THE SYNTAX OF VERBS INVOLVING THE BODY IN ISIXHOSA

BY

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STUDY LEADER: PROFESSOR J.A. DU PLESSIS
DATE SUBMITTED: MARCH 1999
DECLARATION

I, DUMISANI GODFREY SPOFANA hereby declare that the work contained in this assignment is my own original work and that I have not previously in its entirety or in part submitted it to any university for a degree.

Signature

Date: 11-01-1999
SUMMARY

This study examines the syntax of the verbs involving the body in isiXhosa. This is done with the view of giving a full account of how these verbs behave. The study is based on the theory of Government and Binding.

The study gives a full account of the predicate argument structure (PAS) of the verbs involving the body. IsiXhosa has three types of predicates, namely, one place, two place and three place predicates. The study also focuses on the number of arguments these verbs may assign, some of these verbs are intransitive and therefore they assign one argument which is an external argument. Other verbs are transitive and as such they assign more than one argument (i.e. external and internal arguments).

These verbs are investigated as to whether they would allow cognate objects and it was found that some of them would allow such objects. It is worth mentioning that for some verbs it is not usual in spoken language to use them with cognate objects though the written form may be proper. Another difference between transitive and intransitive verbs is that when they are used in the passive construction the copulative in intransitive verbs tends to be in plural whereas in transitive verbs tends to be either plural or singular. This may be accounted by the fact that positive passives indicate a universal permission to do something as against the negative passives that indicate a universal prohibition.

It was found that certain verbs involving the body would accept human locatives and such locatives have the interpretation of location. Another observation was that the verbs involving the body cannot be used with the Infinitival clause unless they appear with the applicative -el-
OPSOMMING

Hierdie studie ondersoek die sintaks van werkwoorde oor die liggaam in Xhosa. Die doel is om volledig te beskryf hoedat sulke werkwoorde gebruik word. Die studie berus op die teorie van ooreenstemming en binding.

Die studie verskaf 'n volle beskrywing van die predikaat argumentstruktuur van werkwoorde wat die liggaam betrek. Xhosa het drie tipes predikate, tewete enkelplek, tweeplek en drieplek predikate.

Die studie fokus ook op die aantal argumente wat hierdie werkwoorde kan bepaal, sommige van hierdie werkwoorde is onoorganklik, derhalwe bepaal hulle een argument wat ekstern is. Ander werkwoorde is oorganklik, sodar meer as een argument, tewete ekstern en intern, bepaal..

Hier word ondersoek of kongitiewe onderwerpe gebruik kan word, en dit is bevind dat dit kan plaasvind. Dit dien ook vermeld te word dat by sommige werkwoorde gebruik van kongitiewe onderwerpe in die spreektaal selde moontlik is, maar in skryfaal wel. ‘n Verdere verskil tussen oorganklike en onoorganklike werkwoorde is dat wanneer hulle in die passiewe vorm gebruik word, die kopulatiewe by onoorganklike werkwoorde neig om in die meerderheidsvorm te wees, terwyl dit by oorganklike werkwoorde of enkelvoudig of in meerderheids vorm kan wees. Dit mag wees omdat die positiewe passiewe vorms dui op ‘n universile toestemming om iets te doen, terwyl negatiewe passiewes ‘n universile verbod impliseer.

Daar is bevind dat sommige werkwoorde rondom die liggaam menslike motiewe kan neem, en dat sulke lokatiewe ‘n vertolking van die lokatief kan behels. ‘n Verdere waarneming was dat werkwoorde oor die liggaam nie met ‘n infinitiewe sinsnede gebruik kan word sonder die applikatief -el nie.
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CHAPTER 1 AN INTRODUCTION

This chapter is an introductory one, which spells out the main aim of the study, the theoretical framework and the organisation of the study. The basis of the study is the Government and Binding Theory. A brief description of the theory and its sub-theories will be made. These will be used in the investigation of the verbs involving the body.

1.1 AIM OF THE STUDY

The fundamental aim of this study is to look at the syntax of verbs involving the body in isiXhosa. This will be done within the ambit of the Government and Binding Theory as put forward by several authors, amongst others is Noam Chomsky (1991). The study will look at the properties of transitive and intransitive verbs under the category of verbs involving the body. Levin (1993) undertook a similar study concerning the verbs involving the body in English and her study will be taken as a point of departure for this study. These verbs involving the body will be classified in different categories and each category will be given a definition. Studies done in the past have shown that criteria like, semantic and syntactic properties of words, for group classification led to sub-categorization of verbs into two, that is, transitive and intransitive verbs.

The study will also look at the Predicate Argument Structure (PAS) of the verbs involving the body to see how many arguments they may take. The use of verbal affixes like the applicative and the passive in the verbs involving the body will be looked at. An exploration of the arguments of the different categories of the verb involving the body will be done. These arguments are external, internal and locative arguments of each category under the verbs involving the body.

The study will also concentrate on the test as to whether these verbs do allow cognate objects. The definition of cognate object will be given and the test will follow, which will take two diagnostics, that is, the objective agreement and the movement in the passive construction. A further test will be done so as to see whether the verbs involving the body do accept locatives that are human. These verbs will also be forced with an applicative followed by an Infinitival clause.
1.2 THEORETICAL FRAMEWORK

The theoretical framework on which this study is based is the Government and Binding Theory. The theory of government and Binding has a number of sub-theories which in turn have properties and principles. These when used together provide general grammatical descriptions. This study will utilise three of these sub-theories, namely, the Theta, Case and Control Theories. These sub-theories are considered to have a bearing on this study. Theta theory is concerned with the assignment of thematic or theta roles to sentential constituents. Case theory is concerned with the assignment of abstract Case to NPs. According to Visser (1995) Control theory is concerned with the assignment of an antecedent (controller) to the phonetically empty category (EC) PRO which characteristically occurs as the subject in infinitival clauses.

1.2.1 THETA THEORY

According to Sells (1985) the theta theory was developed around the 60s and 70s but it was brought into syntactic description in a general way in recent years. Thematic roles are roles which have been called semantic roles such as agent, patient (or theme), beneficiary, etc. (Horrocks, 1987:101-2). Lexical elements are associated with a number of thematic roles which correspond to the number of arguments they select. An argument is an expression that bears a thematic role and a non-argument is an expression that does not bear a thematic role. Lexical heads theta-mark their complements directly and they theta-mark their subjects indirectly. Theta roles assigned to complements are internal theta roles while those assigned to base-generated subjects are external theta roles. Theta role assignment is spelt out in the lexicon in the lexical entry of a predicate. Let us look at the following theta grid:

\[
\begin{array}{cccc}
\text{ph-} & \text{V[_______ NP NP]} \\
\text{Position of} \\
\text{the verb} \\
\theta & \theta & \theta \\
\text{agent} & \text{recipient theme}
\end{array}
\]
Each position sub-categorised by a verb is assigned a theta role, however the subject position of a passive and neuter-passive verb is a non-theta position. A position to which a theta role is assigned is a theta position and a position to which a theta role is not assigned is a non-theta position. Quhalle (1991) as cited by Mpeko (1992:3) says, “the theta theory is a model of grammar which is responsible for determining the structural representation of thematic relation between constituents”.

1.2.1.1 THE PROPERTIES OF THETA THEORY

1.2.1.1.1 THETA CRITERION

“The idea behind θ-Criterion is that if syntax is to be a ‘projection’ of lexical properties, as is the GB conception, then there should be a requirement to the effect that each head gets exactly the number of arguments that are lexically specified for it” (Sells, 1985:37). Each argument should be assigned exactly one theta role. θ-Criterion applies at all levels, ensuring that heads and their arguments are in suitable configurations. Simply put θ-Criterion stipulates that each argument is assigned one and only one theta role, and each theta role is assigned to one and only one argument. From this it is evident that an argument cannot have two or more theta roles at the same time.

1.2.1.1.2 THETA-MARKING

Theta marking is the ‘principle that relates sub-categorization and the assignment of θ-roles” (Sells, 1998:37). According to this principle the two subsystems interact in very important ways.

(1) If $\prec$ sub-categorizes the position occupied by $\beta$, then $\prec$ θ-marks $\beta$ (Sells, 1985:37).

It is important to note that sub-categorization is for a position, e.g. an NP, while theta-marking is to the lexical content dominated by that position (that is, its semantic content). The requirement in (1) is built into the revised Projection Principle, which requires the existence of thematic subjects, for these are lexically required by predicates. This interacts with (1) to ensure that both thematic and sub-categorization requirements are projected at each level.
1.2.1.2 **THETA ROLES**

Verbs assign theta roles to their arguments as required by the theta theory. Sells (1985) claims that it is not usual to find a verb with more than three basic arguments though others may be added by various word formation processes, while verbs do not sub-categorize for subjects, they may assign theta roles to them. The theta role assigned to the subjects needs to be distinct in one way or another. Sells represents sub-categorization (Categorical-selection) and the argument structure (Semantic-selection) in angle brackets and parentheses respectively:

(a) sneeze, V, *(Agent)*
(b) devour, V, <NP>, *(Agent, Theme)*
(c) donate, V, <NP, PP>, *(Agent, Theme, Goal)* (Sells, 1985:36).

Each theta role is assigned by a head within its domain with the exception of the underlined argument, if there is one. This is known as the external argument, and the others are internal arguments. The assignment of theta roles to internal arguments is known as direct assignment; the external theta role is indirectly assigned, the process mediated by the Verb Phrase. Theta roles are assigned at d-structure. The following diagram is provided by Sells (1985:36).

(12) **θ-role Assignment**

```
S
   \-----\-----\-----
   |       |       |
   NP    INFL    VP
   \-----\-----\-----
  |       |       |
  external V       NP
  \-----\-----\-----
       |       |
       internal
```

In this illustration V assigns the theta role directly to an internal argument and indirectly to an external argument.

Haegeman (1991:41) provides an information on the different theta roles. These will be listed and defined:
-agent: an entity which intentionally initiates the action expressed by the predicate.

-experiencer: an entity that experiences, feels or perceives some psychological state that is expressed by the predicate.

-theme: an entity that is moved by the action expressed by the verb.

-patient: an entity which undergoes an action expressed by the verb and is affected by it.

-recipient: an entity that receives something as a result of the action expressed by the verb.

-benefactive: an entity that benefits or gets benefits from the action expressed by the verb.

-instrument: an entity with which an action is performed.

-malefactive: an entity which is disadvantaged by the action expressed by the verb.

-purpose: an entity for which something is done as a result of the activity expressed by the verb.

-location: a place where something is, or a place in which the action expressed by the predicate is situated.

-source: an entity from which motion takes place.

-goal: an entity towards which the motion takes place.

Example sentences for the above theta roles are provided in Chapter 2 under sub-section 3.1.

1.2.2 CASE THEORY

Case theory is responsible for determining the distribution of NPs and other maximal projections. Case theory is concerned with the assignment of Case to NPs. Visser (1995) postulates that Case assignment is contingent on government in that case assignment is defined in terms of government.
Case theory deals with the principles of Case assignment to sentential constituents. All NPs that are phonetically realised (overt) must have Case and some phonetically empty categories (*small pro and wh trace*) are also assigned Case. Case Filter is the requirement for well-formedness (grammaticality) of the phonetic form (PF) which requires that all NPs with phonetic content be assigned Case; is stated as follows:

*N(P) has a phonetic content but no Case (A sentence has to be ruled out by the Phonetic Form component). Case Filter applies to chains and each chain must have exactly one Case-marked position if it has NP as its first member. The Case Filter is similar to the Theta-Criterion in that having two Cases is as bad as having none at all. The notion of Case assignment remains central to Government and Binding.*

The following tree diagram illustrates Case assignment of this sentence:

(a) Indoda isika isonka sikatata ngemela

The man cuts father's bread with a knife
1.2.2.1 PRINCIPLES OF CASE ASSIGNMENT

-NP is assigned Nominative Case if governed by AgrS (of Inflection) - AgrS always governs NP.

-NP is assigned Accusative (Objective) Case if governed by V (i.e. if it occurs as an object of a transitive verb) - a double object verb assigns two instances of accusative case and a mono object verb assigns one instance of accusative case.

-NP is assigned Oblique Case if governed by Locative Preposition.

-NP is assigned Locative Case if governed by Locative preposition ku- OR NP is assigned Locative Case if governed by the Locative morphology e...ini in isiXhosa.

-NP is assigned Genetive Case if governed by the Genetive a or ka- (possessive and descriptive possessive constructions).

Case assignment takes place at the s-structure. Case is assigned to the NP by virtue of the structural position it occupies and goes down to the head of that NP. Category x θ-marks an NP if it assigns Case to this NP.

1.2.3 CONTROL THEORY

Visser (1995:24) postulates that “control theory is concerned with the assignment of an antecedent (controller) to the phonetically empty category (EC) PRO which characteristically occurs as the subject in infinitival clauses. Inflection in infinitival clauses lacks agreement as there is no governor in the subject position. PRO in the subject position of infinitival clauses is therefore ungoverned, because of this, PRO is not assigned case. According to Chomsky PRO is Classified as a pronominal anaphor with features [+pronominal, +anaphor]. As an anaphor it has no intrinsic reference (the discussion on anaphor is not applicable to African languages) and as a pronominal it is bound outside its own clause.

The rules of control apply in the Logical Form (LF) component of the grammar. The relations of control are indicated by co-superscripting (indexing at the top).
1.2.3.1 TYPES OF CONTROL

1.2.3.1.1 SUBJECT CONTROL

This is the type of control which is of importance to the study; others will be mentioned in passing. The subject NP of the higher / matrix clause controls (serves as an antecedent of) PRO. It also determines the referential features of PRO. This type of control can be illustrated thus:

```
Utata!  rhonel  uku  lala
```

1.2.3.1.2 OBJECT CONTROL

The object NP of the matrix (main)/higher clause controls (serves as an antecedent of) subject PRO. Object control varies in frequency of occurrence in African languages.
1.2.3.1.3 **SPLIT CONTROL**

Both the subject NP and object NP mutually control PRO. This means that in conjunction they determine the referential features of PRO.

1.2.3.1.4 **ARBITRARY CONTROL**

Arbitrary control implies that PRO has no specific reference.

1.3 **ORGANIZATION OF THE STUDY**

This study comprises of four chapters. Chapter 1 is an introduction which spells out the aim of the study, the theoretical framework and the organisation of the study. The basis of this study is the Government and Binding Theory. A brief description of the theory and its sub-theories is made. These are used in the investigation of the verbs involving the body.

Chapter 2 deals with the Predicate Argument Structure. A brief look at the difference between lexical-syntactic and lexical-semantic representation is done. Under lexical-syntactic representation we look at the types of predicates, namely, one-place, two-place and three-place predicates, and the internal and external arguments. The characteristics of verbs involving the body are looked at by spelling out the different categories giving definitions of each and example sentences under each category. The six categories of verbs involving the body are: verbs of bodily processes, verbs of nonverbal expression, verbs of gestures or signs involving the body, verbs of bodily-internal states of existence, suffocate verbs and verbs of bodily state and damage to the body.

Sub-categories under these main categories are given. Under lexical-semantic representation we look at theta roles where a definition of each theta role is given and example sentences for each theta role. Lexical features of nouns to be used in the study are also looked at. An interpretation of the arguments in all categories of the verbs involving the body is done. A summary of the chapter is given at the end.

Chapter 3 deals with the characteristics of the verbs involving the body where under each sub-category two example sentences are given. It also looks at the cognate objects, a description a cognate object is given, and a test is done as to whether verbs involving the body do allow cognate objects. This test...
will be based on two diagnostics, namely, objectival agreement and movement in the passive. An examination is done to see whether these verbs do allow passive constructions in them. The verbs involving the body are also tested as to whether they do allow human locatives. They are also forced with an applicative followed by an Infinitival clause. A summary of the chapter is given at the end.

Chapter 4 deals with the general conclusions of the whole study.
CHAPTER 2  PREDICATE ARGUMENT STRUCTURE

The chapter will look at the Predicate Argument Structure (PAS) under which a line will be drawn between lexical-syntactic and lexical-semantic representations. Under lexical-syntactic representation the focus will be on the types of predicates, types of arguments and then the PAS of the verbs involving the body. Under the lexical-semantic representation the focus will be on the requirements of the theta theory, the features of nouns and the interpretation of the arguments of the verbs involving the body. The chapter will be concluded by highlighting important points discussed in the chapter.

1. LEXICAL-SYNTACTIC AND LEXICAL-SEMANTIC REPRESENTATION

Linguistic expressions such as NPs that are given theta-roles are referred to as arguments. Potential arguments are the NPs and clauses which have some sort of referential function: they have to refer to persons, things and places. In this perspective the term theta-role is synonymous to the term argument. According to this usage lexical representation is a reflection only of a lexical-syntactic representation, i.e. predicate argument structure (PAS). The semantic relation between the argument and the predicate is not of concern. Theta-roles within this lexical representation are not referred to by any semantic labels.

The term theta-role may also name a specific semantic relationship which an argument may bear to its predicate. The lexical representation refers to a lexical-semantic representation. Many theories refer to the semantic content of theta-roles. The one that has been developed by Jackendoff (1990) refers to the lexical-semantic representation as lexical conceptual structure (LCS).

2. LEXICAL-SYNTACTIC REPRESENTATION

2.1 PREDICATE ARGUMENT STRUCTURE (PAS)

In the lexical-syntactic representation the Predicate Argument Structure of a verb indicates the number of arguments it takes. If a predicate takes one argument it is described as a one-place predicate. If it takes two arguments then it is called a two-place predicate, and if it takes three arguments it is described as a three-place predicate.

11
**One-place predicate:**

(1) Amanzi ayabila  
The water is boiling  
bila: x(a variable)

*Theme (a semantic label)*

**Two-place predicate:**

(2) Umfazi upheka ukutya  
The woman cooks food  
pheka: x(y) (variables)

*Agent (patient) (semantic labels)*

**Three-place predicate:**

(3) Umfana upha intombi umsesane  
The young man gives the girl a ring  
pha: x(y;z) (variables)

*Agent (recipient; theme) semantic labels*

The lexical entries of the above mentioned verbs are:

(i) **Morphophonological feature**  
bil-  
Categorical feature  
[+V, -N]  
Subcategorial feature  
[_, #]  
Theta grid  
θ
(ii) Morphophonological feature
  phek-
  Categorial feature
  [+V,-N]
  Subcategorial feature
  [\_NP]
  Theta grid
  \(\emptyset_1 \emptyset_2\)

(iii) Morphophonological feature
  ph-
  Categorial feature
  [+V,-N]
  Subcategorial feature
  [\_NP NP]
  Theta grid
  \(\emptyset_1 \emptyset_2 \emptyset_3\)

The assignment of theta-role is governed by general principles such as projection principle and theta-criterion. The former ensures that a verb may only sub-categorize for complements sit theta-marks. The theta-criterion imposes a one-to-one association between theta-roles and arguments, each argument bears one and only one theta-role and each theta-role is assigned to one and only one argument.

(4) Umfazi upheka ukutya
    The woman cooks food

In this sentence the agent corresponds to the NP *umfazi* while the patient corresponds to the NP *ukutya*. The PAS of *pheka* has two variables and these variables are theta-roles assigned by *pheka*. The two arguments represented by *umfazi* and *ukutya* will each have one theta-role. There is an association given by the theta-role assignment between the NPs in the argument positions of a verb in the syntax and the variables of the PAS of the verb. Rappaport and Levin (1988) as cited in du Plessis and Visser (1998:4) postulate that there are three modes of theta-role assignment, i.e. by a verb, a
preposition and a VP via predication.

2.1.1 THE EXTERNAL ARGUMENT

The NP argument which is assigned by a theta-role by the VP via predication must be outside the maximal projection of the verb (i.e. VP) as required by the predication theory. The verb may thus assign a theta-role to the NP argument in the subject position and this argument is an external argument (Williams (1981) as in du Plessis and Visser (1998)). The external NP argument must be in relation of mutual c-command with the maximal projection of the verb. The external argument is the head of the argument structure.

(5) Inkwenkwe iyahlala
   The boy is sitting

(6) Inkunzi iyabhonga
   The bull is bellowing

In the above examples external arguments are inkwenkwe and inkunzi.

2.1.2 THE INTERNAL ARGUMENT

The other arguments that remain are internal to the maximal projection of the verb. The subcategorial features of a verb indicate the syntactic categories that appear as sisters or complements to that verb which is the head within a verb phrase. All positions for which a verb sub-categorises are theta-positions, i.e. the verb assigns a theta-role to each of these positions. If a verb assigns a theta-role position, it theta-marks that position. The arguments that appear in the position sub-categorised by a verb are called internal arguments.

There is a distinction between a direct NP argument and indirect NP argument. The NP argument which is assigned its theta-role directly by the verb, is the direct NP argument. The NP argument which is assigned its theta-role by a preposition is an indirect NP argument. The internal NP arguments are assigned their theta-roles in the syntax under government, i.e. the verb or preposition
that assigns a theta-role must govern such an internal argument. Direct NP arguments are usually objects of a verb and indirect NP arguments are the objects of a preposition.

(7) Umama uvala ucango  
Mother closes the door

(8) Utishala unika abafundi izibalo  
The teacher gives the learners sums

In the above examples internal arguments are ucango, abafundi and izibalo. Abafundi is a direct NP argument whereas izibalo is an indirect NP argument.

2.2 VERBS INVOLVING THE BODY

2.2.1 VERBS OF BODILY PROCESSES

All verbs of bodily processes are intransitive. They assign only one argument:

HICCUP VERBS

(9) [Utata] u-ya-rhona  
Father is snoring

BREATHE VERBS

(10) [Umdlali] u-ya-bila  
The player is sweating

In the predicate structure of these verbs one will notice that these verbs assign only an external argument to the NP in the subject position:

(1) PAS of [-rhon-]:[X]  
(2) PAS of [-bil-]:[X]

The X argument will be assigned to utata in (1) and to umdlali in (2).
2.2.2. VERBS OF NONVERBAL EXPRESSION

Some of these verbs are intransitive and others are mono-transitive.

Intransitive:
(11) [Amahlosi] a-ya-khwina
    The leopards are whining

Monotransitive:
(12) [Izinja] zi-joja [umzila]
    Dogs sniff the trail

In the predicate structure one will notice that the first type of verb assigns only an external argument to the NP in the subject position:

(1) PAS of [-khwin-]: [X]

The second type on the other hand assigns both an external argument to the NP in the subject position and an internal argument to the NP in the object position:

(2) PAS of [-joj-]: [X (Y)]

In the first type the [X] argument will be assigned to amahlosi while in the second type the [X] argument will be assigned to izinja and the [Y] argument will be assigned to umzila.

2.2.3. VERBS OF GESTURES OR SIGNS INVOLVING THE BODY

Verbs under curtsey, snooze and flinch groups are intransitive, while those under wink and crane groups are monotransitive.

CURTSEY VERBS
(13) [Amadolo] a-ya-goba
    The knees are bending
SNOOZE VERBS

(14) [Usana] lu-ya-lala
   The baby is sleeping

FLINCH VERBS

(15) [Umntwana] u-ya-rhona
   The child is snoring

In the predicate structure of these verbs one will notice that these verbs assign only an external argument to the NP in the subject position:

1. PAS of [-gob-] : [X]
2. PAS of [-lal-] : [X]
3. PAS of [-rhon-] : [X]

The [X] argument will be assigned to amadolo in (1); to usana in (2) and to umntwana in (3).

WINK VERBS

(16) [Udyakalashe] u-qhwanyaza [amehlo]
   The jackal blinks its eyes

CRANE VERBS

(17) [Indoda] i-goba [umqolo]
   The man archs his back

In the predicate structure of these verbs one will notice that these verbs assign both an external argument to the NP in the subject position and an internal argument to the NP in the object position:

1. (PAS) of [-qhwanyaz-] : [X (Y)]
2. PAS of [-gob-] : [X (Y)]

The [X] argument will be assigned to udyakalashe in (1); to indoda in (2). The [Y] argument will be assigned to amehlo in (1) and to umqolo in (2).
2.2.4. VERBS OF BODILY-INTERNAL STATES OF EXISTENCE

All the verbs of bodily-internal states of existence are intransitive. They assign only one argument.

(18) [Intombazana] i-ya-chachatheka
    The girl is shivering

In the predicate structure of these verbs one will notice that these verbs assign an external argument to the NP in the subject position:

(1) PAS of [-chachathek-] : [X]
The [X] argument will be assigned to intombazana in (1).

2.2.5. SUFFOCATE VERBS

All suffocate verbs are intransitive. They assign only one argument.

(19) [Umsi] u-ya-rhaxa
    Smoke is choking

In the predicate structure of these verbs one will notice that these verbs assign an external argument to the NP in the subject position:

(1) PAS of [-rhax-] : [X]
The [X] argument will be assigned to umsi in (1).

2.2.6. VERBS OF BODILY STATE AND DAMAGE TO THE BODY

The verbs of bodily state and damage to the body are transitive but some are intransitive.

PAIN VERBS

(20) [Imilenze] i-ya-qaqamba
    Legs are aching
TINGLE VERBS

(21) [Ubuso] bu-ya-tsha

The face is burning

HURT VERBS

(22) [Umfana] u-luma [umlomo]

The young man bites the lip

VERBS OF CHANGE OF BODILY STATE

(23) [Umfazi] u-ya-mbatsha

The woman is blanching

In the predicate structure of these verbs one will notice that some of the verbs assign an external argument to the NP in the subject position; while others assign both an external argument to the NP in the subject position and an internal argument to the NP in the object position:

(1) PAS of [-qaqamb-] : [X]

(2) PAS of [-tsh-] : [X]

(3) PAS of [-lum-] : [X (Y)]

(4) PAS of [-mbatsh-] : [X]

The [X] argument will be assigned to imilenze in (1); to ubuso in (2); to umfana in (3); to umfazi in (4). The [Y] argument will be assigned to umlomo in (3).

2.3. LEXICAL-SEMANTIC REPRESENTATION

2.3.1. THETA-ROLES

Verbs assign theta-roles to their arguments as required by the theta-theory. Theta-theory is concerned
with the assignment of thematic roles to sentential constituents. Theta-roles that are assigned to complements are internal theta-roles while those that are assigned to base-generated subjects are external theta-roles. An argument is an expression that bears a thematic role. There is a theta-criterion which stipulates that each argument is assigned to one and only one theta-role, and each theta-role is assigned to one and only one argument, i.e. an argument cannot have two or more theta-roles at the same time. The following is a list of theta-roles:

2.3.1.1. AGENT
Agent fulfils a thematic-role by referring to the entity which is the intender of the action denoted by the verb. There is a property of will or intention attributable to the agent.

(24) [Utata] u-ya-hamba
    Father is going

In the above sentence the NP argument, utata in the subject position is seen as doing an action, and is therefore assigned a theta-role of agent. The theta-role of agent is characterised by the argument which intentionally starts something. It performs an action expressed by the predicate or verb.

2.3.1.2. EXPERIENCER
Experiencer relates exclusively to mental state. It is entity that experiences, feels or perceives some psychological state that is expressed by the predicate or verb.

(25) [Umfana] u-danile
    The young man is disappointed
Umfana has the thematic-role of experiencer of mental state of disappointment.

2.3.1.3. THEME
Theme refers to the entity that is being located. It is a participant which is characterised as changing its position or condition, or as a state or position.

(26) [Izulu] li-sile
    The weather is fine
In the above sentence, izulu has a theta-role of theme as an argument that is undergoing some change
in its condition.

2.3.1.4. PATIENT
Patient is the entity which undergoes an action expressed by the verb and is affected by it.

(27) [Umama u-phereka [ukutya]
Mother cooks food
In the example the NP argument in the object position has the thematic role of patient. The object is affected by an action expressed by the verb or predicate.

2.3.1.5. RECIPIENT
This thematic-role of recipient occurs with denoting change of possession. The recipient seems to receive something expressed by the verb or predicate.

(28) [Utitshala] u-boleka [umfundi] [imali]
The teacher borrows the student money

Umfundi has a theta-role of recipient because he receives money as expressed by the predicate. This thematic-role is characterised by a ditransitive verb and usually occurs as an indirect object.

2.3.1.6. BENEFACTIVE / BENEFICIARY
The thematic-role of benefactive or beneficiary refers to the entity that benefits or gets benefits from the action expressed by the verb or predicate. The internal argument assigned a thematic-role of benefactive is usually an indirect object.

(28) [UNdopho] u-thengela [uNomsa] [iwotshi]
Ndopho buys a watch for Nomsa
Nomsa has the theta-role of benefactive because she is benefiting from the action expressed by the predicate.
2.3.1.7. INSTRUMENT
This theta-role of instrument implies the object with which an action is performed. This is assigned by the preposition nga which comes before the argument taken as an instrument.

(30) [ULunga] u-sika [isonka] [(nga)-imela]
Lunga cuts bread with a knife
The argument imela is assigned thematic-role of instrument by the preposition nga. The morphophonological process of vowel coalescence has occurred hence we have ngemela from nga+imela.

2.3.1.8. MALEFACTIVE
Malefactive as a thematic-role refers to the external argument regarded as an entity or person who is disadvantaged from the action expressed by the action of the predicate or verb.

(31) [USipho] u-hlalela [uMzamo]
Sipho stays for Mzamo
In the above sentence Sipho is assigned a thematic-role of malefactive because he is disadvantaged by the action of staying for Mzamo.

2.3.1.9. PURPOSE
The thematic-role of purpose refers to the entity for which something is done as a result of the activity expressed by the predicate or verb.

(32) [Umama] u-thengela [umtshato] [ilokhwe]
Mother buys a dress for the wedding
In the above sentence the applicative -el- has been used. Umtshato has the theta-role of purpose because it is the entity for which something is done as a result of the activity expressed by the predicate or verb.
2.3.1.10. LOCATION
This thematic-role is an argument regarded as a place in which the action expressed by the predicate is situated. Location may be concrete or abstract.

(33) [Utata] [u-s-eThekwini]
Father is in Durban
Location is usually characterised by the locative formative and suffix, i.e. e- and -ini. In our sentence eThekwini is assigned the theta-role of location.

2.3.1.11. SOURCE
The theta-role of source refers to an argument taken as an entity from which motion takes place. The motion may be concrete or abstract.

(34) Ndi-thenge [imoto] [e-garaji]
I bought a car from the garage
Egaraji has the thematic-role of source because it is the entity from where the motion of buying took place.

2.3.1.12. GOAL
Goal as a thematic-role refers to the entity towards which the motion takes place. The motion once more can be either concrete or abstract.

(35) [Umfana] u-khabela [epalini]
The young man kicks to the goalpost
Epalini is assigned a thematic-role of goal as it is the entity towards which the motion takes place.

2.3.2. LEXICAL FEATURES OF NOUNS

Nouns may have various lexical features. These features are a formal or functional device for expressing the presence or absence of such features by pluses and minuses. Some of these features need not be mentioned since a presence of one may mean another, let us look at this example: if a word is [+human] it is automatically [+animate]. This generalisation according to Fromkin and Rodman (1993) can be expressed as a redundancy rule which is part of the Lexicon: a word that is
[+human] is [+animate]. This rule stipulates that [+animate] need not be specified in the lexical entry for a word which is [+human]. Features which will be of interest in this piece of work are the following:

Human, animal, animate, inanimate, concrete, abstract, body part etc.

2.3.3. INTERPRETATION OF THE ARGUMENTS OF THE VERBS INVOLVING THE BODY

In this section various verbs will be considered with animate and body part subjects after which their arguments will be interpreted.

2.3.3.1. VERBS OF BODILY PROCESSES

2.3.3.1.1 HICCUP VERBS

Hiccup verbs relate to involuntary bodily processes, that is, processes that are typically not under the control of the person or organism that experiences them.
(36)  a. [Human] : [Utata] u-ya-rhona
      Father is snoring
b. [Animal] : [Inja] i-ya-rhona
      The dog is snoring
c. [Body part] : [Impumlo] i-ya-rhona
      The nose is snoring

(37)  a. [Human] : [Usana] lu-ya-thimla
      The baby is sneezing
b. [Animal] : [Igusha] i-yathimla
      The sheep is sneezing
c. [Body part] : [Impumlo] i-ya thimla
      The nose is sneezing

(38)  a. [Human] : [Isibhanxa] si-ya-bhodla
      The fool is belching
b. [Animal] : [Inja] i-ya-bhodla
      The dog is belching
      The mouth is belching

(39)  a. [Human] : [Usana] lu-ya khama
      [Usana] lu-ya-zamla
      The baby is yawning
      [Ihashe] li-ya-zamla
      The horse is yawning
The verbs in above sentences can be shown by means of a table like this:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>-rhona</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-thimla</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-bhodla</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-khama</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-zamla</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

The external arguments in the above sentences seem to take the theta-role of theme as they are characterised as changing their position or condition or as being in a state or position. These verbs indicate a certain state or condition.

2.3.3.1.2 BREATHE VERBS

Breathe verbs also relate to bodily processes. They relate to emitting a substance from the body, that is so with the exception of 'breathe' which can also describe taking air into the body.

(40) a. [Human] : [Umdlali] u-ya-bila

The player is sweating

b. [Animal] : [Inkomo] i-ya-bila

The cow is sweating

The face is sweating

(41) a. [Human] : [Inkwenkwe] i-y-opha
The boy is bleeding

b. [Animal] : [Ikati] i-y-opha
The cat is bleeding

c. [Body part] : [Idolo] li-y-opha
The knee is bleeding

(42) a. [Human] : [UNomsa] u-y-phafumla
Nomsa is breathing

b. [Animal] : [Iidonki] zi-y-phafumla
Donkeys are breathing

The mouth is breathing

(43) a. [Human] : [Uthemba] u-y-khonyuluka
Themba is puking

b. [Animal] : [Inja] i-y-ka-khonyuluka
The dog is puking

The neck is puking

(44) a. [Human] : [Umntwana] u-y-bibitheka
The child is weeping

b. [Animal] : * [Inkwu] i-y-bibitheka
The monkey is weeping

   The mouth is weeping

(45) a. [Human] : [UNomsa] u-ya-hlanza
   [UNomsa] u-ya-gabha
   [UNomsa] u-ya-khupha
   Nomsa is vomiting

b. [Animal] : [Inja] i-ya-hlanza
   [Inja] i-ya-gabha
   [Inja] i-ya-khupha
   The dog is vomiting

   [Umlomo] u-ya-yagabha
   [Umlomo] u-ya-khupha
   The mouth is vomiting

(46) a. [Human] : [Umfana] u-ya-thufa
   [Umfana] u-ya-tshica
   The young man is spitting

   *[Ingwe] i-ya-tshica

28
The tiger is spitting


[Umlomo] u-ya-tshica
The mouth is spitting

(47) a. [Human] : [Usana] lu-ya-khohlela
The baby is coughing

b. [Animal] : [Ihagu] i-ya-khohlela
The pig is coughing

The mouth is coughing

The verbs in the above sentences can be illustrated by means of a table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>-bila</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-opha</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-phefumla</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-khonyuluka</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-bibitheka</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>-gabha</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-khupha</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-hlanza</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-thufa</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>-tshica</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>-khohlela</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
The verbs 'bibitheka' and 'tshica' do not take animals as subjects since they indicate actions attributable to humans.

Like the arguments in the hiccup verbs the arguments under this section seem to take the thematic role of theme.

2.3.3.2. VERBS OF NONVERBAL EXPRESSION

These verbs can be treated as verbs of 'nonverbal expression'. Most of them involve facial expressions that are associated with a particular emotion. Some of them are used as manner of speaking verbs.

Intransitive verbs:

(48)  a. [Human] : [Umfazi] u-ya-khwina
The woman is whining

b. [Animal] : [Amahlosi] a-ya-khwina
The leopards are whining

c. [Body parts] : [Umlomo] u-ya-khwina
The mouth is whining

(49)  a. [Human] : [Intombi] i-ya-ncwina

[Intombi] i-ya-gcuma
The girl is groaning

b. [Animal] : [Ibhokhwe] i-ya-ncwina

[Ibhokhwe] i-ya-gcuma
The goat is groaning
c. [Body parts]: [Umlomo] u-ya-ncwina

[Umlomo] u-ya-gcuma
The mouth is groaning

(50) a. [Human]: *[Umntu] u-ya-vungama

*[Umntu] u-ya-bhavuma
*The person is growling

b. [Animal]: [Izinja] zi-ya-vungama

[Izinja] zi-ya-bhavuma
The dogs are growling

c. [Body part]: [Umlomo] u-ya-vungama

[Umlomo] u-ya-bhavuma
The mouth is growling

(51) a. [Human]: [Umfundi] u-ya-jala
The pupil is disappointed

b. [Animal]: *[Inkunzi] i-ya-jala
*The bull is disappointed

The face is disappointed
The above verbs can be shown in a table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>-khwina</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-ncwina</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-gcuma</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-vungama</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-bhavuma</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>-jala</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

The verb 'vungama' does not take a human subject as it indicates an action done by an animal and the verb 'jala' does not take an animal subject as it expresses an action done by a human.

The arguments in the first three verbs seem to take the thematic-role of theme and the ones in the last verb seem to take the thematic-role of the experiencer.

Transitive verbs:

(52) a. [Human] : [UThemba] u-joja [ivumba]

Themba smells a smell

b. [Animal] : [Izinja] z i-joja [umzila]

The dogs sniff the trail

c. [Body part] : [Impumlo] i-joja [ivumba]

[Impumlo] i-joja [umzila]

The nose smells/ sniffs a/the smell/trail
(53) a. [Human] : [Umfazi] u-ncuma [uncumo]
The woman smiles a smile

*The donkey smiles a smile

The mouth smiles a smile

(54) a. [Human] : [Inkwenkwe] i-hleka [intsini-menyo]
The boy laughs a giggle

b. [Animal] : *[Impuku] i-hleka [intsini-menyo]
*The mouse laughs a giggle

The mouth laughs a giggle

(55) a. [Human] : [Umfazi] u-gigitheka [intsini]
The woman giggles a laughter

*The horses giggle a laughter

The mouth giggles a laughter

(56) a. [Human] : [lxhego] li-khefuza [umbefu].
The old man pants heavy breath

b. [Animal] : [Inkomo] i-khefuza [umbefu]
The cow breathes heavy breath
c. [Body part]: [Isifuba] si-khefuza [umfebu]
The chest pants heavy breath

The verbs in the above sentences can be shown in a table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- joja</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- ncuma</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- hleka</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- gigitheka</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- khefuza</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

The verbs 'ncuma', 'hleka' and 'gigitheka' do not take animal subjects as they denote actions done by humans.

External arguments seem to take the thematic-ole of theme. The following nouns ivumba, umzila, intsini-menyo, intsini and umbefu are internal arguments since they appear as sisters to their predicates or verbs which are heads within the verb phrases. The internal arguments take the thematic-role of patient as they are affected by the actions expressed by the verbs.

2.3.3.3. VERBS OF GESTURES / SIGNS INVOLVING BODY PARTS

2.3.3.3.1. CURTSEY VERBS

Curtsey verbs describe signs made with the entire body. They differ from each other with respect to the movement involved and the position attained.
(57) a. [Human] : [Umfundisi] u-ya-goba
    The preacher is kneeling

    b. [Animal] : [Indlulamthi] i-ya goba
    The giraffe is kneeling

    The knees are kneeling

(58) a. [Human] : [UmKrestu] u-ya-guqa
    The Christian is kneeling

    b. [Animal] : [Inkonyana] i-ya guqa
    The calf is kneeling

    The knee is kneeling

(59) a. [Human] : [Umlimi] u-ya-kahlela
    The farmer is saluting

    *The pig is saluting

    c. [Body part] : [Isandla] si-ya-kahlela
    The hand is saluting

(60) a. [Human] : [Umntu] u-ya-thoba
    The person is bowing

    *The giraffe is bowing
The verbs in the above sentences can be illustrated thus by means of a table:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- goba</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- guqa</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- kahlela</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- thoba</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

The verbs 'kahlela' and 'thoba' do not take animal subjects as they indicate actions done by humans, and the verb 'guqa' does not take inanimate subjects.

External arguments in the above sentences seem to take the thematic-role of theme, as they are characterised as changing their position or condition or as being in a state or position.

2.3.3.3.2. SNOOZE VERBS

These verbs describe different types of sleeping.

(61) a. [Human] : [Usana] lu-ya-lala
     The baby is sleeping

     b. [Animal] : [Igusha] i-ya-lala
     The sheep is sleeping

     * The head is sleeping
The verbs in the above sentences can be illustrated by means of a table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- lala</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- yeketheka</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- ozela</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

The verbs ‘lala’, ‘yeketheka’ and ‘ozela’ do not take inanimate subjects as they denote actions experienced by animate subjects.

External arguments of snooze verbs seem to take the thematic role of theme hence they indicate a state.
2.3.3.3. FLINCH VERBS

Flinch verbs describe body movements that reflect an emotional or physical reaction. These movements may be triggered by fear, dislike, shame, cold or pain.

(64) a. [Human] : [Umntwana] u-ya-rhoxa
The child is cringing

b. [Animal] : [Ikati] i-ya-rhoxa
The cat is cringing

The tongue is cringing

(65) a. [Human] : [Umuntu] u-ya-ncipha
The person is shrinking

b. [Animal] : [Imbila] i-ya-ncipha
The rabbit is shrinking

The face is shrinking

(66) a. [Human] : [Unina] u-ya-jijitheka
His mother is wincing

*The sheep is wincing

* The face is wincing

(67) a. [Human] : [Umfazi] u-ya-finyela
The woman is cramping
b. [Animal] : [Inkabi] i-ya-finyela
   The ox is cramping

   The leg is cramping

(68)  a. [Human] : [Umntu] u-ya-hlehla
   The person is retreating

     b. [Animal] : [Igusha] i-ya-hlehla
           The sheep is retreating

           * The back is retreating

Verbs in the above sentences can be illustrated by means of a table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- rhoxa</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>- ncipha</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- jijitheka</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- finyela</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- hlehla</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

The verb 'jijitheka' does take only a human subject as it denotes an action done by humans, and the verb 'hlehla does not take an inanimate object as it expresses what is done by animate subjects.

External arguments of flinch verbs seem to take the thematic-role of theme, as they are characterised as changing their position or condition or as being in a state or position.
2.3.3.4. WINK VERBS

These verbs relate to gestures or signs made with specific body parts. The specific parts may be optionally expressed, when they are not expressed they are understood.

(69) a. [Human] : [Umfazi] u-yaqhwanyaza [amehlo]
   The woman blinks her eyes

   The jackal blinks its eyes

   * The head blinks its eyes

(70) a. [Human] : [Ababukeli] ba-qhwaba [izandla]
   The spectators clap their hands

   * The monkey claps its hands

   * The arms clap their hands

(71) a. [Human] : [Utitshala] u-nqwala [intloko]
   The teacher nods his head

   b. [Animal] : *[Imfene] i-nqwala [intloko]
   * The baboon nods its head

   * The hand nods its head

(72) a. [Human] : [Undwendwe] lu-khomba [indlebe]
   The guest points the ear
*The sheep points the ear

The finger points the ear

(73)  a. [Human] : [Abantwana] ba-nyusa [amagxa]
The children shrug their shoulders

b. [Animal] : *[Ibhokhwe] i-nyusa amagxa
*The goat shrugs its shoulders

* The head shrugs its shoulders

(74)  a. [Human] : [UMongezi] u-nyikinya amagxa
Mongezi moves his shoulders

b. [Animal] : [Inkomo] i-nyikinya [amagxa]
The cow moves its shoulders

* The back moves its shoulders

(75)  a. [Human] : [Isela] li-jija [amehlo]
The thief squints its eyes

b. [Animal] : [Ikati] i-jija [amehlo]
The cat squints its eyes

* The head squints its eyes
Verbs in the above sentences can be shown by means of a table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- qhwanyazaa</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- qhwaba</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- nqwala</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- khomba</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- nyusa</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- nyikinya</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- jija</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

The verbs 'qhwanyaza', 'nyikinya' and 'jija' do not take subjects that are inanimate, 'khomba' does not take an animal subject as it expresses an action done by humans and 'qhwaba', 'nqwala' and 'nyusa' only take subjects that are human as they express actions performed by humans.

External arguments of wink verbs seem to take the thematic-role of theme, as they are characterised as changing the position or condition or as being in state or position. The following nouns amehlo, izandla, intloko, indlebe, ikati, amagxa, and amehlo are internal arguments since they appear as sisters to their verbs which are heads within the verb phrases. They take the thematic-role of patient as they are affected by the actions expressed by the verbs.

2.3.3.5. CRANE VERBS

These describe gestures or signs made with specific parts.

(76) a. [Human] : [Indoda] i-goba [umqolo]
     The man archs his back

b. [Animal] : [Ikati] i-goba [umqolo]
     The dog archs its back
   * The arm archs its back

(77) a. [Human] : [Umntwana] w-osula [impumlo]
The child cleans the nose

   * The cat cleans the nose

c. [Body part] : [Isandla] s-osula [impumlo]
The hand cleans the nose

(78) a. [Human] : [Umfana] u-fumbatha [amanqindi]
The young man clenches his fists

   * The goat clenches its fists

   * The arm clenches its fists

(79) a. [Human] : [Umntu] u-cima [amehlo]

   [Umntu] u-vala [amehlo]
The person closes his eyes

b. [Animal] : [Imbila] i-cima [amehlo]

   [Imbila] i-vala [amehlo]
The rabbit closes its eyes
c. [Body part]: *[Ubuso] bu-cima [amehlo]  
*[Ubuso] bu-vala [amehlo]  
*The face closes its eyes

(80)  
a. [Human]: [UThemba] u-vula [amehlo]  
Themba opens his eyes

b. [Animal]: [Inja] i-vula [amehlo]  
The dog opens its eyes

c. [Body part]: *[Intloko] i-vula [amehlo]  
* The head opens its eyes

(81)  
a. [Human]: *[UZolani] u-qhwaba [amaphiko]  
*Zolani flaps his wings

b. [Animal]: [Intaka] i-qhwaba [amaphiko]  
The bird flaps its wings

c. [Body part]: *[Isifuba] si-qhwaba [amaphiko]  
* The chest flaps its wings

(82)  
a. [Human]: [Umntwana] u-songa [izandla]  
[Umntwana] u-khwabasha [izandla]  
The child folds his hands

b. [Animal]: *[Inkomo] i-songa [izandla]  


*The back folds its hands

(83) a. [Human] : [Umfazi] u-hlafuna [amazinyo]
The woman chews teeth

The horse chews teeth

The mouth chews teeth

(84) a. [Human] : [UNomsa] u-tshixiza [amazinyo]
Nomsa grinds her teeth

b. [Animal] : [Ihagu] i-tshixiza [amazinyo]
The pig grinds its teeth

*The mouth grinds its teeth

(85) a. [Human] : [Umfo] u-qhomfa [umnwe]
The fellow flicks his finger

*The pig flicks its finger
c. [Body part]: *[Isandla] si-qhomfa [umnwe]
   * The hand flicks its finger

(86) a. [Human]: [ULudwe] u-nikina [intloko]
   Ludwe shakes his head

b. [Animal]: [Ibhokhwe] i-nikina [intloko]
   The goat shakes its head

c. [Body part]: *[Umqala] u-nikina [intloko]
   * The neck shakes its head

(87) a. [Human]: [Abadlali] b-olula [imilenze]
   The players stretch their legs

b. [Animal]: [Impungutye] y-olula [imilenze]
   The wolf stretches its legs

c. [Body part]: *[Isinqe] s-olula [imilenze]
   * The back stretches its legs

(88) a. [Human]: [UmXhosa] u-shwabana [ingalo]
   The Xhosa wrinkles his arm

b. [Animal]: [Ikati] i-shwabana [ubuso]
   The cat wrinkles its face

c. [Body part]: *[Intloko] i-shwabana [ubuso]
   * The head wrinkles its face

(89) a. [Human]: [UNosisa] u-nqekeza [amazinyo]
   Nosisa bares her teeth
b. [Animal] :  [Inja] i-nqekeza [amazinyo]
The dog bares its teeth

*The mouth bares its teeth*

The following is the table in which the above verbs can be shown:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- goba</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- osula</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- fumbatha</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- cima</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- vala</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- vula</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- qhwaba</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- songa</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- khwabasha</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- hlafuna</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- tshixiza</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- qhomfa</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- nikina</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- olula</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- shwabana</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- nqekeza</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

The verbs 'goba', 'vala', 'vula', 'tshixiza', 'nikina', 'olula', 'shwabana' and 'nqekeza' do not take
inanimate subjects hence they denote actions done by animate subjects, 'osula, 'songa' and 'qhomfa' take only human subjects as they express what is done by humans while 'qhwaba' takes only animal subjects.

External arguments of the above crane verbs seem to take the theta-role of theme, as they are characterised as changing the position or condition or as being in a state or position. The following nouns umqolo, umsila, impumlo, amanqindi, amehlo, amaphiko, izandla, amazinyo, umnwe, intloko, imilenze, ingalo, ubuso and amazinyo are internal arguments since they appear as sisters to their predicates or verbs which are heads within the verb phrases. They take the thematic-role of patient since they are affected by the actions expressed by the verbs.

2.3.3.4 VERBS OF BODILY-INTERNAL STATE OF EXISTENCE

Verbs of bodily-internal state of existence describe a physical state of the subject that typically is a reflex of a particular psychological state.

(90) a. [Human] : [Intombazana] i-ya-chachatheka
    The girl is shivering

b. [Animal] : [Ihagu] i-ya-chachatheka
    The pig is shivering

c. [Body part] : [Izandla] zi-ya-chachatheka
    The hands are shivering

(91) a. [Human] : *[Umfana] u-ya-duduzela
    *The young man is shaking

    *The goat is shaking
c. [Body part] : [Umzimba] u-ya duduzela
The body is shaking

(92) a. [Human] : [Umkhwetha] u-ya-gubha
The arm is trembling

b. [Animal] : [Ingada] i-ya-gubha
The wild cat is trembling

*The arm is trembling

(93) a. [Human] : [Intombi] i-ya-bhanyalaza
The girl is writhing

b. [Animal] : [Inyoka] i-ya-bhanyalaza
The snake is writhing

The tail is writhing

(94) a. [Human] : [USipho] u-ya-xhuzula
Sipho is jerking

b. [Animal] : [Inkomo] i-ya-xhuzula
The cow is jerking

The leg is jerking
(95) a. [Human] : [Umfo] u-ya-ngcangcazela
The fellow is trembling

b. [Animal] : [Ibhokhwe] i-ya-ngcangcazela
The goat is trembling

*The foot is trembling

(96) a. [Human] : *[UNomsa] u-ya-dikizela
*Nomsa is twitching

*The cat is twitching

The eye is twitching

(97) a. [Human] : [Inxila] li-ya-didizela
The drunkard is staggering

*The goat is staggering

* The leg is staggering

The following is the table in which the above verbs can be shown:
2.3.3.5 SUFFOCATE VERBS

Suffocate verbs relate to the disruption of breathing, they differ from each other with respect to means. They are often considered to either lexicalise or entail death and consequently, have sometimes been included among the verbs of killing.

(98) a. [Human] : [Umuntu] u-ya-miwa
   The person is suffocated

   b. [Animal] : [Ikati] i-ya-miwa
   The cat is suffocated

   The oesophagus is suffocated
The following is the table in which the above verbs can be shown:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- miwa</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- krwitsha</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- futhanisela</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

The verbs 'krwitsha' and 'futhanisela' do not take animate subjects.

The external arguments of these verbs seem to take the thematic role of patient since they are disadvantaged from the actions expressed by the predicates or verbs.
2.3.3.6. VERBS OF BODILY STATE AND DAMAGE TO THE BODY

2.3.3.6.1. PAIN VERBS

These verbs of bodily state can be used either transitively or intransitively. The subject of these verbs is a body part whose possessor experiences the state. When used transitively, the object is the experiencer of the state; and, therefore, understood as the possessor of the body part expressed in the subject position.

Intransitive verbs:

(101) a. [Human] : *[Umfazi] u-ya-qaqamba
   *The woman is aching

   *The dog is aching

   The legs are aching

(102) a. [Human] : [Ubhuti] u-limele
   Brother is injured

   The donkey is injured

   The arm is injured

(103) a. [Human] : *[Umfundi] u-ya-baba
   *The learner is itching

* The horse is itching

c. [Body part]: [Iihlo] li-ya-baba
   The eye is itching

(104) a. [Human]: *[UNomasonto] u-ya-rhawuzela
   *Nomasondo is itching

b. [Animal]: *[Ufudo] lu-ya-rhawuzela
   *The tortoise is itching

c. [Body part]: [Ubuso] bu-ya-rhawuzela
   The face is itching

The above verbs can be shown in the table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- qaqamba</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- limele</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- baba</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- rhawuzela</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

The verbs ‘qaqamba’, ‘baba’ and ‘rhawuzela’ do not take animate subjects.

Arguments for the above verbs seem to take the thematic-role of patient.

Transitive verbs:

(105) a. [Human]: [Utata] u-limaza [isandla]
   Father hurts his hand
b. [Animal] :  [Inkonyana] i-limaza [umsila]
The calf hurts its tail

The nails hurt the skin

(106) a. [Human] :  [UNDopho] u-hlungisa [abazali]
Ndopho troubles his parents

*The dog troubles the cat

The leg troubles the groin

These verbs can be shown in the following table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- limaza</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- hlungisa</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

The verb ‘hlungisa’ does not take animal subject as it indicates what can be done by humans.

External arguments of the above verbs seem to take the thematic-role of theme as they are characterised as changing their position or condition as being in a state or position. The nouns isandla, umsila, ufele, abazali and inyonga are internal arguments since they appear as sisters to their predicates or verbs which are heads within the verb phrases. They take the thematic-role of patient as they are affected by the actions expressed by the verbs.
2.3.3.6.2. TINGLE VERBS

These verbs of bodily state are only used intransitively. The subject is a body part whose possessor experiences the state.

(107) a. [Human] : [UTemba] u-ya-tsha
   Themba is burning

   b. [Animal] : [Ihagu] i-ya-tsha
   The pig is burning

   The face is burning

   *The teacher is pounding

   *The bull is pounding

   c. [Body part] : [Intloko] i-ya-nkenketha
   The head is pounding

(109) a. [Human] : *[Intombi] i-ya-geqeza
   *The girl is spinning

   *The donkey is spinning

   c. [Body part] : [Intloko] i-ya-geqeza
   The head is spinning
(110) a. [Human] : *[Umntwana] u-ya-ngongoza
*The child is throbbing

*The cow is throbbing

c. [Body part] : [Intliziyo] i-ya-ngongoza
The heart is throbbing

(111) a. [Human] : *[Umfazi] u-ya-tshotshozela
*The woman is itching

*The dog is itching

The eye is itching

(112) a. [Human] : *[Inkwenkwe] i-ya-shwabana
*The boy is cramping

*The fowl is cramping

c. [Body part] : [Isandla] si-ya-shwabana
The hand is cramping

(113) a. [Human] : [Umfazi] u-ya-gxadazela
The woman is wabbling

b. [Animal] : [Inja] i-yagxadazela
The dog is wabbling
*The ear is wabbling

(114)  a. [Human] : *[UMongezi] u-ya-thuthumba
*Mongezi is aching

*The dog is aching

c. [Body part] : [Ibunzi] li-ya-thuthumba
The forehead is aching

(115)  a. [Human] : *[Umfana] u-ya-ntlontlozela
*The young man is itching

*The zebra is itching

c. [Body part] : [Impumlo] i-ya-ntlontlozela
The nose is itching

The above verbs can be shown in the following table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- tsha</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- nkenketha</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- geqezza</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- ngongoza</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- tshotshozela</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- shwabana</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- gxadazela</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>- thuthumba</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- ntlontlozela</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>
All the above verbs save ‘tsa’ and ‘gxadazela’ do not take animate subjects, and ‘gxadazela’ does not take an inanimate subject.

External arguments of tingle verbs seem to take the thematic-role of patient since they are characterised as changing their position.

2.3.3.6.3. HURT VERBS

Hurt verbs relate to the occurrence of damage to the body through a process that is not under the control of the person that suffers the damage. The subject involuntary injures himself or herself and does not intentionally inflict an injury on himself or herself. They can be used either transitively or intransitively.

Intransitive verbs:

(116) a. [Human] : [UNobambo] u-ya-gruzuka
Nobambo is bruising

b. [Animal] : [Inkomo] i-ya-gruzuka
The cow is bruising

The leg is bruising

(117) a. [Human] : [Umuntu] u-ya-ngqubeka
The person is hit against

b. [Animal] : [Ikati] i-ya-ngqubeka
The cat is hit against

c. [Body part] : [Imbande] i-ya-ngqubeka
The femur is hit against
(118) a. [Human] : [UNdim] u-ya-khuthuka
Ndima is abraded

b. [Animal] : [Inja] i-ya-khuthuka
The dog is abraded

c. [Body part] : [Imbande] i-ya-khuthuka
The femur is abraded

(119) a. [Human] : [Inkwenkwe] i-ya-kruneka
The boy is spraining

b. [Animal] : [Ingonyama] i-ya-kruneka
The lion is spraining

c. [Body part] : [Ingqiniba] i-ya-kruneka
The elbow is spraining

(120) a. [Human] : *[Indoda] i-ya-tshisa
*The man is itching

*The elephant is itching

The eyes are itching

These verbs can be shown in the following table thus:
<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- gruzuka</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- ngqubeka</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- khuthuka</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- kruneka</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- tshisa</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

The verb 'tshisa' does not take subjects that are animate.

Arguments of the above sentences seem to take the thematic-role of patient.

Transitive verbs:

(121) a. [Human] : [Umfana] uluma [umlomo]
       The young man bites his lip

       b. [Animal] : [Inja] iluma [umlomo]
       The dog bites the mouth

       The mouth bites the nails

(122) a. [Human] : [Ungqirha] w-ophula [izinyo]
       The doctor breaks the tooth

       b. [Animal] : [Inkomo] y-ophula [izibonda]
       The cow breaks the poles

       c. [Body part] : [Isandla] s-ophula [intonga]
       The hand breaks the stick
(123) a. [Human] : [Umama] u-chachambe [umlenze]
Mother has fractured her leg

b. [Animal] : [Inkabi] i-chachambe [iimbambo]
The ox has fractured its ribs

c. [Body part] : [Ingalo] i-chachambe [isihlala]
The arm has fractured the wrist

Sipho pricks the finger

*The bee pricks the boy

The nail pricks its owner

(125) a. [Human] : [UZingisa] u-gqabhuza [ithumba]
Zingisa raptures the boil

*The lion raptures the boil

c. [Body part] : *[Isandla si-gqabhuza [ithumba]
* The hand raptures the boil

(126) a. [Human] : [Usana] lu-krwempa [isilonda]

[Usana] lu-krwentsa [isilonda]
The baby scratches the wound
b. [Animal] : [Ikati] i-krwempa [umntwana]
[Ikati] i-krwentsa [umntwana]
The cat scratches the child

*[Umlomo] u-krwentsa [isilonda]
The mouth scratches the wound

(127) a. [Human] : [Umfana] u-qangqulula [ufele]
The young man skins the skin

*The dog skins the skin

*The hand skins the skin

(128) a. [Human] : [Intombi] i-gruzuka [idolo]
The girl skins her knee

b. [Animal] : [Ihagu] i-gruzuka [impumlo]
The pig skins its nose

The face skins the cheek

(129) a. [Human] : [Inkwenkwe] i-jija [iqatha]
The boy turns the ankle

*The cat turns its ankle

c. [Body part] : [Isandla] si-jija [ivili]
The hand turns the wheel

(130) a. [Human] : [UThemba] u-sika [iinziphoph]

[UThemba] unqumla [iinzipho]
Themba cuts his nails

b. [Animal] : *[Impuku] i-sika [iinziphoph]

*[Impuku] i-nqumla [iinziphoph]
*The mouse cuts the nails

c. [Body part] : *[Ingalo] i-sika [iinziphoph]

*[Ingalo] i-nqumla [iinziphoph]
*The arm cuts the nail

(131) a. [Human] : [Umfo] u-xobula [isikhoko]
The fellow peels off the scab

*The tortoise peels off the scab

*The finger peels off the scab

(132) a. [Human] : [Umdlali] w-onzakalisa [umqolo]
The player hurts his back
The above verbs can be illustrated in the following table thus:

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- luma</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- ophula</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- chachambe</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- hlabo</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- gqabhuza</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- krwemba</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- krwentsa</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- qangqulula</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- gruzuka</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- jija</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>- sika</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- nqumla</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- xobula</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- onzakalisa</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The verbs ‘hlaba’ and ‘jija’ do not take subjects that are animal as they express the actions that are performed by humans. The verbs ‘qangqulula’, ‘sika/nqumla’, ‘xobula’ and ‘onzakalisa’ only take subjects that are human, and the verb ‘kwempa/krwentsa’ does not take inanimate subjects.
External arguments for the following verbs luma, chachambe, hlaba, gruzuka, jija and onzakalisa seem to take the thematic-role of theme as they are characterised as changing their position or condition or as being in a state or position. External arguments for the remainder of verbs, i.e. gqabhuza, krwempa, krwentsa, gangqulula, sika, nqumla and xobula seem to take the thematic-role of agent hence they are intenders of actions denoted by the verbs. There is a property of will or intention attributable to them. The following nouns umlomo, iinizipho, izinyo, izibonda, intonga, umlenze, iimbambo, isihlahla, umnwe, umninilo, ithumba, isilonda, isilonda, ufele, idolo, impumlo, isidlele, iqatha, ivili, iinizipho, iinizipho, isikhoko and umqolo are internal arguments as they appear as sisters to their predicates or verbs which are heads within the verb phrases. They take the thematic-role of patient since they are affected by the actions expressed by the verbs.

2.3.3.6.4 VERBS OF CHANGE OF BODILY STATE

These verbs describes the changes in the states of humans, and hence take only animate subjects.

(133) [Human] : [Umfazi] u-ya-mbatsha
The woman is blanching

(134) [Human] : [Intombi] i-ya-yoba
The girl is swooning

(135) [Human] : [Umfana] u-juba isiduli
The young man faints

(136) [Human] : [Umntu] u-fa isiqqa
The person faints

The above verbs can be illustrated in the following table thus:
External arguments for the above verbs of change of bodily state seem to take the thematic-role of patient.

### 2.4 SUMMARY

Firstly the difference between lexical-semantic representation was highlighted. The second section looked at the discussion on lexical syntactic representation which does not concern itself with the semantic relation between the argument and the predicate, but focuses on the predicate argument structure (PAS). PAS of a verb indicates the number of arguments that a verb takes. A description of a verb in terms of the number of arguments it takes was given, hence, we have one-place predicates, two place predicates and three place predicates. One looked at the types of arguments, i.e. the internal argument and external argument. An internal argument is the NP argument in the subject position. An internal argument is the argument that is in the position that is sub-categorised by the verb. A difference was made between the types of internal argument, i.e. direct and indirect arguments. An NP argument is indirect if it assigned a theta role by a preposition.

An NP argument is direct if it is assigned a theta-role directly by the verb. Lastly, in the second section one looked at the PAS of the verbs involving the body, where some of these verbs are intransitive while others are transitive.

In the third section firstly we looked at the requirements of the theta-theory, which is concerned with the assignment of thematic-roles to sentential constituents. According to the theta-criterion each argument is assigned to one and only one theta-role, and each theta-role is assigned to one and only

<table>
<thead>
<tr>
<th>VERBS</th>
<th>HUMAN</th>
<th>ANIMAL</th>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>- mbatsha</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- yoba</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- juba</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- fa</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
one argument. A list of thematic-roles has been made and it consists of agent, experiencer, theme, patient, recipient, benefactive (beneficiary), instrument, malefactive, purpose, location, source and goal.

Secondly the focus was on the features nouns have, the following features were identified; human, animal, animate, inanimate, concrete, abstract and body part. Thirdly an interpretation of the arguments of the verbs involving the body was made. Each category of verbs has been described and under it examples of sentences have been given where each verb is used in three sentences. The subject in the first sentence is [+human], in the second sentence is [+animal] and in the third sentence is [+body part]. In some instances it has been noticed that it is not possible for a verb to be used with a subject that is either [+human], [+animal] or [+body part]. In such instances in the tables a feature [-] has been used to show that it is not possible for that particular subject to be used with that particular verb. Also the subjects have been assigned thematic-roles according to what the verbs express. For internal arguments this has also been done, i.e. each internal argument is assigned a thematic-role according to what the verbs express. Types of arguments assigned by the verbs dealt with above are as follows:

**Verbs of bodily processes:**

<table>
<thead>
<tr>
<th>Verb Category</th>
<th>Thematic Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiccup verbs</td>
<td>Theme</td>
</tr>
<tr>
<td>Breathe verbs</td>
<td>Theme</td>
</tr>
<tr>
<td>Verbs of nonverbal expression</td>
<td>Theme</td>
</tr>
<tr>
<td>Intransitive verbs</td>
<td>Theme, Experiencer</td>
</tr>
<tr>
<td>Transitive verbs</td>
<td>Theme (external arguments), Patient (internal arguments)</td>
</tr>
</tbody>
</table>

**Verbs of gestures / signs involving body parts:**

<table>
<thead>
<tr>
<th>Verb Category</th>
<th>Thematic Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curtsey verbs</td>
<td>Theme</td>
</tr>
<tr>
<td>Snooze verbs</td>
<td>Theme</td>
</tr>
<tr>
<td>Flinch verbs</td>
<td>Theme</td>
</tr>
<tr>
<td>Wink verbs</td>
<td>Theme (external arguments), Patient (internal arguments)</td>
</tr>
<tr>
<td>Crane verbs</td>
<td>Theme (external arguments), Patient (internal arguments)</td>
</tr>
</tbody>
</table>
Verbs of bodily-state of existence: Theme

Suffocate verbs: Patient

Verbs of bodily state and damage to the body:

Pain verbs:
- Intransitive verbs: Patient (internal arguments)
- Transitive verbs: Theme (external arguments)
  Patient

Tingle verbs: Patient

Hurt verbs:
- Intransitive verbs: Patient
- Transitive verbs: Theme and Agent (external arguments)
  Patient (internal arguments)

Verbs of change of bodily state: Patient.
CHAPTER 3 CHARACTERISTICS OF VERBS INVOLVING THE BODY

The chapter will look at the characteristics of verbs involving the body as the heading suggests. In the first section two examples of sentences will be given under each verb category. The second section will look at what a cognate object is and test as to whether the verbs involving the body do take cognate objects or not. The third section will look at the passive construction, where a summary of the passive with intransitive and transitive verbs will be given, followed by the use of the verbs involving the body in the passive construction alone and with other sentential constituents. The fourth section will look at the locative indicating human, the test will be to establish as to whether these verbs can be used with such locatives or not. Lastly the focus will be on the applicative followed by an Infinitival clause. The chapter will be concluded by highlighting the important points discussed in the whole chapter.

3.1. THE VERBS INVOLVING THE BODY

In this section a list of the categories of verbs involving the body will be given with two examples which are representative of these verbs.

3.1.1. VERBS OF BODILY PROCESSES

3.1.1.1. HICCUP VERBS

(1) Utata uyarhona
Father is snoring

(2) Usana luyathimla
The baby is sneezing

3.1.1.2. BREATHE VERBS

(3) Umdlali uyabila
The player is sweating

(4) UNomsa uyaphemula
Nomsa is breathing
3.1.2. VERBS OF NONVERBAL EXPRESSION

Intransitive verbs:
(5) Umfazi uyakhwina
    The woman is whining
(6) Intombi iyanqwina
    The girl is groaning

Transitive verbs:
(7) UThemba ujoja ivumba
    Themba smells a smell
(8) Umfazi uhleka intsini
    The woman laughs a laughter

3.1.3 VERBS OF GESTURES / SIGNS INVOLVING BODY PARTS

3.1.3.1. CURTSEY VERBS

(9) Unfundisi uyagoba
    The priest is kneeling
(10) Umlimi uyakhahlela
    The farmer is saluting

3.1.3.2. SNOOZE VERBS

(11) Usana luyalala
    The baby is sleeping
(12) Umntu uyozele
    The person is dozing

3.1.3.3. FLINCH VERBS

(13) Umntwana uyarhoxa
The child is cringing

(14) Umfazi uyajijitheka
The woman is wincing

3.1.3.4. WINK VERBS

(15) Umfazi uqhwanyaza amehlo
The woman winks her eyes

(16) Ababukeli baqhwaba izandla
The spectators clap their hands

3.1.3.5. CRANE VERBS

(17) Indoda igoba umqolo
The man archs his back

(18) Umntwana wosula impumlo
The child cleans the nose

3.1.4 VERBS OF BODILY-INTERNAL STATE OF EXISTENCE

(19) Intombazana iyachachatheka
The girl is shivering

(20) Umkhwetha uygubha
The initiate is trembling

3.1.5. SUFFOCATE VERBS

(21) Umntu uyamiwa
The person is suffocated

(22) Isandla siyakrwitsha
The hand stifling
3.1.6 VERBS OF BODILY STATE AND DAMAGE TO THE BODY

3.1.6.1. PAIN VERBS

Intransitive verbs:
(23) Imilenze iyaqaqamba
    The legs are aching
(24) Ilihlo liyababa
    The eye is itching

Transitive verbs:
(25) Utata ulimaza isandla
    Father hurts his hand
(26) UNdopho uhlungisa abazali
    Ndopho troubles his parents

3.1.6.2. TINGLE VERBS

(27) UThemba uyatsha
    Themba burns
(28) Intloko iyankenketha
    The head is pounding

3.1.6.3. HURT VERBS

Intransitive verbs:
(29) UNobambo uyagruzuka
    Nobambo is bruising
(30) Inkwenkwe iyakruneka
    The boy is spraining

Transitive verbs:
(31) Umfana uluma umlebe
The young man bites his lip

The doctor breaks the tooth

3.1.6.4. VERBS OF CHANGE OF BODILY STATE

The woman is blanching

The girl is swooning

3.2 COGNATE VERBS

In this section one will define a cognate and test as to whether which verbs in section 1 and those listed in Chapter 2 will accept cognate objects. The test will be done by trying two diagnostics for objecthood on these objects, that is, objectival agreement and movement in the passive constructions (these are reflected in a and b respectively). If the cognate object passes both tests, it will be a syntactic object, otherwise it will be an adjunct if it fails both tests.

A cognate object is a sentential constituent which may appear with some intransitive verbs and it appears to be a direct object noun phrase whose head noun indicates the event or state nominalization of the verb. A cognate object is not an argument hence it is an adjunct of the verb. The status of it being an adjunct is determined by the semantic relation between the head nouns and the verb rather than by a lexical property of the head noun.

The following sentences will be tested using the two above-mentioned diagnostics to see whether they will accept cognate objects or not:
3.2.1. **VERB OF BODILY PROCESSES**

3.2.1.1. **HICCUP VERBS**

In the case of hiccup verbs only one verb will accept a cognate object:

(35) **Umntwana ubhodla isabhongo**

The child belches eructation

a. Diagnostic for AgrO

[Isabhongo;] umntwana u-ya-si; -bhodla
Eructation the child is belching it

b. Movement in passive

[Isabhongo;] siyabhodlwa [tj] ngumntwana
Eructation is being belched by the child

The cognate object **isabhongo** above is a complement of the verb and not an adjunct. Thus the verb will assign an argument to the NP which will be theme.

3.2.1.2. **BREATHE VERBS**

Five breathe verbs may appear with a cognate object:

(36) **Umdlali ubila umbilo**

The player sweats sweat

(37) **Umfazi wopha igazi**

The woman bleeds blood

(38) **UNomsa uphefumla umphefumlo**

Nomsa breathes breath

(39) **Inkwenkwe igabha umgabho**

The boy vomits vomiting

(40) **Amantombazana atshica amathe**

The girls spit saliva
3.2. VERBS OF NONVERBAL EXPRESSION

Intransitive verbs:

Only two verbs will accept a cognate object.
(41) Umfazi ukhwina umkhwino
    The woman whines the whine

(42) Intombi incwina incwina
    The girl groans the groan

a. Diagnostic for AgrO
[Umkhwino;] umfazi u-ya-\textit{wu}; -khwina
    The whine the woman is whining it
[Incwina;] intombi i-ya-\textit{yi}; -ncwina
    The groan the girl is groaning it

b. Movement in passive
[Umkhwino;] uyakhwina [t;] ngumfazi
    The whine is being whined by the woman
[Incwina;] iyancwinwa [t;] yintombi
    The groan is being groaned by the girl

The cognate objects \textit{umkhwino} and \textit{incwina} are complements of the verbs above and are not adjuncts. These verbs assign an argument to the NP which will be a theme.

Transitive verbs:
Four verbs will accept a cognate object.

(43) UThemba ujoja ivumba
    Themba smells the smell

(44) UNosisa uncuma uncumo
    Nosisa smiles the smile

(45) Intombi ihleka intsini
    The young man giggles the laughter

a. Diagnostic for AgrO
[Ivumba;] uThemba u-ya-\textit{li}; -joja
    The smell Themba is smelling it
The cognate objects ivumba, uncumo and intsini are complements of the above verbs and not adjuncts. These verbs will assign an argument to the NP which will be a theme.

3.2.3. VERBS OF GESTURES / SIGNS INVOLVING BODY PARTS

3.2.3.1. & 3.2.3.2. CURTSEY AND FLINCH VERBS
No curtsey and flinch verbs will accept a cognate object.

3.2.3.3. SNOOZE VERBS
Only one snooze verb will accept a cognate object

(47) Umntwana ulala ubuthongo
The child sleeps the sleep

a. Diagnostic for AgrO
The sleep the child is sleeping it

b. Movement in passive

The sleep is being slept by the child

The cognate object *ubuthongo* above is a complement of the verb and not an adjunct, thus the verb will assign an argument to the NP which is a theme.

3.2.3.4. WINK VERBS

Only one wink verb will allow a cognate object.

(48) Umfazi uqhwanyaza amehlo
The woman winks the eyes

a. Diagnostic for AgrO

[Amehlo;] umfazi u-ya-wa; -qhwanyaza
The eyes the woman is blinking them

b. Movement in passive

[Amehlo;] ayaqhwanyawa [t; ] ngufazi
The eyes are being blinked by the woman

The cognate object *amehlo* is a complement of the verb and not an adjunct, thus the verb will assign an argument to the NP which is a theme.

3.2.3.5. CRANE VERBS

Only three crane verbs will allow a cognate object.

(49) Inkwenkwe ifumbatha inqindi
The boy clenches the fist
(50) Umfazi ukhwabasha izandla
   The woman folds the hands

(51) Indoda inikina intloko
   The man shakes the head

   a. Diagnostic for AgrO
   [Inqindi; nqwenkwe i-ya-li; fumbatha
   The fist the boy is clenching it
   [Izandla; nqumfazi u-ya-zis; khwabasha
   The hands the woman is folding them
   [Intloko; yindoda i-ya-yi; nikina
   The head the man is shaking it

   b. Movement in passive
   [Inqindi; nqwenkwe liyafunjathwa [t; nqwenkwe
   The fist is being clenched by the boy
   [Izandla; nqumfazi ziyakhwayashwa [t; nqumfazi
   The hands are being folded by the woman
   [Intloko; yindoda iyanikinwa [t; yindoda
   The head is being shaken by the man

The cognate objects **inqindi**, **izandla** and **intloko** are complements of the verbs above and not adjuncts. Thus these verbs will assign an argument to the NP which will be a theme.

3.2.4. **VERBS OF BODILY-INTERNAL STATE OF EXISTENCE**
No verbs of bodily-internal state of existence will accept a cognate object.

3.2.5 **SUFFOCATE VERBS**
No suffocate verbs will accept a cognate object.

3.2.6. **VERBS OF BODILY STATE AND DAMAGE TO THE BODY**
3.2.6.1., 3.2.6.2. & 3.2.6.3. **PAIN, TINGLE VERBS AND VERBS OF CHANGE OF BODILY STATE**
No pain, tingle verbs and verbs of change of bodily state will accept a cognate object.
3.2.6.4. HURT VERBS

Only one hurt verb will accept a cognate object.

(52) Umfana uqangqulula ufele
     The young man skins the skin

     a. Diagnostic for AgrO
        [Ufele] umfana u-ya-lu -qangqulula
        The skin the young man is skinning it

     b. Movement in passive
        [Ufele] luyaqangqululwa [t] ngumfana
        The skin is being skinned by the young man

The cognate object ufele is a complement of the verb and not an adjunct, thus the verb will assign an argument to the NP which will be a theme.

It could seem that it appears that a number of the verbs involving the body do take cognate objects as it is shown above. Another point which needs mentioning here is that it seems that it is not right in spoken language to use some of the verbs with cognate objects but concerning the grammatical structure these sentences are fine.

3.3. PASSIVE

In this section one will look at the passive construction, where a summary of the passive with intransitive and transitive verbs will be given, followed by the use of verbs involving the body in the passive construction alone and with other sentential constituents.

Intransitive verbs:

The most important effect of passive morphology on the structure of sentences is that it always de-externalises the subject argument of the clause. The external theta-role assigned may then occur in some other syntactic position as agent or theme. As we know intransitive verbs are one-place predicates.
with one argument which is assigned a theta-role, so if this argument is de-externalised and does not appear within the clause in another position, it will mean that intransitive passive verbs will be predicates with no argument at all. When the passive affix -w- is added onto a verb, its subject position will thus be empty and the agreement in the Inflection will receive the feature [+existential] which will be spelled out as ku-. The existential pro associated with ku- may only appear in non-argument positions in isiXhosa and thus may never receive a theta-role. The missing argument is always implied. Sentences like this in the positive form are quite general in isiXhosa:

(53) Kuyalilwa
There is being wept

and their negative counterparts are frequently used for prohibitions:

(54) Akulilwa
There is not being wept (No crying)

Transitive verbs:
The effect of the passive morpheme is to de-externalise the subject argument of the sentence so that it may occur somewhere else as agent or theme. The position of the subject of the sentence becomes empty which means it has no theta-role. The other effect is that the object of the sentence may occupy the empty subject position:

(55) [Oku kutya] kungatiwa
This food can be eaten

The subject of the above sentence is now ‘oku kutya’ and it came as an object with a theta-role determined by the ‘tya’. The vacated position is now occupied by a trace (Du Plessis & Visser, 1992). The effect of the passive morphology is that it takes away the objective case of ‘oku kutya’ and gives it the nominative case through the agreement morpheme ku-. The existential ku- is frequently used with passive verbs. In transitive verbs it happens that the object remains in its position and the existential pro associated with ku- has to be inserted in the empty subject position:

(56) Kutyiwe ukutya
There were eaten food

The object ‘ukutya’ remains its argument status and also its thematic-role of theme. It is not assigned the objective case because of the passive morpheme. Ku- is to receive the nominative case. Transitive verbs in isiXhosa may undergo argument reduction and they may be used without any arguments but only with the existential ku- present on the verb:
(57) Xa kutyiwa kuyathulwa
   When there is being eaten it is kept silent

Passive verbs may also be found as stems of Nominal Infinitives:

(58) Andazi ukuba [kwakutyiwa nini kweli khaya]
   I do not know when food will be eaten in this home

The following are passive sentences with verbs involving the body mentioned in section 1:

3.3.1. VERBS OF BODILY PROCESSES
3.3.1.1. HICCUP VERBS

These verbs are intransitive verbs. Thus they need to accept an empty pro co-indexed with ku as the subject:

(59) Ku-ya-rhon-w-a
    There is being snored

(60) Ku-ya-thiml-w-a
    There is being sneezed

The de-externalised argument may appear in copulative plural:

(59) Kuyarhonwa ngamaxhego
    There is being snored by the old men

(60) Kuyathimlwa ziinkewu
    There is being sneezed by the fellows

3.3.1.2. BREATHE VERBS

These verbs are intransitive verbs. Thus they need to accept an empty pro co-indexed with ku as the subject:

(61) Ku-ya-bil-w-a
    There is being sweat

(62) Ku-ya-phefuml-w-a
    There is being breathed

The de-externalised argument may appear in copulative plural:

(63) Kuyabilwa ngabadlali
There is being sweated by players

(64) Kuyaphesifumila ziijana

There is being breathed by the puppies

3.3.2. VERBS OF NONVERBAL EXPRESSION

Some of these verbs are intransitive and others are mono transitive.

Intransitive verbs:

They need to accept an empty pro co-indexed with ku as the subject:

(65) Ku-ya-khwin-w-a

There is being whined

(66) Ku-ya-ncwin-w-a

There is being groaned

The de-externalised argument may appear in a copulative plural:

(67) Kuyakhwinwa ngabafazi

There is being whined by women

(68) Kuyancwinwa ngabaguli

There is being groaned by patients

Transitive verbs:

With these verbs there are three possibilities in the passive construction, namely:

a. pro with ku

(69) Ku-joj-w-a ivumba

There is being smelt the smell

(70) Ku-hlek-w-a intsini

There is being laughed the laughter

In this instance the empty pro is co-indexed with ku as the subject.

b. Move NP

(71) [Ivumba] liyajowwa [tj]

The smell is being smelt
(72) \([\text{Intsini}_i] \text{ iyahlekwa } [t_t]\]  
The laughter is being laughed  
The object with its theta-role of theme has moved to the subject position and left a trace.

c. With de-externalised argument  
(73) \(\text{Ivumba liyajojwa ngu Themba}\)  
The smell is being smelt by Themba  
(74) \(\text{Intsini ihlekwa ngabafazi}\)  
The laughter is laughed by the women  
The de-externalised argument may appear in a copulative (either in plural or singular).

3.3.3. VERBS OF GESTURES / SIGNS INVOLVING BODY PARTS  
Verbs under curtsey, snooze and flinch categories are intransitive while those under wink and crane are mono transitive.

3.3.3.1. CURTSEY VERBS  
They need to accept an empty \(\textpro\) co-indexed with \(\textku\) as the subject:

(75) \(\text{Ku-ya-goty-w-a}\)  
There is being knelt  
(76) \(\text{Ku-ya-kahlel-w-a}\)  
There is being saluted  
The de-externalised argument may appear in a copulative plural:

(77) \(\text{Kuyagotywa ngabefundisi}\)  
There is being knelt priests  
(78) \(\text{Kuyakahlelwa ngabalimi}\)  
There is being saluted by farmers

3.3.3.2. SNOOZE VERBS  
They need to accept an empty \(\textpro\) co-indexed with \(\textku\) as the subject:

(79) \(\text{Ku-ya-lal-w-a}\)  
There is being slept
(80) Ku-y-ozel-w-a
There is being dozed

The de-externalised argument may appear in a copulative plural:

(81) Kuyalalwa ziintsana
There is being slept by the babies

(82) Kuyozelwa ngabafana
There is being dozed by the young men

3.3.3.3. FLINCH VERBS

They need to accept an empty pro co-indexed with ku as the subject:

(83) Ku-ya-rhox-w-a
There is being cringed

(84) Ku-ya-jijithek-w-a
There is being winced

The de-externalized argument may appear in copulative plural:

(85) Kuyarhoxwa ngabantwana
There is being cringed by children

(86) Kuyajijithekwa ngabafazi
There is being winced by women

3.3.3.4. WINK VERBS

a. pro with ku

(87) Ku-qhwanyaz-w-a amehlo
There is being blinked the eyes

(88) Ku-qhwaty-w-a izandla
There is being clapped the hands

The empty pro is co-indexed with ku as the subject:

b. Move NP

(89) [Amehlo] ayaqhwanyazwa [t1]
The eyes are being blinked

(90) [Izandla] ziyaqhwatwa [t1]
The hands are being clapped
The object with its theta-role of theme has moved to the subject position and left a trace.

C. With de-externalised argument

(91) Amehlo ayaqhwayazwa ngumfazi
   The eyes are being blinked by the woman

(92) Izandla ziyaqhatwya ngababukeli
   The hands are being clapped by the spectators

The de-externalised argument may appear in a copulative (either plural or singular).

3.3.3.5. CRANE VERBS

a. pro with ku

(93) Ku-goty-w-a umqolo
   There is being arched the back

(94) K-osul-w-a impumlo
   There is being cleaned the nose

The empty pro is co-indexed with ku as the subject.

b. Move NP

(95) [Umqolo;] uyagotywa [t₁]
   The back is being arched

(96) [Impumlo;] iyosulwa [t₁]
   The nose is being cleaned

The object with its theta-role of theme has moved to the subject position and left a trace.

c. With de-externalised argument

(97) Umqolo ugotywa yindoda
   The back is being arched by the man

(98) Impumlo yosulwa ngumntwana
   The nose is being cleaned

The de-externalised argument may appear in copulative (either plural or singular).
3.3.4. VERBS OF BODILY-INTERNAL STATE OF EXISTENCE

These verbs are intransitive, thus they need to accept an empty pro co-indexed with ku as the subject:

(99) Ku-ya-chachathek-w-a
    There is being shivered

(100) Ku-ya-guj-w-a
    There is being trembled

The de-externalised argument may appear in a copulative plural:

(101) Kuyachachathekwa ngamantombazana
    There is being shivered by the girls

(102) Kuyagujwa ngabakhwetha
    There is being trembled by the initiatives

3.3.5. SUFFOCATE VERBS

These verbs are intransitive, thus they need to accept pro co-indexed with ku as the subject:

(103) Ku-ya-mi-w-a
    There is being suffocated

(104) Ku-ya-krwitsh-w-a
    There is being stifled

The de-externalised argument may appear in a copulative plural:

(105) Kuyamiwa ngabantu
    There is being stifled by people

(106) Kuyakrwitshwa ngamadoda
    There is being stifled by men.

3.3.6. VERBS OF BODILY STATE AND DAMAGE TO THE BODY

3.3.6.1. PAIN VERBS

Intransitive verbs:

These verbs need to accept an empty pro co-indexed with ku as the subject:
The de-externalised argument may appear in a copulative plural:

(109) Kuyaqaqanjwa yimilenze
There is being ached by the legs

(110) Kuyabatywa ngamehlo
There is being itched by the eyes

Transitive verbs:

a. pro with ku

(111) Kulinyazwa isandla
There is being hurt the hand

(112) Kuhlungiswa abazali
There is being troubled the parents

The empty pro is co-indexed with ku.

b. Move NP

(113) [Isandla] siyalinyazwa [t₁]
The hand is being hurt

(114) [Abazali] bayahlungiswa [t₁]
The parents are being troubled

The object with its theta role of theme has moved to the subject position and left a trace.

c. With de-externalised argument

(115) Isandla silinyazwa ngutata
The hand is being hurt by father

(116) Abazali bahlungiswa nguNdopho
The parents are being troubled by Ndopho

The de-externalised argument may appear in a copulative (either plural or singular).
3.3.6.2. TINGLE VERBS

These are intransitive verbs, thus they need to accept an empty pro co-indexed with ku as the subject:

(117) Ku-ya-tsh-iw-a
      There is being burnt
(118) Ku-ya-nkenketh-w-a
      There is being pound

The de-externalised argument may appear in a copulative plural:

(119) Kuyatshiwa ngabafazi
      There is being burnt by the women
(120) Kuyankenkethwa ziintloko
      There is being pound by the heads

3.3.6.3. HURT VERBS

Intransitive verbs:

These verbs need to accept an empty pro co-indexed with ku as the subject:

(121) Ku-ya gruzuk-w-a
      There is being bruised
(122) Ku-ya-krunek-w-a
      There is being sprained

The de-externalised argument may appear in a copulative plural:

(123) Kuyagruzukwa ngabantwana
      There is being bruised by the children
(124) Kuyakrunekwa ngabadlali
      There is being sprained by the players

Transitive verbs:

a. pro with ku

(125) Kulunywa umlomo
      There is being bitten the mouth
(126) Kophulwa izinyo
      There is being broken the tooth
The empty pro is co-indexed with ku as the subject.

b. Move NP
(126) [Umlomo₁] uyalunywa [t₁]
The mouth is being bitten
(127) [Izinyo₁] liyophulwa [t₁]
The tooth is being broken

The object f the theta role of theme has moved to the subject position and left a trace.

c. With de-externalised argument
(128) Umlomo uyalunywa ngabafana
The mouth is bitten by young man
(129) Izinyo liyophulwa ngugqirha
The tooth is being broken by the doctor

The de-externalised argument may appear in a copulative (either plural or singular).

3.3.6.4. VERBS OF CHANGE OF BODILY STATE
These verbs are intransitive, thus they need to accept an empty pro co-indexed with ku as the subject:

(130) Ku-ya-mbatsh-w-a
There is being blanched
(131) Ku-ya-yoty-w-a
There is being swooned

The de-externalised argument may appear in a copulative plural:
(132) Kuyambatshwa ngabafazi
There is being blanched by the women
(133) Kuyayotywa ngabafundi
There is being swooned by learners

From the above it would seem that the verbs involving the body do allow to be used in the passive morphology as it has been shown in the examples. The passivised verb can either be used alone or be used with other sentential constituents as reflected in the examples. It also appears that positive passives indicate a universal permission to do something as the negative passives indicate a universal
prohibition. This might be the reason why the arguments of the intransitive verbs in the copulative phrase in sentences are all in plural and for the transitive verbs the arguments in the copulative phrases may be plural or singular. The passive verb can either be used alone or be used with other sentential constituents as reflected in the examples.

3.4. **LOCATIVE**

This section will look at the locatives indicating human, the test will be to establish as to whether the verbs involving the body can be used with such locatives or not.

3.4.1. **VERBS OF BODILY PROCESSES**

3.4.1.1. **HICCUP VERBS**

These verbs will accept animate locatives.

(135) Utata uyahrhona emfazini  
Father is snoring on the woman

(136) Usana luyathimla enkosikazini  
The baby is sneezing on the woman

3.4.1.2. **BREATHE VERBS**

Bila will not accept animate locatives and phefumla will accept animate locatives.

(137) *Umdlali uyabila emhlobeni  
The player is sweating on the friend

(138) UNomsa uyaphefumla enkwenkweni  
Nomsa is breathing on the boy

3.4.2. **VERBS OF NONVERBAL EXPRESSION**

Intransitive verbs:

These verbs will accept locatives.

(139) Umfazi uyakhwina emfaneni  
The woman is whining on the young man
(140) Intombi iyancwina endodeni
    The girl is groaning on the man

Transitive verbs:

Joja will not accept animate locatives and hleka will accept animate locatives.

(141) *UThemba uyajoja emfazini
    Themba is smelling on the woman

(142) Umntwana uyahleka emfazini
    The child is laughing on the woman

3.4.3. VERBS OF GESTURES / SIGNS INVOLVING BODY PARTS

3.4.3.1. CURTSEY VERBS

Goba will not accept animate locatives and khahlela will accept animate locatives.

(143) *Umfundisi uyagoba enkwenkweni
    The priest is kneeling on the boy

(144) Umlimi uyakhahlela enkosini
    The farmer is saluting to the chief

3.4.3.2. SNOOZE VERBS

These verbs will accept animate locatives.

(145) Usana luyalala kuyise
    The baby is sleeping on its father

(146) Umntwana uyozele kunina
    The child is dozing on his mother

3.4.3.3. FLINCH VERBS

These verbs will not accept animate locatives.

(147) *Umfo uyarhoxa enkwenkweni
    The fellow is cringing from the boy

(148) *Umfazi uyajjitheka endodeni
    The woman is wincing on the man
3.4.3.4. **WINK VERBS**

These verbs will not accept animate locatives (both intransitive and transitive)

(149) *Umfazi uyaqhwanyaza emfaneni

The woman is blinking on the young man

(150) *Ababukeli bayaqhwaba emadodeni

The spectators are clapping on men

3.4.3.5. **CRANE VERBS**

These verbs will not accept animate locatives.

(151) *Indoda iyagoba emntwaneni

The man is arching on the child

(152) *Umntwana uyoosula emfazini

The child is cleaning on the woman

3.4.4 **VERBS OF BODILY-INTERNAL STATE OF EXISTENCE**

Chachatheka will accept animate locatives and gubha will not accept animate locatives.

(153) Intombi iyachachatheka emntwaneni

The girl is shivering on the young man

(154) *Umkhwetha uyagubha endodeni

The initiate is trembling on the man

3.4.5 **SUFFOCATE VERBS**

Miwa will not accept animate locatives and krwitsha will accept animate locatives.

(155) *Umntwana uyamiwa emfazini

The child is suffocating on the woman

(156) Isandla siyakrwitsha entombini

The hand is stifling to the girl
3.4.6 VERBS OF BODILY STATE AND DAMAGE TO THE BODY

3.4.6.1 PAIN VERBS

Intransitive verbs:
These verbs will accept animate locatives.
(157) Imilenze iyaqaqamba emfazini
   The legs are aching in the woman
(158) Ilihlo liyababa emdlalini
   The eye is itching in the player

Transitive verbs:
These verbs will not accept animate locatives.
(159) *Utata uyalimaza enkwenkweni
   Father is hurting on the boy
(160) *UNdopho uyahlungisa emantombazaneni
   Ndopho is troubling on the girls

3.4.6.2 TINGLE VERBS

Tsha will accept animate locatives and nkenketha will not accept animate locatives.
(161) Ubuso buyatsha emfazini
   The face is burning on the woman
(162) *Intloko iyankenketha enkwenkweni
   The head is pounding in the boy

3.4.6.3 HURT VERBS

Intransitive:
These verbs will accept animate locatives.
(163) Idolo liyagruzuka emfazini
   The knee is bruising in the woman
(164) Isandla siyakruneka endodeni
   The hand is spraining in the man
Transitive:
These verbs will not accept animate locatives.

(165) *Umfana uyaluma endodeni
   The young man is biting on the man

(166) *Ugqirha uyophula emfazini
   The doctor breaks on the woman

3.4.6.4. VERBS OF CHANGE OF BODILY STATE

These verbs will not accept animate locatives.

(167) *Ubuso buyambatsha emfazini
   The face is blanching in the woman

(168) *Intombi iyayoba emfaneni
   The girl is swooning on the young man

It would seem that certain verbs involving the body do allow human locatives, but certain verbs will never allow such locatives as some of them refer to the actions taking place within the body only. The locatives in the acceptable sentences above have the interpretation of location.

3.5. APPLICATIVE

This section will look at the applicative and the use of the verbs that involve the body with the applicative followed by an Infinitival clause.

The applicative or applied form of the verb is a term which is used for a verbal affix in the derivation of verbs. The applicative affix allows the non-arguments to be increased by one argument. If the applicative affix -el- is added onto an intransitive verb, it changes the verb to a transitive one. The changed verb will thus have both an external and internal argument. The semantic role of this internal argument has been given quite some attention. In the lexical entry for verbs in the lexicon, the PAS of each verb must be given, but not the specified role like theme, benefactive, or source. This is because semantic interpretation of sentences cannot be done at the lexical level.
In general intransitive verbs do not allow infinitives as complements. One major exception to this rule is found with motion verbs. When the intransitive verb is a motion verb, it may take an Infinitive as a complement, but only on condition that the verb with the Infinitive is also a motion verb. To allow a purposive Infinitive the applied affix -el- has to be used with the matrix verb:

(169) Bahambela ukufunda ibanga elithile  
They went to study a certain grade

If the matrix verb is not a motion verb, no Infinitive can appear as complement of such verbs unless the matrix verb is used with the applicative affix -el-:

(170) Ndihlalele ukutya inyama  
I stay to eat meat

The following sentences are sentences with the verbs that involve the body with an applicative followed by an Infinitival clause, those that do not take the Infinitival clause have been left out.

(171) a. *Utata urhona ukulala  
Father snores to sleep  
b. Utata urhonela ukuthini?  
Father snores for what?  
c. Utata urhonela ukulala  
Father snores to sleep

(172) a. *Usana luthimla ukukhohlela  
The baby sneezes to cough  
b. Usana luthimela ukuthini?  
The baby sneezes for what?  
c. Usana luthimela ukukhohlela  
The baby sneezes to cough

(173) a. *Umdlali ubila ukuphumla  
The player sweats to rest  
b. Umdlali ubilela ukuthini?  
The player sweats for what?  
c. Umdlali ubilela ukuphumla
The player sweats to rest

(174) a. *UThemba ujoja ukuva
Thembia smells to feel
b. UThemba ujojela ukuthini?
Thembia smells for what?
c. UThemba ujojela ukuva
Thembia smells to feel

(175) a. *Umkhwetha ugubha ukufunda
The initiate trembles to learn
b. Umkhwetha ugubhela ukuthini?
The initiate trembles for what?
c. Umkhwetha ugubhela ukufunda
The initiate trembles to learn

(176) a. *Isandla sikrwitsha ukubulala
The hand stifles to kill
b. Isanda sikrwitshela ukuthini?
The hand stifles for what?
c. Isandla sikrwitshela ukubulala
The hand stifles to kill

(177) a. *Umlenze uqaqamba ukudumba
The leg aches to swell
b. Umlenze uqaqambela ukuthini?
The leg aches for what?
c. Umlenze uqaqambela ukudumba
The leg aches to swell

(178) a. *Ilihlo libaba ukudumba
The eye itches to swell
b. Ilihlo libabaela ukuthini?
The eye itches for what?
c. Ilihlo libanela ukudumba
The eye itches to swell

(179) a. UThemba utsha ukufa
Themba burns to die
b. UThemba utshela ukuthini?
Themba burns for what?
c. UThemba burns to die

(180) a. *Intloko inkenketha ukuqhekeka
The head pounds to break
b. Intloko inkenkethela ukuthini?
The head pounds for what?
c. Intloko inkenkethela ukuqhekekeka
The head pounds to break

(181) a. *Umfundisi ugoba ukuthandaza
The priest kneels to pray
b. Umfundisi ugoabela ukuthini?
The priest kneels for what?
c. Umfundisi ugoabela ukuthandaza
The priest kneels to pray

(182) a. *Umlimi ukhahlela ukubulisa
The farmer salutes to greet
b. Umlimi ukhahlelela ukuthini?
The farmer salutes for what?
c. Umlimi ukhahlelela ukubulisa
The farmer salutes to greet

(183) a. *Usana lulala ukuphumla
The baby sleeps to rest
b. Usana lulalela ukuthini?
The baby sleeps for what?

c. Usana lulalela ukuphuma
The baby sleeps to rest

(184) a. *Umntu wozela ukulala
The person dozes to sleep

b. Umntu wozelela ukuthini?
The person dozes for what?

c. Umntu wozelela ukulala
The person dozes to sleep

(185) a. *Umfazi ujjitheka ukufa
The woman winces to die

b. Umfazi ujjithekela ukuthini?
The woman winces for what?

c. Umfazi ujjithekela ukufa
The woman winces to die

(186) a. *Umfazi uqhwanyaza ukulila
The woman blinks to cry

b. Umfazi uqhwanyazela ukuthini?
The woman blinks for what?

c. Umfazi uqhwanyazela ukulila
The woman blinks to cry

(187) a. *Ababukeli baqhwaba ukuncoma
The spectators clap to appreciate

b. Ababukeli baqhwabela ukuthini?
The spectators clap for what?

c. Ababukeli baqhwabela ukuncoma
The spectators clap to appreciate

(188) a. *Indoda igoba ukuzimela
The man archs to hide
b. Indoda igobela ukuthini?
The man archs for what?
c. Indoda igobela ukuzimela
The man archs to hide

(189) a. *Umfana uluma ukuhlafuna
   The young man bites to chew
b. Umfana ulumela ukuthini?
The young man bites for what?
c. Umfana ulumela ukuhlafuna
The young man bites to chew

As it has been seen it would seem that certain verbs involving the body do allow to be used with an applicative followed by an Infinitival clause. In the (a) sentences the Infinitival clause appears after the verb. All these sentences are unacceptable, whether the verb is intransitive as rhona or transitive as luma the Infinitival clause will not be accepted. To allow an Infinitival clause to appear after these verbs, the verbs must appear with the applicative -el- as in the (b) and (c) sentences.

3.6. SUMMARY

In conclusion the chapter looked at the characteristics of verbs involving the body, in which two example sentences under each category were given. The other section investigated as to whether the verbs involving the body do take cognate objects, this was done by trying two diagnostics for objecthood on these objects, that is, objectival agreement and movement in the passive constructions. It was found that some verbs do pass the test while others do not. A brief description of what a cognate object is, was given as a sentential constituent which may appear with some intransitive verbs and it appears to be the direct object noun phrase whose head noun indicates the event or state nominalisation of the verb. The third section looked at the passive morphology and where examples provided in section 1 were tested to find out whether the verb can be both used alone in the passive construction and with other sentential constituents. It was found that in isiXhosa both these are possible. The fourth section tested whether these verbs could take a locative which is human and it was found that certain verbs do
allow locatives which are human while others do not allow such locatives. This could be attributed to the fact that some of these verbs express the actions taking place within the human body only. Those that were used in acceptable sentences have the interpretation of location. The last section looked at the verbs involving the body whereby they were forced with an applicative followed by an Infinitival clause. Those that allow to be used with an applicative followed by an Infinitival clause were given. It was found that the verbs involving the body cannot be used with the Infinitival clause whether they are intransitive or transitive. These verbs must appear with the applicative -el-.
CHAPTER 4 CONCLUSION

This chapter will deal with the conclusions of the study as a whole. These conclusions will be based mainly on Chapters 2 and 3 which form the core of the study. Suggestions if any will be given as to how to deal with the verbs involving the body.

Firstly the study concentrated on the difference between lexical-syntactic representation and lexical-semantic representation. Lexical-syntactic representation concerns itself with the predicate argument structure (PAS) not the semantic relation between the argument and the predicate. The PAS of the verb indicates the number of arguments that the particular verb takes. As shown in this study isiXhosa has three types of predicate, namely one-place, two-place and three-place predicates. There are two types of arguments that is, external and internal arguments. According to the predication theory the NP argument which is assigned a theta by the VP via predication must be outside the maximal projection of the verb. This means that the verb may assign a theta role to the NP argument in the subject position and this argument is an external argument. It is the head of the argument structure:

(190) Umdlali uyabila
    The player is sweating

Other arguments that remain are internal to the maximal projection of the verb. The sub-categorical features of a verb indicate the syntactic categories that appear as sisters or complements to that verb which is the head within a verb phrase. The arguments that appear in the position can be distinguished, namely direct and indirect NP arguments. The NP argument which is assigned a theta role directly by the verb is the indirect NP argument. The internal NP which is assigned a theta role by a preposition is an indirect NP argument. The internal NP arguments are assigned their theta roles in syntax under government, i.e. the verb or preposition that assigns a theta role must govern such an internal argument. Direct NP arguments are usually objects of a verb and indirect NP arguments are the objects of a preposition:

(191) Utishala unika abafundi izibalo
    The teacher gives the learners sums

"Abafundi’ is a direct NP argument and “izibalo’ is an indirect NP argument.

Let us look at the verbs involving the body and see how many arguments they assign:
-Verbs of bodily processes
These verbs assign only one argument (external one), this is because they are intransitive.

-Verbs of nonverbal expression
These may assign one or two arguments (external or /and internal) because some of these verbs are intransitive and others are transitive.

-Verbs of gestures or signs involving the body
The verbs under curtsey, snooze and flinch categories assign one argument because they are intransitive. The verbs under wink and crane categories may assign more than one argument as they are transitive.

-Suffocate verbs
These verbs may assign only one argument because they are intransitive.

-Verbs of bodily state and damage to the body
The verbs under pain and hurt categories may assign one or more arguments because some of them are intransitive and others are transitive. The verbs under tingle category and verbs of change of bodily state may assign one argument hence they are intransitive.

Lexical-semantic representation according to Jackendoff (1990) refers to lexical conceptual structure (LCS). Verbs assign theta roles to the arguments as required by the theta theory which is concerned with the assignment of thematic roles to sentential constituents. Theta roles that are assigned to complements are referred to as internal theta roles and those that are assigned to base-generated subjects are external theta roles. In the theta theory there is a theta criterion which stipulates that each argument is assigned to one and only one theta role and each theta role is assigned to one and only one argument. Theta roles were given with example sentences. Lexical features of the nouns used in the study were also given.

The subsequent section concentrated on seeing whether the verbs involving the body would allow human, animal and body part subjects:
-Verbs of bodily processes

Hiccup verbs relate to involuntary bodily processes that are typically not under the control of the person or organism that experiences them. These verbs do allow human, animal and body part subjects. Breathe verbs also relate to bodily processes. They relate to emitting a substance from the body, that is so with the exception of 'breathe' which can also describe taking air into the body. These verbs with exception of 'bibitheka' and 'tshica/thufa' would accept subjects which are human, animal and body part. The behaviour of these two mentioned verbs could be explained by the fact that they indicate actions that are attributable to human so they will not allow animal subjects. Since both hiccup and breathe verbs are intransitive they assign the theta role of theme to their external arguments.

-Verbs of nonverbal expression

These verbs can be treated as verbs of 'nonverbal expression'. Most of them involve facial expressions that are associated with a particular emotion. Some of them are used as manner of speaking verbs. Some of these verbs are intransitive others are transitive. In the transitive verbs two verbs, 'bhavuma/vungama' and 'jala' seem not to behave like others in that 'bhavuma/vungama' does not allow the subject that is human as it indicates the action done by an animal and 'jala' will not allow the subject that is animal as it expresses an action experienced by humans. Arguments for 'khwina', 'ncwina/gcuma' and 'bhavuma/vungama' seem to take the theta role of theme while 'jala' assigns the theta role of experiencer. In transitive verbs the following verbs, 'ncuma', 'hleka' and 'gigtheka' will not allow the subject that is animal because they denote actions done by humans. External arguments of these verbs take the theta role of theme. The internal arguments take the theta role of patient as they are affected by the actions expressed by the verbs.

-Verbs of gestures/ signs involving body parts

Curtsey verbs describe signs made with the entire body. They differ from each other with respect to the movement involved and the position attained. "Guqa' will not allow the subject that is body part; and 'khahlela' and 'thoba' will not accept the subject that is animal as these express actions done by humans. Snooze verbs describe different types of sleeping. These verbs will not allow the subject that is body part as they express actions experienced by animate subjects. Flinch verbs describe body movements that reflect an emotional or physical reaction. These movements may be triggered by fear, dislike, shame, cold or pain. "Jijitheka' will not allow animal and body part subjects and 'hlehla' will not allow the subject that is body part as it expresses what is done by animate objects. Curtsey, snooze and flinch verbs do assign a theta role of theme to their external arguments. Wink verbs relate to
gestures or signs made with specific body parts. The specific parts may be optionally, when they are not expressed they are understood. The verbs, ‘qhwanyaza’, ‘nyikinya’ and ‘jija’ will not accept the subject that is animal as it indicates the action done by humans. The verbs ‘qhwaba’, accept the subject that is animal as it indicates the action done by humans. The verbs ‘qhwaba’, ‘nqwala’ and ‘nyusa’ will accept only subjects that are human as they express actions performed by humans. External arguments are assigned the theta role of theme by these verbs. Internal arguments are assigned by the theta role of patient as they are affected by actions expressed by these verbs. Crane verbs describe gestures or signs made with specific parts. The verbs, goba’, ‘vala’, ‘vula’, ‘tshixiza’, ‘nikina’, ‘olula’, ‘shwabana’ and ‘nqekeza’ do not take the subject that are inanimate hence they denote actions done by animate subjects. The verbs, osula’, ‘songa’ and ‘qhomfa’ will accept only human subjects as they express what is done by humans. The verb, ‘qhwaba’ will only accept animal subjects. Crane verbs assign a theta role of theme to external arguments and a theta role of patient to internal arguments.

-Verbs of bodily-internal state of existence

These verbs describe a physical state of subject that typically is a reflex of a particular psychological state. The verbs, ‘duduzela’ and ‘dikizela’ will not allow animate subject as they express something that is happening within the body. The verbs, ‘ngcangcazela’ and ‘gubha’ will not allow inanimate subjects as they express actions experienced by animate subjects and ‘didizela’ will only allow subjects that are human. Since these verbs are intransitive they only assign one theta role of patient to their arguments.

-Suffocate verbs

They relate to the disruption of breathing, they differ from each other with respect to means. They are often considered to either lexicalise or entail death and, consequently, have sometimes been included among the verbs of killing. The verbs, ‘kwitsha’ and ‘futhanisela’ will not allow subjects that are animate. These verbs are intransitive and they assign a theta role of patient to their arguments.

Verbs of bodily state and damage to the body

They can be used either transitively or intransitively. The subject of these verbs is a body part whose possessor experiences the state. When used transitively, the object is the experiencer of the state; and therefore, understood as the possessor of the body part expressed in the subject position. Under pain verbs, all transitive verbs with the exception of ‘limele’ will not allow subjects that are animate and they assign a theta role of patient to their arguments. Under transitive verbs, ‘hlungisa’ will not accept a subject that is animal as it expresses what is done by humans. These verbs assign a theta role of theme.
to their external arguments and a theta role of patient to their internal arguments. In tingle verbs the subject is the body part whose possessor experiences the state. All these verbs except for ‘tsha’ and ‘gxadazela’ will not accept a subject that is animate and ‘gxadazela will not accept a subject that is inanimate. Since these verbs are intransitive they assign one theta role of patient to their arguments. Hurt verbs relate to the occurrence of damage to the body through a process that is not under the control of the person that suffers the damage. The subject involuntary injures himself or itself and does not intentionally inflict an injury on himself or herself. They can be used either transitively or intransitively. Under intransitive verbs only ‘tshisa’ will allow subjects that are animate. These verbs assign a theta role of patient to their arguments. Under transitive verbs ‘hlaba’ and ‘jija’ will not allow subjects that are animal as they express the actions that are performed by humans. The verbs ‘gqabhuza’, ‘qangqulula’, ‘sika/nqumla’, ‘xobula’ and ‘onzakalisa’ will only allow subjects that are human and the verb, ‘kwentsa/kewempa’ will not accept inanimate subjects. External arguments of the verbs, ‘luma’, ‘chachambe’, ‘hlaba’, ‘gruzuka’, ‘jija’ and ‘onzakalisa’ assigned the theta role of theme while other verbs assign the theta role of agent to their arguments as they are intenders of actions denoted by these verbs. Internal arguments are assigned the theta role of patient. Verbs of change of bodily state describe the changes in states of humans hence they take only human subjects. They assign a theta role of patient to their arguments.

The study also looked at the characteristics of the verbs involving the body, firstly each category was given with its sub-categories and two example sentences under each category. Secondly the emphasis was on cognate objects, a cognate object is a sentential constituent which may appear with some intransitive verbs and it appears to be a direct object noun phrase whose head noun indicates the event or state nominalisation of the verb. A test was undertaken to see if the verbs involving the body will accept cognate objects. The test followed two diagnostics i.e. The objectival agreement and the movement in the passive constructions. The following was found:

-Verbs of bodily processes
Under hiccup verbs only one verb will accept a cognate object. Under breathe verbs five verbs will accept a cognate object. These verbs of bodily processes assign an argument to the NP which will be a theme.

-Verbs of nonverbal expression
Under intransitive verbs only two verbs will accept a cognate object. Under transitive verbs four verbs
will accept a cognate object. The verbs of nonverbal expression will assign an argument to the NP which will be a theme.

-Verbs of gestures / signs involving body parts
Curtsey and flinch verbs will not accept a cognate object. Only one snore and one wink verb will accept a cognate object. Three crane verbs will accept a cognate object. The verbs of gestures/signs involving body parts will assign an argument to the NP which will be a theme.

-Verbs of bodily-internal state of existence
These verbs will not accept cognate objects.

Suffocate verbs
These verbs will not accept a cognate object.

-Verbs of bodily state and damage to the body
Verbs of change of bodily state, pain and tingle verbs will not accept a cognate object. Only one hurt verb will accept a cognate object. The verbs of bodily state and damage to the body will assign an argument to the NP which will be a theme. Another observation was that for some of the verbs involving the body it is not right to use them with cognate objects in spoken language though the grammatical structure of such utterances is fine.

Thirdly the verbs involving the body were used in the passive sentences and the following was noted:

-Verbs of bodily processes
Since these verbs are intransitive they need to accept an empty pro co-indexed with ku as the subject.

-Verbs of nonverbal expression
Those that are intransitive need to accept an empty pro co-indexed with ku as the subject. Transitive verbs have three possibilities in the passive construction, namely, pro with ku, movement of NP and the use of de-externalised argument.
-Verbs of gestures/signs involving body parts
Curtsey, snooze and flinch verbs are intransitive and as such they need to accept an empty pro co-indexed with ku as the subject. Wink and crane verbs are transitive and there are three possibilities, namely, pro with ku, movement of NP and the use of de-externalised argument.

-Verbs of bodily-internal state of existence
These verbs are intransitive, thus they need to accept an empty pro co-indexed with ku as the subject.

-Suffocate verbs
They are intransitive and need to accept an empty pro co-indexed with ku as the subject.

-Verbs of bodily state and damage to the body
Under pain verbs, those verbs that are intransitive need to accept an empty pro co-indexed with ku as the subject, while those that are transitive have three possibilities, namely, pro with ku, movement of NP and the use of de-externalised argument. Tingle verbs are intransitive, thus they need to accept an empty pro co-indexed with ku as the subject. Under hurt verbs, those verbs that are intransitive need to accept an empty pro co-indexed with ku as the subject, while those that are transitive have three possibilities namely, pro with ku, movement of NP and the use of de-externalised argument. Verbs of change of bodily state are intransitive, thus they need to accept an empty pro co-indexed with ku as the subject.

It could be noted that the de-externalised argument may appear in a copulative that is plural with intransitive verbs and in a copulative that is either plural or singular with transitive verbs. This might be based on the fact that positive passives indicate a universal permission to do something as the negative passives indicate a universal prohibition. Fourthly it was investigated as to whether the verbs involving the body will accept locatives indicating human and it was found that:

-Verbs of bodily processes
Hiccup verbs will accept human locatives. Under breathe verbs, 'bila' will not accept human locatives and 'phefumla' will accept human locatives.
-Verbs of nonverbal expression

Intransitive verbs will accept human locatives. Under transitive verbs, ‘joja’ will not accept human locatives while ‘hleka’ will accept human locatives.

-Verbs of gestures/signs involving body parts

Under curtsey verbs, ‘goba’ will not accept human locatives and ‘khahlela’ will accept human locatives. Snooze verbs will accept human locatives. Flinch, wink and crane verbs will not accept human locatives.

-Verbs of bodily-internal state of existence

‘Chachatheka’ will accept human locatives and ‘gubha’ will not accept human locatives.

-Suffocative verbs

“Miwa’ will not accept human locatives and ‘krwitsha’ will accept human locatives.

-Verbs of bodily state and damage to the body

Under pain verbs, intransitive verbs will accept human locatives while intransitive verbs will not accept human locatives. Under tingle verbs, ‘tsha’ will accept human locatives while ‘nkenketha’ will not accept human locatives. Under hurt verbs, intransitive verbs will accept human locatives while transitive verbs will not accept human locatives. Verbs of change of bodily state will not accent human locatives. The locatives in these cases have the interpretation of location.

Lastly the student dealt with the use of the applicative followed by an infinitival clause in the verbs involving the body. The observation was that sentences where the Infinitival clause appears after the verb were unacceptable, whether the verb is transitive as luma or intransitive as rhona the Infinitival clause will not be accepted. To allow an Infinitival clause to appear after these verbs, the verb must appear with the applicative -el-.
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