THE ARGUMENT STRUCTURE OF DEVERBAL NOMINALS IN VENDA

BY

THIATHU JOSEPH MANDOMA

Study project presented in partial fulfilment of the requirements for the degree of Master of Arts at the University of Stellenbosch.

Study leader: Dr. M.W. Visser

Date submitted: March 1994

i

DECLARATION

I, the undersigned, hereby declare that the work contained in this study project is my own work and has not previously in its entirety or in part been submitted at any university for a degree.

T.J. MANDOMA

DATE: *10. January. 1994*

SUMMARY

This study investigates the structure of deverbal event nominals in Venda. The central aim of this study is to investigate the syntactic projection or realization of arguments in the argument structure of the deverbal event nominals. The properties of these structures will be investigated in full.

The event nominals used will be derived from a diversity of verbs, monotransitive verbs, ditransitive and intransitive verbs. The data that will be used in this study have been collected from Venda, although reference is made to English examples, more especially in section two (2).

It will be demonstrated that the argument structure of the deverbal event nominals in Venda is similar to the argument structure of the related active verb. The difference between the two is that there is a visible external argument assigned by the verb phrase, whereas a similar external argument does not occur with deverbal event nominals. All the arguments of the deverbal event nominals appear within the maximal projection of the nominals in question. They occur in the postnominal position, either as complements of the genitive **a** or any salient preposition.

Just like in English, some theta-roles are assigned by prepositions in the argument structure of deverbal nominals in Venda. The only difference is that the argument structure of the deverbal event nominals in Venda may have bare NPs, that is, arguments which are not preceded by a genitive **a** or any preposition may occur and still carry their theta-roles. However, arguments immediately adjacent to the deverbal event nominals **must** be preceded by a preposition or the genitive **a**.

It will be demonstrated that ambiguity occurs in instances of omission or alternation of arguments. This occurs especially when the remaining argument is animate (that is if the argument projected in a syntactic position is animate or have human control ambiguity arises in the thematic interpretation if any other argument is not realized).

There is also a relationship between the argument structure of deverbal event nominals and control theory. An implicit argument or an overt argument in the argument structure of deverbal event nominals may sucessfully serve as the controller of the PRO subject of infinitival clause.

iii

OPSOMMING

Hierdie studie ondersoek die sintaktiese struktuur van deverbatiewe handeling ('event') naamwoordkonstruksies in Venda. Die sentrale doelwit van die studie is om die sintaktiese projeksie (of realisering) van die argument deverbatiewe handeling ('event') te ondersoek. Die kenmerke van die argumentstruktuur van hierdie soort deverbatiewe naamwoorde word volledig ondersoek.

Die handelingnaamwoorde wat ondersoek word, is afgelei van verskillende werkwoorde: onoorganklike, enkeloorganklike en dubbeloorganklike werkwoorde. Die data wat gebruik word in die studie kom van Venda, alhoewel verwysing gemaak sal word na voorbeelde uit Engels, veral in afdeling 2.

Daar sal aangetoon word dat die argumentstruktuur van deverbatiewe handeling-naamwoorde in Venda ooreenkom met die argumentstruktuur van die verwante werkwoorde. Die verskil is dat die eksterne argument duidelik buite die VP gerealiseer word, terwyl 'n soortgelyke eksterne argument nie met deverbatiewe handelingnaamwoorde voorkom nie: al die argumente van die deverbatiewe handelingnaamwoorde verskyn binne die maksimale projeksie van die handeling-naamwoord. Hierdie argumente verskyn in posisies ná die deverbatiewe naamwoord, òf as komplemente van die genitiewe **a**, òf as komplement van 'n preposisie.

Soos in Engels, word sommige theta-rolle in Venda toegeken deur preposisies in die argumentstruktuur van deverbatiewe handelingnaamwoorde. Die enigste verskil is dat die argumentstruktuur van hierdie naamwoorde in Venda NPs mag hê wat nie voorafgegaan word deur die gentiewe **a** nie. Dit wil sê, bepaalde argument NPs mag verskyn sonder die genitiewe **a**, en steeds hul tematiese interpretasie behou. Wanneer argument NP's egter onmiddellik regs van die deverbatiewe handelingnaamwoord verskyn, moet dit voorafgegaan word deur die genitiewe **a** of 'n preposisie.

Daar sal aangetoon word dat dubbelsinnigheid ontstaan in gevalle van die weglating of alternering in liniêre orde van argumente. Dit is veral die geval wanneer die oorblywende argument die kenmerk [+lewend] het. Dit wil sê wanneer die NP argument wat struktureel geprojekteer is lewend is, of geïnterpreteer word as dat dit onder menslike kontrole staan, ontstaan daar dubbelsinnigheid in die tematiese interpretasie van 'n argument as enige ander argument nie gerealiseer word nie.

iv

Daar is ook 'n verband tussen die argumentstruktuur van deverbatiewe handelingnaamwoorde en die teorie van kontrole. Dit word aangetoon dat 'n overte of 'n implisiete argument kan optree as kontroleerder van subjek PRO in infinitiefklouse.

v

ACKNOWLEDGEMENTS

In the first place, I wish to express my sincere gratitude to my supervisor, Dr. M. Visser who supervised me to make this study project a reality. "I give all my thanks to you."

Secondly, my heartful thanks go to Prof. J.A. du Plessis who initiated me in the theoretical aspect of the argument structure of sentences in African Languages. To him I say: "You are the Originator".

In the third place, I express my gratitude to Mr R.M. Madadzhe (UNIN), who encouraged me to go on with my studies. T.P. Phaswana, Nemudzivhadi and Tshikhwalivha helped me to collect the data. To them I say: "You are inferior to none."

TABLE OF CONTENTS

viii

SECTION I

INTRODUCTION

1.1   PURPOSE AND AIMS OF STUDY

There has been extensive of study on the argument structure of nominals in general and the deverbal event nominals in particular within the generative literature. Some of the most notable studies of the argument structure of nominals are Grimshaw (1990), Szabolsci* (1992) and Safir (1987). Grimshaw and Safir explore the argument structure of English event nominals while Szabolsci investigated Hungarian data.

The central aim of the present study is to explore the syntactic projection or structural realization of the arguments of the deverbal event or process nominals in Venda. It will be the purpose of this study to establish whether deverbal event nominals may project the full thematic array projected by the related verb.

The study will analyse the syntactic position of arguments occuring with the deverbal event nominals. The question of whether these arguments occupy the same positions they occupied with the corresponding or related verbs will be addressed.

A further issue that will be addressed is whether the deverbal event nominals have the capacity to assign theta-roles to arguments which are projected in their argument structure. The question of how nominals assign these theta-roles since they are defective theta-markers, and whether these arguments which occur with the deverbal event nominals can appear as bare NPs are investigated.

This study will also consider the issue of control of the PRO subject of infinitival clauses which may occur as complements of the deverbal event nominals. The question of whether control of this subject of infinitival clause is possible in the argument structure of deverbal event nominals is addressed.

It will be the purpose and aim of this study to answer these and some of the related questions which concern the distribution of arguments in the argument structure of the deverbal event nominals.

1.2   THEORETICAL FRAMEWORK ASSUMED IN THE STUDY

The general framework assumed in this study is the theory of Government and Binding (GB) as developed in Chomsky (1981, 1982, 1986) and many related works.

The properties of Government and Binding theory will not be reviewed in full in this study but only some brief remarks of this theory will be presented.

The organization of the GB theory with all its different components as illustrated in Sells (1985:24) is shown in Figure 1.1:

$$
\begin{array}{lll}
& \text{d-structure} & \text{X}^1\text{-Theory, }\Theta\text{-Theory} \\
& \downarrow \text{move-}\alpha & \text{Projection principle} \\
& & \Theta\text{-Criterion} \\
& \downarrow & \\
& \text{s-structure} & \\
& \text{ECP} & \\
\text{Phonetic form} \swarrow \text{Binding Theory} \searrow \text{logical form} & \\
& \text{Control} &
\end{array}
$$
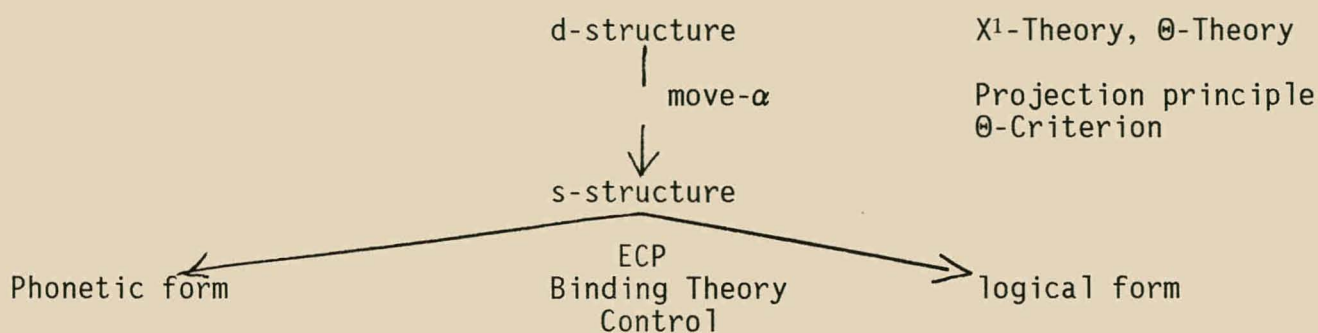
Figure 1.1: Government-Binding theory

From this structure (i.e. figure 1.1) it is evident that the GB theory comprises the following major subtheories:

1. (i)   Government theory
   (ii)   Case theory
  (iii)   Theta-theory
   (iv)   Binding theory
    (v)   Bounding theory
   (vi)   Control theory
  (vii)   X-bar theory

Only subtheories which are relevant to this study will be briefly explained and defined here. These are Θ-theory and Control theory. Some of the concepts related to these subtheories will be defined. These include, for example, the

notions of argument structure, theta-criterion, theta-mark, implicit argument, and projection principle.

1.2.1   Theta-Theory (θ-Theory)

Theta-theory, deals with the assignment of semantic roles to elements in the sentence. It deals with the semantic relationship of elements in the sentence, hence the assignment of thematic roles to arguments.

It is important for the purpose of this study to list and define different types of thematic roles as listed by Haegeman (1991:41) in (2).

(2)   a.   AGENT/ACTOR: the one who intentionally initiates the action expressed by the predicate.

b.   PATIENT: the person or thing undergoing the action expressed by the predicate.

c.   THEME: the person or thing moved by the action expressed by the predicate.

d.   EXPERIENCER: the entity that experiences some (psychological) state expressed by the predicate.

e.   BENEFACTIVE/BENEFICIARY: the entity that benefits from the action expressed by the predicate.

f.   GOAL: the entity toward which the activity expressed by the predicate is directed.

g.   SOURCE: the entity from which something is moved as a result of the activity expressed by the predicate.

h.   LOCATION: the place in which the action or state expressed by the predicate is situated.

Other commonly recognized thematic roles are given in (3).

(3)   a.   MALEFACTIVE: the thing or person disadvantaged by the action expressed by the predicate.

b.   INSTRUMENT: the thing or person used by the agent to carry out the action expressed by the predicate.

c.   RECIPIENT: the thing or person who receives as a result of the action expressed by the predicate.

It is important to illustrate the above thematic roles with reference to examples from Venda. At this stage only examples with the active verbs will be illustrated, but later in section 3, the argument structure of deverbal nominals will also be included:

(4)   a.   **Munna** u rwa **ṅwana**   nga **thamu**
             Agent   Malefactive Instrument
             (Man beats child with a stick)

       b.   **Musidzana** u ka **maḓi**   **mulamboni**
             Agent   Theme Location
             (Girl taps water from the river)

       c.   **Vhabebi** vha fha **vhana**   **kholomo**
             Agent   Recipient Theme
             (Parents give children cattle)

       d.   **Munna** o sinyuwa vhukuma
             Experiencer
             (Man is very angry)

       e.   **Khotsi** u posa **tshelede kha ṅwana**
             Agent   Theme   Goal
             (Father sends money to the child)

       f.   **Mudededzi** u funza **vhana**   **mbalo**
             Agent   Beneficiary Theme
             (Teacher teaches children Maths)

       g.   **Mudededzi** u vhudzisa **vhana**   **mbudziso**
             Agent   Patient Theme
             (Teacher asks children questions)

       h.   **Mutshudeni** u wana **basari** u bva kha **muvhuso**
             Recipient   Theme   Source
             (The student gets bursary from the government)

It is also important to define some of the important concepts related to theta theory:

(5)   (i)   Argument
             An argument is an expression that bears a thematic role.

       (ii)   A θ-position: is a position that is assigned a theta-role by the predicate.

(iii)   Θ-marking takes place when a head of a phrase assigns a thematic role to a particular position which it subcategorizes.

(iv)   **Argument structure**
The argument structure of a predicate is a list of its theta-roles like agent, theme, experiencer, goal, etc. One of these arguments is distinguished as the external argument and the rest are internal arguments (Du Plessis: 1993:18).

(v)   **An implicit argument** is a form of missing argument.

(vi)   **External argument**
Jaegli (1986:588-589) defines the external argument as follows:

> A predicate may take an argument that does not fall within the government domain of the predicate. This argument is often called the external argument of a predicate. As an argument of a predicate, it also bears a Θ-role specified in the lexical entry of the predicate. Since the external argument does not fall within the domain of subcategorization, its theta-role remains unlinked.

(vii)   **Internal argument(s)**
Internal theta roles or arguments are arguments which fall within the government domain of a predicate. These theta-roles are linked in the lexical entry of a predicate.

The principles of theta-theory is explained in (6).

(6) (i)   **Theta-criterion**

Sells (1985:37) defines Θ-criterion as follows:

(6)   Θ-criterion (is when)
Each argument bears one and only one Θ-role, and each Θ-role is assigned to one and only one argument.

(ii)   **Projection Principle**
This principle is a fundamental principle of the Government and Binding (GB) theory, related to Θ-theory and other subtheories of GB theory. Sells (1985:33) gives the form of this principle:

(7)   **Projection Principle**
Representation at each syntactic level are projected from the lexicon, in that they observe the subcategorization properties of lexical items.

The Projection Principle states a constraint on the mapping between d-structure and s-structure and LF to the effect that if there is an NP-position in a certain structural configuration at one level, that NP-position must be present at all levels.

1.2.2   Control Theory

Cook (1988:162) explaines control theory and argues that control theory determines the potential for reference of the abstract pronominal element PRO. This means that control theory is concerned with the assignment of an antecedent to (big) PRO the phonologically empty category which characteristically appears as subject in infinitival clauses.

To explain the nature of PRO Van Riemsdijk (1986:132) states that PRO has been devised to stand for a phonetically null pronoun that occupies the subject position of infinitives in control structures.

PRO is an empty category and it acts as the subject of the infinitival constructions. PRO can be controlled. PRO is controlled by the antecedent which is the noun phrase that determines the grammatical features of the PRO, that is, the antecedent is the controlling NP for PRO.

There are two embracing types of control theory, these are obligatory control and optional control.

For the purpose of this study, this brief explanation of control theory will suffice.

1.3   ORGANISATION OF THE STUDY

Section 2 of this study will focus on the recent proposals on the argument structure of the deverbal event nominals. Although there is a wide range of linguists who explored this issue, the two particular works dealt with in this study are Grimshaw (1990) and Safir (1987). The Prominence Theory of Grimshaw and Grammatical Function Relativity of Safir (theories which are related to the distribution of arguments) will be explained in this section. This section will also explain how thematic roles are assigned to arguments of nominals. Grimshaw (1990) argues that they are assigned by preposition and not by nominals.

In section 3, examples of deverbal event nominals related to the corresponding active verbs will be illustrated. First, the argument structure of an active verb will be explored and from this different structural positions of arguments of related deverbal event nominals will be considered.

In 3.1 introductory remarks on the whole of section 3 will be given. In 3.2.1 the structural projection of arguments of deverbal event nominals related to monotransitive verbs is explored. Alternation in linear order will be considered. The possibility to omit arguments in the argument structure of monotransitive verbs will be investigated in 3.2.2.

In 3.3.1 the structural projection of arguments in deverbal nominals related to ditransitive verbs will be investigated. It will be demonstrated that three postnominal genitive NPs may not occur with the deverbal event nominals related to ditransitive verbs. The alternation in linear order of arguments will be illustrated in this section. In 3.3.2 omissibility of arguments from the argument structure of the event nominals related to ditransitive verbs will be explored.

In 3.4 the syntactic projection of an argument of the deverbal nominals related to intransitive verbs will be investigated. It will be argued in 3.4.1 that omissibility may also occur with these deverbal event nominals.

Subsection 3.5 will conclude the whole section 3. The main finding in section 3 will be reviewed. Section 4 will test the validity of Safir's proposals for the deverbal nominals related to the active verbs of Venda.

Section 5 is the main conclusion in which the work of the whole study will be reviewed.

SECTION 2

SOME PREVIOUS VIEWS ON THE ARGUMENT STRUCTURE OF EVENT NOMINALS

2.1   INTRODUCTORY REMARKS

The purpose of this section is to review some previous studies on the argument structure of event nominals. Although the research that has been done on the nature and syntactic projection of arguments with deverbal nominals is extensive, I will focus, for the purpose of this study, on two prominent studies, namely, Grimshaw (1990), and Safir (1987).

The views of these authors will not be reviewed or criticized in this section, but I will reserve this for section four where Safir's (1987) proposals will be explored with respect to the projection of arguments in Venda event nominals.

Subsection 2.2 will focus on the proposals of Grimshaw (1990) and 2.3, the proposals of Safir (1987). The last subsection, that is 2.4, will be the concluding remarks of section 2.

2.2   GRIMSHAW'S PROPOSALS (1990)

Grimshaw's proposals are grounded in what she calls Prominence theory. The fundamental assumptions of this theory are the following:

1.   A-structure (argument structure) is a structured representation which represents prominence relations among arguments. Prominence relations are determined by the thematic properties of the predicate and by the aspectual properties of the predicate. For a verb like **announce**, with external Agent and an internal Theme and Goal, the **a-structure** prominence relations are those indicated in (6).

(6)   announce (Agent (Goal (Theme)))

        Here, according to Grimshaw's prominence theory, the Agent argument is more prominent than the other arguments which are more deeply embedded in the representation.

2.   The concept of an external argument can be explained in terms of a-structure prominence relation. The external argument is the most prominent in the a-structure of a predicate. It must be prominent along two dimensions: **thematic** and **aspectual**. Thus an argument is external or internal by virtue of its intrinsic relations to other arguments.

3.   Grimshaw distinguishes between grammatical arguments and semantic arguments. Not all semantically relational lexical items have a syntactic a-structure and take syntactic arguments. She argues that only nouns that refer to what she calls complex events, nouns that have an internal aspectual analysis - have a-structure. Hence, only they have obligatory grammatical arguments of the kind that verbs have. Each verb and noun has a lexico-semantic representation (LCS) that include among other things, the participants in the activities or states described by the verb.

Some of these participants are realized as grammatical arguments and projected into an a-structure representation. The ability to project arguments in this way is limited to **process** or **event nominals**. Other nouns do not have a-structure in their lexical representation, even though they may have semantic arguments appearing in the lexical conceptual structure definitions. Grimshaw argues that gerunds always have a-structure and that derived nominals are ambiguous in this respect.

4.   The **argument structure** and theta-marking properties of lexical items vary across syntactic categories. Grimshaw argues that nouns, even though they have argument structure if they are of the right semantic kind, never theta-mark directly but only via prepositions. The evidence for this, she argues, is that nouns never take bare arguments, even when the arguments do not require case.

According to Grimshaw, nouns never have sentential arguments. She suggests that this is because nouns are not governors and government is required for theta-marking. Second, she argues that the argument structure of nouns and passive verbs are different from that of active verbs. In nominalization and passivization the external argument of a predicate undergoes suppression, and suppressed positions cannot be satisfied by syntactic arguments although they can license **argument adjuncts**. This, she suggest, explains many properties of passives and

nominals: the distribution of by phrases and possessives, the absence of passivization and nominalization of certain verb classes and the behavior of passives and nominals with respect to control.

2.2.1   The relationship between nouns and verbs.

Although, it is now generally agreed that nouns differ from verbs in not being able to assign case, the extent and character of similarities and differences with respect to argument structure and theta theory is still an open issue.

Grimshaw disputes the notion that nouns take arguments only optionally. She argues. that, like verbs, nouns can and do take obligatory arguments. This property of nouns has been observed by the fact that nouns are ambiguous between an interpretation in which they do take arguments obligatorily and other interpretations in which they do not. To clarify this Grimshaw proposes that there are two nominals. She claims that nouns denoting **complex events** have an argument structure. Other nouns, which she calls **simple event** and **result nominals**, have no argument structure. These nouns do have a meaning, expressed by their Lexical Conceptual Structure (LCS) representation.

2.2.2   Ambiguity in the Nominal System

Grimshaw (1990:147) considers the following set of data to explain the notion of ambiguity:

(3) a.   *The doctor examined.
    b.   The doctor's examination (of the patient) was successful.
    c.   *They attempted.
    d.   Their attempt (to reach the top) was successful.

The data in (3) might be construed as showing that the nouns, **examination** and **attempt**, are simply indifferent to the presence or absence of their complements while the verbs absolutely require their presence. By such reasoning she argues that one should reach the conclusion that nouns take arguments only optionally and so differ quite fundamentally in their theta-marking properties with verbs.

However, appearances are misleading here. The flexibility exhibited by the nouns in (3) is due to a fundamental and persistent ambiguity within the nominal system: nouns do not behave uniformly. Some are systematically like verbs in their argument-taking capacities. Other classes of nouns are quite different and in fact take no arguments at all. This situation is obscured by

the fact that many nouns are like **examination** in being ambiguous between the two classes.

When a noun is ambiguous between the two readings, as **examination** is, an associated possessive is also ambiguous between the modifier reading and a-structure-related reading in which the possessive provides information about a position in the argument structure of the noun. So a possessive modifying **examination** can be the possessor, author, or taker of the exam as in (4a). Alternatively, it can have an a-structure related interpretation as in (4b), where **John** is interpreted as the agent of an action.

(4) a.   John's examination was long.
     b.   John's examination of the patients took a long time.

This is, according to Grimshaw, the conclusion of the study of possessive NPs in Anderson (1983-1984). Anderson concluded that prenominal genitives in English are of two types, depending on the nouns they are modifying. When possessives are associated with concrete nouns, they can be modifiers, which are uniformly non-theta-assigning. With abstract nouns, possessives can either be modifiers or have a subject-like role. Anderson suggests that abstract nouns can in principle be either theta-assigning or not. When they are not theta-assigning, they behave like concrete nouns in taking possessive modifiers. When they are theta-assigning, they take subject-like arguments. Anderson based her distinction on the specifier system, but Grimshaw argues, it can be shown that the very same distinction pervades the complement system for nouns and lies behind the apparent optionality of the arguments of nouns in (3).

2.2.3   Nominals and event structure

2.2.3.1   Event structure and argument structure in nominals

Result nominals name the output of a process or an element associated with the process, process nominals name a process or an event. The noun **examination**, for example has two interpretations. It can refer to concrete entity, it may also refers to an event.

The **result** and **process** labels do not provide an illuminating way of characterizing the entire range of relevant cases. Grimshaw argues that the real distinction is between nouns that have an associated event structure which she calls complex event nominals and nouns that do not. (Event nouns

that denote events behave like result nominals unless they have an event structure which provides them with an internal event analysis). Since argument structure is composed from the aspectual and thematic analyses of a predicate, Grimshaw hypothesizes that any predicate lacking an aspectual analysis will also lack an argument structure and will never take any grammatical arguments at all.

2.2.3.2 The presence or absence of argument structure

Grimshaw points out that since complex event nominals have an event structure, they have a-structure and take arguments. Complements to complex event nominals will be obligatory. Obligatory must mean the same for nouns as for verbs capable in principle of being obligatory but perhaps subject to lexical variation. She points out that even direct objects of verbs are sometimes optional.

The widespread ambiguity between two types of nominals will complicate the hypothesis, (i.e. complex event nominals have obligatory arguments) and various techniques of disambiguation must be invoked. The first and simplest case, argues Grimshaw, is to pick unambiguous nouns and see how they behave.

Gerundive nominals also take obligatory arguments and they share event properties of the other complex event nominals. The disambiguation of other derived nominals supports the conclusion that complex event nominals take grammatical arguments. It is often possible to disambiguate nouns by using modifiers. Grimshaw refers to English modifiers to clarify this, **frequent** may force the event reading in word-like expression as in (7c).

(7)   c.   The frequent expression of one's feeling is desirable.

Grimshaw maintains that once the nominal is disambiguated we can see that the object of the event nominal is obligatory. She porposes that a further kind of evidence for the obligatoriness of arguments with complex event nominals comes from the behavior of possessives. Recall that subject-like possessives are licensed by a-structure. Thus, when a possessive subject occurs, the noun must have an argument structure. Hence, she concludes, the appearance of a possessive interpreted as subject will lead to the appearance of objects.

According to Grimshaw one other kind of subject-like element occurs in nominals: the **by** phrase. Just like possessive the **by** phrase is licensed a-structure. Hence, the prediction is that the inclusion of a **by** phrase will

have the same effect as the addition of a possessive subject: disambiguating the nominal into an argument-taking reading and making objects obligatory. But, Grimshaw states, not all **by**-phrases are related to argument structure. Only the subject-like by phrases are and only they will disambiguate the nominal and force obligatory arguments. The modifier **by** phrase will not.

By manipulating the context to disambiguate nominals, it is possible to see that nominals do take obligatory objects, just as verbs do. But the existence of the ambiguity explains why objects might seem to be optional for nouns.

Grimshaw concludes that nouns with a complex event interpretation have an argument structure, which must be satisfied, and other nouns do not. But even results nominals imply the existence of certain participants in the situation they are used in. The proposal here crucially distinguishes between **syntactic arguments**, which stand in a grammatically significant relationship to predicates, and which she calls participants.

2.2.3.3 Unambiguous modifiers

Grimshaw argues that postnominal genitives in English are unambiguously modifiers, co-occuring only with non-argument-taking nouns, so examples like **an examination of Bill's** are unambiguous. Certain possessives can never be interpreted as related to a-structure, since their meaning is such that they cannot contribute information about an argument position. Examples are temporary possessives like **yesterday's** etc. Grimshaw concludes that these modifiers are associated only with nouns with no argument structure.

2.2.3.4 Aspectual differences

Grimshaw argues that there is a telling difference between complex and simple nominals concerning the possibility of event control. Nominals, like passives, allow control into an infinitival purpose clause. Lasnik (1988) and Williams (1985) argue that the controller in such cases is the event denoted by the clause or the nominal rather than an implicit argument of the noun, as proposed in Roeper (1987). Grimshaw proposes that event control is possible with a passive and with the complex event nominals. Unambiguous result nominals never allow control (pp. 57-58).

Grimshaw points out that there are many nominals that seem to denote events but do not behave like the complex event nominals. She considers, for example,

the nouns **race, trip, exam** and even an **event**. Grimshaw argues that these nouns are simple event nominals. They disallow event control. In contrast, only the complex event nominals have the internal aspectual structure needed for event control and needed to license aspectual modifiers.

Grimshaw's proposals so far can be summarized as follows: complex event nominals and corresponding simple event and result nominals have related lexical conceptual structures, but only complex event nominals have an event structure and a syntactic argument structure like verbs. Complex event nominals are distinguished from others in the range of determiners and adjuncts they occur with as well as in event control and predication.

2.2.4   The lexical representation of nominals

Grimshaw argues that there are two kinds of external arguments. One is the R-external argument, a non-thematic argument which serves as an external argument of nouns. The other external argument introduced by Davidson (1985) is E. All nouns have an external argument even result nominals and simple event nominals like in (42):

(42)   (a)   dog   (R)
        (b)   dissertation   (R)
        (c)   observation   (R)

In this sense, then, all nouns have an a-structure. Even if they have no other arguments they have **R** as their external argument. Nominals like those in (42), however, lack a thematic a-structure, an a-structure projection of their **LCS** participants, and this is what distinguishes them from complex event nominals.

Grimshaw maintains that event nominals must have an external argument distinct from their thematic arguments. The external argument of event nominals is different from that of result and simple event nominals. First, Grimshaw notes that the external argument of a complex event nominal never binds an lcs participants. It must not be the **R**. Grimshaw designates it as EV.

EV, then is the external argument of complex event nominal. In the **Prominence theory** of a-structure, it must be the most prominent argument, since it is external. All other arguments of a noun must be internal. The distribution of **by-phrases** in nominals follows from the hypothesis that their external arguments are EV rather than external arguments of the corresponding verbs.

A noun gets EV as its external argument if it has an event structure. Hence, Grimshaw concludes, no noun with **R** as its external argument can ever have an event structure associated with it. Both result and simple event nominals have R as their external argument.

2.2.5   Theta-marking properties of argument-taking nominals

Grimshaw (1990:70) proposes that nouns in English have no direct theta-marking capacity. Argument-taking nouns have the same kind of a-structure representation as verbs, but nevertheless they cannot directly accept arguments because they are defective theta-markers. Grimshaw argues that nouns can take arguments only through the mediation of prepositions.

The structure of theta-marking with nouns require that only prepositions that are theta transmitters will combine with nouns to take arguments. Other prepositions will not be qualified for the job, even though they are all case assigners. Critical in this solution is that the preposition **of** acts like the other prepositions with respect to theta-marking. It must transmit theta-marking. Otherwise, process nominals with **of** NP complement would violate the theta criterion, because it also have a-structure. **Of** is thematically restricted in nominals. More generally, since the prepositions which occur with theta-marking nouns are always theta transmitters, it is no surprise that the prepositions that appear in these NPs are always semantically based.

The general consequence of the idea that nouns are defective theta markers is, according to Grimshaw, that nominals can license PPs and not bare maximal projections of any other kind. Thus when a noun in English occurs with a complement that is not introduced by a preposition, the complement cannot be a syntactic argument. As a result, Grimshaw argues, the NP cannot be a complex event nominal.

If a nominal is construed as a complex event nominal, it will have an argument structure to be satisfied, but the maximal projection will not be able to satisfy it, because the proper predicate argument relationship cannot be established without a preposition.

2.3   SAFIR'S PROPSALS

2.3.1.   Introduction

Safir is concerned with the question of how thematic structure in the lexicon is mapped onto syntactic structure.

His main conclusion, based on grammatical mapping in nominals, is that the notion external argument cannot be defined independently of its context, rather it must be defined relative to an internal argument or maximal projection. This phenomenon, which he calls Grammatical Function Relativity (GFR), will have important consequences for the distribution of implicit arguments in nominals and Chomsky's (1981) Projection Principle.

Safir favors the Government-Binding approach because this theory can account for the dependence of external argument on internal ones.

He defines the notions **projected** and **linked** as follows:

An argument is
(a)   **linked** if it is mapped onto a structural position at D-structure,
(b)   **projected** if it is syntactically non-inert at D-structure.

It follows that all linked arguments are also projected, but it·will be maintained that some arguments, namely, implicit arguments, are projected without being linked. Linking of arguments corresponds to what most linguists mean by grammatical mapping. Safir considers the following:

John examined the fish.

The theme of **examine, the fish**, is linked to a syntactic position (sister of V) by the direct object relation (or internal argument, following Williams (1981)). The agent of examine, **John**, is linked to the NP daughters of S by William's external argument relation, which assigns a thematic role to an NP which is outside the maximal projection of the predicate.

When a predicate projects both its internal and external arguments, it has projected its full set of thematic roles or its **full thematic array.**

Given the notion of linking, just introduced, GF Relativity can now be stated more precisely: the grammatical relation 'external argument' must according to Safir be reformulated so as to be defined relative to the presence of a linked

internal argument in a given structure. As evidence for the existence of GF Relativity he argues that only nominal predicates that link internal arguments will be able to have true external ones.

Safir argues that to establish these claims it is important, first, to show that there is a syntactic effect that serves as a diagnostic for the presence or absence of an external argument. Then he shows that this effect is susceptible to manipulation based on whether or not the internal argument is linked. To do this a syntactic context, where internal arguments are optionally needed, is required, and hence he focuses on deverbal nominal constructions.

2.3.2   Argument Linking in Nominals

Safir states that the most important question in the distribution of thematic roles in nominals is: does the Projection Principle ever apply to the structure of nominals in the way it applies to the structure of sentences? In answering this question, Safir points out that it is simply not necessary for a deverbal nominal to express all of the thematic roles that the corresponding verb requires.

He considers the following English example, where the noun **discussion** requires a theme argument only optionally, although the verb **discuss** requires a direct theme.

(2)   a.   John discussed* (the issue) for a long time
                    Theme

        b.   John's discussion (of the issue) lasted a long time.

Safir states that the most important question that arises is whether the Projection Principle has any relevance at all for nominals. According to him if the Projection Principle is in force, it should account for the distribution of traces, that is, thematic roles must be assigned to argument positions in the same way at every level, and if the argument moves, it can only maintain its thematic role by association with a trace of a grammatically linked position. In what follows it will emerge that the distribution of internal arguments in nominals will critically determine the force of the Projection Principle with respect to all arguments of nominals.

2.3.2.1 Movement in Nominals and the Adjunct Restriction

According to Safir, Anderson (1983) defends the analysis which states that the thematic object of deverbal nouns in English is derived by movement, even though other arguments of thematic roles to prenominal genitive position may be assigned directly. If Anderson's analysis is correct, it would be expected, given the Projection Principle, that a trace would be found in postnominal position when the prenominal genitive NP (PGNP) corresponds to the object of the deverbal noun (i.e. the object of the corresponding verb).

In as far as adjunct modification is concerned Safir argues that **some nominals** can be adjunct modified and other cannot. He invokes three examples to support his view, the nominals **photograph, treatment** and **discussion**. The difference between nominals like these may be that the latter two are event nominals while photograph is not an event. We can now state at least part of the restriction as follows:

(8)   An adjunct can modify a prenominal genitive NP (PGNP) only if the
        nominal describes an event or process.

Safir argues that the issue of adjunct restriction can be reduced to fairly simple generalisation if we abandon the view that theme interpretation of nominals are derived by movement. The restriction on adjuncts must be made sensitive to whether or not the nominal in question has an internal argument NP in postnominal position i.e. an of NP.

According to Safir, the peculiar restriction of adjunct modification of PGNPs may now be stated provisionally as in (10) which replaces (8).

(10)   The Adjunct Restriction
             An adjunct can modify a PGNP only if:

    a.   the nominal in question describes an event or process (=8) and

    b.   the nominal in question links an internal argument.

The internal argument condition in (10b) also appears to be the crucial factor determining thematic interpretation of the PGNP if the internal argument is present, then the PGNP in English, cannot have anything but the external argument interpretation.

Event or process nominals are nominals that describe an event. One way of accounting for the external argument interpretations is, according to Safir, to state the generalization in (12).

(12)   The PGNP is interpreted as the external argument of a nominal N if N links its internal argument.

What (12) requires is that if the internal thematic role of a nominal is linked, that is, mapped onto a postnominal position (typically the of-argument), then the PGNP must be interpreted as the external argument of the nominal predicate, and the full thematic structure of the predicate is linked (both internal and external arguments).

For example the agent of **catch** is linked to the NP daughter of S by Williams' external argument relation which assigns a thematic role to an NP which is outside of the maximal projection (in X terms) of the predicate in question.

In cases where there is one argument only like in **Bill's treatment** both the agent and theme interpretations are available for the PGNP. When the internal argument is not linked, Safir assumes that the interpretation of the PGNP is **relatively free. Bill** may therefore be interpreted not only as one of the roles in the thematic array of **treatment** (e.g. agent or theme) but also as a possessor or author. Safir assumes that any freely interpreted PGNP position in English, if one is syntactically realized, counts as a theta-position with respect to the Theta-criterion.

Safir states that the possibility for free thematic interpretation for the PGNP means that the agent role can be interpreted by other means than the grammatical mapping imposed by (12) i.e. the agent role can be linked to the thematic array of the nominal without being an external argument.

2.3.2.2   Predicting the Distribution of Movement in Nominal

If the presence of a linked internal argument entails the presence of a full thematic array as required by (12), then we expect, according to Safir, that the PGNP position in such a nominal will have to be a theta-position at D-structure, as it is at every level as a result of the interaction of the Projection Principle and the Theta criterion, for there is no movement into a theta-position.

Safir interprets the derived nominal with an internal argument as having the same thematic structure as an active verb, and as such it projects the external theta-role onto the PGNP position if that position is structurally realized in syntax.

2.3.2.3 Lexical structure and Argument Linking

Safir addresses the question of why the structural presence of the internal argument should be crucial to the presence of a full thematic array, and hence a completely thematic interpretation of the PGNP. Why should a thematic interpretation be more idiosyncratic when the internal argument is not represented?

The central observation, according to Safir, which provides the key to these problems, is that projection of internal arguments determines the way that the external argument is projected. This suggests that the theory of lexical representation should not specify how external arguments are linked in syntactic structure, as this should follow from linking of internal arguments. Safir points out that a theory of lexical representations with almost exactly this property has been proposed by Hale and Keyser (1985).

Hale and Keyser (H&K) propose that the lexical thematic structure of a verb like **cut** should only specify that **cut** requires linking of its theme argument to an internal position, and that it has an agent. Their lexical representation of cut is in (23), where X is the agent and Y is the theme as illustrated in the Lexical Conceptual structure (LCS) below.

(23)   cutv   V
                        /   \
                   V   NP
                                 ¦
                                 ¦
            X   Y
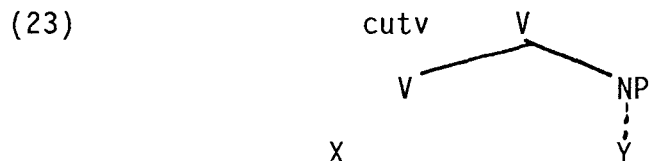
LCS: X produce a linear separation in material integrity of Y by sharp edge coming into contact with Y.

The tree representation in the lexical entry which H & K call lexical structure is mapped onto syntactic structure at the level of lexical insertion i.e. D-structure. This mapping is more precisely what is meant by **linking** of an internal argument.

To be more precise, Safir assumes the generalization in (24).

(24) If a predicate P has a lexical structure then the lexical **structure of**
      P consists of the first branching X projection above P or the maxical
      projection of P elsewhere.

This means that the lexical structure of verb like cut is V because **cut**
selects a sister to V, but for verbs like **run**, the **lexical structure is the
unbranching maximal VP**.

The three key properties of Hale & Keyser exploited by Safir are (i) aspects
of grammatical mapping are represented in configurational terms in lexical
entries, (ii) only the linking of the internal argument is specified in the
lexical entry, and (iii) the LCS is not necessarily affected by an adjustment
in the way that arguments are linked or thematic arrays are represented.
Property (iii) makes it possible to suggest that one may appeal pragmatically
to the lexical conceptual structure (LCS) of a predicate and bypass its
lexical argument structures, which is exactly what I propose to be the content
of free thematic interpretation of the PGNP (= the postnominal genitive NP in
Xhosa and Venda.

2.3.2.4   Linking in Nominals

Turning now to nominals Safir assumes that the lexical entry for a nominal
like **investigation** will be as in (25).

(25)   investigation$_N$ [$\overline{N}$ NP]
                          | |
                          X   Y
        LCS: The activity of X investigating Y.

The key property is that **investigation** is a nominal capable of having a full
thematic array corresponding to the related verb, and it is the conditions
under which this is possible that concerns us here.

Safir reconsiders the notion of External Argument. Recall that his assumption
was that only the linking of internal argument is represented in lexical
structure while the presence of the remaining argument is simply noted. The
leftover argument can, according to Safir, now be defined as the external
argument only if the definition in (26) is met.

(26)   The external argument of a lexical predicate P is the unique argument
        of P that is assigned **outside the lexical structure** of P.

The term 'outside' here is crucially relative. Safir points out that it follows from (26) that if P does not have a **branching lexical structure** in its lexical entry, then no external argument can be defined for **P** inside the maximal projection of P. For a predicate that has a lexical structure, an external argument is defined in syntax **only** if lexical structure is linked to syntactic structure.

The key results obtained by the application of (26) to the H&K lexical structures is stated by Safir as in (27).

(27)   GF Relativity
       The external argument can be defined in syntax only when the lexical
       structure is linked.

Safir concludes that it is now possible to states when the Projection Principle must be satisfied:

(28)   If the lexical structure of a predicate P is **projected** at D-structure, then the arguments of P must be projected at every syntactic level.

If a lexical predicate does not project its full **lexical structure**, then it will follow that the projection principle is not invoked. It thus follows, according to Safir, that the nominals in (29) do not violate the Projection Principle since the lexical structure of examination has not been projected at all.

(29)a.   The examination was terrible.
    b.   John's examination was terrible.

Since the external argument is not defined in (29) it follows that the nominal can either be without arguments altogether as in (29a), or, if a PGNP in English has been generated as in (29b), then the PGNP can receive a theta-role by free thematic interpretation. The theta-role assigned by free thematic interpretation to the PGNP may be selected either from the LCS of **examination** or on the basis of any salient interpretation e.g. **John** can be interpreted as agent or theme or owner of the nominal examination. If, however, the lexical structure is linked (where **John** is the internal argument of examination then the PNGP is interpreted as a thematic external argument.

Safir maintains that the definition of external argument introduced here in relative terms, makes it possible to be more precise about the consequences of this definition in the simpler cases. He argues that in sentences the external

argument will be the NP that is sister to VP, because the sister of VP is outside of VP. Thus the unassigned argument of **cut** (i.e. the external argument) will be mapped onto the subject position. This is not the same thing as identifying the [NP,S] position as subject directly as it is not part of the [NP,S] specification to require that the subject be outside of anything.

The latter distinction may according to Safir be highlighted by considering an intransitive verb like **run**, which has no branching lexical structure at all under this account, as it has no internal argument. **Run** may still have an external argument assigned outside of its maximal projection, however, as in the case of the [NP,S] position. Thus **run** may have an external argument without having a lexical internal argument and this possibility contrasts the [NP,S] position with the PGNP position in nominals.

By contrast, the PGNP position is not external to the maximal projection of the noun **run** and the noun **run** has no lexical structure by virtue of which its single argument could be defined as external. Nominals like **John's run** can therefore only have free thematic interpretation by appeal to the LCS of run. **John** gets a formal theta-role to satisfy Theta-criterion, from the possessive marker in this case, but the content of that role is filled in by free thematic interpretation.

Thus, Safir argues, due to the fact that the PGNP position is internal to the maximal projection of the nominal, the PGNP can be defined as an external argument position only by virtue of the linking of an internal argument. Thus (12), repeated below, can now be derived from the interaction of the Projection Principle with the definition of the external argument.

(12)   The PGNP in English is interpreted as the external argument of a
        nominal N if N links its internal argument.

If the internal argument is dominated by a branching N induced by the linked lexical structure, then the sister of N may be defined as the external argument. The Projection Principle will then require that the full thematic array be projected, and this will require the PGNP to be interpreted as the external argument. Safir explores the sense in which the Projection Principle require the presence of a full thematic array when the internal argument is linked and there is no PGNP which can be defined as the external argument.

To clarify this Safir considers **implicit arguments**, which are a form of missing argument (Safir: 1987:580).

Safir points out that it is as a consequence of his theory that the full thematic array of deverbal nominal is projected if the internal argument is linked. If the presence of the adjunct modification is diagnostic of the presence of linking with lexical structure, then, when the **of**-NP is present, it should become possible to construe an adjunct with an implicit argument which, if it were overt, could appear in prenominal genitive position the external argument.

Safir consider English examples corresponding to the Venda examples in (35) to clarify the issue of implicit arguments:

(35)   a.   Khadzimo ya munna ya tshelede ya [PRO U takadza vhathu] ndi yavhudi
              (The loan of the man of money to make people happy is good)

        b.   Khadzimo ya [PRO u takadza vhathu] ndi ya vhudi
              (The loan [to make-people happy] is good)

The crucial factor here is whether or not there is any controller for the PRO subject of the infinitival clause. The overt postnominal NP serves as a controller in (35a) where the internal argument is linked and the postnominal genitive NP is thus defined as the external argument. (35b) works the same way except that the external argument is implicit - yet it serves successfully as a controller. More examples are in section 3.

In each example in (35) the argument modified by the adjunct is unambiguously interpreted as the external argument of the verbs corresponding to these nominals, thus indicating that the full thematic array of these nominals has been projected. Secondly, the possible presence of an implicit argument is predicted by the presence of the linked internal argument. By contrast free thematic interpretation does not licence implicit argument because lexical structure is not linked and so no grammatical function is implied.

Thus, Safir concludes, we now have a means of predicting the syntactic contexts in which implicit arguments in nominals can appear.

The implicit argument in (35b), like other implicit arguments, is a projected but unlinked argument. This means that it is defined relative to the linked internal argument, but is not mapped onto a syntactic position. It is assumed that the projection of a lexical structure is sufficient to imply the presence of the external argument since the external argument is defined in the lexicon according to (26).

Thus, if the lexical structure is linked, the external argument is projected whether it is linked or not. The external argument is quite literally implied. Safir assumes that the fact that only external argument can be implicit can be accounted for within assumption outlined above. The crucial mechanism according to Safir is the triggering effect of the internal argument linking which provide for external argument projection. Thus, he concludes, GF Relativity obtains as follows:

GF Relativity (GFR)

If a predicate P has an object, then it cannot have a subject unless the object of P is linked.

Safir maintains that GF Relativity follows from H&K lexical structures in terms of the definition of the external argument - provided the GF of the external argument is defined relatively. Thus in terms of Safir's proposals, the notion external argument is constructed by reference to the lexical structure, which explains the facts of GF Relativity.

Safir assumes that the external argument, defined as the theta-role assigned outside lexical structure, can be assigned either to a **by-phrase** or to the PGNP in English but not to both as a result of the Theta-Criterion (P.588).

Safir maintains that the **by-object** competes with the PGNP because they both count as argument positions capable of satisfying the external argument slot of a nominal with a projected lexical structure (a linked internal argument).

Safir's proposals crucially advances the idea that the expression of one grammatical function of some predicate is contingent on the expression of another. Safir defines the grammatical function subject which maps an argument of a predicate P that has a subject onto [NP,S] position in a sentence and PGNP position in nominal constructions. Safir also defines the GF object which corresponds to the **of**-object in nominals and [NP,VP] position in a sentence.

2.4   CONCLUDING REMARKS

The two studies, Grimshaw (1990) and Safir (1987) concentrate considerably on the definition of the external (agent) argument. Safir argues that the external argument must depend on the linked internal argument if it is to be mapped onto a syntactic position. He explains this through his GFR theory.

Grimshaw on the other hand introduces Prominence Theory and claims that the external argument is the most prominent member of a predicate. Thus, she claims, an argument is external or internal by virtue of its intrinsic relation to other arguments.

The two linguists to agree that the argument structure of the deverbal event nominal correspond to the argument structure of the corresponding verb, although Grimshaw emphasises the complexity of the event nominal.

Grimshaw claims that nouns do not have the capacity to theta-mark, but only prepositions have.

SECTION 3

3.1   INTRODUCTORY REMARKS

In this section the argument structure of deverbal event nominals of related intransitive and transitive verbs in Venda is investigated. In subsection 3.2, the argument structure of event nominals derived from monotransitive verbs is explored. Monotransitive verbs assign two theta-roles, the external argument and the internal argument. In subsection 3.3, the argument structure of event or process nominals derived from ditransitive verbs is investigated. Ditransitive verbs assign one external argument and two internal arguments. In subsection 3.4, the argument structure of event or process nominals derived from intransitive verbs is investigated. Intransitive verbs do not take objects. They are one place argument verbs because they assign external arguments only.

The argument structure of the active verb will be exemplified first in sentences and from these sentences event or process nominals will be constructed. These event nominals will be placed in deverbal nominal sentence construction to determine if the arguments which appear with the active verb may appear with a deverbal nominals.

The hypothesis, which states that the argument structure of a deverbal nominal is identical to the argument structure of a verb from which it is derived, is assumed. The central aim of this section is thus to explore the syntactic projection or structural realization of the arguments of deverbal event and process nominals in Venda.

3.2   DEVERBAL NOMINALS RELATED TO MONOTRANSITIVE VERBS

3.2.1   The structural projection of arguments of deverbal nominals.

Consider the following example sentences with active monotransitive verbs from which deverbal event nominals related to monotransitive verbs will be derived:

(1)   a.   **Vhafunzi** vha ramba **vhathu**
              Agent   Patient
              (The priest invites the people)

b.   **Vhashumi** vha fafadzela **vhunyunyu**
     Agent   Patient
     (The workers spray the mosquitoes)

c.   **Vhalimi** vha guda **mavu**
     Agent   Theme
     (Farmers study the soil)

d.   **Mupurofesa** u sasaladza **munwali**
     Agent   Patient
     (The professor criticizes the author)

e.   **Vhabebi** vha vhulunga **nwana**
     Agent   Theme
     (The parents bury the child)

f.   **Muvhuso** u tambudza **vhathu**
     Agent   Patient
     (The government cause the people to suffer)

g.   **Muvhuso** u lifhedza **maravhele**
     Agent   Patient
     (The government retaliates the terrorists)

h.   **Mudzimu** o sika **shango**
     Agent   Theme
     (God created the earth)

i.   **Mufunzi** u tanganedza **nwana**
     Agent   Theme
     (The priest accepts the child)

The verbs in the above examples in (1a-i) all assign two thematic roles: an internal theta role and an external theta role. The external argument of the verb -**ramba** (invite) in (1a) is the agent **mufunzi** (priest) and the internal argument is the patient **vhathu** (people). The external argument of the verb -**fafadzela** (spray) in example (1b) is the agent **vhashumi** (workers) and the internal argument is the patient **vhunyunyu** (mosquitoes). The external argument of the verb -**guda** (study) in example (1c) is the agent **vhalimi** (farmers) and the internal argument is the theme **mavu** (soil).

The external argument of the verb -**sasaladza** (criticize) in (1d) is the agent **mupurofesa** (professor) and the internal argument is the patient **munwali** (author). The external theta-role of the verb -**vhulunga** (bury) in (1e) is the

agent **vhabebi** (parents) and the internal theta-role is the theme **ṅwana** (child).

The external theta-role of the causative verb **tambudza** (cause to suffer) in (1f) is the agent **vhabebi** (parents) and the internal theta-role is the theme **ṅwana** (child). The external theta role of the verb **lifhedza** (retaliate) in example 1(g) is the agent **muvhuso** (government) and the internal theta-role is the patient **maravhele** (terrorists). The external theta role of the verb **sika** (create) in (1h) is the agent **Mudzimu** (God) and the internal argument is the theme **shango** (earth).

The external theta=role of the verb **tanganedza** (accept) in (1i) is the agent **mufunzi** (prest) and the internal theta-role is the theme **ṅwana** (child).

The deverbal event and process nominals that correspond to the verbs in (1a-i) are given below in (2). The noun class number of each event nominal is given below the nominal in question.

(2) a. Thambo **ya mufunzi ya vhathu** i takadza mubishopo
          9   Agent   Patient
          (The invitation of the priest of the people interests the bishop)

  b. Mufafadzelo **wa vhashumi wa vhunyunyu** u fhungudza malwadze
          3   Agent   Patient
          (The spraying of workers of mosquitoes reduces diseases)

  c. Ngudo **ya vhalimi ya mavu** i khwinisa vhulimi
          9   Agent   Theme
          (The study of farmers of the soil improves farming)

  d. Tsatsaladzo **ya mupurofesa ya muṅwali** yo vhifha
          9   Agent   Patient
          (The criticism of the professor of the author is bad)

  e. Mbulungo **ya vhabebi ya ṅwana** i a tungufhadza
          9   Agent   Theme
          (The burial of parents of the child is pitiful)

  f. Dambudzo **la muvhuso la vhathu** lo hulela
          5   Agent   Patient
          (The cause of great suffering of the government of people is worse)

g. Ndifhedzo **ya muvhuso ya maravhele** i takadza vhadzulapo
        9   Agent   Patient
    (The retaliation of the government of the terrorists interests
    citizens)

h. Tsiko **ya Mudzimu ya shango** i vhalwa bivhilini
        9   Agent   Theme
    (The creation of God of the earth is read in the bible)

i. Thanganedzo **ya mufunzi ya ṅwana** i rembulusa vhathu
        9   Agent   Theme
    (The acceptance of the priest of the child make the people to
    repent)

All the arguments of the active verb **ramba**(invite) in (1a) also appear in the argument structure of the deverbal event nominal, **thambo** invitation) in (2a). They appear as postnominal genitive NPs. The leftmost NP is the Agent **mufunzi** (Priest) and the rightmost NP is the patient **vhathu** (people). The two arguments **mufunzi** (Priest) and **vhathu** (people), agent and patient respectively, occur as complements of the genitive **a**. There is no change in the thematic interpretation of the arguments in the examples in (1a) and those in (2a).

In example (2b) above, all the arguments which are assigned by the verb **fafadzela** (spray) appear in the argument structure of **Mufafadzelo** (the spraying). The two arguments, **vhashumi** (agent) and **vhunyunyu** (patient) appear in the postnominal genitive position. They occur as complements of the genitive **a**. There is no change in the thematic interpretation of these arguments in (1b) and (2b).

In example (2c) above, all the arguments which are assigned by the verb **guda** (study) appear in the argument structure of deverbal event nominal **ngudo** (the study). These arguments occur in the postnominal genitive position and occur as the complements of the genitive **a**. The thematic interpretation of these arguments is similar to the arguments of the corresponding active verb.

All the arguments of the active verb **sasaladza** (criticize) in (1d) also appear in the argument structure of the deverbal event nominal **tsatsaladzo** (criticism) in (2d). They appear as the postnominal genitive NPs. The leftmost argument is the agent **mupurofesa** (the professor) and the rightmost argument is the patient **muṅwali** (author). The two arguments occur as the complements of

the genitive **a**. The thematic interpretation of the arguments of the deverbal nominal are similar to the arguments of the corresponding verb.

In example (2e) above, all the arguments which are assigned by the verb **vhulunga** (bury) appear in the argument structure of the deverbal event nominal **mbulungo** (burial). The two NPs appear in the postnominal genitive position. They occur as complements of the genitive **a**. There is no change in the thematic interpretation of these arguments. The leftmost argument is the agent **vhabebi** (parents) and the rightmost is the theme **ṅwana** (child).

In example (2f) above, all the arguments which are assigned by the causative verb **tambudza** (cause to suffer) in (1f) also appear. The two NPs in (2f) appear in the postnominal position. The leftmost NP is the agent **muvhuso** (government) and the rightmost NP is the patient **vhathu** (people). They occur as complements of the genitive **a**. There is no change in the thematic interpretation of these arguments.

The deverbal event nominal in (2g) **ndifhedzo** (retaliation) has all the arguments assigned by the corresponding verb **lifhedza** (retaliate). The two NPs appear in the postnominal genitive position. The leftmost NP is the agent **muvhuso** (government) and the rightmost NP is the patient **maravhele** (terrorists). They occur as complements of the genitive **a**. There is no change in the thematic interpretation of the arguments.

In example (2h) above, all the arguments which are assigned by the verb **sika** (create) appear in the argument structure of the event nominal **tsiko** (creation). The two NPs in (2h) appear in the postnominal genitive position. The leftmost NP is the agent **Mudzimu** (God) and the rightmost NP is the theme **shango** (earth). The two NPs appear as the complements of the genitive **a**. The thematic interpretation of the arguments of the deverbal nominal in (2h) is similar to the thematic interpretation of the arguments of the corresponding verb in (1h), **sika** (create).

In example (2i) above, all the arguments which are assigned by the verb **ṱanganedza** (accept) appear in the argument structure of the event nominal **ṱhanganedzo** (acceptance). The two arguments appear in the postnominal genitive position. They appear as the complements of the genitive **a**. There is no change in the thematic interpretation of the arguments. The leftmost NP is the agent **mufunzi** (priest) and the rightmost NP is still the theme **ṅwana** (child).

The possibility of ambiguity as regards the thematic interpretation of arguments in (2) is discussed in the following paragraphs. Ambiguity occurs when all the arguments are animate. When the internal argument is inanimate no ambiguity arises. The examples in (2) will be grouped into two groups. The first group will be those examples which exemplify with ambiguity:

(2)   a.   Thambo **ya mufunzi**   **ya vhathu** i takadza mubishopo
        [9]   Agent/Patient Agent/Patient
        (The invitation of the Priest of the people interests the bishop)

(2)   d.   Tsatsaladzo **ya mupurofesa ya munwali** yo vhifha
        [9]   Agent/Patient Patient/Agent
        (The criticism of the professor of the author is bad)

(2)   f.   Dambudzo **la muvhuso**   **la vhathu** lo hulela
        [5]   Agent/Patient Patient/Agent
        (The cause of great suffering of the government of people is worse)

(2)   g.   Ndifhedzo **ya muvhuso**   **ya maravhele** i takadza vhadzulapo
        [9]   Agent/Patient Patient/Agent
        (The retaliation of the government of the terrorists interests the citizens)

(2)   i.   Thanganedzo **ya mufunzi**   **ya nwana** i rembulusa vhathu
        [9]   Agent/Patient Agent/Patient
        (The acceptance of the priest of the child makes the people to repent)

All examples repeated above, that is (2a), (2d), (2f), (2g) and (2i) have an ambiguous thematic interpretation of the arguments. This is illustrated by the two theta-roles below the arguments in these examples. All these ambiguous interpretations arise because the arguments are either human or have human control.

The second group of examples in (2) which demonstrates the absence of ambiguous interpretation of arguments are given below.

(2)   b.   Mufafadzelo **wa vhashumi wa vhunyunyu** u fhungudza malwadze
        [3]   Agent   Patient
        (The spraying of workers of mosquitoes reduces diseases)

(2)   c.   Ngudo **ya vhalimi ya mavu** i khwinisa vhulimi
        [9] Agent   Theme
        (The study of farmers of the soil improves farming)

(2)   e.   Mbulungo **ya vhabebi ya ṅwana** i a tungufhadza
       [9]   Agent   Theme
       (The burial of the parents of the child is pitiful)

Examples (2b), (2c) and (2e) have no ambiguous interpretation of arguments because the internal arguments are inanimate. These inanimate internal arguments are **vhunyunyu** (mosquitos) in (2b), **mavu** (soil) in (2c) and **ṅwana** (child) in (2e). In (2e) the child has no life because he or she is dead and cannot be interpreted as agent.

The arguments of all the deverbal event nominals in (2) may alternate in linear order as in (3):

(3)   a.   Thambo **ya vhathu**   **ya mufunzi** i takadza mubishopo
             Agent/Patient Agent/Patient
             (The invitation of the people of the priest interests the bishop)

       b.   Mufafadzelo **wa vhunyunyu wa vhashumi** u fhungudza malwadze
                    Patient   Agent
             (The spraying of mosquitos of workers reduces diseases)

       c.   Ngudo **ya mavu ya vhalimi** i khwinisa vhulimi
                    Theme   Agent
             (The study of the soil of the farmers improves farming)

       d.   Tsatsaladzo **ya muṅwali**   **ya mupurofesa** yo vhifha
                    Agent/Patient Agent/Patient
             (The criticism of the author of the professor is bad)

       e.   Mbulungo **ya ṅwana ya vhabebi** i a tungufhadza
                    Agent   Theme
             (The burial of the child of the parents is pitiful)

       f.   Dambudzo **ḽa vhathu**   **ḽa muvhuso** ḽo huḽeḽa
                    Agent/Patient Agent/Patient
             (The cause of great suffering of the people of the government is worse)

       g.   Ndifhedzo **ya maravhele**   **ya muvhuso** i takadza vhadzulapo
                    Agent/Patient Agent/Patient
             (The retaliation of terrorists of the government interests the citizens)

       h.   Tsiko **ya shango ya Mudzimu** i vhalwa bivhilini
                    Theme   Agent
             (The creation of the earth of God is read in the bible)

34

i.   Thanganedzo **ya ṅwana**   **ya mufunzi** i rembulusa vhathu
                   Agent/Theme   Agent/Theme
      (The acceptance of the child of the priest makes people to repent)

In example (3a) the linear word order in (2a) is altered. **Vhathu** (people) is now in the leftmost position (adjacent to the deverbal nominal) and **mufunzi** (priest) appears in the rightmost position. The two arguments are structurally realized as postnominal genitive NPs. They occur as complements of the genitive **a** and both are animate. Ambiguity arises in the interpretation of theta roles. **Vhathu** (people) could be interpreted as either agent or patient and **mufunzi** (priest) also as either agent or patient. This is because both arguments are animate.

The postnominal genitive NP arguments in (2b) occur in the alternate linear order in (3b). They still appear as postnominal genitive NPs but the patient **vhunyunyu** (mosquitos) now occurs adjacent to the deverbal event nominal. The agent **vhashumi** (workers) appears in the rightmost position. The two arguments still appear as complements of the genitive **a**. There is no ambiguity in thematic interpretation because the patient **vhunyunyu** is inanimate and cannot be agent.

The postnominal genitive NP arguments in (2c) occur in the alternate linear order in (3c). They are still structurally realized as postnominal genitive NPs but the theme **mavu** (soil) occur adjacent to the deverbal nominal while the agent **vhalimi** (farmers) now occurs in the rightmost position. The two arguments appear as complements of the genitive **a** in (3c). There is no ambiguity in thematic interpretation because the theme **mavu** (soil) is inanimate and cannot be interpreted as agent.

In example (3d) there is an alternation of linear order of postnominal genitive NPs. **Muṅwali** (author) now occurs adjacent to the deverbal event nominal and **muporofesa** (the professor) in the rightmost position. The two arguments appear as complements of the genitive **a**. An ambiguous interpretation of these roles arises because all arguments are animate. Although background knowledge helps us to interprete **muṅwali** (author) as patient and **mupurofesa**(professor) as agent, the two arguments may have an ambiguous thematic interpretation. **Muṅwali** (author) may also be interpreted as agent and **muporofesa** (the professor) as patient. This is because they are both animate.

The alternation of linear order of the postnominal genitive NPs is also demonstrated in example (3e). **Ṅwana** (child), a theme in (2e) now occurs

adjacent to the deverbal nominal and **vhabebi** (parents) agent in (2e) occurs in the rightmost position. This stylistic alternation results in a change of thematic interpretation. **Ṅwana** (child) is now interpreted as the agent and **vhabebi** (parents) as theme because it would seem the parents are the people who have died. There is no ambiguity because one of the arguments, **ṅwana** is lifeless (i.e. dead).

In example (3f), the postnominal genitive NPs have alternated in linear order. **Vhathu** (people) now appears in the leftmost position adjacent to the deverbal nominals and **muvhuso** (the government) is now in the rightmost position. The two arguments appear as complements of the genitive **a**. There is ambiguity in the thematic interpretation of the two arguments because **vhathu** (people) is animate and **muvhuso** (government) is controlled by humans. The people can make those in the government feel uncomfortable in which case **vhathu** (people) will be interpreted as agent. If people are the ones who suffer from the oppressive government **vhathu** (people) will then be patient. **Muvhuso**(government) can cause the people to suffer (agent) and may suffer from the action of the people (patient).

In example (g) an alternation occurs in the linear order of the postnominal genitive NPs. The argument **maravhele** (terrorists) now appears adjacent to the deverbal nominal and another argument **muvhuso** (the government) now occurs in the rightmost position. The two arguments still occur as complements of the genitive **a**. There is ambiguity in the interpretation of these two arguments because one of them **maravele** (terrorists), is animate and the other, **muvhuso** (government), is controlled by humans. **Maravhele** (terrorists) could denote the people who are retaliating (agent) or the people who are retaliated (patient). **Muvhuso** (government) could be the one retaliating (agent) or the one retaliated (patient).

There is also an alternation in the linear order of the postnominal genitive NPs in example (3h). The NP **shango** (earth) occurs in the leftmost position adjacent to the deverbal nominal. The NP **Mudzimu** (God) occurs in the rightmost position. There is no change in thematic interpretation, the NP **shango** (earth) is the theme and **Mudzimu** (God) is the agent. There is no ambiguity in the interpretation of arguments because the theme **shango** (earth) is inanimate and cannot be agent.

In example (3i) an alternation in the linear order of the postnominal NPs occurs. The NP **ṅwana** (child) occurs in the leftmost position adjacent to the

deverbal nominal while the NP **Mufunzi** (Priest) appears in the rightmost position. They appear as complements of the genitive **a**. Background knowledge gives rise to the interpretation that the priest is the only person who accept people in the church. This means that the child (theme) could only be accepted by the priest (agent). Notwithstanding this fact, ambiguity may arise in the interpretation of theta roles in (3i). The child could be the person accepted (theme) or the person accepting (agent), or the priest could be the person accepting (agent) or accepted (theme).

The external arguments in (1) above could be structurally realized as complements of the preposition **nga** (**by**) in English. This is the only possible realization of the external argument in passive verb construction. It can also appear with arguments of deverbal event nominals as in (4):

(4)   a.   Thambo **nga mufunzi ya vhathu** i takadza mubishopo
                    Agent   Patient
          (The invitation by the priest of the people interests the bishop)

    b.   Mufafadzelo **nga vhashumi wa vhunyunyu** u fhungudza malwadze
                      Agent   Patient
          (The spraying by workers of mosquitos reduces diseases)

    c.   Ngudo **nga vhalimi ya mavu** i khwinisa vhulimi
                Agent   Theme
          (The study by the farmers of the soil improves farming)

    d.   Tsatsaladzo **nga mupurofesa ya munwali** yo vhifha
                    Agent   Patient
          (The criticism by the professor of the author is bad)

    e.   Mbulungo **nga vhabebi ya nwana** i a tungufhadza
                  Agent   Theme
          (The burial by the parents of the child is pitiful)

    f.   Dambudzo **nga muvhuso la vhathu** lo hulela
                  Agent   Patient
          (The cause of great suffering by the government of the people is worse)

    g.   Ndifhedzo **nga muvhuso ya maravhele** i takadza vhadzulapo
                  Agent   Patient
          (The retaliation by the government of the terrorists interests citizens)

h.   Tsiko **nga Mudzimu ya shango** i vhalwa bivhilini
                Agent   Theme
      (The creation by God of the earth is read in the bible)

i.   Thanganedzo **nga mufunzi ya ṅwana** i rembulusa vhathu
                   Agent   Theme
      (The acceptance by the priest of the child makes the people to
      repent)

In exmaple (4a), the agent argument **mufunzi** (priest) occurs as complement of
the preposition **nga** (by). The internal argument **vhathu** (people) appears as a
postnominal genitive NP after the prepositional phrase with **nga**. It occurs as
complement of the genitive **a** and its thematic interpretation remains patient.
No ambiguity occurs in this sentence.

In example (4b), the agent argument **vhashumi** (workers) is structurally
realized as the complement of the preposition **nga**. The patient argument
vhunyunyu (mosquitos) occurs as a postnominal genitive NP immediately after
the prepositional phrase with **nga**. No ambiguity occurs in thematic
interpretation.

In example (4c) the agent argument **vhalimi** (farmers) is structurally realized
as a complement of the preposition **nga**. The theme **mavu** (soil) appears as a
postnominal genitive NP after the prepositional phrase **nga vhalimi** (by the
farmers). There is no ambiguity in the interpretation of theta-roles.

The agent argument **mupurofesa** (the professor) in (4d) is structurally realized
as the complement of the preposition **nga**. The patient argument **muṅwali** (the
author) appears as the postnominal genitive NP after the prepositional phrase.
There is no ambiguity in the interpretation of arguments.

In example (4e), the agent argument **vhabebi** (parents) occurs as a complement
of the preposition **nga** (by). The theme **ṅwana** (child) appears as the
postnominal genitive NP after the prepositional phrase. There is no ambiguity
in the thematic interpretation of arguments.

In example (4f), the agent argument **muvhuso** (the government), is structurally
realized as the complement of the preposition **nga**. The patient argument **vhathu**
(people) appears as a postnominal genitive NP as the complement of the
genitive **a** after the prepositional phrase. There is no ambiguity in the
interpretation of thematic roles.

In example (4g), the agent argument **muvhuso** (the government), is structurally projected as the complement of the preposition **nga** (by). The patient **maravhele** (terrorists) appears as the postnominal genitive NP after the prepositional phrase. It occurs as the complement of the genitive **a**. There is no ambiguity in thematic interpretation of arguments.

In example (4h), the agent argument **Mudzimu** (God), is structurally projected as the complement of the preposition **nga** (by). The theme argument **shango** (earth) appears after the prepositional phrase with **nga** (by) as a postnominal genitive NP. It occurs as a complement of the genitive **a**. No ambiguity in thematic interpretation occurs.

In example (4i), the agent argument **mufunzi** (priest) appears as the complement of the preposition **nga** (by). The theme **ṅwana** (child) appears after the prepositional phrase as a postnominal genitive NP. It occurs as a complement of the genitive **a**. No ambiguity in thematic interpretation occurs.

The arguments in (4), the external argument with the preposition **nga** and the patient/theme argument which occurs as a postnominal genitive NP, can alternate in linear order. This is evident in (5):

(5) a. Thambo **ya vhathu nga mufunzi** i takadza mubishopo
      Patient Agent
   (The invitation of the people by the priest interests the bishop)

  b. Mufafadzelo **wa vhunyunyu nga vhashumi** u fhungudza malwadze
       Patient   Agent
   (The spraying of mosquitos by workers reduces diseases)

  c. Ngudo **ya mavu nga vhalimi** i khwinisa vhulimi
     Theme Agent
   (The study of the soil by farmers improves farming)

  d. Tsatsaladzo **ya muṅwali nga mupurofesa** yo vhifha
       Patient Agent
   (The criticism of the author by the professor is bad)

  e. Mbulungo **ya ṅwana nga vhabebi** i a tunguṱfhadza
      Theme Agent
   (The burial of the child by the parents is pitiful)

f. Dambudzo **la vhathu nga muvhuso** lo hulela
         Patient   Agent
(The cause of great suffering of the people by the government is worth)

g. Ndifhedzo **ya maravhele nga muvhuso** i takadza vhadzulapo
              Patient   Agent
(The retaliation of the terrorist by the government interests the citizens)

h. Tsiko **ya shango nga Mudzimu** i vhalwa bivhilini
        Theme   Agent
(The creation of the earth by God is read in the bible)

i. Thanganedzo **ya nwana nga mufunzi** i rembulusa vhathu
          Theme   Agent
(The acceptance of the child by the priest makes the people repent)

In example (5a) there is an alternation of linear order of arguments. The patient argument **vhathu** (people) which is a postnominal genitive NP occurs adjacent to the deverbal event nominal. The agent **mufunzi** (priest) is projected as a complement of the preposition **nga** (by) at the rightmost position. There is no ambiguity in the interpretation of theta roles.

In example (5b), there is an alternation of linear order of arguments. The postnominal genitive NP, which is the theme **vhunyunyu** (mosquitoes), occurs adjacent to the deverbal nominal. The agent **vhashumi** (workers) is projected as the complement of the preposition **nga** (by) at the rightmost position. No ambiguity of thematic interpretation occurs.

In example (5c) an alternation in the linear order of arguments is illustrated. The theme **mavu** (soil) occurs as a postnominal genitive NP adjacent to the deverbal event nominal. The agent **vhalimi** (farmers) is projected as the complement of the preposition **nga**(by) in the rightmost position. No ambiguity occurs in the thematic interpretation of arguments in this example.

In example (5d) there is an alternation of linear order because the postnominal genitive NP **munwali** (author) occupies the leftmost position. The agent **mupurofesa** (the professor) is now structurally realized as the complement of the preposition **nga** (by). No ambiguity in thematic interpretation occurs, that is **munwali** (author) remains a patient and **mupurofesa** an agent.

In example (5e) there is an alternation of linear order of argumetns. The theme argument **ńwana** (author), which is the only postnominal genitive NP, occurs adjacent to the deverbal nominal. The agent **vhabebi** (parents) is structurally realized as the complement of the preposition **nga** (by) at the rightmost position. No ambiguity in the interpretation of arguments occurs.

In example (5f) there is an alternation in linear order of arguments. The patient argument **vhathu**, which is a postnominal genitive NP, occurs adjacent to the deverbal event nominal. The agent **muvhuso** (government) is projected as the complement of the preposition **nga** (by) in the rightmost position. No ambiguity occurs in the interpretation of arguments.

In example (5g) there is an alternation in the linear order of arguments The patient argument **maravhele** (terrorists), which is a postnominal genitive NP, occurs adjacent to the deverbal event nominal. The agent argument **muvhuso** (government) is projected as a complement of the preposition **nga** in the rightmost position. No ambiguity in thematic interpretation occurs.

The alternation in linear order of argument occurs in example (5h). The theme argument **shango** (earth) which is a postnominal genitive NP, occurs adjacent to the deverbal nominal. The agent **Mudzimu** (God) is projected as a complement of the preposition **nga** (by) in the rightmost position. No ambiguity in thematic interpretation occurs.

In example (5i) there is an alternation of linear order of arguments. The theme argument **ńwana** (child), which is a postnominal genitive NP, occurs adjacent to the deverbal event nominal. The agent **mufunzi** (priest) is structurally realized as the complement of the preposition **nga** (by) in the rightmost position. No ambiguity in thematic interpretation occurs.

3.2.2 Omissibility of arguments with deverbal nominals.

In this subsection the possibility of omitting the external argument or the internal argument or both is discussed. For this purpose the set of sentences in (6) is given:

(6) a. (i) Thambo **ya mufunzi** i takadza mubishopo
[9] Agent/Patient
(The invitation of the priest interests the bishop)

(ii)   Thambo **ya vhathu** i takadza mubishopo
         [9] Agent/Patient
         (The invitation of the people interests the bishop)

b.   (i)   Mufafadzelo **wa vhashumi** u fhungudza malwadze
            [3]   Agent/Patient
            (The spraying of the workers reduces diseases)

     (ii)   Mufafadzelo **wa vhunyunyu** u fhungudza malwadze
            [3]   Patient)
            (The spraying of mosquitoes reduces diseases)

c.   (i)   Ngudo **ya vhalimi** i khwinisa vhulimi
            [9] Agent/Patient
            (The study of the farmers improves farming)

     (ii)   Ngudo **ya mavu** i khwinisa vhulimi
            [9] Theme
            (The study of the soil improves farming)

d.   (i)   Tsatsaladzo **ya mupurofesa** yo vhifha
            [9]   Agent/Patient
            (The criticism of the professor is bad)

     (ii)   Tsastaladzo **ya muṅwali** yo vhifha
            [9]   Agent/Patient
            (The criticism of the author is bad)

e.   (i)   Mbulungo **ya vhabebi** i a ṱungufhadza
            [9] Agent/Theme
            (The burial of the parents is pitiful)

     (ii)   Mbulungo **ya ṅwana** i a ṱungufhadza
            [9] Agent/Theme
            (The burial of the child is pitiful)

f.   (i)   Dambudzo **ḽa muvhuso** ḽo hulela
            [5] Agent/Patient
            (The cause of great suffering of the government is worse)

     (ii)   Dambuzo **ḽa vhathu** ḽo hulela
            [5] Agent/Patient
            (The cause of great suffering of the people is worse)

g.   (i)   Ndifhedzo **ya muvhuso** i takadza vhadzulapo
            [9]   Agent/Patient
            (The retaliation of the government interest the citizens)

    (ii)   Ndifhedzo **ya maravhele** i takadza vhadzulapo
               [9]   Agent/Patient
              (The retaliation of the terrorists interests the citizens)

h.   (i)   Tsiko **ya Mudzimu** i vhalwa bivhilini
             [9] Agent
              (The creation of God is read in the bible)

    (ii)   Tsiko **ya shango** i vhalwa bivhilini
              [9]   Theme
              (The creation of the earth is read in the bible)

i.   (i)   Thanganedzo **ya mufunzi** i rembulusa vhathu
              [9]   Agent/Theme
              (The acceptance of the priest makes the people to repent)

    (ii)   Thanganedzo **ya ṅwana** i rembulusa vhathu
              [9]   Agent/Theme
              (The acceptance of the child makes the people to repent)

In example (6a(i)) the argument **vhathu** (people) of (1a) is omitted and only the argument **mufunzi** (priest) appears. This argument appears as a postnominal genitive NP. Ambiguity arises because this postnominal genitive NP is interpreted as either agent or patient because the argument is animate.

Example (6a(ii)) has the same properties with the omission of the argument **mufunzi** (priest) of (1a). Only the argument **vhathu** (people) appears as a postnominal genitive NP. This NP **vhathu** (people) is human hence ambiguity occurs in the thematic interpretation of this argument. As the theta-roles illustrate, this argument may be interpreted either as either agent or patient.

In example (6b(i)) the patient argument **vhunyunyu** (mosquitoes) of (1b) is omitted. The argument which occurs as a postnominal genitive in this construction is the agent **vhashumi**. This argument is animate and because of this there is ambiguity in the thematic interpretation of this argument. It is interpreted as either agent or patient.

In example (6b(ii)) the agent **vhashumi** (workers) of (1b) is omitted. The argument which appears as a postnominal genitive NP in this construction is the patient **vhunyunyu** (mosquitoes). It is -human and there is no ambiguity in the interpretation of this argument. It remains a patient.

In example (6c(i)) the theme **mavu** (soil) of (1c) is omitted. The only argument that occurs as a postnominal genitive NP is the agent **vhalimi** (farmers). It appears as the complement of the genitive **a**. This argument has human qualities and because of this it has ambiguous intepretation of theta-roles. It may be interpreted as either agent or patient.

In example (6c(ii)) the agent **vhalimi** (farmers) of (1c) is omitted. The only argument that appears as a postnominal genitive NP is the theme **mavu** (soil). It appears as a complement of the genitive **a**. This argument is inanimate and hence no ambiguity in thematric interpretation occurs.

In example (6d(i)) the patient **munwali** (author) of (1d) is omitted. The only argument which occurs as a postnominal genitive NP is the agent **mupurofesa** (the professor). Ambiguity in the interpretation of theta-roles occurs because the argument has human qualities. This argument is interpreted as either agent or patient.

In example (6d(ii) the agent **mupurofesa** (the professor) of (1d) is omitted. The only argument which appears as a postnominal genitive NP is the patient **munwali** (the author). This argument is animate and because of this ambiguity occurs in the thematic interpretation of this argument. It may be interpreted either as agent or patient.

In example (6d(ii)) the agent **mupurofesa**(the professor) of (1d) is omitted. The only argument which appears as a postnominal genitive NP is the patient **munwali**(the author). This argument is animate and because of this ambiguity occurs in the thematic interpretation of this argument. It may be interpreted either as agent or patient.

In example (6e(i)) the theme **nwana** (child) of (1e) is omitted. The only argument which occurs as a postnominal genitive NP is the agent **vhabebi**(parents). Ambiguity in thematic interpretation occurs because this argument has human qualities. It may be interpreted either as agent or theme.

In example (6e(ii)) the agent **vhabebi** (parents) of (1e) is omitted. The only argument which occurs as a postnominal genitive NP is the theme **nwana** (child). Ambiguity in thematic interpretation of this argument occurs because it has human qualities. It may be interpreted as either agent or theme.

In example (6f(i), the patient argument **vhathu** (people) of (1f) is omitted. The only argument which appears as a postnominal genitive NP is the agent

muvhuso (government). Ambiguity in thematic interpretation of this argument occurs because it has human control. It may be interpeted as either agent or patient.

In example (6f(ii)) the agent argument **muvhuso** (the government) of (1f) is omitted. The only argument which occurs as a postnominal genitive NP is the patient **vhathu** (people). This argument has human qualities and ambiguity in thematic interpretation occurs. It may be interpreted as either agent or patient.

In example (6g(i)), the patient **maravhele** (terrorists) of (1g) is omitted. The only argument which appears as a postnominal genitive NP is the agent **muvhuso** (the government). This argument has human control and because of this it may have ambiguous thematic interpretation. It may be interpreted as either agent or patient.

In example (6g(ii)) the agent **muvhuso** (the government) of (1g) is omitted. The only argument which occurs as postnominal genitive NP is the patient **maravhele** (terrorists). This argument is +human and ambiguity in thematic interpretation occurs. It is interpreted as either agent or patient.

In example (6h(i)) the theme **shango** (earth) of (1h) is omitted. The argument which occurs as a postnominal genitive NP is the agent **Mudzimu** (God). Our background knowledge tells us that God created everything on earth. Because of this, this argument is interpreted as agent only with no ambiguity.

In example (6h(ii)) the agent **Mudzimu** (God) of (1h) is omitted. The only argument which appears as a postnominal genitive NP is the theme **shango** (earth). This argument is inanimate and no ambiguity in thematic interpretation occurs. It remains a theme.

In example (6i(i)), the theme **ṅwana** (child) of (1i) is omitted. The only argument which occurs as a postnominal genitive is the agent **mufunzi** (priest). This argument is +human and because of this it may have ambiguous thematic interpretation. It is interpreted as either agent or theme.

In example (6i)ii)), the agent **mufunzi** (priest) of (1i) is omitted. The only argument which occurs as a postnominal genitive NP is the theme **ṅwana** (child). Ambiguity in thematic interpretation occurs because this argument has human qualities. It may be interpreted as either agent or theme.

From the examples in (6a to i) it is evident that if external argument or internal argument of the related verb in (1) above is animate ambiguity will occur if one of them is omitted. If the internal argument of the related verb in (1) above is inanimate, ambiguity will not occur in that inanimate arguments can usually not be agent arguments.

Ambiguity with all the external arguments of the related verb in (1) disappears in all examples in (6a to i) if these external arguments appear as complements of the preposition **nga**, as in (7):

(7)   a.   Thambo **nga mufunzi** i takadza mubishopo
                   Agent
            (The invitation by the priest interests the bishop)

    b.   Mufafadzelo **nga vhashumi** u fhungudza malwadze
                     Agent
            (The spraying by the workers reduces diseases)

    c.   Ngudo **nga vhalimi** i khwinisa vhulimi
                 Agent
            (The study by farmers improves farming)

    d.   Tsatsaladzo **nga mupurofesa** yo vhifha
                    Agent
            (The criticism by the professor is bad)

    e.   Mbulungo **nga vhabebi** i a tungufhadza
                  Agent
            (The burial by the parents is pitiful)

    f.   Dambudzo **nga muvhuso** lo hulela
                  Agent
            (The cause of great suffering by the government is worse)

    g.   Ndifhedzo **nga muvhuso** i takadza vhadzulapo
                  Agent
            (The retaliation by the government interests the citizens)

    h.   Tsiko **nga Mudzimu** i vhalwa bivhilini
                 Agent
            (The creation by God is read in the bible)

    i.   Thanganedzo **nga mufunzi** i rembulusa vhathu
                   Agent
            (The acceptance by the priest makes people to repent

The arguments in (7a-i) above appear as complements of the preposition **nga** (by). All these arguments are interpreted as agent and there is no ambiguity in thematic interpretation of these arguments. These arguments are **mufunzi** (priest) in (7a), **vhashumi** (workers) in (7b), **vhalimi** (farmers) in (7c), **mupurofesa** (the professor) in (7d), **vhabebi** (parents) in (7e), **muvhuso** (government) in (7f), **Mudzimu** (God) in (7h) and **mufunzi** (priest) in (7i).

This preposition **nga** (by) usually precedes instrument arguments and the agent arguments in passive. Instrument arguments are usually inactive participants, they are only activated by other arguments in any construction. Examples of these instrument arguments are pen, spade, axe, etc. This is the reason why there is no ambiguity in all arguments preceded by **nga** in (7a-i). They may only be interpreted as agent.

All the deverbal event nominals derived from the monotransitive verbs in (1a-i) may occur without any arguments. That is the deverbal nominals in (2) to (7) may appear with no overt NP argument, like in (8) below:

(8)　　a.　　Thambo i takadza mubishopo
　　　　　　(The invitation interests the bishop)

　　　　b.　　Mufafadzelo u fhungudza malwadze
　　　　　　(The spraying reduces the diseases)

　　　　c.　　Ngudo i khwinisa vhulimi
　　　　　　(The study improves farming)

　　　　d.　　Tsatsaladzo yo vhifha
　　　　　　(The criticism is bad)

　　　　e.　　Mbulungo i a ṱungufhadza
　　　　　　(The burial is pitiful)

　　　　f.　　Dambudzo ḽo hulela
　　　　　　(The cause of great suffering is worse)

　　　　g.　　Ndifhedzo i takadza vhadzulapo
　　　　　　(The retaliation interests the citizens)

　　　　h.　　Tsiko i vhalwa bivhilini
　　　　　　(The creation is read in the bible)

　　　　i.　　Ṱhanganedzo i rembulusa vhathu
　　　　　　(The acceptance makes the people to repent)

In the above examples in (8) none of the arguments of the related verb in (1) occurs. The deverbal event nominal in (8) appears with no overt argument NP. If there is no overt agent or theme, patient, recipient etc, the agent may be viewed as an implicit argument while the reference of the theme, patient, recipient, etc. may be determined by free thematic interpretation.

Although no overt arguments are present in the examples in (8), the agent argument occurs as an implicit argument. This implicit argument may serve as an antecedent for the infinitival clause subject. This means that the PRO subject of the infinitival clause is controlled by this implicit argument. Here are examples in (9) to illustrate this:

(9)   a.   Thambo ya [PRO u takadza mubishopo] ndi ya vhuḓi
            (The invitation [to interest the bishop] is good)

      b.   Mufafadzelo wa [PRO u fhungudza malwadze] ndi wa vhuḓi
            (The spraying [to reduces the diseases] is good)

      c.   Ngudo ya [PRO u khwinisa vhulimi] ndi ya vhuḓi
            (The study [to improve farming] is good)

      d.   Tsatsaladzo ya [PRO u thutha] yo vhifha
            (The criticism [to destroy] is bad)

      e.   Mbulungo ya [PRO u tungufhadza] yo fhela
            (The burial [to make the people feel pity] is finished)

      f.   Dambudzo ḽa [PRO u shumisa vhathu] ḽo fhela
            (The cause of great suffering [to cause the people work] is finished)

      g.   Ndifhedzo ya [PRO u takadza vhadzulapo] ndi ya vhuḓi
            (The retaliation [to interest the citizens] is good)

      h.   Tsiko ya [PRO u vhalwa bivhilini] i a takadza
            (The creation [to be read in the bible] is interesting)

      i.   Thanganedzo ya [PRO u rembulusa vhathu] ndi ya vhuḓi
            (The acceptance [to make the people repent] is good).

All the examples in (9) are grammatical. In all the examples in (9 a-i), the genitive **ya** is obligatory. It must be present for the sentences to be grammatical. The implicit agent argument of the deverbal event nominals in (9a-i) above serves as a controller of the subject PRO in the infinitival clause.

The controller of subject PRO may be overtly realized as a postnominal genitive NP, as in the following examples:

(10) a. Thambo **ya mufunzi**[i] ya [PRO[i] u takadza mubishopo] ndi ya vhudi
           (The invitation of the priest [to make the bishop happy] is good)

      b. Mufafadzelo wa vhashumi[i] wa [PRO[i] u fhungudza malwadze] ndi wa vhudi
           (The spraying of workers [to reduce the diseases] is good)

      c. Ngudo ya vhalimi[i] ya [PRO[i] u khwinisa vhulimi] ndi ya vhudi
           (The study of farmers [to improve farming] is good)

      d. Tsatsaladzo ya mupurofesa[i] ya [PRO[i] u mangadza vhathu] yo vhifha
           (The criticizm of the professor [to surprise the people is] bad)

      e. Mbulungo ya vhabebi[i] ya [PRO[i] u tungufhadza] yo fhela
           (The burial of the parents [to make the people feel pity] is
           finished)

      f. Dambudzo la muvhuso[i] la [PRO[i] u shumisa vhathu] lo fhela
           (The cause of great suffering [to cause the people work] is
           finished)

      g. Ndifhedzo ya muvhuso[i] ya [PRO[i] u takadza vhadzulavhupo] ndi ya vhudi
           (The retaliation of the government [to interest the citizens] is
           good)

      h. Tsiko ya Mudzimu[i] ya [PRO[i] u takadza vhathu] i vhalwa bivhilini
           (The creation of God [to make the people happy] is read in the
           bible)

      i. Thanganedzo ya mufunzi[i] ya [PRO[i] u rembulusa vhathu] ndi ya vhudi
           (The acceptance of the priest [to make the people repent] is good)

In the above constructions, that is examples (10), the overt external agent argument of the deverbal nominal is projected or is realized in front of the infinitival clause. It serves as a controller of the PRO subject of the infinitive clause. Here is a diagram to illustrate control theory as illustrated in examples (9) and (10) above.
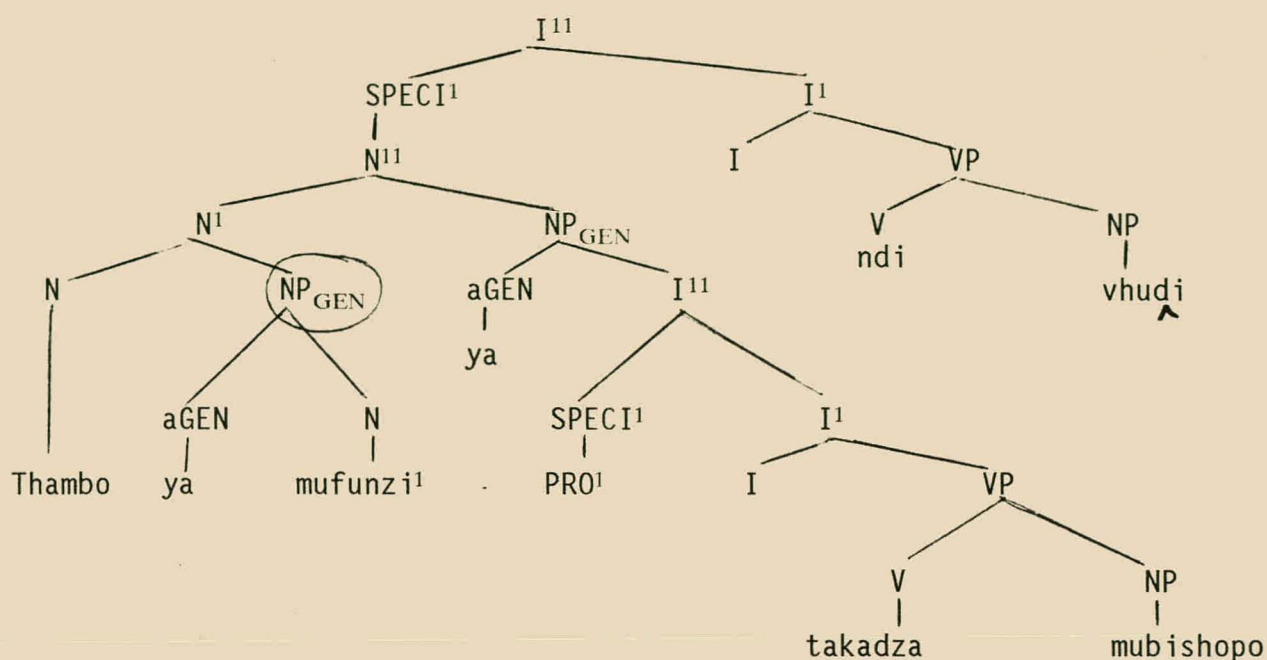
If there is an implicit argument like in (9) the encircled NP$_{GEN}$ will be omitted.

This external agent argument may occur after the infintival clause, as demonstrated in (11).

(11)   a.   Thambo ya [PRO^i u takadza mubishopo] ya mufunzi^i ndi ya vhudi
            (The invitation [to make the bishop happy] of the Priest is good)

       b.   Mufafadzelo wa [PRO^i u fhungudza malwadze] wa vhashumi^i ndi wa vhudi
            (The spraying [to reduce diseases] of workers is good)

       c.   Ngudo ya [PRO^i u khwinisa vhulimi] ya vhalimi^i ndi ya vhudi
            (The study [to improve farming] of the farmers is good)

       d.   Tsatsaladzo ya [PRO^i u mangadza vhathu] ya mupurofesa^i yo vhifha
            (The criticism [to surprise the people[of the professor is bad)

       e.   Mbulungo ya [PRO^i u tungufhadza] ya vhabebi^i yo fhela
            (The burial [to make the people feel pity] to the parents is
            finished)

       f.   Dambudzo la [PRO^i u shumisa vhathu] la muvhuso^i lo fhela
            (The cause of great suffering [to make the people work] of the
            government is finished)

       g.   Ndifhedzo ya [PRO^i u takadza vhadzulapo] ya muvhuso^i ndi ya vhudi
            (The retaliation [to make the citizens happy] of the government is
            good)

h. Tsiko ya [PROⁱ u takadza vhathu] ya Mudzimuⁱ ndi ya vhudi
    (The creation [to make the people happy] of God is good)

i. Thanganedzo ya [PROⁱ u rembulusa vhathu] ya mufunziⁱ ndi ya vhudi
    (The acceptance [to make the people repent] of the priest is good)

In the above constructions (11), the agent argument occurs in the post infinitival clause position. The agent successfully controls the PRO subject of infinitival clause from this position.

Alternatively to the view that subject PRO of a purposive infinitival clause can be controlled by an implicit or overtly realized agent argument, the view of control of this PRO by the complex event nominal as a whole can be considered. In accordance with this view, it is the event denoted by the deverbal nominal which controls subject PRO of the purposive infinitival clause. This view constitutes an extension of proposals by Lasnik (1988) who calls into question the possibility of control by implicit arguments, taking into account sentences with a passive matrix clause and an infintival purpose clause complement, such as the following examples (Lasnik's (48) and (50)):

(48) The ship was sunk [PRO to prove a point]

(50) The ship was sunk by a torpedo [PRO to prove a point]

Lasnik argues that PRO in the above examples is controlled by the matrix clause as a whole. Hence in (48), **the ship was sunk** is the controller of PRO. Likewise, in (50), the controller of PRO is **the ship was sunk by a torpedo**. According to Lasnik, it is the ship's being sunk (either by a torpedo or in some unspecified way) that was intended to prove a point. Thus, Lasnik claims, if the event itself was intended to prove a point, the agent of the event, whether grammatically present or not (i.e. implicit), can be deduced to have intended to prove a point by bringing about the event. Lasnik refers to this analysis of control by the matrix clause as S-control.

The essence of Lasnik's proposals is that the event expressed by the matrix clause in examples such as (48) and (50) is intended to accomplish the action expressed by the purposive infinitival clause. This analysis can be plausibly extended to deverbal nominal constructions with or without an overt (i.e. grammatically realized) NP like the examples in (9-11) above. Under this analysis it is assumed that the N projection headed by the event nominal and which occurs as sister to the infinitival clause controls subject PRO (see the diagram in the discussion of the examples in (10)).

Thus it is proposed here that deverbal nominals that are complex event nominals serve as controler of PRO subject of the purposive infinitival clause. The event itself expressed by these deverbal nominals is thus intended to accomplish the action denoted by the purposive infinitive, while the agent argument NP, whether overt or implicit, can be deduced to have intended to accomplish the event expressed by the purposive infinitive by bringing about the event denoted by the event. nominal. In accordance with this view the deverbal nominal in **Thambo ya mufunzi** in (10a), for example, rather than the agent argument NP (overt or implicit), controls PRO in the infinitival clause.

3.2.3   The preposition kha with the internal argument

(12)   a.   **Vhabebi** vha kanuka **mvelelo**
                Agent   Theme
                (The parents are astonished by the results)

        b.   Ganuko **ļa vhabebi ļa mvelelo ļi** manangadza vhadededzi
                        Agent   Theme
                (The astonishment of parents of the results surprise teachers)

        c.   Ganuko **ļa vhabebi kha mvelelo** ļi mangadza vhadededzi
                        Agent   Theme
                (The astonishment of parents at the results surprises the teachers)

(13)   a.   **Muhaṱuli** u haṱula **mbava**
                Agent   Patient
                (The judge convicts the thief)

        b.   Khaṱhulo **ya muhaṱuli ya mbava** i fusha vhoramabindu
                        Agent   Patient
                (The conviction of the judge of the thief satisfies the businessmen)

        c.   Khaṱhulo **ya muhaṱuli kha mbava** i fusha vhoramabindu
                        Agent   Patient
                (The conviction of the judge of the thief satisfies the businessmen)

(14)   a.   **Maswole** a dia **vhafhalali**
                Agent   Patient
                (The soldiers strike the exiles)

        b.   Mudio **wa maswole wa vhafhalali** wo vhifha
                        Agent   Patient
                (The strike of the soldiers of the exiles is bad)

c.   Mudio **wa maswole kha** .**vhafhalali** wo vhifha
              Agent   Patient
      (The strike of the soldiers at the exiles is bad)

(15) a.   **Vhakhiresite** vha rabela **Mudzimu**
            ‑ Agent   Goal
            (The Christians pray to God)

      b.   Thabelo ya **vhakhiresite ya Mudzimu** i disa mulalo
                        Agent   Goal   ^
            (The prayer of the christians of God brings peace)

      c.   Thabelo **ya vhakhiresite kha Mudzimu** i disa mulalo
                      Agent   Goal   ^
            (The prayer of the christians to God brings peace)

In example (12a) the verb **kanuka** (astonish) assigns two theta-roles. The external argument in (12a) is the agent **vhabebi** (parents) while the internal argument is the theme **mvelelo** (results). These arguments may appear as postnominal genitive NPs as in (12b) above. In (12c) the internal argument **mvelelo** (results) appears as a complement of the preposition **kha**. There is no change or ambiguity in its thematic interpretation. It is still a theme.

In example (13a) the verb **hatula** (convict) assigns two arguments. The external argument is the agent **muhatuli** (judge) whereas the internal argument is the patient **mbava** (thief). These arguments may appear as postnominal genitive NPs as in (13b). They retain their thematic interpretation, however. The internal argument **mbava** (thief) may occur as a complement of the preposition **kha** (13c) while still retaining its theta-role which it has when it occurs as a postnominal genitive NP.

The active verb **dia** (strike) in example (14a) assigns two arguments. The external argument is the agent **maswole** (soldiers) whereas the internal argument is the patient **vhafhalali** (exiles). The two arguments may appear as postnominal genitive NPs with no change in thematic interpretation, as in (14b). The internal argument may be structurally realized as a complement of the preposition **kha**. It still retains its theta-role of patient.

In example (15a) the verb **rabela** (pray) assign two arguments. The external argument is the agent **vhakhiresite** (christians) whereas the internal argument is the Goal. The two arguments may occur as postnominal genitive NPs with no change of thematic interpretation. The internal argument may occur as a

complement of the preposition **kha** and still retains its theta-role which it has when it occurs as a postnominal genitive NP.

The two arguments in examples (12c), (13c), (14c) and (15c) may alternate in linear order with no change in thematic interpretation. These examples will be illustrated below with arguments occuring in the alternate order.

(12)　　c.　　(i)　　Ganuko **kha mvelelo la vhabebi** li mangadza vhadededzi
　　　　　　　　　　　　　　　　　Theme　　　Agent
　　　　　　　　　　(The astonishment at the results of the parents surprises the teachers)

(13)　　c.　　(i)　　Khathulo **kha mbava ya muhatuli** i fusha vhoramabindu
　　　　　　　　　　　　　　　　　　　Patient　Agent
　　　　　　　　　　(The conviction at the thief of the judge satisfies the businessmen)

(14)　　c.　　(i)　　Mudio **kha vhafhalali wa maswole** wo vhifha
　　　　　　　　　　　　　　　Patient　　　　Agent
　　　　　　　　　　(The strike at the exiles of the soldiers is bad)

(15)　　c.　　(i)　　Thabelo **kha Mudzimu ya vhakhiresite** i disa mulalo
　　　　　　　　　　　　　　　Goal　　　　Agent
　　　　　　　　　　(The prayer to God of the christians brings peace)

In example (12c(i)) above the argument which occurs as a complement of the preposition **kha**, appears in the leftmost position. There is no change in thematic interpretation of this argument. It is still a theme.

In example (13c(i)) above the argument which occurs as a complement of the preposition **kha**, appears in the leftmost position. No ambiguity or change in thematic interpretation occurs. This argument **mbava** (thief) is still a patient.

The argument **vhafhalali** (exiles) which appears as a complement of the preposition **kha** has alternated in linear order in (14c(i)). It now appears in the leftmost position with no change in thematic interpretation. It is still a patient.

The argument **Mudzimu** (God) which appears as a complement of the preposition **kha** has alternates in word order in (15c(i)). It now appears in the leftmost position with no change in thematic interpretation. It is still a goal.

The internal argument with the preposition **kha** may also appear in a construction in which the external argument is omitted. Consider the examples in (12-15) that illustrate this:

(12)   c.   (ii)   Ganuko **kha mvelelo** ļi mangadza vhadededzi
                                   Theme
                      (The astonishment at the results surprise the teachers)

(13)   c.   (ii)   Khaṱhulo **kha mbava** i fusha vhoramabindu
                            Patient
                      (The conviction to the thief satisfies the businessmen)

(14)   c.   (ii)   Mudio **kha vhafhalali** wo vhifha
                            Patient
                      (The strike to the exiles is bad)

(15)   c.   (ii)   Thabelo **kha Mudzimu** i ḓisa mulalo
                            Goal
                      (The prayer to God brings peace)

In all the examples above the external argument is omitted. The only argument which is structurally realized as a complement of the preposition **kha** is an internal argument. There is no change or ambiguity in thematic interpretation of these arguments. **Mvelelo** (results) in (12c(ii)) is still a theme, **mbava** (thief) in (13c(ii)) is still a patient, **vhafhalali** (exiles) in (14c(ii)) is also a patient and **Mudzimu** in (15c(ii)) is still a goal.

3.3   DEVERBAL EVENT NOMINALS RELATED TO DITRANSITIVE VERBS

3.3.1   The structural projection of arguments of deverbal nominals

Consider the following examples of ditransitive verbs from which deverbal event nominals will be derived.

(16)   a.   (i)   **Munna** u hadzima **vhathu   tshelede**
                     Agent   Recipient Theme
                     (The man lends the people money)

        (ii)   **Munna** u hadzima **tshelede kha vhathu**
                Agent   Theme   Recipient/Source
                (The man lends money to / borrows money from the people)

b. (i) **Mufunzi** u fha **vhana**   **zwifhiwa**
         Agent   Recipient Theme
         (The pastor gives children the gifts)

    (ii) **Mufunzi** u fha **zwifhiwa kha vhana**
         Agent   Theme   Recipient
         (The pastor gives gifts to the children)

c. (i) **Vhengele** li vhila **munna   tshikolodo**
         Agent   ^   Patient Theme
         (The shop demands man debt)

    (ii) **Vhengele** li vhila **tshikolodo kha munna**
         Agent   ^   Theme   Patient/Source
         (The shop demands debt to / from the man)

d. (i) **Munna** u badela **vhengele   mulandu**
         Agent   Recipient Theme
         (Man pays the shop the debt)

    (ii) **Munna** u badela **mulandu kha vhengele**
         Agent   Theme   Recipient
         (The man pays the debt to the shop)

e. (i) **Mutshudeni** u humbela **muvhuso basari**
         Agent   Goal   Theme
         (The student request/applies bursary from the government)

    (ii) **Mutshudeni** u humbela **basari kha muvhuso**
         Agent   Theme Goal/Source
         (The student requests/applies bursary to/from the
         government)

f. (i) **Murena** o fhulufhedzisa **vhafunziwa** vhawe **muyamukhethwa**
         Agent   Patient   Theme
         (Christ promised His disciples the Holy Spirit)

    (ii) **Murena** o fhulufhedzisa **muyamukhethwa** kha **vhafunziwa** vhawe
         Agent   Theme   Patient
         (Christ promised the Holy Spirit to His disciples)

g. (i) **Mudededzi** u talutshedza **vhana   mbalo**
         Agent   ^   Beneficiary Theme
         (The teacher explains the children maths)

(ii)   **Mudededzi** u talutshedza **mbalo** **kha vhana**
        Agent   Theme Beneficiary
        (The teacher explains maths to the children)

In example (16a(i), the verb **hadzima** (lend) assigns three arguments. The external argument is the agent **munna** (man). The two internal arguments are the recipient **vhathu** (people) and the theme **tshelede** (money). The recipient argument may also occur as a complement of the preposition **kha** as in (16a(ii)). This is accompanied by an alternation in linear order of the internal arguments. The theme **tshelede** (money) occurs adjacent or immediately after the verb. Ambiguity occurs with the argument which occurs as a complement of the preposition **kha**. It may be interpreted as either recipient or source.

In example (16b(i)) above, the verb **fha** (give) assigns three theta-roles. The external argument is the agent **mufunzi** (pastor). The two internal arguments are the recipient **vhana** (children) and the theme **zwifhiwa** (gifts). The recipient argument may also be structurally realized as a complement of the preposition **kha** as in (16(b(ii)). When the recipient argument occurs in the prepositional phrase with **kha** an alternate in linear order occurs with internal arguments. The theme **zwifhiwa** (gifts) occurs adjacent to the verb **fha** (give) and the recipient **vhana** (children) immediately thereafter. No ambiguity in thematic interpretation occurs when the preposition **kha** appears with the recipient **vhana** (children).

In example (16c(i)), the verb **vhila** (demand) assigns three arguments. The external argument is the agent **vhengele** (shop). The two internal arguments are the patient **munna** (man) and the theme **tshikolodo** (debt). The patient argument **munna** (man) may also appear as a complement of the preposition **kha** as in (16c(ii)). When the patient is structurally realized as a complement of **kha** the internal arguments alternate in linear order. The theme occurs adjacent to the verb **vhila** (demand) while the patient occurs immediately thereafter. All arguments retain their thematic interpretations.

In example (16d(i)), the verb **badela** (pay) assigns three theta-roles. The external theta-role is the agent **munna** (man). The two internal arguments are the recipient **vhengele** (shop) and the theme **mulandu** (debt). The recipient argument may also be projected as a complement of the preposition **kha** as in (16d(ii)). When the recipient argument occurs as a complement of the preposition **kha** the internal arguments alternate in linear order. The

recipient occurs in the rightmost position in the prepositional phrase with **kha** and the theme occurs immediately adjacent to the verb **badela** (pay). No ambiguity occurs in the thematic interpretation of arguments.

In example (16e(i)), the verb **humbela** (request) assigns three arguments. The external argument is the agent **mutshudeni** (student). The two internal arguments are the goal **muvhuso** (government) and the theme **basari** (bursary). The goal argument **muvhuso** (government) may also appear in a prepositional phrase with **kha** as in (16e(ii)). When **kha** appears before the goal argument there is an alternate in linear oder of internal arguments. The goal argument with the preposition **kha** occurs in the rightmost position whereas the theme occurs immediately after the verb. There is ambiguity in thematic interpretation of the argument which is projected as a complement of **kha**. It may be interpreted as either goal or source.

The verb **fhulufhedzisa** (promise) in (16f(i)) assigns three arguments. The external argument is the agent **Murena** (Christ). The two internal arguments are the patient **vhafunziwa** (disciples) and the theme **muyamukhethwa** (Holy spirit). The patient argument **vhafunziwa** (disciples) may also be projected as a complement of the preposition **kha** as in (16f(ii)). The alternation in linear order occurs when **kha** appears before the patient **vhafunziwa** (disciples). The rightmost position is occupied by the patient in the prepositional phrase with **kha**. The theme **muyamukhethwa** (Holy spirit) occurs immediately adjacent to the verb **fhulufhedzisa** (promise). No ambiguity occurs in thematic interpretation of the argument that appears with **kha**.

In example (16g(i)), the verb **ṭalutshedza** (explain) assigns three arguments. The external argument is the agent **Mudededzi** (teacher). The two internal arguments are the beneficiary **vhana** (children) and the theme **mbalo** (maths). The beneficiary argument **vhana** (children) may also occur as a complement of the preposition **kha** as in (16g(ii)). When this argument occurs in the prepositional phrase with **kha** there is an alternation of linear order of the internal arguments. The beneficiary **vhana** (children) occurs in the rightmost position with the preposition **kha** whereas the theme **mbalo** (maths) occur immediately after the verb **ṭalutshedza** (explain). No ambiguity occurs in the thematic interpretation of arguments in (16g(ii)) with **kha**.

From the ditransitive verbs in (16) deverbal event nominals are constructed as in (17). In these constructions the agent and the two internal arguments (theme, patient, etc.) of the verb related to the deverbal nominal occur as

postnominal genitive NPs with the corresponding deverbal nominal. Three postnominal genitive NPs occur with deverbal nominals related to ditransitive verbs. Judgements tend to waver on the permissibility of three postnominal genitive NPs, although it is generally accepted that three postnominal genitive NPs are ungrammatical. Consider the following examples in (17) that illustrate this:

(17) a.   *Khadzimo **ya munna ya vhathu ya tshelede** ndi ya vhuḓi
                        Agent   Recipient Theme
            (The loan of the man of the people of money is good)

     b.   *Mpho **ya mufunzi ya vhana ya zwifhiwa** i a vha takadza
                        Agent   Recipient Theme
            (The giving of the pastor of the children of gifts interests them)

     c.   *Mbilo **ya vhengele ya munna ya tshikolodo** yo vha yo lavhelelwa
                        Agent   Patient Theme
            (The demand of the shop of the man of the debt has been expected)

     d.   *Mbadelo **ya munna ya vhengele ya mulandu** i ḓo thivhela u farwa hawe
                        Agent   Recipient Theme
            (The payment of the man of the shop of the debt will stop his arrest)

     e.   *Khumbelo **ya mutshudeni ya muvhuso ya basari** i ḓo sedzuluswa
                        Agent   Goal   Theme
            (The application of the student of the government of the bursary will be considered)

     f.   *Fhulufhedziso **ḽa Murena ḽa vhafunziwa** vhawe **ḽa muyamukhethwa ḽo** itwa
                            Agent   Patient   Theme
            (The promise of Christ of His disciples of the Holy Spirit has been fulfilled)

     g.   *Thalutshedzo **ya mudededzi ya vhana**   **ya mbalo** i ḓo vha phasisa
                            Agent   Beneficiary   Theme
            (The explanation of the teacher of the children of Maths will make them pass)

All the arguments which occur with the active verbs in (16) also appear with the corresponding deverbal nominals in (17). The arguments occur as three postnominal genitive NPs. As already pointed out it is not possible to have three postnominal genitive NPs with the deverbal nominals related to ditransitive verbs. But as I have pointed out the judgement as regards

grammaticality and ungrammaticality of these constructions may differ from person to person. Some people may consider these sentences grammatical while others may consider them to be ungrammatical. As I have illustrated with an asterisk in (17) above I also consider these constructions to be ungrammatical.

The theta-roles in (17) are identical to those assigned by the related verbs in (16). There is no change or ambiguity in the interpretation of theta-roles. All the agent arguments which occur as external arguments in (16(i) occur adjacent to the deverbal nominals in (17), the patient / goal / beneficiary arguments occur in the intermediate position. The theme arguments occupy the extreme right position.

The recipient / beneficiary / goal arguments may occur as complements of the preposition **kha** as in (18):

(18) a. Khadzimo **ya munna ya tshelede kha vhathu** ndi ya vhudi
              Agent   Theme   Recipient
             (The loan of the man of money to the people is good)

    b. Mpho **ya mufunzi ya zwifhiwa kha vhana** i a vha takadza
               Agent   Theme   Recipient
             (The giving of the pastor of the gifts to the children interests them)

    c. Mbilo **ya vhengele ya tshikolodo kha munna** yo vha yo lavhelelwa
               Agent   Theme   Patient
             (The demand of the shop of the debt to the man has been expected)

    d. Mbadelo **ya munna ya mulandu kha vhengele** i do thivhela u farwa hawe
               Agent   Theme   Recipient
             (The payment of the man of the debt to the shop will stop his arrest)

    e. Khumbelo **ya mutshudeni ya basari kha muvhuso** i do sedzuluswa
               Agent   Theme   Goal
             (The application of the student of the bursary to the government will be considered)

    f. Fhulufhedziso **la Murena la muyamukhethwa kha vhafunziwa** vhawe lo itwa
                   Agent   Theme   Patient
             (The promise of Christ of the Holy spirit to His disciples has been fulfilled)

g.   Thalutshedzo **ya mudededzi ya mbalo kha vhana** i do vha phasisa
                        Agent   Theme   Beneficiary
        (The explanation of the teacher of Maths to the children will make
        them pass)

All the constructions in (18) correspond to the constructions in (16) numbered
(ii). In (18) there are two postnominal genitive NPs which are structurally
realized as postnominal genitive arguments, the agent and the theme.

Particular attention will be given to the thematic role of the argument that
occurs as a complement of the preposition **kha**. In all examples in (18) this
argument has the same theta-role as it has in all examples in (16) numbered
(ii). In (18a) **kha vhathu** (to the people) is interpreted as recipient, **kha
vhana** (to the children) as recipient in (18b), **kha munna** (to the man as
patient in (18c), **kha vhengele** (to the shop) as recipient in (18d), **kha
muvhuso** (to the government) as goal in (18e), **kha vhafunziwa** vhawe (to His
disciples) as patient in (18f) and **kha vhana** (to the chidlren) as beneficiary
in (18g).

The two postnominal genitive NPs adjacent to the deverbal nominal (18) may
alternate in linear order, as shown in (19):

(19)   a.   Khadzimo **ya tshelede ya munna kha vhathu** ndi ya vhudi
                        Theme   Agent   Recipient
                (The loan of money of the man to the people is good)

        b.   Mpho **ya zwifhiwa ya mufunzi kha vhana** i a vha takadza
                        Theme   Agent   Recipient
                (The giving of gifts of the pastor to the children interests them)

        c.   Mbilo **ya tshikolodo ya vhengele kha munna** yo vha yo lavhelelwa
                        Theme   Agent   Patient
                (The demand of the debt of the shop to the man has been expected)

        d.   Mbadelo **ya mulandu ya munna kha vhengele** i do thivhela u farwa hawe
                        Theme   Agent   Recipient
                (The payment of the debt of the man to the shop will stop his
                arrest)

        e.   Khumbelo **ya basari ya mutshudeni kha muvhuso** i do sedzuluswa
                        Theme   Agent   Goal
                (The application of the bursary of the student to the government
                will be considered)

f. Fhulufhedziso ḽa **muyamukhethwa** ḽa **Murena** kha **vhafunziwa** vhawe ḽo itwa

                            THeme   Agent   Patient

(The promise of the Holy spirit of Christ to His disciples has been fulfilled)

g. Thalutshedzo **ya mbalo ya mudededzi kha vhana** i do vha phasisa

                       Theme   Agent   Beneficiary

(The explanation of Maths of the teacher to the children will make them pass)

The two postnominal genitive NPs in all the examples in (19) have alternated in linear order. The theme argument in all examples occurs in the leftmost position adjacent to the deverbal nominal. The argument with the theta-role agent occurs in the intermediate position. There is no ambiguity in the interpretation of theta-roles.

From (19) it can be deduced that (stylistic) alternation in linear order between the agent and theme arguments if these are both realized as postnominal genitive NPs may freely occur.

The argument that occurs as a complement of the preposition **kha** may occur between the two postnominal genitive arguments, as shown in (20):

(20) a. Khadzimo **ya munna kha vhathu ya tshelede** ndi ya vhudi

                   Agent   Recipient Theme

(The loan of the man to the people of the money is good)

b. Mpho **ya mufunzi kha vhana**   **ya zwifhiwa** i a vha takadza

            Agent   Recipient Theme

(The giving of the pastor to the children of the gifts interests them)

c. Mbilo **ya vhengele kha munna ya tshikolodo** yo vha yo lavhelelwa

             Agent   Patient   Theme

(The demand of the shop to the man of the debt has been expected)

d. Mbadelo **ya munna kha vhengele ya mulandu** i do thivhela u farwa hawe

                Agent   Recipient · Theme

(The payment of the man to the shop of the debt will stop his arrest)

e.   Khumbelo **ya mutshudeni kha muvhuso ya basari** i d̯o sedzuluswa
                    Agent   Goal   Theme
        (The application of the student to the government of the bursary
        will be considered)

f.   Fhulufhedziso ḽa **Murena kha vhafunziwa** vhawe ḽa **muyamukhethwa** ḽo
        itwa
                        Agent   Patient   Theme
        (The promise of Christ to His disciples of the Holy Spirit has been
        fulfilled)

g.   Ṱhalutshedzo **ya mudededzi kha vhana**   **ya mbalo** i d̯o vha phasisa
                        Agent   Beneficiary Theme
        (The explanation of the teacher to the children of Maths will make
        them pass)

In (20) above all the arguments which are structurally realized as complements
of the preposition **kha** are unambiguously interpreted as recipient /
beneficiary / goal. **Kha vhathu** (to the people) in (20a) is a recipient, **kha
vhana** (to the children) in (20b) is also a recipient, **kha munna** (to the man)
in (20c) is a patient, **kha vhengele** (to the shop) in (20d) is interpreted as
recipient, **kha muvhuso** (to the government) in (20e) is the goal, **kha
vhafunziwa** in (20f) is the patient, and **kha vhana** (to the chidlren) in (20f)
is the beneficiary.

The external argument of the verb related to these deverbal nominal may occur
as a complement of the preposition **nga** (by). The preposition **nga** is the only
way the external arguments may be realized in passive-verb constructions. The
recipient / goal / beneficiary and theme are structurally realized as
postnominal genitive NPs. Consider the following constructions in (21) that
illustrate this:

(21)   a.   Khadzimo **ya vhathu ya tshelede nga munna** ndi ya vhud̯i
                        Recipient Theme   Agent
                (The loan of people of money by man is good)

        b.   Mpho **ya vhana ya zwifhiwa nga mufunzi** i a vha takadza
                        Recipient Theme   Agent
                (The giving of the children of the gifts by the pastor interests
                them)

        c.   Mbilo **ya munna ya tshikolodo nga vhengele** yo vha yo lavhelelwa
                        Patient   Theme   Agent
                (The demand of the man of the debt by the shop has been expected)

d.   Mbadelo **ya vhengele ya mulandu nga munna** i do˙thivhela u farwa hawe
         Recipient   Theme   Agent   ᴧ
     (The payment of the shop of the debt by man will stop his arrest)

e.   Khumbelo **ya muvhuso ya basari nga mutshudeni** i do sedzuluswa
         Goal   Theme   Agent   ᴧ
     (The application of the government of the bursary by the student
     will be considered)

f.   Fhulufhedziso **la vhafunziwa la muyamukhethwa nga Murena** lo itwa
         ᴧ Patient   ᴧ Theme   Agent   ᴧ
     (The promise of the disciples of the Holy Spirit by Christ has been
     fulfilled)

g.   Thalutshedzo **ya vhana   ya mbalo nga mudededzi** i do vha phasisa
     ᴧ   Beneficiary Theme   Agent   ᴧ
     (The explanation of the children of Maths by the teacher will make
     them pass)

In example (21a) the agent argument **munna** (man) is structurally realized as a
complement of the preposition **nga** (by). There is no change in its thematic
interpretation. It is still interpreted as an agent. There is no ambiguity and
this preposition is not an instrumental **nga** but an agentive preposition. The
recipient **vhathu** (people) and the theme **tshelede** (money) are structurally
realized as postnominal genitive NPs.

The agent **mufunzi** (pastor) is projected as a complement of the preposition **nga**
in example (21b). This preposition is not an instrumental **nga** and the argument
mufunzi (pastor) is interpreted as agent only with no possible ambiguity. The
recipient **vhana** (children) and theme **zwifhiwa** (gifts) are structurally
realized as postnominal genitive NPs.

In example (21c) the argument **vhengela** (the shop) is projected as a complement
of the preposition **nga** (by). No ambiguity occurs in thematic interpretation of
this argument. It is interpreted as an agent. The patient **nunna** (man) and
theme **tshikolodo** (debt) occur as postnominal genitive NPs.

In example (21d) the argument **munna** (man) is structurally realized as a
complement of the preposition **nga** (by). No ambiguity occurs in thematic
interpretation of this argument. It is interpreted as an agent only. The
recipient **vhengele** (shop) and the theme **mulandu** (debt) appear as postnominal
genitive NPs.

The argument **mutshudeni** (student) occurs as a complement of the preposition **nga** (by) in (21e) above. No ambiguity occurs in the thematic interpretation of this argument, it is an agent. The goal argument **muvhuso** (government) and the theme **basari** (bursary) occurs as postnominal genitive NPs.

In example (21f) the argument **Murena** (Christ) is projected as a complement of the agentive preposition **nga** (by). It is interpreted as an agent with no possible ambiguity. The patient **vhafunziwa** (disciples) and the theme **muyamukhethwa** (Holy Spirit) occurs as postnominal genitive NPs.

The argument **mudededzi** (teacher) is structurally realized as a complement of the agentive preposition **nga** (by). Its thematic interpretation is agent with no possible ambiguity. The beneficiary argument **vhana** (children) and the theme argument **mbalo** (maths) occur as postnominal genitive NPs.

The agentive prepositional phrase with **nga** (by) (which appears in sentence-final position in (21)) may occur in the immediate postnominal position, as in (22):

(22) a.   Khadzimo **nga munna ya vhathu ya tshelede** ndi ya vhuḓi
                          Agent   Recipient Theme
          (The loan by the man of people of money is good)

      b.   Mpho **nga mufunzi ya vhana ya zwifhiwa** i a vha takadza
                        Agent   Recipient Theme
          (The giving by the pastor of the chidlren of gifts interests them)

      c.   Mbilo **nga vhengele ya munna ya tshikolodo** yo vha yo lavhelelwa
                        Agent   Patient Theme
          (The demand by the shop of man of the debt has been expected)

      d.   Mbadelo **nga munna ya vhengele ya mulandu** i do thivhela u farwa hawe
                          Agent   Recipient   Theme
          (The payment by the man of the shop of the debt will stop his arrest)

      e.   Khumbelo **nga mutshudeni ya muvhuso ya basari** i do sedzuluswa
                          Agent   Goal   Theme
          (The application by the student of the government of the bursary will be considered)

f.   Fhulufhedziso **nga Murena** la **vhafunziwa** vhawe la **muyamukhethwa** lo
      itwa
                           Agent   Patient   Teme
      (The promise by Christ of His disciples of the Holy Spirit has been
      fulfilled)

g.   Thalutshedzo **nga mudededzi ya vhana**   **ya mbalo** i do vha phasisa
                      Agent   Beneficiary Theme
      (The explanation by the teacher of the children of Maths will make
      them pass)

The agentive prepositional phrase with **nga** appears in the immediate postnominal position in (22a). The thematic interpretation of the argument **munna** (man) is the agent with no possible ambiguity.

The recipient **vhathu** (people) and theme **tshelede** (money) occur as postnominal genitive NPs after the prepositional phrase with **nga**.

In example (22b), the argument **mufunzi** (pastor), which occurs in the prepositional phrase with **nga**, appears adjacent to the deverbal nominal. No ambiguity in thematic interpretation occurs, it is interpreted as an agent. The recipient **vhana** (children) and the theme **zwifhiwa** (gifts) are structurally projected as postnominal genitive NPs, after the PP.

In example (22c), the argument **vhengele** (shop), which occurs in the prepositional phrase with **nga**, appears in the immediate postnominal position. This argument is interpreted as the agent with no possible ambiguity. The patient **munna** (man) and the theme **tshikolodo** (debt) are structurally projected as postnominal genitive NPs after the PP with **nga**.

The agentive prepositional phrase with **nga** (by) appears adjacent to the deverbal nominal in (22d). The argument **munna** (man) in this phrase is interpreted as agent with no possible ambiguity. The recipient **vhengele** (shop) and the theme **mulandu** (debt) are structurally realized as postnominal genitive NPs after the PP with **nga**.

In example (22e), the argument **mutsibudeni** (student), which occurs in the prepositional phrase with **nga**, appears in the immediate postnominal position as an agent. No ambiguity in thematic interpretation occurs. The goal argument (to which the application is directed) **muvhuso** (government) and the theme **basari** (bursary) occur as postnominal genitive NPs after the PP with **nga**.

In example (22f), the argument **Murena** (Christ), which is structurally projected as a complement of the preposition **nga** is the agent. It occurs adjacent to the deverbal nominal **fhulufhedziso** (the promise). The patient **vhafunziwa** (disciples) and the theme **muyamukhethwa** (Holy Spirit) occur as postnominal genitive NPs after the PP with **nga**.

In example (22g), the argument which occurs in the prepositional phrase with **nga** is the agent **mudededzi** (teacher). It appears in the immediate postnominal position. The beneficiary **vhana** (children) and theme **mbalo** (Maths) occur as the postnominal genitive NPs, following the prepositional phrase with **nga**.

It is possible to have two prepositions in constructions like the ones in (22). In such constructions the agent argument occurs as complement of the preposition **nga**, the recipient / goal / beneficiary argument occurs as complement of the preposition **kha**. The theme argument occurs as a postnominal genitive complement. Consider the following examples in (23) that illustrate this:

(23) a.   Khadzimo **nga munna ya tshelede kha vhathu** ndi ya vhuḓi
               Agent   Theme   Recipient
        (The loan by the man of money to the people is good)

    b.   Mpho **nga mufunzi ya zwifhiwa kha vhana** i a vha takadza
        (The giving by the pastor of gifts to the children interests them)

    c.   Mbilo **nga vhengele ya tshikolodo kha munna** yo vha yo lavhelelwa
        (The demand by the shop of the debt to the man has been expected)

    d.   Mbadelo **nga munna ya mulandu kha vhengele** i do thivhela u farwa hawe
        (The payment by the man of the debt to the shop will stop his arrest)

    e.   Khumbelo **nga mutshudeni ya basari kha muvhuso** i do sedzuluswa
        (The application by the student of the bursary to the government will be considered)

    f.   Fhulufhedziso **nga Murena ḽa muyamukhethwa kha vhafunziwa** vhawe ḽo itwa
        (The promise by Crhist of the Holy Spirit to His disciples has been fulfilled)

g.   Thalutshedzo **nga mudededzi ya mbalo kha vhana** i do vha phasisa
     (The explanation by the teacher of Maths to the children will make
     them pass)

In example (23a), the agent argument **munna** (man) occurs as a complement of the
preposition **nga** adjacent to the deverbal nominal. After this prepositional
phrase with **nga**, the theme **tshelede** (money), occurs in the postnominal
genitive position. In the rightmost position the recipient is projected as a
complement of the preposition **kha** (to). There is no ambiguity in thematic
interpretation of all these arguments, and this construction is grammatical.

There are two prepositional phrases in (23b) as in (23a). The first
prepositional phrase appears in the immediate postnominal position, **nga
mufunzi** (by the pastor). The argument which is structurally projected as a
complement of the preposition **nga** is interpreted as the agent with no possible
ambiguity. The second prepositional phrase occurs in the extreme right
position, **kha vhana**(to the children). The argument which is projected as a
complement of **kha** is the recipient which exemplifies no possible ambiguity.
The theme **zwifhiwa** (gifts) occurs as a postnominal genitive NP, immediately
after the prepositional phrase with **nga**.

In example (23c), the agentive prepositional phrase with **nga** appears
immediately adjacent to the deverbal nominal **mbilo** (the demand). The second
prepositional phrase **kha munna** occurs in the rightmost position. The argument
which is structurally realized as a complement of the preposition **kha** is
interpreted as the patient, which exemplifies no possibility of ambiguity. The
theme argument **tshikolodo** (debt) occurs as a postnominal genitive NP after the
prepositional phrase with **nga**.

In example (23d), the prepositional phrase with **nga**, occurs immediately
adjacent to the deverbal nominal **mbadelo** (the payment). The argument **munna**
(man) which is structurally projected as a complement of the preposition **nga**
is interpreted as the agent only. After this prepositional phrase a theme
argument **mulandu** (debt) occurs as a postnominal genitive NP. The prepositional
phrase with **kha** occurs in the extreme right position. The argument which
occurs as a complement of the preposition **kha** is thematically interpreted as
the recipient which exemplifies no possible ambiguity.

There are also two prepositional phrases in example (23e) above. The first
prepositional phrase with **nga** occurs in the immediate postnominal position **nga
mutshudeni** (by the student). The argument **mutshudeni** which is structurally

projected as a complement of the preposition **nga** is interpreted as the agent. The second prepositional phrase with **kha** occurs in the rightmost position **kha muvhuso** (to the government). The argument **muvhuso** (government) which is a complement of the preposition **kha** is interpreted as the goal argument. The theme **basari** (bursary) occurs after the prepositional phrase with **nga** as a postnominal genitive NP.

In example (23f), two prepositional phrases occur. The first prepositional phrase with **nga** occurs in the immediate postnominal position, **nga Murena** (by Chirst). The argument **Murena** (Christ) which is structurally projected as a complement of the preposition **nga** is interpreted as an agent. The second prepositional phrase occurs in the rightmost position **kha vhafunziwa vhawe** (to His disciples). The argument **vhafunziwa** (disciples) which is structurally realised as a complement of the preposition **kha** is interpreted as the patient. The theme argument **muyamukhethwa** (Holy Spirit) occurs as a postnominal genitive NP after the prepositional phrase with **nga**.

In example (23g), two prepositional phrases occur. The first prepositional phrase with **nga** occurs in the immediate postnominal position **nga mudededzi**. The argument which occurs as a complement of the preposition **nga** is interpreted as the agent argument. The second prepositional phrase with **kha** occurs in the rightmost position, **kha vhana** (to the children). The argument **vhana** (children), which is a complement of the preposition **kha** is interpreted as the beneficiary. The theme **mbalo** (Maths) appears between the two prepositional phrases as a postnominal genitive NP.

All the examples in (23), with two prepositional phrases with **nga** and **kha**, are grammatical.

The theme argument which appears as a postnominal genitive NP in all the examples illustrated above, may occur as a bare NP, as in (24):

(24)   a.   Khadzimo **ya munna ya vhathu**   tshelede ndi ya vhudi
                     Agent   Recipient Theme
             (The loan of the man of people money is good)

       b.   Mpho **ya mufunzi ya vhana**   zwifhiwa i a vha takadza
                   Agent   Recipient Theme
             (The giving of the pastor of the children gifts interests them)

69

c. Mbilo **ya vhengele ya munna tshikolodo** yo vha yo lavhelelwa
            Agent   Patient Theme
    (The demand of the shop of the man debt has been expected)

d. Mbadelo **ya munna ya vhengele mulandu** i do thivhela u farwa hawe
            Agent   Recipient Theme
    (The payment of the man of the shop debt will stop his arrest)

e. Khumbelo **ya mutshudeni ya muvhuso basari** i do sedzuluswa
            Agent   Goal   Theme
    (The application of the student of the government bursary will be
    considered)

f. Fhulufhedziso **la Murena la vhafunziwa** vhawe **muyamukhethwa** lo itwa
                    Agent   Patient   Theme
    (The promise of Christ of His disciples the Holy Spirit has been
    fulfilled)

g. Thalutshedzo **ya mudededzi ya vhana**   mbalo i do vha phasisa
                    Agent   Beneficiary Theme
    (The explanation of the teacher of children Maths will make them
    pass)

In (24) all examples have a bare theme argument i.e. the theme argument is not
preceded by the genitive. In example (24a), this argument is **tshelede** (money)
in (24b) this theme argument is **zwifhiwa** (gifts), in (24c) it is **tshikolodo**
(debt), **mulandu** (debt) in (24d), **basari** (bursary in (24e), **muyamukhethwa** (Holy
Spirit) in (24f), and **mbalo** (Maths) in (24g).

There is no rule which prohibits these arguments to appear as bare NPs. All
the deverbal nominals in (24) allow bare NPs and the constructions in (24) are
grammatical. But it must be clear that the constructions in (24) will be
ungrammatical if bare NPs appear in the immediate postnominal position like in
(25):

(25) a. *Khadzimo **tshelede ya munna ya vhathu** ndi ya vhudi
                    Theme   Agent   Recipient
         (The loan money of the man of the people is good)

     b. *Mpho **zwifhiwa ya mufunzi ya vhana** i a vha takadza
                Theme   Agent   Recipient
         (The giving gifts of the pastor of the man interests them)

c. *Mbilo **tshikolodo ya vhengele ya munna** yo vha yo lavhelelwa
           Theme   Agent   Patient
    (The demand debt of the shop of the man has been expected)

d. *Mbadelo **mulandu ya munna ya vhengele** i do thivhela u farwa hawe
            Theme   Agent   Recipient
    (The payment debt of the man of the shop will stop his arrest)

e, *Khumbelo **basari ya mutshudeni ya muvhuso** i do sedzuluswa
            Theme   Agent   Goal
    (The application bursary of the student of the government will be considered)

f. *Fhulufhedziso **muyamukhethwa la Murena vhafunziwa** vhawe lo itwa
             Theme   Agent Patient
    (The promise Holy spirit of Chirst of His disciples has been fulfilled)

g. *Thalutshedzo **mbalo ya mudededzi ya vhana** i do vha phasisa
             Theme   Agent   Beneficiary
    (The explanation Maths of the teacher of the children will make them pass)

From (25) it can be deduced that bare NPs, that is, NPs not preceded by the genitive **a**, cannot be structurally realized as immediate postnominal NPs. They are absolutely not allowed to occur adjacent to the deverbal nominal. If they do the construction becomes ungrammatical as illustrated in (25).

The recipient / beneficiary / goal argument may also occur as bare NP, as shown in (26):

(26) a. Khadzimo **ya munna ya tshelede vhathu** ndi ya vhudi
                Agent   Theme   Recipient
    (The loan of the man of the money people is good)

    b. Mpho **ya mufunzi ya zwifhiwa vhana** i a vha takadza
              Agent   Theme   Recipient
    (The giving of the pastor of the gifts children interests them)

    c. Mbilo **ya vhengele ya tshikolodo munna** yo vha yo lavhelelwa
              Agent   Theme   Patient
    (The demand of the shop of the debt man has been expected)

    d. Mbadelo **ya munna ya mulandu vhengele** i do thivhela u farwa hawe
              Agent   Theme   Recipient
    (The payment of the man of the debt shop will stop his arrest)

e.   Khumbelo **ya mutshudeni ya basari muvhuso** i do sedzuluswa
                  Agent   Theme   Goal
(The application of the student of the bursary government will be considered)

f.   Fhulufhedziso **la Murena la muyamukhethwa vhafunziwa** vhawe lo itwa
                  Agent   Theme   Patient
(The promise of Chirst of the Holy Spirit His disciples has been fulfilled)

g.   Thalutshedzo **ya mudededzi ya mbalo vhana** i do vha phasisa
                  Agent   Theme Beneficiary
(The explanation of the teacher of Maths children will make them pass)

From (26) it is clear that the recipient / beneficiary / goal argument may occur as bare NPs in the rightmost position. Although there is no rule that prohibit bare arguments in (26), these constructions are not common in Venda. Their English counterparts are not grammatical with bare NPs, that is when the recipient / goal / beneficiary arguments are not preceded by the genitive **of** or any preposition like **nga** or **kha**.

In (26), the bare NPs are the recipient **vhathu** (people) in (26a), recipient **vhana** (children) in (26b), patient **munna** (man) in (26c), recipient **vhengele** (shop) in (26d), goal **muvhuso** (government) in (26e), patient **vhafunziwa** (disciples) in (26f), and beneficiary **vhana** (children) in (26g).

3.3.2   Omissibility of arguments with deverbal nominals related to ditransitive verbs

The examples in this section demonstrate the possible ambiguity with postnominal genitive arguments. Consider examples such as the following with one [+human] postnominal genitive NP and one inanimate postnominal genitive NP:

(27) a.   Khadzimo **ya munna**   **ya tshelede** ndi ya vhudi
            [9]   Agent/Recipient   Theme
(The loan of the man of money is good)

b.   Mpho **ya mufunzi ya zwifhiwa** i a vha takadza
    [9]   Theme
(The giving of the priest of the gifts interests them)

c. Mbilo ya **vhengele ya tshikolodo** yo vha yo lavhelelwa
    [9]   Agent   Theme
    (The demand of the shop of debt has been expected)

d. Mbadelo **ya munna ya mulandu** i do thivhela u farwa hawe
    [9]   Agent   Theme
    (The payment of the man of the debt will stop his arrest)

e. Khumbelo **ya mutshudeni ya basari** i do sedzuluswa
    [9]   Agent   Theme
    (The application of the student of the bursary will be considered)

f. Fhulufhedziso ḽa **Murena** ḽa **Muyamukhethwa** ḽo itwa
    [5]   Agent   Theme
    (The promise of Christ of the Holy Spirit has been fulfilled)

g. Ṱhalutshedzo **ya mudededzi ya mbalo** i do vha phasisa
    [9]   Agent   Theme
    (The explanation of the teacher of Maths will make them pass)

In all the examples in (27) only the theme and the agent which occur in (16) above are projected into syntactic positions.

In example (27a) ambiguity arises in the interpretation of the argument **munna** which occurs as a postnominal genitive adjacent to the deverbal nominal **khadzimo** (loan). Because one of the internal arguments of the active verb **hadzima** (lends) is not linked, the argument **munna** (man) may be interpreted as an agent or recipient by free thematic interpretation.

This ambiguity does not occur with any other nominal in (27). In all examples (b-g) the arguments, projected as postnominal genitive NPs, are interpreted as the agent (for the immediate postnominal genitive NP) and theme for the argument which immediately follows the agent. Ambiguity in (27a) is possible because of the nature of the nominal used. **Khadzimo** (loan) gives rist to ambiguity in thematic while other nominals in (27b-g) do not give rise to such ambiguity in the interpretation of the argument adjacent to the deverbal nominal.

Consider the following examples in which the theme argument is omitted and only two [+human] postnominal genitive NPs occur. These are the arguments interpreted as agent and recipient / patient / goal in (16):

(28) a. Khadzimo **ya munna**   **ya vhathu** ndi ya vhuḓi
          [9]   · Agent/Recipient   Agent/Recipient
          (The loan of the man of the people is good)

      b. Mpho **ya mufunzi**   **ya vhana** i a vha takadza
          [9]   Agent/Recipient   Agent/Recipient
          (The giving of the priest of children interests them)

      c. Mbilo **ya vhengele ya munna** yo vha yo lavhelelwa
          [9]   Agent   Patient
          (The demand of the shop of the man has been expected)

      d. Mbadelo **ya munna ya vhengele** i ḓo thivhela u farwa hawe
          [9]   Agent   Recipient
          (The payment of the man of the shop will stop his arrest)

      e. Khumbelo **ya mutshudeni ya muvhuso** i ḓo sedzuluswa
          [9]   Agent   Goal
          (The application of the student of the government will be
          considered)

      f. Fhulufhedziso **la Murena la vhafunziwa** vhawe lo itwa
          [5]   Agent   Patient
          (The promise of Christ of His disciples has been fulfilled)

      g. Thalutshedzo **ya mudededzi ya vhana** i ḓo vha phasisa
          [9]   Agent   Beneficiary
          (The explanation of the teacher of the children will make them
          pass)

In all the examples above (28) the theme is omitted. In examples (28a and b) ambiguity arises because of this omission. In (28a) the argument **munna** (man) and **vhathu** (people) may both be interpreted either as agent or recipient. The same properties obtain in (28b) where both **mufunzi** (pastor) and **vhana** (children) may be interpreted as either agent or recipient.

This ambiguity is not possible with the other arguments of the deverbal nominals in (28c) to (g). The inherent semantics of these deverbal nominals dictate to the interpretation of their arguments. **Vhengele** (shop) can only have a possible interpretation of agent and **munna** (man) will then be the patient in (28c).

In (28d) **munna** (man) is the agent and **vhengele** (shop) the recipient. In (28e) **mutshudeni** (student) is the agent making an application to **muvhuso**

(government) which is interpreted as goal. In (28f) **Murena** (Christ) is the agent and **vhafunziwa** (disciples) is patient mainly from pragmatic competence.

In (28g) the argument in the immediate postnominal genitive NP **mudededzi** (teacher) is the agent and **vhana** (children) is interpreted as beneficiary. These theta roles are fixed and cannot alternate between the two arguments. If ambiguity were possible, the argument **mudededzi** (teacher) may only be interpreted as patient since this argument cannot be interpreted as a participant who benefits from the explanation of the children. This theta role was not possible in (16) and is not allowed. Hence, no ambiguity occurs in (28g).

Consider next examples where the theme is omitted but the recipient / patient / goal argument occurs as the complement of the preposition **kha**:

(29) a.   Khadzimo **ya munna kha vhathu** ndi ya vhuḓi
             [9]   Agent   Recipient
             (The loan of the man to the people is good)

      b.   Mpho **ya mufunzi kha vhana** i a vha takadza
             [9]   Agent   Recipient
             (The giving of the pastor to the children interests them)

      c.   Mbilo **ya vhengele kha munna** yo vha yo lavhelelwa
             [9]   Agent   Patient
             (The demand of the shop to the man has been expected)

      d.   Mbadelo **ya munna kha vhengele** i ḓo thivhela u farwa hawe
             [9]   Agent   Recipient
             (The payment of the man to the shop will stop his arrest)

      e.   Khumbelo **ya mutshudeni kha muvhuso** i ḓo sedzuluswa
             [9]   Agent   Goal
             (The application of the student to the government will be considered)

      f.   Fhulufhedziso ḽa **Murena kha vhafunziwa** vhawe ḽo itwa
             [5]   Agent   Patient
             (The promise of Christ to His disciples has been fulfilled)

      g.   Thalutshedzo **ya mudededzi kha vhana** i ḓo vha phasisa
             [9]   Agent   Beneficiary
             (The explanation of the teacher to the children will make them pass)

The rightmost argument in (29) is projected as a complement of the preposition **kha**. In (29a) this argument is **vhathu** (people), (b) **vhana** (children), (d) **vhengele** (shop) and it is interpreted as the recipient. In (29c) this argument is **munna** (man), and in (f) is **vhafunziwa** (disciples) and it is interpreted as the patient. In (29 e) **muvhuso** (government) is interpreted as goal and in (29g) **vhana** (children) is interpreted as the beneficiary. All the immediate postnominal genitive NPs in (29) are interpreted as agent with no possibility of ambiguity in the thematic interpretation.

Consider next the example sentences in which only a theme argument is realized as a postnominal genitive NP as in (30):

(30) a.   Khadzimo **ya tshelede** ndi ya vhuḓi
            [9]   Theme
        (The loan of money is good)

      b.   Mpho **ya zwifhiwa** i a vha takadza
            [9]   Theme
        (The giving of gifts interests them)

      c.   Mbilo **ya tshikolodo** yo vha yo lavhelelwa
            [9]   Theme
        (The demand of the debt has been expected)

      d.   Mbadelo **ya mulandu** i ḓo thivhela u farwa hawe
            [9]   Theme
        (The payment of the debt will stop his arrest)

      e.   Khumbelo **ya basari** i ḓo sedzuluswa
            [9]   Theme
        (The application of a bursary will be considered)

      f.   Fhulufhedziso **ḽa muyamukhethwa** ḽo itwa
            [5]   Theme
        (The promise of the Holy Spirit has been fulfilled)

      g.   Thalutshedzo **ya mbalo** i ḓo vha phasisa
            [9]   Theme
        (The explanation of Maths will make them pass)

In (30) all the other arguments, but the theme, have been omitted. The theme appears as a postnominal genitive NP with no possible ambiguity in thematic interpretation. This kind of constructions are .common in Venda. The theme arguments are **tshelede** (money) in (a), **zwifhiwa** (gifts) in (b), **tshikolodo**

76

(debt) in (c), **mulandu** (debt) in (d), **basari** (bursary) in (e), **muyamukhethwa** (Holy Spirit) in (f) and **mbalo** (Maths) in (g).

These nominals related to ditransitive verbs may occur with no arguments at all. Consider the following examples in which neither the external (agent) argument nor the internal arguments in (16) occur with the deverbal nominal.

(31) a.   Khadzimo ndi ya vhudi
            [9]
            (The loan is good)

      b.   Mpho i a vha takadza
            [9]
            (The giving ceremony interests them)

      c.   Mbilo yo vha yo lavhelelwa
            [9]
            (The demand has been expected)

      d.   Mbadelo i do thivhela u farwa hawe
            [9]
            (The payment will stop his arrest)

      e.   Khumbelo i do sedzuluswa
            [9]
            (The application will be considered)

      f.   Fhulufhedziso lo itwa
            [5]
            (The promise has been fulfilled)

      g.   Thalutshedzo i do vha phasisa
            [9]
            (The explanation will make them pass)

All the arguments which occurred in the active verbs in (16) are omitted in (31a-g). These examples are all grammatical and are common in everyday conversation of people.

The deverbal nominal from ditransitive verbs may be followed by an infinitival clause i.e. the complement of the deverbal nominal may be an infinitival clause. Consider the following examples in (32) where the deverbal nominal is followed by an infinitival clause of which the PRO subject is controlled by an implicit agent argument of the deverbal nominal:

(32)   a.   Khadzimo ya [PRO u takadza vhathu] ndi ya vhudi
            [9]
       (The loan [to make people happy] is good)

       b.   Mpho ya [PRO u takadza vhana] ndi ya vhudi
            [9]
       (The giving ceremony [to make children happy] is good)

       c.   Mbilo ya [PRO u latisa munna] ndi ya vhudi
            [9]
       (The demand [to punish the man] is good)

       d.   Mbadelo ya [PRO u takadza vhengele] ndi ine ya todea
            [9]
       (The payment [to make the shop happy] is desirable)

       e.   Khumbelo ya [PRO u humbela tshelede] ndi ya vhudi
            [9]
       (The application [to request money] is good)

       f.   Fhulufhedziso la [PRO u takadza vhafunziwa vhawe] lo itwa
            [5]
       (The promise [to make His disciples happy] has been fulfilled)

       g.   Thalutshedzo ya [PRO u phasisa vhana] ndi ya vhudi
            [9]
       (The explanation [to make the children pass] is good)

The deverbal event nominals in (32a - g) appear with infinitival clause
complements. The external argument (agent) occurs as an implicit argument of
the deverbal event nominal. The crucial factor here is whether or not there is
any controller of the PRO subject of infinitival clause. The external implicit
argument serves as the controller of PRO in all examples in (32).

These constructions with the deverbal nominals taking infinitival complements
are grammatical and the genitive **ya** (of) must appear obligatorily.

The external (agent) argument may still appear with deverbal nominals which
take infinitival clauses as in (33):

(33)   a.   Khadzimo **ya munna**[i] ya [PRO[i] u takadza vhathu] ndi ya vhudi
            [9]   Agent
       (The loan of the man [to make people happy] is good)

b.   Mpho **ya mufunzi**[i] ya [PRO[i] u takadza vhana] ndi ya vhuḓi
     [9]   Agent
     (The giving of the pastor [to make children happy] is good)

c.   Mbilo **ya vhengele**[i] ya [PRO[i] u laṱisa munna] ndi ya vhuḓi
     [9]   Agent
     (The demand of the shop [to punish the man] is good)

d.   Mbadelo **ya munna**[i] ya [PRO[i] u takadza vhengele] ndi ine ya toḓea
     [9]   Agent
     (The payment of the man [to make the shop happy] is desirable)

e.   Khumbelo **ya mutshudeni**[i] ya [PRO[i] u humbela tshelede] ndi ya vhuḓi
     [9]   Agent
     (The application of the student [to request money] is good)

f.   Fhulufhedziso **ḽa Murena**[i] ḽa [PRO[i] u takadza vhafunziwa vhawe] ḽo
     itwa
          [5]   Agent
     (The promise of Christ [to make His disciples happy] has been
     fulfilled)

g.   Thalutshedzo **ya mudededzi**[i] ya [PRO[i] u phasisa vhana] ndi ya vhuḓi
          [9]   Agent
     (The explanation of the teacher [to make the children pass] is
     good)

The agent argument occurs with the deverbal event nominals with infinitival
clause complements in (33). This overt postnominal genitive NP serves as a
controller of the PRO subject of the infinitival clause. Consider the diagram
below which demonstrates control as illustrated in examples (32) and (33)
above.
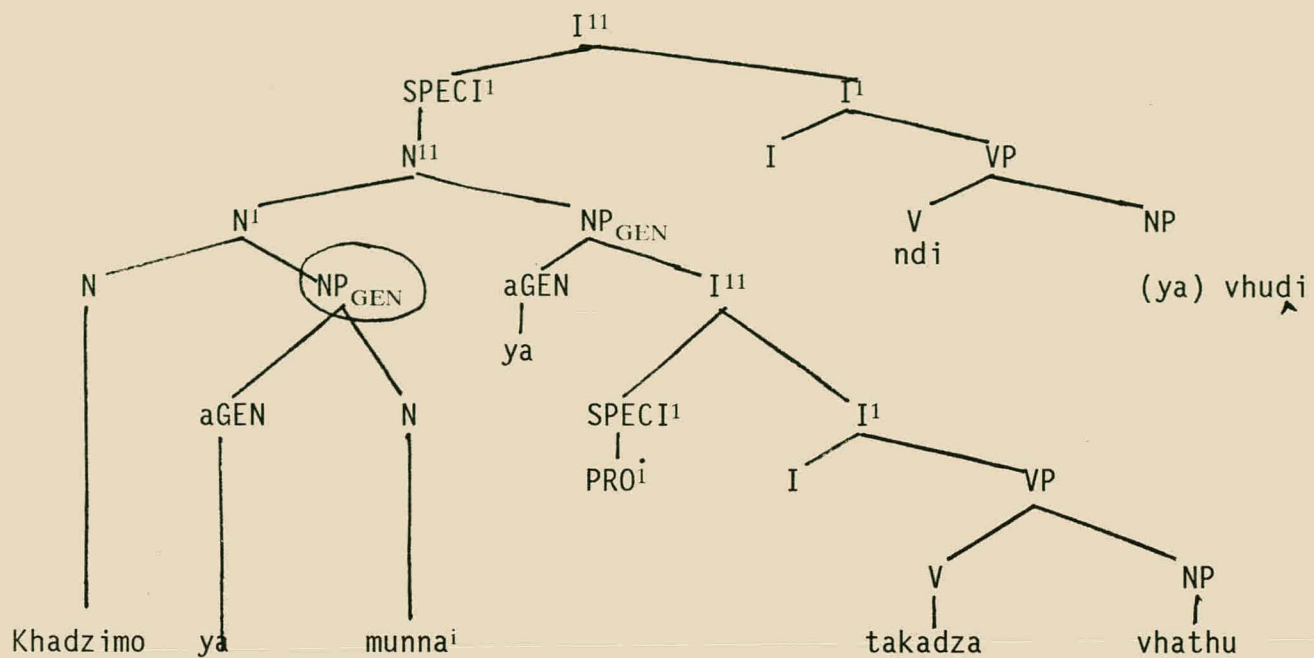
If there is an implicit argument like in (32) above the encircled NP_{GEN} will be omitted.

These overt agent arguments are **munna** (man) in (33a), **mufunzi** (pastor) in (33b), **vhengele** (shop) in (33c), **munna** (man) in (33d), **mutshudeni** (student) in (33e), **Murena** (Christ) in (33f), and **mudededzi** (teacher) in (33g).

This external (agent) argument may also occur in the post-infinitival clause position, i.e. after the infinitival clause. Consider examples in (34):

(34)   a.   Khadzimo ya [PRO^i u takadza vhathu] **ya munna^i** ndi ya vhudi
          [9]   Agent
          (The loan [to make the people happy] of the man is good)

      b.   Mpho ya [PRO^i u takadza vhana] **ya mufunzi^i** ndi ya vhudi
          [9]   Agent
          (The giving [to make the children happy] of the pastor is good)

      c.   Mbilo ya [PRO^i u latisa munna] **ya vhengele^i** ndi ya vhudi
          [9]   Agent
          (The demand [to punish the man] of the shop is good)

      d.   Mbadelo ya [PRO^i u takadza vhengele] **ya munna^i** ndi ine ya todea
          [9]   Agent
          (The payment [to make the shop happy] of the man is desirable)

e.   Khumbelo ya [PRO^i u humbela tshelede] **ya mutshudeni**^i i do sedzuluswa
     [9]   Agent
     (The application [to request money] of the student will be
     considered)

f.   Fhulufhedziso la [PRO^i u takadza vhafunziwa vhawe] **la Murena**^i lo
     itwa [5]   Agent
     (The promise [to make His disciples happy] of Christ has been
     fulfilled)

g.   Thalutshedzo ya [PRO^i u phasisa vhana] **ya mudededzi**^i ndi ya vhudi
          [9]   Agent
     (The explanation [to make the children pass] of the teacher is
     good)

The overt agent argument occurs after the infinitival clause in the rightmost
position. It serves as a controller of PRO subject of infinitival clause from
this position. The agent argument occurs as complement of the genitive **a**.
These constructions are grammatical. The agent argument in (34a) is **munna**
(man), **mufunzi** (pastor) in (34b), **vhengele** (shop) in (34c), **munna** (man) in
(34d), **mutshudeni** (student) in (34e), **Murena** (Christ) in (34f), and **mudededzi**
(teacher) in (34g).

In accordance with the view of control of PRO by the complex deverbal nominal
as outlined in section 3.2.2 it may alternatively be proposed that the complex
deverbal nominal in examples such as (32-34) controls PRO subject in the
purposive infinitival clause.

3.4   DEVERBAL NOMINALS RELATED TO INTRANSITIVE VERBS

3.4.1   The structural projection of the argument of deverbal nominals related to intransitive verbs

The examples in this subsection demonstrate the syntactic projection of the
argument with the deverbal event nominals related to intransitive verbs:

(35) a.   **Vhasadzi** vha khou semana
           Agent
           (The women are quarreling against each other)

      b.   **Vhafhalali** vha tshimbila nga milenzhe
           Agent
           (The refugees walk on foot)

    c.   **Vhatonga** vha khou tshongola
          Agent
          (The Batonga are dancing)

    d.   **Munna** u enda nga bisi
          Agent
          (The man travels by bus)

    e.   **Vhaloi** vho shavha
          Agent
          (The witches have escaped)

    f. _ **Vhathu** vha khou gwalaba
          Agent
          (The people are protesting)

    g.   **Bomo** yo thuthuba
          Theme
          (The bomb has exploded)

It has been pointed out in (3.1) that intransitive verbs assign one argument only. This is usually the external argument with thematic interpretation of agent though, depending on the verb, other thematic interpretations may occur.

In the above examples, that is (35), the verb **semana** (quarrel) assign an agent theta role to the argument **vhasadzi** (women) in (35a), **tshimbila** (walk) assigns agent theta role to the argument **vhafhalali** (refugees) in (35b), **tshongola** (dance) assigns an agent theta role to the argument **vhatonga** (Batonga) in (35c), **enda** (travel) assign an agent theta role to the argument **munna** (man) in (35d), **shavha** (run away) assigns the theta role of agent to the argument **vhaloi** (witches) in (35e), **gwalaba** (protest) assigns agent theta role to the argument **vhathu** (people) in (35f) and **thuthuba** (explode) which is a motion verb, assigns a theme theta role to **bomo** (bomb).

From these intransitive verbs (35), deverbal event nominals can be constructed which are related to these verbs. Consider examples in (36):

(36)   a.   Tsemano **ya vhasadzi** i lwisa vhanna vhavho
           [9]   Agent
        (The quarrel of the women makes their husbands fight)

     b.   Mutshimbilo **wa vhafhalali** nga milenzhe wo lapfa)
           [3]   Agent
        (The walk of the refugees on foot is long)

c.   Mutshongolo **wa vhatonga** u a takadza
          [3]   Agent
      (The dance of the Batsonga is interesting)

d.   Lwendo **lwa munna** nga bisi lwo lapfa
       [11]   Agent
      (The trip of the man by bus is long)

e.   Mushavho **wa vhaloi** wo takadza vhathu
          [3]   Agent
      (The escape of the witches has interested the people)

f.   Mugwalabo **wa vhathu** u thithisa vhudziki
          [3]   Agent
      (The protest of the people disturbs stability)

g.   Muthuthubo **wa bomo** wo dzinginyisa shango
          [3]   Theme
      (The explosion of the bomb has shaken the earth)

The external argument of the intransitive verbs in (35) occurs as postnominal genitive NP arguments in (36). The arguments retain their theta roles. However, other linguists, like Safir (1987:580) argues that this kinds of nominals may take arguments which may have free thematic interpretation. They can be interpreted as agent arguments only. I will return to issues concerning free thematic interpretation in section four of this study.

The agent arguments which occur as postnominal genitive NPs in (36) are, **vhasadzi** (women) in (1), **vhafhalali** (refugees) in (b), **vhatonga** (Batonga) in (c), **munna** (man) in (d), **vhaloi** (witches) in (e), **vhathu** (people) in (f). **Bomo** (bomb) in (36g) is interpreted as a theme.

The external argument of the corresponding verb related to the deverbal nominal may occur as a complement of the preposition **nga**, which is the only possible realization of the external argument in passive verb constructions. Consider the examples in (37):

(37) a.   Tsemano **nga vhasadzi** i lwisa vhanna vhavho
                [9]   Agent
            (The quarrel by women makes their husbands to fight)

      b.   Mutshimbilo **nga vhafhalali** wa milenzhe wo lapfa
                [3]   Agent
            (The walk by the refugees on foot is long)

c.   Mutshongolo **nga vhatonga** u a takadza
         [3]   Agent
      (The dance by Batonga is interesting)

d.   Lwendo **nga munna** lwa bisi lwo lapfa
         [11]   Agent
      (The trip by man of bus is long)

e.   Mushavho **nga vhaloi** wo takadza vhathu
         [3]   Agent
      (The escape by witches has interested the people)

f.   Mugwalabo **nga vhathu** u thithisa vhudziki
         [3]   Agent
      (The protest by people disturbs stability)

g.   Muthuthubo **nga bomo** wo dzinginyisa shango
         [3]   Theme/Instrument
      (The explosion by a bomb has shaken the earth)

The arguments, which are projected in the postnominal position immediately after the deverbal event nominal, occur as complements of the preposition **nga**. The arguments in (37a-f) are interpreted as agent arguments. These are **vhasadzi** (women) in (a), **vhafhalali** (refugees) in (b), **vhatonga** (Batonga) in (c), **munna** (man) in (d), **vhaloi** in (e), and **vhathu** (people) in (f). The argument **bomo** (bomb) in (37g) has an ambiguous thematic interpretation because it can be interpreted as either theme or instrument.

The deverbal event nominals related to intransitive verbs never take bare NPs. Consider the following examples where it is illustrated that deverbal event nominals related to intransitive verbs cannot take bare NPs.

(38) a.   *Tsemano **vhasadzi** i lwisa vhanna
                   Agent
            (The quarrel women cause the husbands to fight)

      b.   *Mutshimbilo **vhafhalali** wa milenzhe wo lapfa
                   Agent
            (The walk refugees on foot is long)

      c.   *Mutshongolo **vhatonga** u a takadza
                   Agent
            (The dance Batonga is interesting)

    d.   *Lwendo **munna** lwa bisi lwo lapfa
                    Agent
        (Trip man long)

    e.   *Mushavho **vhaloi** wo takadza vhathu
                     Agent
        (The escape witches has interested the people)

    f.   *Mugwalabo **vhathu** u thithisa vhudziki
                     Agent
        (The protest people disturbs stability)

    g.   *Muthuthubo **bomo** wo dzinginyisa shango
                     Theme
        (The explosion bomb has shaken the earth)

The deverbal event nominals related to intransitive verbs may occur with no argument, as demonstrated in (39):

(39) a.   Tsemano i lwisa vhanna vhavho
           [9]
          (The quarrel makes their husbands to fight)

    b.   Mutshimbilo nga milenzhe wo lapfa
           [3]
          (The walk on foot is long)

    c.   Mutshongolo u a takadza
           [3]
          (The dance is interesting)

    d.   Lwendo lwa bisi lwo lapfa
           [11]
          (The trip of bus is long)

    e.   Mushavho wo takadza vhathu
           [3]
          (The escape has interested the people)

    f.   Mugwalabo u thithisa vhudziki
           [3]
          (The protest disturbs stability)

    g.   Muthuthubo wo dzinginyisa shango
           [3]
          (The explosion has shaken the earth)

There is no argument that occurs with the intransitive verbs in (36) in the above examples (39). The arguments are omitted but these sentences are grammatical.

The deverbal event nominals related to intransitive verbs may take infinitival clauses as their complements. Consider the following examples in (40):

(40) a. Tsemano ya [PRO u takadza vhanna vhavho] ndi ya vhudi
          [9]
          (The quarrel [to make their husbands happy] is good)

      b. Mutshimbilo wa [PRO u netisa vhathu] wo lapfa
          [3]
          (The walk [to make people tired] is long)

      c. Mutshongolo wa [PRO u takadza vhathu] ndi wa vhudi
          +3
          (The dance [to make people happy] is good)

      d. Lwendo lwa [PRO u tshimbidza vhana] ndi lwavhudi
          [3]
          (The trip [to make children travel] is good)

      e. Mushavho wa [PRO u takadza vhathu] ndi wa vhudi
          [3]
          (The escape [to make the people happy] is good)

      f. Mugwalabo wa [PRO u thithisa vhudziki] wo vhifha
          [3]
          (The protest [to disturb stability] is bad)

      g. Muthuthubo wa [PRO u thithisa vhudziki] wo vhifha
          [3]
          (The explosion [to disturb stability] is bad)

This kind of constructionin (40a-g) supports the view that an implicit agent argument is present in these examples which control the subject PRO of the infinitival clause.

The omitted argument may occur overtly with constructions in (40) that is, it may appear with the infintival clause. Consider the examples in (41):

(41) a. Tsemano **ya vhasadzi**[i] ya [PRO[i] u takadza vhanna vhavho] ndi ya vhudi
          [9]   Agent
          (The quarrel of women [to make their husbands happy] is good)

b. Mutshimbilo **wa vhafhalali**[i] wa [PRO[i] u netisa vhathu] wo lapfa
      [3]   Agent
    (The walk of the refugees [to make the people tired] is long)

c. Mutshongolo **wa vhatonga**[i] wa (PRO[i] u takadza vhathu] ndi wa vhudi
      [3]   Agent
    (The dance of the Batonga [to make the people happy] is good)

d. Lwendo **lwa munna**[i] lwa [PRO[i] u tshimbidza vhana] ndi lwavhudi
      [11]   Agent
    (The trip of the man [to make children travel] is good)

e. Mushavho **wa vhaloi**[i] wa [PRO[i] u takadza vhathu] ndi wa vhudi
      [3]   Agent
    (The escape of the witches [to interest the people] is good)

f. Mugwalabo **wa vhathu**[i] wa [PRO[i] u thithisa vhudziki] wo vhifha
      [3]   Agent
    (The protest of people [to disturb stability] is bad)

g. Muthuthubo **wa bomo**[i] wa [PRO[i] u thithisa vhudziki] wo vhifha
      [3]   Theme
    (The explosion of the bomb [to disturb peace] is bad)

The agent argument occurs overtly as postnominal genitive NP in examples (41a-f). Example (f) has a theme argument. These arguments occur before (i.e. to the left of) the infinitival clauses, and they serve as controllers of the PRO subject of infinitival clauses. Consider the diagram below which illustrates control as exemplified in the examples (40) and (41) above.
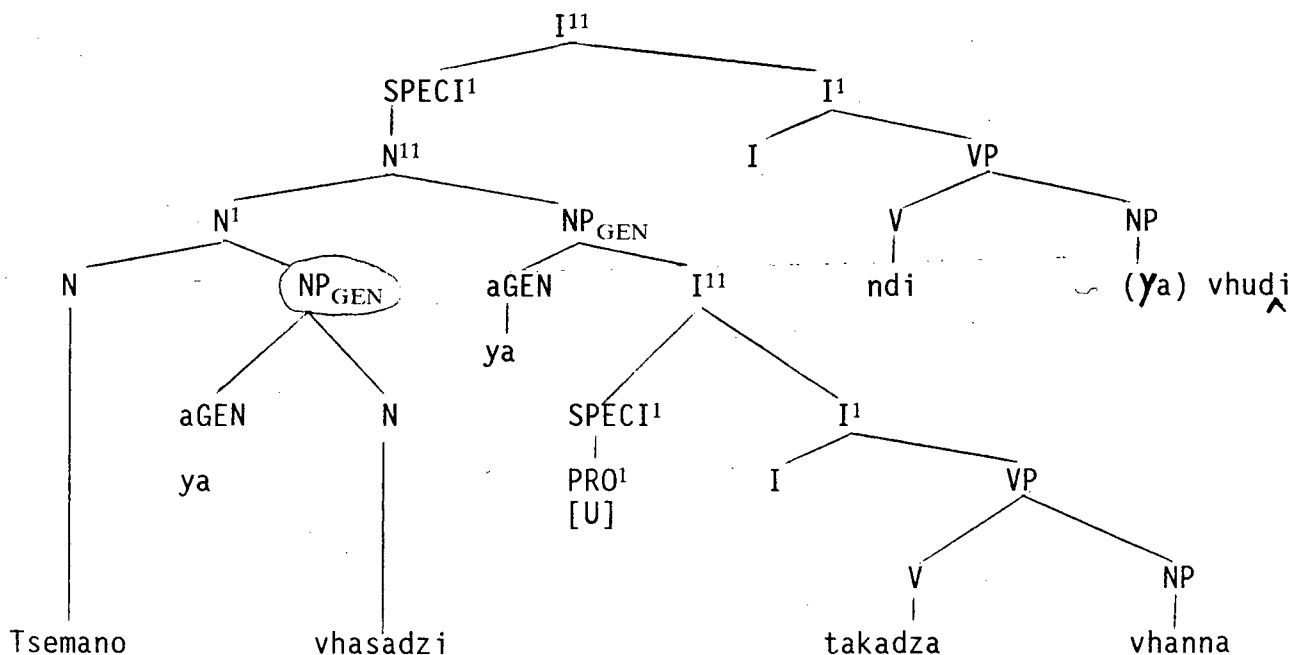
If there is an implicit argument like in (40) above the encircled NP$_{GEN}$ will be omitted.

It is also possible for these arguments to occur after the infinitival clauses which are complements of the deverbal nominal, as shown in (42):

(42)   a.   Tsemano ya [PRO^i u takadza vhanna vhavho] **ya vhasadzi**^{i} ndi ya vhudi
        [9]   Agent
        (The quarrel [to make their husbands happy] of the women is good)

      b.   Mutshimbilo wa [PRO^i u netisa vhathu] **wa vhafhalali**^{i} wo lapfa
        [3]   Agent
        (The walk [to make the people tired] of the refugees is long)

      c.   Mutshongolo wa [PRO^i u takadza vhathu] **wa vhatonga**^{i} ndi wa vhudi
        [3]   Agent
        (The dance [to make the people happy] of the Batonga is good)

      d.   Lwendo lwa [PRO^i u tshimbidza vhana] **lwa munna**^{i} ndi lwa vhudi
        [11]   Agent
        (The trip [to make children travel] of man is good)

      e.   Mushavho wa [PRO^i u takadza vhathu] **wa vhaloi**^{i} ndi wa vhudi
        [3]   Agent
        (The escape [to make the people happy] of witches is good)

      f.   Mugwalabo wa [PRO^i u thithisa vhudziki] **wa vhathu**^{i} wo vhifha
        [3]   Agent
        (The protest [to disturb stability] of the people is bad)

      g.   Muthuthubo wa [PRO^i u thithisa vhudziki] **wa bomo**^{i} wo vhifha
        [3]   Agent
        (The explosion [to disturb stability] of the bomb is bad)

The external arguments of verbs in (35) occur in (42) after the infinitival clauses (which are complements of the deverbal nominal) as postnominal genitive NPs. From this position they act as controlers of the PRO subject of the infinitival clause.

In accordance with the view of control of PRO by the complex deverbal nominal as outlined in section 3.2.2, it may alternatively be assumed that the complex deverbal nominal NP serves as controller of PRO in the purposive infinitival clause in examples like (40-42).

3.5   CONCLUDING REMARKS

This subsection will focus on the question of whether the hypothesis put forward in the beginning of section (3) has been verified Venda. This hypothesis states that the argument structure of a deverbal event nominal is identical to the argument structure of a verb from which it is derived.

From the examples illustrated in (2), (17) and (36) it may be concluded that deverbal event nominals in Venda projects all the arguments which are assigned by the corresponding verb.

These arguments occur as postnominal genitive NPs of the deverbal event nominals. That is, they are projected as the internal arguments of the deverbal event nominal. In contrast with Enflish there are no prenominal genitive NPs (PGNPs) which occur with the deverbal event nominals in Venda.

From the examples illustrated in (17), it can be concluded that it is not possible for three postnominal genitive NPs to occur with the deverbal event nominals related to ditransitive verbs in Venda. But as it has been stated that, the grammaticality of these examples will depend on the judgement on the speaker concerned.

One of the main findings in this section is that if all the arguments projected by the deverbal event nominal are animate, ambiguity in thematic interpretation of arguments may arise. The most striking example to illustrate this property is (2a(i)). This issue needs further research and consultation with the speakers of the Venda language.

From examples illustrated as (3), and (19) it can be concluded that the order of arguments which occur with deverbal event nominals is not fixed. They may alternate in word order. The nature of this alternation is stylistic. This does not result in any change of meaning with deverbal event nominals related to ditransitive verbs. Ambiguity may, however,occur with arguments occuring with the deverbal nominals related to monotransitive verbs as in (3). This occurs especially if all arguments are animate. The presence of the agentive **nga** may disambiguate this thematic interpretation as illustrated by the examples in (5).

From the examples illustrated in (4), (5), (12) and (23), it can be concluded that the preposition **nga** may only precede the external argument of the

corresponding active verb, whereas the preposition **kha** may precede the internal argument. The preposition **nga** used with deverbal event nominals is not an instrumental **nga**. This is similar to the agentive **nga** which is the only realization of the agent argument in passive constructions. From this it can be concluded that the deverbal event nominals with which such a **nga** phrase occurs in Venda have passive properties.

As illustrated in (6), (27), and (39), it is possible to omit arguments of the deverbal event nominals. If the arguments which remain are animate ambiguity in thematic interpretation occurs. This is evident from examples illustated as (6), (27a) and (28a,b).

From the examples illustrated as (9), (32) and (40), it can be concluded that there is a relationship between the argument structure of deverbal nominals and control theory. An implicit argument of the deverbal nominal may serve as a controller of the PRO subject of infinitival clauses. This subject (PRO) can also be controlled by an overt argument which may precede or follow the infinitival clause, as in (33) and (34), respectively.

SECTION 4

4.1   INTRODUCTORY REMARKS

The purpose of this section is to determine to what extent Safir's proposals as regards Grammatical Function Relativity are borne out in Venda.

As illustrated in section 2, Safir (1987) is mainly concerned with how thematic structure in the lexicon is mapped onto syntactic structure. His main conclusion based on grammatical mapping in nominals is that the notion external argument cannot be defined independently on its structural context: rather the external argument must be defined relative to an internal argument or maximal projection. This is the backbone of Safir's Grammatical Function Relativity.

As part of his GFR (Grammatical Function Relativity) Safir proposes that the grammatical relation external argument must be defined relative to the presence of a LINKED INTERNAL ARGUMENT in a given structure. As evidence of the existence of GF Relativity it will be argued that only nominal predicates that link internal arguments will be able to have TRUE external ones (1987:563).

Safir also proposes that there is a postnominal argument NP, i.e. an internal argument of the deverbal nominal corresponding to the internal argument of the corresponding verb. If the internal argument is present, then the (Safir's PGNP) postnominal genitive NP (in Venda) cannot have anything but the external argument interpretation.

Safir argues that when a predicate projects both its internal and external arguments it has projected its FULL SET OF THEMATIC ROLES, or ITS FULL THEMATIC ARRAY. The structural presence of the internal argument is crucial to the presence of a full THEMATIC ARRAY and hence a completely thematic interpretation of the PGNP (the postnominal genitive NP in Venda) as EXTERNAL ARGUMENT.

Safir assumes that when the internal argument is not linked, the interpretation of the Pregenitive NP (immediate postnominal NP with nominals related to active verbs is Venda) is relatively free (1987:568). Free thematic

interpretation also plays a role in the interpretation of arguments projected by intransitive verbs as this will be evident later in this discussion.

These proposals, and some which will be highlighted in the course of this discussion, pertain to event nominals related to active verbs in Venda.

The passive nominal constructions, where the agent argument is projected or realized as a complement of **nga** will be illustrated in 4.2. Subsection 4.3 will focus on event nominals related to active verbs and consider the application of the notion Grammatical Function Relativity and the projection of the full thematic array. Subsection 4.4 focuses on the EXTERNAL argument as an implicit argument and 4.5 is a conclusion.

4.2   PASSIVE NOMINALS

There are similarities of event nominals related to passive verbs and passive infinitival constructions. The nominal construction containing the event nominal is similar to passive infinitival construction. The passive morpheme -**w**- is omitted in passive nominals for phonetic reasons. The **nga** phrase which typically projects the agent argument in the passive, is also realized in the passive nominal constructions.

Consider the following examples where the passive infinitival construction is demonstrated in (a) and the corresponding passive nominal in (b):

(1)   (i)   a.   U gudwa **ha mavu nga vhalimi** hu khwinisa vhulimi
                                   Theme   Agent

       b.   Ngudo **ya mavu nga vhalimi** i khwinisa vhulimi
             (The study of the soil by the farmers improves farming)

       (ii)   a.   U vhulungwa **ha ṅwana nga vhabebi** hu a tungufhadza
                                        Theme   Agent

       b.   Mbulungo **ya ṅwana nga vhabebi** i a tungufhadza
                        Theme   Agent
             (The burial of the child by the parents is pitiful)

The agentive **nga** appears in front of the argument **vhalimi** (farmers) in both the passive infinitival construction and the passive nominal construction. This agent phrase (with the prepositional phrase with **nga**) in example (1(i)a)

is similar to the passive **nga** in example (1(i)b). This also applies to **vhabebi** (parents) in (1(ii)a) and (b).

Examples (a) in (1(i)) and (ii) have the passive morpheme -**w**- in their verbal morphology, **u gudwa** and **u vhulungwa** while their passive event nominal counterparts **ngudo** (study) and **mbulungo** (burial) do not have this passive morpheme overtly. This passive morpheme -**w**- does not appear in the deverbal nominal because of phonetic reasons.

The syntactic projection of arguments in (1) (i)a and (b), and (ii)a and (b) is the same. In the first set of examples (1(i)a,b), the theme argument **mavu** (soil) appears in the postnominal position adjacent to the passive infinitival verb in (ia) and adjacent to the passive event nominal in (ib).

The prepositional phrase with the agentive **nga** occurs after the genitive theme NP in both examples (ia) and (ib). This prepositional phrases is **nga vhalimi** (by the farmers) in both (ia) and (ib).

In examples (iia) and (iib) the argument which is projected as a postnominal genitive NP for the passive infinitival verb and the passive nominal is the theme **nwana** (child). The argument **vhabebi** (parents) is projected as the complement of the agentive preposition **nga**.

The above properties are also demonstrated by the passive verbal infinitive and passive event nominal related to ditransitive verbs. Consider the following examples where the passive infinitival construction is illustrated in (a) and the related passive event nominal construction in (b).

(2) (i) a. U hadzinwa **ha vhathu ha tshelede nga munna** ndi ha vhudi
       Recipient Theme Agent

   b. Khadzimo **ya vhathu ya tshelede nga munna** ndi ya vhudi
       Recipient Theme Agent
    (The loan of people of money by the man is good)

 (ii) a. U badelwa **ha vhengele ha mulandu nga munna** hu do thivhela u farwa hawe
       Recipient Theme   Agent

b.   Mbadelo **ya vhengele ya mulandu nga munna** i do thivhela
ufarwa hawe
                 Recipient   Theme   Agent
(The payment of the shop of the debt by man will stop his
arrest)

The passive verbal infinitive in (2ia) has three argumetns. There are two postnominal genitive NPs, **vhathu** (people) and **tshelede** (money). These arguments are interpreted as recipient and theme respectively. The agentive prepositional phrase with **nga, nga munna** (by the man) occurs in the rightmost position of the construction.

In (2ib) with the passive event nominal **khadzimo** (loan), the syntactic projection of arguments is similar to that in (2ia). Two postnominal genitive NP arguments occur adjacent to the passive event nominal. These are **vhathu** (people) and **tshelede** (money) which are interpreted as recipient and theme respectively as in (2ia). The agentive prepositional phrase with **nga**, like in (2ia), also appears in the rightmost position of the noun phrase containing the event nominal.

The properties which apply to (2ia,b) also apply to a pair of examples in (2iia,b). As is clearly illustrated in (2) the two types of constructions (passive infinitival verb and passive event nominal) are similar in as far syntactic projection of arguments is concerned. The passive nominals in (2) **khadzimo** (loan) and **mbadelo** (payment) have no passive morpheme -**w**- due to phonetic reasons.

The above examples, that is (1) and (2), demonstrate that the passive event nominal construction are similar to their corresponding passive infinitival constructions as regards the syntactic projection of arguments. The suppression of the external argument which is a characteristic of passive verbs is also realized with the corresponding passive event nominal.

The **nga** phrase which occur in the passive event nominal is similar to the passive **nga** because the external argument appears as a complement of the preposition **nga**, like it does in the passive verb clauses.

Consider the following structural representation of the examples in (1) and (2):

Examples 1a(i)/(ii)

```
                            VP¹
              ┌──────────────┴──────────────────┐
             V¹                                  PP
       ┌──────┴───────┐                    ┌──────┴──────┐
       V            NP_GEN                 P            NP
       │              │                    │             │
    ugudwa         ha mavu               nga          vhalimi
  (u vhulungwa     ha nwana              nga          vhabebi)
```

Exampbles b

```
                            N
              ┌──────────────┴──────────────────┐
             N¹                                  PP
       ┌──────┴───────┐                    ┌──────┴──────┐
       N            NP_GEN                 P            NP
       │              │                    │             │
    Ngudo          ya mavu               nga          vhalimi
  (Mbulungo        ya nwana              nga          vhabebi)
```
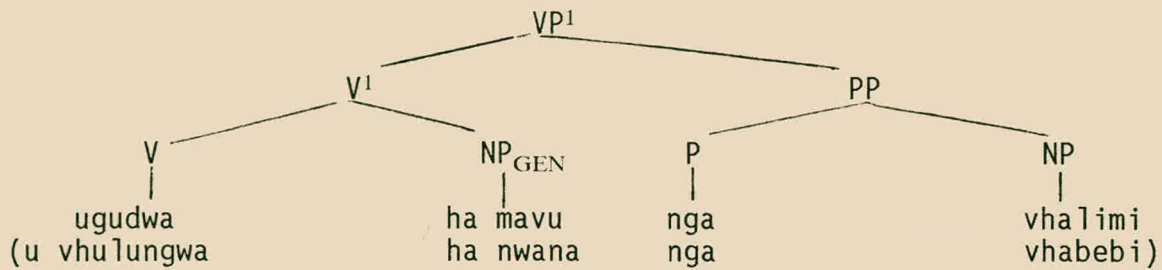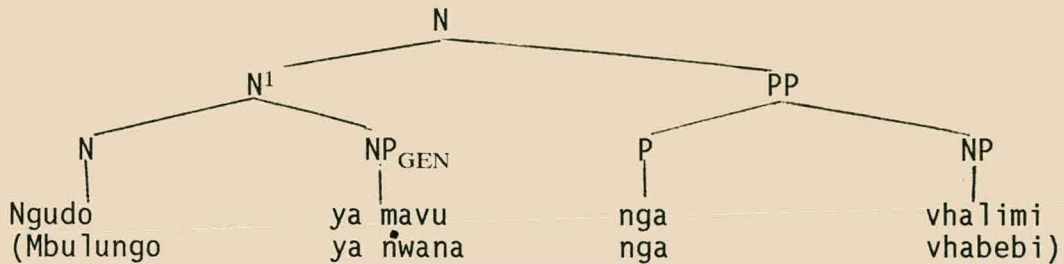
The two diagrams above illustrate that the theme argument occur in a
postnominal genitive position -> **mavu** (soil) and **nwana** (child). The arguments
vhalimi (farmers) and **vhabebi**(parents) occur in the PP (prepositional phrase)
as complements of **nga**.

Consider the lexical structure of passive nominals related to monotransitive
verbs:

Ngudo_N   [N^{11} [N^1 N NP_GEN]   PP
                               │   │
Mbulungo_N   Y   X
                          Theme/Patient
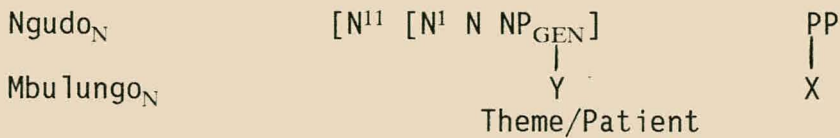
Lexical conceptual structure (LCS): The activity of Y studied/buried by X.

Illustrations of examples in (2) (Ditransitive)

(2(i)/(ii)a)

```
                               V¹¹
                 ┌──────────────┴─────────────────────┐
                V¹                                     PP
     ┌──────────┼────────────┐                   ┌─────┴─────┐
     V        NP_GEN       NP_GEN                 P          NP
     │          │            │                    │           │
 U hadzinwa  ha vhathu   ha tshelede            nga         munna
 (U badelwa  ha vhengele ha mulandu             nga         munna)
```

(2(i)biib)

```
                                         N¹¹
                    N¹                                      PP
        N        NP_GEN      NP_GEN              ·P              NP
        |          |           |                 |               |
     Khadzimo   ya vhathu   ya tshelede         nga            munna
     (Mbadelo   ya vhengele ya mulandu          nga            munna)
```
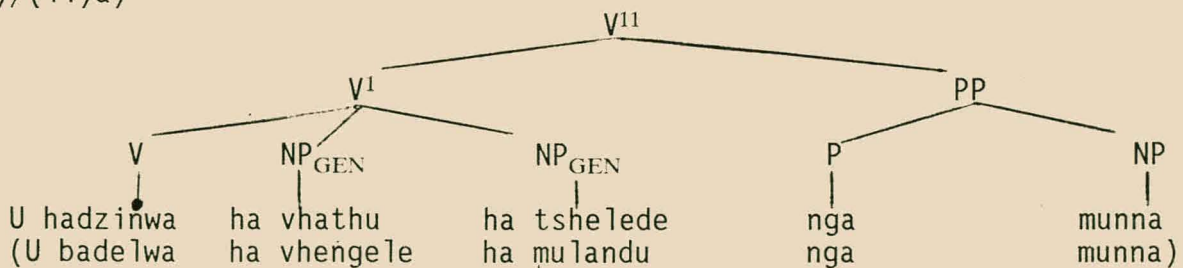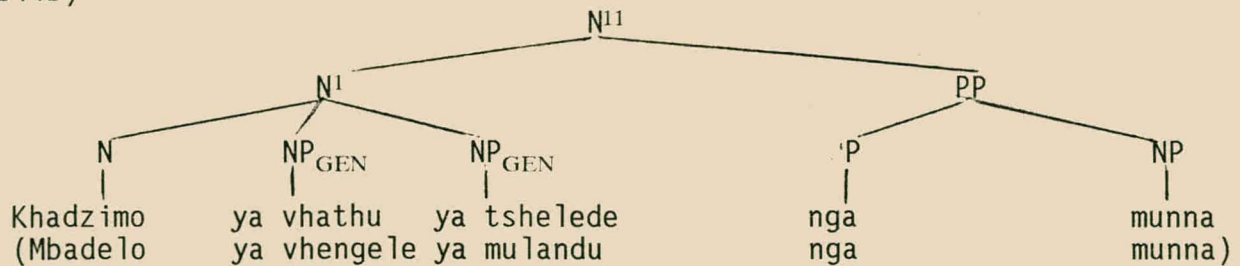
In the first diagram of the passive infinitival construction of ditransitive verbs, there are two postnominal genitive NP argumetns **vhathu** and **tshelede** (recipient and theme respectively). The agent **munna** (man) is structurally realized as a complement of the preposition **nga**. These arguments are projected in the same way with the corresponding passive event nominals in diagram (2ib(ii)b).

Consider the Lexical structure of passive nominals related to ditransitive verbs:

```
[N¹¹ [N¹        N     NP_GEN        NP_(GEN)]        PP
                      |              |
                      Y              Z               X
                      R/P          Theme           Agent
```

Lexical conceptual structure: The activity of Z lend ,etc X to Y.

As this has been noted in the introductory remarks of this section, that is in 4.1, Safir argues that the external argument is defined in relation to the linked internal argument.

Safir's proposal or his definition of the external argument does not apply with all the passive infinitival verb constructions and their related passive event nominals in example (1) and (2).

In these examples, (1) and (2), all the arguments, which are structurally projected as complements of the preposition **nga**, are interpreted as agents. There is no possibility of ambiguity that may occur. The linking of the internal argument (theme / recipient or patient) as a prerequisite for the thematic interpretation of external argumetns does not hold in passive nominals. For the passive nominals the NP argument which occurs as complement of the **nga** is interpreted as the agent with no possible ambiguity, irespective of whether the internal argument is linked or not.

4.3   EVENT NOMINALS RELATED TO ACTIVE VERBS

Safir acknowledges that an event nominal will inherit the argument structure of the related verb or project the full thematic array corresponding to the related verb. Example (2h) in section 3 is repeated here to make the point clear.

> Tsiko **ya Mudzimu ya shango** i vhalwa bivhilini
>   Agent   Theme
> (The creation of God of the earth is read in the bible)

All the arguments which occur with the active verb in example (1h) in section 3 are syntactically projected as the arguments of the event nominal **tsiko** (creation) in (2h). These arguments appear in the postnominal genitive position. Safir also acknowledges the existence of certain languages where the external argument appears as a postnominal genitive position (as in Venda) not in a prenominal genitive position, but he does not include evidence from such languages.

As it has been illustrated Safir's main proposal is the Grammatical Function Relativity. With this notion he proposes that the external argument can be defined in syntax only when the lexical structure is linked. That is the external argument can be defined only when the internal argument is linked.

Consider the following examples that illustrate the similarity in syntactic projection of argument sin infinitival active verb constructions and in the corresponding nominal constructions with event nominals related to active verb:

4.3.1 (a)   U guda **ha munna (ha) mavu** hu do khwinisa vhulimi
                        Agent   Theme

    (b)   Ngudo **ya munna ya mavu** i do khwinisa vhulimi
           (The study of the man of the soil will improve farming)

Illustrations of these examples:

4.3.1 (a)
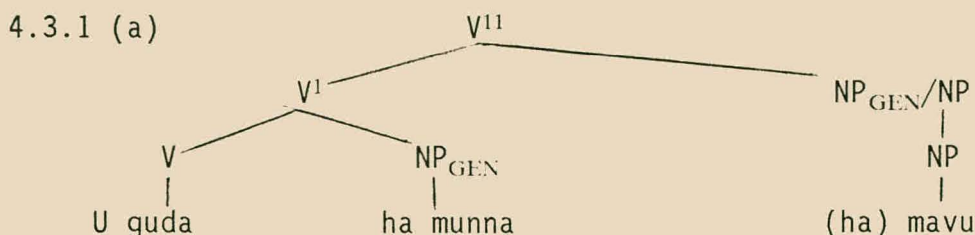
4.3.1 (b)
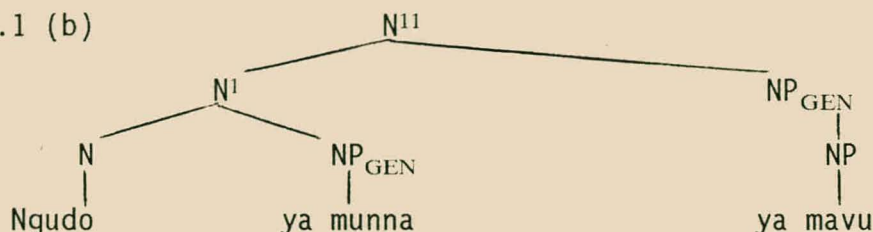
Lexical entry of nominals related to active verbs [monotransitive verbs in (4.3(a) and (b)].

Ngudo$_N$ [N^{11} [N^1 N   NPGEN]   NP$_{GEN}$]

L.C.S.: The activity of X studying Y   X   Y

The event nominal **ngudo** (study) project all the arguments of the active verb. The external argument **vhalimi** (farmers) occurs in the immediate postnominal genitive position like in the corresponding infinitival active verb. The theme **mavu** (soil) also occupy the postnominal genitive position after the agent.

Does the external argument satisfy the GFR notion as proposed by Safir in these examples? The answer is in the negative. The agent or external argument cannot be defined in relation to the linked inanimate internal argument. There will be no ambiguity if one argument is +human and the other is -human. The +human argument will be the only argument possible for the external argument slot.

Consider the following examples to illustrate GFR further:

4.3.2 (a)   U ramba **ha mufunzi (ha) vhathu** hu takadza mubishopo
                      Agent   Patient

     (b)   Thambo **ya mufunzi ya vhathu** i takadza mubishopo
                    Agent   Patient
            (The invitation of the priest of the people interests the bishop)

In example (4.3.2(b)) the patient argument **vhathu** (people), which is the internal argument of the active verb, must be linked in a syntactic position if the external argument is to be defined. If the internal argument is not linked, and because the two arguments are +animate, the theta-role of the postnominal genitive argument is determined by free thematic interpretation as either agent or patient as illustrated in the following exmaple:

4.3.2 (c)   Thambo **ya mufunzi** i takadza mubishopo
                      Agent/Patient
              (The invitation of the priest interests the bishop)

In terms of Safir's proposal, the internal argument of the active verb is not
linked in (4.3.2(c)), thus the argument **mufunzi** (priest) may be ambiguously
interpreted as either agent or patient by free thematic interpretation.

4.3.3   Double-object verbs (ditransitive)

Consider the following examples, where the infinitival active construction is
illustrated in (a) and (b) and the corresponding event nominal construction
related to an active ditransitive verb is illustrated in (c):

4.3.3 a.   U hadzima **ha munna vhathu**   tshelede ndi ha vhudi
                      Agent Recipient Theme

     b.   U hadzima **ha munna (ha) tshelede kha vhathu** ndi ha vhudi
                      Agent   Theme   Recipient

     c.   Khadzimo **ya munna ya tshelede kha vhathu** ndi ya vhudi
                      Agent   Theme   recipient
              (The loan of the man of the money to the people is good)

Illustrations of example 4.3.3 (b) and (c)

4.3.3 (b)

V^{11}

V^1 PP

V NP_{GEN} NP   P   NP
| | | | |
Uhadzima   ha munna   tshelede   kha   vhathu

4.3.3 (c)

N^{11}

N^1 PP

N NP_{GEN} NP_{GEN} P   NP
| | | | |
Khadzimo   ya munna   ya tshelede   kha   vhathu
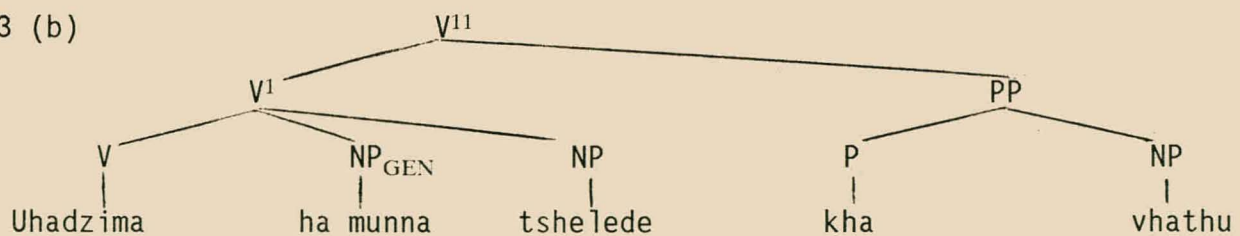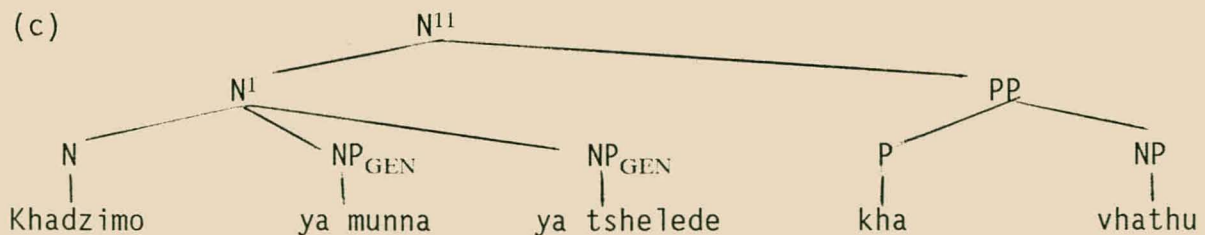
The event nominal **khadzimo** (loan) projects all the argument sof the active
verb related to the event nominal. There are two postnominal genitive NP
arguments in 4.3.3 (c). These are the agent **munna** (man), and theme **tshelede**

(money). Theme **tshelede** (money) occurs as a bare NP in 4.3.3 (b) but optionally.

Consider the lexical entry of the nominal in example 4.3.3 (c) related to ditransitive verb:

Khadzimo$_N$ [N^{11} [N^1 N NP$_{GEN}$]   NP$_{GEN}$ PP]

                                   X   Y   Z

Lexical conceptual structure (LCS). The activity of X lending etc Y to Z.

With double object verbs it is not only the theme that must be linked for the external argument to be defined. The recipient argument must also be linked because ambiguity in thematic interpretation of arguments may occur:

<div align="center">

Khadzimo **ya munna**   **ya tshelede** ndi ya vhudi

Agent/Recipient Theme

(The loan of the man of money is good)

</div>

In this construction, one argument, the recipient **vhathu** (people) is not mapped onto the syntactic position, that is, it is not linked. This results in the ambiguous interpretation of the argument **munna** (man). It can be interpreted as either the agent or the recipient by free thematic interpretation.

4.3.4   Event nominals related to intransitive verbs

Consider the following examples that illustrate the similarity in syntactic projection of arguments in infinitival active verb construction and in the corresponding nominal constructions with event nominals related to active verbs in intransitives:

4.3.4 (i)   a.   U tereka **ha vhashumi** ho lapfesa

                             Agent/Possessor

       b.   Tshitereke **tsha vhashumi** tsho lapfesa

             17   Agent/Possessor

       (The strike of the workers is long)

   (ii)   a.   U tshata **ha vhafunzi** ndi ha vhudi

                             Agent/Posessor

b.   Mutshato **wa vhafunzi** ndi wa vhudi
                Agent/Possesor
       (The marriage of the pastor is good)

The event nominals, related to the active intransitive verbs in both in (4.3.4
i and ii), project the full thematic array of the corresponding infintive
active verb. **Tshitereke** (strike) projects one argument which occur in the
postnominal genitive position **vhashumi** (workers). **Mutshato** (marriage) projects
one argument which occur in the postnominal genitive position.

Nominals from intransitive verbs do not have linked internal arguments and the
only argument projected by this nominals can therefore have free thematic
interpretation (Safir, 1987:580). **Vhashumi** (workers) in (4.3.4i(b)) and
vhafunzi (priest) in (4.3.4ii(b)) may either be interpreted as the agent or
the posessor arguments. But the possible thematic interpretation with event
nominals from intransitive is the agent.

4.4   THE EXTERNAL ARGUMENT AS AN IMPLICIT ARGUMENT

Safir (1987:580) defines implicit argument as a form of missing argument which
the interpretation of some nominals appears to imply. Safir's main concern is
how implicit arguments appear with adjuncts. Can the implicit argument act as
a controller of the subject of the adjunct clause, the infinitival clause.

Consider the following examples with the infinitive clause:

4.4   (i)   a.   Tsatsaladzo **ya munna**[i] **ya bugu** ya [PRO[i] u mangadza vhathu] yo
                       vhifha
                       (The criticism of the man of the book [to surprise people]
                       is bad)

            b.   Tsatsaladzo **ya bugu** ya [PRO u mangadza vhathu] yo vhifha
                   (The criticism of the book [to surprises people] is bad)

The crucial factor here is whether or not there is any controller for the PRO
subject of the infinitival rationale clause. The overt postnominal NP **munna** in
(4.4.(i)a) serves as a controller where the internal argument is linked and
the immediate postnominal genitive NP **munna** is thus defined as the external
argument.

Example (4.4(i)(b)) works the same way, except that the external argument is
implicit, yet it serves successfully as a controller of the PRO.

Also consider the following examples:

4.4   (ii)   a.   Mbulungo **ya vhabebi ya ṅwana** ya [PRO u ṱungufhadza] yo
              fhela
              (The burial of the parent of the child [to make people feel
              pity] is finished)

       b.   Mbulungo **ya ṅwana** ya [PRO u ṱungufhadza] yo fhela
              (The burial of the child [to make people feel pity] is
              finished)

In example (4.4ii(a)) the postnominal genitive NP **vhabebi** (parents) serves as
the overt controller of the PRO subject of the infinitival claue and because
the internal argument is linked this postnominal genitive NP is defined as the
external argument.

In example (4.4ii(b) there is an implicit argument which is projected but
which is unlinked. This means that it is defined relative to a linked internal
argument, but it is not mapped onto a syntactic position. It nevertheless act
as a successful controller of the PRO subject of infinitive clause.

In accordance with the view of control of PRO by the complex deverbal nominal
as outlined in section 3.2.2, it may alternatively be assumed that the complex
event nominal in examples like those in 4.4 controls subject PRO of the
purposive infinitival clause.

4.5   CONCLUDING REMARKS

From the examples illustrated in section 3 and 4, it can be to concluded that
Safir's proposals are relevant in the study of the argument structure of the
deverbal event nominals in Venda.

For the deverbal event nominals related to monotransitive verbs, the external
argument is defined in relation to the linked internal argument. This is
illustrated in (4.3.2(b)). With deverbal event nominals related to
ditransitive verbs, the external argument is defined in terms of the linked
internal arguments, that is both the theme and recipient must be linked as
illustrated in (4.3.3(c)).

For the deverbal event nominals related to intransitive verbs there is only
one argument and the issue of linking does not apply to it. That is the

102

argument of the deverbal event nominal related to intransitive verbs, being one, is not defined in terms of the linked internal argument.

The arguments of these deverbal event nominals may be interpreted through free thematic interpretation. This is one of Safir's porposals and it is borne out in Venda. The examples to illustrate this is in (4.3.4(b). Examples in (4.4 (i) (a) and (b)) and (4.4 (ii) (a) and (b)) illustrate that in Venda implicit arguments may serve as controllers of PRO subject of infinitival clauses.

SECTION 5

CONCLUSION

This section will focus on the main findings of the whole study. As it has been stated in the introduction of this work the central aim of this study was to explore the syntactic projection or structural realization of the arguments of the deverbal nominals. It was also the purpose of this study to explore whether deverbal event nominals project all the arguments of the corresponding active verbs. The essence of this section is to explain how the aim and purpose of this study is realized in Venda, focusing on the main examples in section 3 and to some extent section 4.

5.1   DEVERBAL EVENT NOMINALS RELATED TO TRANSITIVE VERBS

From all examples given in section 3 regarding transitive verbs, it is easy to conclude that, generally, the argument structure of the deverbal event nominal is similar to that of the corresponding active verb in Venda. Going through most of the examples in section 3, it is also easy to conclude that, in most cases, ambiguity arises in thematic interpretation when all the arguments projected by the deverbal event nominal have human qualities.

In section (3) examples (2a)-(i) it has been illustrated that the two argumetns of monotransitive verbs in occur as postnominal genitive NPs. So, it can be concluded that, in Venda, there is no prenominal genitive NPs but only postnominal genitive NPs. In nominal circumstances the argument which occurs adjacent to the deverbal nominal is the external argument of the active verb.

From the examples illustrated in (3(a)-(i)) it can be concluded that the order of the arguments in the argument structure of deverbal nominals is not fixed. The two arguments of the deverbal event nominals related to monotransitive verbs may alternate in word order.

The external arguments of the monotransitive verb in (1) may also occur as a complements of the preposition **nga** (by) which is the only possible realization of an external argument in passive. This is illustrated in (4) and (5). From this examples it may be concluded that the structure of the deverbal event

nominals is similar to that of passive verbs. This **nga** is the agentive **nga** and not the instrumental **nga**.

It is also concluded from the examples illustrated in (6) that there is ambiguity in thematic interpretation of arguments if one of the two arguments of the deverbal nominal related to monotransitive verb is omitted. This (ambiguity) occurs when the argument which is projected by the deverbal event nominal is animate. If the projected argument is inanimate, like in (6c(ii)) no ambiguity occurs.

From the examples illustrated as (12c, 13c and 14c) it can be concluded that only internal arguments of the corresponding monotransitive verbs may occur as complements of the preposition **kha** in the argument structure of deverbal event nominals.

From the examples illustrated in (17) it may be concluded that no three postnominal genitive NPs may occur with deverbal event nominals derived from ditransitive verbs in Venda.

One of the main findings in section three is that deverbal event nominals may take bare NPs. These bare NPs are illustreated in (24), but as it is illustrated in (25) these bare NPs may not occur in the immediate postnominal position (i.e. adjacent to the deverbal event nominal). If bare NPs occur adjacent to the deverbal event nominal the construction becomes ungrammatical.

Arguments may also be omitted from the argument structure of the deverbal event nominals related ot ditransitive verbs as illustrated in (27), (28), (29), (30) and (31).

From these examples, it is concluded that ambiguity in thematic interpretation of arguments will occur if all arguments projected by the deverbal event nominals are animate. The prepositions **nga** and **kha** may disambiguate these argument. **Kha** occurs in front of internal argument (recipient) and **nga** in front of the external argument (agent).

From the examples illustrated in (8) and (31) it can be concluded that the deverbal event nominals related to transitive verbs may occur without any argument assigned by the related active verbs. They may all be omitted with no problem of grammaticality.

5.2   DEVERBAL EVENT NOMINALS RELATED TO INTRANSITIVE

It is concluded from the examples illustrated in (36) that the argument structure of the deverbal event nominal related to the active intransitive verb is imilar to the argument structure of the related verb. This argument occurs as a postnominal genitive NP. There is no change or any ambiguity of thematic interpretation of this argument when it appear with deverbal event nominals related to intransitive verbs.

Safir (1987), as illustrated in section 4 examples (4.3.4(i)(a and b), also postulated that this argument of the deverbal nominal related to monotransitive verb may also have free thematic intepetation. It may be concluded in this study that in Venda this argument may, besides being an agent or any other salient theta-role, also have a possesor thematic interpretation.

It is also possible for this argument to occur as a complement of the preposition **nga** (by) as illustrated in (37). In (39) it is illustrated that this argument may be omitted from the argument structure of the deverbal nominal related to intransitive verbs.

From the examples illustrated in (38) it can be concluded that in Venda deverbal nominals related to intransitive verbs never take bare NPs.

5.3   THE RELATIONSHIP BETWEEN CONTROL THEORY AND THE ARGUMENT STRUCTURE OF DEVERBAL EVENT NOMINALS

From all the examples illustrated in section three (3), that is examples corresponding to transitive and intransitive verbs, it is clear that there is a relationship between the argument structure of the deverbal event nominal and control theory.

As illustrated in (9), (32) and (48) an implicit argument of the deverbal event nominal may successfully serve as a controller of the PRO subject of infinitival clause. This argument may occur as an overt NP before or after the infinitival clause. This is illustrated by examples in (33), (41) and (42). The overt argument of deverbal event nominal may successfully serve as a controller of the PRO subject of infinitival clause from all these syntactic positions.

5.4   DEVERBAL EVENT NOMINALS RELATED TO PASSIVE VERBS

From the examples explored in section 4, it is concluded that the argument structure of the event nominals related to passive verbs is similar to the argument structure of the passive infinitival constructions.

The passive morpheme -**w**- is omitted in deverbal event nominals related to passive verbs because of phonetic reasons. This is also true for all deverbal event nominals related to verbs in section 3.

As it has been illustrated in this section, it is concluded that the **nga** (by) which precede the agent argument in the argument structure of all deverbal event nominals in section 3 and 4 is similar to the passive **nga** and not the instrumental **nga**.

APPENDIX

A.   THE ARGUMENT STRUCTURE OF THE EVENT NOMINALS DERIVED FROM MONOTRANSITIVE VERBS

(1)   a.   **Vhafunzi vha ramba vhathu**
            Agent   Theme
            (The Priest invites the people)

       b.   **Thambo ya mufunzi ya vhathu i takadza mubishopo**
            [9]   Agent   Theme
            (The invitation of priest of the people interests the bishop)

(2)   a.   **Vhashumi vha fafadzela vhunyunyu**
            Agent   Patient
            (Workers spray the mosquitoes)

       b.   **Mufafadzelo wa vhashumi wa vhunyunyu u fhungudza malwadze**
                [9]   Agents   Patients
            (The spray of workers of mosquitoes reduces diseases)

(3)   a.   **Vhalimi vha guda mavu**
            Agents   Theme
            (Farmers study the soil)

       b.   **Ngudo ya vhalimi ya mavu i khwinisa vhulimi**
            [9]   Agent   Theme
            (The study of farmers of the soil improves farming)

       c.   **Ngudo nga vhalimi ya mavu i khwinisa vhulimi**
                    Agent   Theme
            (The study by farmers of the soil improves farming)

(4)   a.   **Mupurofesa u sasaladza munwali**
            Agent   Patient
            (The professor criticizes the author)

       b.   **Tsatsaladzo ya muporofesa ya munwali yo vhifha**
            [. 9]   Agent   Patient
            (The criticism of the professor of author is bad)

(5)   a.   **Vhabebi vha vhulungu nwana**
            Agent   Theme
            (The parents bury their child)

b. Mbulungo ya vhabebi ya ṅwana i a ṱungufhadza
   [c19]   Agent   Theme
   (The funeral of the parents of child is pitiful)

(6) a. Muvhuso u tambudza vhathu
        Agent   Patient
        (The government cause the people to suffer)

     b. Dambudzo ḽa muvhuso ḽa vhathu ḽo hulela
        [5]   Agent   Patient
        (The cause of great suffering of government of people is worse)

(7) a. Muṱhannga u vhingana na musidzana wa vhuḓi
        Agent   Patient
        (Young man is wedding with a beautiful lady)

     b. Mbingano ya muṱhannga na musidzana wa vhuḓi i a takadza
        (The wedding of a young man and a beautiful lady is interesting)

(8) a. Vhabebi vha kanuka mvelelo
        Agent   Theme
        (Parents are astonished by the results)

     b. Ganuko ḽa vhabebi ḽa mvelelo ḽo mangadza vhadededzi
        [5]   Agent   Theme
        (The astonishment of parents of the results surprised teachers)

(9) a. Dokotela u thusa vhalwadze
        Agent   Patient
        (The doctor helps patients)

     b. Thuso ya dokotela ya vhalwadze ndi yavhuḓi
        [9]   Agent   Patient
        (The help of the doctor of the patients is good)

(10) a. Vhana vha ṱhompha mudededzi
        Agent   Beneficiary
        (Children respect the teacher)

     b. Ṱhompho ya vhana ya mudededzi i a takadza
        [9]   Agent   Beneficiary
        (The respect of children of teacher is interesting)

(11) a. Muvhuso u lifhedza maravhele
        Agent   Patient
        (The government retaliates the terrorists

b. ˙ **Ndifhedzo ya muvhuso ya maravhele i takadza vhadzulapo**
   [+9]   Agent   Patient
   (The retaliation of government of terrorists interests citizens)

(12)   a.   **Vhalanda vha hulisa khosi**
              Agent   Patient
              (The subjects respect the chief)

        b.   **Khuliso ya vhalanda ya khosi i a tamisa**
              [9]   Agent   Patient
              (The respect of the subjects of the chief is admirable)

(13)   a.   **Mufunzi u ţanganedza ṅwana**
              Agent   Theme
              (The priest accept the child)

        b.   **Thanganedzo ya mufunzi ya ṅwana i rembulusa vhathu**
              [+9]   Agent   Theme
              (The acceptance of the priest of the child makes people to
              repent)

(14)   a.   **Mudzimu o sika shango**
              Agent   Theme
              (God created the earth)

        b.   **Tsiko ya Mudzimu ya shango i vhalwa bivhilini**
              [+9]   Agent   Theme
              (The creation of God of the earth is read in the bible)

(15)   a.   **Munna u ḽa zwiḽiwa**
              Agent   Theme

        b.   **Nndyo ya munna ya zwiḽiwa i a nengisa**
              [+9]   `Agent   Theme
              (The eating of man of food is loathsome)

(16)   a.   **Vhathu vha ofha ndau**
              Experiencer   Source
              (The people are afraid of the lion)

        b.   **Nyofho dza vhathu dza ndau ndi khulwane**
              [9]   Experiencer Source
              (The fear of the people of the lion is big)

(17)   a.   **Vhanna vha lima mavhele**
              Agent   Theme
              (Men cultivate maize)

b. **Ndimo ya vhanna ya mavhele ndi ya vhudi**
[9]   Agent   Theme   ^
(The cultivation of men of maize is good)

(18)   a. **Vhatukana vha tamba bola**
Agent   Theme
(The boys play soccer)

b. **Mutambo wa vhatukana wa bola u a takadza**
[3]   Agent   Theme
(The game of boys of soccer is interesting)

(19)   a. **Vhasadzi vha tshina malende**
Agent   Theme
(Women dance malende)

b. **Mutshino wa vhasadzi wa malende u a takadza**
[3]   Agent   Theme
(The dance of women of malende is interesting)

(20)   a. **Muvhuso u nanga maswole**
Agent   Patient
(The government selects soldiers)

b. **Munango wa muvhuso wa maswole u shavhisa vhanna**
[3]
(The selection of the government of soldiers cause men to run away)

(21)   a. **Muvhuso u vhala vhathu**
Agent   Patient
(The government counts people)

b. **Muvhalo wa muvhuso wa vhathu u thusa kha mvelaphanda ya shango**
[3]   Agent   Patient   ^
(The census of the government of people helps in the development of the country)

(22)   a. **Munna u vhiga mafhungo**
Agent   Theme
(Man reports the news)

b. **Muvhigo wa munna wa mafhungo u dzumbulula zwiphiri zwa muvhuso**
[3]   Agent   Theme
(The report of the man of the news reveals the secrets of the government)

(23)   a.   **Mushumi u hola tshelede**
              Beneficiary   Theme
              (The worker earns money)

        b.   **Muholo wa mushumi wa tshelede ndi wa mafheloni a ṅwedzi**
              [+3]   Beneficiary Theme
              (The wage of the worker of the money is at the end of the
              months)

(24)   a.   **Vhamusanda vha tovhola mudinda**
              Agent   Patient
              (The chief scolds the subject)

        b.   **Mutovholo wa vhamusanda wa mudinda u sinyusa vhathu**
              [3]   Agent   Patient
               (The scolding of the chief of the subject enrages the people)

(25)   a.   **Muhatuli u hatula mbava**
              Agent   Patient
               (The judge convicts the thief)

        b.   **Khathulo ya muhatuli ya mbava yo fusha vhoramabindu**
              [9]   Agent   Patient
               (The conviction of the judge of the thief has satisfied the
              businessmen)

(26)   a.   **Muhatuli u gwevha mbava**
              (The judge sentences the thief)

        b.   **Tshigwevho tsha muhatuli tsha mbava tsho lapfesa**
              [7]
              (The sentence of the judge of the thief is too long)

(27)   a.   **Mutshini u gandisa mabammbiri**
              Agent   Theme
               (The machine prints papers)

        b.   **Khandiso ya mutshini ya mabammbiri yo naka**
              [9]   Agent   Theme
               (The printing of the machine of the papers is beautiful)

(28)   a.   **Mufunzi u lovhedza vhathu**
              Agent   Patient
               (The priest baptizes the people)

    b.   **Ndovhedzo ya mufunzi ya vhathu i takadza mubishopo**
       [9]   Agent   Patient
      (The baptism of the priest of the people interests the bishop)

(29)   a.   **Vhatendi vha lindela mbulungo**
        Agent   Theme
      (The christians wait for the funeral)

    b.   **Mulindelo wa vhatendi wa mbulungo u khuthadza vhabebi vha ṅwana**
       [3]   Agent   Theme
      (The vigil of the christians of the funeral comfort the parents
      of the child)

(30)   a.   **Vhamusanda vha vhidza vhathu**
        Agent   Patient
      (The chief calls (summons) the people)

    b.   **Tshivhidzo tsha vhamusanda tsha vhathu ndi tshihulu**
       [7]   Agent   Patient
      (The call (summon) of the chief of the people is big)

(31)   a.   **Mudededzi u linga matshudeni**
        Agent   Patient
      (The teacher examines the students)

    b.   **Mulingo wa mudededzi wa matshudeni a u kondi**
       [3]   Agent   Patient
      (The examination of the teacher of the students is not
      difficult)

(32)   a.   **Vhasadzi vha kaṋa mavhele**
        Agent   Theme
      (The women harvest the corn)

    b.   **Khaṋo ya vhasadzi ya mavhele ndi ya vhuḓi**
       [9]   Agent   Theme
      (The harvest of women of maize is good)

(33)   a.   **Maravhele a shushedza vhathu**
        Agent   Experiencer
      (The terrorist terrorize the people)

    b.   **Mushushedzo wa maravhele wa vhathu wo vhifha**
       [3]   Agent   Experiencer
      (The terror of the terrorists of the people is bad)

(34) a. **Maswole a dia vhafhalali**
    Agent   Patient
    (The soldiers strike the exiles)

b. **Mudio wa maswole wa vhafhalali wo vhifha**
    [3]   Agent   Patient
    (The strike of the soldiers of the exiles is bad)

c. **Mudio nga maswole wa vhafhalali wo vhifha**
    (The strike by the soldiers of the exiles is bad)

(35) a. **Mmbi i vhulaha vhathu**
    Agent   Melafactive
    (The army kills the people)

b. **Bulayo la mmbi la vhathu lo vhifha**
    [5]   Agent Melafactive
    (The killing of the army of the people is bad)

c. **Bulayo nga mmbi la vhathu lo vhifha**
                Agent Melafactive
    (The killing by the army of the people is bad)

(36) a. **Maswole a govhela mudi**
    Agent   Theme
    (The soldiers surround the house)

b. **Mugovhelo wa maswole wa mudi wo dzhia tshifhinga tshilapfu**
    [3]   Agent   Theme
    (The surrounding of the soldiers of the house took a long time)

c. **Mugovhelo nga maswole wa mudi wo dzhia tshifhinga tshilapfu**
               Agent   Theme
    (The surrounding by the soldiers of the house took a long time)

(37) a. **Vhakhiresite vha rabela Mudzimu**
    Agent   Goal
    (The christians pray to God)

b. **Thabelo ya vhakhiresite ya Mudzimu i disa mulalo**
    [9]   Agent   Goal
    (The prayer of the christians of God brings peace)

c. **Thabelo nga vhakhiresite ya Mudzimu i disa mulalo**
             Agent   Goal
    (The prayer by the christians of God brings peace)

114

(38)   a.   **MaAfurika a lifhedza MaAmerika**
       Agent   Patient
       (The Africans retaliate the Americans)

       b.   **Ndifhedzo ya MaAfurika ya MaAmerika i t̬anganedzwa nga nd̬ila dzo
            fhambanaho**
            [9]   Agent   Patient·
            (The retaliation of the Africans of the Americans is received
            with mixed feelings)

       c.   **Ndifhedzo nga MaAfurika ya MaAmerika i t̬anganedzwa nga nd̬ila dzo
            fhambanaho**
                           Agent   Patient
            (The retaliation by the Africans of the American is received
            with mixed feelings)

(39)   a.   **Vhakegulu vha goba mavhele**
            Agent   Theme
            (The old ladies sow the maize)

       b.   **Mugobo wa vhakegulu wa mavhele u thusa kha mishumo**
            ([+3]   Agent   Theme
            (The sowing of old ladies of maize helps to create jobs)

       c.   **Mugobo nga vhakegulu wa mavhele u thusa kha mishumo**
                         Agent   Theme
            (The sowing by old ladies of maize helps to create jobs)

(40)   a.   **Mad̬i a kumbulula mavu**
            Agent   Theme
            (The water erode the soil)

       b.   **Mukumbululo wa mad̬i wa mavu u t̬usa manona mavuni**
            [3]   Agent   Theme
            (The erosion of the water of the soil removes the fertility of
            the soil)

       c.   **Mukumbululo nga mad̬i wa mavu u t̬usa manona mavuni**
                         Agent   Theme
            (The erosion by the water of the soil removes the fertility of
            the soil

(41)   a.   **Munna u hwivha hatsi**
            Agent   Theme
            (The man cuts the grass)

b. **Khwivho ya munna ya hatsi i kunakisa shango**
    [9]   Agent   Theme
    (The cutting of man of grass beautify the country)

c. **Khwivho nga munna ya hatsi i kunakisa shango**
                 Agent   Theme
    (The cutting by man of grass beautify the country)

(42) a. **Khothe i khwathisedza tshigwevho**
          Agent   Theme
          (The court confirms the sentence)

      b. **Khwathisedzo ya khothe ya tshigwevho i sinyusa vhathu**
          [9]   Agent   Theme
          (The confirmation of the court of the sentence make the people
          angry)

      c. **Khwathisedzo nga khothe ya tshigwevho i sinyusa vhathu**
                          Agent   Theme
          (The confirmation by the court of the sentence make the people
          angry)

(43) a. **Munna u senga mulandu**
          Patient   Theme
          (Man is tried for an offence)

      b. **Tsengo ya munna ya mulandu i dzhia tshifhinga tshilapfu**
          [9]   Patient Theme
          (The trial of a man of an offence takes a long time)

      c. **Tsengo nga munna ya mulandu i dzhia tshifhinga tshilapfu**
                      Patient Theme
          (The trial by man of an offence takes a long time)

(44) a. **Mapholisa vha todisisa mulandu**
          Agent   Theme
          (The police investigates an offence)

      b. **Thodisiso ya mapholisa ya mulandu a i thusi**
          [9]   Agent   Theme
          (The investigation of the police of the offence does not help)

      c. **Thodisiso nga mapholisa ya mulandu a i thusi**
                      Agent   Theme
          (The investigation by the police of an offence does not help)

(45)   a.   **Mapholisa a tsireledza vhathu**
              Agent   Patient
              (The police protect the people)

        b.   **Tsireledzo ya mapholisa ya vhathu a i fushi**
              [9]   Agent   Patient
              (The protection of the police of the people is not satisfactory)

        c.   **Tsireledzo nga mapholisa ya vhathu a i fushi**
                              Agent   Patient
              (The protection by the police of the people is not satisfactory)

(46)   a.   **Feme i renga migodi**
              Agent   Theme
              (The firm buys the mines)

        b.   **Thengo ya feme ya migodi i ḓo pfumisa vhashumi**
              [9]   Agent   Theme
              (The buying of the firm of the mines will enrich the workers)

        c.   **Thengo ya migodi nga feme i ḓo pfumisa vhashumi**
                              Theme   Agent
              (The buying of the mines by the firm will enrich the workers)

(47)   a.   **Vhengele ḽi rengisa zwiambaro nga tshipi**
              (The shop sells the clothes cheaply)

        b.   **Thengiso ya vhengele ya zwiambaro yo tshipa**
              [9]   Agent   Theme
              (The sale of the shop of the clothes is cheap)

        c.   **Thengiso nga vhengele ya zwiamboro yo tshipa**
                              Agent   Theme
              (The sale by the shop of the clothes is cheap)

(48)   a.   **Muvhuso u huwelela vhathu uri vha thele**
              Agent   Patient
              (The government call on the people to pay taxes)

        b.   **Khuwelelo ya muvhuso ya vhathu uri vha thele a i tanganedzei**
              [3]   Agent   Patient
              (The call of the government of the people to pay taxes is
              unacceptable)

c. **Khuwelelo nga muvhuso ya vhathu uri vha thele a i ṱanganedzei**
                      Agent   Patient
(The call by the government of people to pay taxes is
unacceptable)

(49)   a. **Muvhuso u tandulula thaidzo**
          Agent   Theme
          (The government solves the problem)

        b. **Thandululo ya muvhuso ya thaidzo a i fushi**
           [9]   Agent   Theme
           (The solution of the government of the problem is not
           satisfactory)

        c. **Thandululo nga muvhuso ya thaidzo a i fushi**
                          Agent   Theme
           (The solution by the government of the problem is not
           satisfactory)

(50)   a. **Madzangano a rerisana ndayotewa**
          Agent   Theme
          (The organisation negotiate the constitution)

        b. **Therisano ya madzangano ya ndayotewa yo imiswa**
           [9]   Agent   Theme
           (The negotiation of the organisations of the constitution have
           been stopped)

        c. **Therisano nga madzangano ya ndayotewa yo imiswa**
                          Agent   Theme
           (The negotiation by the organisation of the constitution has
           been stopped)

(51)   a. **Vhathu vha khetha muphuresidennde**
          Agent   Patient
          (The people elect the president)

        b. **Khetho ya vhathu ya muphuresidennde yo itisa pfiriri**
           [9]   Agent   Patient
           (The election of the people of the president resulted violence)

        c. **Khetho nga vhathu ya muphuresidennde yo itisa pfiriri**
                      Agent   Patient
           (The election by the people of the president resulted in
           violence)

(52)   a.   **Vhana vha lugisela lwendo**
                Agent   Theme
                (Children prepare for the trip)`

         b.   **Ndugiselo ya vhana ya lwendo yo khunyelela**
                [9]   Agent   Theme
                (The preparation of the children of the trip is complete)

         c.   **Ndugiselo nga vhana ya lwendo yo khunyelela**
                           Agent   Theme
                (The preparation by the children of the trip is complete)

(53)   a.   **Vhathu vha lulamisa mushumo**
                Agent   Theme
                (The people correct the work)

         b.   **Ndulamiso ya vhathu ya mushumo i fusha mune wa feme**
                [9]   Agent   Theme
                (The correction of people of the work satisfies the owner of the firm)

         c.   **Ndulamiso nga vhathu ya mushumo i fusha mune wa feme**
                           Agent   Theme
                (The correction by the people of the work satisfies the owner of the firm)

(54)   a.   **MaAfurika a kunda MaAmerika**
                Agent   Patient
                (The Africans defeat the Americans)

         b.   **Gundo la MaAfurika la MaAmerika li fusha vhathu**
                [5]   Agent   Patient
                (The defeat of the Africans of the Americans satisfies the people)

         c.   **Gundo la MaAfurika kha MaAmerika li fusha vhathu**
                   Agent   Patient
                (The defeat of the Africans to the Americans satisfies the people)

         d.   **Gundo la MaAmerika nga MaAfurika li fusha vhathu**
                 Patient   Agent
                (The defeat of the American by the Africans satisfies the people)

(55)   a.   **Vhalimi vha ţana mitshelo**
             Agent   Theme
             (The farmers show fruits)

       b.   **Ţano ļa vhalimi ļa mitshelo ļo naka**
             [5]   Agent   Theme
             (The show of the farmers of fruits is beautiful)

       c.   **Ţano nga vhalimi ļa mitshelo ļo naka**
                        Agent   Theme
             (The show by farmers of the fruits is beautiful)

(56)   a.   **Vhagwalabi vha saina phethisheni**
             Agent   Theme
             (The protesters sign a petition)

       b.   **Tsaino ya vhagwalabi ya phethisheni i do fhungudza** tshigwevho
             [+9]   Agent   Theme
             (The signing of the protesters of the petition will reduce the
             sentence)

       c.   **Tsaino nga vhagwalabi ya phethisheni i do fhungudza tshigwevho**
                         Agent   Theme
             (The signing by the protesters of the petition will reduce the
             sentence)

(57)   a.   **Ňwana u linda mavhele**
             Agent   Theme
             (The child guard the maize)

       b.   **Tshilindo tsha ňwana tsha mavhele tshi vha nga matsheloni**
             [+7]   Agent   Theme
             (The guarding of the child of the maize comes in the morning)

       c.   **Tshilindo nga ňwana tsha mavhele tshi vha nga matsheloni**
                          Agent   Theme
             (The guarding by the child of the maize comes in the morning)

(58)   a.   **Maravhele a thuntsha vhana**
             Agent   Patient
             (Terrorists shoot children)

       b.   **Muthuntsho wa maravhele wa vhana u tshusa vhathu**
             [3]   Agent   Patient
             (The shooting of the terrorists of the children terrifies the
             people)

120

    c.   **Muthuntsho nga maxavhele wa vhana u tshusa vhathu**
                         Agent   Patient
        (The shooting by terrorists of the children terrifies the people)

(59)   a.   **Munna u dzumbulula zwiphiri**
             Agent   Theme
        (The man reveals the secrets)

    b.   **Ndzumbululo ya munna ya zwiphiri i farisa vharangaphanda**
        [9]   Agent   Theme
        (The revelation of man of secrets causes the leaders to be arrested)

    c.   **Ndzumbululo nga munna ya zwiphiri i farisa vharangaphanda**
                         Agent   Theme
        (The revelation by man of the secrets cause the leaders to be arrested)

(60)   a.   **Shango li bveledza zwiliwa**
             Agent   Theme
        (The country produce food)

    b.   **Mveledzo ya shango ya zwiliwa i fusha vhadzulapo**
        [9]   Agent   Theme
        (The production of the country of food satisfies the citizens)

    c.   **Mveledzo nga shango ya zwiliwa i fusha vhadzulapo**
                     Agent   Theme
        (The production by the country of the food satisfies the citizens)

(61)   a.   **Muvhuso u hangwela zwivhotshwa**
              Agent   Patient
        (The government remit the prisoners)

    b.   **Khangwelo ya muvhuso ya zwivhotshwa i tanganedzwa nga vhothe**
        [9]   Agent   Patient
        (The remission of the government of the prisoners is accepted by all)

    c.   **Khangwelo nga muvhuso ya zwivhotshwa i tanganedzwa nga vhothe**
                     Agent   Patient
        (The remission by the government of the prisoners is accepted by all)

B.   THE ARGUMENT STRUCTURE OF EVENT NOMINALS DERIVED FROM DITRANSITIVE VERBS

(1)   a.   **Munna u hadzima vhathu   tshelede**
            Agent   Recipient Theme
            (Man loans people money)

       b.   **Khadzimo ya munna ya tshelede kha vhathu ndi ya vhuḓi**
            [9]   Agent   Theme   Recipient
            (The loan of man of money to the people is good)

       c.   **Khadzimo nga munna ya tshelede kha vhathu ndi ya vhuḓi**
            (The loan by the man of the money to the people is good)

       d.   **Khadzimo ya munna ya vhathu   tshelede ndi yavhuḓi**
                        Agent   Recipient Theme
            (The loan of man of the people money is good)

(2)   a.   **Murena o fhulufhedzisa vhafunziwa vhawe muyamukhethwa**
            Agent   Experiencer   Theme
            (Christ promised His disciples the Holy spirit)

       b.   **Fhulufhedziso la Murena la muyamukhethwa kha vhafunziwa vhawe lo itwa**
                [+5]   Agent   Theme   Experiencer
            (The promise of Christ of the Holy spirit to His disciples has been fulfilled)

       c.   **Fulufhedziso nga Murena la muyamukhethwa kha vhafunziwa vhawe lo itwa**
                        Agent   Theme   Experiencer
            (The promise by Christ of the Holy Spirit to His desciples has been fulfilled)

(3)   a.   **Vhengele li vhila munna   tshikolodo**
            Agent   Patient Theme
            (The shop demand man debt)

       b.   **Mbilo ya vhengele ya tshikolodo kha munna yo vhayo lavhelelwa**
            [9]   Agent   Theme   Patient
            (The demand of the shop of the debt to the man has been expected)

       c.   **Mbilo nga vhengele ya tshikolodo ya munna yo vha yo lavhelelwa**
                    Agent   Theme   Patient
            (The demand by the shop of the debt of the man has been expected)

(4)   a.   **Mufunzi u fha vhana   zwifhiwa**
            Agent   Recipient Theme
            (The pastor gives children the gifts)

       b.   **Mpho ya mufunzi ya zwifhiwa kha vhana i a vha takadza**
            [9]   Agent   Thene   Recipient
            (The giving of the pastor of the gifts to the children makes
            them happy)

       c.   **Mpho nga mufunzi ya zwifhiwa ya vhana i a vha takadza**
                        Agent   Theme   Recipient
            (The giving by the pastor of the gifts of the children makes
            them happy)

       d.   **Mpho ya zwifhiwa ya mufunzi kha vhana i a vha takadza**
                        Theme   Agent   Recipient
            (The giving of the gift of the pastor to the children makes them
            happy)

       e.   **Mpho ya zwifhiwa nga mufunzi kha vhana i a vha takadza**
                        Theme   Agent   Recipient
            (The giving of the gifts by the pastor to the children makes
            them happy)

(5)   a.   **Munna u badela vhengele mulandu**
            Agent   Recipient Theme
            (Man pays the shop the debt)

       b.   **Mbadelo ya mulandu ya munna kha vhengele i do thivhela u farwa
            hawe**
            [9]   Theme   Agent   Recipient
            (The payment of the debt of man to the shop will prevent his
            arrest)

       c.   **Mbadelo ya mulandu nga munna kha vhengele i do thivhela u farwa
            hawe**
                        Theme   Agent   Recipient
            (The payment of the debt by man to the shop will prevent his
            arrest)

(6)   a.   **Mudededzi u talutshedza vhana   mbalo**
            Agent   Beneficiary Theme
            (The teacher explains the children maths)

    b.   **Thalutshedzo ya mudededzi ya mbalo kha vhana i do vha phasisa**
           [9]   Agent   Theme   Beneficiary
           (The explanation of the teacher of Maths to the children will
           make them pass)

    c.   **Thalutshedzo nga mudededzi ya mbalo kha vhana i do vha phasisa**
                              Agent   Theme   Beneficiary
           (The explanation by the teacher of Maths to the children will
           make them pass)

(7)   a.   **Mutshudeni u humbela muvhuso basari**
           Agent   Goal   Theme
           (The student request/apply the bursary from the government)

      b.   **Khumbelo ya mutshudeni ya basari kha muvhuso i do sedzuluswa**
           [9]   Agent   Theme   Goal
           (The application of the student of the bursary to the government
           will be considered)

      c.   **Khumbelo nga mutshudeni ya basari kha muvhuso i do sedzuluswa**
                             Agent   Theme   Goal
           (The application by the student of the bursary to the government
           will be considered)

(8)   a.   **Mapholisa vha setsha vhathu mbanzhe**
           Agent   Patient Theme
           (The police search the people for dagga)

      b.   **Musetsho wa mapholisa wa mbanzhe kha vhathu u lengisa bisi**
           [3]   Agent   Theme   Patient
           (The searching of the police of dagga to the people delays the
           bus)

      c.   **Musetsho wa vhathu nga mapholisa wa mbanzhe u lengisa bisi**
                      Patient   Agent   Theme
           (The searching of people by the police of the dagga delays the
           bus)

C.   THE ARGUMENT STRUCTURE OF EVENT NOMINALS DERIVED FROM INTRANSITIVE VERBS

(1)   a.   **Muhedeni o rembuluwa**
           Experiencer
           (The heathen has repented)

b. **Thembuluwo ya muhedeni i takadza vhafunzi**
[9]   Experiencer
(The repentance of the heathen makes the priest happy)

c. **Thembuluwo nga muhedeni i takadza vhafunzi**
                    Experiencer
(The repentance by the heathen makes the priest happy)

d. **Thembuluwo kha muhedeni i takadza vhafunzi**
                    Experiencer
(The repentance on the heathen makes the priest happy)

d. **Thembuluwo ha Muhedeni i takadza vhafunzi**
                    Location
(The repentance at the heathen makes the priest happy)

(2)   a. **Vhatukana vho takala**
Experiencer
(The boys are happy)

b. **Dakalo ḽa vhatukana ndi ḽavhudi**
                 Experiencer
(The happiness of the boys is good)

c. **Dakalo nga vhatukana ndi ḽavhudi**
                    Experiencer
(Happiness by the boys is good)

d. **Dakalo kha vhatukana ndi ḽavhudi**
                 Experiencer
(Happiness at the boys is good)

(3)   a. **Mvula i khou bvuma**
Theme
(The rain is thundering)

b. **Mubvumo wa mvula u a tshusa**
[3]   Theme
(The thunder of rain is terrifying)

c. **Mubvumo nga mvula u a tshusa**
                    Theme
(Thunder by the rain is terrifying)

(4)   a. **Shango ḽi ḓo fhela**
Theme
(The earth will perish)

b. **Vhufhelo ha shango hu tsini**
    [14]   Theme
    (The perish of the earth is near)

c. **Vhufhelo nga shango hu tsini**
                    Theme
    (The perish by the earth is near)

(5)   a. **Munna o fa**
            Malefactive
            (The man has died)

        b. **Lufu lwa munna lu a tungufhadza**
            [11]   Malefactive
            (The death of the man is pitifull)

        c. **Lufu nga munna lu a tungufhadza**
                        Agent/Malefactive
            (The death by the man is pitifull)

(6)   a. **Vhathu vha a lila**
            Agent
            (The people are crying)

        b. **Tshililo tsha vhathu ndi tshihulu**
            [7]   Agent
            (The cry/lamentation of the people is big)

        c. **Tshililo nga vhathu ndi tshihulu**
                        Agent
            (The cry/lamentation by the people is big)

(7)   a. **Vhana vha a gidima**
            Agent
            (Children are running)

        b. **Mugidimo wa vhana u a takadza**
            [3]   Agent
            (The running of children is interesting)

        c. **Mugidimo nga vhana u a takadza**
                        Agent
            (The running by the children is interesting)

(8)   a. **Mvula i khou penya**
            Theme
            (The rain is glittering)

b. **Lupenyo lwa mvula lwo fhisa nndu**
    [11]   Theme
    (The lightning of the rain burnt the house)

c. **Lupenyo nga mvula lwo fhisa nndu**
                    Theme
    (Lightning by rain burnt the house)

(9)   a. **Vhasadzi vha khou semana**
          Agent
          (The women are quarrelling against each other)

      b. **Tsemano ya vhasadzi i lwisa vhanna vhavho**
          [9]   Agent
          (The quarrell of women cause their husbands to fight)

      c. **Tsemano nga vhasadzi i lwisa vhanna vhavho**
                          Agent
          (The quarrel by women cause their husbands to fight)

(10) a. **Vhafhalali vha tshimbila nga milenzhe**
          Agent
          (The refugees walk on foot)

      b. **Mutshimbilo wa vhafhalali nga milenzhe wo lapfa**
          [3]   Agent
          (The walk of the refugees on foot is long)

      c. **Mutshimbilo nga vhafhalali wa milenzhe wo lapfa**
                          Agent
          (The walk by the refugees on foot is long)

(11) a. **Maswole o fola**
          Agent
          (The soldiers are queueing)

      b. **Mufolo wa maswole wo naka**
          [3]   Agent
          (The queue of the soldiers is beautiful)

      c. **Mufolo nga maswole wo naka**
                      Agent
          (The queue by the soldiers is beautiful)

(12) a. **Vhatonga vha khou tshongola**
          Agent
          (The Batonga are dancing)

b. **Mutshongolo wa vhatonga u a takadza**
   [3]   Agent
   (The dance of the Batsonga is interesting)

c. **Mutshongolo nga vhatonga u a takadza**
                    Agent
   (The dance by the Batonga is interesting)

(13) a. **Vhana vha a lwala**
   Malefactive
   (The children are sick)

b. **Dwadze la vhana lo vhifha nga maanda**
          Malefactive
   (The sickness of children is too bad)

c. **Dwadze kha vhana lo vhifha nga maanda**
          Malefactive
   (The sickness on the children is too bad)

d. **Dwadze nga vhana lo vhifha nga maanda**
          Malefactive
   (The sickness by the children is too bad)

(14) a. **Shango lo omelela**
   Theme
   (The earth is dry)

b. **Gomelelo la shango lo vhulaha kholomo**
   [5]   Theme
   (The drought of the earth has killed cattles)

c. **Gomelelo kha shango lo vhulaha kholomo**
          Theme
   (The drought on the earth has killed cattles)

(15) a. **Munna u enda nga bisi**
   Agent
   (The man travels by bus)

b. **Lwendo lwa munna nga bisi lwo lapfa**
   [9]   Agent
   (The trip of man by bus is long)

c. **Lwendo nga munna lwa bisi lwo lapfa**
          Agent
   (The trip by man of the bus is long)

128

(16)　　a.　　**Vhaloi vho shavha**
　　　　　　Agent
　　　　　　(The witches have escaped)

　　　　b.　　**Mushavho wa vhaloi wo takadza vhathu**
　　　　　　　　　　Agent
　　　　　　(The escape of the witches has interested the people)

　　　　c.　　**Mushavho nga vhaloi wo takadza vhathu**
　　　　　　　　　　Agent
　　　　　　(The escape by the witches has interested the people)

(17)　　a.　　**Ḓuvha ḽi khou fhisa**
　　　　　　Theme
　　　　　　(The sun is hot)

　　　　b.　　**Mufhiso wa ḓuvha wo engedzea**
　　　　　　[3]　　　　Theme
　　　　　　(The heat of the sun has increased)

　　　　c.　　**Mufhiso nga ḓuvha wo engedzea**
　　　　　　　　　　Agent/Instrument
　　　　　　(The heat by the sun has increased)

(18)　　a.　　**Muya u a rothola**
　　　　　　Theme
　　　　　　(The wind is cold)

　　　　b.　　**Murotho wa muya u lwadza vhana**
　　　　　　[3]　　　　Theme
　　　　　　(The coldness of the wind causes illness to children)

　　　　c.　　**Murotho nga muya u lwadza vhana**
　　　　　　　　　　Theme
　　　　　　(The coldness by the wind causes illness to the children)

(19)　　a.　　**Vhathu vho vhofholowa**
　　　　　　Patient
　　　　　　(The people are free)

　　　　b.　　**Mbofholowo ya vhathu i ḓo ḓisa mvelaphanḓa**
　　　　　　[9]　　　　Patient
　　　　　　(The freedom of the people will bring progress)

　　　　c.　　**Mbofholowo nga vhathu i ḓo ḓisa mvelaphanḓa**
　　　　　　　　　　Agent/Instrument
　　　　　　(The freedom by the people will bring progress)

(20)   a.   **Munna u a penga**
            Experiencer
            (The man is mad)

      b.   **Tshipengo tsha munna tshi khou hulela**
            [7]   Experiencer
            (The madness of the man is becoming worse)

      c.   **Tshipengo nga munna tshi khou hulela**
                        Experiencer
            (The madness by the man is becoming worse)

(21)   a.   **Vhathu vha khou tshinyala nga ndala**
            Patient
            (The people are starving with hunger)

      b.   **Mutshinyalo wa vhathu nga ndala wo fhela**
            [3]   Patient
            (The starvation of people with hunger has come to an end)

      c.   **Mutshinyalo kha vhathu nga ndala wo fhela**
                        Patient
            (The starvation on the people by hunger has come to an end)

      d.   **Mutshinyalo nga vhathu wa ndala wo fhela**
                  Patient/Agent
            (The starvation by people of hunger has come to an end)

(22)   a.   **Duvha lo tsha**
            Theme
            (The sun has risen)

      b.   **Mutsho wa duvha u a takadza**
            [3]   Theme
            (The rise of the sun is interesting)

      c.   **Mutsho nga duvha u a takadza**
                        Theme
            (The rise by the sun is interesting)

(23)   a.   **Vhana vha khou tatisana**
            Agent
            (Children are competing)

      b.   **Mutatisano wa vhana wa u gidima u a takadza**
            [3]   Agent
            (The competition of children of running is interesting)

c. Mutatisano nga vhana wa u gidima u a takadza
⌃ ⌃
                            Agent
(The running competition by children is interesting)

(24)   a. Vhathu vha khou gwalaba
Agent
(The people are protesting)

b. Mugwalabo wa vhathu u thithisa vhudziki
[3]   Agent
(The protest of people disturbs stability)

c. Mugwalabo nga vhathu u thithisa vhudziki
                     Agent
(The protest by the people disturbs stability)

(25)   a. Bomo yo thuthuba
Theme
(The bomb has exploded)

b. Muthuthubo wa bomo wo dzinginyisa shango
[3]   Theme
(The explosion of the bomb has shaken the earth)

c. Muthuthubo nga bomo wo dzinginyisa shango
                  Theme
(The explosion by the bomb has shaken the earth)

(26)   a. Vhathu vha khou tambula
Patient
(The people are suffering)

b. Thambulo ya vhathu i a tungufhadza
                     ⌃
[9]   Patient
(The suffering of people is pitiful)

c. Thambulo nga vhathu i a tungufhadza
                        ⌃
                Patient
(The suffering by people is pitiful)

(27)   a. Vhafunzi vha khou tshata
Agent
(The pastor is wedding)

b. Mutshato wa vhafunzi ndi wa vhege i daho
                                    ⌃
[3]   Agent
(The wedding of the pastor is next week)

c.　**Mutshato nga vhafunzi ndi wa vhege i ḓaho**
　　　　　　　　　　　　Agent
　　(The wedding by the pastor is next week)

(28)　a.　**Shango ḽo lala**
　　　　Theme
　　　(The country is peaceful)

　　b.　**Mulalo wa shango u ḓisa fhulufhelo kha vhadzulapo**
　　　　[3]　　　　Theme
　　　(The peace of the country brings hope to the citizens)

　　c.　**Mulalo kha shango u ḓisa fhulufhelo kha vhadzulapo**
　　　　　　　　　　Theme
　　　(The peace in the country brings hope to the citizens)

(29)　a.　**Mushumi u khou gungula**
　　　　Agent
　　　(The worker is grumbling)

　　b.　**Lugungulo lwa mushumi lwo tea**
　　　　[11]　　　　　Agent
　　　(The grumble of the worker is right)

　　c.　**Lugungulo nga mushumi lwo tea**
　　　　　　　　　　Agent
　　　(The grumble by the worker is right)

(30)　a.　**Shango ḽo dzika**
　　　　Theme
　　　(The country is stable)

　　b.　**Vhudziki ha shango hu khwinisa ikonomi**
　　　　[14]　　　　Theme
　　　(The stability of the country boosted the economy)

　　c.　**Vhudziki shangoni hu khwinisa ikonomi**
　　　　　　　　Location
　　　(The stability in the country boosted the economy

　　d.　**Vhudziki kha shango hu khwinisa ikonomi**
　　　　　　　　Theme
　　　(The stability to the country boosted the economy)

(31)　a.　**Mulambo wo ḓala**
　　　　Theme
　　　(The river is overflowing)

b. **Muḓalo wa mulambo wo vhanga mutshinyalo**
[3]   Theme
(The flood/overflow of the river has caused the damage)

c. **Muḓalo nga mulambo wo vhanga mutshinyalo**
          Theme
(The flood/overflow by the river has caused th damage)

d. **Muḓalo kha mulambo wo vhanga mutshinyalo**
          Theme
(The flood/overflow to the river has caused the damage)

(32) a. **Tshifhinga tshi khou shanduka**
Theme
(The time is changing)

b. **Tshanduko ya tshifhinga i khou konḓela vhaaluwa**
[9]   Theme
(The change of time is difficult to the elders)

c. **Tshanduko kha tshifhinga i khou konḓela vhaaluwa**
          Theme
(Change to the time is difficult to the elders)

d. **Tshanduko nga tshifhinga i khou konḓela vhaaluwa**
          Theme
(The change by time is difficult to the elders)

(33) a. **Vhorapolotiki vha khou ambedzana**
Agent
(Politicians are negotiating)

b. **Nyambedzano dza vhorapolotiki dzo ganzhila**
          Agent
(Negotiations of the politicians have failed)

c. **Nyambedzano nga vhorapolotiki dzo ganzhila**
          Agent
(The negotiations by politicians have failed)

(34) a. **Vhashumi vho tereka**
Agent
(Workers are on strike)

b. **Tshitereke tsha vhashumi tsho lapfesa**
[7]   Agent
(The strike of the workers is too long)

    c.   **Tshitereke nga vhashumi tsho lapfesa**
                          Agent
        (The strike by the workers is too long)

(35)   a.   **Khosi i a fhisa**
             Patient
             (The chief is ill)

    b.   **Biso la khosi lo hulela**
        [5]   Patient
        (The illness of the chief has worsened)

    c.   **Biso kha khosi lo hulela**
                Agent
        (The illness on the chief has worsened)

BIBLIOGRAPHY

Anderson, M. 1983. **Prenominal Genitive NPs**. The Linguistic Review 3, 1-24.

Chomsky, N. 1981e. **Lectures on Government and Binding**. Foris, Dordrecht.

Chomsky, N. 1982. **Some concepts and consequences of the theory of government and binding**. MIT Press, Cambridge Massachusetts.

Chomsky, N. 1986. **Barriers**. MIT Press Cambridge, Massachusetts.

Cook, V.J. 1988. **Chomsky's Universal Grammar: An introduction**. Basil Blackwell, Cambridge Massachusetts.

Du Plessis, J.A. 1993. **Words structure rules**. M.A. Notes, University of Stellenbosch.

Grimshaw, J. 1990. **Argument structure**. The MIT Press, Cambridge Massachusetts, London.

Haegeman, L. 1991. **Introduction to Government and Binding Theory**. Basil Blackwell, Cambrdige Massachusetts.

Hale, K and Keyser, S.J. 1985(a). **Some Transitivity Alternations in English**. Manuscript, MIT, Cambridge.

Jaegli, O.A. 1986. **Passive Linguistic Inquiry**. Vol. 7 no. 4, 587-622. Massachusetts Institute of Technology.

Lasnik, H. (1988). Subjects and the Θ-criterion. **Natural Language and Linguistic Theory** 6, 1-17.

Safir, K. 1987. **The syntactic Projection of Lexical structure, Natural Language and Linguistic Theory 5**. 561-601.

Sells, P. 1985. **Lecture on Contemporary Syntactic Theories: An Introduction to Government-Binding Theory**. Generalized Phrase structure Grammar and Lexical-Functional Grammar. CSLI, Leland Stanford Junior University, USA.

Szabolcsi, A. 1992: **Subject Suppression or Lexical PRO?** The Case of derived Nominals in Hungarian, Dept. of Linguistics, University of California.

Van Riemsdijk, H. 1986. **Introduction to the Theory of Grammar**. The MIT Press, Cambridge Massachusetts London.