndoinda navanababamukuru av
Achibva kuBehera iye ari oga . Runatsa : Achida
achibva ozoita svikiro zvino obuda pane mumwe mu
achingova masango nokuti hakusi ... hakuna misha y
achingova mumavoko avachena asingapuwi vatema . Va
achingova she paari . Zvino Mandevere ovuya aivuya
achirova shumba iya . Saka , manje , makudo kuzot
achiziva chishona chaizvo ... naVagwivi murunguvo
achizoziva kuti chuni yacho yaiti chii , zvorasika
aibva . Runatsa : Saka apa mune muchidyawo mhu
aibva avona munhu achitevera akashama , akati
aibva here ? Zikhali : Paanongodonha , anongod
aibva zviya zvokuti oteketera kungoteketera un
aitova mainterests avana kare . Handina zvangu
aitova okutozikamwa , ndotombonetseka ndichitsv
aiva ani haana kunyatsozvivona . Mai vakarair
aiva asati achafambira musikana wake uya waiv
aiva chinhambwe . Mukomana wakatimba pasi aka

b) Word division problems involving auxiliaries of the graphological type, that is, the deficient verbs.

These types of auxiliaries are supposed to be found within a graphological form, and they should not be separated from other morphemes that come after it as shown in the examples below:

svikotora and not * sviko tora
sviko-tor-a
on.arrival-take-FV
"take on arrival"

vakararotamba and not * vakararo tamba
va-ka-raro-tamb-FV
3PL-REM.PAST-all.night-dance-FV
"they danced all night"

Some of these problems, however, continue to be reduced as the process of cleaning up the corpus continues.

3.2.1.4 Other institutions where oral material was collected.

In addition to the sources of oral material that we have discussed so far, there are other institutions where oral material was collected. Below is a list of some of these institutions:

a) Zimbabwe Broadcasting Corporation: Tape-to-tape recordings of radio and television programmes in Shona, from various parts of the country on a wide variety of topics.

b) National Archives: Audio portions of films in Shona. Oral interviews from the oral traditions section.

c) Parliament: Recordings of few parliamentary sessions where contributions were in Shona. There were some parliamentary debates that were translated from English to Shona.

d) Magistrate's Courts: Transcribed tapes of court cases where the evidence was in Shona.

The collections of oral material resulted in seven hundred and fifty audio tapes of spoken Shona. Some of the cassettes were one hour long while others were one and half hours. To date over forty books of various genres have been scanned and put into the corpus.

3.2.2 Written corpus

The choice of written texts was not random. In order to obtain some sort of representative sample of the written corpus we followed a policy adopted by Yang (1885) at Shangai (cited by Renouf in Sinclair 1987:2), "to take the library as a microcosm of the written language." We scanned texts of different types taking into consideration their genres:

e.g. prose
poetry
drama
periodicals, pamplets etc.
textbooks.

We also considered the periods which they were written, whether they are pre-colonial, colonial or post-colonial. Such characteristics of authorship as age, sex, region, social class and educational background were also considered in the selection of texts. The students also collected written materials from various sources in all these Shona-speaking districts where they were deployed. Some written materials were collected from the following institutions:

a) Literature Bureau: published and unpublished texts.

b) Newspapers: magazines, pamphlets, advertisements especially from the only weekly which is Shona, Kwayedza.

e) Publishers: published and unpublished works.

f) National Archives: various written historical records.

g) Parliament: mainly translation of parliamentary debates, translated from English to Shona.

h) Denominational head-offices: religious books and pamphlets.

3.3 Monitor corpus

The corpus that the ALLEX team has compiled can be regarded as the nucleus of a dynamic or monitor corpus because it is an "open-ended language bank which is only limited by financial resources and technology needed to maintain."(Kennedy 1998:22). Sinclair (1992:382) sees monitor corpora as "huge, changing bodies of no finite size, flowing across a set of filters which extract linguistic evidence". The corpus that was used, therefore, contains data collected from 1993 to the year 2001.

This corpus is currently being enlarged for the purpose of producing more lexicographic products. Emphasis is being put on material that is already in the electronic form to minimise the laborious task of transcribing and converting text and sound into machine-readable form. One publisher, College Press, who ended up publish-

ing the three dictionaries produced by the project so far, gave the project some of the material that they have in the electronic form, for our use in the corpus.

3.4 The Corpus-driven approach

One of the main sources of linguistic evidence used in this study is the ALLEX Shona corpus that has been described above. We call this approach the "corpus-driven approach" as it is called by the Cobuild scholars at Birmingham to refer to their data-driven approach to the study of grammar. There are many scholars who are associated with this approach since it originated in the days of Firth (1957). It would not be possible to do justice to all the various works associated with this approach but we decided to single out John Sinclair, the leader of the Cobuild team at Birmingham, because his ideas are central to the development of the corpus-driven approach to the study of language use and language structure. Sinclair's work, according to Baker et al (1993: ix), has "genuinely shifted the focus of the discipline" because it emphasises naturally-occurring language exploration, in line with developments in the last three decades, that have seen a significant growth in computer-assisted corpus linguistics. We are here deliberately avoiding the term corpus-based, preferring corpus-driven, because of the size of the corpus that was used in this study, as will be mentioned in section 3.7 which discusses the limitations of the corpus. The Shona corpus that we used is still too small to support a corpus-based study. It is more of a corpus-aided study than corpus-based one.

One main advantage of using corpus evidence was clearly spelt out by Biber et al. (1998:1) when they argue that:

> *From this perspective (corpus-driven approach), we can investigate how speakers and writers exploit the resources of their language. Rather than looking at what is theoretically possible in a language, we study the actual language used in naturally-occurring texts.*

The idea of using the corpus as a source of linguistic description and argumentation stems from what Sture Allen (1992:1) refers to as the need to arrive at authenticity, a key notion in any scientific study. This drive to achieve authenticity has given new impetus to the corpus-driven approach where the emphasis in on what Sture Allen (1992:1) calls, "the real manifestations of language)." Another advantage of using the corpus is that the evidence is empirical and it is there for the public to verify. Public verification is important in any scientific study where there is need for sharing results with other people.

According to Gill Francis (1991:138), traditional grammarians had this tendency of using examples that had an "unmistakable ring of artificiality." He says that, for the purposes of saying exactly how language is used, intuition is "notoriously unreliable" because people do not realize that there is often "a difference between what they think they say and what they actually do say." For Francis, the corpus has raw information which has the advantage of revealing multiple aspects of language that are simply not accessible to introspection and it contains some threats to our accepted views of language.

3.5 Use of computers

The use of computers in corpus linguistics has resulted in the manipulation and analysis of much bigger volumes of natural language texts. The databases have greatly improved in terms size and variety, to the extent that it is possible to carry out even more complex and reliable linguistic investigations. The identification, sorting, quantification and analysis of some linguistic features and processes in a corpus can be done by the computer. Computer-assisted searches have the following advantages:

a) They provide consistent and reliable analysis and they do not change their minds or become tired during analysis.(Biber et al.1998:4).

b) Analysis can be done quite quickly and much more accurately than in situations where this is done manually.

c) Record-keeping is made much easier, with records being more easily accessible.

3.6 The Concordance Programme

A concordance allows the researcher to search for a given word or grammatical form in the corpus. The concordance then shows us all the surrounding contexts in which that word occurs in the corpus.The concordance listing that will be used in this study is the one in which the target word appears in the middle of a single line and you have the surroundings or contexts on either each side of it. Such displays, according to Biber et al (1998:26), are referred to a KWIC (Key Word in Context) displays. For our purposes in this study the target was not necessarily a word but a grammatical form, the auxiliary forms. The concordance listings are used to show the different meanings associated with given auxiliaries. Below is an example of a concordance of the auxiliary showing the contexts on the left and right of the key word in context. It is possible to have more context on the left and less on the right and vice-versa.

ALLEX -- Shona Corpus (2,224,983 words)
Search for ".*sviko.*" in SHONA

uru anosweropinzwa munhandaro yepwere ?	'Ndakasvikogara zvangu pasi asi mwoyo wangu waingonyumwa
aramba kutenga ,Haugari pasi kuirongera	,Unosvikondipa chematsenganzungu.Ndaneta ini vasikana ;
zvaibinhavhu zvichibva mumakomo akaoma	,Zvaisvikozvikanda mauri huro dzatsva nenyota ,Zvawaigutsa
sika kudzokera kuSouth Africa.CHITSAUKO	8Ndakasvikowana mudzimai akandimirira nomwoyo wa- itambu
aunosvika wakahututa ,Mhandu yako ndini	;Unosvikobvunza sadzaNechematsenganzungu. Ukatukana nevam
aMurambiwa ichingorova , achifunga kuti	achasvikopondwa . Mumbamo akasvikopedzisa mushando wake
muimba iyo . Mapenzi aya akamhanya ose	achinosvikobondera paboard . Saka pane rimwe rakasararakaga
diye akabhururuka napamusoro pemusikana	achinosvikoti dwi muvhu nemhanza , ndokuzoti pidigu nj
guva imwe cheteyo Murovasango akauchira	achisvikogara pasi . Nechinguvana akabva ati ,'Ko , m
ble Jongwe ,' mukadzi uyu akanyemwerera	achisvikombundirana maoko nomweni wake . Asi kumeso kwake kw
e zvino ndokuzvikanda kwazvo pamusikana	achisvikoruka muviri zvose nemaoko . Zviye zvetsvete n
, Tobayiwa ndokuurukira pamusoro pako ,	achisvikoti pahuro kwi . Zvikati zvotsukutsana , ndi
ye aizoenda nezvinhu zvacho nemota yake	agosvikokumbira kuzvisiyapo achiti aida kunosiya mota ya
orana kudai ndipo paanouya aguta hwahwa	agosvikorutsira ipapa chaipo.Ko kuridira mvura yakatonho
nyai uye odzokera kuvabereki vechikomba	agosvikovaudza achirumbidza muroora uyu :" Aiwa , Mady
i haaisvika nazvo mbuya vaya vachiona .	Aindosvikogara pamba iri pedyo neyambuya ava wovateya k
zvichemo zvokudzimba dzavo . Pamanheru	aindosvikorwa nomurume.Waonazve kuti kurayira kwamai p
zvi zvokuti kuti muroora anoimbirwa ."	Aingosvikopindawo mumusha ? Kana apinda mumusha zvoitwa se
na . Ndakafunga kuti zvimwe Tsvakai uyu	aingosvikoti ,'Imi VaChinovava ndakakuonai muina Yun
nganonge akanzwa mudumbu kuti tonho-o .	Ainosvikoti chii chaizvo kuna Nyanga yeNzou ? Aisazo
nganonge akanzwa mudumbu kuti tonho-o .	Ainosvikoti chii chaizvo kuna Nyanga yeNzou ? Aisazo
omo . Asi zvakazvitika nezvekuti church ava wovateya kuti vabve . Kana vangobva	aisviko rara zvake uyu tsuro achisvika a kunoita aisvikogadzika tswanda iya mumba mavo oenda zvake . Mbu

A programme which is suitable for concordancing Shona data was developed by Daniel Ridings of the University of Gothenburg in Sweden, one of the co-operating partner Universities involved in the ALLEX project, as mentioned in chapter one. This programme, now known in the ALLEX team, as the DCP (Daniel's Concordance Programme), is a modification of the Oxford Concordance Programme(OCP). As Chimhundu et. al (1994:6) noted, in the course of working with OCP, it was realized, the difficult problems caused by applying a system designed for materials spelt conjunctively could not be overcome. That is, the existing programmes like OCP work best when searching for words in the corpus that, when spelt, contain no markers for such grammatical elements as tense, aspect, modality or case. They can be made to search, albeit somewhat less efficiently, for headwords with suffixed grammatical information. However, they can be made to search and with little comprehensiveness when faced with graphological forms containing prefixed grammatical information.

Chimhundu et al. (1994:6) describe the peculiarities of Bantu languages that the DCP had to overcome for it to be useful for Shona. For us to have a clear understanding of the problems involved it is worth quoting the description in full:

In the case of Shona, nearly all verb forms and a great number of nouns in phrases appear, not as they would be listed in the dictionary (as headwords would be in an English language corpus, for example), but rather buried in graphological forms which might contain any of a fair number of grammatical markers in a wide variety of prefixed and suffixed combinations. For a concordance programme to work properly on Shona data, it must be able to search in the corpus and find all occurrences if each headword, regardless of whether or not the headword itself happens to be a word stem, prefix or suffix.

Facing this challenge, Daniel Ridings completed a program to replace the OCP. This innovative programme operates by identifying the syllables represented by a graphological form and is able, beginning at the left edge of the form, to cut away any number of syllables. A form like akaenda (s/he went), for example, could be found under the full form of the phrase akaenda, under -kaenda (past + perfective+ "go"), or under -nda (no meaning). The programme is designed to be interactive, in the sense that the user is asked to provide a headword to search for a searchstring. After the user does so, the programme calls up all occurrences of it onto the computer screen. What appears on the screen for each occurrence is a code identifying its location in the corpus at the left margin, plus data which includes the form containing the headword. This is centred on the page and surrounded by a total of ten or fifteen words which show the context of its occurrence.

The use of concordances helped in identifying the association patterns of the auxiliaries. According to Biber et al. (1998:5), in linguistic analysis, when we focus on a particular linguistic feature, either a word or a grammatical construction, the use of such a feature can be investigated by considering its systematic associations with other features. They identify two main kinds of associations:
linguistic associations

i) lexical associations with particular words

ii) grammatical associations with particular grammatical constructions
non-linguistic associations (e.g. registers, dialects and historical periods).

When we consider lexical associations, we will be looking at words that commonly occur with a given target word. The analysis focuses on the significance of such co-occurrences. However, in our case the target item is not a word but a grammatical form, the auxiliary. We have already noted that nearly all verb forms and a great number of nouns in phrases appear, not as they would be listed in the dictionary (as headwords would be in a English language corpus, for example), but rather buried in graphological forms which might contain any of a fair number grammatical markers in a wide variety of prefixed and suffixed combinations. One type of auxiliaries in Shona occurs within a verbal graphological form and they immediately follow any tense and aspect or mood markers. The auxiliary is one of the prefixal grammatical markers mentioned above. For this type of auxiliary, the task would be to make concordances that enable us to make quantitative analysis of the auxiliary and its other grammatical combinations. An investigation into the auxiliary's associations enabled us to unravel patterns of collocations that gave more information on the nature and function of these auxiliaries.

The quantitative techniques that we used involved finding out, from the concordances, the following:

1) How many times does the auxiliary occur in the corpus?

2) How many different graphological forms co-occur with the auxiliary?

3) How frequent is each of the co-occurrences?

By answering the above questions we make quantitative statements that enable us to make functional statements about our target words.

The other type of linguistic associations that needs to be investigated are grammatical associations. This, according to Biber et al. (1998:6), involves investigating how the target linguistic item associates with grammatical features in the immediate context. In the case of auxiliaries in Shona, Fortune (1982:119) described some of the constituents of that feature in the immediate context of the auxiliary radical. For example, the deficient verb, a subtype of auxiliary, never occurs in a verb phrase which has an object prefix is one of its constituents. In an auxiliary phrase, the auxiliary radical is always followed by a compliment. From the concordances we were be able to investigate such grammatical associations of the auxiliaries.

3.7 Limitations of the corpus-driven approach

One of the main limitations of corpus evidence in this study is the relatively small size of the corpus used. A two or three million corpus is not large enough to provide sufficient data for analysis of the meaning and functions of given grammatical form. Biber et al. (1998:30) highlight the need for a very large corpus to study the meaning and use of words in corpus-based research. They argue that:

A one-million-word corpus will not provide sufficient data for many words to allow meaningful generalisations. The frequencies are relatively reliable for most common words in the corpus, but to analyse the senses and association patterns of words we need a very large number of occurrences.

Kennedy (1998:100) even goes further to argue that even a five million corpus is also small for lexicographical studies when he looks at the statistics of the American Heritage Intermediate corpus and comments:

Nevertheless, the fact that almost 40% of the words in a corpus of over million words occur only once shows that even a corpus of this size is not a sound basis for lexicographical studies of low frequency words. There are simply not enough instances in such a corpus to form a clear picture of their linguistic ecology, their range of senses, the company they keep, the grammatical structures they occur in and so on

Biber et al (1998:30), in the above quotation, are referring to the use of corpus-based research for lexicographical purposes. What they say about lexicographical research is also true for a grammatical analysis like the one carried out in this study. A good number of auxiliary forms will be what Kennedy(1998:100) refers to as the "hapax legomena"(from Greek- something said only once). An example of a hapax legomena, in the Shona corpus, would be a concordance for the auxiliary -bango- which appears only once as shown in the concordance below:

ALLEX -- Shona Corpus (2,224,983 words)
Search for".*bango.*" in SHONA 39 hits

twavaiti mhimbidya- kunoku vakacherera	**bango** remutowa rinorepuka . Vanofana vakaposa
mudzimai ndokusvikomira pagedhi akabata	**bango** resimbi . Kumba kwemukoma wake amai vamu
handati imba yamambo yatsva asi kwasara	**bango** rimwe , nzira.Josephine Machowa :Nzira i
Donnie :Imba yamambo yatsva asi kwasara	**bango** rimwe.Josephine Machowa :Ndiani kanoda k
riti iyeyi tofenza , teti apo bango apo	**bango** totora toisa waya , pasi apa tinenge tak
zwa manje woenda kunoita huroora mukati	**mebango** saka watora muroora weuku.sekaiPakuenda
a " akadaro achiombera kundiona kuscika	**mubango** muno kudai haasi manake ndatumwa neshoko
i handisikuda kuti doro rangu ribikirwe	**mubango** musimangu ndinoda ribikirwe ubango mako
Aive mudzonga uri pamutararo . Ndisati	**ndabangotaura** nokutaura kwese achibva anditi bhotoro r
erokwe rake chakanga chasarira chabatwa	**nebango** muchirugwi muya maakaba mbudzi-- sezvinon
Hanya kutiza . Tsuro kavanga kangopinda	**nebango** rako.Kari kufamba kachicheka iyi nzou ha
watinoita munhu anoti anoda kuvaka imba	**nebango** rimwe , kana kuti nechidhinha chimwe ? H

It shows some of the concordances of -bango- . It has has 39 hits, that is, it occurs in 39 contexts in the corpus. We, however selected only a few of the occurrences because they are adequate for what we want to illustrate. Out of the 39 hits only one of these occurrences has an auxiliary function. That is, the line that is shaded in the above set of concordances. Others, that are instances of the same form, have nothing to do with its function as an auxiliary. It is, therefore, difficult to base our judgments on the use and function of such an auxiliary form out of that one concordance listing.

Another limitation of the corpus as a source of linguistic evidence is that, not every occurrence is acceptable to the speakers as noted by Aarts (1991:52) when he says that:

> *To equate occurrence in the corpus with acceptability ….it ignores the fact that every corpus will contain sentences that the writer wanted to be ungrammatical … or knows to be ungrammatical, as when he breaks off sentences, repeats parts of constituents…etc.*

A strict reliance on the corpus will result in inaccurate descriptions, especially in cases where the corpus includes spoken material. Hence the need to complement the corpus-driven method with other methods like intuition and elicitation that are discussed in this chapter.

3.8 Intuition

We have argued that the last three decades have seen an increasing interest in the use of the corpus as a resource for linguistic research. We also discussed the merits of the corpus-driven approach as a source of linguistic evidence. It should be borne in mind, as we have pointed out a number of times before, that the corpus cannot reveal everything about the structure and use of a language. The corpus has to be complimented by other sources of linguistic evidence. Some of the evidence that we get from the corpus has to pass the test of the native speakers as to whether they are possible in the language or not.

We have pointed out earlier on in this study that one of the main sources of linguistic evidence is the Shona corpus. Corpus linguistics has become an increasingly prevalent methodology in modern day linguistics. The method, however, is not without its own limitations. Some of the arguments for or against this methodology have to do with what is now known as the rationalist versus empirical debate. It is a debate that is not only confined to linguistics but runs across disciplines.

The empirical theories base their arguments on naturally occurring data. In our particular case, the corpus provides the naturally occurring data on which models of language are built on. The linguist, therefore, tests the grammaticality of given sentences by looking at the corpus.

The rationalist approach is based on what McEnery & Wilson (1996:9) refer to as conscious introspective judgements, either from the native speaker of a language or reflecting on that language and making theoretical claims based on those reflections. One of the chief proponents of the rationalist approach to linguistics is Noam Chomsky. Chomsky (1957,1965) argues that when we use the corpus to come up with models of language structure we are using the wrong tool of language study. The corpus, he says, reflects the performance of a speaker and performance is the wrong source of a theoretical model of language. According to Chomsky, when we use performance as our basis for theoretical arguments, we are not developing a good theory because there are many factors that can affect our performance. Our performance may be affected by such factors as lose of memory, drunkenness and others. He argues that a corpus is by its very nature a collection of externalised utterances, as such, it must of necessity be a poor guide to modelling linguistic competence (McEnery & Wilson 1996:9).

To Chomsky, therefore, the best way to gather evidence would be to use introspective judgements which are the best tool for measuring a speaker's competence, which is a better guide to the nature and function of a given language. This argument that Chomsky brings is very valid, particularly when one looks at the theoretical framework of this study. As will be mentioned in the theoretical framework, this study makes use of cognitive grammar. It appears as if there is a contradiction when one uses an empiricist methodology, in the form of the corpus, and yet one is looking at auxiliaries using a cognitive approach. Such an argument only becomes valid when the corpus is used as the only source of data, that is, when the corpus is used as the "sole explicandum of linguistics" (McEnery & Wilson 1996:9).

This study takes the approach suggested by McEnery & Wilson (1996), where one uses a combination of the rationalist and empiricist methods. Such an approach ensures one uses both natural data, that is the corpus, as well as the artificial data based on introspection. These are not necessarily mutually exclusive but complementary. Linguistics should be a synthesis of introspective and observational techniques, relying on a mix of artificial and natural observation.

On the importance of intuition as a source of linguistic evidence, Filmore (1992:38) has this to say:

> *The ability to judge that some corpus is not large enough to be representative of the language, is an ability based on the recognition that certain things which the linguist, as a native speaker, intuitively knows about the language are not exhibited in the corpus. In the end, there is simply no way to avoid reliance on intuitive knowledge.*

We have argued in Section 4.2.5 of this chapter that we should not equate occurrence in the corpus with acceptability. Another reason why it is undesirable to equate the occurrence of sentences in a corpus with their (linguistic) acceptability is the fact that, if we write a grammar that accounts for every single sentence in a corpus, "that grammar loses its generalizability and we are doing exactly what corpus linguistics in 1960s and early 1970 was denounced for: we are making linguistic statements about the sentences in the corpus only, and we have no idea about the generalizability of these statements to the whole language"(Aarts 1991:52).

3.9 Questionnaires and Interviews

The methods described above provided the bulk of the data that was used in this study. However, there was need for additional methods of gathering information which could indicate the dialectal distribution of the auxiliaries that were obtained from the corpus. The auxiliaries plus their contexts were first identified from existing grammars, dictionaries and from the corpus. The questionnaires and interviews were meant to establish the dialectal distribution of these auxiliaries.

3.9.1 The target group

The questionnaires were administered to the following categories of Shona-speaking Zimbabweans:

i) Those who have studied Shona at Advanced Level (mainly those who were studying at colleges or universities).

ii) Those who are studying Shona as a main subject at teacher`s training colleges.

iii) Lecturers and teachers at the universities and teacher`s training colleges.

One main advantage of the above target group is that they are already familiar with the structure of Shona and it is easier to explain to them the objectives of the study. The disadvantage is that this group has gone through the education system which exposed them to a variety of dialects, so they no longer speak peak dialects. This would be a big disadvantage in a study where the main focus is on dialect study but it is not in this particular study.

The questionnaires were administered in the following institutions:

Masvingo Degree Programme (Masvingo)
Marymount Teachers College (Mutare)
Gweru Teachers College (Gweru)
University of Zimbabwe(Harare).

The University of Zimbabwe provided an easily accessible pool of informants from all over the country. The interviews took place, not necessarily during the data collection months, but throughout the period that I was in Zimbabwe.

The questionnaire required the interviewees to start by filling in some personal details, such as their age, place of birth, where they grew up, where they went to school and the dialects spoken by their parents. They were then asked to indicate whether they used given auxiliaries whose example contexts (taken from the corpus) where given. If they do not use a given auxiliary they were asked to provide the ones they use. Sample questionnaires are given as appendixe 1

As the study progressed, it became apparent, after administering the questionnaire, that this question of dialectal variation could not be adequately handled in a study of this nature. It would require a separate extensive study. We, however, managed to make use of the questionnaires to establish those auxiliaries that are peculiar to certain dialects. We avoided using them as examples in this study. We ended up choosing, as our examples, auxiliaries that are generally used in most of the dialects of Shona. We could not limit our study to a specific Shona dialect because we also rely on the corpus. By the very nature of our corpus, in terms of its composition, it would be a good idea to focus on the behaviour of those auxiliaries that are found in most of the Shona dialects.

Most of the interviews conducted were mainly the unstructured type, aimed at finding the speakers intuitions on a number of issues. Some of the interviews were used to test the concordances of auxiliaries from the corpus and finding out their "grammaticality" or "ungrammaticality." For example, there was need to find out

from the speakers if there are any differences in meaning between the forms that are at different stages in the grammaticalization process. Take the following examples (1a) and (1b) below. They show two stages in the verb-to-affix continuum. The verb-to-affix continuum (the verb-to-TAM continuum) is discussed in chapter six.(cp section 6.4). We wanted to find out whether there are any differences in meaning between the two stages.

(1a) anowanza kunwa doro
a-no-wanz-a ku-nwa doro
2SG-hab-too.much-FV INF-drink CL5-beer
"he/she drinks too much beer"

(1b) anowanzonwa doro
a-no-wanzo-nw-a doro
2SG-hab-often-drink-FV CL.5-beer
"he/she usually/normaly drinks beer."

In the in interviews we established that for some speakers the two forms, a) –wanza kunwa and the b) -wanzo- can be used interchangeably. For others the first form has the idea of intensity while the second form has the idea of habituality. These are facts that cannot be established when one only relies on the corpus.

3.10 Data from existing sources

3.10.1 Written sources

This study benefited from the use of data presented in some earlier works. This is not going to be a full listing of each and every book that we referred to in this study. We will just list a few of the most important sources of data particularly those that are used in the cross-linguistic comparisons.

Fortune (1955) provides some valuable data on the verb forms in Shona. Another very useful work on verb forms is an article by Maho (1999a), which is based on Fortune's (1955) data. Guthrie (1948, 1967-71) and Maho (1999b) provide useful data on the classification of Bantu languages. Hachipola (1998) gives some valuable data on the language situation in Zimbabwe.

Below is a list of some of the important sources of data for individual languages that was in the cross-linguistic comparison.

Doke (1935)	Zulu
Louwrens (1991)	Northern Sotho
Mkhatswa (1991)	Zulu
Doke C.M. and Mofokeng S.M. (1957)	Southern Sotho

3.10.2 Data from internet

In addition to Guthrie's (1967-71) books on the classification of Bantu languages, other very useful sources of data on Bantu languages are the following:

a) The Comparative Bantu Online Dictionary(COBOLD).

The main aim of the Comparative Bantu Online Dictionary (COBOLD), according to the introduction on the website, is to produce a lexicographic database to support and enhance the theoretical, descriptive, and historical linguistic study of the languages in the important Bantu family. The database includes a substantial list of reconstructed Proto-Bantu roots, several thousand additional reconstructed regional roots and reflexes of these roots for a substantial subset of the 500+ daughter languages. Published and unpublished dictionaries of selected Bantu languages have been scanned, converted to test, and entered into the database.

b) The BL Search

This is a search engine, which provides a fast search of any Bantu language and its varieties. For each answer, you will find a straight link to SIL for further details.

You may search a language without specifying a country, but not the contrary. Sil is a service organization that works with people who speak the world's lesser known languages. More detailed descriptions of the above internet sources are given in the reference section (The section on Internet sources.)

3.11 Summary of chapter

This chapter discussed the methodological issues related to the techniques we used in obtaining data. A large part of the discussion was on the two main methods used in this study, that is, the corpus and intuition. In our description of the corpus we started with the composition of the corpus, who collected it, where and how it was collected. We went into the transcription as well as the problems encountered in making it machine readeable.We then moved on to intuition as a method of obtaining data. This took us to what has become known as the rationalist versus impirical debate. We came to the conclusion that a combination of rationalist and impiricist methods brings to the study a healthy mix of natural data and artificial data.The other methods, the questionnaire, interviews and data from existing sources are also discussed but not in detail because they are not as crucial as the first two main methods.

CHAPTER FOUR

Morphology of the Shona verb

4.1 Introduction

This chapter looks at the morphology of the Shona verb. For us to have a clearer understanding of the nature and functions of the auxiliaries in Shona there is need to look at the cluster of verbal morphemes or affixes that are typical of the Shona verb. In the last chapter we distinguished two types of auxiliary. The defective type, on the one hand, and on the other the auxiliary that occurs in a graphological form. This second type of auxiliary that occurs in a graphological form is one of the optional components within the verb and they can only be fully understood after a full description of the conjugation of the Shona verb. The discussion starts with a distinction between inflection and derivation. It then moves to consider some of the distinctive characteristics of Bantu that are essential in our understanding of Shona verbal morphology, which enables us to investigate the nature and behavior of auxiliaries in Shona.

Section 4.3 looks at the agglutinative character of Bantu languages. Section 4.4 discusses the conjugation of verbs in Shona, while section 4.5 looks at the concept of word in Bantu. In the rest of the chapter we then look at the components of the verb so that we can see the position of auxiliaries within the verb. The main components of the verb that we look at are the verb root, subject prefixes, mood, object prefixes, tense markers, aspectual markers and the final vowel. Erikson (1988:78) points out that even a cursory glance shows that the combinational powers of the Shona verb are tremendous. We cannot claim to give every detail of the Shona verb. As was noted by Mkanganwi (1995:45) "the inflectional morphology of the Shona verb is extremely complex and it deserves a whole thick volume of its own." This is a not going to be a detailed discussion of the co-occurrence patterns but a brief description of some of the major elements that may occur in the Shona verb. The discussion will concentrate on those details that are mostly relevant to the treatment of auxiliaries. As was pointed out earlier, before one gets to the analysis of the behavior of auxiliary, one should have a clear conception of the morphology of the Shona verb.

4.2 Inflection and Derivation

In any treatment of the morphology of the verb in any language, it is necessary to make a distinction between derivational (word forming affixes) and inflectional affixes. However, as Carstairs (cited in Taylor1989:177) rightly points out, the distinction may be more of a continuum than a matter of discreteness.

The difference between inflection and derivation can only be clear if we start by making a distinction between two types of morphemes in Shona, that is, root morp-

hemes and affixes. Mkanganwi (1995:78) argues that the root morphemes are at the centre of constructions. In the case of the verb, other than the root, all other recurrent formative morphemes which are subsidiary to the root are the ones which we are calling affixes

This is obviously an oversimplification because not every non-root morpheme is an affix, some are clitics. A distinction between an affix and a clitic will be made later on in this chapter (cp. 4.7.10).

Mkanganwi (1995:70) goes on to argue that in the morphology of the Shona verb, affixes fall into two positional classes in relation to the root morpheme, that is, those that occur before it and those that occur after it, within a word. The concept of a word in Shona will be discussed in section 4.5. Those affixes that occur before are prefixes, while those that occur after are suffixes. Shona does not have any infixes. Crystal (1980:176) defines infix as a term used in morphology to refer to an affix that is added within a root or stem. Shona does not have such affixes.[3] According to Mkanganwi, those affixes that occur before the root are inflectional while, those that occur after the root are derivational. Although Mkanganwi includes the final vowel under derivational affixes, we will argue that this is not the case.The final vowel, in our view, is inflectional. This controversy will be discussed much more fully in section 4.7.9.

One distinguishing feature between inflection and derivation is that an inflection, on the one hand, does not change the syntactic category of the root that it is inflecting whilst, on the other hand, derivational affixes typically change class of the stems to which they are attached. Inflection, according to Bubenik (1999:52), is defined as "a change in the form of a word to express its relation to other words in the sentence." It involves the change in the form of a word to mark such distinctions as tense, aspect, person, number and mood. Derivational affixes are usually used to create new words and they typically change the syntactic category of the root that they derive. The following examples show words which are not verbal in character being turned into verbs through the use of the verbaliser, which is a derivational suffix.

(1a) pfimbi "place to store fruits to ripen them" + -k- > pfimbika "ripen fruits"

(1b) tete "thin" + -p- > tetepa "become thinner"

(1c) tomu "ideophone of leaping" + -k- > tomuka "to leap"

In the above examples, we have cases where words which are not verbs, e.g. noun in 1a, adjective in 1b and ideophone in 1c, and they are being changed into verbs through the use of verbalisers -k-, -p- and -k- respectively. The verbalisers are derivational suffixes that involve changing the above monomorphemic words into verbs. The term "verbaliser" was popularized by Gowlett, in his 1967 work The Morphology of the Verb in Lozi and is now widely used in Bantu linguistics to refer to these verb-forming derivative affixes as shown above.

[3] While Shona does not have infixes, Kalanga does have infixes. We mentioned in section 1.5 that Kalanga is the third largest language in Zimbabwe and it is closely related to Shona. Mkanganwi (1990:79) gives examples of vowel commensing verb roots in Kalanga which can have infixes inserted. e.g. -olot- "dream" → -onloti- "dreamer" and -ezel- "sleep" → enzeli "one who sleeps"

In Shona, however, as in most of the Bantu languages, there are some derivational suffixes that do not change the grammatical category of the root to which it is suffixed. These derivational suffixes are known in Bantu linguistics as "extensions", as in the following examples:

(2a) -rov- "beat" + extension -es- > -roves- "beat harder"

(b) -famb- "walk" + extension -ik- > -fambik- "walkable distance."

In cases where the derivational process does not change syntactic categories, we tend to get large meaning changes. This is quite evident in the above examples 2a and 2b. The events being described by the unextended roots are closely related to the respective extended roots but the extended roots have distinct meanings from the unextended roots, as can be seen from the English glosses in the above examples.

Another characteristic of an inflection that Mkanganwi mentioned is what he refers to as "syntactic generality." What this means is that an inflectional affix will apply to all members of the category to which it can apply. A tense sign, for example, can be prefixed to many different types of verb stems. Take the example of the tense sign -cha- "future", it can inflect virtually any verb stem in Shona. Such kind of syntactic generality does not apply to derivational affixes. Each affix is restricted to certain applications. The -ir- form of the applied extension is restricted to simplex radicals in which the last vowel of the root is a primary, while the -er- form is restricted to those in which the last vowel of the simplex root is a secondary vowel. When we say primary vowels in Shona we mean /a/, /i/ and /u/ while secondary vowels refers to /e/ and /o/. Verbalisers are other good examples of derivational affixes that do not have syntactic generality, as shown in examples 1a , 1b and 1c. These verbalisers do not just apply to any root. A given verbaliser would apply to certain types of roots.

4.3 The agglutinative character of Shona

According to Comrie (1981:35), one could, in principle, choose any linguistically relevant parameter along which to typologize languages. Comrie also points out that some typological parameters turn out to be more significant than others. We will not go into the various attempts, in the history of language typology, to come up with holistic typologies for languages. Such a historical discussion is provided in by Croft (1990:39). Here we discuss the morphological typology to the exclusion of other typologies. Other typologies like the word order typology, for example, have been used much more frequently in recent studies but we just chose the morphological typology because it is the one that best illustrates the characteristic of Shona (and Bantu languages) that is being highlighted in this section.

According to Comrie (1981:39) morphological typology usually recognizes three canonical types of languge: isolating, agglutinating and inflectional. Others add a fourth type, which is called the polysynthetic or incorporating type.

An isolating language is "one in which all words are invariable" (Lyons 1968:187). An isolating language does not involve affixation. In other words, in an ideal isolating language every word would have a meaning on its own. Vietnamese is generally regarded as a typical example of an isolating language.

An inflecting (fusional) language is "one which cannot be segmented into morphs" (Lyons 1968:189). In this type of languages one word element may represent several grammatical categories. Lyons (1968:189) gives the example of the following Latin words:

domus	"house"	
singular	plural	
nominative	domus	domi
accusative	domum	domos
ablative	domo	domis
genitive	domi	domorum.

One way of analyzing these forms would be to take dom as one form (morph) and the endings (us, i, o i, orum, os, is) as separate morphs. Lyons looks at the endings of the above nouns and compares them with similar endings of other nouns and comes to the conclusion that these endings are not analyzable into morphs. As we mentioned above, will not go into a detailed discussion of this type of languages but we just add that there is no "one to one correspondence between morphemes and their linear sequence of morphs." (Crystal 1980:176)

The third language type is the agglutinative type. An agglutinating language is "one in which words are typically composed of a sequence of morphs with each morph representing one morpheme." It should be pointed out, however, that with such classifications the categories are not clear-cut. Different languages, Crystal (1980:13) observes, will display the characteristic of agglutination to a greater or lesser degree.

As noted by Myers (1990:3), Bantu languages share a distinctive verbal morphology. Being an agglutinative language, the Shona language, makes extensive use of prefixes and suffixes. Paulos (1990:210) traces the history of the term agglutinating and he says that it comes from the Latin word agglutinare, which means to glue to, and when it is used in the context of the conjugation of the verb it refers to the glueing or stringing together of prefixes and suffixes attaching them to the root or stem. The agglutinating character of Shona, like most Bantu languages, is not only evident in the analysis of the verb. It is also evident when we look at nouns and qualificatives. This agglutinative character is more evident when one looks at verbs because the verb has the ability to "incorporate various concords, tense prefixes and extensions." Orr and Scotton (1980:33) had this to say about ChiChewa, a language spoken in Malawi:

> *An agglutinative language such as ChiChewa is different from English in that it has many more bound morphemes .... Words are most often composed of sticking together a number of bound morphemes.*

The sticking together of these verbal formatives is not as flexible as is the case with English which has words with an isolating quality. Doke (1935:11) noted that the various verbal formatives have definite positions in relation to the verb stem. Doke gives the following examples from English to illustrate how flexible verbal formatives are in relation to the verb.

He is driving
Driving is he?

Is he driving?

As can be seen from the above examples it is possible to have such an inversion of the elements that constitute the verb in English. In Bantu this kind of inversion is not possible. Doke (1935:12) argues that the very immutability of the Bantu positions indicates adhesion, an immutability of particle order.

Such an understanding of the affixes that are adjoined to a verb root is very vital because each modification or addition to the basic verb stem contributes to the ultimate meaning of the combination. Below are examples where some of the typical components of the verb in Shona are utilized.

(3a) tamba
tamb-a
dance-FV
"dance"

(3b) ngatichivarove
nga-ti-chi-va-rov-e
HORT-1Pl-ASP-CL.2-beat-FV
Mood-Subject-Aspect-Object-Root- Final Vowel
"Lets beat them"

(3c) ngatisangomumhanyirawo
nga-ti-sa-ngo-mu-mhany-ir-a-wo
HORT-1PL-NEG-just-him/her-run-APL-FV-please
Mood-Subject-Negative-Aux-Object-Root-Extension -Final.Vowel-Clitic
"Let us not run to him, please"

(3d) havachandosvikomutengeriko
ha-va-cha-ndo-sviko-mu-teng-er-i-ko
NEG-2PL-FUT-go.and-on.arrival-OBJ-buy-APL-FV-there
Polarity-Subject-Tense-Aux-Aux-Object-Root-Extension-Final.Vowel-Clitic
"They will not, on arrival, buy(for)him/her there"

The examples given above show the agglutinative character of Shona. We will also refer to them in our discussion of the conjugation of the verb in the next section.

4.4 The conjugation of the verb in Bantu

A Shona verb can be thought of as being composed of a number of morphological elements attached to one root. The verb root forms the nucleus of a verbal form. In some works you find the terms verb root and verb radical used interchangeably. In this study we agree with Mkanganwi's (1995:128) definition of root, which considers it to be the primary verbal element which is monomorphemic and is at the core or heart of the verb. The verb radical, therefore, would be made up of the verb root plus other derivational morphemes such as extensions and verbalisers, so that we end up with a

polymorphemic verb stem. For the purposes of this study, the terms root and stem will be used throughout. We will avoid using the term radical

The verb root, as we noted above, is the element which carries the fundamental meaning of the composite verb. As a bound morpheme the verb root may accept morphemes before and after it. We have already noted in 4.2 that Mkanganwi (1995:129) argues that the morphemes that may occur before the verb root are inflectional while those that may occur after it are derivational. He says that the morphology of the verb in Shona, therefore, involves stating what types of inflectional morphemes are prefixed and what derivational morphemes are suffixed. We also pointed out in 4.2 that we agree with most of Mkanganwi's assertions stated above except that the final vowel, which occurs after the verb root, is not derivational but it is inflectional (cp 4.7.9).

Because of their agglutinative character, which we discussed earlier on in this chapter, in the conjugation of the verb, words are mainly made up by adjoining several morphemes. The term conjugation here is used to refer to what Doke (1935:75) calls the "yoking together, particularly in reference to the inflexion of the verb, a schematic arrangement (as in a paradigm) of the inflexional forms of a verb." It is not difficult to understand the conjugation of the verb in Shona especially if it is taken against the background of one of the peculiarities of Bantu languages, which as we mentioned earlier on (cf 3.6), that nearly all verb forms and a great number of nouns in phrases appear, not as they would be listed in the dictionary as headwords would be in an English language corpus, for example, but rather buried in graphological forms which might contain any of a fair number of grammatical markers, in a wide variety of prefixed and suffixed combinations.

Apart from the verb root, there are other elements of the verb that come before and after it. According to Erikson (1988:30), some of these categories have multiple occurrences, some are optional while others are obligatory. For each of these categories, it is important to find the order in which they appear and the co-occurrence restrictions. There are some which have multiple occurrences, it is also important to find out their co-occurrence restrictions as well. It is difficult to get a verbal form where all these elements or categories are used. In Shona, therefore, the following are some of the morphological components of a verb as a word.

Polarity-Subject-Tense-Aspect- Aux-Object-Root-Extension-Final.Vowel-Clitic.

As pointed out above, it is difficult to get a verbal form where all these elements or categories are found. The obligatory components of all the verbal constructions are mood, root and final vowel, as in example 3a, which is in the imperative mood. Example 3c shows that the negative formative does not always come before the subject, it comes before the subject if it is a ha- and it comes after the subject if it is a -sa- or -si-.

Having looked at how affixes conjugate in a Bantu, the next aspect that needs to be looked at is how these elements combine to form words. What does one consider when deciding what constitutes a word in Shona?

4.5.1 The concept of a word in Shona.

As Mkanganwi (1995:62) points out, we all seem to know what a word is, until we are asked to define it precisely. Crystal (1980:379) defines it as a "unit of expression which

has universal intuitive recognition by native-speakers, in both spoken and written language." Though we can have such a concise definition of word, Crystal points out that there are several difficulties in coming up with a consistent use of the term in relation to other categories of linguistic description. Hence Lyons (1968:206) points out
" … what we call words in one language may be units of a different kind from the words of another language."

4.5.1.1 The Orthographic word

In most Bantu languages it is difficult to use an orthographic definition of a word, which is looked at in terms of "physically definable units that one encounters in a stretch of writing, bounded by spaces"(Crystal 1980: 400). The orthographic word is not reliable because of the diversity in the method of word-division. The diversity, according to Doke (1935.11) is due to the diversity and individual peculiarities of the Europeans who were responsible for reducing them to writing. Doke (1935) gives the example of the English phrase we are loving which is three words. When the English-speaking missionaries wrote the equivalent in Bantu languages they wrote it as follows:

(4a) In Zulu si ya tanda
"We are loving"

(4b) In Shona ti no da.
"We are loving"

The French missionaries were influenced by their French. The English phrase we are loving translates into two words nous aimons in French. And hence when they translated it into Ronga and Sotho they wrote it as:

(4c) In Ronga ha randa

(4d) In Sotho rea rata

This disjunctive word division was therefore based on isolating qualities of languages such as English.

4.5.1.2 Phonological word

Doke's (1935) findings after analyzing six Bantu languages show that the Bantu word is dependent upon the Bantu law of stress. He defined the Bantu word as "that sound or group of sounds which is subject to one main stress and one only". A phonological word in Bantu, which is now referred to as the Dokean word, according to Mkanganwi (1995:64), is defined as a group of syllables characterized by a syllable length pattern in which all syllables are relatively short save the penultimate one which is relatively longer than the others. It is punctuated by an ultimate pause. Mkanganwi (1995) goes on to argue that it is more correct to speak of potential rather than actual penultimate length (stress) and pause between a sequence of words because the penultimate length and pause are not there in normal speech but they are usually made in slow and deliberated speech or when words are pronounced in their isolate forms.

We agree with Mkanganwi (1995:63), that the overriding principle of penultipmate length (stress) remains the most useful criterion of determining whether a form

is a word or not in Shona. If we take the inflection of the verb, for example, a single verb root has the potential of being inflected by a wide range of prefixes, each one of them adding its own meaning to the whole verb. Take the examples below:

(5)
tau:ra	"speak"
anotau:ra	"he/she speaks"
anochitau:ra	"he/she often speaks"
anochitaura:wo	"he/she often speaks also"
anochitauri:ra	"he/she often speaks for him/her also"

(5a)
tau:ra
taur-a
speak-FV
"speak"

(5b)
anotau:ra
a-no-taur-a
3SG-hab-speak-FV
"he/she talks"

(5c)
anochitau:ra
a-no-chi-taur-a
3SG-hab-FREQ-speak-FV
"he/she often speaks."

(5d)
anochitaura:wo
a-no-chi-taur-a:wo
3SG-hab-FREQ-speak-FV-enclitic
"he/she often speaks also."

(5e)
anochitauri:ra
a-no-chi-taur-ir-a
3SG-hab-FREQ-speak-APL- FV
"he/she often speaks."

In the Shona examples above, we have an addition of various prefixes to a single root -taur- "speak". This makes it difficult to define a word using the traditional semantic criteria because each prefix we add to the root adds some meaning to the root, as we will mention in the next section. The addition of a clitic -wo in example 5d and an extension example 5e further complicates the definition of word. Hence most scholars end up using the phonological criteria in defining a Bantu word. Dimmendaal (2000:180), for example, concludes that:

> *….conudrums concerning the definition of wordhood (in Bantu) frequently center around clitics, as data from Swahili help to illustrate. In Swahili, words usually receive stress or prominence on the penultimate vowel. When deriving a verb stem from a basic root in Swahili one observes how stress automatically shifts.*

Dimmendaal (2000:180) gives the following examples to illustrate how the addition of verbal extensions and clitics complicates the definition of a word.

Swahili examples:

(6a) kui:ta
ku-it-a
INF-call-FV
"to call"

(6b) kuiti:a
ku-it-i-a
INF-call-APL-FV
"to call for"

(6c) waliniitia:ni
wa-li-ni-it-i-a-ni
3PL-SU-PAST-1SG-OP-APL-FV-what
"What were they calling me for?"

In example (6a) the penultimate stress is on the penultimate vowel -i- . In (6b) the penultimate stress shifts from the vowel of the root to the applicative suffix -i- because of the extension. In 6c penultimate stress also shifts because of the addition of the clitic -ni "what". Dimmendaal (2000:180) says that the morpheme -ni also occurs as a longer form with its own penultimate stress, that is, as a phonologically and grammatically independent word nini? "what".

The shifting of the penultimate stress as described by Dimmendaal is similar to the way it shifts in Shona as shown in examples (5d) and (5e). In 5d it shifts because of the addition of a clitic -wo and in (5e) it shifts because of the extension of the verb root. This data serves to show why phonological criteria is preferred in defining a word in Bantu.

4.5.1.3 Semantic word

Langa Khumalo (2000) devotes a whole Master of Arts thesis on the concept of a word and he arrives at a linguistic notion of a word as a semantic unit. He first of all looks at the development of the notion of a word in the last century and then he argues for a universal notion of the word as a semantic unit. He says that "a theory of a word as a semantic unit, by implication, views a word as a universal unit, a unit that has meaning."

Although Khumalo argues for a word as a universal unit, we have to be reminded of Doke's (1935.13) statement that it is "manifestily unwise to base arguments for Bantu grammar upon supposed European parallels." While Khumalo's arguments might fit in neatly with the English data that he was using, this might not be the case with Bantu data.

If we were to use Khumalo's definition of word as a semantic unit we are likely to encounter problems when we look at the meanings of each of the above examples to come up with a definition of word in Shona, or any other Bantu language. Each

modification or addition to the basic verb stem contributes to the ultimate meaning of the combination.

One way to define a semantic word is to look at it as a "union of a particular complex of sounds capable of a particular grammatical employment" (Lyons1968:200). As Lyons points out, such a definition makes it a necessary condition that the word should be simultaneously a semantic, a phonological and a grammatical unit. There is no doubt that such a definition will cover quite a good number of words in Shona but it also presents a lot of problems as the examples in 5 have shown.

Phrasal verbs in Shona would not fit into the above semantic definition of a word. The following phrasal verbs, which are idiomatic, clearly show why it is difficult to use a semantic definition:

(7) bata maoko
bat-a ma-oko
touch-FV CL.6- hands
(literally "touch hands")
"pay condolences"

(8) rova guva
rov-a guva
beat-FV CL.5-grave
(literally "beat the grave")
"ceremony to bring the spirit of deceased home."

The above examples, according to Jefferies et al.(1994:17) each phrase has a unitary meaning that consists of much more than the parts that make it up. This makes it difficult to use semantic considerations to determine what a word is in Shona.

4.5.1.4 Grammatical word

The grammatical word in Shona can be defined as a phonological word that does not have clitics. We will come back to this definition later on in this section after examining some of the characteristics of a grammatical word.

One characteristic of a grammatical word is internal cohesion. Lyons(1968:202) argues that cohesion of a word has two aspects, positional mobility and uninterruptability. We will start by looking at positional mobility. It is easier to illustrate this point with a sentence broken down into morphemes as in the example below.

(9) ndaenda kundorima kumunda kwavo.
nd- a- end -a ku- ndo –rim –a ku- mu -nda kwa-vo
1 2 3 4 5 6 7 8 9 10 11 12 13
1SG-R.PAST-go-FV INF-AUX –plough-FV CL.17- CL.3field CL.17-their
"I went to plough at their field"

In the above example, one finds that certain groups of morphemes will behave as blocks, not only occurring together, but also in the same order relative to one another. It is not possible to change the sequence of morpheme to have them in the order, 4 3 1 2 in the first orthographic word, or 7 5 8 6 in the second orthographic word or any other rearrangement within each of the four orthographic words. As Lyons (1968.203) points out, one characteristic of a word is that it tends to be internally stable, that is, in terms

of the order of the component morphemes. The moment one changes the order of the morphemes in the orthographic words they became meaningless. However, the morphemes which make up a word are, as a unit, positionally mobile within the sentence. That is to say we have words within the sentence, are permutable with other words in the sentence as shown below:

(9a) ndaenda kundorima kumunda kwavo.
nd- a- end -a ku- ndo -rim -a ku- mu -nda kwa-vo
1 2 3 4 5 6 7 8 9 10 11 12 13
"I went to plough at their field"

(9b) ndaenda kumunda kwavo kundorima
1 2 3 4 9 10 11 12 13 5 6 7 8

(9c) ndaenda kwavo kumunda kundorima
1 2 3 4 12 13 9 10 11 5 6 7 8

(9d) kundorima ndaenda kwavo kumunda
5 6 7 8 1 2 3 4 12 13 9 10 11

The characteristic of internal cohesion that Lyons (1968) discusses applies to the Shona word in that there is unchangeability in the sequence of morphemes that constitute a linguistic word. An autonomous word can change its position within the sentence without a significant change in the meaning of the sentence. Sentences 9a, 9b, 9c and 9d have the same basic meaning, which shows that autonomous words are mobile within the sentence without any significant changes to meaning of the sentence.

The internal cohesion also involves the inseparability of the morphemes in the linguistic word. Going back to example 9a, above, one finds that it not possible to interrupt the sequence of morphemes by inserting autonomous words between morphemes of each word. If we were to do that we end up with some ungrammatical sentences like the ones below:

(10) *nda(kwavo)enda kumunda
nd-a-(kwa-vo)end-a ku-mu-nda
ISG-REC.PAST(CL.17-their)-go-FV CL.17-CL.3-field
"I (their) went to the field"

(11) *nd(kumunda)enda kwavo
nd(ku-mu-nda)a-end-a kwa-vo
ISG(CL.17-CL.3-field)REC.PAST-go CL.17-their
" I (to the field) went their."

(12) *ndaenda ku(kwavo)munda
nd-a-end-a ku(kwa-vo)mu-nda
1SG-REC.PAST-go-FV CL.17(CL.17-their)-CL.3-field
"I went to(their) field"

Apart from the unchangeability and mobility of linguistic words, there are other features that can be used to determine what words are in a language.

Fortune (1989:6) argues that replaceability is another feature that can be used to establish that a given sequence of morphemes is an autonomous word. The autonomous word can be replaced by another autonomous word of the same category. Again we go back to example 9a where the first word can be replaced by another word as follows and sentence remains meaningful:

varamba kundorima kumunda kwavo

v-	a-	ramb	-a	ku-	ndo	-rim	-a	ku-	mu	-nda	kwa-	vo
1	2	3	4	5	6	7	8	9	10	11	12	13

3PL-R.EC-PAST-refuse-FVINF-AUX –plough-FV CL.17- CL.3field CL.17-their

"They refused to plough at their field"

This rule of replaceability applies to any other word not only in the above example but to every autonomous word.

Another feature that Fortune(1989:6) gives that could be used to determine what a word is in a language is interpolation. This feature according to Fortune means that autonomous words in Shona can be separated by other words in a sentence. Example 9a once again, one can have the following:

ndaenda nhasi kundorima kumunda kwavo.
ndaenda kundorima nhasi kumunda kwavo

An autonomous word nhasi "today" is being placed between words in the sentence. This shows that the words that are being separated by nhasi are autonomous words.

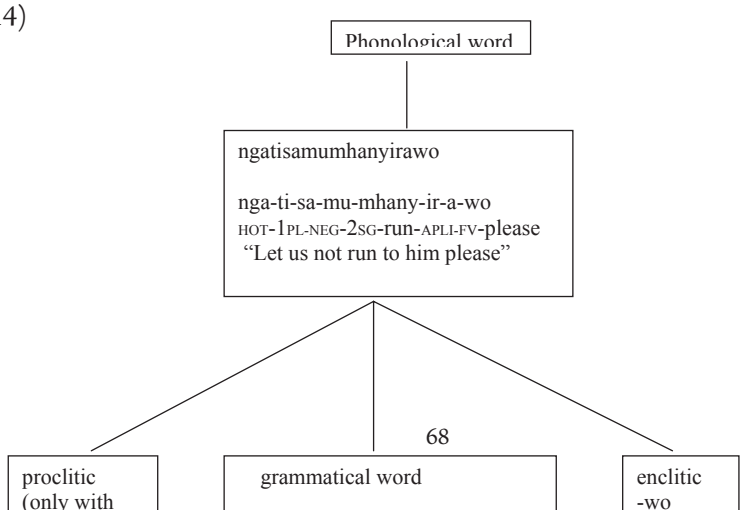
The grammatical word in Shona was defined earlier on in this section. It can be looked at as a phonological word that does not have clitics as illustrated diagrammatically in examples 13 and 14 below. Clitics are discussed in section 4.7.10.

Figure 4.1

(13) Havachandomutengeriko "They will not on arrival b
Ha-va-cha-ndo-mu-teng-er-i-ko
NEG-2PL-FUT-go.and-o-on.arrival-o-OBJ-buy-APL-FV-there

Figure 4.2

(14)



Although there are many conudrums concerning the definition of wordhood in many languages, we find that in Shona and in most Bantu languages a phonological definition based on penultimate length remains the most fruitful method of defining the concept of word.

4.6 The verb root and verb stem

Since the Bantu verbal structure is built around the verb root it is imperative that we start with this important component of the verb. As Dembetembe (1987:100) points out, the verb root forms the nucleus, not only of the predicate, but of the whole sentence. It is the element which carries the fundamental meaning of the whole verb. The root is the "irreducible core of a word, with absolutely nothing else attached to it" (Katamba.1993:41). We have already noted in section 3.3 that in some works the terms verb root and verb radical are used interchangeably.

The verb stem in this study is defined as being made up of the verb root plus any other derivational morphemes such as extensions and verbalisers. In some Bantu grammars it is equivalent to the verb radical as mentioned in section 3.3 but this study will use the term verb stem throughout.

The are three types of verb stems:

a) simplex stem

b) extended stem

c) derived stem

4.6.1 A simplex stem

A simplex stem is one which made up of just a single morpheme. The following are examples of simplex roots:

-p-	"give"	-tor-	"take"	-chimbidz-	"do hastily"
-d-	"love"	-gar-	"sit"	-kanganw-	"forget"
-f-	"die"	-tem-	"cut"	-uray-	"kill"

4.6.2 Extended stems

Extended stems are those that add some morpheme (extension) to the simplex stem to modify to its (simplex stem) meaning and shape. Below are some of the commonest extensions that we find in Shona.

a) Applied -ir- , -er-

b) Causative -is- -es-

c) Intensive -is- -es-

d) Neuter -ik- , -ek-

d) Perfective -irir-, -urur-

e) Reciprocal -an-

f) Reversive -onor-

g) Passive -w-, -iw- , -ew-

In the first example, the applied extension, which is realized by the morphs -ir- and -er-, the choice of the morph is determined by vowel harmony. [4]

i) - gar- "sit" is extended to -garir- "sit on somebody or on something"

ii) -mir- "wait" is extended to -mirir- "wait for somebody"

iii) - fur- "graze" is extended to -furir- "to graze at some place"

iv) -tor- "take" is extended to -torer- "take for, or take from someboby"

v) -teng- "buy" is extended to -tenger- "to someone something or buy on their behalf."

The vowel harmony rules apply to all extensions which have these two realizations where there is either i or e in the extension. The simplex stem can be extended by one or more affixes. In such a case, we then get a polymorphemic stem. Below is an example of multiple extensions on one root:

(15) vakarovanisirana
va-ka-rov-an-is-ir-an-a
2PL-REM.PAST-beat-RECIP-CAUS-APPL -RECIP-FV
"They caused each other's beating."

However, we will not spent much time on the derivational affixes because this study is mainly concerned with those morphemes that come before the root since they are the ones that are more relevant in the study of the behavior of auxiliaries.

[4] Vowel harmony here is used in the sense in which it is used by Mutaka (2000:54) to refer to a "situation whereby vowels within a word or part of a word harmonise with a feature or features of a particular vowel that may be present or absent in the word." In the case of verbal extensions in Shona the last vowel in the unextended root determines the extension we get. If the last vowel of the verb root is a, i,or u then the form of the extension used is -ir- and when the last vowel unextended root e or o then the form of the extension is -er-.

4.6.3 Derived verbs

Derived verbs have, as their roots, morphemes that are not verbal in character. They are derived from ideophones and substantives. The term substantive is used in the sense in which it generally used in Bantu grammars to "indicate any of the following types of construction, nouns, adjectives, selectors, enumeratives, quantitatives, demonstratives and pronouns" (Mkanganwi,1995:93) Another definition of substantive is given Mkanganwi (1995:93) who says that "syntactically, substantive may be defined as a group of words functioning as noun, including the noun itself." Although there are some morphosyntactically complex constituents which can and do function as nouns, this definition can help us understand some of the constructions which can be turned into verbs. Below are some examples of derived verbs:

(16)	From an ideophone	svetu) svetuka svetu-k-a "jump"
(17)	From a noun	pfimbi pfimbika pfimbi-k-a "store fruits to ripen them"
(18)	From an adjective	-tete -tetepa -tete-p-a "be thin"

In the above examples, we have cases of morphemes that are not verbal but are turned into verbs by the use of verbalisers. The -k- in svetuka, the -ik- in pfimbika and the -p- in tetepa, in these examples are used as verblisers, that is, they are the ones that change morphemes that are not verbs themselves into verbs.

Adoptive roots are those that are derived from other languages.

e.g.	-bharanz-a	from	"balance"
	-fit-a	from	"fit"
	-rodh-a	from	"load"

4.7 Verb slot system for Shona

Having looked at the verb stems, we now need to look at verb slot system for Shona. When we say a verb slot system we are referring to the fixed positions in which we find the various types of affixes that are attached to the verb root.

We noted in section 4.3 that the sticking together of verbal affixes in Shona, like in most Bantu languages, is not as flexible as is the case with English. We touched on some of these aspects in section 4.3 where we looked at some of the morphological

components of the Shona verb. We will now take a closer look at verbal slot system for Shona. Our starting point is the full verbal slot system given by Maho (1999b). Below is a table showing Maho's 14 slot system of the Shona verb. After the table, table 4.1, we have another table which we will call table 4.1.1 which shows examples of forms that we find in table 4.1. We just chose examples that show the differences between the same element (homograph), that appears in a number of slots. For example, the element ha- appears in slots B and C, so we will give examples which show the difference between them. Similarly the element -chi-appears in slots G and I, so we will give examples of verbs that show why the homographs are elements in more than one slot. After the table of examples, we will then go into descriptions of the elements of each of the slots.

Figure 4.1[5]

i	NEG	TMA	SC	TMA	NEG	TMA	NEG	TMA	OC	ROOT	EXT	TV	EXTRA
i	ha	ha	SC	i	si	chi	si	chi	zvi		an	a	yi
		nga	SCa	cha	sa	ka	sa	ka			anur	e	yi?
			SCo	no		do	za	zo			ek	(i)	pi?
			u			ne					enur		ka
			mu			nga					er		
			ku								erer		
											ik		
											inur		
											ir		
											irir		
											is		
											onor		
											unur		
											w		

Maho (1999b)'s 14 slot system for Shona is based on two assumptions:

1) one morpheme per slot

2) one meaning-type per slot.

[5] Note that the slot system presented in 4.1 is taken as it is from Maho (1999)'s paper. The only changes made are the -ci- which changes to -chi- and the -ca- which changes to -cha- and this is line with the changes in the orthography which took place after 1955. Maho's data is based on Fortune's 1955 analysis of Shona. The Shona orthography has changed several times after Fortune's work. The abbrieviations used in this table are listed in the preface of this study.

Table 4.1.1[6] **Examples (Actual word examples)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N
i	NEG	TMA[7]	SC	TMA	NEG	TMA	NEG	TMA	OC	ROOT	EXT	TV	
1.	ha		ndi			chi	si			na			
2.	ha		va		si		si			na			
3.			ndi		si	nga		chi		end		i	
4.			va		si		sa	ka		rar		a	
5.			va	ka			sa			end		a	
6.			va	cha	ka					rar		a	
7.	ha		va		sa					ti			
8.		ha	ti						va	rov		e	

Examples 1and 3 show why we have **-chi-** as a homograph is an element in slots G and I.
Examples 1, 2, 3 and 4 show why we have **-si-** as a homograph is an element in slots F and H. Examples 4 and 7 show why we have **-sa-** as a homograph is an element in slots Fand H. Examples 1and 8 show why the homograph **ha-** is an element in slots B and C.
Finally examples 4, 5 and 6 show why the homograph -ka- is an element in slots E, F and I.

The A-slot
This i- is a prefix, according to Maho (1999b:2), is put before monosyllabic verb roots in the imperative. It is directly attached onto the root without any concords, negations and any other affixes in between it and the verb root. In some Bantu works it is termed a stabiliser because of its phonological function of stabilizing a monosyllabic word and making it easily pronounceable. e.g.

(19) idya
i-dy-a
i-eat-FV
"eat" (imperative eat)

(20) ita
i-t-a
i-do-FV
"do" (imperative do-).

The B-slot
In this slot, there is the negative ha-. e.g.

[6] Here we will simply put a few examples which show the differences between those elements which are homographs which appear in more than one slot. For a clearer understanging of these examples we refer you to appendix 4 which shows the full table of Shona verb forms compiled by Maho (1999) using Fortune (1955) data.
[7] TMA (TAM) We use this abbrieviation in the sense in which it is used by Creissels (2000:238) to refer to semantic distinctions of tense, mood and aspect which are expressed through verbal inflections. This abbrieviation is more fully explained in section 6.3

(21) handifambi
ha-ndi-famb-i
NEG-SP-walk-FV
"I do not walk".

The C-slot
In this slot, there are two TMA markers ha- and nga-. e.g.

(22) hatifambe
ha-ti-famb-e
HORT-SP-walk-FV
"let us walk".

(23) ngatifambe
nga-ti-famb-e
HORT-SP-walk-FV
"Let us walk".

The D-slot
This slot has subject concords:

i) the default set SC

ii) the past tense set SCa

iii) the exclusive set SCo

iv) ku- which is used with infinitives

v) u- used with imperatives

vi) mu- used with imperatives as well.

The slots E, F,G, H and I
These slots are what Maho (1999b:2) calls the" five internal NEG-TMA-columns which present problems". These slots are the main focus of this thesis and we will look at them in greater detail, not only in this chapter but throughout the study.

The J-slot
Here there is the object concord. e.g.

(24) anozviziva
a-no-zvi-ziv-a
SP-PRES.CONT-OC-know-FV
"He/she knows them (the things)."

The K-slot
In this slot there is the verb root. We have already looked at the verb root in 3.5.1.

The L-slot
This slot is for the verbal extensions.

The M-slot
Here there is the final vowel. The final vowel is discussed in section 4.7.9.

The N-slot
This is what (1999b:2) describes as the trash category made up suffixes and clitics including the following:

i) Plural/honorific. Used with imperatives and greetings and also with 2nd person object concord ....ku-.....-yi. Alternative form: -nyi (Manyika)

ii) -yi ? Interrogative 'what?' Alternative form -i

iii) -pi? Interrogative 'where'

iv) -ka peremptory/insistent. Used with imperatives

In an effort to reduce the number of zero-representations Maho (1999b) suggests a number of ways of reducing the number of slots. In addition to the 14-slot system that we have presented, we will look at two other »reduced« slot systems that Maho suggested. After these, we will then present our own suggested system.

The 11-slot system is arrived at by making the following changes to the 14-slot system, that is, combining some slots. Slots ABC of figure 3.1 are lumped into one because none of the morphemes appearing in these slots can be used together in one verbal form. Maho (1999b:3) combines M and N into one slot. We do not agree with this, as will be shown later on in figure 4.4.

Figure 4.2

ABC	D	E	F	G	H	I	J	K	L	M N
1	2	3	4	5	6	7	8	9	10	11
i-TMA NEG	SC	TMA	NEG	TMA	NEG	TMA	OC	Root	Ext	FV/ Extra
i	SC	i	si	chi	si	chi	OC	Root	Ext	a
ha	SCa	cha	sa	ka	sa	ka	zvi		an	e
nga	SCo	no		do	za	zo			anur	(i)
ha	u			ne					ek	eyi
	mu			nga					enur	e-yi?
	ku								er	e-pi?
									erer	a-ka
									ik	e-ka?
									inur	

									is	
									onor	
									unur	
									w	

The next "reduced" slot system that (1999b) presents is the 9-slot system, which we show in figure 4.3

A	B	C	D	E	F	G	H	I	J	K	L	M	N
i	tma	Neg	SC	tma	neg	tma	neg	tma	oc	root	Ext	fv	extr
1			2	3		4	5		6	7	8	9	
			SC	chi		sa	ka		zvi	R	an	a	
			SCa	ka		za	chi				anur	e	
			SCo	zo		si	zo				k	(i)	
			u	cha		sisa	nga				enur	e-yi	
			mu	do		sasa	ngachi				er	e-yi?	
			ku	i		sisi					ik	e-pi?	
				ne							inur	aka	
				nga							onor	(e-ka)	
				no							ir		
											irir		
											is		
											onor		
											unur		
											w		

The 9-slot system was created by allowing reduction of the five NEG/TMA markers that occur between the subject concord and the object concord. Maho (1999b:4) achieves this by considering double negation as single negation and sequences of tense markers as composite morphemes, as shown below:

negation

-si-sa- > -sisa-
-sa-sa- > -sasa-
-si-si- > -sisi-

sequence of tense markers

-nga- -chi- > -ngachi-.

Such reduction leads to fewer slots and fewer zero representations. The 9- slot system achieves some considerable reduction, not only in the number of slots but in the zero representations as well. Maho even goes on to suggest further reductions to the slot systems. We see these as theoretically possible, but for our purposes in this study, we see the fuller slot-systems as the ones that make our task of looking at the combinational possibilities of what we referred to earlier as the "five internal NEG-TMA markers-columns." Among these slots, we will argue later on in this chapter, is where we can place the auxiliary slot.

Having given the full verb14-slot system for Shona, as was presented by Maho (1999b), as well as his 11-slot system, an attempt will now be made at coming up with our own Shona verb system with 13 slots. We will attempt to place the three systems in one diagram, that is, Maho's 14-slot system, his reduced 11-slot system and finally our suggested system. We will then discuss the similarities and differences between the systems, justifying the kinds of items that we place in a given column/slot. In many instances we agree with Maho's suggestions, but there are areas where we differ

especially when it comes to his treatment of the TMA markers. The difference, as will be pointed out later, largely stems from our interpretation of the origin and development of the TMA markers in Shona.

Our Shona verb slot system has 13 slots as shown in the figure below:

Figure 4.4

1	2	3	4	5	6	7	8	9	10	11	12	13
Neg Mood	SC	tma	Neg	tma	Neg	tma	Aux	OC	R	Ext	FV	clit & oth
i	sc	i	si	chi	si	chi	ndo	zvi	R	an	a	eyi
ha	sca	cha	sa	ka	ka	ka	mbo			anur	e	e-yi
ha	sco	no		do	za	zo	ngo			ek	(i)	e-pi
nga	u			ne			zo			enur		a-ka
	mu			nga			fum			er		e-ka
	ku						etc			ik		
										inur		
										is		
										onor		
										unur		
										w		

The first slot (Slot 1) in our system combines A, B and C, just as we found in Maho's slots, which we presented in figure 4.2. The i- is used for a specific group of imperative forms, namely those that involve monosyllabic roots especially in the Karanga dialect. The mood markers ha- and nga- are used with hortative forms. The other ha- is a negative marker. Here we have abandoned the principle of "one meaning-type per slot" so as to reduce the number of "zero representations" in some slots.

We added a slot, which is not there in Maho's two systems. This added slot, slot 8, in figure 4.3 is made up of auxiliaries in Shona. This type of auxiliaries, in our view, cannot be placed in the TMA slots as suggested by Maho (1999b). We will show why these auxiliaries are given a separate slot, when we look at the slot system for the infinitives in Shona. Before we go into justifying why these auxiliaries deserve a separate slot, we will present the 13-slot systems that we discussed above in one diagram.

Figure 4.5

Maho's 14 slot system														
A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
i	Neg	tma	SC	tma	Neg	tma	Neg	tma	OC	R	Ext	FV		
Maho's 11-slot system														
ABC			D	E	F	G	H	I	J	K	L	MN		
i	Neg	tma	SC	tma	Neg	tma	Neg	tma	OC	R	Ext	TV		
1			2	3	4	5	6	7	8	9	10	11		
Our 13-slot system														
ABC			D	E	F	G	H	I		J	K	L	M	N
1			2	3	4	5	6	7	8	9	10	11	12	13
i-	Neg	tma	SC	tma	Neg	tma	Neg	tma	Aux	OC	R	Ext	FV	clit

4.7.1 Subject prefixes (subject concords) and Object prefixes

We will treat slot 2 and slot 9 together and these are made up of subject prefixes (subject concords) and object prefixes respectively. The subject prefix is also known as the subject concord. The subject concord tells us the subject of the action. It shows agreement with the subject in person or class. Mkanganwi (1995:97) gives a list of the basic series of concords, which act as subject markers in verbs in column A and object markers in column B below.

	A	B
1s	ndi-	-ndi-
1p	ti-	-ti-
11s	u-	-ku-
11p	mu-	-ku-/-mu-
1.	u-/a-	-mu-
2.	va-	-va-
3.	u-	-u-
4.	i-	-i-
5.	ri-	-ri-
6.	a-	-a-
7.	chi-	-chi-
8.	zvi-	-zvi-
9.	i-	-i-
10.	dzi-	-dzi-
11.	r(w)u-	-ru-
12.	ka-	-ka-
13	tw(u)	-t(w)u

14.	h(w)u-	-hu-/-vu-
15.	ku-	-ku-
16.	pa-	-pa-
17.	ku-	-ku-
18.	mu-	-mu-
19.	svi-	-svi-
20.	k(w)u	-ku-
21.	zi-	-ri-.

It should be pointed out that the subject concords listed above are those that are used when the verb is positive.

The object prefix is the one which tells us that there is an object to which the action is directed. If the object prefix is present in a verb, it is placed immediately before the verb stem.

4.7.2 The Negatives formatives

The following negative formatives are use in Shona.
ha- e. g.

(25) handiendi
ha-ndi-end-i
NEG-1SG-go-FV
"I will not go"

This formative always precedes the subject prefix and it is normaly used with the indicative mood and the potential mood.
-si- e.g

(26) asiri kuenda
a-si-ri ku-end-a
3SG-NEG-be INF-go-FV
"He/she who is not going"

-sa- e.g.

(27) vasaende
va-sa-end-e
3PL-NEG-go-FV
"they should not go".

These formatives always come after the subject prefix. Therefore, they are used with finite moods except the indicative mood which uses ha- as pointed out above.

4.7.3 The NEG-TMA slots

These slots are what Maho (1999b) refers to as the "five internal NEG-TMA-columns" which are E, F, G, H and I in his slot system. The major differences between the two systems is that Maho's system and our system is that our system has the category Aux, which Maho's system does not have. We do not agree with Maho (1999b:2)'s analysis of this category when he says:

> *The stuff that Fortune labels Auxiliary Type 2 are described as contracted infinitives. For example, the verb form kuzopa "to come to give"*
>
> *is analysed as a contraction of the infinitives kuza "to come" and kupa "to give"*

Ex	ku-zo-pa	= kuz-{ a-u(ku)}-pa	> (ku-zopa)
	ku-zo-ona	= kuz- {a-u(ku) -ona	> (ku-zoona)
	ku-ndo-tsvaga	= ku- (e)nd-{a-u(ku)-tsvaga	> (ku-ndotsvaga)
	ku-ndo-funda	= ku-(e)nd- {a-u(ku)-funda	> (ku-ndofunda).

Maho (1999b:2) goes on to argue that the "most simple and economical way analysing these "auxiliaries" is to see them simply as TMA-markers. Thus we may add these "auxiliaries" into the three internal-columns. Which one(s)."
The fact that Maho (1999b) is unable to place these auxiliaries in any of the three TMA shows that they need to be looked at again. In our view, these auxiliaries need to be given a slot of their own, since they do not fit neatly into any of the three TMA as will be shown below when we look at the infinitive verb slot-system in Shona.

4.7.4 The infinitive forms

We looked at the verb slot system for Shona. Although infinitives can easily be accommodated in the slot systems discussed above, we will present a separate slot-system for infinitives. This infinitive slot-system shows that »auxiliaries«, contrary to claims by Maho (1999b), are not TMA markers but they form a separate slot in the Shona verb form, as shown in the diagram below:

Figure 4.6

A	B	C	D	E	F	G	H	I	J	K	L	M	N
i-	neg	tma	Sc	tma	neg	tma	neg	tma	oc	R	ext	fv	extr
ku				tma	neg	tma	neg	aux	oc	R	ext	fv	Ext
ku				chi	sa	chi	sa	zo	mu	tor	er	a	wo
					si			mbo	va	tor			
								ndo	zvi				
								ngo	tu				
								etc	etc	etc	etc		

The following are the main differences between the infinitive slot system and the 14-slot system:

i) Infinitives do not have subject concords.

ii) The infinitives do include Aux as a slot on its own, which we do not have in Maho's 14 slot-system.

iii) Infinitives do not include any other element in the TMA-slots except the element -chi- (which is an aspect, as we will see later when we say more about the TMA markers).

iv) Note that the Aux slot can have multiple occurrences.

A careful look at the above diagram shows that the only elements, other than the auxiliary, that can occur between the infinitive ku- and the verb stem in the infinitive verb forms are the aspect -chi- the negative -sa- or -si- and the object prefix. The example below will show that auxiliaries deserve a separate slot in the Shona verb form.

(28) kuchindotora
ku-chi-ndo-tor-a
INF-INCEPT-go.and-take-FV
"to start to go and take"

In the example above, -chi- is an aspect marker. What this means, therefore, is that the -ndo- cannot be an aspect as well because it is not possible to have two aspects in one verb. The -ndo- cannot be tense or mood as we shall see later on in this chapter when we list the tense markers and mood markers. It cannot fit into the TMA category and therefore this means that the elements that we place under the auxiliary category, in the above table, really deserve to be in a slot of their own. Hence we argue that, in addition to the slots that we have in Maho (1999b)'s slot systems, we need to add the slot for the auxiliary.

4.7.5 Mood

Every verbal form has to have some form of mood marker. Mood as a category is inherent in every verb. Its main function is to "describe an event in terms of whether it is necessary, possible, permissible, desirable and the like" (Katamba 1983:222). Crystal (1980:223) says the term mood is used in the theoretical and descriptive study of sentence /clause types, especially of the verbs they contain. He goes on to say that "mood refers to a set of syntactic and semantic contrasts signalled by alternative paradigms of the verb." He also points out that syntactically the contrasts may be signalled by alternative inflectional forms of the verbs.

Shona, like most Bantu languages, falls in the second category of languages that use inflection to mark mood. It is not marked by a particular affix or morpheme, except for a few moods, but by whole inflectional patterns of the verb. As Mkanganwi (1995:147) points out, determining and marking the presence of one or other of the

verbal moods of the inflection involves a variety of both segmental and/or suprasegmental morphs. We said mood describes an event in terms of whether it is necessary, possible, permissible, desirable and the like.

Shona has got eight moods. They are divided into two main categories. There are those that do not incorporate the subject concord and in Shona these two moods are the infinitive and the hortative.

Fortune (1955:239) shows that each of the moods expresses different significances when it comes to the speaker's view of the action in any given mood. For the positive moods the following are the significances of the some of the moods in Shona (adapted from Fortune G, 1955:239):
as commanded (the imperative) e.g.

(29) -famba
famb-a
walk- FV
"walk"

as actual (the indicative) e.g.

(30) ndinoenda
ndi-no-end-a
1SG-HAB-go-FV
"I normaly go"

as possible (the potential) e.g.

(31) ndingafamba
ndi-nga-famb-a
1SG-MOOD-walk-FV
"I can walk"

as conceived (the participial) e.g.

(32) ndichitamba
ndi-chi-tamb-a
1SG-ASP-dance-FV
"I (while) dancing"

as actual but qualificative (the relative) e.g.

(33) ini ndisingafare
i-ni ndi-si-nga-far-e
1Pro 1SG-NEG-nga-happy-FV
"I who is not happy"

as aimed at (the subjuctive) e.g.

(34) kuti ndiende

ku-ti ndi-end- e
INF-so.that 1SP-go FV
"so that I go"

as exhorted (the hortative) e.g.

(35) ngaafambe
nga-a-famb-e
HOT-3SG-walk- FV
"let him/her walk."

Some verbs have suprasegmental morphemes which indicate the mood of the verb. Fortune(1982:85) calls such morphemes, modal morphemes of tone. In the following examples the tone determines the mood of the verb. The relatively high tone is marked by a / ´/ on the vowel of the syllable, while the relatively low syllable is not marked.

(36) ndaverenga
nd-a-vereng-a
1SG-REC.PAST-read-FV
I read"

(37)	nda ve´ re´ nga	indicative mood	" I read"
(38)	nda´ ve´ re´ nga	participial mood	" I having read"
(40)	nda ve´ re´ nga´	relative mood	" I who read"

As Paulos (1990:238) observes that Venda, unlike English, does make a distinction between singular and plural imperatives. Shona behaves like Venda in that there is a distinction in form between singular and plural imperatives. Plural forms are obtained by suffixing an -i at the end of a singular form. Hence the above imperatives can be turned into plurals (more than one and honorific) as shown below:

(41) fambai
famb-a-i
walk - FV + -i
"you (plural) walk"

(42) rovai
rov-a-i
Root-FV + -i
"you (plural) beat"

4.7.6 Tense markers

The term tense "tense" goes back to the latin word tempus which means time. Lyons (1968:304) says the word tempus itself in Latin was a translation for the Greek term khronos which means time. For the purposes of this study, we will take the position where tense markers indicate time, and time is conceived as linear in both directions, past and future, with reference to the present. The present or the 'now' therefore refers to the moment of speaking or writing. Comrie (1985:2) also takes this position. We assume that time can be represented as a straight line, with the 'present' as contemporaneous with the theoretical zero point, the 'past' before now and the 'future' after now as represented in the diagram below:

__before_____.____ after_____
now

Bybee (1985) defines tense as a "deictic category that places a situation in time with respect to the some other pre-established point in time."
Past tense

Shona is one of those languages that has an inflectional present/past distinction which is marked as a verbal inflection. There are two past tenses:

-a- recent past
-ka- remote past.

The recent past refers to actions or states that took place before the time of speaking (the now) but on the day of speaking or on the day being referred to, e.g.

(43) ndadya bota
nd-a-dy-a bota
1SG-REC..PAST-FV porridge
"I ate porridge."

The remote past refers to actions or states that took place before the day of speaking or the day being referred to. e.g.

(44) ndakadya bota
nda-ka-dy-a bota
1SG-REM..PAST-FV porridge
"I ate porridge"

The present tense

This tense according to Fortune (1989:84) indicates an action or process which takes place at the time of speaking. The present is simultaneous with 'now.' As Erikson (1988:52) points out Shona has a present tense which has no overt marker for the present tense. The present tense in this case involves the use of an auxiliary of the defective type plus an infinitive. The auxiliary of the defective type was discussed in chapter two (cf 2.5). e.g.

(45) ndiri kuenda
ndi-ri ku-end-a
1SG-to.be INF-go-FV
"I am going"

The other marker for the present tense is -no-
e.g.

(46) ndinogara muHarare
ndi-no-gar-a muHarare
1SG-PRES.CONT-stay-FV CL.18-Harare
" I stay in Harare"

(47) ndinomuda
ndi-no-mu-d-a
1SG-PRES.CONT-OBJ.PRE-love-FV
"I love him or her."

As was pointed out by Bellusci (1991), Shona employs the same marker that can have an aspectual function -no-. In the above examples the -no- neither expresses immediacy nor habituality but it simply indicates action of the indefinite present tense.

Future tense

The future tense indicates an action or process which takes place after 'now'.
Shona has two future tenses. One is near future and the other far future. Near future refers to something that is done after 'now' but usually that very day. The two markers are
-cha- and -o- for far future and near future respectively, as in the examples below.

(48) ndichaenda kumba
ndi-cha-end-a kumba
1SG-FUT-go-FV CL.17-home
"I will go home"

(49) ndoenda kumba manheru
nd-o-end-a kumba manheru
1SG-NEAR.FUT-go-FV CL.17-home CL.6-evening
"I will go home in the evening"

Tense in Shona is found in three moods only, namely indicative, participial and relative. The tense marker comes directly after the subject marker.

4.7.7 Aspect markers

It is important to distinguish between tense and aspect. As Bubenik (1999:116) points out, both tense and aspect are concerned with time but in different ways. "Whereas tense is a deictic category which relates the time of the action (or event state) to

time of utterence which is 'now' aspect is concerned with representing different positions of the subject within event time." Katamba (1993:221) says that aspect indicates whether an event, state, process or action that is denoted by the verb is completed or in progress. He goes on to make a distinction between complete and incomplete aspect. The aspect that is used for incomplete action is called imperfective (progressive or habitual) and that which indicates completed actions is called perfective aspect. The following are some of the aspect formatives that are found in Shona, with examples:

-no- present habitual

(50) ndinoenda kuchikoro
ndi-no-end-a kuchikoro
1SG-PRES.HAB-go-FV CL.17- CL.7-school
"I go to school"

-ai- past habitual e.g.

(51) ndaienda kuchikoro
nd-ai-end-a kuchikoro
1SG-PAST.HAB-go-FV CL.17-CL.7-school
"I used to go to school"

-chi- present progressive

(52) achiri kudya
a-chi-ri ku-dy-a
2SG-PRES..PROG-to.be INF-eat-FV
"He/she is still eating"

-chi- inceptive (indicating the beginning of an action or process)

(53) ngatichienda
nga-ti-chi-end-a
HORT.-1PL-INCEPTIVE-go-FV
"Let us (start) to go now"

-chi- frequentative

(54) ndinochienda
ndi-no-chi-end-a
1SG-PRES.HAB-FREQ-go-FV
"I often go"

It should be born in mind that the boundary between the categories, auxiliary, tense, aspect and mood is very fuzzy. It comes back to the gradience hypothesis that will be discussed in section 5.3.1.3, as well as the grammaticalization theory where lexical items develop into grammatical morphemes. In the above example, the -chi- which we said is an aspect can also be regarded as an auxiliary if we consider the fact that it has

the same semantic function as -soo- "often or usually" in Manyika dialect and –gar- "often or usually" in the other dialects of Shona, as shown in the examples below:

(55) mabiko zvaisooitwa navanatete navanambuya
ma-bik-o zva-i-soo-it-w-a na-va-na-tete na-va-nambuya
CL.6-celebrations Cl.7- past-hab-often-do-caus- FV conj-cl
"The celebration that used to be organized by the aunts and the grandmoth ers."

(55) mazuva ese Sabhina aigarondituka ini ndinyerere zvangu
ma-zuva e-se Sabhina a-i-garo-ndi-tuk-a
CL.6-days QUA-all CL.1aSabhina 3SG-past-hab-often-1SG-scold-FV
"All the days Sabhina used to scold me"

Although an attempt has been made above to divide the notional domains tense, aspect and mood into distinct subcategories, it should also be pointed out that they are related in a systematic way. According to Heine (1993:69), they are interrelated as patterns of development which can be described with reference to a grammaticalization scale. The stages of this scale, as we see it in Shona, are given in chapter six. The important point that needs to be made in this section is the one made by Bybee and Dahl (1989:97) when they said that:

It is not the case that tense and aspect each present a domain that languages divide into distinctive members in idiosysyncratic ways, it is rather the case that there are a few major gram-types, each representing a section or range of one of a smaller number of frequently occuring paths of development. A better understanding of a gram 'perfective' is not as a member of a supercategory of aspect, but as an instantiation of a range on a path of development, comparable to the other perfectives from similar sources and at similar stages of development. This means further that we do not have to concern ourselves with defining 'tense' or 'aspect' or the more recalcitrant 'mood' as overarching categories, nor with deciding whether perfect is a tense or an aspect, or whether future is a tense or a mood. Rather the relevant entity for the study of grammatical meaning is the individual gram, which must be viewed as having inherent semantic substance reflecting the history of its development as much as the place it occupies in a synchronic system.

The important point coming out this quotation is that one way of approaching the study of grammatical morphemes tense, aspect and mood is not so much to start with defining them into distinctive members in idiosycratic ways but to see individual grammatical morphemes as instantations of a range on a path of development.

4.7.8 Auxiliaries

According to Erikson (1988:60) this set of prefixes have traditionally been called "commentaries" or "auxiliaries." These are the auxiliaries that we have constantly referred, in this study, to as the auxiliaries that are found in a graphological form. We also pointed out earlier on in this study that in other works they are referred to as deficient verbs.

Erikson(1988.60) identifies two types of these auxiliaries, the monosyllabic ones and the polysyllabic. Below are a few examples of the two types.

Monosyllabic auxiliaries:
-mbo- "already, previosly, at first"

(56) ndamboenda kumba
nd-a-mbo-end-a kumba
1SG-REC.PAST-at.first-go-FV CL.17-home
"I first went home."

other monosyllabic auxiliaries:
-go- "be able to do"
-ndo- "go and"
-ngo- " only."

Polysyllabic auxiliaries:

(57) -chimbidz- "do quickly"
achachimbidzofamba
a-cha-chimbidz-o-famb-a
2SG-FUT-do.quickly-o-walk-FV
"He/she will quickly walk."

Other polysyllabic auxiliaries
-hwiriro- "do again"
-nguno- "do concurrently with another event being referred to"
-nyanyo- "do excessively"

Erikson (1988:60) goes on to say that "although these auxiliaries or commentaries are optional within the verb, more than one may occur. Where they occur they are restrained by semantic considerations. Further there is a preferred of occurrence. This order of occurrence has not yet been studied." For us to have a clearer understanding of this set of aspectual markers their distributional restrictions have to be fully investigated. This study, therefore, attempts to fully explore these restrictions. Their combinational possibilities are easier to investigate when one makes use of computer-generated concordances of each one of them.

Apart from the distributional restrictions, there is also the issue of their nature and origin.

According to Heine (1997:4), instead of analysing language as a self-contained system, it should be interpreted as an entity that is constantly shaped by external factors such as cognitive forces, pragmatic manipulation and history. He goes on to say that many of the problems that are associated with auxiliaries can be solved once we look at the forces that can be held responsible for the rise and further development of lexical categories into grammatical categories.

4.7.9 The final vowel

The presence of the final vowel, after the stem, as Mkanganwi (1995:134) points out, makes perfect phonological sense because the stem then becomes syllabically pronounceable. However, he goes on to argue that the final vowel is a derivational suffix. We differ with Mkanganwi on this point because the final vowel, in our view, is part of the verbal inflection, with the -e marking the subjunctive, potential and negative, the -i marking negation, while the -a is used with all other verb forms. Mchombo (1993:187) supports this view when writes:

> *…the final vowel appears to be an "inflectional" depending on the Tense/ Aspect, the presence of negation, mood etc.*

In this study, therefore, we regard the final vowel as an inflectional morpheme.

4.7.10 Clitics

> *According to Taylor (1989:179), the distinction between words and affixes is complicated by the existence of another unit of linguistic structure, the clitic. Taylor goes on to say that in some respects, clitics are rather like words while in other respects they are like affixes and yet certain characteristics suggest that these clitics form a category on their own. Clitics are bound morphs which seem to be intermediate between an affix and a word. The problem of dealing with clitics is not so much distinguishing them from words, but distinguishing them from affixes. Bauer (1988:99) argues that, since most syntactic of the affixes are inflectional affixes, the distinction that has to be drawn is between clitics on the one hand, and inflectional affixes on the other.*

Trask (1996:74) describes a clitic as follows:

> *an item which exhibits behavior which is intermediate between that of a word and an affix. Typically, a clitic has the phonological form of a separate word, but cannot be stressed and is obliged to occupy a particular position in the sentence in which it is phonologically bound to an adjoining word, its host.*

Another definition comes from Halpern (1998:101) who says that in one sense a clitic denotes "any prosodically weak (unaccented) element which is not a canonical inflectional or derivational affix." Three important points emerge from the above descriptions of clitics. The first point is that they are neither inflectional nor derivational. The second is that they cannot stand on their own; so they have to lean on their hosts. The third point is that for both definitions, the dominant criterion is that they lack accent. Halpern argues that the fact that a clitic lacks what he calls "independent accent", either because of some reduction process or just an inherent lack of accent makes, it imperative that the clitic must be incorporated into the accentual structure of an adjacent word or phrase which is variously referred to as the clitic's host, anchor or stem. For

our purposes we will use the term host because it is much more widely used than the other two terms.

In this study, the problem of defining clitics is further complicated by the fact that the main criterion used in the above definitions in not very useful when it comes to African languages. This problem was observed by Heine and Reh (1984:33) when they wrote:

> *In Indo-European languages, deaccentuation is an important criterion for defining cliticization. The suprasegmental behavior of a word is in fact important in deciding whether one is dealing with cliticization or not. However, complicated tonal structures in many languages make it difficult to use suprasegemental features as a means of defining cliticization in Africa. In African languages it turns out to be particularly difficult to trace the boundary between clitic and affixal morphemes…*

Taylor makes similar observations when he looks at clitics in Zulu and he cames to the conclusion that Zulu does not have sentence stress and therefore we cannot use it as a phonological diagnostic for distinguishing the three categories, words, clitics and affixes. Shona, like Zulu, does not have sentence stress.

In our attempt to find criteria for distinguishing between affixes and clitics, we should also bear in mind Bauer's (1988:99) point that such criteria will not always define them precisely into clearly-cut categories but will rather define prototypical cases of clitics and affixes and then actual cases will deviate from the prototypes to a greater or lesser extent.

Because of the problems outlined above in tracing the boundary between clitics and affixes, particularly in those cases African languages where we cannot use sentence stress as a criterion, we therefore take the suggestion by Heine and Reh (1984:33) that:

> *Perharps the best, although by no means a satisfactory means of distinguishing clitic and affixal morphemes, is to have a recourse to the relevant syntactic properties: usually, affixes can be described with reference to a word, while clitics tend to be associated with phrasal constituents.*

This idea of leaning more to the syntactic criteria is also suggested by Bauer (1988:99) who says that the distinction between clitics and affixes is that "clitics are more syntactic than affixes." This view is further supported by Taylor (1988:180) who argues for syntactic criteria because:

> *affixes change the semantic content and/or the syntactic function of a word while clitics, on the other hand, do not affect word meaning and word function, but generally have to do with text structure or speaker attitude.*

> *We have pointed out some of the problems that we face in defining clitics, particularly in African languages. We will now look at what is now generally considered as the "standard set of diagnostics"[8] used in distinguishing cliticization*

[7] This set suggested by Zwicky and Pullum (1983:503-4) is also cited by Halpern (1998) and Katamba (1993).

and affixation. Our account of clitics in Shona will mainly be based on Zwicky and Pullum's (1983:503) six criteria listed below:

a. Clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems.

b. Arbitrary gaps in the set of combinations are more characteristic of affixed words than of clitic groups.

c. Morphological idiosyncrasies are more characteristic of affixed words than of clitic groups.

d. Semantic idiosyncrasies are more characteristic of affixed words than of clitic groups.

e. Syntactic rules can affect affixed words, but cannot affect clitic groups.

f. Clitics can attach to material already containing clitics, but affixes cannot.

Shona has two positional types of clitics, that is, those that lean forward to the following word, which are called proclitics, and those that lean backwards on the preceding word, which are called enclitics. According to Mkanganwi (1995:160) Shona enclitics are examples of simple clitics. We will look at enclitics first because there are clearer examples of clitics than proclitics.

The morphemes -wo "also" and -zve "again" are very good examples of enclitics in Shona.

(58) -wo and -zve attached to a verb

a)		b)	
	enda:wo		enda:zve
	end-a-wo		-end-a-zve
	go-FV-also		go-FV-again
	"also go"		"go again"

(59) -wo and -zwe attached to a noun

a)		b)	
	mu-nhu-wo		munhu:zve
	mu-nhu-wo		mu-nhu-zve
	cl.1-person-also		cl.1-person-again
	"also a person"		"a person again"

(60) -wo and -zwe attached to an adjective

a)		b)	
	chitete:wo		chitete:zve
	chi-tete-zwe		chi-tete-:zve
	CL.7-thin-also		CL.7-thin-tete:zve
	"(it's) also thin"		"its thin again"

The two enclitics in the examples above are very good examples. They cannot stand on their own and they cannot be separated from their hosts by a pause. We noted in 3.5 that the penultimate syllable is relatively longer than all other syllables in a word. When

we add an enclitic to a word, it is phonologically integrated with the host in the sense that the addition of the enclitic causes a lengthening shift of one syllable to the right.

The enclitics -wo and -zve exhibit a low degree of selection with respect to their hosts as the above examples 9-11 show that they can be attached to nouns, verbs and adjectives, that is, according to criterion A above. Although the above examples show only three parts of speech to which these enclitics can be attached, it should be pointed out that they could be attached to practically any part of speech.

According to criteria B, C and D above -wo and -zve are clitics because, as we mentioned above, they can be attached to any word in the relevant domain without any gaps in the set of combinations, neither do we have them being attached in a way that results in idiosyncratic morphophonological and semantic results. Onother enclitic which behaves in the same way as -wo and -zve is the interrogative -su.

The other types of enclitics in Shona are, according to Mkanganwi (1995:160 citing Katamba 1993:246), "contracted forms of self-standing words." These are demonstratives and pronouns, minus their prefixes, which are attached to at the end of their hosts.

(61) demonstrative enclitic attached to (a) a noun and (b) a verb:

a)	munhuyu	b)	-endako
	mu-nhu-yu		-end-a-ko
	cl.1-person-DEM		-go-FV-DEM
	"this person"		"go there"

(62) pronoun enclitic attached to a verb

anoda kutoreni
a-no-d-a ku-tor-e-ni
3SG-PRES-HAB-like-FV INF-take-FV-DEM
"He/she wants to take me."

We mentioned earlier on that, while enclitics are attached to the end of the host, proclitics are appended to the front of their hosts. According to Mkanganwi (1995:157) all Shona proclitics are what Zwicky (1977) calls special clitics which are syntactic constituents in phrases which, in Fortune's (1982) grammar, have been regarded as the "the inflected substantive phrases." They are appended to the 'substantival phrases'[9] to form what in traditional Shona terminology are called the Copulative, the Locative, the Adverbial and the Possessive.

It should be pointed out that,although we go on to give examples of proclitics in Shona, they are not of interest to us in this study. We are interested in the morphology of the verb in Shona. We, however, go on to discuss them, while they do not belong to the verbal constructions because they bring out an important characteristic of clitics in Shona. According to Mkanganwi (1995:156), the most distinguishing feature of these clitics in Shona is that "while they are appended to individual words phonologically what they lean on is the entire phrase."[10] This characteristic will be very important in chapter four where the discussion will touch on the difference between cliticization and affixation processes that are key in the description of the deseman-

[9] For a definition of substantive phrase see section 4.6.3.
[10] Mkanganwi cites Matthews (1974:218)

ticization that occurs in the grammaticalization process. Examples of these Shona proclitics are shown below:

(63) The Copulative:

a) ndibaba wake
ndi-baba wa-ke
It is-father CL2.his/her
"It is his/her father"

b) ihuku nhema
i-huku nhema
i-CL.9-chicken black
"It is a black chicken"

(64) Locative:

a) kumusha kwake
ku- mu-sha kwa-ke
CL.17-CL.3-village CL.17-his/hers
"at his/her village"

(65) Adverbial

a) samambo wavo
sa-mambo wa-vo
sa-Cl.5-king Cl.2 –their
"like their king"

b) navakomana wangu
na-va-komana wa-ngu
na-CL.2-boys CL.2 -my
"with my boys"

(66) Possessive

a) we- + substantive phrase
wemumwe murume
we- mu-mwe mu-rume
POSS.PRE-CL.1-certain CL.1-man
"of a certain man"

4.7.11 Summary of the chapter

An attempt has been made in this chapter to look at the components of the Shona verb. The first task was to make a distinction between inflection and derivation. Any treatmemt of the morphology of a language has to make this distinction very clear. The agglutinative characteristics of the Shona verb are discussed. Having looked at how the affixes conjugate in Shona and in Bantu we then went on to look at how these elements combine to form words in Shona. We came to the conclusion that the principle of penultimate length remains the most useful criterion determing wordhood in Shona and most Bantu languages.

As we have already pointed out in the introduction to this chapter, Shona verbal morphology is extremely complex and we cannot pretend that we have satisfactorily resolved all the issues. The most important contribution of this chapter was to show the position of the auxiliary of the deficient verb type in the Shona verbal form. In some earlier treatments of the Shona verbal form, auxiliaries are "simply seen as TAM markers" (Maho 1999b:2). We came up with new verb-slot system for Shona. We have shown that auxiliaries deserve a slot of their own in the Shona verbal form. There is obviously a close relationship between auxiliaries and the TAM markers, as we will see

in chapter six. In our view, they are all part of a continuum, that is, the verb-to-affix continuum that will be discussed in chapter six.

While this chapter has given some insights into the position of the auxiliary in the Shona verbal form, we left a lot of unresolved issues. One such area that could be a target for future research is one that looks at the link between morphology and tonology in Shona. Though we acknowledge that the study has not gone all the way towards remedying the relative neglect of the verbal morphology of Shona, we still think that the details that we have given in this chapter enable us to responsibly illustrate the points that we make in the description of the phenomena that we are looking at in this study, using the theoretical framework that we have chosen. This chapter, therefore, provides a good background for the next chapter that discusses the theoretical framework adopted in this study.

CHAPTER FIVE

Theoretical Framework

5.1 Introduction

This chapter looks at the theoretical framework used in this study. As was pointed out in introductory chapter, the major motivation for carrying out this study was to "provide the conceptual context for a principled account of the relative indeterminacy in language and of the basic non-discreteness of categories"(Hopper and Traugott 1993:2). This motivation, as has already been mentioned in the introduction, arose as a result of problems faced by the ALLEX team while compiling a dictionary for the Shona language, Duramazwi ReChiShona (Chimhundu 1996). In compiling this dictionary, the editorial team encountered many problems relating to linguistic categorization, particularly those lexical items that were related with auxiliaries.

The problems that the ALLEX team faced in determining the range of entities subsumed under the category auxiliary were mainly a result of the use of frameworks that are traditional in origin. These traditional frameworks failed to adequately account for intricacies of linguistic categorization mainly because of the use of the classical approaches to linguistic categorization. The discussion, therefore, starts in 5.2. by looking at the nature of categories, examining the classical and non-classical models of categorization. This leads to a discussion of the three main approaches taken by different scholars who study auxiliaries in section 5.3. The autonomy approach and the main-verb approach are discussed briefly while the gradience approach is given more attention as the discussion goes into why it is the framework that was chosen for this study.

Section 5.4 looks at the notion of grammaticalization. The diachronic and the synchronic dimensions of grammaticalization are looked at in this section. Sections 5.5.1 through to 5.5.4 are concerned with the processes that appear to be relevant in the description of grammaticalization in Shona. The three main processes are phonological, morphosyntactic and functional processes. The discussion then moves on to the motivations of grammaticalization.

5.2 The Nature of Categories

In section 2.3, we noted that one of the dominant questions that have characterized the study of auxiliaries is whether these elements that we call "auxiliaries" form a distinct category different from verbs or they are just verbs that have some deviant behavior.

This question obviously plunges us into an examination of the nature of categories. So many questions have been raised on the nature of categories in general. Vonen (1997:12) observes that, in any branch of science, "few theoretical notions are as fundamental as the notion of category." Being a science, linguistics is no exception;

it has to be intimately concerned with the notion of "category". On the importance of categorization in linguistics, Labov (1973:342) has this to say: "If linguistics can be said to be one thing it is the study of categories: that is how language translates meaning into sound through the categorization of reality into discrete units and sets of units"(cited in Taylor 1989:1). Being such a crucial notion in addressing the question at hand, we would need to have some discussion on it. We can then focus our attention on the auxiliaries after we have looked at developments in the study of the nature of categories in general.

The purpose of categorization has changed over the years. According to Vonen (1997.12), for the ancient Greeks, the main motivation for categorization was the classification of words, whilst in modern days the emphasis is more on the generalized categories that are applicable to any scientific enquiry. There are two main approaches to categorization. The classical model, also known as the Aristotelian model, is based on the principle that membership of categories should be based on discrete, necessary and sufficient conditions. The other, the non-classical approach, has several models which revisit the use of necessary and sufficient conditions, which lead to discrete categories. The two main non-classical models are the family resemblance model and the prototype model.

5.2.1 The classical model

The classical model of categorization, also known as the attribute model, is one in which members of a category should have a given set of features. This model is based on the Aristotelian view of categorization where categories are defined only by properties which the members share. In this classical treatment of categories, there are no members of a category that should be better examples of the category than others. What this basically means is that all features are binary. Any item that does not have at least one of the features in the set is considered as a non-member. As Langacker (1987:16) puts it, membership of a class is an "all-or-nothing affair; a sharp distinction is presumed between those that are entities in the class and those that are not." According to this model, a category once established, divides entities into two, those that are members of a category and those that are not, without any ambiguous cases.

The classical model has its own problems. Let us take the definition of a bird in The Consise Oxford Dictionary 9th Edition, for example, which defines a bird as "a feathered vertebrate of the class of Aves with a beak, two wings and two feet, egg-laying and usually able to fly." This definition is based on the classical model of categorization in which the features are binary in the sense that any member of the category should have the stated features. Every member of the category "bird" must have following features in order for it to be considered as a bird:

a) It must be a vertebrate

b) It must have two feet

c) It must have two wings

d) It must have feathers

e) It must have a beak

f) It must be egg-laying

g) It must (usually) have the ability to fly.

What this definition means is that, apart from feature g (that of having the ability to fly), if an entity does not have any one of the other features, it then ceases to be in the category 'bird.' One could take the example of a bird that loses one leg. Does that bird belong to the category 'bird' or not? According to this classical approach, such a 'bird' does not belong to the category 'bird.' Another question that arises is when does a chick develop to be called a 'bird' because some chicks are born without feathers? If we strictly follow the principle of necessary and sufficient conditions, then some chicks would not qualify in the category 'bird'. Using this model, it means that all the members of a category would have the same status, without a single entity that is considered as better than the other. There are also no ambiguous cases where an entity might be considered to be a member using some of the features and ignoring others.

5.2.2 Non-classical categorization models

Some of the problems that are associated with the classical model have already been pointed out above. There are two non-classical models, the family resemblance model and the prototype model.

5.2.2.1 The family resemblance model

Philosopher Ludwig Wittgestein's 1945 work (cited in Taylor 1989:38) revisits the criterial-attribute model and he comes up with the family resemblance model. Wittgestein looked at the question of how to define the word spiel, a German word for the category game (the one we play and not a type of meat). He looks at board-games, ball-games, olympic games, and asks the question, what is it that is common to all these games. Games are connected by a network of overlapping similarities, which he called family resemblances. He comes to the conclusion that the entities that are said to belong to this category do not always share the same characteristics which clearly distinguish them from those which are not. The boundary between members of a category and that of non-members is very fuzzy. Contrary to the tenets of classical theory, a category in his scheme of things is not "structured in terms of criterial features, but rather by a criss-crossing network of similarities"(Taylor 1989:38). Entities in a category, would have some attributes which are commonly associated with it, but it does not necessarily follow that all the members of that category will have all of these characteristics. As Rosch and Mervis (1975: 575) put it, the principle of family resemblances can be defined as "a set of items of the form AB, BC, CD, DE. That is, each item has at least one, and probably several, elements in common with one or more other items, but no, or few, elements are common to all items."

5.2.2.2 The prototype model

The other non-classical model, the prototype model, came as a result of Eleanor Rosch's (1978) pioneering work, which also revisited the criterial-attribute model.

Her findings and those of others working within cognitive psychology showed that membership of categories is in most cases matters of degree. Rosch argued that categories, in general, have best examples called "prototypes." This approach which recognizes some category members are "better examples" than others, which are then regarded as the prototypes, is referred to as the prototype model. It also recognizes that there is some gradience from the prototypes to the less central members of a category. This recognition that some categories have degrees of membership and no clear boundaries is the reason why this approach to categories has been referred to as the gradience model. The fact that a member does not have one property does not necessarily disqualify it from a given category. The fact that the ostrich does not fly does not necessarily mean that it does not fall in the category of birds. There are members that are considered as the prototypical or core members of a category and then there is a gradience from these prototypical members to the peripheral members.

5.3 Hypotheses and categorization

The issue of categories arose when we attempted to address one of the issues raised in section 2.2, which tries to establish the position of the auxiliary in relation to other grammatical classifications. We gave the impression earlier on, that if we first of all focus our attention on the nature of categories, which we did, we would be in a position to handle the question of the position of auxiliaries *vis-à-vis* other grammatical classifications. It is not that simple. This question is also determined by the theoretical framework that one adopts. Heine (1993:20) rightly points this out when he says that "the way auxiliaries are conceived of and defined, is to no minor extent influenced by the theoretical background adopted by the author concerned." A survey of the definitions of auxiliary by different scholars studying different languages shows that each scholar adopts one of the following approaches:

a) The autonomy approach

b) The main-verb approach

c) The gradience hypothesis

5.3.1 The autonomy approach

The autonomy approach to the study of auxiliaries considers auxiliary to be a distinct category different from verbs and other categories. Proponents of this view are generally agreed that auxiliary is a universal category, although there are differences in the realization of this category in the different languages. One of the main advocates of this approach is Noam Chomsky.

Chomsky (1965) makes a distinction between an "AUX" and an auxiliary. For Chomsky, "AUX" represents a syntactic category or a node. In this node, we find a class of elements which are referred to as "auxiliary." The difference between the two is that auxiliary refers to individual members of a grammatical category "AUX."

Steele (1978), one of the proponents of this hypothesis, argues the category auxiliary contains "a certain notional set involving elements that are sentential in scope, in

that they place the situation described in the sentence in a certain time (tense), ascribe a temporal contour to it (aspect) and assess its reality (modality)." (Cited in Heine 1993:8). Other proponents of this view simply point out that the syntactic properties of English auxiliaries, for example, are very different from those of the main verbs. According to Matthews (1981:61), the properties of auxiliaries are of interest to the grammarian, whilst the individual meanings of full verbs are of interest to someone who looks at the lexicon.

5.3.1.2 The main-verb approach

The main-verb approach argues that auxiliaries are basically verbs which are just "deviant." Pullum & Wilson, in their 1977 work (cited in Heine 1993:9) argue that in English, for example, the category of verb includes auxiliaries although there is a clear criterion to distinguish auxiliaries and modals from main verbs. This view argues that auxiliaries are underlyingly verbs and the differences between them do not warrant that they be treated as separate categories. The proponents of this main-verb hypothesis argue that auxiliaries are basically verbs with "deviant" behavior because, in their view, there is "neither syntactic nor any other evidence for defining a category AUX", at least in the languages that they studied.

5.3.1.3 The gradience approach

For a long time, the debate on the status of auxiliaries was between the two above-named positions, the autonomy hypothesis and the main-verb hypothesis. These hypotheses were mainly a result of theories of linguistic inquiry that were restricted by structuralist and generative traditions. However, things changed as a result of new studies that challenged the structuralist and generative traditions that tended to view language as a closed, self-contained system instead of interpreting language as an entity that is constantly shaped by external factors such as cognitive forces, pragmatic manipulation and history (Heine 1993: 3).

The gradience approach is based on the new findings by such scholars as Heine (1993,1997a, 1997b), Heine and Reh (1984), Heine et al. (1991), Hopper & Traugott (1993), Langacker (1987, 1991), Bybee (1985), Bybee et al. (1994), Ungerer & Schmid (1996), whose studies have brought new insights into the nature of linguistic categorization. Heine (1993:3) argues that previous approaches to the analysis of language structure tended to base their categories on necessary and sufficient conditions, and this accounts for only a limited range of speech behaviour. He suggests that, in addition to these necessary and sufficient conditions, there is need to come up with "more flexible taxonomic principles in order to take care of such phenomena as linguistic ambiguity, polysemy and other kinds of semantic relationships" (ibid:3).

Bybee et al. (1994:1), for example, reject the structuralist position that each language represents a tidy system in which units are defined by the oppositions they enter into where the object of study would be to look at the internal system which the units are supposed to create. According to Bybee et al. (1994:3), the focus of linguistic inquiry should be on the substance of language and not on the structure, or the system, of the language. They argue that a language should be viewed as being composed of substance both, semantic and phonetic, and the structure or system of that language is a product, and not a creator, of substance.

Another major criticism came from scholars who argued that the structuralist and generative traditions did not take into consideration other non-linguistic phen-

omena that are responsible for shaping linguistic structure. Langacker (1987) and Lakoff & Johnson (1980) emphasized the need to take into consideration cognitive processes that shape linguistic structure. Other scholars like Givón (1971) argued for the need to take such parameters as diachrony into consideration in any analysis of language structure. This emphasis on the diachronic dimension was a result of the realization that the existing theoretical frameworks, mainly generative grammar and structuralist theories, were rigidly synchronic.

5.4 Cognitive grammar and grammaticalization

This study makes use of cognitive grammar. The main advantage of using cognitive grammar is that, as a framework, it recognizes that the fundamental issue in linguistic theory is the nature of meaning and how to deal with it (Langacker1987:5). In the same vein, Heine (1997:3) argues that the main function of language is to convey meaning. He goes further to say that "the question of why language is used and structured the way it is must therefore be answered first and foremost with reference to this function." The importance of meaning when dealing with language stems from the fact that when people use language, they are not bothered by the kind of syntax or phonology they are going to use, but they are concerned about what they are going to communicate. Heine (1997a:4) also argues that the linguistic form is determined by the meaning that is being conveyed and not the other way round. Cognitive grammar offers an alternative to generative tradition where the general tendency is the "emphasis on surface form and lesser reliance on transformational derivations from abstract representations" (Langacker1987:4). Embracing the cognitive view of language, Svorou (1994:3) argues that language is embedded in human cognition. He goes on to argue that, "such manifestations of human cognition as experience, understanding and imagination are necessary not only in order for humans to understand language, but also in the development of a theory of language as well. Linguistic meaning is embodied in the forms of language and our experience of the world, which is required for the understanding of linguistic forms."

One of the most fundamental assumptions in language study since Ferdinand de Saussure's work is to view language as arbitrary. When we say that language is arbitrary we mean that "there is no natural connection between a linguistic form and its meaning" (Yule 1985:18). "There is no iconicity, or physical resemblance, between a linguistic sign and element or feature of the world to which it is connected except in rare instances of onomatopoeia" (Malmjar 1995:11).

This study takes the cognitive view that the arbitrary character of language is overstated. Langacker (1987:12) observes that the vast majority of expressions in language are polymorphemic, and that these polymorphemic linguistic signs are not arbitrary. He gives the example of the word staple which means what a stapling device does. We then have stapler to refer to the device that staples. It is not arbitrary that it is given the name stapler. Langacker (1987:12) rightly points out that the principle of arbitrariness of language is applicable largely to individual morphemes, and even in cases of these individual morphemes sometimes it does not apply (and here we are not even considering the obvious case of onomatopoeia).

The cognitive approach takes the view that words of a given language, their meaning and how they are used in combinations is dependent on the perception and ca-

tegorization of the real world around us (Ungerer & Schmid 1996:279). For example, the cross-linguistic regularities in the structure of numerals observed by Heine (1997a:18) show that numeral systems in most languages are motivated, that is, they are not arbitrary. It can be shown that the human body, the hand to be more precise, provides the conceptual template for numerals in Shona. This is suggested in the literal meaning of the numeral adjective 9, pfumbamwe "fold one" :

(1) -pfumbamwe
-pfumb-a-mwe
fold-FV-one
"nine."

This numerical adjective is made up of a verb -pfumba "fold" plus an enumerative stem -mwe "one" An enumerative is one of the "substantives" in Fortune's (1982) grammar. The numerical adjective -pfumbamwe "fold one" points to the fact that the decimal counting that we use in Shona is motivated by our observation of natural phenomena, and in this particular case, the human body. The ten is derived from the ten fingers of two hands in which case the hands are the conceptual source of the decimal counting. Nine then comes when we fold one of the fingers.

The meanings of words, are normally related to our perception of the real world and they can be understood in relation to these concrete objects. Heine (1997b:45) argues that, "one basic strategy to deal with our environment is to conceive and express experiences that are less easily accessible or more difficult to understand or describe in terms of more immediately accessible, clearly delineated experiences." Studies by Lakoff and Johnson (1980), Johnson (1987), Svorou (1994) give detailed discussions on how parts of our bodies, for example, can be the source of many examples of metaphors which are used to conceptualize less concrete phenomena. The main contribution of their studies, particularly in their monumental work Metaphors we live by (1980) was to reveal the pervasiveness of metaphor in everyday life. Their main ideas are succinctly summarized in the following paragraph which we will quote is full:

Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature. The concepts that govern our thought are not just matters of the intellect. They also govern our everyday functioning, down to the most mundane details. Our concepts structure what we perceive, how we get around in the world, and how we relate to other people. Our conceptual system thus plays a central role in defining our everyday realities. If we are right in suggesting that our conceptual system is largely metaphorical, then the way we think, what we experience, and what we do every day is very much a matter of metaphor.
(Lakoff and Johnson 1980:3)

This process by which body-part terms and landmark terms have been used to encode spatial relations has been described by some scholars as semantic extension. Svorou (1994:89) cites Brugman (1983) as one such scholar who views semantic extension as the process by which semantic properties are abstracted and transferred for the encoding and understanding of other domains. Heine et al. (1991), however, do not consider this same process as semantic extension but they call it a "metaphorical process that consists of a gradual and continuous transfer from the conceptual domain of body parts and environmental landmarks to the conceptual domain of spatial relations." Heine et al. (1991:28) go on to argue that the cognitive activity that results in

grammaticalization is egocentric and egodeictic in the sense that it moves from domains of conceptualisation that are close to human experience to those that are more distant.

Below are some of the widely used examples that make use of parts of our bodies as source of metaphor, which will then be used to conceptualize less familiar concepts. e.g. when we say, the foot of the mountain, the head of the page. Such examples can be found in all languages. For example, in Shona we have the following:

(2) musoro wechipikiri
mu-soro we- chi-pikiri
CL.3-head POSS.PRE-CL.7-nail
" head of the nail"

(3) gumbo rechigaro
gumbo re-chigaro
CL.5-leg POSS.PRE-CL7.stool or chair
(leg of a stool or chair).

In the above examples, the words musoro "head" and gumbo "leg" are metaphors which are used as "basic level categories", while the head of the nail and the leg of the stool or chair are the less concrete concepts.

Svorou (1994:93) explains that the use of body-part terms and landmark terms as relational object-part terms is a result of the fact that they provide us with concrete sensory experience and their salience in terms of linguistic reference to them is enhanced by the high rate of interaction with them. He argues that our frequent interaction with our bodies and our physical environment gives rise to images from such entities.

The "basic level categories"[11] provide the conceptual basis and raw material for the other more abstract categories. Ungerer & Schmid (1996:279) argue that, unlike the basic level categories, the other more abstract concepts would require additional cognitive processes if they are to be fully understood. They go on to add that our orientation in space is also a source of metaphors in expressions like prices rising or turn down an invitation. In Shona, we would have expressions like the following:

(4) kukwidza nyaya kwasabhuku
ku-kwi-dz-a nyaya kwa-sabhuku
INF-go.up-CAUS-FV CL.9- case CL.17-CL.1a-village.head
"To take up a case to the village head."

It the above example, a less concrete concept, the process of taking up a case to the head of the village is derived from the more concrete process of moving up physically. In the example below, we have the physical process of going down being equated with getting slim.

(5) adzikira chaizvo mazuva ano
a-dzik-ir-a chaizvo ma-zuva ano

[10] The term "basic level categories" is widely used in psychology to refer to concepts which, within the hierarchy of abstraction, have a cognitive privilege in the sense that they are easy to learn and they are most freely produced.

3SG-go.down-APPL-FV a lot CL.6-days these
"He/she has gone down these days" i.e.
"He/she is very slim these days."

Apart from the body-part and landmark examples that show that language is a result of our observation of the world around us, we also have some Shona words that show this phenomenon:

(6) mashambanzou
ma-shamb-a-nzou
CL6-bath-FV-Cl.9/10-elephants
"time when elephants bath", i.e.
"time of day just before dawn"

(7) rufuramhembwe
ru-fur-a-mhembwe
CL.11-graze-FV-duikers
"time when the duikers graze" i.e.
"time of day, dawn or dusk"

(8) zuva rogara miti
zuva ro-gar-a miti
zuva r -(ava + ku-)-gar-a miti
Cl.21-sun SP.CL.21-be-sit –FV CL.4-trees
"When the sun sits on trees" , i.e.
"When the sun sets"

(9) zuva rorova nhongonya
zuva r-(ava+ku-)-rov-a nhongonya
CL.21-the.sun SP.CL.21-to.be-INF-hit-FV CL.9-fontanelle
"When the sun hits the fontanelle"
"when the sun hits right on top of the head", i.e.
"At noon."

In the above examples we find evidence for the theory that language is based on our experience with our environment.

The present study takes the cognitive approach in focusing on auxiliaries. Since auxiliaries are considered as a closed set, the task would be to find out their class membership and their relationship with non-auxiliary verbs, especially in the light of the new findings in the study of grammaticalization where lexical forms are said to develop into grammatical forms or grammatical forms become more grammatical. This requires a thorough analysis of their position of occurrence, and their co-occurrence restrictions in the concordances.

The proponents of the gradience approach use the grammaticalization theory to account for the nature and behavior of auxiliaries. In order to fully understand this approach, there is need to have a full understanding of what grammaticalization is.

5.4.1 What is Grammaticalization?

It is generally accepted that the term "grammaticalization" was coined by the French linguist Antoine Meillet in 1912. As pointed out by Lehmann (1995:9), a look at the derivational pattern of the word "grammaticalization" suggests that it is a process in which something becomes more "grammatical." The term "grammatical" ,however, has a number of meanings. In one sense, when something is regarded as grammatical, it means that it belongs to grammar as opposed to belonging to the lexicon, to stylistics or discourse (Lehmann 1995:9). Another sense that Lehmann identifies is one in which the term "grammatical" is used as an abbreviation in cases where we say something is grammatically correct, to refer to something that conforms to the rules of grammar of a given language.

Although the term grammaticalization was coined in 1912, as mentioned earlier, the notion of grammaticalization, has a much longer history than the term itself. Heine et al. (1991:5) trace the history of the notion of grammaticalization to as far back as the tenth century, a period when the Chinese were already battling with the distinction between "full" and "empty" symbols, resulting in their observation that empty symbols were formerly full symbols. Similar observations were made by French philosophers Bonnot de Condillac and Jean Jacques Rousseau who argued that grammatical abstract vocabulary is historically derived from concrete lexemes (Heine et al. ibid.). Condillac, especially, in the work that he did between 1746 and 1749, is said to be the first to discover that verbal inflections such as tense suffixes evolve from independent words.

Grammaticalization, in this study, is the "theory which observes that grammatical morphemes develop gradually out of lexical morphemes or combinations of lexical morphemes with lexical morphemes or grammatical morphemes" (Bybee et al. 1994:4). This definition of grammaticalization brings in a distinction that has preoccupied grammarians for centuries, that of the difference between lexical and functional morphemes. Carlson (1981:1) argues that all languages exhibit in their vocabularies two types of morphemes that are variously referred to as lexical vs function morphemes, full words vs empty words, content words vs particles and function words. This is the way traditional linguistics has looked at lexical and grammatical morphemes. The dominant characteristic of the function morpheme, in this traditional sense, is that it is "generally felt to be 'meaningless' or to be considerably more devoid of meaning than the lexical morpheme"(Carlson 1981:2). Function morphemes, he goes on to say, "may play purely formal grammatical roles such as markers of case, finite class, aspect, tense, etc, whereas the set of lexical morphemes do not generally play such roles." The set of function morphemes in a language is closed, they are a finite set, while the set of lexical items is considerably larger and open to expansion by virtue of language-internal processes such as derivation and compounding and language-external processes such as borrowing, adaptation and adopting.

This distinction between lexical and grammatical morphemes in the cognitive grammar tradition moves away from the traditional sense of content versus empty morphemes. This study takes the cognitive approach which has brought in new ways of looking at grammatical morphemes. Studies by Lakoff and Turner (1989), Langac-

ker (2000), Talmy (1988) and Sweetser (1990), have shown that grammatical constructions have meaning.[12] Sweetser (1997:116), for example, writes that:

We are only gradually coming to the full realization that grammatical constructions, like lexical items, not only have meaning but offer fascinating evidence about human conceptual structure.

Grammaticalization refers to that process where lexical items and constructions develop grammatical functions in certain contexts. Content word categories like nouns and verbs change over time and they can develop into markers of case, or they can become connectives or they can turn into auxiliaries. Heine et al.(1991:3) provide a list of terms used either as synonyms or near synonyms of the term grammaticalization. These include the following:

Reanalysis	(Lord 1976)
Syntacticization	(Givón 1979)
Semantic bleaching, semantic weakening	(Guimier 1885)
Semantic fading	(Antilla 1972)
Subduction	(Guillaume 1964)
Condensation	(Lehmann 1982)
Reduction	(Langacker 1977)
Desemanticisation	(Heine1991:40)
Semantic devaluation	(Lord 1993:9)
Grammaticisation	(Bybee et al.1994)
Decategorisation	(Hopper and Thompson 1984).

For now, the term "grammaticalization" will be used throughout, not because of any theoretical considerations, but because it has a longer history and it is much more widely used than any of the above terms. The motivation to carry out this study was based on the observations made by Pagliuca (1994:vii) that the universality of grammaticalization is "most obvious in the striking cross-linguistic consistency of the lexical sources of particular grammatical forms and the formal and semantic changes which characterize their developmental histories."

To have a clearer picture of the meaning of concept of grammaticalization it would be a good idea to look at what has became the most famous example of the instance of grammaticalization in English (Hopper and Traugott 1993:1, Ungerer and Schmid 1996:255). This well known English example of the transition of the lexical verb go into an auxiliary serves to illustrate some of the key questions that one needs to ask when studying grammaticalization.

(10)
a) Bill is going to college after all
b) Bill's gonna go to college after all.(informal)
c) Bill's going to college after all.
d) * Bill's gonna college after all.

[12] Thanks to Tomoko Hansen for clarifying to me the cognitive view on the differences between lexical morphemes and grammatical morphemes.

Hopper and Traugott (1993:1), ask the following questions in relation to the instances of go in the examples below:

a) What is the relationship between the instances go in the above examples?

b) Are they different morphemes that just happen to look and sound alike, that is, are they homonyms?

c) Are they variants of the same morpheme in different contexts, that is, are they polysemous?

Hopper and Traugott (1993:1) argue that in the above instances of go, the one in which it functions as an auxiliary, which expresses immediate futurity is derived historically from the lexical verb. Proponents of the grammaticalization hypothesis argue that this process in language takes place over a long time and in most languages. Heine et al. (1991) look at this theory providing examples from many different languages but with special focus on African languages, especially Ewe. Ewe is a language spoken mainly in Ghana which falls in the Kwa group, in the Niger-Congo family. Heine et al. (1991:1) give an example of grammaticalization which involves the verb na "to give" in Ewe. In this instance, a lexical verb assumes a grammatical meaning, as shown in these examples that they give:

(11) mena ga Kofi
ISG-give money Kofi
"I gave Kofi money"

(12) meple botru na Kofi
ISG-buy door give Kofi
"I bought a door and gave it to Kofi" or
"I bought a door for Kofi"

(13) mewo do vevie na dodokpo
ISG-do work hard give exam
"I worked hard for the exam".

Heine et al (1991:1) note that in sentence (11) na functions as a verb that means "give" while in sentence (12) it is ambiguous because it can mean "give" or it can be interpreted as the benefactive preposition "for". In sentence (13), they interpret it as a preposition only. The same questions that we ask in the instances of go and na in English and Ewe, respectively, could be asked in the case of -dzidz- and -svik- in Shona, in the examples below:

(14) mwana uyu ava kudzidza mabasa ekuroya
mw-ana u-yu a-va ku-dzidz-a ma-basa e-ku-roy-a
CL.1-child 3SG-this.one3SG-be INF-learn-FVCL.6-habitsPOSS-INF-bewitch-FV
"The child is now learning how to bewitch"

(15) mw-ana uyu ava kudzidzoroya
mw-ana u-yu a-va ku-dzidzo-roy-a
CL.1-child 3SG-this.one 3SG-be INF-learn-bewicth-FV
"This child is now learning how to bewitch"

(16) akasvika akadya sadza
a-ka-svik-a a-ka-dy-a sadza
3SG-REM.PAST-arrive-FV 3SG-REM.PAST-eat-FV CL.5-sadza
"He/she arrived and ate sadza"

(17) akasvikodya sadza
a-ka-svik-o-dy-a sadza
3SG-REM.PAST-on.arrival-o-eat-FV sadza
"He/she arrived and ate sadza".

In the above examples, -dzidz- is functioning as a non-auxiliary verb radical in example 14, while in example 15 it is functioning as an auxiliary radical of the main verb -roy-. In example 16 -svik- is functioning as a non-auxiliary verb, while in example 17 it is functioning as an auxiliary of the main verb -dy-. It would be useful to revisit auxiliaries in Shona, given observations by Givón (1971:2) that many Bantu languages show some observable diachronic change where verb stems are in the process of converting into modality morphemes, and or other grammatical morphemes. In Northern Sotho, a language which falls under the Sotho-Tswana group of southern Bantu languages (cp 1.4), Louwrens (1991:50) had this to say about the relationship between verbs and auxiliaries:

> *Sufficient evidence exists which proves that what are known today as auxiliary verbs in Northern Sotho have historically developed from proper main verbs. Main verbs are more autonomous words than auxiliary verbs. This implies that when a main verb develops into an auxiliary verb, the main verb loses its status as an independent word and becomes an auxiliary verb which always depends on another main verb in the sentence. The auxiliary verb and its complement are interdependent inasmuch as they together form a single semantic unit which functions as the verbal element in the sentences.*

Other works that have pointed out the derivational relationship between verbs and auxiliaries in Bantu languages include Cole (1955) and Doke (1981).

5.4.2 Synchronic vs Diachronic approaches

Wilhelm von Humboldt noted in 1836 that language is always in a state of change when he said, "There can never be a moment of true standstill in language, just as little as in the ceaseless flaming thought of men. By nature it is a continuous process of development" (cited in Aitcheson 1991:1). Hence language has been approached from two perspectives, the synchronic approach and the diachronic approach. The synchronic approach was introduced by the Swiss linguist Ferdinand de Saussure to refer to the study of language at a theoretical point in time. It, therefore, looks at the

state of a language at a certain point in time without taking into consideration whatever changes that might have taken place in the past. The diachronic approach studies languages from the point of view of their historical development. This approach looks at "the set of changes linking a synchronic state of a language to successive states of the same language" (Hopper and Traugott 1993:2).

Grammaticalization can also be approached from the two above-mentioned perspectives. It can be looked at from a diachronic perspective where one investigates the "sources of grammatical forms and the typical pathways of change that affect them." (Hopper and Traugott 1993:ibid). It traces the development of a lexical item when it changes into a grammatical item, or the changes that occur when a grammatical item develops into a more grammatical item. The synchronic approach to gramaticalization sees it primarily as a "syntactic, discourse pragmatic phenomenon, to be studied from the point of view of fluid pattern of language use" (Hopper and Traugott 1993:2).

This study will try and use both approaches as much as possible, but the nature of the methods used will obviously make it lean more towards the synchronic approach. One question that could be asked is the rationale of applying a theory of grammaticalization on an African language like Shona, which hardly has any historical documentation. How can one obtain data that could be used in the diachronic approach when studying an African language such as Shona. As was pointed out in the methodology, the bulk of the data used in the study is taken from the Shona corpus. The corpus is basically synchronic since it covers a period of just nine years (1993-2001).

As Heine et al.(1991:) point out, it is possible to employ internal reconstruction and comparative methods to account for some of these historical facts in African languages. Although the synchronic dimension will be the main approach, diachronic methods will also be used as a means of overcoming the problems that arise as a result of using what Heine et al.(1991:11) refer to as the "static" synchronic approaches to the study of grammar, particularly structuralism and transformational grammar. As has been pointed out earlier in this chapter, the structuralist approach tends to consider each language to be a "tidy system in which units are defined by the oppositions that they enter into and the object of study is the internal system that the units are supposed to create" (Bybee et al. 1994:1). This study takes the position taken by Bybee and others that considers language to be made up of substance (semantic and phonetic) and this substance then creates structures and not the other way round. This view considers this substance as a universal phenomenon, though shaped differently in those different languages. The substance is always changing, and one characteristic of this evolution of language is the change of linguistic elements from lexical to grammatical forms and from grammatical to even more grammatical items.

The position taken by Bybee et al.(1994) as described above will be taken to account for the diachronic dimension of the research. As Bybee et al.(1994:3) argue, the diachronic approach greatly increases the explanatory power of linguistic theory because, if we demonstrate that a given form or construction has a certain function, that does not constitute an explanation for the existence of that form or construction, but it must be shown how that form or construction came to have that function. This position is reflected in earlier works by such scholars as Joseph H. Greenberg (1963,1966), who used world-wide databases in his comparison of linguistic categories from a diachronic perspective with emphasis on the origin and development of linguistic items in order to explain their similarities and differences across languages (Bybee 1994:1). Other works by Doke (1935), Guthrie (1967-1971), Meinhof

(1932) and others could prove useful when it comes to providing data for use in comparative methods capable of handling the diachronic dimension. By combining the synchronic and the diachronic perspectives, this study is actually taking up Erikson's (1988:65) challenge when he suggested that "a more acceptable resolution to this issue hinges on understanding just what these aspectual markers (commentaries) really are. Looking closely at the history of Shona we can note that commentaries are, in actuality, phonologically reduced verbs."

5.4.3 The concept of clines

It is also important to note that the change that has been described in relation to the diachronic approach does not take place abruptly from one category to another. According to Hopper and Traugott (1993:6), the forms go through a series of gradual transitions which tend to be similar across languages. They give the example of the lexical noun back which expresses the part of the body yet it can stand for a spatial relationship in "in/at the back of", and it is also possible that it can become an adverb and eventually it can become a preposition and even an affix. This development from a lexical noun, to relational phrase, to adverb and preposition, and maybe to an affix is an example of a cline.

The concept of a cline can also be used in the synchronic approach. Hopper and Traugott (1993:6) say a cline in this sense can be thought of as a "continuum" where forms are put on an imaginary line with the fuller "lexical" form on one end and, on the other end, there will be the "grammatical form." The "cline" in this synchronic sense has the following line:

content word > grammatical word > clitic > inflectional affix.

5.5 grammaticalization in Progress

5.5.1 Processes of grammaticalization

In this section we will take a closer look at the grammaticalization process, drawing our examples from Shona. Here, we are taking the position taken by Dahl (2000:4) that a language is seen as a "system of behavioural patterns, each with its functional niche and its own life-cycle." The patterns in a language, according to Dahl, form a hierarchy from concrete to abstract, with lexical patterns at one end and grammatical patterns on the other in a continuum. Grammaticalization, as we pointed out earlier in this chapter, results "in the increase of the range of morphemes advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status."(Kuryłowicz 1965:52 cited in Campbell 1998:238). [Take note of the fact that this definition is limited in the sense that in some cases the source concept is more than one linguistic item which involves source propositions. see Heine (1993:30) cf. 6.2 differences between source lexical items and source propositions.] We will be looking at the characteristics of the linguistic units that undergo the process of grammaticalization in Shona, analyzing the pathways that they typically take comparing these with similar processes in other languages around the world. We will be focusing on the sets of lexical verbs

that change into auxiliaries and then into tense/aspect/mood affixes and the paths of change in the meanings and forms that arise.

Grammaticalization changes which are of the lexical-to-grammatical morpheme sort, can involve phonological and semantic reduction and they can exhibit change from independent words to clitics or affixes. This involves the development where the content of lexical morphemes is reduced until we end up with abstract grammatical morphemes. The movement would be along the following continuum which we saw in section 5.4.3:

content word > grammatical word > clitic > inflectional affix.

As was noted by Lehman (1995:14), a single example to illustrate the whole process is not easy to come by, though such examples exist in some languages. He goes on to point out that it is not essential to grammaticalization theory that every element affected by grammaticalization enters the process at the start and leave it at the end.

According to Croft (2000:156), grammaticalization can be divided into three unidirectional processes, phonological, morphosyntactic and functional (semantic and pragmatic). We should always bear in mind that although we are segmenting the process of grammaticalization into three processes, such segmenting is just there for presentational convenience, because grammaticalization, as Heine and Reh (1984:15) point out, is an evolutional continuum, such that any attempt to segment it into discrete units must remain arbitrary.

Some scholars like Kuryłowicz (1965:52) argue that grammaticalization is not a unidirectional process. In this study we will take it as a unidirectional process because we have not yet encountered a counter-example in Shona or any other Southern African Bantu language. The elements in grammaticalizing constructions, Croft (2000:156) argues, tend to undergo all three processes to a greater or lesser extent. He comes up with a diagram which represents the grammaticalization processes which is shown in figure 5.1 below:

Figure 5.1[13]

phonological

Paradigmatic: Attrition:	reduction/erosion > phonological loss
Syntagmatic: Coalescence:	free morpheme > cliticization,
	compounding > affixation>loss
	Adaptation (including assimilation)

Morphosyntactic

Paradigmatic:	obligatorification> fossilization>morphological loss
	Paradigmicization: open class>closed class>invariant element
Syntagmatic:	Rigidification [word order]
	Loss of independent syntactic status>morphological fusion> loss

[13] Croft (2000:157)'s diagram is an integration of Heine and Reh (1984)'s and Lehmann (1995)'s classifications of grammatical processes with the italicized terms referring to the process as a whole.

Functional

Paradigmatic:	extension of semantic range> loss of function
Syntagmatic:	idiomaticization: compositional & analyzable> Noncompositional & analyzable> unanalyzable.

As the above table shows, Croft (2000:157) adopts Lehmann's (1995) approach of subdividing all of the three grammaticalization processes into "paradigmatic" and "syntagmatic" where the former, the paradigmatic changes, refer to changes that affect only one element in the grammaticalizing construction and the later, the syntagmatic changes, refer to changes affecting more that one element.

In order for us to have a clearer understanding of some of the processes shown in figure 5.1 above, it is necessary to give some examples. Examples 18-23 have full contexts whilst examples in table 5.1 consist of a list of verbs that grammaticalize in the same fashion as in examples 18-23 but without full contexts. Table 5.1 shows the verbs that grammaticalize and their meanings before grammaticalization are given in the first column. The second column shows the verb combining with the infinitive marker ku- and then finally in the last column we have the grammaticalised form with its new meaning. It should be pointed out that the there are differences in meaning between the different stages of the verbs that undergo the grammaticalization process but, in some cases, it is difficult to bring out these differences in the English translations.

(18) vakanyatsa kutaura zvakaitika
va-ka-nyats-a ku-taur-a zva-ka-it-ik-a
2PL-PAST-do.well-FV INF-speak-FV CL7-PAST-happen-NEUT-FV
"They carefully said all that happened"

(19) vakanyatsotaura zvakaitika
va-ka-nyats-o-taur-a zva-ka-it-ik-a
2PL-PAST-did.well-o-speak-FV CL7-PAST-happen-NEUTER-FV
"They said all that happened" or "They said it all"

(20)

a.) -svika pamba
-svik-a pamba
-arrive-FV at home
"arrive at home"

b) -svika kuenda
-svik-a ku-end-a
arrive-FV INF-go-FV
"arrive (and) go"

c) -svikoenda
-sviko-end-a
-on.arrival-go-FV

"go on arrival"

(21)

a) -wanza shuga
-wanz-a shuga
-put.too.much-FV sugar
"put too much sugar"

b) anowanza kunyima
a-no-wanz-a ku-nyim-a
ISG-pres.hab-too.much-FV INF-stingy-FV
"He/she is in the habit of being too stingy"

c) anowanzonyima
a-no-wanz-o-nyim-a
ISG-present.hab-often-stingy-FV
"He/she is often stingy"

(22)

a) -gara pasi
-gar- a pasi
-sit- FV down
"sit down"

b) kugara kutamba mumunda
ku- gar- a ku-tamb-a mu-munda
INF-sit-FV INF-play-FV CL-18- the.field
"the habit of playing in the field"

c) -garotamba mumunda
-garo-tamb-a mu-mu-nda
often-play-FV CL.18-CL.3-field
"often play in the field"

(23)

a) -chimbidza mukomana
-chimbidz- a mu-komana
hurry-FV CL.1-boy
"hurry boy"

b) -chimbidza kufamba mukomana
-chimbidz-a ku-famb-a mu-komana
quickly-FV INF-walk-FV CL.1- boy
"walk quickly boy"

c) -chimbidzofamba mukomana
-chimbidzo-famb-a mu-komana
quickly-walk-FV CL.1-boy

"be in the habit of walking quickly boy"

Table 5.1[14] Grammaticalization of selected Shona verbs.

Verb meaning	Verb + ku-	Grammaticalised form plus its meaning
24a) -enda "go"	-enda + ku-	-ndo-/-no- "go and"
c) - fuma "get up early in the morning"	-fuma + ku-	-fumo- "get up early and .."
d) -vamba "at first" or "previously"	-vamba + ku-	-mbo- "begin"
e) -swera "spent the day"	-swera + ku-	-swero- "all day"
f) -za "come"	-za + ku-	-zo- "then"
g) -gona "able"	-gona + ku	-go- "able to…as a result"
h). -rara "sleep"	-rara + ku-	-raro- "do all night"
i). -gara "sit"	-gara + ku-	-garo- "do often"
j) -fana "beforehand"	-fana + ku-	-fano- "in the meantime"
k) -nga "be, be able"	-nga + ku	-ngo- "only"
l) -da "want or like"	-da + ku-	-do- "even if" or, "eagerly"

There is evidence to suggest that this is a diachronic process since most of the auxiliaries in the above examples have cognate full verbs. In some cases, the full verb is no longer used in everyday speech. Example 24f, is a case in point, where the verb -za "come" is no longer in everyday speech. It survives on in a few names of people and a few proverbs.

(25) -za in names of people

a) *Muzanenhamo*
Mu-za-ne-nhamo
cl.1-come-with-problems
"The one who comes with problems"

b) *Muzamhindo*
Mu-za-mhindo
CL.1-come-darkness
"one who brings darkness"

c) Muzanago
mu-za-na-go
CL.1-come-with-them
"one who comes with it (death)"

(26) The verb -za "come" used in Shona proverbs

a) *garwe haridyi chebamba charo chizoza neronga*
garwe ha-ri-dy-i che-bamb-a cha-ro chi-no-za ne-ronga

[14] Note that this is not an exhaustive list of the verbs that fall into this category in Shona. The reduction processes of a few of the verbs are taken from Erikson (1988:69).

crocodile NEG-OBJ.PRE-eat-NEG CL.7-steal-FV CL.7-its CL.7-HAB-come-FV with the.river
"the crocodile does not have to steal for it to eat, what it eats comes with the river"

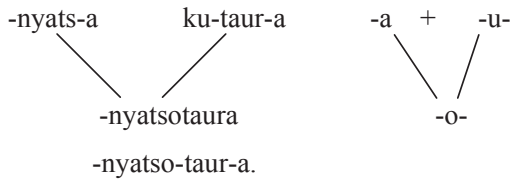
b) gore harizi pakaza rimwe
gore ha-ri-zi pakaza ri-mwe
CL.5-year NEG-SUB.PRE-come-NEG CL.16-REM.PAST-come CL.5-another.one
"the year does not come where another one came"

c) chaza masikati charamba basa chaza usiku charamba hope
cha-za masikati cha-ramb-a basa chaza usiku cha-ramb-a hope
CL.7-come daytime CL.7-refuse-FV work CL.7-come at.night CL.7-refuse-FV sleep
"what(tragedy) comes during daytime denies you work, what comes at night denies you sleep"

It should be pointed out that -za "come" is also found in Zulu[15] and Ndebele, languages which belong to the Nguni group, which in turn falls in the South Zone in Guthrie's (1948) classification of Bantu languages. In these languages, it is found in everyday speech, while in Shona it only found in archaic language in most cases in fixed expressions, that is, in figurative expressions.

5.5.2 Phonological processes

The first set of processes, in Croft's figure 5.1 above, involves phonological processes where there is a "reduction of fuller forms to phonologically shorter ones" (Campbell: 1998:238). This process of phonological erosion is also known as "attrition." Attrition refers to the "phonological phenomenon in which segments or syllables are entirely lost from the pronunciation of a word over time (Trask 1996: 40)." All the verbs that are grammaticalised in examples 18-24 above fall in the category of verbs that are followed by the infinitive. The consonant of the infinitive marker /k/ is lost. The final vowel of the verb and the /u/ of the infinitive marker are coalesced to form /o/. In example 1, for instance, the verb that grammaticalizes is -nyatsa and it combines with the /ku-/ of the infinitive as shown below:



As mentioned above, the consonant of the infinitive marker /k/ is dropped and then the final vowel of the verb -nyatsa combines with the /u-/ of the infinitive marker in a vowel coalescence process. Vowel coalescence here refers to the process where two vowels of different quality merge into one"(Mutaka 2000:43). In the above example, the final vowel of the auxiliary -nyatsa, merges with the vowel of the infinitive prefix ku-, resulting in the vowel -o-. A fuller description of vowel coalescence in Shona is given by Harford (1997) in her article entitled.

[15] According to Mkhatswa (1991)

"When two vowels go walking: Vowel coalescences in Shona."

Other additional phonological reduction processes also occur in the same example. One finds other grammatilised forms of the verb -nyatsa as in the following examples:

(27) -nyatsa > nyats-o-taur-a
-nyatsa > -nats-o-taur-a /ø/ > /n/
-nyatsa >-nyas-o-taura/ø/ is retained but there is dropping of phoneme /t/
-nyatsa > -nas-o-taur-a /ø/ > /n/ plus dropping of the phoneme /t/.

The phonologically shorter forms above which result from the "attrition" process are semantically reduced forms of the lexical form -nyatsa. Apart from the coalescence process and the dropping of the /k-/ of the infinitive there are other phonological processes that take place during the attrition process in the above example. In (ii) there is a change from a /ø/ of the lexical verb -nyatsa to an /n/ in the grammaticalized form -nats-. In phonological terms we have a /ø/ which is a palatal nasal changing into an alveolar nasal. In (iii) the /ø/ is retained but the /t/ is dropped. The dropping of the /t/ is therefore a phonological movement from an alveolar affricate /ts/ to an alveolar fricative /s/. In (iv) there is a change from /ø/ to /n/, just like in (ii) plus a dropping of the phoneme /t/. It would be interesting to investigate the sequence with which these changes took place, that is, of the changes i to iv, which could have come first and which could have followed because they did not necessarily come in the order in which they are presented above. In this study we will simply observe that such changes took place without going into the possible sequences in which they took place because such an investigation would require extensive additional data collection which is beyond the scope of this study.

Obviously the changes described above involve variation. Such variation is not confined to phonological changes but also found in morphosyntactic and functional changes. The old and new forms co-exist. Most Shona speakers use at least one of the forms (i, ii, iii and iv) above. There are a few speakers who would use some of these forms interchangeably. Of those that use some of these forms interchangeably, it was not possible to establish the stylistic and social causes of the choices made by these speakers. This was also beyond the scope of this study as was explained in the methodology chapter. What we managed to establish, however, is that speakers of the Manyika[16] dialect, consistently retain the full verbal form. They use the fuller infinitive form -nyatsa kutaura, while the rest of the Shona dialects make use of the newer grammaticalised forms. A separate study would be required to establish which forms, out of the other four forms above (i, ii, iii and iv), are used by which speakers of the other Shona dialects.

Another good example that shows the phonological changes taking place in this grammaticalization process is example 24a in table 4.2:

28)
a) ku-end-a ku-gar-a
INF-go-FV INF-stay/live-FV
"to go and stay/live"

16 The Shona dialect situation is discussed in the introductory chapter (cf 1.5).

b) ku-nd-o-gar-a
INF-go-o-stay/live
"to go and stay/live"

c) ku-no-gar-a
INF-go-o-stay/live
"to (in future) go and stay/live"

In (a) we have the verbs kuenda "to go" and kugara "to stay", forming what Louwrens (1991:50) calls an "auxiliary word group" consisting of two words. The first verb in the auxiliary word group, that is, kuenda, is the "auxiliary lexical verb" which is followed by the main verb kugara, which is the complement[17].

In b) the phonological reduction process results in the is dropping of the /k/ of the infinitive marker of the main verb(the complement). This is followed by vowel coalescence, in which the final vowel of the "lexical auxiliary"-enda and the /u/ of the infinitive marker (after the dropping of the /k/) results in the -o- of the form kundogara. In (c) we have a further phonological reduction where there is dropping of the /ë/ to end up with kunogara. The semantic changes that go with this phonological reduction will be discussed when we get to the section that deals with functional changes.

5.5.3 Morphosyntactic processes

At this level, the morphosyntactic level, according to Croft (2000:157), we do have two main processes, paradigmicization and rigidification. We will go back to example 23 which we will repeat here.

(29)
a) -chimbidza mukomana
-chimbidz- a mu-komana
hurry-FV CL.1-boy

b) -chimbidza kufamba mukomana
-chimbidz-a ku-famb-a mu-komana
quickly-FV INF-walk-FV CL.1- boy
"walk quickly boy"

c) -chimbidzofamba mukomana
-chimbidzo-famb-a mu-komana
quickly-walk-FV CL.1-boy
"be in the habit of walking quickly boy".

We have a case where a linguistic pattern is at the syntactic level in that it is made up of three phonological words in 23b. Two of these three words go through a grammaticalization process ending up being "conventionalized" or "entrenched" in example

[17] The term complement has been defined in chapter 2 (cf 2.5.1and 2.5.2)

23c. Conventionalization, here is being used in the sense in which it is used by Dahl (2000:15) to refer to a combination of two or more patterns, whether lexical or grammatical, which are recruited as parts to form a new pattern. The two parts that are conventionalized are:

-chimbidza "hurry" and the infinitive kufamba "to walk."

The two parts lose their autonomy and form a new pattern -chimbidzofamba "be in the habit of walking quickly." We, therefore, have a conventionalization process, which involves the integration of syntactic forms into morphological paradigms. This paradigmaticisation process is accompanied by the development of open productive lexical classes into closed classes. In all the examples 18 to 24 we have the lexical verbs that grammaticalize. Before grammaticalization they belong to large open classes that have specific meanings. They then change into grammatical formatives that belong to a closed class with fewer members that are not productive. This morphosyntactic process which turns productive processes into unproductive ones is called fossilization. The main characteristic of fossilization is quite evident in all the examples 18-24. Taking example 20, for instance, we find that the verb -svika "arrive" in 20a can undergo quite a number of productive processes. It can take derivational suffixes which we said are generally referred to, in Bantu linguistics, as "extensions"(cf 4.6.2). We can have the following coming out of 20a:

(30)	-svikira	pamba
	-svik-ir-a	pamba
	arrive-APPL-FV	at home
	"Arrive at home".	

We noted that 20a -svika pamba simply means "arrive at home." But when we have the verb extended by the applicative -ir-, there is an additional meaning to the phrase in that it is not just "arriving at home" but the fact that "home is the point of arrival" is emphasized.

Another productive process that the verb -svika can undergo is reduplication. We can have -svika-svika pamba "often arrive at home" The same productive processes that the verb in 20a can undergo cannot apply to the grammaticalized form -svik- in 20c -svikoenda "go on arrival". These characteristics of fossilization are evident in all the cited examples 18-24.

Again in example 20, we have -svika and kuenda in 20b that are two separate parts which are recruited to form a new pattern in 20c -svikoenda. We see, in this example, that when a verb grammaticalizes, "the more its syntactic variability decreases, that is, the more its position within the clause becomes fixed" (Heine 1991:15). In 20a -svika is the main verb in the whole construction. It can be considered as the headword in that syntactic construction. But when we go to 20c, -svika ceases to be the headword, and -enda becomes the new headword of the construction. The grammaticalized -svik- takes a fixed position in the construction in that it will always be immediately before the verb –enda. In terms of the position of the "source" verb -svika in relation to the second verb -enda, the auxiliary comes in a fixed position, it immediately precedes the radical of the verb that was in the infinitive. While it is possible to add some other derivational affix after the verb stem in 20a , as we seen above, it is

difficult to add anything in the case where we have the grammatical formative -svik-. The verb -svika in 20b, on the one hand, is not fixed in terms of its position in the construction. The -svik-, in 20c, on the other hand, is so fixed that the only inflecting affix that can come between it and the new main verb -enda is the object prefix. This rigidification in terms of the word order results from the gradual loss of the independent syntactic status of the lexical verb -svika during the grammaticalization process resulting in morphological fusion to the next verb -enda.

The examples of grammaticalization discussed so far seem to point to the process of "verbal attraction." Heine and Reh (1984:50) define verbal attraction as a "complex process by which units being part of or forming arguments of the predicate are attracted to the verb, undergoing cliticization and/or affixation." They go on to argue that the categories that are prone to verb attractions include the following:

- adpositions and adverbs
- verbs
- object nouns.

What the above definition of verbal attraction means is that in the case of verb to verb attraction we end up with the attracted verb undergoing cliticization and/or affixation. We will argue in this study that evidence we have of this process in Shona seems to suggest that verb to verb attraction leads to a situation where the attracted verb undergoes affixation only without any cliticization.

In our treatment of clitics in the preceding chapter (4.7.10), we noted the problems of distinguishing between clitics and affixes, particularly in African languages as was observed by Heine and Reh (1984:33) when they wrote:

In Indo-European languages, deaccentuation is an important criterion for defining cliticization. The suprasegmental behavior of a word is in fact important in deciding whether one is dealing with cliticization or not. However, complicated tonal structures in many languages make it difficult to use suprasegemental features as a means of defining cliticization in Africa. In African languages in turns out to be particularly difficult to trace the boundary between clitic and affixal morphemes…

Since we looked at the criteria for distinguishing clitic and affixal morphemes in chapter 4, we will now simply mention the characteristics of the grammaticalised forms of verbs that result from verb attraction, that is, the "deficient auxiliary verbs", so that we show why we regard the process as affixation and not cliticization.

In cliticization the category of the host to which the clitic attaches itself is usually irrelevant. The clitic, according to Taylor(1989:180), attaches practically to any part of speech, but in the case of the "deficient auxiliary verbs" we argue that this is affixation because these formatives attach to a specific category, they are attached to verbs only.

The second reason why we think verb to verb attraction in Shona results in affixation and not cliticization is that the deficient auxiliary verbs that are in Table 4.2 cause some semantic changes to the main verbs to which they are attached. Taylor (1989:181) argues that affixes "change the semantic content and/or the syntactic function of a word while clitics, on the other hand, do not affect word meaning or word function, but generally have to do with text structure or speaker attitude."

The third reason why we think verb to verb attraction in Shona results in affixation and not cliticization is that affixation is associated with a specific word or

word category while cliticization in African languages is typically a feature of phrasal constituents. The examples we have looked at so far point to affixation because we are looking at a process that operates within the verbal constituents and they do not have much effect on any other non-verb elements. The non-syntactic characteristic of deficient auxiliary verbs is much clearer if we contrast them with proclitics involving the so called "inflected substantive phrases" that we looked at in chapter 4 where you get proclitics as part of phrasal constituents.

The fourth reason why we think deficient verbs in Shona are affixes and not clitics is that they are placed between verbal prefixes and the verb root. This indicates that they are affixal because clitics do not occur in between affixes, they occur outside affixes.

Although Croft (2000:157) places cliticization, compounding and affixation under phonological processes in his diagram which we have as Table 4.1 above, our observation of the Shona examples of grammaticalization seem to show that these are more on the morphosyntactic level than the phonological level. We therefore agree with Heine and Reh (1984) that these three processes are more at the morphosyntactic level..

5.5.4 Functional processes

One of the salient characteristics of grammaticalization is what, according to Heine (1991:17), has been widely referred to as "generalization". The process of generalization, or weakening of semantic content has a number of aspects to it. The first aspect has to do with generalization in terms losing their "semantic complexity" (Heine and Reh 1984:15). In examples 18-24, we have verbs that have specific meanings. When they grammaticalize, they tend to loose most of the specificities of lexical meaning. Although new meaning remains related to the original meaning, it becomes very general. The new meanings become abstract and relational. This phenomenon has been given various names by various scholars, "semantic bleaching" (Guimier:1885), semantic fading (Antilla:1972) and desemanticization (Heine:1991), just to name a few.

Semantic bleaching is illustrated in example 31 which we will repeat below but with more context:

(31)

a) -rara
-rar-a
-sleep-FV
"sleep"

b) -rara kutamba
-rar-a ku- tamb-a
-sleep-FV INF-play/dance-FV
"dance/play all night"

c) -rarotamba
-raro-tamb-a
-all.night-dance/play-FV
"dance/play all night".

In this example, we have in 31a the verb -rara. It is a proper verb with full lexical meaning which has a rich specific meaning which means to "sleep". It stands as an autonomous word.

In 31b above, the verb -rara is put before the infinitive kutamba. In this context the verb -rara, loses its status as an autonomous word and it becomes dependent on the next verb, that is, it is dependent on the infinitive kutamba. According to Louwrens (1991.50), what we have in 31b is "auxiliary word group" consisting of two words, the "lexical auxiliary verb"-rara, followed by the main verb kutamba, which is the "complement"[18] These two words, as Louwrens (1991:50) rightly points out, are interdependent because they form a single semantic unit which functions as the verbal element in the sentence. In this semantic unit the -rara gradually shifts from the original meaning of "sleep" and it assumes a grammatical meaning "do all night."

In (31) we see what we have described as a the verb attraction process in which the -rara which was a automous verb in (31a), develops into "lexical auxiliary verb" in (31b) and further develop into a grammatical formative -raro- in (31c). In example (31) we also see that, when the verb -rara grammaticalizes, it loses its semantic complexity, its particularistic meaning -rara "sleep" and it assumes a more general meaning -raro- "do all night". While the lexical verb is restricted in terms of contexts in which it can be used when it grammaticalizes, it becomes more flexible in terms of the contexts in which it can be used. The grammaticalized -raro- can be morphologically fused with a wide range of verbs where it means "doing all night" whatever is being referred to by the verb to which it is fused.

In (31c) the grammaticalization process led to a situation where -rara ends up as -raro- , a grammatical formative which has lost its autonomy and becomes a morphological constituent of another verb in -rarotamba. The -raro- is a "deficient auxiliary verb" because, as Louwrens puts it, it "has become almost totally devoid of its original verbal character." It has gone through the fossilization (cf 5.6.3) process which led to its becoming an unproductive "deficient verb." This is the process that we described as verbal attraction of the "verb to verb type."

Another example which shows that a grammaticalized morpheme can be able to be used in more contexts than those that it could enter before grammaticalization is example (24d). In this example, we have the full lexical verb -swera "spend the day" The verb -swera has a specific meaning to "spend the day". When it grammaticalizes, it loses that rich specific meaning and it becomes -swero- which assumes a more abstract meaning meaning "wasting time", doing whatever is meant by the verb to which it is morphologically fused.

5.6 Summary of chapter

This chapter discusses a number of issues that are crucial, from a theoretical standpoint, to our understanding of the nature of auxiliaries in Shona. These issues have not been adequately resolved in existing Shona grammars. They include include the following:

[18] The term complement is discussed in the definition of auxiliary in chapter 2 (cf 2.5.1and 2.5.2)

a) the nature of categories

b) the diachronic vs the synchronic approaches

The chapter started with an examination of the nature of categories. We looked at the two main approaches to categorization, the classical and the non-classical. The main contribution we make to Shona linguistic studies, on the nature of categories, is that we point to the need for a movement towards the use of the non-classical approaches to the study of auxiliariess. Such an approach tallies very well with the theory of grammaticalization which we use to account for the development of auxiliaries from lexical verbs. This approach helps to show that, as Lehmann (1995:33) puts it, "the dispute on whether auxiliaries are main verbs or not is fruitless." We also showed, in this chapter, that grammatical categories connected on a grammaticalization scale are neither the same nor distinct. The difference between them is gradual, and there is no clear-cut dividing line.

The chapter is therefore devoted to the theoretical issues that have to do with the combination of the synchronic and the diachronic perspectives in accounting for the development of lexical verbs into auxiliaries in Shona. In our description we devided the the grammaticalization process into three unidirectional processes, phonological, morphological and functional (semantic and pragmatic).

This chapter also goes into the reasons why we prefer the cognitive approach in accounting for the development of lexical verbs into auxiliaries. The description of the grammaticalization process in this chapter lays the foundation for the next chapter which looks at the cognitive forces that are responsible for the pathways of grammaticalization changes in Shona.

CHAPTER SIX

Pathways of grammaticalization changes in Shona

6.1 Introduction

Chapter five provided evidence of grammaticalization in Shona. We have already noted in chapter 4 that it is now widely accepted that, in most languages, auxiliaries have historically developed from main lexical verbs. The question that arises then is, what characterizes the set of verbs, in Shona, that change from the major lexical category to a minor category, from lexical content morphemes to form grammatical morphemes in Shona. In dealing with this question, we will be bearing in mind the observation made by Bybee et al.(1994.11) when they made the following point:

When we take into consideration the meaningful units that comprise a grammatical construction, we find that the meaning present in the source construction bears a definable relation to the grammatical meanings that later arise and that these earlier meanings prefigure the grammatical meaning.

This chapter focuses on the pathways of the changes that may have taken place when verbs grammaticalize in Shona. The universality of the pathways of change has been observed by many scholars. We have already noted that Bybee et al.(1994) consider the actual meanings of the verb that is being grammaticalized as the ones that uniquely determine the path of grammaticalization and consequently the resulting grammatical meanings. Lord (1993) shares the same view that the verbs that grammaticalize are characterizable in terms of meaning. Embracing the same view, Svorou (1994:61) provides evidence that "languages develop grammatical material similarly, within specific semantic domains, going through similar semantic paths."

This chapter attempts to characterize the verbs and other constructions that grammaticalize to form auxiliaries in Shona. The discussion starts in 6.2 with the identification of the types of sources of grammaticalization in Shona, that is, the lexical verb sources and the source propositions. We take the view that the verbs that grammaticalize are characterizable in terms of meaning.

In section 6.2.1 we take a closer look at lexical verb sources, identifying the types of notions that normally grammaticalize into auxiliaries. In 6.2.2 we look at metaphorical extension, as a crucial but often ignored notion in the development of concrete concepts into abstract concepts. A classification of some of the verbal notions that grammaticalize in Shona and some selected Bantu languages is given in 6.2.3. In chapter five we showed that grammatical categories connected on a grammaticalization scale are neither the same nor distinct. The difference between them is gradual, and there is no clear-cut dividing line. Section 6.3 takes up the issue of the grammaticalization scale again, but this time focusing on the the characteristics of the categories

along the scale. The motivation of grammaticalization is discussed in 6.4. The grammaticalization of source propositions is discussed in section 6.5.

6.2 Sources of grammaticalization

6.2.1 grammaticalization Issues

In this effort to find out the pathways of changes when verbs grammaticalize we will be asking some of the questions that Heine et al.(1991:23) were asking in their study:

1. What motivates grammaticalisation ?
2. What role does metaphor and other related phenomena play in this process?
3. What is the semantic relation between the input and output of grammaticalisation?
4. What constraints are there in the choice of concepts serving as the input of grammaticalization?

An attempt will be made, in this chapter, to address the above questions. However, we will not take them in the order in which they are listed above, but we hope to have looked at each and every one of them by the time we get to the end of the chapter.

The use of concrete concepts to understand, explain or describe less concrete concepts is a characteristic of all languages as was observed by Sapir:

It would be impossible for any language to express every concrete idea by an independent word or radical element. The concreteness of experience is infinite, the resources of the richest language are strictly limited. It must perforce throw countless concepts under the rubric of certain basic ones, using other concrete or semi-concrete ideas as functional mediators. [(Sapir 1921:84) cited in Heine et al. (1994.23)]

In studies of the process of grammaticalization, it is also widely accepted, as we mentioned earlier on in this chapter, that "grammatical expressions do not emerge ex nihilo "(Heine 1997b:50). Studies on grammaticalization in many languages have shown that there is one specific principle that can be held responsible for the creation of linguistic forms serving the expression of grammatical concepts. This principle is referred to by Werner and Kaplan as " the principle of the exploitation of old means for novel functions (1963:403)". By this principle, concrete concepts are employed in order to understand, explain, or describe less concrete phenomena.

In the theoretical framework, we argued that the approach used in this study is based on the assumption that grammaticalization is influenced by forces that are located outside language structure such as cognitive structure and worldview pragmatics.

The approach taken by Bybee et al.(1994), has shown that verbal categories can profitably be studied in cross-linguistic perspective and that certain semantic properties tend to recur in the verbal categories of unrelated languages. This study takes the same approach focusing on the development of grammatical clines of the verb-to-affix type in Shona. As Svorou (1994:62) points out, very little attention had been given to similarities with respect to semantic change. This is a result of a number of reasons. According to Svorou (1994:61), one of the reasons is that most of the linguists

in the Bloomfieldian era, the post-Bloomfieldian era in American linguistics, as well as the structuralist tradition in Europe, tended to ignore the questions of universals because of the exaggerated views of the diversity of languages coming from what is now popularly known as the Sapir-Whorf hypothesis. This hypothesis over-emphasized the importance of the cultural contexts when meaning changes. Bybee and Dahl (1989:52) point out that Chomsky even went further from the universals of grammatical meaning when they said:

> *From a methodological principle this (the idea of ignoring semantic universals) was elevated to a theoretical principle by Chomsky who asserted not only that grammatical description should be autonomous from semantic, but also that there is not any interesting semantic difference between grammatical and lexical morphemes (Chomsky 1957:104).*

The other reason was that meaning was considered to be an aspect of language that changes relatively easily and quickly, to such an extent that it would be difficult to come up with generalizations and explanations in studies of semantic change. Another reason why similarities with respect to semantic change were not emphasized, according to Svorou (1994:62), was because of claims by such scholars as Weinreich (1963) who claimed that semantic universals do not exist.

The study looks at cross-linguistic patterns in the development of grammatical morphemes identified by Bybee et al.(1994), Givón (1984), Heine et al.(1994), Sweetser (1990), Talmy (1988) and Svorou (1994), among others. These studies have led to new research directions in which the major claim is that "if there are any universals at all, these (i.e. semantic universals) are substantive universals, and the similarities of form are being subsumed under the similarities of meaning" (Svorou 1994:62). An attempt will be made to show how these findings can be applied to Southern African Bantu languages. After describing some of the cross-linguistic patterns observed, we then try and figure out the language-specific patterns. Although the focus is on Shona, cross-linguistic comparisons with other Southern African Bantu languages will enable us to obtain a diachronic perspective.

The first step in our effort to find out the pathways of changes that take place in grammaticalization would be to establish the different types of sources for grammaticalization involving auxiliaries in Shona. By this we mean the verbs and other constructions that provide the candidates or the input of grammaticalization. There are two main types of candidates:

lexical verbs, and
source propositions.

The main difference, as was observed by Heine (1993:30), between these two types of candidates is that lexical verbs are made up of single lexical items while source propositions are made up of more than one linguistic item. The first group tends to be made up of simple single concepts while source propositions tend to be made up of event schemas that are composed of "more than one perceptually discontinuous entity"(Heine 1997b:46). He gives the example of an event schema like "X eats Y" which has three entities X, Eat, and Y. On the other hand, single concepts like EAT have one en-

tity, although the other entities such as the agent (X) and the patient (Y) are implied. We will now take a closer look at each of the above types of sources.

6.2.2 Lexical verbs as sources

In our discussion of the semantic changes (cf. 5.6.4) that take place in the process of grammaticalization, we looked at what we referred to as "semantic generalization" or "semantic bleaching" along the verb-to-affix cline. The task in this section is to take a closer look at those verbs that undergo grammaticalization and attempt a categorical way of describing them.

We noted earlier (cf. 5.5.1) on in this study that studies by Talmy (1988:167) and others have revealed that, as a fundamental design feature, language has two subsystems, the open-class one (lexical) and the closed-class one (grammatical). Talmy (1988:167) notes that, "in the total meaning expressed by any portion of discourse, the open-class forms contribute the majority of the content, while the closed class forms determine the majority of the structure." He points out that, looked at across languages, all the closed class forms (the grammatical concepts) are under great semantic constraints in that they represent certain concepts and categories of concepts. He goes on to say that studies have shown that, by looking at grammatical forms and examining the notions that they specify, it is possible to get notions that get grammatically specified and those kinds of notions that possibly never do. Talmy (1988:168) gives examples of notions that are never found specified by grammatical elements. One such notion that he gives that is never found grammatically specified is "color."

Given the constraints that we have noted above, that is, constraints on the notions that can be specified grammatically, our concern in this chapter is on those notions that are expressed grammatically in the form of auxiliaries. The starting point for such an endeavor, according to Heine (1993:28), would be the concrete concepts from which these grammatical concepts expressed in auxiliaries are derived. Heine (1993:28) gives the following list of concrete concepts that would fall in that category:

a. Location (where one is)

b. Motion (where one moves to, from, through, etc.)

c. Activity (what one does)

d. Desire (what one wants)

e. Posture (the way one's body is situated)

f. Relation (what one is like, is associated with, or belongs to)

g. Possession (what one owns)

Heine (1993:28) goes further to give some of the verbs that tend to be used to linguistically express each of the above notions:

a. Location "be at", "stay at", "live at", "remain at" etc.

b. Motion "go", "come", "move", "pass" etc.

c. Activity "do", "take", "continue", "begin", "finish", "seize", "put", "keep" etc.

d. Desire "want", " wish", etc.

e. Posture "sit", "stand", "lie", etc.

f. Relation "be (like)", "be (part of)", "be accompanied by", "be with", etc.

g. Possession "get", "own", "have", etc.

According to Bybee et al.(1994:17), in the process of grammaticalization, the grammatical morphemes often retain traces of the lexical meaning of the source concepts. Although the more prominent function of the grammatical morphemes is their relational function, there are traces of the older and more specific lexical function. We will take a closer look at some examples of grammaticalization that we found in Shona to try and identify the semantic traces of the source concepts that we find in the grammaticalized forms. We will also give examples from other languages, mainly Bantu languages, so as to add a cross-linguistic dimension. This is necessary as it will help us find out which semantic properties are being abstracted and transferred for the encoding and understanding of other domains.

A careful study of the development process from lexical morphemes to grammatical morphemes in Shona and in many other languages reveals that this process involves metaphorical extension. We will now take a closer look at the metaphorical extension process that is involved when verbs are recruited as source concepts of auxiliation.

6.2.3 Metaphorical extension

When we look at the development of lexical verbs into auxiliaries, we are dealing with semantic shifts. These meaning shifts are unidirectional in the sense they all involve a shift from concrete meanings to abstract meanings and not the other way round. Quite a number of studies have come to the conclusion that metaphor is a crucial, but often ignored, source of links between concrete and abstract domains. Schiffman's (1999:3) analysis of auxiliaries in Tamil, for example, leads him to the conclusion that most of them are derived historically from some lexical verbs and their grammaticalization process involves metaphorical extension. He says that:

The meaning of aspect markers (auxiliaries) is primarily grammatical or syntactic and can usually only vestigially be related to the lexical meaning of the verb from which it is derived. It is here that the role of metaphor comes into play, since it is by metaphoric extension of the lexical verb that the grammatical meaning is arrived at.

In Shona, we have already noted that auxiliaries develop from lexical verbs. This process, in our view, involves metaphorical extension as described by Schiffman (1999), Givón (1984), Heine (1993), among others, as we shall see later on in this chapter when we look at the semantic development from lexical verbs to auxiliaries.

Heine's (1993) analysis of this phenomenon in quite a number of African languages resulted in the conclusion that this semantic development of lexical verbs into auxiliaries involves metaphorical extension.

We looked at the nature of categories in 4.2.1, where we argued that the treatment of auxiliaries in Shona would be easier if one uses the non-classical approach, especially if it is based on the prototype model. Members of a category are defined according to their similarity to the prototype which, according to Givón (1984:17), is that member that displays the greatest number of the most important characteristic properties/features. Givón (1984:17) also points out that the notion of similarity/resemblance is important, not only in formation of categories, but also in the extension of the prototype. This process where the prototype is extended is the one which he calls metaphor or analogy. Givón (1984:17) goes on to say that metaphor and analogy are two names for the same phenomenon, with the only difference being that they came into linguistics from different traditions. The term metaphor comes from the literary tradition while the term analogy comes from the philosophical tradition.

The metaphoric extension of a prototype that Givón (1984:18) describes can be seen in Shona, in the development of lexical verbs into auxiliaries. We will begin our illustration of metaphorical extension with the lexical verb -gara "to be ", "to sit", "to stay " or "to live."

(1a) -gara pasi
-gar-a pasi
-sit-FV cl.16-down
"sit down"

(1b) anogara muruzevha
a-no-gar-a mu-ru-zevha
3SG-PRES.CONT-stay-FV CL.18-CL.11-rural.area
"He/she lives/stays in the rural area".

[From the Shona corpus]

From the above examples we can see that -gara has two meanings, "to sit" and "to live/stay." We have here a case of lexical polysemy, that is, a case of a single form used for multiple senses. According to Sweetser (1990:9), multiple synchronic senses of a given word will normally be related. In most cases, an account of the relationship between the senses will reveal that one of the meanings is derived from the other. Sweetser (1990.5) gives the example of the word see in the two English sentences below:

(2a) I see the tree.

(2b) I see what you are getting at.

Sweetser (1990:5) argues that it is by no means arbitrary that the word see has two meanings in the above sentences, in:

a) to discern by use of the eyes, and in:

b) to understand.

She argues that it is not random the verb see (as opposed to kick or feel or smell), is used to mean knowledge. The second meaning is a well-motivated extended sense of the first meaning. This does not mean that all cases of lexical polysemy are a result one of the senses developing into another. But, in most cases, a motivated account of the relationship between senses of a single morpheme results in interesting discoveries about the human conceptual structure and the general principles of cognitive organization.

Coming back to the senses of -gara that we mentioned above, we find's (1990:9) way of looking at multiple synchronic senses quite applicable to the -gara senses. It is not random that the "sit" meaning is found in the same word as the "stay, live" meaning, not only in Shona but in quite a number of Bantu languages as we shall see later on in this chapter. We take the cognitive approach taken by Lakoff and Johnson (1980), Lakoff and Turner (1989), and Heine (1993) to show that in most cases there are etymological connections between the multiple senses. The two meanings are related in that one is a metaphorical extension of the other. As Sweetser (1990:8) points out, "a great deal of polysemy is due to metaphorical usage, and that in fact not only our language, but our cognition and hence our language operates metaphorically." We will argue in this study that this kind of lexical polysemy has connection with cognitive relations between the concepts referred to.

Our claim here is that the meaning of "stay at" or "live at", is derived from postural meaning, "to sit." This comes from the cognitive view that language is grounded in cognition, that is, our perception of the world around us. People observe that when we "sit", that is, when one adopts a position in which the body is supported more or less upright by the buttocks resting on the ground or on a raised seat, the most important properties/features of meaning in the verb -gara in that sense are:

the posture, and
the stationariness or lack of movement.

When the meaning of -gara changes or shifts, either because of diachronic development or a change in the context, to refer to "stay", e.g. reside at a place, we have a change in the prototype because of a metaphorical induction of new properties to the set (posture and stationariness) that we had. In the process of metaphoric change we lose some properties, in the sense that the posture characteristic fades away as we acquire the new meaning of "living at a place." There is "semantic bleaching" in that we have lost the meaning of "posture" and retaining "stationariness" by not moving residence. There is also semantic gain in the sense that the stationariness of -gara, as in residence, is different from that of posture that we saw in -gara, "sit", as in sitting down. We have here a metaphorical extension that involves a shift from physical domain (-gara as in sitting down) to a more abstract domain (-gara as in stay referring to residence.)

The dominant characteristic in the prototype -gara "sit" is the "stationariness" or "lack of movement". This characteristic is then metaphorically extended to refer to "lack of movement" in terms of the residence, hence the meaning changes from a postural sense "sit" to a locational sense "live at."

As Goatly (1997:2) puts it, "metaphor basically involves suppressing some features and highlighting some." In the above example, the feature posture is highlighted in the "sit" meaning of -gara whilst in the "stay" meaning it is suppressed. As Ungerer and Sch-

mid (1996:144) rightly point out, metaphors are rich in the sense that they do not just link up two isolated items but rather, they connect multi-faceted categories or cognitive models. The characteristic of "stationariness" in -gara "sit" is mapped on to the -gara "to live or to stay" and it is also mapped onto the target domain -garo- "always" which is a habitual marker. When it becomes a habitual marker it turns more deeply into the abstract domain and it assists us in conceptualizing the abstract domain in which concepts are defined primarily with reference to their relative function in discourse.

When there is metaphorical extension it does not necessarily mean that the earlier meaning disappears. It may or may not disappear. If it does not disappear, then we have a case of polysemy, where the two meanings may, as Dahl (2000:18) describes it, compete for the same "niche." If the earlier meaning disappears, we may have the only the new metaphorically extended meaning, so that its etymological sources may in time become considerably obscured and we cannot trace the lexical verb source, as is the case with a number of auxiliaries that we find in many languages, especially those that do not have a long written tradition. The language that we are focusing on in this study falls in that category of languages that have to rely on internal reconstruction and comparative evidence to reconstruct such historical developments.

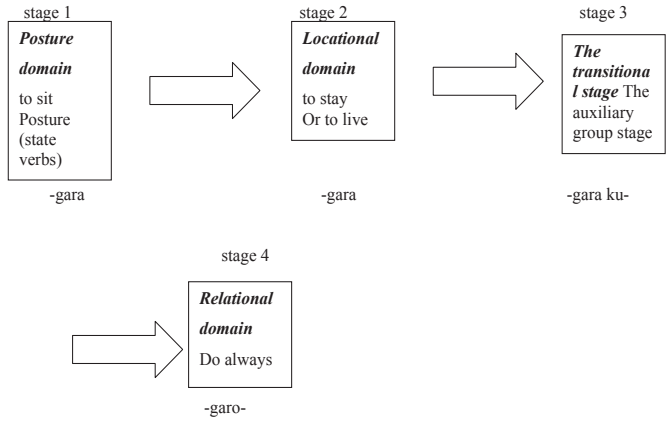
We now move on to the main focus of this study, that is, the metaphorical extension that involves the shift from a lexical verb to an auxiliary. The verb -gara, that we mentioned above, is metaphorically extended to -garo-, which is a habitual marker. Below is an example in which -garo- is used as a habitual marker that means, " always or usually or (do) habitually."

(3) Muzorewa aigarotaura achiti …
Muzorewa a-i-garo-taur-a a-chi-ti ….
1a(Muzorewa) 3SG-HAB-often-speak/talk-FV 3SG-FREQ-saying
" Muzorewa used to talk (about it), saying…."

[From the Shona Corpus]

The path of semantic evolution from the lexical source -gara, to the auxiliary -garo-, can be represented by the diagram below:

Fig 6.1



The above diagram illustrates the semantic development in this conceptual metaphor where there is a mapping from the source domain of POSTURE "sit", which is a physical domain. From the physical domain it moves to more abstract domain, LOCATION "stay." Then from the locational domain it moves on to the "auxiliary group stage." This stage will be discussed in more detail later on in section 6.3 when we look at the different stages in the continuum from the lexical forms to the grammatical forms. It then develops into an even more abstract relational[19] domain, " often or always." This involves highlighting the feature "stationariness" in "sit" and extending it to the "live at or stay at" meaning and it is further highlighted in the residual meaning of "persistence or occasionalness" of an action or event in the habitual marker "do always or do often." We are aware that some might not agree with this model which argues that that the locational meaning of -gara is derived from the postural sense. Studies on Sango[20], by Thornell (1997) support our view when she argues that:

> *….among the three broad groups of verbs, concrete, mental and grammatical verbs, concrete verbs tend to extend their meanings either to mental verbs or grammatical verbs or both. Mental verbs may further extend their meanings to grammatical functions. Extension in the opposite direction is uncommon. The diachronic development implies that in the synchronic pattern of polysemy, the concrete meaning is in general more prototypical than the mental meaning or the grammatical.*

Thornell (1997:108) also cites similar studies by Viberg (1992) who analysed a hundred verbs which were the most common in a one million word corpus of Swedish newspaper texts. Viberg (1992) comes to the same conclusion that grammatical meaning is extended from the concrete meaning. Using this model, we argue that the postural sense of -gara is more concrete than the locational sense and hence the postural sense could have been the more prototypical and then it developed the locational sense.

A similar case of semantic development obtains in Zulu where the verb -hlala means "to sit" and to "stay at" or "live at." According to Mkhatswa (1991), the verb -hlala means "to sit", "to stay" or "to remain". It then develops into an auxiliary in the same fashion as the -gara in Shona. The semantic development can easily fit into Figure 5.1, above, because it starts with -hlala "sit" in example (4a) and then it changes to -hlala "stay" in example 4b) and then it becomes -hlale in in example (4c) where it means, "always or often" or it can express persistent or occasional action. The following examples will show:

(4a) -hlala pansi
-hlal-a pansi
sit-FV CL.16-down
"sit down"

[19] Relational in this context is used by Svorou (1994:83-86) to mean concepts that do not refer to physical objects or kinetic processes. Such concepts are fall in the abstract domain where they are defined primarily with reference to their relative function in discourse.

[19] Sango is a creole language which arose in the multilingual Central African Republic which according to Thornell (1997) is genetically and sociolinguistically classified as an Ubangi language. It should noted that it is different from Sangu, a Bantu language language spoken mainly in Tanzania, which according to the Comparative Bantu Online Dictionary (CBOLD) which falls in Guthie's zone G61.

(4b) uhlala eGoli
u-hlal-a eGoli
2SG-stay-FV INF-Johannesburg
"He/she stays in Johannesburg"

(4c) uhlale ekhuluma njalo
u- hlal-e e-khulum-a njalo
3SG-do.always-FV LOC-talk-FV also
"He/she always talks".

[Examples taken from Mkhatshwa (1991:98)]

In Venda, the verb -dzula "to sit", "to live" or "to stay" grammaticalizes in the same manner as its equivalents in Shona and Zulu. The following examples show the metaphorical extension of -dzula from the physical domain in 5a), to the locational domain in 5b), and then to the relational domain in 5c):

(5a) vho dzula fhasi
vho dzul-a fha-si
3PL live-FV CL.16-down
"They are sitting"

(5b) vha dzula Tshakhuma
vha dzul-a Tshakhuma
3.PL live-FV Tshakhuma
"They live in Tshakuma"

(5c) vha dzula vha tshi vhala
vha dzula vha tshi vhala
3.PL CONT 3PL read
"They are always reading".

[Venda examples from Poulos 1990:324]

In this section we have looked at the development of lexical verbs into auxiliaries. Our description of this development so far, has been to regard it as a metaphorical process. There is considerable debate on whether to regard the movement from stage 1 to stage 2 in figure 5.1 above, as metaphor or metonymy. Some would regard it as metonymy while the movement from stage 2 to stage 3 in figure 5.1 is regarded as metaphor. The position we take in this study is the one suggested by Goatly (1997:126) which considers metonymy as a "less central variety of metaphor." This is also in line with Dirven's (1985:98) distinction between metaphor and metonymy in which she considers metaphor to be a "major associative leap" while metonymy is a "minor process." In the -gara example above, we argue that the movement from -gara "sit" to -gara "stay" is metonymy because the process does not constitute a "major leap." It is a movement from the posture domain to the locational domain, both of which fall in the physical domain. The movement from -gara to -garo- is a metaphor because it constitutes a major leap from the physical domain to the abstract domain.

We argued that this metaphorical extension process involves the abstraction and transference of concepts in concrete domains to more abstract domains. The above examples bring us back to the point we made in section 5.4 that the fundamental assumption of structural linguistics, that language is arbitrary is overstated. As Sweetser (1990:5) rightly points out, we do not dispute Ferdinard de Saussure's claim, which is at the heart of structural linguistics, that there is an essential arbitrary component in the association of words with what they mean. For example, it is arbitrary that "sit" is conveyed by -gara in Shona. In Zulu, the same notion is conveyed by -hlala and in Venda it is conveyed by -dzula. But the fact that -gara means both "to sit" and "to stay" or "to live" in all languages is by no means arbitrary. One of the most important contributions of the cognitive approach is to see the relationships in the two meanings of -gara as motivated relationships. In cognitive grammar, as pointed out by Sweetser (1990:5), multiple uses of the same sign are not regarded as arbitrary. Multiple uses of the same sign are, in most cases, a result of a well-motivated metaphorical extension from one meaning to another.

We will not pretend that the -gara "sit" "stay or live" example of metaphorical extension gives us clear understanding of the process. We will give more examples of metaphorical extension in the next section. The focus, however, will be on categorizing the source notions of the lexical verbs that grammaticalize. The aim is to come up with pathways of grammaticalization, that is to say, coming up with patterns of diachronic development which state which kinds of lexical verbs (i.e. which notions) grammaticalize into which kinds of auxiliaries.

6.2.4 Classification of lexical verbal notions that develop into auxiliaries

In 6.2.1 we gave Heine's (1993:28) list of concrete concepts from which grammatical concepts often expressed in auxiliaries are derived. We will not give the list again in this section, but we will just go ahead and attempt to use that list in our classification of the source concepts for auxiliaries in Shona, making cross-linguistic comparisons with other languages, especially Southern African Bantu languages.

6.2.4.1 LOCATION

The first notion that we will look at is Location. As pointed out already, the Location Schema is made up of verbs that indicate where one is, and it includes such verbs as "to be at" ,"to stay at" and "to live at"

The -gara "sit" , "stay or live" example, which we looked at above, in our discussion of the process of metaphorical extension, is a good example of the Location Schema. Here we go along with Heine's (1993:31) observation that historical evidence suggests that some of these schemas are derived from others. However, at least with the evidence we have in Shona, we do not agree with him when he says the Location Schema, the Motion schema and the Action Schema are more basic than the other Schema. We found out in the -gara example that the Location Schema is actually derived from the Postural Schema. In that case, therefore, the Postural Schema is more basic than the Location Schema. From the Location Schema, -gara then develops into the habitual marker-garo-.

We looked at the development of the verbs that are similar to -gara "sit" in a number of Southern Bantu languages and we argued that they also develop from a Postural Schema to a Locational Schema. From the Locational Schema, they then develop into habitual markers. So the important pattern coming out of our observations above is that Location verbs, in Shona and other Southern African Bantu languages tend to be durative verbs such as "live" or "stay", which develop into habitual markers.

6.2.4.2 MOTION

The Motion notion tends to be expressed by means of such verbs as "come", "go" and "move." The developments from lexical verbs to grammatical morphemes involving movement verbs "come" and "go" have been documented in many languages of the world. The predictable patterns in the diachronic development of futures from movement verbs in Romance have been well documented by Freischman (1982), for example. Her studies can be useful for our purposes in that we can note if there are any parallels between the patterns in Romance languages and patterns in Bantu languages. If so, this can help us in establishing universal patterns in the development of movement verbs into future auxiliaries.

Givón (1984:19) says that the process where the meaning "go" (move towards a target location) becomes the [future] marker is very common. This, according to Givón (1984:19), is essentially an analogical/metaphorical extension from 'spatial' to 'temporal' movement as in 'going to a place where one will do X' and ' moving to a time when one will do X'. He adds that a similar metaphorical extension is found in all Creole languages, Romance, Germanic, Hebrew, Arabic and others. This points to the universality of some of the diachronic processes that we are looking at.

In Shona one verb for "come" is -za. We looked at the development of the verb -za "come" into a future -zo- in Shona (cf. 5.6.1). We also pointed out that -za is no longer found in everyday speech, but found only in names of people and some proverbs. Below is an example where -zo- is used as a future marker in Shona.

(6) uzoenda kumusha
u- zo-end-a ku-musha
2SG-FUT-go-FV CL.17-the.village
"You (in near future) go to the village".

[Example taken from the Shona Corpus]
The verb -za "come" is a source of grammaticalization in a number of Southern Bantu languages. In Zulu, according Mkhatshwa (1991:97), the verb -za "come" grammaticalizes into -zo- "immediate future" and he gives the following examples:

(7a) ngiyeza
ngi-ye-za
ISG-PRES-come
"I am coming"

(7b) ngizoza ngemoto
ngi-zo-za nge-moto
ISG-FUT-come ADVERB..PRE-car
"I will come by car".

According to Louwrens (1991:51), in Nothern Sotho, the future tense marker -tla- and
-tlo- are some of the clearest examples of "deficient" verb forms which have developed from a main verb. He gives the following examples for -tla- and its variant -tlo-:

(8a) ke tla go thusa ge ke boa
ke tla go thus-a ge ke bo-a
ISG FUT 2SG help-FV if ISG return-FV
"I will help you when I return"

(8b) ba tlo goroga ka nako mang?
ba tlo gorog-a ka nako mang?
3PL be arrive-FV home
"At what time will they arrive at home?"

He goes on to say that the deficient auxiliaries -tla- and -tlo- have developed through the process of grammaticalization from the proper main verb -tla which has the lexical meaning "come", as in the following examples:

(8c) le mpotse ge ba etla
le m-pots-e ge ba e-tla
2SG 1SG-tell-SUB if 3PL COP-come
"You must tell me when they come"

(8d) nka tla ge ba ntaletsa
n-ka tla ge ba n-ta-lets-a
ISG-may-come if 3PL ISG-tell-FV
"I might come if they invite me".

Louwrens (1991:54) argues that it is the lexical meaning of the verb stem -tla that makes it possible to have it being grammaticalised into the future tense. He writes:

Due to this lexical meaning (lexical meaning -tla "come") the verb stem -tla was particularly suitable to express the grammatical meaning of futurity, which consequently led to its grammaticalization as future tense morpheme.

Louwrens (1991:54) gives the possible reconstruction of the development of the -tla into the a future tense marker. He argues that the -tla could have originally been part of a an auxiliary word group in which the -tla functioned as an auxiliary stem, which would then be followed by a complement which is in the infinitive. He gives the following example:

(8e) ba tla + go soma
ba tla go som-a
3PLcome INF work-FV
"They come to work".

According to Louwrens (1991:54), in the sentence above, the ba -tla and the go soma are two autonomous words with a clear boundary between them. As a result of the

grammaticalization process, the -tla then lost its status as an autonomous word and became a deficient auxiliary verb and functioning as a grammatical formative as in the following example:

(8f) ba tlo soma
ba tlo som-a
3PL FUT work-FV
"They shall work".

We also looked at -enda "go" in Shona (cf. 5.6.1) and we saw that it develops into future markers -ndo-/-no-. It is not necessary to reconstruct the development of -enda again in this section. We will just give examples in which the -ndo/–no- are used as future markers, -no- in a) and -ndo- in b) below:

(9a) unotora mwana kuchikoro
u- no- tor- a mw-ana ku-chi-koro
1SG -FUT.go-take-FV CL.1-child CL.15-CL.7-school
"You go (in future) and get the child from school"

(9b) endai kunyika dzese mundoparidza kuzvisikwa zvese
end-a-i ku-nyika dz-ese mu-ndo-paridz-a
go-FV-PL INF-CL.10-places CL.10-all 2PL-go.(in future)-preach-FV
"go to all places and preach….

ku-zvi-sikwa zv-ese
INF-CL.7-creatures CL.7-all
…to all creatures"

[Examples taken from the Shona Corpus]

In Zulu, according to Mkhatswa (1991:98), the verb -ya "go" grammaticalizes into -ya- "remote future" as the following examples show:

(10) -ya "go"
baya eGoli
ba-y-a e-Goli
3PL-go-FV INF-Johannesburg
" They are going to Johannesburg"

(11) -ya- "remote future"
bayakufika
ba-ya-ku-fik-a
3PL-REM.FUT-FV-INF-arrive-FV
"They will arrive"

When it comes to Motion verbs, we have looked at examples for "come" and "go" and we noted the cross-linguistic similarity in path of development drawing our examples

from Shona, Zulu, Ndebele and Nothern Sotho. The important point to note is that they tend to grammaticalize into future markers.

In addition to the "come" and "go" notions in the Motion category, there is the notion of "arrive." In Shona, the source concept -svika "arrive" grammaticalizes into -svik- "on arrival", as shown in the examples below, in a) the example of -svika and in b) the example of -sviko-:

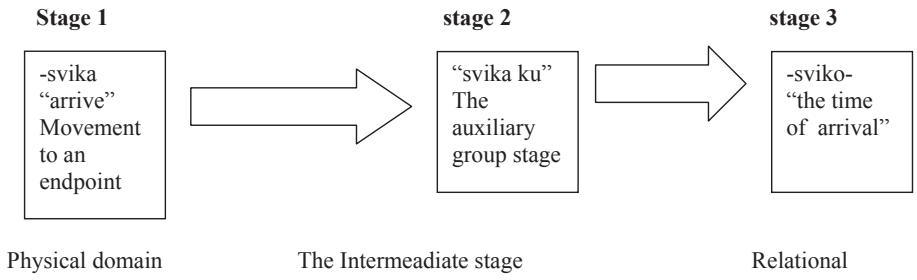
(12a) hauzivi kuti asvika nguvai.
ha-u-ziv-i ku-ti a-svik-a nguva-i
NEG-2SG-know-FV INF-that 3SG-arrive-FV l.9-time-what
"You do not know what time he/she arrived"

(12b) mukadzi uyu akasvikombundirana nomweni wake
mu-kadzi u-yu a-ka-sviko-mbund-ir-ana no-mw-eni wa-ke
Cl.1-woman this-DEM 3SG-REM.PAST-on.arrival-embrace-APPL-REC
with-CL.1-visitor POSS-her
"This woman, on arrival, embraced each other with her visitor."

[Examples taken from the Shona corpus]

In this case we have a motion verb which describes a movement from somewhere to a given point. We therefore perceive the movement of an entity with respect to some stable environment, and in this case, the stable environment is some endpoint location known to the speaker and the hearer. The most important feature of this process is the "getting there" in the physical sense at the endpoint location, that is, "the arrival." This feature is then abstracted or metaphorically transferred into a relational domain that has reference to time -sviko- "on arrival", which basically means "time of arrival." It is therefore a change from a physical domain to a relational domain.

Fig 6.2



Stage 1 shows the lexical verb before it starts on the road to auxiliariness. Stage two marks the stage where it is followed by the full infinitive. As was pointed out by Bolinger (1980:297) when he said:

> *The moment a verb is given an infinitive complement, that verb starts down the road of auxiliariness. (Cited in Heine1993:27).*

Stage 3 shows us where the verb has now developed into an auxiliary.

6.2.4.3 ACTIVITY

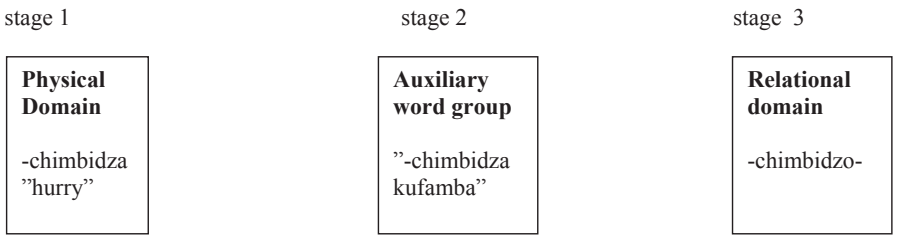
Activity verbs refer to what one does and it includes verbs like, "to do, to take, to continue, to be" etc. Although -chimbidza "hurry" would not be the best example for the Activity category, we will place it into this category. It should be pointed out that -chimbidza comes out of a derivational process in which the ideophone chimbi "hurry" is causativised as shown below:

(13a) -chimbi-idz-a
ideo -caus-FV
"cause to hurry".

When -chimbidza grammaticalizes, it involves a semantic development in which it changes from the lexical sense "hurry" into the relational sense of "habit of hurrying" as in the following example:

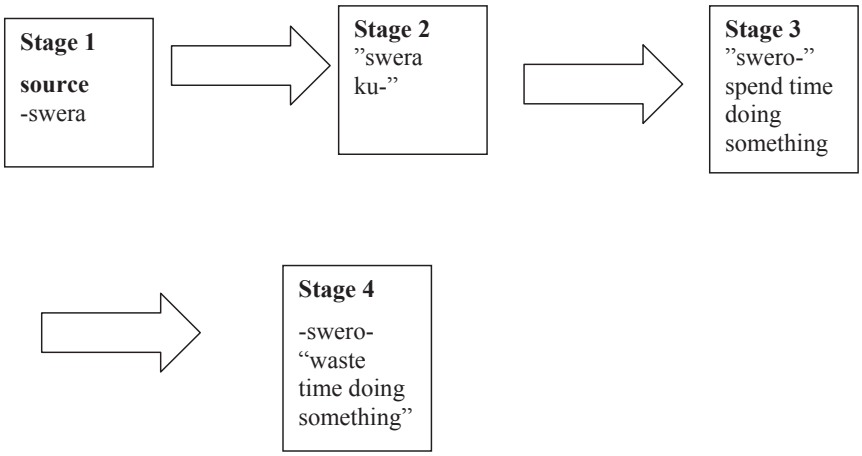
(13b) anochimbidzoshatirwa murume uyu.
a-no-chimbidz-famb-a mu-rume u-yu
He-PRES.HAB-walking quickly-PAS-IND cl.1-man 2SG-this
"This man has a habit of walking quickly"

Figure 6.3



Another verb that we will place in the Activity category is -swera "spend the day" The lexical verb -swera then grammaticalizes into -swero-, which has the idea of participating in some activity for the whole day, roughly from morning to sunset. It further grammaticalizes into the -swero-, which means "waste time." The path of semantic evolution, in our view, is represented by the diagram below:

Figure 6.4



Below are examples of auxiliaries that would fall into stages 3 and 4 of the above diagram. Example (14a) falls into stage 2, while example (14 b) falls into stage 4.

(14a) aisweroshanda pamwe navamwe
a-i-swero-shand-a pa-mwe na- va-mwe
He/she-PAST.HAB-all.day-work-FV CL.16-others with-cl.2-others
"He/she used to work with the others all day."

(14b) kuswerotambidzana mikombe neharahwa
ku-swero-tamb-idz-an-a mi-kombe ne-harahwa
INF-waste.time-pass-CAUS-REC-FV CL.10-gourd with-CL.10-elders
"Wasting time exchanging the gourds with the elders" / "Wasting time drin king beer with the elders".

[Examples taken from the Shona corpus]

A careful study of the corpus occurrences of the uses of -swero- would reveal that the majority of the senses have to do with the "wasting time". Only four or so occurrences out of a total of ninety five occurrences of -swero- have the meaning "spending the day doing something", while the rest have the meaning "wasting time".

In Venda, the verb -twa has undergone a semantic development similar to the one that
-swera has undergone in Shona, as is shown in the following examples:

(15a) ndo twa fhano
ndo tw-a fha-no
1SG spend.day-FV CL.16-here
"I have spent the whole day here"

(15b) vha twa vha tshi nthwa

vha tw-a vha tshi n-thw-a
3PL spent.day-FV 3PL PART 3SG-beat.me-FV
"They contintially beat me."

[Venda examples taken from Poulos 1990:324[21]]

Also falling in the Activity category is the verb -fuma "rise up early in the morning or do something early in the day". This verb grammaticalizes to -fumo- "do something at the time rising". The main difference between the -fuma, the lexical verb and the grammaticalized form -fumo- is on the focus. The former focuses on the activity of rising up early in the morning or early in the day while the latter focuses on the "timing" more than the activity, that is, the activity is done as soon as one rises. So -fumo- means "at the time of rising you do X"

(16) Vimbai akademba kuti afumopfeka …(sentence continued below.)
Vimbai a- ka-demb-a ku-ti a-fumo-pfek-a
CL.1a 3SG-PAST-regret-FV INF-that 3SG-at.time.of.rising.up-put.on-FV
"Vimbai regretted why she had (at the time or rising up) put on..

dhirezi kwaro
dhirezi kwaro
CL.5-dress ADV- nice
...a nice dress"

[Example is taken from the Shona Corpus]

Another Activity verb is -wanza "exceed or increase." Below are some examples which show some of the stages which -wanza undergoes in the development from lexical verb to auxiliary.

(17a) mazuva ano munowanza huni
ma-zuva a-no mu-no-wanz-a huni
CL.6-days -these 2PL-hab-increase-FV CL10-firewood
"These days you have to put more firewood"

(17b) murume anowanza kutanga kufa
mu-rume a-no-wanz-a ku-tang-a ku-f-a
CL.1-man 3SG –hab-normaly-FV INF-start-FV INF-die-FV
"the man is the one who usually dies first"

(17c) Erina ndiye musikana anowanzofamba naYuna
Erina ndi-ye mu-sikana a-no-wanzo-famb-a na-Yuna
Erina is-the-one CL.1-girl 3SG-hab-normaly-walk-FVwith-Yuna
"Erina is the girl who normally walks with Yuna."

Examples taken from the Shona corpus]

[21] Examples are from Paulos (1990:324), but morpheme by morpheme analysis is mine.

In the above examples, (17a) -wanza is used as a full lexical verb in which the meaning refers to the act of increasing or putting more firewood. It, therefore, has a concrete meaning. In (17b), in terms of shape, the -wanza is still the same as it is in (17a) but the meaning has developed more towards the Relational than the concrete. This is if we take -wanza to be part of an auxiliary word group[22] -wanza kutanga "normally start." As a single semantic unit, this auxiliary word group means "normally." We have, therefore, a context in which -wanza kutanga has not yet undergone the conventionalization process, that is, the integration of the syntactic forms into morphological paradigms has not yet started, but in terms meaning, it has already moved from the concrete to the relational meaning. In other words, the "semantic fading", or the "semantic bleaching" has already started while the morphosyntactic changes have not yet started. The meaning of -wanza in (17b) is much closer to the meaning in (17c).

A careful analysis of the corpus reveals that both forms, that is, the one we find in example (17b) and the one we find in example (17c) continue to be used by the speakers. We have a situation which was described by Dahl (2000:18) where two or more patterns are competing for the same "niche." In most cases, with time, the older form gradually disappears and makes way for the newer form.

Another verb that we could put into the Motion notion is -vamba "begin" or "start" and it grammaticalizes to -mbo- "previously or at first." Below is an example from the Shona corpus showing the meaning of the auxiliary -mbo-.

(18) Murume uyu aimboremekedzwa nenyembe yehuSajeni
Mu-rume u-yu a-i-mbo-remek-edz-w-a ye-huSajeni
CL.1-man 2SG-this 2SG-HAB-previously-respected-CAUS-PAS-FV
POSS.PRE-CL.14-sergent
"This man used to be respected as a police sergeant"

[Example taken from the Shona corpus]

6.2.4.4 DESIRE

The category desire has verbs that refer to what one wants and it includes verbs like "to want, to wish". In Shona the verb -da "to want", "to love" or "to like" falls in this category. This verb grammaticalizes into aspect marker, which means "even if" or "eagerly", as shown in the following example:

(19) takadogarira asi haana kuuya
ta-ka-do-gar-ir-a asi ha-a-na ku-uy-a
1PL-PAST-eagerly-wait.APPL-FV but NEG-3SG-be.with INF come-FV
"We eagerly waited but he/she did not come".

6.2.4.5 POSTURE

We have already looked at one postural verb above, that is, the verb -gara "to sit" and we have argued that it grammaticalizes into a locational verb -gara "to stay." It then grammaticalises into a habitual marker as we have already discussed earlier on in this

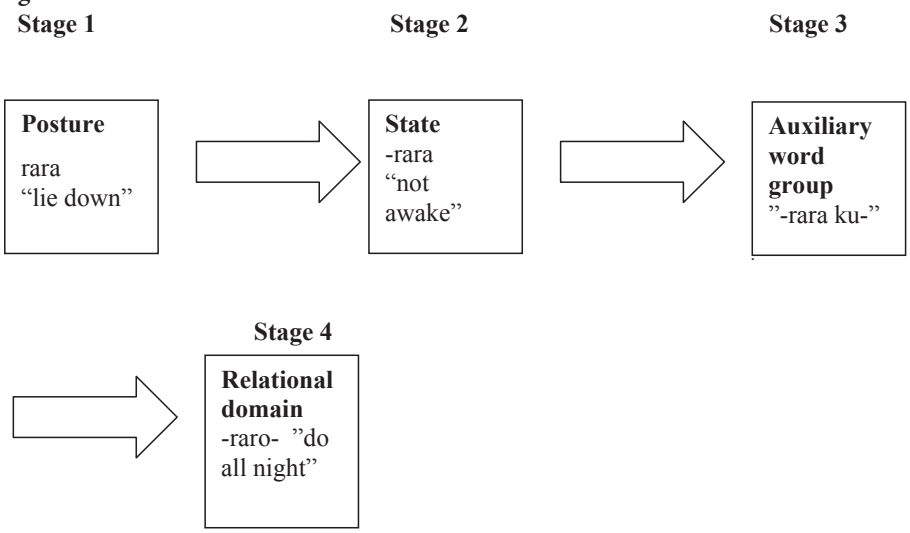
[22] We take the concept of an "auxiliary word group" as it is described by Louwrens (1989:50) and we discussed it in section 4.6.2.

section. Another verb that falls into this category is -rara "to lie down" We will also argue that the "sleep" sense of -rara must have developed from the postural sense of -rara "lie down." We are claiming that the basic form -rara means to "lie down." Because most people would be in that posture of lying down when they are "not awake", that is, when they "sleep", the "lie down" meaning is metaphorically extended to mean "sleep". This path of semantic evolution is similar to the one that has been diagrammatically represented in figure 6.1. The only difference with figure 6.1 is that the -rara verb changes from being a Posture verb to a Stative verb and then to Continous aspect marker in the form of -raro- "do all night" as in the following example.

(20) vakararotamba usiku hwegoredzva
va-ka-raro-tamb-a u-siku hwe-goredzva
2PL-PAST-all.night-FV CL.14-night POSS.PRE-CL.5-new.year
"They danced all night on new year's eve".

The evolutional semantic path from the lexical verb -rara "lie down" to the Continuous marker -raro- "do all night" can be represented by the diagram below:

Figure 6.5



Like we noted in our discussion of the -gara example, the semantic change from stage 1 to stage 2 is a case of metonymy. This is actually a better example of metonymy because when one is in the -rara "lie down" position, we normally associate that position with the state of being asleep.This fits very well with the definition of metonymy which sees it as "the association of one word with another" (Traugott and Dasher 2002:57). We therefore have a case of a word -rara "lie down" which changes in meaning, and it includes an additional sense "sleep".

What we have observed with -rara "lie down" in Shona also occurs in Herero, Swahili and Southern Sotho. Actually the word for "lie down" is a cognate of -rara because it is -lala in these languages. According to Meinhof (1932:207), -lala is also polysemous and has meanings "lie down" and "sleep" in Swahili, Herero and Southern Sotho. Below are Southern Sotho examples in which -lala means "all night":

(21) ha-kea-ka ka-lal-a ke-robetse
ha-kea-ka ka-lal-a ke-robetse
NEG- 1SG INF-sleep-FV 1SG-the.whole.night
"I had a sleepness night: I did not sleep through the night".

[Example taken from Doke and Mofokeng (1957:293)]

From the above example it can be seen that the same path of semantic evolution that -rara "lie down" takes in Shona is also found in Southern Sotho.

We have seen that the source notions of verbs that grammaticalize into auxiliaries are not equally basic in the sense that some are historically derived from others. For instance, the locational verb can be derived from the postural verb as we saw with -gara. We argued that the locational sense is derived from the postural sense. The verb -rara, for example, would fall in the same category where is locational sense is derived from the postural sense.

The important point coming out of this cross-linguistic comparison of the grammaticalization of verbs is the cross-linguistic consistency in the meanings of the grammatical expression of different languages. We have here regular semantic changes. This is contrary to the views expressed by such scholars as Ullman (1957) on generalizations or explanations in semantic change. Ulman wrote that:

> *the existence of … regularities is most cases extremely hard to demonstrate, and their very possibility is still doubted by many scholars (cited in McMahon 1994:175).*

Ullman's view, according to McMahon (1994:175), that meaning is unformalisable was based on the belief that meaning changes quickly and easily compared to other areas of grammar, such that it is not possible to come up with generalizations in semantic change. McMahon adds that this school of thought subscribes to the view that "every word has its history." The proponents of this school argue that the meaning of a given word or phrase can only be accounted for if we know the cultural context of the speech community from which that word or phrase is taken from. We cannot, according to this view, formalize meaning based on cultural context because cultural context is an extremely specific factor that does not generalize to other changes.

While we accept that cultural context is an important factor in accounting for meaning changes, we subscribe to Jerpersen's (1946) claim that "there are universal laws of thought which are reflected in the laws of meaning…even if the Science of Meaning … has not yet made much advance towards discovering them."

What Jerpersen (1946) said about half a century ago is still largely true, although there have been some significant research that has suggested that "certain types of semantic change can be regarded as regular and recurrent enough to be predictable" (McMahon:175).

This cross-linguistic consistency in the meanings of verbs that grammaticalize led Heine et al.(1994:33) to the conclusion that the source concepts that enter into grammaticalization are basic to human experience and hence we find that they "tend to be conceived of in a similar way across linguistic and ethnic boundaries." Svorou (1994:63) came to a similar conclusion when he argued that there is substantial evidence to support the view, that not only grammatical forms emerge from lexical forms,

but also "grammatical meaning evolves from lexical meaning in particular ways along universally determined paths." Svorou (1994:63) gives the example of the consistency in the kinds of verbs that evolve into futures, like the ones we discussed above, to show that the particular semantic content of words chosen for grammaticalization, as well as the progress of their development is not a language specific phenomenon, but rather it is governed by more universal principles. This points to the assumption that we alluded to earlier on, that grammaticalization is initiated by forces that are located outside language structure, and in this particular case, cognitive forces are evidently responsible for some of the changes that occur in language.

We will now take a look at some of the semantic developments from lexical verbs to grammatical concepts that we described above, some of which are given in the tables below, that is Tables 6.1 to 6.3.

Table 6.1

Language	Source concept 1	Source concept 2	Auxiliary
Shona	-gar- "sit"	-gar- "stay or live"	-garo- "do always"
Ndebele	-hlal- "sit"	-hlal- "stay or live"	-hlale "do always"
Zulu	-hlal- "sit"	-hlal- "stay or live"	-hlale "do always"
Venda	-dzul- "sit"	-dzul- "stay or live"	dzula "do always"
Shona	-rar- "lie down"	-rar- "sleep"	-raro- "spend the night doing"
Venda	-lal- "lie down"	-lal- "sleep"	-lal- "spend the night doing"
Swahili	-lal- "lie down"	-lal- "sleep"	-lal- "spend the night"
Herero	-lal- "lie down"	-lal- "sleep"	-lal- "spend the night"
Southern Sotho	-lal- "lie down"	-lal- "sleep"	-lal- "spend the night"

Table 6.2

Language	Source	Auxiliary
Shona	-za "come"	-zo- " in future"
Ndebele	-za "come"	-zo- " in future"
Zulu	-za "come"	-zo- " in future"
Northern Sotho	-tla "come"	-tla " in future"
Northern Sotho	-tla "come"	-tlo " in future"
Zulu	-ya "go"	-ya " future"
Shona	-enda "go"	-ndo-/ -no- " future"

Table 6.3

Language	Lexical source	Auxiliary
Shona	-svika "arrive"	-sviko- "do first" "do first on arrival"
Zulu	-fika "arrive"	-fike "do first or do first on arrival"
Shona	-swera "spend the day"	-swero- "continually doing" or "spend the day doing"
Venda	"-twa" spend the day"	-twa "spend the day doing" or "continually doing"
Shona	-it- "do or make"	-it- "do the right thing"
Venda	-it- "do or make"	-it- "do the right thing"

The above tables (6.1-6.3) show some of the examples that we have looked at. They show us the cross-linguistic similarity in the paths of grammaticalization from lexical verbs to auxiliaries. For some of the verbs, one might argue that the similarity could be a result of the fact that some of them are cognates, hence the similarity in their development which has nothing to do with the meaning of the source verb. For example, -rara "sleep" in Shona and -lala "sleep" in Venda, Swahili and Herero are cognates. The same argument could be used for -gara "sit" in Shona and -hlala "sit" in Ndebele and Zulu. It is easy to see that the Shona -gara is obviously related to the Proto Bantu -ikala[23] "sit" and possibly -dzula in Venda could be related to the Proto Bantu -ikala.

We cannot argue that -ya "go" in Zulu and -enda "go" in Shona are cognates. When one looks at the example of the verb ac "come" in So, a Kuliak language spoken in north-eastern Uganda, which develops into a future tense ga we cannot argue that it is because it is related (in the sense of being cognates) to the other source verbs for "come" that we saw above, the -za "come" in Shona and the -tla "come" in Nothern Sotho in table 6.2.

This seems to support the view that the verbs that give rise to similar grammatical concepts tend to share properties of meaning. This then leads to the conclusion that grammaticalization is iniated by forces that are outside language structure. For us to clearly understand the forces that are responsible for initiating grammaticalization in Shona we need to, first of all, look at the stages of development from the lexical verb to the grammatical concepts which we will refer to as the verb-to-TAM continuum.

6.3 The Verb-to-TAM continuum in Shona

The development of grammatical categories out of lexical material is a gradual process which means that in a particular language at any particular time we will find grammatical morphemes in various "stages" of development. This development is, in some works, referred to as the verb-to-affix continuum. In Shona, when the development along the verb-to-affix contuum involves verbs as the lexical sources, the resultant affixes mostly those that fall in the TAM category, hence the phrase "verb-to-TAM" that we see this section. TAM or TMA is used here to refer to semantic distinctions of the notions tense, aspect and mood which in Shona and most Southern Bantu languages are expressed through verbal inflection. When we say that in Shona these notions are expressed through verbal inflection we mean that they are grammaticalized i.e. they are

[23] From Meinhof (1932)

marked by bound morphemes which constitute an intergral part of the verb. In some languges they are lexicalised i.e. they are marked by independent/free morphemes.[24]

As Heine (1993:48) points out, the stages along the verb-to-TAM continuum represent certain focal points along a continuum and they should not be considered as distinct entities. So many stages have been suggested in different works, to characterize some of the important points along the verb-to-TAM continuum. Heine (1993:58), for example, suggests seven stages. Below is a continuum that we think is most suitable in the description of the stages in the verb-to-TAM continuum in Shona. Some of the examples given below have already been presented in section 5.6.1.

Table 6.4

Independent lexical form	Auxiliary group	Deficient verb	Affixes/particles
(22a.)		-bango- "do without reason"	
(b) -bvira "start from"	-bvira ku-	-bviro- "make an effort to do something for some time"	
(c)-bvirira "start all the the way from"	-bvirira ku-	-bviriro- "make an effort to do something for a longer time"	
(d) -chimbidza "hurry"	-chimbidza ku-	-chimbidzo- "habit of hurrying"	
(e) -da "to love or like"	-da ku-		do- "do eagerly" or "even if"
(f) -dzidza "learn"	-dzidza ku-	-dzidzo- "habbit of.."	
(g) -enda "go"	-enda ku-	-ndo- "go and"	-no- "habitual"
(h) -fana "beforehand"	-fana ku-	-fano- "in the meantime"	
(i)-fuma "get up early in the morning"	-fuma ku-	-fumo- "get up early and …"	
(j) -gona "be able to"	-gona ku-		- go- "able to …as a result
(k) -gara "sit, stay or live"	-gara ku-	-garo- "do often"	
(l) -hwirira "return"	-hwirira ku-	-hwiro-, -hwiriro- "do again"	
(m) -nga "be, be able"	-nga ku-	-ngo- "only"	
(n) -natsa "do well"	-natsa ku-	-natso- "do carefully"	
(o)		-nguno- "do meanwhile"	
(p) -nyatsa "do well"	-nyatsa ku-	-nyasto- "do carefully"	
(q) -nyanya "exceed"	-nyanya ku-	-nyanyo- "normally"	
(r)-rara "sleep or lie down"	-rara ku-	-raro- "do all night"	
(s) -ita "do"	-ita ku-		-to- "do right away or do perforce"
(t) -sana "beforehand"	-sana ku-	-sano- "do meanwhile"	
(u) -svika "arrive"	-svika ku-	-sviko- "on arrival"	
(v) -swera "spend the day"	-swera ku-	-swero- "do all day"	
(w) -wanza "increase"	-wanza ku-	-wanzo- "habit of"	
(x) -vamba "start"	-vamba ku-	-mbo- "begin by" or "do first"	
(y) -za "come"	-za ku-		-zo- "then

[24] The distinction between lexicalized and grammaticalized morphemes with reference to tense, aspect and mood is taken from Mutaka (2000:183)

The first group of auxiliaries that we need to note from the above table are -bango- "do without reason" and -nguno- "do meanwhile". These two cannot be related to any existing lexical source and Mkhatshwa (1991:103) calls them "orphans" because any etymological reconstruction to try and link them to a to some lexical source can only be speculative.

Stage I
At this stage the we have verbs which have full lexical meaning. The verbs in the first column of the above table would fall in that category.

Stage 2
This stage, in many treatments of this continuum, is an often ignored. This is the one that we discussed in section 5.6.4 and we referred to it as the "auxiliary word group". The verb in this stage will still have the full phonological form as the one in stage 1, but in terms of meaning it has teamed up with other words in the auxiliary word group. As was pointed out by Lowrens (1991:50), the lexical verb and the other words in the auxiliary group became a single semantic unit. The word group ends up with a meaning that is midway between the concrete meaning of the lexical verb in stage I and the more abstract meaning in stage 3.

Stage 3
This is the stage that is made up of the "deficient verbs" These are regarded as defective verbs because of what Heine (1993:61) calls their decategorialized status. He says that they cannot undergo morphological processes that other verbs can undergo. Some of the morphological processes include the ability to:

a) to be nominalised

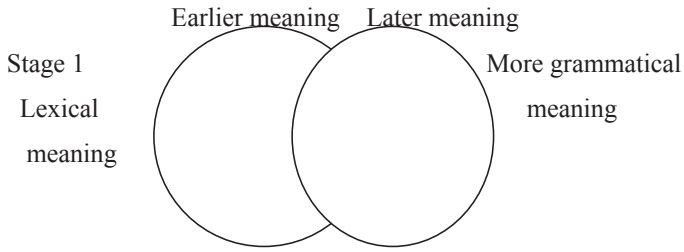
b) to be turned into imperatives

c) to be turned into passives.

Stage 4
For the purposes of this study, we lumped a number of stages into one. This is because these stages, as focal points, are not as salient as the other earlier stages in this continuum and ,as can be seen from table 6.4, there are very few examples that fall in this category. Because of that, our analysis, tends to focus more on the earlier stages of the grammatization process, than the more grammatical end of the continuum. The is expected, given the fact that the language that we are focusing on, does not have a long history of writing, such that it more difficult to reconstruct the development of stages on the grammatical end of the chain.

The development from a lexical meaning to more grammatical meanings can be better explained using the overlap model shown in the diagram below:

Figure 6.6



As can be seen in figure 6.6, in the transition from one concept to another, there is "an intermediate stage of overlapping where the earlier and the latter concepts coexist side by side, before the former is ousted." (Coates 1983 cited in Heine et al 1991:111.) According to Heine et al (1991:111), this intermediate stage of overlapping, is a stage of ambiguity and it can be understood to refer either to its lexical (less grammatical) sense or to its more grammaticalized sense. Taking some of the examples that we gave in table 6.4, we can show how they illustrate the overlap model in figure 6.6 above.

We will compare the frequencies of occurrence, in the Shona corpus, of some stages for a few of these examples:

Table 6.5

	Stage 2		Stage 3	
Verb	Stage of development (form)	Number of occurrences of that form	Stage of development (form)	Number of occurrences of that form
-nyatsa	-nyatsa ku-	84	-nyatso-	1000+
-nyanya	-nyanya ku-	812	-nyanyo-	358
-rara	-rara ku-	30	-raro-	257
-svika	-svika ku-	6	-sviko-	1000+
-swera	-swera ku-	3	-swero-	95
-wanza	-wanza ku-	130	-wanzo-	435

In the above table, we show the frequencies of occurrence of some stages in the grammaticalization process of some selected verbs in Shona. We selected these from those shown in Table 6.4 above.

We chose these few examples because of a number of reasons. Firstly some of the verbs, that we left out are so frequent that it is not easy to see the differences in uses between the stages. Take for instance, example (22s) from Table 6.4, which is -ita "do" as the source verb which may develop into -to- "do perforce." As a graphological form "to" occurs in many forms, some of which are not even verbal. It occurs in many nouns, such as, chitoro "store", matondo "forests", matombo "stones", etc. It also occurs in many verbs in which it has nothing to do with the "do perforce" sense, for example, in verbs like vatora "they have taken" or kukotonoka "to come in large numbers". It is difficult, therefore to find out the frequency of occurrence for such a

stage because it is too frequent, with a lot of the occurrences having nothing to do with our target auxiliary meaning.

Secondly, some of those that we left out occur so few times, that it is difficult to make any meaningful comparison of the frequencies of the stages of these kinds of verbs. Take for example, the verb -hwirira "to do again," which occurs only twice in the corpus. The second stage "-hwirira ku-" does not even occur in the corpus while the third stage

-hwiriro- also does not occur in the corpus. Therefore, we cannot use such a verb in comparing the frequencies of its developmental stages. This goes back to the point that we made in section 3.7 when we looked at some of the limitations of the corpus-driven approach.

Thirdly, we felt that the few examples that are given above are adequate to illustrate the points that we are making concerning the development of lexical items into grammatical forms.

A look at the frequencies of some the stages in the development of -nyanya "exceed" shows that it is still at the "budding stage" in the process of grammaticalization relative to the others listed in the same table. This is because the -nyanya ku- "exceed" form, which is stage 2 of the continuum, is still more frequent, with over eight hundred occurrences, as compared to the more grammaticalized form of -nyanyo- "normally" or "habit of" sense, which has less than four hundred occurrences. The earlier stage which is more concrete is much more frequent than the newer and more grammaticalized stage.

The example in which -svika ku- "arrive" has only six occurrences while -sviko- "on arrival" has more than a thousand occurrences shows that this example is relatively more grammaticalized than the most of the other examples in table 6.5. Another example which falls in the group of the relatively more grammaticalized forms is -swera "spent the day" because it has only three occurrences in the -svika ku- stage while in -swero- "waste time" stage it has ninety-five occurrences. In the development of -svika "arrive" along the verb-to-affix continuum, the "auxiliary group stage", that is, the "-svika ku- " stage and the "deficient" verb stage have passed the intermediate stage. In Dahl's (2000:18)terms, they have passed a stage where they compete for the same niche because the earlier meaning is about to disappear. In some cases, such a development continues until the lexical source is considerably obscured. We saw this kind of development with the -za "come" in Shona. It developed until it was no longer found in everyday speech and it only remained in a few names and in proverbs. In some cases like -bango- "do without reason" and -nguno- "do meanwhile" in examples (22a) and (22o) respectively (from Table 6.4 above), we cannot trace the etymological sources of the these auxiliaries.

We think that in the case in which the -nyanya ku- has more occurrences than the -nyanyo- we have the situation which we described above, where the earlier form and the latter form exist side by side. The earlier form, which is more concrete, is still more dominant than the more grammaticalized form. In the case of -svika ku- and -sviko-, however, the more grammaticalized form is more frequent than the less grammaticalized form.

The pattern shown in table 6.5 is consistent with the trends observed in the universal paths of grammaticalization. As the form becomes more and more gram-

maticalized it becomes more frequent. This is because its selectional restrictions are more reduced as it increases in generality or loses specificity and this leads to wider applicability of use.

In semantic terms, -nyanya ku- "exceed" , is more concrete and more specific than the next stage -nyanyo- which has the more abstract meaning of, "usually" or "habit of."

In phonological terms, as there is reduction from -nyanya ku- to -nyanyo-, where we have the dropping of the /k/ and vowel coalescence resulting in the more grammaticalized form -nyanyo-. The reduction that takes place at the semantic and at the phonological level that accompanies the loss of lexical status results in the -nyanyo- being more dependent on the lexical or grammatical morphemes to which it attached.

6.4 The motivation for grammaticalization

Having described the development of lexical verbs into grammatical concepts we need to look at the motivation for such changes. In order to discover patterns of what motivates these developments, according to Svorou (1994:111), we need to look at the semantics of the source verbs in comparison to the resulting grammatical concepts. We will now attempt in this section to show why we think that the cognitive approach discussed in the theoretical framework is the best when it comes to explaining the motivation for the changes from the source domains of grammaticalization to the target domains.

The major motivation revolves round what what Lakoff and Johnson (1980) refer to as the basic human strategy of dealing with our environment, that is, conceiving of and expressing experiences that are less easily accessible or more difficult to understand or describe in terms of more accessible experiences. The strategy, they argue, entails expressing complex content by means of less complex content that are more basic, and, in this process abstract concepts are described by means of concrete concepts.

As was observed by Heine et al.(1991b:152), most of the source concepts reveal the anthropocentricism in language where the basic human strategy is to begin describing the world in terms of the human body and its everyday experiences. Source concepts tend to refer to very elementary human experiences that are derived from the physical state, the happenings of the world around man, as well as the features of the immediate environment.

We have argued earlier on, in this chapter, that this involves metaphorical extension in which "more abstract" concepts are explained by "more concrete" concepts across conceptual domains. In the metaphorical extension there is a movement from one domain to another and the movement is, according to Heine et al.(1991b:157), along a chain of domains arranged lineally in the following way:

Figure 6.6

PERSON (who?) >OBJECT (what?) > PROCESS (what?) > SPACE (where?) > TIME (when?) > QUALITY (how?)

Grammaticalization, therefore, can be looked at as problem-solving process which employs metaphorical extension involving a movement from one conceptual domain to

another. It is a process that involves a movement from one domain to another. This process is unidirectional in the sense that, in figure 6.7 above, a domain on the left explains any of the domains on its right and not the other way round. We will give some examples, starting with those which do not necessarily have verbs as their source concepts so as to show that this metaphorical extension is not confined to verbs but also to nouns.

(23) garo remugomo
garo re-mu-gomo
CL.5-buttock POSS.PREF-CL.3-tin
"Buttock of the container" i.e.
"Bottom of the container".

In this case we have a part of a human body, whichever way we classify it, under our categories in figure 6.7, whether we put it it under PERSON or OBJECT. This part of a person is a concrete concept which is being used to explain a more abstract concept, part of a container, which is SPACE. It fits perfectly with our explanation of movement from one domain to another in as illustrated in figure 6.7.

(24) ari mushure menguva
a-ri mu-shure me-nguva
He/she-to.be CL.18-behind POSS.PREF-CL.9-time
"He/she is behind time" i.e."he/she is late" OR
"He/she is not abreast with current events"

In the above metaphor, we have a spatial concept that is used to explain TIME. It is, therefore, a conceptual transfer from physical content SPACE to a temporal content, TIME. The same metaphor in example (24) above, can mean "He/she is not abreast with currents events." In this case, we have a movement from the physical content SPACE and then it is extended metaphorically to a temporal concept TIME, and then finally extended to explain QUALITY where it refers to someone who is behind mentally.

We will now look at the Shona lexical verb sources of grammaticalization that we discussed in this study and show the metaphorical movement from one domain to another using our chain of conceptual metaphors that is shown in figure6.7.

In Table 6.6 below, we will give the source verb in column 1, the deficient verb form in column 2 and and then we will characterize the metaphoric transfer involved in column 3.

Table 6.6

Independent lexical form	Deficient verb	Nature of Metaphoric transfer: Which domain to what domain?
(25a).	-bango- "do without reason"	In the absence of the source verb we cannot tell the conceptual transfer.
(b) -bvira "start from"	-bviro- "make an effort to do something for some time"	SPACE to TIME start from point one to some to point in space > start from given time to a given time
(c) -bvirira "start all the way from"	-bviriro- "make an effort to do something for a longer time"	SPACE to TIME start from point one to some to point in space > start from given time to a given time (taking longe than in 1)
(d) -chimbidza "hurry"	-chimbidzo- "habit of hurrying"	PROCESS > TIME> QUALITY Hurrying (process), doing something quickly (time) and then habit of hurrying, that is, how? (Quality)
(e) -da "to love or like"	do- "do eagerly" or "even if"	PROCESS (desire) >TIME > QUALITY
(f) -dzidza "learn"	-dzidzo- "habit of.."	PROCESS >TIME > QUALITY
(g) -enda "go"	-ndo- "go and" -no- "habitual"	PROCESS (motion) > TIME (future)
(h) -fana "beforehand"	-fano- "in the meantime"	PROCESS > TIME
(i)-fuma "get up early in the morning"	-fumo- "get up early and …"	PROCESS > TIME
(k) -gona "able"	- go- "able to …as a result	PROCESS > TIME
(l) -gara "sit, stay or live"	-garo- "do often"	PROCESS (state) > TIME
(m) -hwirira "return"	-hwiro-, -hwiriro- "do again"	PROCESS > TIME-
(n) -nga "be, be able"	-ngo- "only"	PROCESS (state) > TIME
(o) -natsa "do well"	-natso- "do carefully"	PROCESS >TIME >QUALITY
(p)	-nguno- "do meanwhile"	TIME
(q) -nyatsa "do well"	-nyasto- "do carefully"	PROCESS > TIME > QUALITY
(u) -nyanya "exceed"	-nyanyo- "normally"	PROCESS > TIME >QUALITY
(r) -rara "sleep or lie down"	-raro- "do all night"	PROCESS (state) > TIME
(s) -ita "do"	-to- "do perforce" -to- "do right away"	PROCESS > TIME > QUALITY
(t) -sana "beforehand"	-sano- "do meanwhile"	PROCESS > TIME
(u) -svika "arrive"	-sviko- "on arrival"	PROCESS (motion) > TIME
(v)-swera "spend the day"	-swero- "do all day"	PROCESS > TIME >QUALITY
w) -wanza "increase"	-wanzo- "habit of"	PROCESS > TIME > QUALITY
x) -vamba "start"	-mbo- "begin by" or "do first"	PROCESS > TIME
y) -za "come"	-zo- "then-	PROCESS (motion) TIME (future)

One interesting observation about the conceptual transfer involved, in almost all the the examples in Table 6.6, is that they all pass through the temporal domain (TIME). A few of them develop further from the temporal (TIME) to the QUALITY domain. For some of them, we do not need to explain how the temporal domain (TIME) comes in, since we have already done so when we looked at metaphorical extension in section 6.3. and for some of them the brief notes in the third column will be adequate to show the conceptual transfer. There are some conceptual transfers that would need more explanation.

One might ask how the temporal domain comes in when one looks at example (25f), for instance, in table 6.6. This can be explained by the following sense of -dzidzo- from the corpus.

kurwa nembwa chirega unobatwa . . Kudzidzoroya kousizivoroya anobatwa . Mururami akatev

(26) kudzidzoroya kousizivoroya anobatwa
ku-dzidzo-roy-a ko-u-si-zivo-roy-a a-no-bat-w-a
INF-start.to.learn-bewitch-FV POSS-3SG-NEG-know-bewitch-FV he/she-HAB-hold-PASS-FV
"To learn bewitching for one who is not used to it, he/she will be caught".

The sense of -dzidzo- which comes out in this example is one which refers to the point in time when one is just beginning to learn how to bewitch. The metaphorical extension therefore moves from a process of learning something, in the lexical verb -dzidza, to the temporal domain as in the example above, and then to the quality domain where it means "habit of".

Example (25q) is an instance where the temporal domain might not be very clear. The process domain is found in the lexical meaning of -nyatsa "do well". There is a sense in which -nyatso- is used to refer to a long time as in the example below:

(27) nhasi ndiri kuda kunyatsorara
nhasi ndi-ri ku-d- a ku-nyatso-rar-a
1a-todayISG-to.be INF-love-FV INF-for.a.long.time-sleep-FV
"Today I want to sleep for a long time"

This is a sense which does not come out clearly in the corpus but quite a number of informants pointed out that they use -nyatso- in this sense. This sense has the idea of intensity in terms of time. This use of -nyatso- in this sense makes it fall in the temporal domain. It then moves to the QUALITY domain when it is used in the sense, which is dominant, in the corpus where it refers to manner of doing something, doing something carefully, as in the examples from the corpus shown below:

satya aids vakangofanana chero nemusoja	chonyatsoziva kuti kuusoja uku kukobata pfuti muchirwa
satya aids vakangofanana chero nemusoja	chonyatsoziva kuti kuusoja uku kukobata pfuti muchirwa
kutoshaiwa hangu kutindiangite sie kuti	ndinyatsobuda pachena kuti ndingite sei kutizvizvineng
kusingamunetse. Nyaya dzevarume ndidzo	dzaainyatsonzwisisa. Kwaari , varume vakange vakangofanana
ndichida kutsinhira kuti ndari pano apa	dzakanyatsokwenywa . hosho dzihwacharika dzei paru
ndichida kutsinhira kuti ndari pano apa	dzakanyatsokwenywa . hozsho dzihwacharika dzei paru
ridza kugwinya nokusimba . Mvere dzadzo	dzakanyatsofararira nomoviri.Nhiyo dzisina utano dzinoonekwa
da kuinzana namashuku , dzimwe dzinen	dzakanyatsogara zvakanaka , kana miti yacho ine mihwa vu
chaiwo vanosaruzivo imomo nembwa dza	dzakanyatsokwana mushonga , wazhinji awa manje mun otev
ambwe-tambwe naye sesadza . Hope	dzakazombonyatsouya herevozve nairo zita

The important point coming out of these observations is that, the metaphorical extension of lexical verbs along the verb-to-TAM continuum largely involves conceptual transfer from basic human processes and states to more relational concepts. This, as we noted earlier, is a problem-solving exercise that is aimed at explaining abstract concepts using basic concrete concepts. The metaphorical transfer involves moving from one domain to another in a unidirectional process in which all of them have to go through the temporal (TIME) domain.

The discussion so far in section 6.3 and section 6.4 has been on deficient verbs. Before we move on to the other type of auxiliary we need to point out that the deficient verbs discussed above are only few examples. It is not an exhaustive list of all the deficient verbs that one can find in Shona. We selected a few. We mentioned in the methodology chapter that we avoided those auxiliaries that are mostly used in one or two dialects. Below are a few of those auxiliaries that are confined to specific dialects:

Karanga dialect
- -ho- "in time"
- -hwimwi "be done in what way"
- -hwinwi "be done in what way"

Manyika dialect
- -soo- "do often"

Ndau dialect
- -naso- "do carefully"
- -nya- "even if" cp -do-
- -ndo- "only" or "just" e.g. ndakandomutarisa cp -ngo- (Zezuru)

Korekore dialect
- -nyacho- "do carefully"
- -mho- "do first,

There are other deficient verbs which we found in Hannan (1984) which were rejected by most respondents and therefore we did not include them in our sample. These include the following:

-bishiko-	"diligently"
-bongo-	"even if"
-chimbiro-	"hurry"

Although we did not manage to discuss the whole set of deficient verbs in Shona, our sample is representative enough to enable us to analyse any deficient verb in Shona.

6.5 Source propositions

We mentioned in section 6.2 that we have two types of sources of grammaticalization. We have already looked at sources that are made up of single lexical items above. The following are a few of the examples single lexical items:

-gara	"sit" ,"stay" or "live"	in Shona
-rara	"lie down" or "sleep"	in Shona
-dzula	"sit" "stay" or "live"	in Venda.

We have already noted that in addition to these single lexical concepts, there are some that are more complex syntactic patterns composed of more than one linguistic item. We referred to them as propositions in the form of event Schemas. In this case, the entire construction becomes the source of grammaticalization, and not just the lexical meaning of any one of the constituents of the construction.

In Shona, the set of auxiliaries which we referred to as "defective verbs" (cf 2.5), would fall in the category of such source propositions or event Schemas. The following is the set of defective verbs in Shona.

-ri	" be"
-va/-ve	"be"
-nga/ -nge	"being" or "seem"
-ti	"to say"
-na/ne	"have" or " be with".

The question that arises is, why do we place them in the category of propositions. When we looked at the above-listed verbs in section 2.5, we said that these are the verbs that would need subordinate verbs or copulative (predicative) formations for them to make stable constructions. When we say a stable construction, we mean an utterance which can stand on its own without the aid of some other construction to make it meaningful. When these defective verbs are part of phrases which make them stable, they are usually in the form of propositions.

According to Heine et al.(1991a :36), these propositions refer to the more complex cognitive structures, which express states and processes that are basic to human experience and can be rendered by linguistic predictions typically involving two participants. Take, for instance, the example below:

-va " be "

(28) ndava kuenda
nd-a-va ku-end-a
ISG-PRES-to be INF-go-FV
"I am (soon) going".

In the -va "be" example above, the proposition has "more than one perceptually discontinuous entity"(Heine 1993:31). It has the form X is doing Y, which means that we have X as the agent, -va "to be" as the second concept and then Y (to go) as the patient. In such a case, it is not just the -va that is considered as the source but the entire phrase, ava kuenda "he/she is going" (X is doing Y). Hence Bybee et al. (1994:11) conclude that:

> *The position of the units entering into a grammaticalizing construction either with regard to one another or with regard to the lexical or phrasal unit they are modifying may also contribute meaning to the construction. For this reason, we must attend to the syntax and morphology of the source construction and not simply to the referential meaning of its lexical items.*

Heine (1993:31) goes on to give a list of some of the most common propositions as follows:

(a) "X is at Y"	Locational proposition
(b) "X moves to/from Y	Motion proposition
(c) "X does Y"	Action proposition
(d) "X wants Y"	Volition proposition
(e) "X becomes Y"	Change-of -state proposition
(f) "X is (like) a Y"	Equation
(g) "X is with Y"	Accompaniment
(h) "X has Y"	Possession
(i) "X stays in a Y manner	Manner

In Shona the source proposition that falls in the category of the location Schema is the one involving the verb -ri "to be" as in the example below:

(29) ndiri kutora > ndinotora
ndi-ri ku-tor-a ndi-no-tor-a
1SG-to.be INF-take-FV 1SG-PRES-take-FV
"I am taking" "1 take".

Heine (1993:32) argues that the location Schema commonly develops into progressive aspects. He says:

> *It (the Location Schema) is most commonly used to develop progressive aspects; in fact it probably accounts for more progressive construction in the languages of the world than all other event Schemas taken together.*

In the above example, we hypothesize that the locational proposition ndiri kutora develops into ndinotora. The exact path of development in such a reduction process is not very clear. Erikson (1988:66), however, postulates that it could have been reduced as follows, when he said:

> *"All dialects (Shona) show this process of merging in certain tense forms, most commonly with the verbs -ri "to be " and especially -na "have"*
>
> ndinotora < *ndirina kutora "I take anotaura < *arina kutaura "I speak".

We also noted earlier on in this chapter (cp section 6.3) that Locational lexical verbs grammaticalize into progressive aspects. We looked at the -gara "sit" example, as a locational lexical verb which turns into a continous (progressive) marker in -garo- "do often" or "habitual" What we see therefore is that both types of sources, the lexical sources and the source propositions, if they have a locational meaning, develop into progressive.

Studies by Heine et al.(1991b:153) in a number of African languages also lead them to the conclusion that the locational proposition develops into verbal aspects and they come to the following conclusion:

The locational proposition is employed for instance to develop verbal aspects or moods like progressive or intentional when the constituent represented by Y is filled with a nominalised process verb. Thus in many languages a construction "X is/in/on Y" has been reinterpreted as meaning "X is doing Y". Constructions of this type, labelled PP-periphrasis in Heine and Reh (1984:115), have developed into progressive and similar aspects in over one hundred African languages

They go on to argue that when the Y is filled by a nominalized verb, such a nominalization can be achieved by "morphological forms like infinitives, gerundials, nomina agentis and the like." (Heine et al. 1991b:153) In the case of the above Shona example, the Y is filled by the infinitive kutora "to take".

Another tentative development from source propositions involving defective verbs, in Shona is the one which has the verb -na " to have", as shown in the example below:

-na " to have"

(30) * ndina kutora > ndinotora
ndi-na ku-tor-a ndi-no-tor-a
1SG-be.with INF-take-FV 1SG-hab-take-FV
"I take" "I normally take".

This is a proposition that would fall in the category of possession. Heine (1993:33) gives Swahili examples involving the verbal possessive -na "be with, have". In Swahili this possessive proposition develops into a progressive. Below is one Swahili example which developed from verbal possessive into a progressive:

(31) ni- na- soma
ni- na- som-a
1SG-be.with read-FV
"I am reading".

Coming back to the -va "to be" that we looked at above. This would fit in the Motion proposition "X moves to/from Y". Below is a tentative development of this proposition into the near future:

-va " to be "

(32) ndava kuenda > ndoenda
nd-a-va ku-end-a nd-o-end-a
ISG-PRES-to be INF-go-FV 1SG-NEAR.FUT-go-FV
"I am going" "I am (soon) going".

The development of the proposition into a tense marker could have taken the path proposed by Fortune (1955:332) when he looked at the same phenomenon and he came to the conclusion that:

> *In this type of deficient verb, the terminative*[25] *-a, -i, or -e depending on the conjugation or mood, coalesces with the vowel -u of the prefix of the following infinitive complement, the intervening consonant k being elided. The -o- os the result of the coalescence. In some cases of the monosyllabic deficient verbs of this type there has been elision of certain syllables of the verb itself.*

Fortune gives a number of examples to illustrate this point. Here we will only cite two of his examples given below:

(33) kugona kuona > kugoona
ku-gon-a ku-on-a ku-go-on-a
INF-able-FV INF-see-FV INF-be.able-see-FV
"to be able to see" i.e- "to see what to do in future" "to see what to do"

(34) kuvamba kuona > kumboona
ku-vamb-a ku-on-a ku-mbo-on-a
INF-start-FV INF-see-FV INF-first-see-FV
"To start to see" "to see first" or "to have previously seen"

The examples save to show that that some syllables or consonants in the source constructions may end up being dropped in the grammaticalized forms. In example (33)

[25] Terminative here refers to the final vowel.

we have the dropping of the /k/ of the second infinitive which we discussed in chapter 5.6.2. There is also the dropping of the /n/ from -gona. In example (34) there is dropping of the consonant /k/ as well as the dropping of the syallable -va- . These examples help to explain the dropping of the consonant /v/ in example (32) as well as the dropping of /r/ in example (29) above.

In our discussion of the development of Motion lexical sources in section 6.2.1.1, we noted that most of them tend to grammaticalize into future tenses. What the above reconstruction in example (32) is proving is that even Motion propositions also develop into future tenses because the above proposition gives rise to a near future marker.

Attempts to reconstruct the verbs that fall in this category (source propositions) as we have seen above, will always give highly tentative results. Each of the above types of source propositions gives rise to its own type of outputs. In this study, we have managed to suggest a few tentative etymological developments of some source propositions. This is one area that still requires further investigation because it requires much more comparative data as compared to single lexical sources.

6.6 Summary of chapter

In this chapter we have seen that there are two types of sources of grammaticalization. We noted that for both sources, the meaning present in the source, whether it is a source verb or source construction, has some relationship with the meaning of the resulting grammatical concept.

We also considered the role of metaphor in the development of lexical verbs into auxiliaries. We argue that in the grammaticalization process it is by metaphorical extension of the lexical verb that the grammatical meaning is arrived at. Metaphor, therefore, is a crucial but often ignored link between the source of grammaticalization and the resulting grammatical morpheme.

We argue, in this chapter, that the metaphorical extension that we see in the grammatilization of lexical verbs in Shona is basically a problem-solving process. The major motivation revolves round what what Lakoff and Johnson (1980) refer to as the basic human strategy of dealing with our environment, that is, conceiving of and expressing experiences that are less easily accessible or more difficult to understand or describe in terms of more accessible experiences. The strategy, they argue, entails expressing complex content by means of less complex content that are more basic, and, in this process abstract concepts are described by means of concrete concepts.

The different stages from the concrete lexical meaning to grammatical morphemes are described in the section which discusses the verb-to-TAM continuum.

CHAPTER SEVEN

Conclusion

7.1 Definition of *Auxiliary*

This study primarily dealt with the problems faced in determining the range of items subsumed under the category auxiliary in Shona.

Finally, we come back to an issue that we kept postponing throughout this study. The question of the definition of auxiliary. This term has been used in a number of ways in this study. At the beginning we used it in the sense in which it is used in Bantu grammars to refer to verbs that do not themselves constitute complete predicates. They would need to be followed by a surbordinate verb or a copulative formation, which is termed a complement, in order to produce a complete predication. This would include defective verbs and deficient verbs. Deficient verbs here refers to the type of auxiliary that we said is found within a graphological form. The definition that we found most applicable to the the entities that we think should be subsumed under the category auxiliary is the one provided by Heine (1993:70):

> *An auxiliary is a linguistic item covering some range of uses along the Verb-to-TAM chain.*

This definition would cover the whole range of items that could be termed auxiliary in Shona. When we looked at the Verb-to-TAM continuum, we gave a number of focal points to show the stages of development along that continuum (see Table 6.4) in section 6.4). The stage where the lexical item exists as an independent lexical item is the only stage where it does not have auxiliary functions.

7.2 Categorical Status of Auxiliaries

One of the major questions that we looked at was whether these "auxiliaries" form a distinct category different from verbs or are they just verbs that have some deviant behaviour. This plunged us into the question of the nature of categories. The issue of the categorical status of auxiliaries only arises if one uses traditional theoretical approaches to linguistics which are based on the classical treatment of grammatical categories. This study uses the gradience approach which is based on the prototype model that recognizes that, in any categorization exercise, there are always "better examples" of any given category. There is then a gradience from the better examples, the prototypes, to the less central members of a category.

We argue that, like most other languages, Shona auxiliaries have historically developed from main lexical verbs. The pattern that emerges from the Shona data and

other Southern Bantu languages is that there is no distinct boundary between auxiliaries and verbs. There is gradience from main lexical verbs to prototypical auxiliaries. Like most of the proponents of the gradience approach, we used the grammaticalization theory to account for the nature and behaviour of auxiliaries in Shona.

7.3 Shona verb-slot system

Another major issue that we considered in this study is the question of the position of the auxiliary in the Shona. In some earlier treatments of the Shona verbal form, auxiliaries are "simply seen as TAM markers" (Maho 1999b:2). We came up with new verb-slot system for Shona. One of the most important contributions of this study was to show that auxiliaries deserve a slot of their own in the Shona verbal form. There is obviously a close relationship between auxiliaries and the TAM markers. In our view, they are all part of a continuum, that is, the verb-to-affix continuum.

7.4 Auxiliaries, metaphorical extension and problem-solving

The study of the development of lexical verbs into auxiliaries in Shona reveals that this process involves metaphorical extension. The metaphorical extension involves semantic shifts which are unidirectional in the sense that they all involve a shift from concrete meanings to abstract meanings and not the other way round.

In an effort to discover patterns of what motivate grammaticalization, we looked at the semantics of source verbs in comparison with the resulting grammatical concepts. We took the cognitive approach in our explanation of the motivation and concluded that the major motivation revolves around what what Lakoff and Johnson (1980) refer to as the basic human strategy of dealing with our environment, that is, conceiving of and expressing experiences that are less easily accessible or more difficult to understand or describe in terms of more accessible concrete experiences. The strategy entails expressing complex content by means of less complex content that are more basic, and, in this process abstract concepts are described by means of concrete concepts.

We took the approach taken by Heine (1991b, 1993) and others, in which grammaticalization is looked at as a problem-solving process which employs metaphorical extension involving a movement from one conceptual domain to another. This movement from one domain to another is along a chain domains arranged lineally as in the diagram below:

PERSON (who?)>OBJECT (what?)>PROCESS (what?) >SPACE (where?>TIME (when?)> QUALITY (how? i.e. manner)

This process, as we have already noted, is unidirectional in the sense that, a domain on the left explains any of the domains on its right and not the other way round. Grammaticalization in Shona involving verbs, in the majority of cases, involves movement from the PROCESS and the SPACE domains into the temporal (TIME) domain and, in number of cases, it goes on to the QUALITY domains. We argue that all the verbs that we looked at that go through the grammaticalization process pass through

the temporal (TIME) domain. Some, after going through the temporal (TIME) domain, they then go on to the QUALITY(manner) domain. Those that move on to the QUALITY domain explain why the "adverb"[26] element that features in quite a number of definitions of auxiliary by Bantu grammarians. We looked at some these definitions of auxiliary in Bantu in chapter two (cp 2.4).

We divided the source concepts of grammaticalization in Shona into two, the lexical sources and source propositions. We noted a pattern in which specific sources, whether they are lexical sources or source propositions, develop into specific grammatical concepts. The meaning present in the source construction has some relationship with the meanings of the resulting grammatical concepts.

The main contribution of this study, to Shona linguistic studies, in our view was to bring into focus recent insights into patterns in historical change of meaning. Previous treatments of auxiliaries failed to account for them because of their use of strictly synchronic approaches to linguistic structure.

7.5 Suggested future research

This study is an endevour in a relatively new direction in Shona linguistic studies, therefore, it cannot satisfactoriry resolve all the crucial issues. For example, the development of source propositions still requires further investigation because it requires more comparative evidence than what we could afford in this study in terms of time and resources. The morphology of the Shona verb still requires a thorough and more detailed description. The dialectal distribution of auxiliaries, which we initially thought we would investigate, will have to be the target of future research. Another area that could be taken up is the issue of multiple occurrences of auxiliaries.

[26] We noted in section 2.4, that one of the points that keeps coming up in the definitions in Bantu grammars, is that the meanings of auxiliaries would be rendered by English adverbs.

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1 Shona Corpus

The Shona Corpus in available on the following site:

http://www.gusd.holding.gu.se/cgi-bin/parole/parole-search

2 Schiffman, Harold

1999 "The role of metaphor in the grammaticalization of aspect in Tamil" Paper presented in panel on spatial metaphors in language, American Antropological Association, Chicago

http://ccat.sas.upenn.edu/~haroldfs/dravling/aspect/tamaspect.html

3 The Comparative Bantu Online Dictionary (CBOLD)

http://www.linguistics.berkeley.edu/CBOLD/ The CBOLD project was started in 1994 by Larry Hyman and John Lowe to produce in Berkeley a lexicographic database to support and enhance the theoretical, descriptive, and historical linguistic study of the languages in the important Bantu family. The database includes a substantial list of reconstructed Proto-Bantu roots, several thousand additional reconstructed regional roots, and reflexes of these roots for a substantial subset of the 500+ daughter languages. Published and unpublished dictionaries of selected Bantu languages have been scanned, converted to test, and entered into the database. Working with colleagues and students from the United States, France, Belgium, the Netherlands, Cameroon, Tanzania and other countries, organized into the Bantu Working Group (BWG).

4 The BL Search

This is a search engine, which provides a fast search of any Bantu language and its varieties. For each answer, you will find a straight link to SIL27[26] for further details. SIL

[27] SIL International has been working for more than 50 years to study, develop and document the world's lesser-known languages. This work has not only contributed to national and international understanding of the richness of human languages, but also served to contribute to the well-being of the peoples

is a service organization that works with people who speak the world's lesser-known languages. You may search a language without specifying a country, but not the contrary. It is available on the following web site:

http://www.bantu.ovh.org/languages.html

And for more information on SIL you can visit the web site:

http://www.sil.org/sil/

Newspapers

Kwayedza A Zimbabwean weekly newspaper written in Shona.

themselves. Partnerships are made with host governments, non-governmental organizations, universities, churches and local villages. SIL has carried out linguistic investigation in 1320 languages, spoken by 350 million people in more than 50 countries. The international headquarters is located in Dallas, Texas, at the International Linguistics Center, but administrative offices are located in a number of other countries

Appendices

Appendix 1 (Questionnaire Shona Version)

Chinangwa chetsvagurudzo ino ndechekuedza kuburitsa kuti zviitogama zvakasiyana-siyana zvinoshandiswa kunzvimbo dzipi dzinotaurwa Shona uye zvinoshandiswa nemapazi api emutauro weShona.

1. Zita rako .....
2. Dheti .....
3. Zita rechikoro/College .....
4. Makore ekuzvarwa .....
5. Kwavakazvarirwa (Dunhu racho) .....
6. Kwawakakurira (Dunhu racho .....
7. Kwavakafunda
   a) Puraimari .....
   b) Sekondari fomu 1-4 .....
   c) fomu 5-6 .....
8. Bazi romutauro weShona raunotaura(dialect) .....
9. Bazi romutauro rinotaurwa nevabereki wako
   a) baba
   b) amai .....

Mubazi romutauro waunotaura iwe unoshandisa zviitogama zvinotevera here? Pachiitogama choga choga nyora kuti unochishandisa here kana kuti kwete. Kana uchichishandisa nyora hongu, kana usingachishandisi nyora kuti kwete. Pachiitogama choga choga panenge paine muenzaniso mumwe kana miviri. Kana paine zvachinorewa zvaunoziva zvakasiyana nezvinorehwa nemuenzaniso wakapihwa tinyorerewo muenzaniso unoratidza zvimwe zvachinorewa. Kana paine chiitomwana chausina chokwadi kuti uchishandisa here kana kwete siya pasina kumakwa.

1. -bango- , -bongo-
   Ndisati ndabangotaura nokutaura kwese ndakabva ndanzi bhotoro re hwahwa ndoo.
   Kana dai ukabangorova mwana uyu haambonzwi.
2. -bishiko-
   Amai vanobishikoshandira mhuri yavo.
3. -bviro-
   Saka kare waibviroti kana wabvisa badza zvapera zveroora.
4. -bviriro-
   Tipe muenzaniso wemashandisirwo echiitogama ichi -bviriro-
5. -chango-
   Amai vakanga vachangobuda pakasvika baba
6. -chimbidzo- -chimbiro-
   Rukadzi rwemakuhwa kuchimbidzodya hanzi ndigoreva vamwe kana nda guta.
7. -chingo-
   Achingoburuka bhazi akabva aenda kundobata maoko.
   Vakaramba vachingoseka iye mudzidzisi ati chinyararai
8. -dai -dari -dayi -dariso -deriso -dero
   Kudai hembe yangu soo!
   Chinomudariso ruchiva
9. -daiano -darano -derano
   Usabvume kuti vana vadaiano.
10. -dakara
    Nokuti akanga asina kudzoka akadakara akamutevera
11. -deya
    Musikana wandakadeya kuruma akawanikwa nomumwe murume.
12. -dii dini
    Wakadii kumupindura paakakutuka kudaro.
13. -do-
    Mwana uyu kudorova hapana zvazviri kubatsira
    Takadomirira sadza izvozvi kuti riburwe.
14. -fano- -sano- -sana- -sono-
    Ufanobika sadza
15. -fum- -fumir-
    Akafumobata jongwe muromo kuenda kundorima
16. -gar- -soo-
    Anogarodhakwa musi weChishanu woga woga
17. -ge-
    Ndaigenge ndaendepi?

18. -genge -gonga
Ndaigenge ndaendepi?

20. -go-
Zarura maziso ugoona.

21 -gongo-
Ndakutuma, unogongova umire sei?

22. -ho-
Wakahoroora riini?

23. -hwimwi -hwinwi
Zvino zvohwinwi zvinhu zvazvashata kudai?

24. -hwir- -hwirir-
Akahwirotangazve kunwa doro rakakambenge aregera.

25. -isvo-
Chimiro unacho chakaisvonaka

26. -iy-
Akarohwa zvandaiya ndisati ndamboona

27. -kar-
Mukomana uyu achakaroita mbavha uyu.

28. -mbenge -mbonga
Ambenge aenda kupi kuzononoka kudai?

28. -mbo- -mho-
Haachambonditeereri

29. -nga -nge
Ndakanga ndichifamba
Anenge musikana kwaye

30. -natso- -naso- -nyaso- -nyatso- -nyacho- -nyatsa
Tinoda munhu anonyatsa kusakura pasina kusiya masora.
Unanyatsomutaurira zvisina hasha kuti anzwisise.

31. -nguno-
Ndakatarisisa ndichingunofamba

32. -na -ne
Ndine vana vatatu.

32. -ngo-
Ndakangomutarisa kamwe kubva atarisa pasi

Appendix 2

English Version of part the questionnaire shown in appendix. Note that this version was not used in the field.

Auxiliaries (Zviitogama)

The main aim of this research is to establish the dialectal distribution of auxiliaries in Shona, that is, which dialects use which auxiliary forms.

Questions asked part of questionnaire for background information.

1. Name: ……..
2. Date: ……
3. Age ……
4. Name of College. ……..
5. District where you were born ……
6. District where you grew up ……
7. Where did you go to school ?
   a) primary education ……
   b) secondary education ……
   c) Advanced level ……

1. Which dialect do you speak?

2. Dialects spoken by your parents:
   a) father ……..……..
   b) mother ……

Do you use the following auxiliaries in the dialect that you speak. Answer YES or NO against each of the auxiliary provided. For each auxiliary given,we provide an example(s) of how it is used. If there is a sense in which you use a given auxiliary which is different from the given sense, could you please provide an example of that sense. If you are not sure whether you use a given auxiliary or not please it blank.

Appendix 3 Qustionnaire results

Masvingo State University (Use of auxiliaries in different dialects)
Key k = NO
h = YES

Axiliary	Karanga	Korekore	Manyika	Ndau	Zezuru
-bango-	kkkkk	kk	hhkkh	khkh	hhkkk
-bongo-	kkkkk	kk	kkkkk	kkkkk	kkkkk
-bishiko-	kkkkk	kk	kkkkkk	kkkkk	kkkkkk
-bviro-	kkk	hk	hkkhhk	hkhh	hhkkk
-bviriro-	kkkk	kk	hkkk	khk	hkkk
-chango-	hhh	hh	hhhhh	hhhh	hhhhh
-chimbidzo-		hk	hhhkh	hhhh	hhhhhh
-chimbiro-	kkk	kk	kkkkk	kkkkk	kkkkkk
-chingo-	hhh	hh	hhhk	hhh	hhhhhh
-dai		kk	hh	hhkh	hhhhh
-dari		hk	hkk	kkk	h
-dayi	h		kk	hhk	
-dariso			hk	kk	h
-deriso			kk	kk	k
-dero			kkk	kkk	hk
-daiano	kkkkh	kk	kkkkk	khkkk	kkk
-darano	khkhh	kh	kkkkkh	kkkkk	hkkh
-derano	khhkk	hk	kkkkk	kkkk	kk
-dakara	kkkhh	hh	hhhhhh	hhhhh	hhhhh
-deya	kkkkk	kk	kkkkkk	kkkkk	kkkkk
-dii		hh	hhhhh	hhkk	hhh
-dini	hhhk	hh	khhkhh	hhhhh	kk
-do-	khkh	kk	kkkkkh	kkhkk	hhhk
-fano-	hhhh	hh	hhhh	hhhhh	hhhhh
-sano-	hk	kk	kk	kkk	kkkkk
-sana	kkk	hk	kk	kkk	kkkkk
-sono-	kkk	hk	k	kkk	kkkkk
-fumo-	hhhhh	hh	h	hhkk	hhhh
-fumiro-	hhhhh	kk	hhh	hhkh	khkh
-garo-	hhhhh	hh	hhh	hhkhh	hhhhhh
-soo-	kkkkh	kk	hhhh	hkk	kkkkkk
-ge-	khhk	hh	kkkk	hhhk	hkk
-genge	khkkk	kh	kkk	khkk	hhkk
-gonga	kkkkk	kk	k	kkkk	kkkkk
-go-	hhhhh	hh	hkkkhk	hhkk	hhhh
-gongo-	kkkkh	hk	kkkkkk	kkkk	kkkk
-ho-	hhhhk	kk	kkkkk	kkkk	kkkkk
-hwimwi	hhhh	kk	kkkkk	kkkkk	kkkk
-hwinwi	khhh	kk	kkkkk	kkkkk	kkkk

-hwiro-	kkkk	kk	kkhkk	hkkk	khk
-isvo	khkk	kk	kkkkk	khkk	hkhk
-iya	kkkk	kk	kkkkk	hhhhh	kkkk
-karo-	hhhh	hh	hhhhh	hhhhh	hhhh
-mbenge	hhhh	hh	khhhk	hkkhk	hhhh
-mbonga	kkkk	kk	hkkkhk	khhkh	kkkk
-mbo-	hhhhh	hh	hhkh	hhhhh	hhhh
-mho-	kkkkk	hh	kk	khhk	kkkk
-nga	khkkk	hh	hhhhh	hhh	hhh
-nge	h	h	hkkkh	kkk	hhk
-natsa		h	kk	hhk	hkk
-naso-			kk	hhhh	kkkk
-nyaso-			kk	kkkk	hhkk
-nyatso-	h	hh	kkh	kkkhk	hhhhh
-nyacho-		hh	kk	kkkk	kkkkk
-nyatsa		hk	hkhh	hkhkk	kkkkk
-nguno-	k	kk	kkk	kkkhkk	hhhk
-na	hhh	hh	hhhh	khkhhkk	hhhk
-ne	hhh	hh	hhhhhh	hhhhhhh	hhhhh
-ngo-	hhh	hh	hhhhhh	hkhhhh	hhhhh

Note:

This appendix shows the questionnaire responses from Masvingo State University. We only selected one institution out of all the institutions from which data was collected. From the above table, with regard to the highlighted auxiliaries, we noted the following:

-bongo- all respondents said they do not use it.
-bishiko- all respondents said they do not use it.
-chimbiro- all respondents said they do not use it.
-soo- its mostly the Manyika who use it
-hwimwi its mostly the Karanga who use it.
-hwinwi its mosly the Karanga who use it.
-nyacho- only the Korekore who said they use it.

These trends are reflected in the results from other institutions as well. [28]

[28] TMA (TAM) We use this abbrieviation in the sense in which it is used by Creissels (2000:238) to refer to semantic distinctions of tense, mood and aspect which are expressed through verbal inflections. This abbreviation is more fully explained in section 6.3