# VERBS OF SENDING AND CARRYING IN SETSWANA

by

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**Study Leader:** 

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# **DECLARATION**

I, the undersigned, 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 at any University for a degree.

20 November 1999

**Date** 

#### **SUMMARY**

Berth Levin (1993) classified verbs in English into a number of semantical classes. In this assignment the verbs of sending and carrying in Setswana are explored. Levin has divided these verbs of sending and carrying into subclasses, namely send verbs, slide verbs, bring and take verbs, carry verbs and drive verbs. The Predicate Argument Structure of each of the subclasses is encountered both with the underived and derived verbs with the exception of carry verbs, where only the underived verbs are used.

The framework assumed for this assignment is the Government and Binding Theory with its subtheories. The theta theory is a subtheory that is explicitly and intensively implemented while the other theories are implicitly implemented. The theta theory is used to examine the semantic roles of each argument which is assigned to the verbs of sending and carrying.

In this assignment these verbs are also investigated by forcing unusual arguments onto them. This is done by using animate and inanimate subjects, animate and inanimate objects, as well as animate and inanimate locatives. The thematic roles of each of these arguments are analysed after the discussion.

The syntax of the causative and the applicative as well as their morphology is discussed, and also the investigation as to whether the insertion of the causative affix and the applicative affix increases the number of arguments the verb assigns or reduces. Their effect on the verbs of sending and carrying is also analysed. The effect of the animate and inanimate locatives on the verbs of sending and carrying is analysed too.

The arguments with the verbs of sending and carrying are subjected to the alternations. The alternations, locative inversion, passive construction, neuter passive and coreferential interpretations are used. The morphology of the passive construction is also discussed. The emphasis in the use of the passive construction and neuter-passive construction is on the [NP] object movement and [NP Loc] movement.

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At the end of the investigation and discussion of each subclass of the verbs of sending and carrying, after each change of argument from animate to inanimate and vice versa, and each alternation, an observation of whether their implementation on those verbs are applicable in Setswana is made.

In view of the investigations and discussions aimed in this assignment it will be realised that the verbs of sending and carrying are generally applicable in Setswana, also that the alternations are possible.

### **TSHOBOKANYO**

Berth Levin (1993) a tlhophisitse madiri a Senyesemane ka ditlhotshwana di le mmalwa ka bokao (semantiki). Mo kakanyotheong e, madiri a jo roma le go rlala a tlhothlomisiwa mo Setswaneng. Levin o kgaogantse madiri a go roma le go rwala ka dikarolwana ebong, madiri a go roma, madiri a go relela, madiri a go isa le go tsaya, madiri a go rwala le madiri a go kganna. P.A.S. ya karolwana nngwe le nngwe e ithutwa ka go dirisa madiri a tlholego le madirimatswa a yona kwa ntle ga madiri a go rwala, ao ona a ithutwang ka go dirisa madiri a tlholego fela.

Letlhomeso le le tlhophilweng go sekaseka mo kakanyotheong e, ke 'Government and Binding Theory' le dikarolwana tsa yona. Theta-theory ke karolwana e e dirisitsweng thata e bonala fa tse dingwe di dirisitswe mme di sa supiwe. Theta-theory e dirisitswe go sekaseka bokao jo bo tshwerweng ke popi-ina nngwe le nngwe e e abetsweng madiri a go roma le go rwala.

Mo Kakanyotheong e, madiri a sekwasekwa ka go pateletsa dipopi-ina tseo a sa di tlwaelang. Se, se dirwa ka go dirisa didiritse eleng ditshedi le tse eseng ditshedi di dirwa tse eseng ditshedi le tse eleng ditshedi, le mafelo ao eleng ditshedi le ao esenge ditshedi a fetolelwa go ao eseng ditshedi le ao e leng ditshedi. Bokao-tiro jwa nngwe le nngwe le nngwe ya dipopi-ina tse, bo a lokololwa mme bo tlhaloswe.

Popapolelo ya madirisi le madiredi, mmogo le popafoko tsa tsona di a tlhaloswa, le tshekatsheko ya gore, a go gokelelwa ga ditlhongwa tsa tirisi le tsa tiredi di oketsa palo ya dipopi-ina tseo lediri le di abileng, kgotsa di a di fokotsa e a dirwa sephetho sa tsona mo madiring a go roma le go rwala, le sona se a lokololwa. Sephetho sa lefelo leo e leng ditshidi le teo e leng la eseng ditshedi la madiri a go roma le go rwala le lona se a lokololwa.

Dipopi-ina mo madiring a go roma le go rwala di dirisiwa mo dithefosanong. Dithefosano tse, 'locative inversion, passive construction, neuter-passive le coreferential interpretation' di a dirisiwa. Popafoko ya 'passive construction' ea tlhaloswa. Kelotlhoko

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e kgolo mo tirisong ya 'passive construction' le 'neuter-passive construction' e mo [NP] object movement le [NP Loc] movement.

Kwa bofelong jwa ditshekatsheko le ditlhaloso tseo di dirilweng mo dikarolwaneng tsa madiri a go roma le go rwala, morago ga phetogo ya dipopi-ina go tswa go tse eleng ditshedi go ya go tse eseng ditshidi le ka thanolelo, le thefosano nngwe le nngwe, lemogo ya gore, a tiriso ya tsona mo madiring ao e a kgonagala mo Setswaneng, e a dirwa.

Ka tebo ya ditshekatsheko le ditlhaloso tse di ikaeletsweng go tsweletswa mo kakanyotheong e, go tla lemogwa gore madiri a go roma le go rwala ka kakaretso a kgonagala mo Setswaneng le gore dithefosano le tsona di a kgonagala.

#### **OPSOMMING**

Berth Levin (1993) het Engelse werkwoorde in 'n aantal semantiese klasse gegroepeer. In hierdie studie word die werkwoorde in Setswana wat " stuur" en " dra" aandui, ondersoek. Levin het die stuur- en dra-werkwoorde in subklasse verdeel, naamlik werkwoorde wat stuur, skuif, bring, neem, dra en dryf aandui. Die Predikaat Argumentstruktuur van elk van die subklasse word by beide die onafgeleide en die afgeleide werkwoorde aangetref, met die uitsondering van stuur-werkwoorde, waar net die onafgeleide werkwoorde gebruik word.

Die raamwerk vir die studie is die Regeer-en-bindteorie met sy subteorieë. Die thetateorie is 'n subteorie wat eksplisiet en intensief gebruik word, terwyl ander teorieë implisiet gebruik word. Die thetateorie word gebruik om die semantiese rol van elke argument wat aan die stuur- en dra-werkwoorde toegeken word, te ondersoek.

In hierdie studie word die betrokke werkwoorde ook ondersoek deur ongewone argumente op hulle af te dwing. Dit word gedoen by wyse van lewende en nie-lewende onderwerpe, lewende en nie-lewende voorwerpe, sowel as lewende en nie-lewende lokatiewe. Na die bespreking word die tematiese rol van elk van hierdie argumente ontleed.

Die sintaksis van die kousatief en die applikatief sowel as hulle morfologie word bespreek, asook die ondersoek omtrent die vraag of die kousatiewe affiks en die applikatiewe affiks die aantal argumente vermeerder wat deur die werkwoord toegeken of gereduseer word. Hulle uitwerking op die stuur- en dra-werkwoorde word ook ontleed. Daarbenewens word die uitwerking van die lewende en nie-lewende lokatiewe op die stuur- en dra-werkwoorde ook ontleed.

Die argumente wat met die stuur- en dra-werkwoorde gebruik word, word aan verwisselings onderwerp. Die verwisselings, lokatiewe omkering, passief konstruksie, neutrum passief en ko-referensiële interpretasies word gebruik. Die morfologie van die passief konstruksie word ook bespreek. In die gebruik van die passiefkonstruksie en die

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neutrum passief val die klem op die [SF] voorwerpsbeweging en die [SF Lok.] beweging.

Na die ondersoek en bespreking van elke subklas van die stuur- en dra-werkwoorde, na elke verandering van lewende na nie-lewende argument en omgekeerd, sowel as na elke verwisseling, word daar vasgestel of dit in die geval van stuur- en dra-werkwoorde in Setswana toegpeas kan word.

Uit die ondersoek en bespreking in hierdie studie blyk dit dat die stuur- en drawerkwoorde algemeen toepaslik is in Setswana en dat die verwisselings ook moontlik is.

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# CHAPTER ONE INTRODUCTION

#### 1.1 AIM

Many scholars have done various studies on verbs and their behaviour in sentences. Berth Levin (1993), one of these scholars, classified verbs into a number of classes, like verbs of putting, verbs of removing, verbs of sending and carrying, verbs of exerting force, verbs of change of possession, etc.

The aim of this study is to investigate the verbs of sending and carrying in Setswana. These verbs will be investigated through sources such as books, dictionaries and by consulting native speakers of Setswana.

Verbs are elements that take arguments. They also determine the number of arguments they will take. The predicate argument structure (P.A.S.) of verbs of sending and carrying will be discussed and examined in detail. The derived verbs with the causative affix and the applicative affix with the verbs of sending and carrying will be investigated as well, and their syntax and morphology will be discussed.

In this study an investigation into non-derived and derived verbs will be done with regard to the assignment of argument as well as the type of arguments the verbs of sending and carrying can take, that is, animate and/or inanimate arguments such as subject, object or locative.

It is also the purpose of this study to explore locative inversion with verbs of sending and carrying.

#### 1.2 THEORIES ASSUMED IN THE STUDY

The framework assumed in this study is the Government and Binding Theory GB.

The Government and Binding theory includes the following subtheories:

- a. Government theory
- b. Theta theory
- c. Binding theory
- d. Bounding theory
- e. Case theory
- f. X-bar theory
- g. Government theory

In this study the focus will be on the <u>Theta theory</u> with the verbs of sending and carrying although the <u>Case theory</u> is also involved.

#### 1.2.1 Theta theory ( $\theta$ -theory)

Theta theory is a subtheory of the Government and Binding theory and is concerned with the assignment of theta roles by verbs to their arguments.

Theta role is a term used for one of a set of the thematic roles that provides the necessary semantic information to the argument in a sentence. It also provides information about the relationship between constituents in a sentence, which is brought about by the verb.

An argument is an expression which has a thematic role. Each argument of a predicate has a particular role. The relationship between the predicate and its arguments is referred to in terms of theta roles. The thematic functions which these arguments fulfil, are drawn from a highly restricted finite universal set.

Linguists differ with regard to the specific number of thematic roles which they present and how they name them. Below is a list of thematic roles according to Haegeman (1994: 49) for the purpose of this study.

#### 1.2.2 Theta roles and their semantic interpretation

#### (a) Agent

An agent is a thematic role which refers to an entity which is an instigator of some action expressed by the predicate, that is, the initiator or the doer of the action.

#### (b) Theme

Theme is a thematic role assigned to an entity which is a person or thing moved by the action expressed by the predicate, and is undergoing the effect of some action.

#### (c) Patient

Patient is a thematic role assigned to an NP argument in the object position of a sentence which depicts a person or thing undergoing the action expressed by the predicate.

#### (d) Experiencer

It is an argument that depicts a person or thing that experiences the phychiological state expressed by the predicate. It can also indicate an entity that gains knowledge or skills by doing or seeing things.

#### (e) Beneficiary

It is an entity that benefits or derives benefits from the action expressed by the predicate. The argument that assigns the thematic role of beneficiary is usually an indirect object.

#### (f) Malefactive

Malefactive is assigned to an internal argument which is regarded as a person or thing that is disadvantaged by the action expressed by the predicate, or simply has the meaning of being hurt.

#### (g) Instrument

This is an argument which depicts an object or instrument which is employed to perform the action expressed by the predicate. The thematic role of instrument is characterised by **ka-**, which precedes the argument regarded as an instrument.

#### (h) Cause

This is an external argument which indicates an entity that causes an action expressed by the predicate.

#### (i) Location

It is an internal argument which is regarded as a place, concrete or abstract, where something is or a place in which the action expressed by the predicate is situated.

#### (j) Source

This is an argument where the action is started, that is, an entity from which motion takes place. The motion may be concrete or abstract.

#### (k) Goal/direction

Goal is an internal argument which is identified as an entity towards which motion takes place. The motion may be concrete or abstract.

#### (l) Purpose

It is an argument which is identified as an entity for which something is done as a result of the activity expressed by the predicate.

#### 1.2.3 Principles of theta theory

#### 1.2.3.1 Theta criterion

Theta criterion or  $\theta$ -criterion is a principle that denotes that if a constituent is an argument, it is assigned one and only one theta role and each theta role is assigned to one and only one argument.

#### 1.2.3.2 The projection principle

Haegeman (1994: 55) argues that the projection principle is a general principle which requires lexical information/categories/properties to be syntactically represented and to be projected to all levels of syntactic presentation.

This principle is regarded as the basis of the Government and Binding theory. It is based on the properties that are used to subcategorise lexical items. Each lexical item in each position subcategorised by a verb through the projection principle is assigned a theta role.

The projection principle plays an important role in facilitating

- the determination of the category of the phrase through the lexical category of the head
- the determination of the minimal components of a sentence through the thematic structure of the predicate, encoded in the theta grid.

For some positions that did not exist, in order to exist in the syntactic structure, they are made possible by the projection principle if certain lexical items require them to exist. The projection principle also allows the existence of thematic subjects because they are needed by the predicate.

#### 1.2.4 Aspects related to theta theory

#### (a) Argument

An argument is a word or phrase with meaning, that is, an expression which bears a thematic role. There are two types of argument:

#### (i) External argument

It is a pre-verbal argument in the subject position which is assigned by the VP.

#### (ii) Internal argument

It is a post-verbal argument in the object position which is assigned by the V.

#### (b) Argument structure

An argument structure contains a list of arguments that bear theta roles.

#### (c) Phrase-marker (P-marker)

A P-marker essentially represents a phrase or a sentence. It comprises a set of nodes, connected by branches. Each node at the end of the P-marker carries category labels.

#### (d) Theta-mark ( $\theta$ -mark)

It is a particular position which is subcategorised by the verb when it assigns a theta role, that is, the verb theta-marks that position.

#### (e) A non-argument

A non-argument occurs in a sentence with a subject or agent. Certain verbs do not  $\theta$ -mark the subject position. Such sentences therefore have implicit arguments.

#### (f) Predicate Argument Structure (P.A.S.)

According to Du Plessis and Visser (1995: 1) the predicate argument structure of a verb indicates the number of arguments it takes in the lexical representation.

#### 1.3 ORGANISATION OF CHAPTERS

This study consists of four chapters.

Chapter 1 is an introduction of the thesis and includes issues and aspects to be discussed in the thesis, and their explanations.

**Chapter 2** deals with the predicate argument structure of verbs of sending and carrying. The predicate argument structure will be discussed under the issues mentioned below.

The issues of one-, two- and three-place predicates are explained and exemplified. The external and internal arguments of the verbs of sending and carrying are also analysed.

The syntax, the causative and the applicative, as well as their morphology, are discussed.

An intensive investigation of the verbs of sending and carrying in their subclasses is done. These verbs include both non-derived and derived verbs.

An experiment with animate and inanimate subjects, animate and inanimate objects, as well as animate and inanimate locatives, with the verbs of sending and carrying will be done and their thematic representation analysed.

The effect of the following will also be analysed:

- (a) The effect of the causative with the verbs of sending and carrying.
- (b) The effect of the applicative with the verbs of sending and carrying.
- (c) The effect of the animate and inanimate locatives on the verbs of sending and carrying.

Chapter 3 focuses on the alternations. The alternations to be investigated are locative inversion, passive constructions and their morphology, neuter passives and coreferential interpretations.

Locative inversion will be investigated to see whether it is applicable to transitive verbs in Setswana. The investigation of this possibility will be done in all the subclasses of verbs of sending and carrying.

Passive constructions will also be investigated in order to see whether they may appear with transitive verbs of sending and carrying in Setswana. The morphology of the passive will also be analysed. The passive will be used with emphasis on the [NP] object movement and [NP Loc] movement.

The neuter-passive will be examined to see whether it is applicable to transitive verbs of sending and carrying in Setswana. The emphasis in the use of neuter-passive constructions will be on the [NP] object movement and [NP Loc] movement.

In this chapter co-referential interpretations are investigated to examine whether they may appear with bring and take verbs as well as carry verbs.

Chapter 4 deals with the conclusions that can be drawn from the study.

# CHAPTER TWO PREDICATE ARGUMENT STRUCTURE

The predicate argument structure is the lexical-syntactic representation of a verb to indicate the number of arguments it takes. Guerssel *et al.* (1985: 52) states that P.A.S. controls the well-formedness of a sentence following the framework in Government and Binding. If the sentences are well formed, they will allow case assignment to be applied.

The verbs according to P.A.S. are described as intransitive (one place), transitive or mono-transitive (two-place), and ditransitive (three-place) predicates, according to the number of arguments a predicate may take.

#### 2.1 TYPES OF PREDICATE

#### 2.1.1 An intransitive verb

The argument structure of an intransitive verb can be approached in two different ways. This is due to the type of arguments it may assign.

Firstly, intransitive verbs are regarded as one-place predicates. Such predicates assign one theta role to an argument such as a noun phrase or a clause. The argument structure of these predicates show only one argument which has to appear as a subject argument. These verbs may be state verbs.

- Mae a tla bola.
   (The eggs will rot.)
- Pula e a na.
   (It is raining.)
- Ngwana o a lela.
   (The child is crying.)



4.	Mosimane	0	a	tsenwa

(The boy is mad.)

The verbs **bola**, **na**, **lela** and **tsenwa** can take only one argument, which will be in the subject position.

Secondly, there are intransitive verbs which assign two arguments, an agent argument in the subject position and an internal argument which is a locative phrase. Such locative phrases are not objects of the verb.

These intransitive verbs are motion verbs.

5. Banna ba tsena mo ntlong.

(The men enter into the house.)

- 6. Mosimane o ya gae.(The boy goes home.)
- 7. Monnamogolo o boela toropong.

(An old man returns to town.)

8. Matsale o tswa Taemaneng.

(My mother-in-law comes from Kimberley.)

The locatives **mo ntlong**, **gae**, **toropong** and **Taemaneng** are complements and not objects of the verb, thus they are not adjuncts.

The lexical entry of an intransitive verb is:

9. morphophonological form na

categorical type [+V -N]

subcategory features [ \_\_\_\_ #]

theta-grid  $\theta$ 1

#### 2.1.2 Mono-transitive verb or transitive verb

Monotransitive verbs are regarded as two-place predicates. Such predicates assign two arguments, where one argument is external and the other internal. Monotransitive verbs, according to theory, have two theta roles. One theta role is found in the external subject position and the other in the internal object position.

The theta roles may have the following semantic representations.

- (i) The external argument may be an **agent** and the internal argument a **theme**:
- 10. Monna o rema setlhare.

(A man chops a tree.)

- (ii) An external argument may be an **agent** and the internal a **patient**:
- 11. Ntswa e bogola motho.

(A dog barks at a person.)

- (iii) An external argument may be a theme and the internal a patient:
- 12. Molamu o ile wa betsa motho.

(A stick hit a person.)

- (iv) An external argument may be an experiencer and the internal a theme:
- 13. Morutwana o itse karabo.

(A learner knows the answer.)

- (v) The syntactic subject may be an **agent** while the object may be the **recipient**:
- 14. Monna yo o lefa mosimane.

(This man pays the boy.)

The lexical entry of a transitive verb is:

15. morphophonological form rem

categorial type 
$$[+V -N]$$
  
subcategory feature  $[\_\_\_NP]$   
theta-grid  $\theta 1 \quad \theta 2$ 

#### 2.1.3 Ditransitive verbs

These verbs are three-place predicates. They assign three arguments: one external argument in the subject position and two internal arguments in the object position. The two internal objects have the grammatical function of direct and indirect object. If we consider the word order, the indirect object comes immediately after the verb while the direct object follows the indirect object.

17. Mosadi o ruta bana Setswana.

(A woman teaches children Setswana.)

18. Banka e adima monna tshelete.

(The bank lends money to the man.)

19. Mosimane o kopa mosadi setshwantsho.

(The boy asks a picture of a woman.)

According to theta theory the syntactic subject has the theta role of agent while the indirect object has the theta role of recipient if it is animate, and the direct object the theta role of theme.

The predicates with ditransitive verbs may be found with only one internal argument, which is a direct object, when they undergo argument reduction.

20. Ke adima tshelete.

(I borrow money.)

21. Mosadi o ruta Setswana.

(A woman teaches Setswana.)

Ditransitive verbs raise the issue of what Bresnan and Moshi (1990: 149) claim to be asymmetrical object type (one of the post verbal arguments which exhibit 'primary object' syntactic property) and symmetrical object type (more than one NP can display 'primary object' syntactic property).

According to Alsina (1994: 154) Setswana, as one of the asymmetrical languages, is distinguished from symmetrical languages by the requirement that certain internal arguments, specifically those that are beneficiaries or goals, must be [-r] (or equivalent, but cannot be [+O]). This means that in asymmetrical languages only the beneficiary argument of a ditransitive construction may be expressed as an object marker (OM) or as a passive subject. However, this is not correct for Setswana:

- 17. (a) Bana ba ruthwa Sesotho.

  (The children are taught Sesotho.)
  - \*(b) Sesotho se rutwa bana.

    (Sesotho is taught to the children.)

Both objects in (17) may be moved:

22. Mosadi o ruta [bana] [Sesotho].(The woman teaches the children Sesotho.)

The lexical entry of a ditransitive verb is:

23. Morphophonological form fa

categorical type [+V -N]

subcategorial feature [ NP NP]

theta grid  $\theta 1 \quad \theta 2 \quad \theta 3$ 

As has been discussed above, the P.A.S. of a verb indicates the number of arguments the verb takes, whether one, two or three arguments. Of these arguments there are an external argument and one or two internal arguments. Each argument will have a specific variable corresponding to such an argument, or alternatively, such variable may have certain semantic labels assigned to them. The verbs with the number of arguments it may take, according to Du Plessis 1995: 1) are:

#### One-place predicate

24. na: X (a variable) theme (a semantic lable)

#### Two-place predicate

25. ja: X(y) (variables)
agent (theme) (semantic labels)

#### Three-place predicate

26. fa: X (y,z) (variables)
agent (recipient, theme) (semantic labels)

#### 2.2 The external argument

Du Plessis and Visser (1995: 1) states that the assignment of theta roles is governed by general principles such as the projection principle and the theta criterion. The projection principle ensures that a verb may only subcategorise for complements that it theta marks. The theta criterion, on the other hand, 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.

According to Rappaport and Levin (1988: 14) there are three modes of theta role assignment: by a verb, a preposition and a VP via predication.

The NP argument which is assigned 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

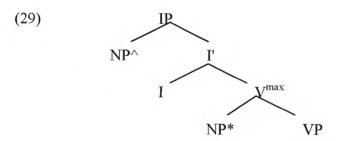
theory. The verb may thus assign a theta role to the NP argument in the subject position and this argument is an external argument.

The variable X in (24-26) which is outside the brackets in the predicate argument structure, represents the external argument. This argument can be assigned a theta role of theme (27) and agent (28).

- (27) [Letsatsi] le a tlhaba. (The sun is shining.)
- (28) [Bana] ba batla dijo.

  (The children want food.)

Emonds (1978), Pollock (1989) and Chomsky (1989), according to Du Plessis and Visser (1995: 3), expanded the category of inflection which now falls within the ambit of the X-bar theory. Various functional categories which play a role in establishing dependencies between parts of a sentence, have been recognized and are represented as heads projecting X-bar phrases. This is the structure of a clause according to Koopman and Sportiche (1991) of the D-structure of the subject as discussed by Du Plessis and Visser (1995: 4):



NP\* is the canonical or D-structure position of the subject while the NP^ is its S-structure position. A subject generated at position NP\* must move to position NP^. (Du Plessis and Visser,1995: 4).

Du Plessis and Visser go on to say that the external NP argument, i.e. NP\* in the structure above, has to be in that position because of the conditions for theta assignment

as given by Chomsky: a theta assignment relation between X and Y requires sisterhood between X and Y. For a subject NP to receive any theta assignment, it must have as a sister a VP. The external NP argument must also be in a relation of mutual C-command with the maximal projection of the verb, as was indicated above.

This position of the NP\*, according to Du Plessis and Visser (1995: 4) is known as the VP internal subject hypothesis and has been refined by Chomsky. In the structure like the one above, the external NP argument will appear internally in the VP but its  $\theta$ -role will still be assigned by the VP.

#### 2.3 The internal argument

The internal arguments are arguments internal to the maximal projection of the verb. These arguments appear in the object position of a sentence, i.e. the position subcategorized by a verb, and can only appear in transitive and ditransitive verb phrases. In a ditransitive verb phrase there are two arguments in the object position. These two arguments can be distinguished as a direct and an indirect object.

Du Plessis and Visser (1995: 2) maintain that the internal NP arguments are assigned their theta roles in the syntax under government. They point out that the direct NP arguments are usually the objects of the verb while indirect NP arguments are the objects of the preposition, and that is why they are theta marked by the verb and a preposition respectively.

The lexical entries and the lexical representation of a verb, which include a specification of how each NP argument is assigned its theta role together with the number of arguments of each verb, are as follows:

#### (30) transitive verb

- (a) nwa: x<y> (variables)

  agent (theme) (semantic labels)
  - (b) baya: x<y Loc z> (variables)

    agent (theme Loc location) (semantic labels)

#### (31) ditransitive verb

```
duela: x <yz> (variables)

agent (recipient theme) (semantic labels)
```

The semantic labels that internal arguments usually bear are theme, recipient, patient, beneficiary/malefactive, goal, experiencer, source and location.

#### 2.4 DERIVED VERBS WITH THE CAUSATIVE AFFIX -IS-

#### 2.4.1 Syntax of the causative

Alsina (1992: 517) calls a causative morpheme a three place predicate which involves a beneficiary or a patient in addition to a causer and a caused event.

#### With intransitive verbs

The causative is a term used for a verbal affix in the derivation of verbs. The causative affix allows the non-subject argument, that is, the internal arguments of the predicate, to be increased by one argument. If the causative affix -is- is added onto an intransitive verb, it will change this verb to a transitive verb. This means that when the intransitive verb has a causative affix -is-, it will then have two arguments, an external and an internal argument:

#### 32. Setshwantsho se a fela.

(The picture ends.)

#### 33. Motsamaisi o fetsa setshwantsho.

(The operator ends the film.)

(The operator causes the film to end.)

The intransitive verb -fel- 'end' in (32) is used with the causative affix -is- in (33) and makes it -fets-. The effect of the causativisation in general on the predicate argument structure of verbs is to introduce a special argument known as the causative agent. This

argument is found in the subject position of the sentences and is thus an external argument. The causative agent therefore causes the action:

34. O dumisa sejanaga.(He causes the car to start.)

35. Matweetwe o nesa pula.(The traditional doctor causes the rain to fall.)

36. Mosimane o ledisa ngwana.(The boy causes the child to cry.)

In all these sentences the old external argument is internalised. In (34-36) the 'new' causative agents are i.a. **matweetwe** and **mosimane**, and are thus external arguments, while the 'old' external arguments, **sejanaga**, **pula** and **ngwana**, now become internal arguments of the causative predicate.

However, the 'new' external argument does not need to be the agent, that is, have the feature [animate] as in (34-36) above. This external argument can have different interpretations attached to it with reference to the different semantic roles. Although this is so, the condition should be that this external argument causes an action or state:

- 37. Setshwantsho se otsedisa bana.(The picture causes the children to be drowsy.)
- 38. Modumo wa radio o tsosa bagolo.(The noise of the radio causes the adults to wake up.)
- 39. Mojago wa dipitsi o ka humisa motho.(A horse race can make a person rich.)
- 40. Thunyo ya kanono e tla boitsha baeng.(A cannon fire will frighten the guests.)

This agent, which is introduced by the affix -is-, can also be interpreted as a permissive agent in which the subject allows or permits the action to happen:

41. Mogokgo o tsentsha bana.

(The principal lets the children to come in.)

42. Morutabana o kwadisa barutwana.

(The teacher makes/causes the learners to write.)

Sometimes the agent can also be an assistive agent in which the agent assists or helps in the action:

43. Mosele o eledisa metsi.

(A furrow helps water to flow.)

44. Lephodisa le tshabisa bagolegwa.

(The police helps the prisoners to escape.)

There is a possibility that the same sentence may be interpreted with any of the three agents discussed above, depending on the specific discourse factors:

- 45. O fetisa dipodi
  - (i) (He/she causes the goats to pass)
  - (ii) (He/she lets/allows the goats to pass)
  - (iii) (He/she helps the goats to pass)

Sentence (45) may thus be interpreted with either a causative (i), permissive (ii) or assistive (iii) agent.

#### With transitive verbs

The effect of the causative affix -is- on the predicate argument structure as mentioned before is to add a new external argument as subject to the sentence and change the old

external argument into an **internal argument**. This may result in transitive verbs changing to ditransitive verbs with two objects. In case of this ditransitivisation of the predicate, the object which is dependent on the presence of the affix -is- is the indirect object and is always adjacent to the verb.

46. Monna o tseisa morwae kgetsana.

(The man makes/allows/helps his son carry the bag.)

In this sentence the external subject 'monna' may be interpreted with the semantic role of either causative agent, permissive agent or assistive agent as indicated by the translated sentences. The 'old' external argument morwae retains its semantic role in the new position as internal argument, that is, internal agent.

47. Monna o nosa bana bojalwa.

(The man makes the children drink liquor.)

48. Monna o kgannisa mosadi sejanaga.

(The man allows the woman to drive a car.)

49. Taugadi e tsomisa ditawana ditshepe.

(A lioness helps the cubs to hunt the springbuck.)

In all these sentences the 'old' external argument ended up as internal agents in the position of the indirect object.

#### With ditransitive verbs

The ditransitive verb with two internal arguments can also be extended to three internal arguments with the addition of the causative affix -is- on the verb.

Although sentences of this nature are theoretically acceptable, they are conceptually difficult to interpret and are regarded as marginal:

- 50. Ba romisa monna ngwana dilamunu.(They allow/let the man to send the children oranges.)
- 51. Ke fepisa mosadi batho dijo.(I help the woman to dish/give food to the people.)
- 52. Ba timisa banna baeng metsi.(They make the men deprive the visitors of water.)
- Ke kopisa motlhoki mogwebi diaparo.(I make/allow/help the begger to ask clothes from the businessman.)

When a causative is formed, the patient of the causative predicate fuses with an argument of the embedded predicate, as Alsina (1992: 523) suggests. This argument can either be an external (highest) or an internal (affected) argument.

#### 2.4.2 Morphology of the causative

In syntax a phrase has a head, and the head of the phrase determines the properties of the whole phrase. If the head is verbal, then the phrase will be verbal. If the head is nominal, then the phrase will be nominal. The same can also be said about words. Such a head determines the properties of the word. If the head is nominal, the word will be a noun; if the head is verbal, the word will be a verb.

Because it is difficult to identify heads of words, morphology identifies them contextually. In morphology the head of the word is the rightmost member of the word, that is, the suffix. Since suffixes belong to categories such as N, V, A, they determine the category of a word.

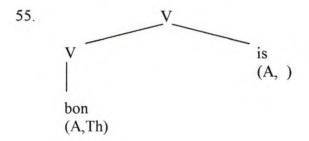
It is not always clear that all rightmost members of the word determine the category of the word they attach to. When a prefix determines the category of the word, the concept of head is relativised. This notion of relativised head permits the possibility that a word could have two heads. A case in point is the issue of **argument** structure and **inflection**. The argument structure of a form is determined by the argument structure of the head.

But the inflectional endings on verbs must appear in head position as they are always the rightmost members.

The argument structure of a predicate is a list of its theta roles, like agent, theme, experiencer, goal etc. One of these arguments is distinguished as the external argument.

#### 54. Bona (Agent, Theme)

In (54) **Agent** is the external argument. The external argument is the **head** of the argument structure. The rest are internal arguments or theta roles, as Theme in (54). Therefore the head of a word derived by affixation determines the external argument of the word.



The structure (11) represents a causative derivation through the causative verbal suffix -is-. This suffix has been added on to the verb -bon- to form a derived word bon-is- (cause to see).

This causative verbal suffix -is- bears an external argument, the causative agent, and this argument becomes the external argument of the whole. All the arguments of the non-head verbal stem (bon-), including its external argument, become internal arguments of the whole.

Morutabana o bontsha bana setshwantsho.(The teacher makes the children see a picture.)

**Morutabana** in (56) is the causative agent and the new external argument of the whole. **Bana**, the old external argument of the verb **-bon-** and also an agent, has now become

an internal argument of a derived word -bontsh- with the internal argument setshwantsho, which is the theme.

The arguments of the nonhead **-bon-** in (56) therefore become part of the argument structure of the whole word. This is a crucial difference between the argument structure in syntax and the argument structure in morphology: in syntax the nonhead satisfies the theta role of the head, but in affixation, the nonhead of an affixal head does not satisfy the theta role of the affix, rather it "composes" with the affix, i.e. the affix and the stem form a complex predicate.

When an affixal head combines with a nonhead stem, the arguments of the nonhead stem, including the external argument, become part of the argument structure of the whole word. The external argument of the nonhead is not used up. It is still available and can be satisfied as an internal argument outside the word as in the case of a causative.

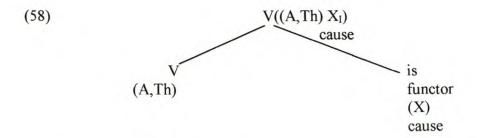
The argument structure of derived words may be defined as:

(57) (The argument of the head) and the argument structure of the nonhead if the head is a **functor**.

A functor is an element which we may take to be a suffix, by virtue of its semantic type. Thus an affix (or a verb) is marked as a functor as part of the specification of its semantics.

Functional composition and theta role assignment differ in a fundamental way: although a verb may have several theta roles, it may "compose" with only one item.

Functional composition can be illustraded with the causative verbs, as follows:



In (58) the causative verbal suffix -is- is a functor. Because -is- is a functor, the arguments of the nonhead, i.e. the agent and theme arguments, will be taken over as arguments of the whole as indicated in (58). In addition, the X argument of -is- will be an argument of the whole because -is- is the head with regard to argument structure. This X argument is the causative agent and this causative agent will then be the new external argument of the derived predicate because -is- is the head. The old external argument, that is, A in (58), does not become the external argument of the whole because the verb is not the head: the head is the suffix -is-. This old external argument now becomes an internal argument of the whole.

#### 2.5 DERIVED VERBS WITH THE APPLICATIVE -EL-

#### 2.5.1 Syntax of the applicative

Bresnan and Moshi (1990: 148) and Baker (1992: 24) agree that the applicative construction introduces a new argument to the base verb. This increases the number of object arguments from one to two, and from two to three, depending on the P.A.S. of the predicate.

#### With intransitive verbs

The applicative or applied form of the verb is the term used for a verbal affix in the derivation of verbs. The applicative construction allows the non-subject arguments, i.e. the internal arguments of the predicate to be increased by one argument. If the applicative affix -el- is added onto an intransitive verb, it will change this verb to a transitive verb. Therefore the intransitive verb with -el- will then have an external and an internal argument. In the lexical entry for verbs in the lexicon, the predicate argument structure of each verb is given, but the specific semantic roles, like theme, benefactive and source, are not given here. This cannot be done because the semantic

interpretation of the sentence cannot be done at the lexical level of the verb. Among the many other phenomena which must be considered and are not available at the level of the lexicon, is the type of complement of the verb, e.g. whether animate or inanimate and various other discourse factors.

- Ngwana wa ga Mosidi o kwalela/betlela/takela [rragwe].
   Mosidi's child is writing/carving/painting for his father.
- 60. Ngwana wa ga Mosidi o kwalela/betlela/takela [madi]. Mosidi's child is writing/carving/painting for money.

From (59) and (60) it is clear that if the applicative **-el-** is added onto a verb, like **kwala** which becomes **kwalela**, the argument which is dependent on this suffix may have different interpretations, hence (59) and (60).

In (59) with a complement which has the feature [animate] it has the semantic role of [benefactive].

In the same breath, in (60) with an inanimate complement, it has the semantic role of [purpose].

Therefore the difference between (59) and (60) is dependent on the type of complement, whether [animate] or [inanimate].

One of the distinguishing factors about applied verbs is that they may never be used without a complement, i.e. these predicates may not undergo argument reduction unless the applied verb assumes an idiosyncratic meaning:

61. \*O a betlela.

(He/she is carving for.)

The semantic role which is commonly found with the applicative affix, according to Du Plessis *et al.* (34), is [benefactive]. According to him, the benefactive reading may be interpreted in three different ways, depending mostly on discourse factors:

62. Monna o boela kgosi.(The man is returning for the chief.)

The first reading is a **benefit** reading, i.e. he is returning **for the benefit of** the chief. The second reading is one of **replacement** or **substitution** - he is returning **on behalf of** / **instead of** the chief. The third interpretation is **malefactive**, i.e. he is returning **to make trouble** for the chief. The unifying concept for the semantic role of benefactive is that of an **animate** object noun phrase which is concerned with the action of the verb. The applied objects that are benefactive seem furthermore to be concerned mostly with **human** noun phrases (Du Plessis *et al.* 35)

63. Ke itumeletse [mosetsana].(I am happy for the girl.)

However, there is an extensive number of nouns which are not animate but which may nevertheless be used with a benefactive reading. Although these nouns are not animate by themselves, all of them have a feature of [human contol], that is, humans are indirectly concerned with these nouns. They are nouns such as **lefatshe** 'country', **sekolo** 'school', **feme** 'firm', **kereke** 'church' (Du Plessis *et al.* 35):

- 64. Ba tla direla [feme e].

  (They will work for this firm.)
- 65. Masole a swela [lefatshe].(The soldiers die for the country.)
- Mosimane o tabogela [sekolo].(The boy is running for the school.)

However, it is clear that nouns with the feature [animate] dominate the benefactive reading.

The appearance of the applied affix on the verbs of 'why' questions is a logical concomitant of this use. The interrogative **eng** together with the applied verb always results in a reading of **cause** (Du Plessis *et al.* 35). The answer to the interrogative **eng** will result in a theme or source.

- O lelela eng? → dijo/setlhabi(Why are you crying?) food/pain
- 68. O itumeletse eng? → mpho/moletlo (Why are you glad?) gift/party

The applied affix may appear in a number of locative or motion contexts such as with **directional** verb phrases. In such cases both nouns may have this reading of **direction**.

- 69. O tloletse [mmagwe/godimo]. (He/she jumped to his mother/high.)
- 70. Ke ragela [motshwaradino/dikoteng].(I am kicking to the goal-keepers/goal-post.)
- 71. E fofela [setlhareng/botlhaba]. (It flies to the tree/east.)
- 72. Ke potlakela morutabana/sekolo]. (I hurry to the teacher/school.)

## With transitive verbs

As in the case of intransitive verbs, the effect of the affix -el- on the predicate argument structure of verbs is to add one extra internal argument to the predicate. When this argument is added onto transitive verbs, ditransitive verbs will be the result. This extra

internal argument is the indirect object and is always adjacent to the verb which is dependent on the affix -el-. It can be interpreted in different ways, thus having a number of semantic roles dependent on the nature of the verb and various discourse factors (Du Plessis, et al. 36). The following gives an indication of possible semantic roles to be found with ditransitive verbs with the affix -el-.

The indirect object has the semantic role of **benefactive**, while the direct object has the semantic role of **theme/patient**.

## BENEFACTIVE AND THEME

- 73. Ke kgweeletsa [rragwe] [mmotorokara]. (I drive the car for his father.)
- 74. Ke kgweeletsa [karatshe] [mmotorokara].(I drive the car for the garage.)

In (73) and (74) the direct object **mmotorokara** has the feature [-animate], and is **theme**, while the indirect object in (73) **rragwe** is [+animate] and in (74) **karatshe** is [-animate] but with the additional feature [+human control]. In that case both indirect objects are **beneficiaries**.

In the second place the indirect object may be interpreted as either beneficiary or recipient and the direct object as theme:

#### BENEFACTIVE OR RECIPIENT AND THEME

- 75. Ke arolela [barwa] [boswa].(I divide the heritage for/among the sons.)
- 76. Ke arolelo [dipanka] [tshelete].(I divide the money for/among the banks.)

- 77. Ke arolela [barutabana] [bana].(I divide the children for/among the teachers.)
- 78. Ke arolela [metse] [bana].(I divide the children for/among the villages.)
- 79. Morutwana o kwalela [rragwe] [lekwalo]. (The student writes a letter for/to his father.)
- 80. Ke kwalela [kgwebo] [lekwalo]. (I write a letter for/to the bank.)

While the verb **kwala** in (79) cannot be used with the direct object with the feature [+animate], the verb **arola** in (75) and (76) can. The direct object thus can have both features [+animate] and [-animate] and still have a semantic role of theme/patient. The **indirect objects, panka**, **metse**, **kgwebo** in (76), (78) and (80) with the feature [-animate] have the additional feature [+human control] in order to qualify as beneficiaries or recipients.

The third semantic distinctions make the indirect object **benefactive** if it has the feature [+animate], but with the feature [-animate] it assumes the semantic role of **purpose**. The direct object is **theme**.

- A. BENEFACTIVE AND THEME (INDIRECT OBJECT [+ANIMATE])
- B. PURPOSE AND THEME (INDIRECT OBJECT [-ANIMATE])
- Ke batlela monna bojalwa.(I want beer for the man.)
- Monna o batlela morwa mosadi.(The man wants a wife for the son.)

83. Ke batlela mmotorokara tshelete. Ke batlela kereke ditulo.

(I want money for the car.) (I want chairs for the church.)

84. Ke batlela mokgweetsi mmotorokara.

(I want a car for the driver.)

85. Ke kgethela morwa mmotorokara.

(I select a car for the son.)

86. Ke kgethela morutabana bana.

(I select children for the teacher.)

87. Monyadiwa o kgethela lenyalo mosese.

(The bride selects a dress for the wedding.)

88. Morutabana o kgethela tlhatlhobo barutwana.

(The teacher selects the students for the examination.)

89. Monna o memela lekau mosetsana.

(The man invites the girl for the young man.)

90. Ke memela lenyalo baeti.

(I invite guests for the wedding.)

In the case of (89) and (90) the verb **mema** can never take a direct object with the feature [-animate] if the indirect object has the feature [-animate].

\*90. a. Ke memela ntlo ditene.

(I invite the bricks for the house)

As the sentences in (81-90) reflect the most frequent combination of semantic roles, it will be worthwhile to see how interrogative words may be used in these two object positions. The verb **batla** in (81-84) will be taken as representative of these verbs.

Both objects may be replaced by interrogative words in the position of indirect and direct object.

91. a. O batlela **mang** bojalwa? b. O batlela monna **eng**?

(For whom do you want beer?) (What do you want for the man?)

When the interrogative words take the position adjacent to the verb, it is a general case that a clitic of the remaining verb has to be used.

92. **Bojalwa**, o **bo** batlela eng? (Why do you want beer?)

Woolford (1993) claims that there are verbs that take two objects without the assistance of an applicative morpheme (refer to 2.1.3).

## With ditransitive verb

It is theoretically possible to extend the arguments of a predicate through the derivative affixes. In the case of ditransitive verbs with two objects it should be possible to extend them to three objects, i.e. the predicate may have three internal arguments. This possibility can be looked into with the applicative affix -el- on ditransitive verbs. In general it seems as if it is very difficult to conceptualize such a number of arguments and such sentences are usually disallowed (Du Plessis and Visser, 38)

- 93. Ke neela [koko] [bana] [dimonamone].(I give sweets to the children on behalf of grandmother.)
- 94. Sipho o adimela [rragwe] [Themba] [pitse].(Sipho borrows a horse for Themba from his father.)

However, some ditransitive verbs such as **fa** (give), **kama** (comb) and **botsa** (ask) with an applicative **-el-** may appear with three internal arguments. Such arguments assign the semantic role of [benefactive + recipient + theme]:

- 95. Ke fela moapei bana dijo.(I give food to the children on behalf of the cook.)
- 96. Ke kopela mme ngwana metse.(I ask for water from the child on behalf of mother.)
- 97. Ke boletsa morutabana baithuti dipotso.(I ask questions to the learners on behalf of the teacher.)

In (95-97) the presence of **-el-** gives the interpretation of [benefactive] to the first internal arguments e.g. **moapei** (cook), **mme** (mother) and **morutabana** (teacher). These arguments are dependent on the appearance of **-el-**.

As the sentences in (95-97) are marginally acceptable, the affixation of the applicative onto ditransitive verbs requires that the interpretation of the phrases be given much thought.

# 2.5.2 Morphology of the applicative

The applicative constructions are just like the passive, except that there is no controller for the external argument of the stem. Thus the external argument of the stem becomes the external argument of the whole.

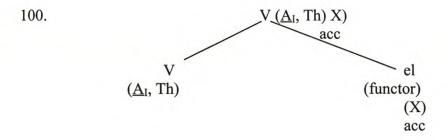
The applied affix -el- adds an extra accusatively marked internal argument to the verb it is joined with. This argument may have different semantic roles like benefactive, direction, location, recipient etc.:

- 98. Mma o reka dimonamone. (Mother is buying sweets.)
- b. Mma o rek-el-a bana dimonamone.(Mother is buying sweets for the children.)

The argument taken by **bana** in (b) is dependent on the applicative **-el-** and it has a reading of benefactive here.

We may assign the following designations to the affix **-el-**:

Because -el- is a functor, all the arguments of the phrase will be carried over. In addition the argument X of -el- will be an argument of the whole because -el- is the head of the whole. Further the -el- argument will be realised as accusative. Because the head has no external argument and because it does not control the external argument of the stem, the external argument of the nonhead will be the external argument of the whole as the stem will be head with regard to the external argument. (100) illustrate these properties:



The notion head with regard to external argument, i.e. a relativised head, plays a crucial role in (100): the applied suffix is the head in some absolute sense because it is a functor. However, it is not the head with regard to external argument and so the stem supplies the index of its external argument.

## 2.6 VERBS OF SENDING AND CARRYING

Verbs of sending and carrying are verbs related to causing an entity to change location accompanied and/or unaccompanied by the agent. Many of these verbs are derived verbs and are mainly causative verbs. The verbs of sending and carrying will be divided

into derived and non-derived verbs in this study. The non-derived verbs and the causative verbs will also appear with the applicative suffix -el-, where this affix will assign only a locative argument.

The arguments of the verbs of sending and carrying will be alternated in what Pustejousky (1996: 8) claims to be a selectional class called **animacy**, that is, the arguments in this chapter and chapter 3 will alternate between [+animate] and [-animate]. The effect of this change will be investigated during the assigning of thetaroles.

## 2.6.1 Send verbs

These verbs relate to causing an entity to change location. The entity moves unaccompanied by the agent (Levin, 1993: 133).

#### 2.6.1.1 Non-derived verbs

These verbs do not use the causative affix -is- but can still change the position of an entity from one place to another.

The non-derived verbs assign three arguments:

- 101. Monna o roma lori kwa ntlong.(The man sends the lorry to the house.)
- 102. Mosadi o posa makwalo mo posong.(The woman posts the letters at the post office.)
- 103. Banna ba mokola diradio kwa sekepeng. (The man smuggles radios at the ship.)
- 104. Mosimane o gapa dikgomo kwa nageng.(The boy drives the cattle in the veld.)

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105. Monna o koba bana ba gagwe mo ntlong.

(The man sends his children away from the house.)

In the predicate argument structure of these verbs, one will notice that these verbs assign an external argument to the NP in the subject position and internal arguments to the NP in the object position and to the locative NP.

Each of the sentences above will be analysed and its meaning checked firstly with its present argument; secondly the arguments will be changed and the meaning of the sentences checked again. The sentences will be treated individually because the arguments behave differently in different sentences.

# The external argument

106. P.A.S.:[-rom]:[ $\underline{x}(y, Loc z)$ ]

The [x] argument will be assigned to [monna], the [y] argument to [lori] and the [z] argument to [ntlong] in (101). The theta roles assigned to these arguments are the following: monna is agent, lori is theme and ntlong is direction.

The external argument **monna**, which appears in the subject position, is **animate**. For that reason **monna** bears the theta role of agent because of the verb [-rom-], which is a motion verb.

- 107. [Phefo] e roma matlhare kwa ntlong.(The wind sends the leaves to the house.)
- 108. [Maru] a roma pula kwa lefatsheng.(The clouds send rain to the world.)

Sentences (107) and (108) applied the test whether inanimate NPs can appear as external arguments in the subject position. If the external NP monna is replaced by an inanimate NP phefo in (107) and maru in (108), then the external NPs phefo and maru will be assigned the theta role of cause. The NPs phefo and maru do not do the action

but causes the object to move to a certain direction, which is **ntlong** and **lefatsheng** in this case.

The predicate argument structure for (102) is:

109. P.A.S.:[-pos-]:[
$$\underline{x}$$
 (y, Loc z)]

The [x] argument will be assigned to [mosadi], the [y] argument to [makwalo] and the [z] argument to [posong]. The theta roles assigned to these arguments are: mosadi is agent, makwalo is theme and posong is location.

The external argument **mosadi**, which is in the subject position, is animate. Because of the motion verb [-pos-], the animate external argument is **agent**.

The external argument **mosadi**, which is animate, may be replaced by an inanimate NP **foroko** to test whether an inanimate NP can appear as a subject of this sentence.

110. [Foroko] e posa dijo mo leganong.(The fork posts the food in the mouth.)

The external argument **foroko** in (110) assumes the theta role of **instrument**. **Foroko** is instrument because it is used by someone or something.

The predicate argument structure for (103) is:

111. P.A.S.:[-mokol-]:[<u>x(y, Loc.z)</u>]

The [x] argument will be assigned to [banna], the [y] argument to [diradio] and the [z] argument to [sekepeng]. The thematic roles assigned to these arguments will be: banna is agent, diradio is theme and sekepeng is location.

The external NP banna is animate and is in the subject position. By virtue of the motion verb [-mokol-] and the external argument being animate, this argument is assigned the theta -role of agent, thus NP is the one that does the work of [-mokol-] in the sentence.

To test whether inanimate NPs can appear in the subject position of this sentence, **banna**, an animate NP, is replaced by an inanimate NP **kgetsi**.

112. \*[Kgetsi] e mokola mmidi kwa molelwaneng.

(A bag smuggles maize at the border.)

The sentence (12) is unacceptable because the verb **mokola** needs an agent.

The predicate argument structure of (104) is:

113. P.A.S.:[-gap]:[ $\underline{x}(y, Loc.z)$ ]

The [x] argument will be assigned to [mosimane], the [y] argument to [dikgomo], and the [z] argument to [nageng]. The thematic roles assigned to these arguments are: mosimane is agent, dikgomo is patient and nageng is location.

The external argument **mosimane** is animate. This argument appears in the subject position of the sentence. This animate external argument is the agent, because of the motion verb [-gap-]. **Mosimane** is also the doer of the action [-gap-] in the sentence. The external argument, which is animate, is replaced by an inanimate argument [dirosa] to test whether an inanimate argument can appear in the subject position of this sentence.

114. [Dirosa] di gapa bajanala kwa Bloemfontein.(The roses attract tourists at Bloemfontein.)

The external argument **dirosa** in (14) assumes the theta role of **cause**. **Dirosa** is not the **doer** of the action but the **cause** of the action. The tourists go to Bloemfontein because of [dirosa].

The predicate argument structure of (105) is:

115. P.A.S.:[-kob-]:[ $\underline{x}(y, Loc.z)$ ]

The [x] argument will be assigned to [monna], the [y] argument to [bana] and the [z] argument to [ntlong]. The thematic roles assigned to these arguments are: monna is agent, bana is patient and ntlong is source. Ntlong can also be location.

Monna, the external argument of sentence (105), is animate. **Monna** also appears in the subject position of the sentence. This external argument being animate and occupying the subject position of the sentence assumes the thematic role **agent**. **Monna** assumes this role because the verb is a motion verb and **monna** is the doer of the action [-kob-] in the sentence. The external argument [monna], which is animate, is replaced by an inanimate argument [tlala] to test whether an inanimate argument can appear in the subject position with the verb [-kob-].

[Tlala] e koba bana mo ntlong.(Hunger sends children away from the house.)

The external argument [tlala] in (116) has the theta role of cause.

## Internal argument

The internal argument [lori] in (101), which is inanimate, may be replaced by an animate NP [ngwana] to see whether this verb can take animate arguments in the object position.

117. Monna o roma [ngwana] kwa ntlong.(The man sends the child to the house.)

Sentence (117) above is grammatical because of the animate argument [ngwana] used in the object position. The verb [-rom-] takes an animate argument for the sentence to be grammatical. Although **ngwana** is animate, it is still assigned a thematic role **theme**. The internal argument [makwalo] in (102), which is inanimate, is going to be replaced by an animate argument [ngwana]. This is to test whether the verb [-pos-] can take an animate argument in the object position.

118. Mosadi o posa [ngwana] mo boemelasetimela.(The woman posts the child at the train station.)

In this sentence (118) the verb [-pos-] does take an animate argument in the object position. This animate internal NP is not a general phenomenon. It depends on the context of the sentence: posting an animate thing, whether it is a person, animal, bird, or fish, is sending that particular thing which cannot take care of its own transport requirements, but needs transport provided by people. The theta role of **ngwana** is **theme**.

\*Mosadi o posa [ntswa] kwa posong.(The man posts a dog at the post office.)

The NP **ntswa** cannot be posted at the post office like letters or parcels. The verb [-pos-] takes an inanimate internal NP in the object position, and animate internal NPs only in the context, where an animate is incapable of doing the action by itself.

The internal argument [diradio] in (103), which is inanimate, is replaced by an animate argument [batsetsana].

120. Dinokwane di mokola [batsetsana] kwa magaeng.(Syndicates smuggle young girls in the rural area.)

In this case, the verb [-mokol-] does take an animate argument in the object position. Anything, whether animate or inanimate, can be sent from one place to another illegally (smuggled). The theta role for **basetsana** is **theme**.

In (104) the internal argument [dikgomo], which is animate, is replaced by an inanimate argument [maru].

121. \*Phefo e gapa [maru] kwa lefaufaung.

(The wind drives the clouds in the sky.)

Although the sentence (121) is acceptable in its English translation, it is not acceptable in Setswana. The internal argument in the object position has to move by itself, its direction being monitored by an agent. In this case the internal argument maru is pushed by an agent phefo.

The internal argument [bana] in (105) is animate. In (122) this argument is replaced by an inanimate argument [setshwantsho].

122. \*Motshini o koba [setshwantsho] mo tsebeng.

\*(The machine sends the picture away from the page.)

The replaced internal inanimate NP cannot be taken by the verb [-kob-] in the object position. The internal argument in the object position of the verb [-kob-] has to move by itself from one position to the other. This argument cannot move.

The common element in the **send** verbs is that even when the internal NP in the object position is animate or inanimate, it always assumes a thematic role **theme**.

## The locative argument

A locative argument is a phrase which refers to the location or place of the action of the verb. This position of the argument is characterised by location/place, goal/direction and source.

All the locative arguments of (101-105) above are inanimate. The arguments in this section will be replaced by an animate NP. This is to test whether the verbs in (101-105) can take them.

An inanimate locative argument [ntlong] in (101) is replaced by an animate argument [moruting] in (123):

123. Morutabana o roma basetsana kwa [moruting]. (The teacher sends the boys to the priest.)

In sentence (123) an inanimate locative can be changed to an animate locative. The argument [moruting] assumes the theta role **direction**.

An inanimate locative NP [posong] in (102) is replaced by an animate NP [malome] in (124):

124. Mosadi o posa pakana mo go [malome].

\*(The woman posts the parcel at uncle.)

The animate locative argument **malome** is problematic in (124) above. If **malome** is an employee of the post office and handling the transaction, then the locative is acceptable. But if **malome** is not an employee of the post office and is not the one handling the transaction, then the locative is unacceptable, because it makes **malome** inanimate. The theta role assumed by **malome** is **location**.

An inanimate locative NP [sekepeng] in (103) is replaced by animate NPs [Thabo] and [mogwebing] in (125a, b).

- 125. a. Magodu a mokola diteemane mo ga [Thabo]. (Thieves smuggle diamonds at Thabo's place.)
- b. Magodu a mokola diteemane kwa [mogwebing].(The thieves smuggle diamonds from/at the businessman.)

In (125a) the animate NP **Thabo** indicates location in this sentence. In (125b) the animate NP **mogwebing** indicates source in that sentence. In (125a) the animate NP **Thabo** must take the locative preposition **go** or **ga**. These NPs in both forms indicate an entity where the action takes place or from where it moves. The animate locative NP **Thabo** in (125a) assumes the theta role **location** and **mogwebing** in (125b) assumes the theta role **source** and **location**.

An inanimate locative NP [nageng] in (104) is replaced by animate NP's [molatofadiwa] in (126a) and [matebeleng] in (126b).

126. a. Mosimane o gapa dikgomo kwa go [molatofadiwa].

(The boy drives the cattle from the accused.)

b. Batlhabani ba gapa dikgomo kwa [Matebeleng].(The warriors drive the cattle from the Ndebeles.)

The animate NPs molatofadiwa in (126a) and Matebeleng in (126b) are arguments that indicate an entity from which motion takes place. Both these arguments, molatofadiwa and Matebeleng, assume the theta role source.

An inanimate NP [ntlong] in (105) is replaced by an animate NP [bathong] in (127).

127. Jesu o koba mowa o o maswe mo [mothong].(Jesus sends the evil spirit away from the person.)

The animate NP **mothong** in (127) is an argument that indicates an entity from which motion takes place. **Mothong** in this sentence assumes the theta role **source**.

One may conclude in this case that the animate arguments can replace the inanimate arguments in the sentence. These new animate arguments can assume any of the three theta roles location, goal/direction and source in the sentence.

The sentence above demonstrates Machobane's fact (1996: 8) that a locative phrase cannot appear without an NP in an object position.

## The applicative affix -el-

The aim is to establish whether the locative arguments (both animate and inanimate) may appear with the applied send verbs.

#### Animate locative:

128. Monna o romela dibuka kwa [mosading].(The man sends the book to the woman.)

## Inanimate locative:

129. Monna o romela dibuka kwa [ntlong].(The man sends the books to the house.)

The locative arguments **mosading** in (128) and **ntlong** in (129) can appear with the applicative affix **-el-**. The thematic role assumed by the two locative arguments is **direction**. The entity **dibuka** is moved towards a certain place which, is **mosading** and **ntlong**.

### Animate locative:

130. Mosadi o posetsa makwalo kwa [morwading].(The woman posts the letters to the daughter.)

## Inanimate locative:

131. Mosadi o posetsa makwalo kwa [Tshwane]. (The woman posts the letters to Pretoria.)

The locative arguments **morwading** in (130) and **Tshwane** in (131) can appear with the applicative affix **-el-**. The thematic role assumed by the two locative arguments is **direction**. The entity **makwalo** is moved towards a certain place, which is **morwading** and **Tshwane**.

## Animate locative:

132. Dinokwane di mokolela makgarebe kwa [mogwebing]. (The syndicates smuggle young girls to the businessman.)

#### Inanimate locative:

133. Banna ba mokolela diradio kwa [sekepeng]. (The men smuggle radios to the ships.)

The locative arguments **mogwebing** in (132) and **sekepeng** in (133) can appear with the applicative affix **-el-**. The thematic role assumed by the two locative arguments is

direction. The entities makgarebe and diradio are moved towards certain places, which are mogwebing and sekepeng.

### Animate locative:

134. Mosimane o gapela dikgomo kwa go [malomagwe].(The boy drives the cattle to his uncle.)

## Inanimate locative:

135. Mosimane o gapela dikgomo kwa [nageng]. (The boy drives the cattle to the veld.)

The locative arguments **malomagwe** in (134) and **nageng** in (135) can appear with the applicative affix **-el-**. The thematic role assumed by these locative arguments is **direction**. **Malomagwe** and **nageng** are the places towards which the entity **dikgomo** is moved.

## Animate locative:

136. Monna o kobela bana ba gagwe kwa go [mogatse].(The man sends his children away to his wife.)

## Inanimate locative

137. Monna o kobela bana ba gagwe mo [ntlong].(The man sends his children away to the house.)

The locative arguments **mogatse** in (136) and **ntlong** in (137) can appear with the applicative affix -el-. The thematic role assumed by these locative arguments is direction. **Mogatse** and **ntlong** are the places towards which the entity **bana** is moved.

The majority of the locative arguments used above, indicate the **direction** towards which the entity (internal argument in the object position) is moved when the applicative affix **-el-** is used with the predicate.

### 2.6.1.2 Causative verbs

These verbs use the affix -is- to allow the internal arguments of the predicate to be increased by one argument. The old external argument in the subject position is internalised to the object position. The new argument in the subject position is called a **causative agent**. The aim is to focus on the difference between verbs with and without -is-, as well as the difference between verbs with animate and inanimate subjects. They are motion verbs with P.A.S.:  $[\underline{x}(Loc.y)]$ :

## (i) These verbs are used without <u>-is-</u> with an animate and inanimate subject.

- 138. a. [+animate]: [Moithuti] o ile kwa Yunibesiting ya Stellenbosch.
  - (The student went to the University of Stellenbosch.)
  - b. [-animate]: [Buka] e ile kwa mabolokela dibuka.

    (The book went to the library.)
- 139. a. [+animate]: [Bana] ba boile kwa ntlong.

(The children returned from the house.)

b. [-animate]: [Metsi] a boile kwa molapong.

(The water returned from the river.)

140. a. [+animate]: [Basotho] ba huduga kwa Thaba Ntsho.

(The Basotho relocate from Thaba Ntsho.)

b. [-animate]: [Mabokose] a huduga mo lebanteng.

(The boxes are conveyed on the belt.)

141. a. [+animate]: [Mogokgo] o belesa kwa sekolong.

(The principal discharges at the school.)

b. [-animate]: [Serori] se belesa kwa femeng.

(The truck transports at the firm.)

142. a. [+animate]: [Mosetsana] o lebile kwa sekolong.

(The girl is heading to the school.)

b. [-animate]: [Matlhare] a lebile kwa ntlong.(The leaves are heading to the house.)

143. a. [+animate]: [Ngwana] a tsena mo kamoreng.

(The child gets in the room.)

b. [-animate]: [Ditulo] di tsena mo kerekeng.

(The chairs get in the church.)

144. a. [+animate]: [Motlhatlheledi] o tsamaya mo kholetsheng.

(The lecturer goes away from the college.)

b. [-animate]: [Bese] e tsamaya mo toropong.

(The bus moves in town.)

145. a. [+animate]: [Moithuti] o feta mo sekolong.

(The student passes at the school.)

b. [-animate]: [Peipi] e feta fa pele ga ntlo.

(The pipe passes in front of the house.)

In the sentences above the animate subjects moithuti in (138a), bana in (139a), Basotho in (140a), mogokgo in (141a), mosetsana in (142a), ngwana in (143a), mothatheledi in (144a) and moithuti in (145a) are the doers of the actions, thus their role is agent. As Haegeman (1994: 49) states: the subject is the one which intentionally initiates or does the action expressed by the predicate. The subjects above fulfil that role. On the other hand the inanimate subjects buka in (138b), metsi in (139b), mabokose in (140b), serori in (141b), mathare in (142b), ditulo in (143b), bese in (144b) and peipi in (145b) are the entities moved by the action expressed by the predicate (Haegeman, 1994: 49). Because these subjects are inanimate, their role is theme.

The arguments in bold print in examples (138-145) are **locative** phrases. These locatives assume different roles according to the action expressed by the predicates. **Yunibesiting** ya Stellenbosch in (138a), mabolokela-dibuka in (138b), sekolong in (142a), and ntlong and kamoreng in (143a) receive the role direction, since they are entities

towards which the activity expressed by the predicate is **directed** (Haegeman 1994: 50). The NPs **ntlong** in (139a), **molapong** in (139b), **Thaba Ntsho** in (140a), **lebanteng** in (140b), **sekolong** in (141a), **femeng** in (141b) and **kholetsheng** in (144a) receive the role **source**, since they are entities from which something is moved as a result of the activity expressed by the predicate (Haegeman 1994: 50).

The locative NPs kerekeng in (143b), toropong in (144b), sekolong in (145a) and ntlong in (145b) receive the role location since they are the places in which the action or state expressed by the predicate is situated (Haegeman 1994: 50).

- (ii) The (a) sentences in (138-145) above are changed to causative with both animate and inanimate subjects.
- 146. a. [+animate]: [Batsadi] ba isa [moithuti] kwa [Yunibesiting ya Stellenbosch].

(The parents send the student to Stellenbosch University.)

b. [-animate]: [Tshelete] e isa [moithuti] kwa [Yunibesiting ya

Stellenbosch].

(Money sends the student to Stellenbosch University.)

147. a. [+animate]: [Mosadi] o busa [bana] kwa [ntlong].

(The woman returns the children from the house.)

b. [-animate]: [Pula] e busa [bana] kwa [ntlong].

(Rain returns the children from the house.)

148. a. [+animate]: [Kgosi] e hudusa [Basotho] kwa [Thaba Ntsho].

(The chief relocates the Basotho from Thaba Ntsho.)

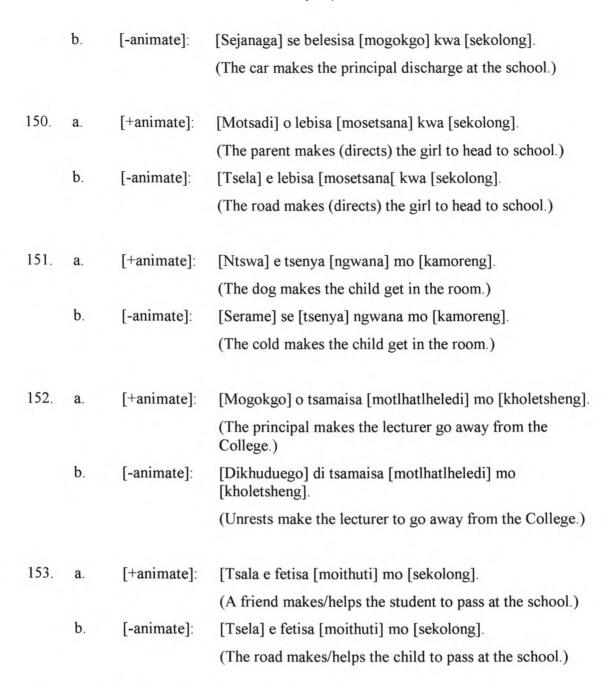
b. [-animate]: [Tlala] e hudusa [Basotho] kwa [Thaba Ntsho].

(Hunger relocates the Basotho from Thaba Ntsho.)

149. a. [+animate]: [Motlhatlhobi] o belesisa [mogokgo] kwa [sekolong].

(The inspector makes the principal discharge at the

school.)



Sentences (b) in (138-145) above are also changed to causative using animate and inanimate arguments in subject position.

154. a. [+animate]: [Moithuti] o isa [buka] kwa [mabolokela-dibuka].

(The student sends/takes books to the library.)

b. [-animate]: [Poso] e isa [buka] kwa [mabolokela-dibuka].

(The Post Office sends/takes books to the library.)

155.	a.	[+animate]:	[Banna] ba busa [metsi] kwa [molapong].  (The men return water at the river.)
	b.	[-animate]:	[Foro] e busa [metsi] kwa [molapong].
	O.	[-anmate].	(A furrow returns water at the river.)
156.	a.	[+animate]:	[Modiri] o hudusa [mabokose] mo [lebanteng].
			(The worker conveys the boxes on the belt.)
	b.	[-animate]:	[Motshini] o hudusa [mabokose] mo [lebanteng].
			(The machine conveys the boxes at the belt.)
157.	a.	[+animatei:	[Modiri] o belesisa [serori] kwa [femeng].
			(The worker makes the truck to transport at the firm.)
	b.	[-animate]:	[Enjene] e belesisa [serori] kwa [femeng].
			(The engine makes the truck to transport at the firm.)
158.	a.	[+animate]:	[Mosimane] o lebisa [matlhare] kwa [ntlong].
			(The boy makes the leaves to head to the house.)
	b.	[-animate]:	[Phefo] e lebisa [matlhare] kwa [ntlong].
			(The wind makes the leaves to head to the house.)
159.	a.	[+animate]:	[Morutabana] o tsenya [ditilo] mo [kerekeng].
			(The teacher puts the chairs in the church.)
	b.	[-animate]:	[Mojako] o tsenya [ditilo] mo [kerekeng].
			(The door lets the chairs in the church.)
160.	a.	[+animate]:	[Mokgweetsi] o tsamaisa [bese] mo [toropong].
			(The driver moves the bus in town.)
	b.	[-animate]:	[Motlakase] o tsamaisa [bese] mo [toropong].
			(The electricity moves the bus in town.)
161.	a.	[+animate]:	[Moagi] o fetisa [peipi] fa pele ga [ntlo].
			(The builder makes the pipes to pass in front of the house.)

b. [-animate]: [Mosele] o fetisa [peipi] fa pele ga [ntlo].(The trench makes the pipes to pass in front of the house.)

The subjects in (a) of (146-161) are animate arguments which intentionally cause the actions expressed by the predicates of their sentences. Therefore they receive the role of causative **agent**. The subjects in (b) of (146-161), on the other hand, are inanimate arguments. They receive the role of **causative theme** as they are the **cause** of the actions expressed by the predicate. They cause the action expressed by the predicate to move the entities in the object position.

All the internal arguments in the object position of examples (154-161) are objects. They are all interpreted with the meaning of **cause**. The objects in (146-153) are also interpreted as **cause**. In (149) there is a need of a third internal argument in the direct object position.

162. Motlhatlhobi o belesisa mogokgo [morutabana] kwa sekolong.(The inspector causes the principal to discharge the teacher from school.)

In this sentence it is **morutabana** (direct object) who is discharged and not **mogokgo** (indirect object). The argument **mogokgo** in (149) receives the role of causative **agent** because it does the action, and **morutabana** in (162) receives the role **theme**. In examples (154-161) the objects **buka**, **metsi**, **mabokose**, **matlhare**, **ditilo**, **bese** and **peipi** are causative themes. Since these arguments are inanimate, they receive the role of causative **theme**. Sentence (157) also needs the third internal argument in the direct object position.

163. Modiri o belesisa serori [morwalo] kwa femeng.(The worker transports (with a truck) goods to the firm.)

In sentence (163) it is **morwalo** (direct object) that is transported and it is **serori** (indirect object) that transports. Therefore **serori** in (157) and (163) receives the role of

causative **theme**. The argument **morwalo** in (163) receives the role **theme** as an entity that is moved by the action expressed by the predicate.

All the locative arguments in examples (145-160) are internal arguments. These arguments assume different roles varying from goal and source to location according to the action expressed by the predicate. In (145) Yunibesiting ya Stellenbosch, mabolokela-dibuka in (154), kamoreng in (151) and kerekeng in (159) denote the role goal or direction because they indicate the entity towards which the activity expressed by the predicate is directed. The role source is assigned to the arguments in (146) ntlong and molapong in (155), Thaba Ntsho in (147) and kholetsheng in (152), since they are entities from which something is moved as a result of the activity expressed by the predicate. The role location is assigned to the arguments lebanteng in (156), toropong in (160), sekolong in (153) and ntlo in (161) since they are places in, at and next to which the action expressed by the predicate is situated.

## (iii) Sentences used with the applicative -el- with inanimate locatives

- 164. a. Moithuti o ela kwa [Yunibesiting ya Stellenbosch].(The student goes to (the direction of) Stellenbosch University.)
  - b. Batsadi ba isetsa moithuti [kwa Yunibesiting ya Stellenbosch].(The parents send the student towards Stellenbosch University.)
  - Poso e isetsa tiro-patlo [kwa Yunibesiting ya Stellenbosch].
     (The Post Office sends the assignment towards Stellenbosch University.)
- 165. a. Bana ba boela [kwa ntlong].

  (The children return to the house.)
  - b. Metsi a boela [kwa molapong].(The water returns to the river.)
  - c. Mosadi o busetsa bana [kwa ntlong].(The woman returns the children to the house.)

- 166. a. Basotho ba hudugela [kwa Thaba Ntsho]. (The Basotho relocate to Thaba Ntsho.)
  - b. Kgosi e hudusetsa Basotho [kwa Thaba Ntsho].(The chief relocates Basotho to Thaba Ntsho.)
  - c. Motshini o hudusetsa mabokoso [mo lebanteng].(The machine conveys to the belt.)
- 167. a Mogokgo o belesetsa [kwa sekolong].

  (The principal discharges at the school.)
  - b. Serori se belesetsa [kwa femeng].(The truck transports at the firm.)
  - c. Modiri o belesisetsa serori [kwa femeng].(The worker transports the truck towards the firm.)
- 168. a. Mosetsana o lebela [kwa ntlong]. (The girl heads to the house.)
  - b. Mosimane o lebisetsa matlhare [kwa ntlong].(The boy directs the leaves to the house.)
  - c. Phefo e lebisetsa matlhare [kwa ntlong].(The wind directs the leaves to the house.)
- 169. a. \*Ngwana o tsenela [mo kamoreng]. (The child attends in the room.)
  - b. \*Ngwana o tsenyetsa [mo kamoreng].(The child puts in the room.)
  - c. \*Serame se tsenyetsa ngwana [mo kamoreng].(The cold puts the child in the room.)
- 170. a. Motlhatlheledi o tsamaela [mo kholetsheng].(The lecturer walks towards/walks for (someone/something) at the College.)
  - b. Mokgweetsi o tsamaisetsa bese [mo toropong].(The driver makes the bus to move to town.)

- c. Motlakase o tsamaisetsa bese [mo toropong].(The electricity makes the bus to move to town.)
- 171. a. Moithuti o fetela [mo sekolong].

  (The student passes towards the school.)
  - b. Moagi o fetisetsa peipi [fa pele ga ntlo].(The builder passes the pipe towards the front of the house.)
  - c. Mosele o fetisetsa peipi [fa pele ga ntlo].(A trench passes the pipe towards the front of the house.)

The locative NPs printed bold in (164), (165), (166), (167c), (168), (170) and (171) receive the role **goal** (or direction), while the locative NPs printed bold in (167a, b) and (170a) receive the role **location**. The locative NP **mo kholetsheng** in (170a) receives two roles **goal** and **location**. If the predicate **-tsama-el-a** means **goes** towards, then the role is **goal**, and if the predicate above means **walk**, then the role is **location**. The sentences in (169) are not acceptable.

- (iv) Sentences used with the applicative <u>-el-</u>, with the inanimate locatives changed to animate locatives.
- 172. a. Moithuti o ela [kwa batsading].

  (The student goes to (the direction of) the parents.)
  - b. Batsadi ba isetsa moithuti [kwa batlhatlheleding].(The parents send/take the students towards the lecturers.)
  - c. Poso e isetsa tiro-patlo [kwa moithuting].(The Post Office sends/takes the assignment towards the student.)
- 173. a. Bana ba boela [kwa mosading].

  (The children return to the woman.)
  - b. Metsi a boela [kwa banneng].(The water returns to the men.)
  - c. Mosadi o busetsa bana [kwa banneng].(The woman returns the children to the men.)

- 174. a. Basotho ba hudugela [kwa Batswaneng]. (The Basotho relocate to the Batswana.)
  - b. Kgosi e hudusetsa Basotho [kwa Batswaneng].(The chief relocates the Basotho to the Batswana.)
  - c. Motshini o hudusetsa mabokoso [mo mopaking].(The machine conveys the boxes to the packer.)
- 175. a. \*Mogokgo o belesetsa [kwa motlhatlhobing]. (The principal discharges at/to the inspector.)
  - b. \*Serori se belesetsa [kwa baneng].(The truck transports something to the children.)
  - c. \*Modiri o belesisetsa serori [kwa baneng].(The worker makes the truck transport something to the children.)
- 176. a. \*Mosetsana o lebela [kwa mosading]. (The girl heads towards the woman.)
  - b. Mosimane o lebisetsa matlhare [kwa mosetsaneng].(The boy directs the leaves towards the girl.)
  - c. Phefo e lebisetsa matlhare [kwa mosimaneng].(The wind directs the leaves towards the boys.)
- 177. a. \*Ngwana o tsenela [mo mothong].

  (The child attends (something) at the person.)
  - b. \*Ngwana o tsenyetsa [mo moruting].(The child puts in (something in something) at the priest.)
  - c. \*Serame se tsenyetsa ngwana [mo baithuting].(The cold puts the child (for something/someone) in the students.)
- 178. a. Motlhatlheledi o tsamaela [mo moithuting].

  (The lecturer walks towards the student.)
  - b. Mokgweetsi o tsamaisetsa bese [mo banneng].(The driver moves the bus towards the men.)

- c. Motlakase o tsamaisetsa bese [mo banneng].(Electricity moves the bus towards the men.)
- 179. a. Moithuti o fetela [mo tsaleng].

  (The student passes towards a friend.)
  - b. Moagi o fetisetsa peipi [fa pele ga mogwebi].(The builder passes the pipe towards the front of the businessman.)
  - c. Mosele o fetisetsa peipi [fa pele ga mogwebi].(The trench passes the pipe towards the front of the businessman.)

The locative NPs printed in bold in (172-179) receive the role **goal** or **direction** with the exception of (177), which is not acceptable, as well as (175) and (176a).

## 2.6.2 Slide verbs

These verbs can be used as intransitive verbs of manner of motion, as well as transitive verbs of causing a change of position (Levin, 1993: 134). Levin goes further to say that the verbs in this subsection can also be used as verbs of change of possession brought about by a change of position (1993: 134).

## 2.6.2.1 Non-derived verbs

- 180. The non-derived verbs assign three arguments
  - a. Mosimane o pitika mosetsana mo diretseng.(The boy rolls the girls in the mud.)
  - b. Monna o pitikolola nama mo molelong(The man turned the meat over on the fire.)
  - c. Mosetsana o akga kgole kwa ntlong.(The girl swings the rope at the house.)
  - d. Makhubu a kgapha ditshila mo lewatleng(The waves remove dirt from the sea.)

In the predicate argument structure of these verbs, one will notice that the verbs assign an external argument to the NP in the subject position and internal arguments to the NP in the object position and to the locative NP.

The predicate argument structure for the sentences above is:

P.A.S.:[x(y, Loc.z)]

The variable  $\mathbf{x}$ , which is outside the round brackets in the predicate argument structure above, represents the external argument. The variables  $\mathbf{y}$  and  $\mathbf{z}$ , which are inside the round brackets, represent the internal arguments. The internal argument  $\mathbf{y}$  is a direct object and the  $\mathbf{z}$  argument is the indirect argument which is assigned a theta role by locative morphemes.

The [x] argument is assigned to mosimane in (a), monna in (b), mosetsana in (c) and makhubu in (d). The [y] argument is assigned to mosetsana in (a), nama in (b), molelong in (b), ntlong in (c) and lewatleng in (d).

The theta roles assigned to the external arguments are: agent to mosimane in (a), to monna in (b) and to mosetsana in (c), while cause is assigned to makhubu in (d). With regard to the internal arguments, the direct objects are assigned the theta role of patient to mosetsana in (a) and nama in (b), kgole in (c) and ditshila in (d), the indirect objects (locatives) are then assigned the theta role: location to diretseng in (a), molelong in (b), and ntlong in (c), and source to lewatleng in (d).

## The external argument

The test in this section is whether the animate external argument in the subject position of a sentence can be changed to an inanimate argument and whether an animate external argument in the object position can also be changed to an inanimate argument. The theta role assigned to the new argument will also be tested.

The external arguments **mosimane** in (180a), **monna** in (180b) and **mosetsana** in (180c), which appear in the subject position, are **animate**. These arguments are changed

and replaced by **inanimate** arguments, while the **inanimate** argument **makhubu** in (180d) is changed and replaced by an animate argument.

181. a. [Koloi] e pitika mosetsana mo diritseng.

(The car rolls the girl in the mud.)

An inanimate argument [koloi] in (181) can appear as an external argument in the subject position of the verb [-pitik-]. **Koloi** is assigned a theta role **cause** because it is not the doer but the **cause** of an action.

The external argument [monna] in (180) is **animate**. **Monna** also appears in the subject position of the sentence. The argument **monna** is assigned the theta role **agent** because it is the doer of the action. An animate argument [monna] is replaced by an inanimate argument [forotlho]:

b. [Forotlho] e pitikolola nama mo molelong.(The fork turns the meat over on the fire.)

The external argument [forotlho] is an instrument which is used to turn the meat on the fire and used by a human. Although it is not human, it can still appear in the subject position of the verb [-pitikolol-]. Forotlho is then assigned the theta role **instrument**.

In (180) the external argument [mosetsana] is **animate** and appears in the subject position of the sentence. The argument **mosetsana** is assigned the theta role **agent** because it is the door of the action. The **animate** argument [mosetsana] is replaced by an **inanimate** argument [phefo].

c. [Phefo] e akga sefofane mo lefaufaung.(The wind swings the plane in the sky.)

The external argument [phefo] is the **cause** of the action undergone by the object. Because the inanimate external argument, which is also in the subject position, is not the doer of the action but the cause, it is assigned a thematic role **cause**.

The external argument [makhubu], which is also in the subject position of (180) is **inanimate**. This inanimate argument is replaced by an **animate** argument **maphodisa** in (180).

d. [Maphodisa] a kgapha dinokwane mo motseng.(The police remove the criminals from the village.)

The animate external argument [Maphodisa] can appear in the subject position of the verb [-kgaph-]. This argument is assigned the theta role **agent** because it is the intentional doer of the action expressed by the verb, and is **animate**.

In the sentences in (180) and (181) above it is proved and acceptable that both animate and inanimate external argument can appear in the subject position of the verbs [-pitik-], [-pitikolol-], [-akg-] and [-kgaph-].

# The internal argument

The internal argument in the object position in (180) that are animate, are changed and replaced by inanimate arguments, and those arguments that are inanimate, are also changed and replaced by animate arguments.

182. a. Mosimane o pitika [dikobo] mo diretseng.

(The boy rolls the blankets in the mud.)

The internal argument **mosetsana** in (180), which is **animate**, is replaced by an **inanimate** argument **dikobo** in (182). The verb [-pitik-] can also take an **inanimate** argument in its object position. The thematic role assigned to this argument [dikobo] is still **patient**.

b. Mooki o pitikolola [molwetse] mo bolaong.(A nurse turns the patient over on the bed.)

The internal argument [nama] in (180) is **inanimate**. It is replaced by an **animate** argument [molwetse] in (182). The verb [-pitikolol-] can also take an animate argument in the object position. [Molwetse] in (182) is assigned a thematic role **patient**.

c. Mosadi o akga [ngwana] mo lebaleng la go tshamekela.(The woman swings the child on the playground.)

The internal argument [kgole] in (180), which is inanimate, is replaced by an **animate** argument [ngwana] in (182). Because the sentence is acceptable, it proves that the verb [-akg-] can take an animate argument in the object position. [Ngwana] in (182) is assigned a thematic role **patient**.

d. Molebeledi o kgaphile [magodu] kwa lebentleleng.(The security pushed the thieves out of the store.)

The internal argument [ditshila] in (180), which is **inanimate**, is replaced with an **animate** argument [magodu] in (182). In this sentence the verb [-kgaph-] can also take an animate argument in the object position. [Magodu] in (182) is assigned the thematic role **patient**.

Since sentences (180-182) are acceptable to the native speaker, they provide proof that the verbs [-pitik-], [-pitikolol-], [-akg-] and [-kgaph-] can take both animate and inanimate arguments in the object position.

## The locative argument

The internal arguments in the locative position in (179) are inanimate. They are now changed and replaced by animate arguments.

183. a. Mosimane o pitika kgwele mo [monneng].

(The boy rolls the ball on the man.)

An **inanimate** locative argument [diretseng] in (180) is replaced with an **animate** locative argument [monneng] in (183). The locative argument **monneng** assumes the

theta role **location**, which indicates the place where the action expressed by the verb is situated. The verb [-pitik-] can take an animate argument in the locative position.

b. Morutabana o pitikolola karata ya leina mo [moithuting].(The teacher turns the name card over on the learner.)

An **inanimate** locative argument [molelong] in (180) is replaced with an **animate** locative argument [moithuting] in (183). The locative argument **moithuting** assumes the theta role **location**. The verb [-pitikolol-] can take an animate argument in the locative position.

c. Mosetsana o akga kgole mo godimo ga [pitse].(The girl swings the rope on top of a horse.)

An inanimate locative argument [ntlong] in (180) is replaced with an **animate** argument [pitse] in (183). This locative argument **pitse** assumes the theta role **location**. The verb [-akg-] can take an animate argument in the locative position.

d. Morapeledi o kgaphile mowa o o maswe mo [molwetseng].(A faith-healer removed the evil spirits from the patient.)

An inanimate locative argument [lewatleng] in (180) is replaced with an **animate** argument [molwetseng] in (183). The locative argument **molwetseng** assumes the theta role **source** because it is an entity from which something is moved as a result of the activity expressed by the verb. The verb [-kgaph-] can take an animate argument in the locative position.

The sentences in (183) are acceptable to the native speaker. These sentences thus provide proof that the verbs [-pitik-], [-pitikolol-], [-akg-] and [-kgaph-] can take both animate and inanimate arguments in the locative position.

## The applicative -el-

The slide verbs in (180) above are used with the applicative affix -el-. The investigation whether the applicative may appear with these verbs and the interpretation of the locative which is now dependent on it, will follow after each example.

- 184. a. (i) Inanimate locative

  Mosimane o pitikela mosetsana mo [diretseng].

  (The boy rolls the girl on the mud.)
  - (ii) Animate locative

    Mosimane o pitikela kgwele mo [monneng].

    (The boy rolls the ball towards the man.)

The locative arguments [diretseng] and [monneng] in (184) can appear with the applicative affix -el-. The thematic role assumed by diretseng is location and monneng assumes the thematic role direction. The locative diretseng can also be direction if it is not the place where the girl is rolling, but the place she will finally roll to.

- b. (i) Inanimate locative
   Monna o pitikololela nama mo [molelong].
   (The man turns the meat over on the fire.)
  - (ii) Animate locative

    Morutabana o pitikololela karata ya leina mo [moithuting].

    (The teacher turns the name card over on the learner.)

The locative arguments [molelong] and [moithuting] in (184) can appear with the applicative affix -el-. The thematic role assumed by the two locatives molelong and moithuting is location.

c. (i) Inanimate locative
 Mosetsana o akgetse kgole kwa [ntlong].
 (The girl swung the rope towards the house.)

(ii) Animate locativesMosetsana o akgetse kgole mo godimo ga [pitse].(The girl swung the rope on top of the horse.)

The locative arguments [ntlong] and [pitse] in (184) can appear with the applicative affix -el-. The thematic role assumed by the two locatives ntlong and pitse is direction.

- d. (i) Inanimate locative
  \*Makhubu a kgaphetse ditshila mo [lewatleng].
  (The waves removed dirt to the sea.)
  - (ii) Animate locative\*Morapeledi o kgaphetse mowa o o maswe mo [molwetseng].(A faith-healer removed the evil spirit to the patient.)

The locative arguments [lewatleng] and [molwetseng] in (184) cannot appear with the applicative affix -el-. For the locatives to appear with the applicative -el-, they must be changed as in (184).

- e. (i) Inanimate locative

  Makhubu a kgaphetse ditshila mo [lotshing].

  (The waves removed dirt to the beach.)
  - (ii) Animate locativeMorapeledi o kgaphetse mowa o o maswe kwa [diheleng].(A faith-healer removed the evil spirit to hell.)

The locative arguments [lotshing] and [diheleng] in (184) can appear with the applicative affix -el-. The locative lotshing is a place where dirt from the sea can be moved to, while diheleng is a place where the evil spirit can be moved to. Therefore the thematic role attached to the two locatives lotshing and diheleng is direction.

When the applicative affix -el- is used with the verb, an entity tends to change the location and the locative becomes the direction towards which an entity change its

location. The thematic role of the locative when dependent on the applicative affix **-el**is in most cases **direction**.

#### 2.6.2.2 Causative verbs

The causative verbs are verbs that use the affix -is-, which increases the number of arguments in the PAS by one. The new argument becomes the new external argument in the subject position and influences or makes the old external subject to perform an activity expressed by the predicate.

- (i) These verbs are used without -is- with an animate subject and an inanimate subject.
- 185. a. [+animate]: [Mosimane] o relela mo seretseng.

(The boy slips on the mud.)

b. [-animate]: [Dibuka] di relela mo tafoleng.

(The book slips on the table.)

186. a. [+animate]: [Noga] e lelemela mo kamoreng.

(The snake crawls in the room.)

b. [-animate]: [Metsi] a lelemela mo jarateng.

(Water flows in the yard.)

187. a. [+animate]: [Mosetsana] o kgokologa mo **bolaong**.

(The girl rolls on the bed.)

b. [-animate]: [Kgwele] e kgokologa mo setilong.

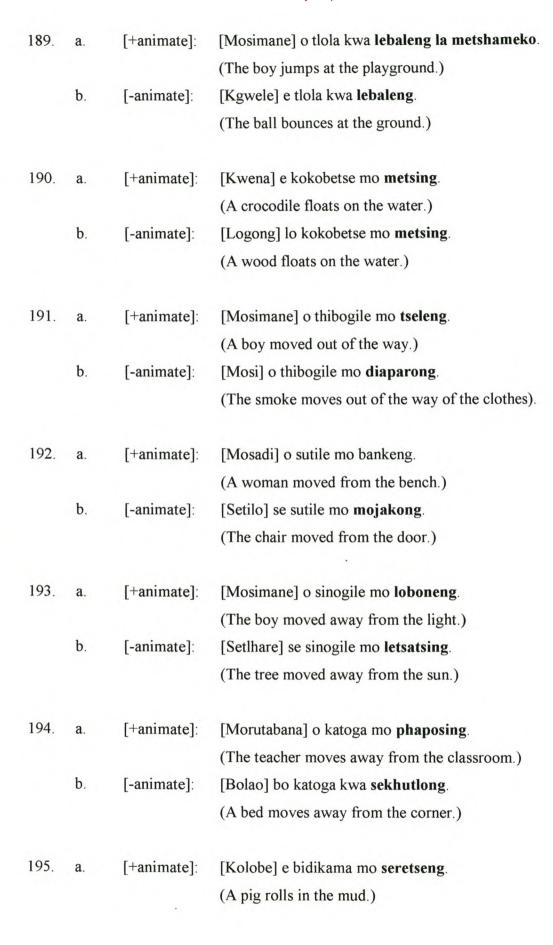
(The ball rolls on the chair.)

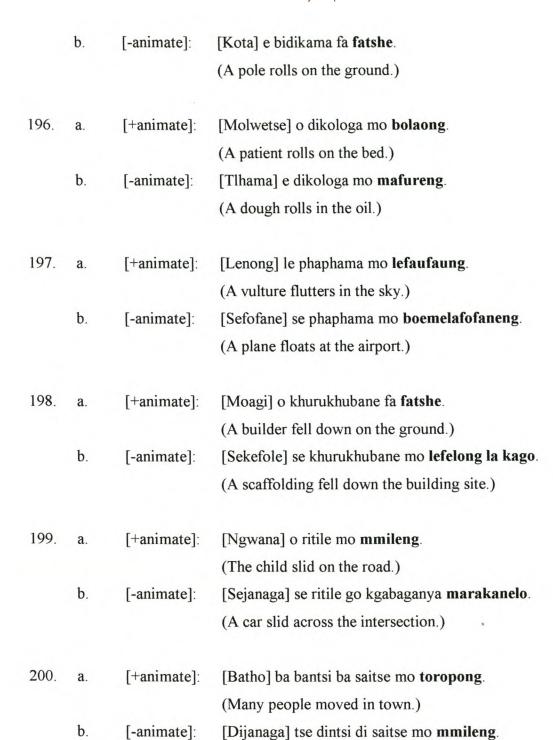
188. a. [+animate]: [Monna] o kolokotega mo lefatsheng.

(The man rolls on the ground.)

b. [-animate]: [Leotwana] le kolokotega mo **mmileng**.

(A wheel rolls on the road.)





In the sentences above, the animate subjects mosimane in (185), noga in (186), mosetsana in (187), monna in (188), mosimane in (189), kwena in (190), mosimane in (191), mosadi in (192), mosimane in (193), morutabana in (194), kolobe in (195), molwetse in (196), lenong in (197), moagi in (198), ngwana in (199) and batho in (200) are the doers of the action expressed by the predicates, thus they assume the

(Many cars moved on the road.)

thematic role agent. The inanimate subjects dibuka in (185), metsi in (196), kgwele in (187), leotwana in (188), kgwele in (189), logong in (190), mosi in (191), setilo in (192), setlhare in (193), bolao in (194), kola in (195), tlhama in (196), sefofane in (197), sekefole in (198), sejanaga in (199) and diganaga in (200) are assigned the role theme.

The arguments which are printed in bold in examples (185-200) are locative NPs. These locative NPs assume different thematic roles according to the actions expressed by the predicate. The locative seretseng in (185), tafoleng in (185), kamoreng in (186), jarateng in (186), bolaong in (187), setilong in (187), lefatsheng in (188), mmileng in (188), lebaleng la motshameko in (189), lebaleng in (189), metsing in (190) and (190), diaparong in (191), seretseng in (195), fatshe in (195), bolaong in (196), mafureng in (196), lefaufaung in (197), boemelafofaneng in (197), fatshe in (198), lefelong la kago in (198), mmileng in (201), marakanelo in (201), totopo in (200) and mmileng in (200) assume the thematic role location since they are places where the action expressed by the predicate is situated. The locatives tseleng in (191), bankeng in (192), mojakong in (192), loboneng in (193), letsatsing in (193), phaposing in (194) and sekhutlong in (194) assume the thematic role source since they are entities from which things are moved as a result of the activity expressed by the predicate.

- (ii) The (a) sentences in (185-200) above are changed to causative with the affix **-is-** with both animate and inanimate subjects:
- 201. a. [+animate]: [Mosadi] o reledisitse [mosimane] mo [diretseng].
  - [-animate]: [Ditlhako] di reledisitse [mosimane] mo diretseng).

(The shoes slipped the boy on the mud.)

(The woman slipped the boy on the mud.)

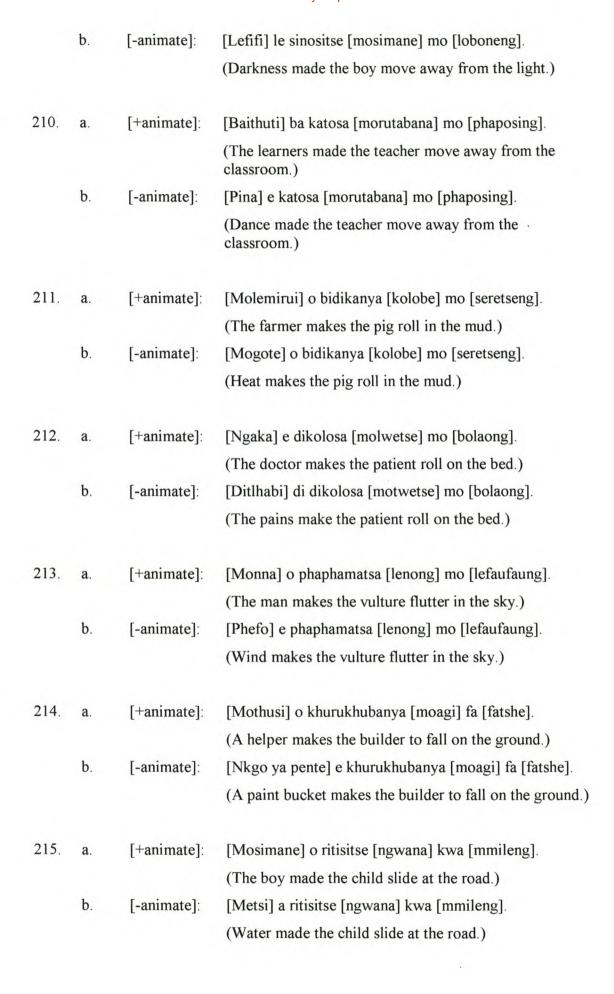
202. a. [+animate]: [Monna] o lelemedisitse [noga] mo [kamoreng].

(The man made the snake crawl in the room.)

[-animate]: [Modumo] o lelemedisitse [noga] mo [kamoreng].

(Noise made the snake crawl in the room.)

203.	a.	[+animate]:	[Mosadi] o kgokolosa [mosetsana] mo [bolaong].  (The woman makes the girl roll on the bed.)
	b.	[-animate]:	[Ditlhabi] di kgokolosa [mosetsana] mo [bolaong].  (Pains make the girl roll on the bed.)
204.	a.	[+animate]:	[Lephodisa] le kolokotisa [monna] mo [lefatsheng].
	b.	[-animate]:	(The policeman dragged the man on the ground.) [Sejanaga] se kolokotisa [monna] mo [lefatsheng].
	U.	[ annate].	(The car dragged the man on the ground.)
205.	a.	[+animate]:	[Mokatisi] o tlodisa [mosimane] kwa [lebaleng la motshameko].
			(The coach made the boy jump at the playground.)
	b.	[-animate]:	[Boitumelo] bo tlodisa [mosimane] kwa [lebaleng la motshameko].
			(Happiness made the boy jump at the playground.)
206.	a.	[+animate]:	[Motsomi] o kokobedisitse [kwena] mo [metsing].
			(A hunter made the crocodile float on the water.)
	b.	[-animate]:	[Tlala] e kokobedisitse [kwena] mo [metsing].
			(Hunger made the crocodile float on the water.)
207.	a.	[+animate]:	[Mosetsana] o thibositse [mosimane] mo [tseleng].
			(The girl made the boy move out of the way.)
	b.	[-animate]:	[Sejanaga] se thibositse [mosimane] mo [tseleng].
			(The car made the boy move out of the way.)
208.	a.	[+animate]:	[Monna] o sutisitse [mosadi] mo [bankeng].
			(The man made the woman move from the bench.)
	b.	[-animate]:	[Metsi] a sutisitse [mosadi] mo [bankeng].
			(The water made the woman move from the bench.)
209.	a.	[+animate]:	[Rra] o sinositse [mosimane] mo [loboneng].
			(Father made the boy move away from the light.)



216.	a.	[+animate]:	[Moeteledipele] o saidisitse [batho] ba bantsi mo [toropong].
			(A leader made many people move in town.)
	b.	[-animate]:	[Dingongorego] di saidisitse [batho] ba bantsi mo [toropong].
			(Grievances made many people move in town.)

The (b) sentences in (201-216) above are also changed to causatives with the affix **-is**-using animate and inanimate arguments in the object position.

217.	a.	[+animate]:	[Moithuti] o reledisitse [dibuka] mo [tafoleng].
			(A student made the books slip on the table.)
	b.	[-animate]:	[Mafura] a reledisitse [dibuka] mo [tafoleng].
			(Oil made the books slip on the table.)
218.	a.	[+animate]:	[Mosimane] o lelemedisitse [metsi] mo [jarateng].
			(The boy made the water flow in the yard.)
	b.	[-animate]:	[Foro] e lelemedisitse [metsi] mo [jarateng].
			(A furrow made the water flow in the yard.)
219.	a.	[+animate]:	[Ngwana] o kgokolosa [kgwele] mo [setilong].
			(The child makes the ball roll on the chair.)
	b.	[-animate]:	[Phefo] e kgokolosa [kgwele] mo [setilong].
			(The wind makes the ball roll on the chair.)
220.	a.	[+animate]:	[Ngwana] o kolokotisa [leotwana] mo [ntlong].
			(The child make the wheel roll in the house.)
		[-animate]:	[Motshini] o kolokotisa [leotwana] mo [ntlong].
			(The machine makes the wheel roll in the house.)
221.	a.	[+animate]:	[Mosimane] o tlodisa [kgwele] kwa [ntlong].
			(The boy makes the ball bounce at the house.)

	b.	[-animate]:	[Rekete ya tenese] o tlodisa [kgwele] kwa [ntlong].
			(A tennis racket made the ball bounce at the house.)
222.	a.	[+animate]:	[Monna] o kokobadisitse [logong] mo [metsing].
			(The man made the wood float on the water.)
	b.	[-animate]:	[Segagane] se kokobadisitse [logong] mo [metsing].
			(Ice made the wood float on the water.)
223.	a.	[+animate]:	[Batho] ba thibositse [mosi] mo [diaparong].
			(The people made the smoke move away from the clothes.)
	b.	[-animate]:	[Phefo] e thibositse [mosi] mo [diaparong].
			(The wind made the smoke move away from the clothes.)
224.	a.	[+animate]:	[Mosadi] o sutisitse [setilo] mo [mojakong].
			(The woman made the chair move away from the door.)
	b.	[-animate]:	[Motshini] o sutisitse [setilo] mo [mojakong].
			(The machine made the chair move away from the door.)
225.	a.	[+animate]:	[Banna] ba sinositse [setlhare] mo [letsatsing].
			(The men made the tree move away from the sun.)
	b.	[-animate]:	[Terekere] e sinositse [setlhare] mo [letsatsing].
			(A tractor made the tree move away from the sun.)
226.	a.	[+animate]:	[Mosadi] o katositse [bolao] kwa [sekhutlong].
			(The woman made the bed move away from the corner.)
	b.	[-animate]:	[Ditumalano] di katositse [bolao] kwa [sekutlong].
			(Agreements made the bed move away from the corner.)
227.	a.	[+animate]:	[Ngwana] o bidikantse [kota] fa [fatshe].
			(The child made the pole roll on the ground.)
	b.	[-animate]:	[Metsi] a bidikantse [kota] fa [fatshe].
			(The water made the pole roll on the ground.)

228.	a.	[+animate]:	[Moapei] o dikolositse [tlhama] mo [mafureng].
			(The cook made the dough roll in the oil.)
	b.	[-animate]:	[Mogote] o dikolositse [tlhama] mo [mafureng].
			(Heat made the dough roll in the oil.)
229.	a.	[+animate]:	[Mofofisi] o phaphamaditse [sefofane] mo boemelafofaneng.
			(A pilot made the plane float at the airport.)
	b.	[-animate]:	[Enjene e ntshwa] e phaphamaditse [sefofane] mo boemelafofaneng.
			(A new engine made the plane float at the airport.)
220			D4 11 11 11 11 11 11 11 11 11 11 11 11 11
230.	a.	[+animate]:	[Modiri] o khurukhukantse [sekefole] mo [lefelong la tiro].
			(A worker made the scaffolding fall at the workplace.)
	b.	[-animate]:	[Phefo] e e matla e khurukhubantse [sekefole] mo [lefelong la tiro].
			(A strong wind made the scaffolding to fall at the workplace.)
231.	a.	[+animate]:	[Mokgweetsi] o ritisitse [sejanaga] mo [marakanelong].
			(A driver made the car slide in the intersection.)
	b.	[-animate]:	[Metsi] a ritisitse [sejanaga] mo [marakanelong].
			(The water made the car slide in the intersection.)
232.	a.	[+animate]:	[Borapharakano] ba saidisitse [dijanaga] tse dintsi mo [mmileng].
			(Traffic officers made many cars to move on the road.)
	b.	[-animate]:	[Roboto] e saidisitse [dijanaga] tse dintsi mo [mmileng].
			(A traffic light made many cars to move on the road.)

In the examples in (201-232) all the external arguments are **subjects** of those sentences. The animate subjects in (a) of sentences (201-232) are intentional initiators and the cause of the action expressed by the predicates of their sentences. Therefore these

arguments assume the theta role **causative agent**. The subjects in (b) of sentences (201-232) are inanimate arguments. Although they are inanimate, they are the **cause** of the action expressed by the predicates. They assume the role **causative theme**.

All the internal arguments in the object position of examples (201-232) are direct objects. In examples (a) and (b) of sentences (201-216) the objects mosimane in (201), noga in (202), mosetsana in (203), monna in (204), mosimane in (205), kwena in (206), mosimane in (207), mosadi in (208), mosimane in (209), morutabana in (210), kolobe in (211), molwetse in (212), lenong in (213), moagi in (214), ngwana in (215), and batho in (216) are animate arguments. These objects retained their roles of agent or theme.

All the internal arguments in the locative positions above also retain their theta roles.

- (iii) Sentences with the predicate used with the applicative affix -el- with inanimate locatives
- 233. a. Mosimane o relelela mo **seretseng**. (The boy slips towards the mud.)
  - b. Mosadi o reledisetsa mosimane mo diretseng.(The woman slips the boy towards the mud.)
  - c. Moithuti o reledisetsa dibuka mo tafoleng.(A student slips the books towards the table.)
- 234. a. Noga e lelemelela mo **kamoreng**. (The snake crawls to the room.)
  - b. Monna o lelemeletsa noga mo kamoreng.(The man makes the snake crawl to the room.)
  - c. Foro e lelemeletsa metsi mo jarateng.(A furrow makes the water flow to the yard.)
- 235. a. Mosetsana o kgokologela mo **bolaong**. (The girl rolls to the bed.)

- b. Kgwele e kgokologela mo setilong.(The ball rolls to the chair.)
- c. Phefo e kgokolosetsa kgwele mo setilong.(The wind rolls the ball to the chair.)
- 236. a. Monna o kolokotegela mo **lefatsheng**. (The man rolls to the ground.)
  - b. Leotwana le kolokotegela mo mmileng.(A wheel rolls to the road.)
  - c. Motshini o kolokotisetsa leotwana mo **ntlong**.(The machine rolls the wheel to the house.)
- 237. a. Mosimane o tlolela kwa **lebaleng la motshameko**. (The boy jumps to the playing field.)
  - b. Kgwele e tlolela kwa lebaleng.(The ball bounces to the field.)
  - c. Rekete ya tenese e tlodisetsa kgwele kwa ntlong.(A tennis racket bounces the ball to the house.)
- 238. a. \*Kwena e kokobeletse me **metsing**. (A crocodile floated to the water.)
  - b. \*Logong lo kokobeletse mo metsing.(A wood floated to the water.)
  - c. \*Segagane se kokobeleditse logong mo metsing.(The ice floated the wood to the water.)
- 239. a. \*Mosimane o thibogetse mo **tseleng**. (The boy moved out of the way to the road.)
  - \*Mosi o thibogetse mo diaparong.(The smoke moved out of the way to the clothes.)
  - c. Phefo e thiboseditse mosi mo diaparong.(The wind moves the smoke out of the way to the clothes.)

- 240. a. Mosadi o sutela mo bankeng.(The woman moves to the bench.)
  - b. Setilo se sutela mo mojakong.(The chair moves to the door.)
  - c. Mosadi o sutisetsa setulo mo mojakong.(The woman moves the chair to the door.)
- 241. a. \*Mosimane o sinogela mo **leboneng**. (The boy moves away to the light.)
  - b. \*Setlhare se sinogela mo **letsatsing**. (The tree moves away to the sun.)
  - c. \*Banna ba sinosetsa setlhare mo **letsatsing**.

    (The men moves the tree away to the sun.)
- 242. a. \*Morutabana o katogela mo **phaposing**. (The teacher moves away to the classroom.)
  - b. \*Bolao bo katogela mo sekhutlong.(The bed moves away to the corner.)
  - c. \*Mosadi o katosetsa bolao mo sekhutlong.(The woman moves the bed away to the corner.)
- 243. a. Kolobe e bidikamela mo **seretseng**. (The pig rolls to the mud.)
  - b. Kota e bidikamela fa fatshe.(A pole rolls to the ground.)
  - c. Ngwana o bidikameletse kota fa fatshe.(The child rolled a pole on the ground.)
- 244. a. Molwetse o dikologela mo **bolaong**. (The patient rolls to the bed.)
  - b. Tlhama e dikologela mo mafureng.(The dough rolls to the oil.)

c. Moapei o dikoloseditse tlhama mo mafureng.(The cook rolled the dough to the oil.)

## 245. a. Lenong le phaphamela mo **lefaufaung**. (A vulture flutters to the sky.)

b. Sefofane se phaphamela kwa boemelafofaneng.

(A plane floats towards the airport.)

c. Mofofisi o phaphameleditse sefofane kwa boemelafofaneng.(A pilot floated a plane towards the airport.)

246. a. Moagi o khurukhubanela fa **fatshe**.(A builder fell down towards the ground.)

b. Sekefole se khurukhubanela mo lefelong la kago.(A scaffolding fell down toward the building site.)

c. Modiri o khurukhubanetse sekefole mo lefelong la kago.(A worker made the scaffolding fall down towards the building site.)

## 247. a. Ngwana o ritilela mo **mmileng**. (The child slides to the road.)

b. Sejanaga se ritilela kwa marakanelong.(The car slides towards the intersection.)

c. Mokgweetsi o ritiseditse sejanaga kwamarakamelong.(The driver slid the car towards the intersection.)

# 248. a. Batho ba bantsi ba sailela kwa **toropong**. (Many people move towards town.)

b. Dijanaga tse dintsi di sailela mo mmileng.(Many cars move to the road.)

Moeteledipele o saidiseditse batho ba bantsi kwa toropong.
 (A leader made many people move towards the town.)

The locative NP's printed in bold in (233-248) assume the theta role direction as they are entities towards which the activities expressed by the predicate are directed. The

locative lebaleng la motshameko in (237), lebaleng in (237) and ntlong in (237) can also be location if the entity moved by the predicate does not change the location because the predicate tlol-el-a may mean jumps to or usually jumps at.

- (iv) Sentences with the predicate used with the applicative affix -el-, with animate locatives
- 249. a. Mosimane o relelela mo **taung**. (The boy slips towards the lion.)
  - b. Mosadi o reledisetsa mosimane mo taung.(The woman makes the boy slip towards the lion.)
  - c. Moithuti o reledisetsa dibuka kwa morutabaneng.(A student slips the books towards the teacher.)
- 250. a. Noga e lelemelela mo **ngwaneng**. (A snake crawls to the child.)
  - b. Monna o lelemeletsa noga mo ngwaneng.(The man makes the snake crawl to the child.)
  - c. Foro e lelemeletsa metsi kwa bathong.(A furrow makes the water flow to the people.)
- 251. a. Mosetsana o kgokologela mo **ngakeng**. (The girl rolls to the doctor.)
  - b. Kgwele e kgokologela mo motshameking.(The ball rolls to the player.)
  - c. Phefo e kgokolosetsa kgwele kwa babogeding.(The wind rolls the ball to the spectators.)
- 252. a. Monna o kolokotegela go **malomagwe**. (The man rolls to his uncle.)
  - b. Leotwana le kolokotegela go mokgweetsi.(The wheel rolls to the driver.)

- c. Motshini o kolokotisetsa leotwana kwa baneng.(The machine rolls the wheel to the children.)
- 253. a. Mosimane o tlolela kwa go **mmagwe**. (The boy jumps towards his mother.)
  - b. Kgwele e tlolela kwa basimaneng.(The ball bounces to the boys.)
  - c. Rekete ya tenese e tlodisetsa kgwele kwa babogeding.(A tennis racket bounces the ball to the spectators.)
- 254. a. Kwena e kokobeletse mo **motsoming**. (A crocodile floated to the hunter.)
  - b. Logong lo kokabeletse mo mosimaneng.(A wood floated to the boy.)
  - c. Segagane se kokobeleditse logong mo bathong.(The ice floated the wood to the people.)
- 255. a. Mosimane o thibogetse go **rragwe**. (The boy moved out of the way to his father.)
  - b. Mosi o thibogetse mo mosetsaneng.(The smoke moved out of the way to the girl.)
  - c. Phefo e thiboseditse mosi mo basetsaneng.(The wind moved the smoke out of the way to the girls.)
- 256. a. Mosadi o sutela mo monneng.(The woman moves towards the man.)
  - b. \*Setilo se sutela mo **mosadimogolong**.

    (The chair moves to the old woman.)
  - c. Mosadi o sutisetsa setilo mo mosadimogolong.(The woman moves the chair to the old woman.)
- 257. a. Mosimane o sinogela go **morwarragwe**. (The boy moves away to his brother.)

- b. \*Setlhare se sinogela mo bathong.(The tree moves away to the people.)
- c. Banna ba sinosetsa setlhare mo bathong.(The men move the tree to the people.)
- 258. a. Morutabana o katogela mo **maphodiseng**. (The teacher moves away to the policemen.)
  - b. Bolao bo katogela go molwetse.(The bed moves away to the patient.)
  - c. Mosadi o katosetsa bolao kwa molwetseng.(The woman moves the bed away to the patient.)
- 259. a. Kolobe e bidikamela mo **molemiruing**. (The pig rolls to the farmer.)
  - b. Kota e bidikamela fa **badiring**.(The pole rolls to the workers.)
  - c. Ngwana o bidikameletse kota mo **badiring**.(The child rolled the pole to the workers.)
- 260. a. Molwetse o dikologela mo **mooking**. (The patient rolls to the nurse.)
  - b. Thama e dikologela mo mogwebing.(The dough rolls to the businessman.)
  - c. Moapei o dikoloseditse tlhama mo mogwebing.(The cook rolled the dough to the businessman.)
- 261. a. Lenong le phaphamela mo **moruting**. (A vulture flutters to the preacher.)
  - b. Sefofane se phaphamela mo **bapalaming**.(A plane floats towards the passengers.)
  - c. Mofofisi o phaphameleditse sefofane mo bapalaming.(A pilot floated the plane towards the passengers.)

- 262. a. Moagi o khurukhubanela mo **mothusing**. (The builder fell down towards the helper.)
  - b. Sekefole se khurukhubanela mo moaging.(The scaffolding fell down towards the builder.)
  - c. Modiri o khurukhubanetse sekefole mo moaging.(The worker made the scaffolding fall down towards the builder.)
- 263. a. Ngwana o ritelela go **mmagwe**. (The child slides to its mother.)
  - b. Sejanaga se ritelela fa baneng.(The car slides to the men.)
  - c. Mokgweetsi o ritiseditse sejanaga fa baneng.(The driver slid the car to the men.)
- 264. a. Batho ba bantsi ba sailela mo **maphodiseng**. (Many people move towards the policemen.)
  - b. Dijanaga tse dintsi di sailela bathong.(Many cars move towards the people.)
  - Moeteledipele o saidiseditse batho ba bantsi kwa maphodiseng.
     (A leader made many people to move towards the policemen.)

The locative NPs which are printed in bold in (249-264), assume the theta role **direction** because they are entities towards which the activities expressed by the predicate are directed.

#### 2.6.3 Bring and take verbs

These verbs can be used as verbs of change of possession which is brought about by the change of position of the entities. Gropen *et al.* (1989) decribe these verbs as verbs of continuous causation of accompanied motion in a deictically-specified direction (Levin, 1993:135).

#### 2.6.3.1 Non-derived verbs

265. The non-derived verbs assign three arguments:

- a. [Mosimane] o tsaya [mosetsanal kwa [gaabo].(The boy takes the girl from her home.)
- b. [Malome] o lere [baeng] kwa [gae].(Uncle brings the visitors at home.)
- c. [Monna] o ntsha [ngwanal mo [mosimeng].(The man takes the child out of the hole.)
- d. [Mosetsana] o inola [ntswa] mo [nokeng].(The girl takes the dog out of the river.)
- e. [Banna] ba rafa [korong] mo [kgetsing].

  (The men take corn out of the sack.)

In the predicate argument structure of these verbs, one will notice that these verbs assign an external argument to the NP in the subject position, and internal arguments to the NP in the object position and to the NP in the locative position.

The predicate argument structure for the sentences above is.

P.A.S.:[x(y,Loc.z)]

The variable  $\mathbf{x}$ , which is outside the brackets in the predicate argument structure above, represents the external argument. The variables  $\mathbf{y}$  and  $\mathbf{z}$ , which are inside the brackets, represent the internal arguments. The internal argument  $\mathbf{y}$  is a direct object and the  $\mathbf{z}$  argument is the indirect argument which is assigned a theta role by locative morphemes.

The [x] argument is assigned to mosimane in (a), malome in (b), monna in (c), mosetsana in (d) and banna in (e). The [y] argument is assigned to mosetsana in (a), baeng in (b), ngwana in (c), ntswa in (d) and korong in (e). The [z] argument is assigned to gaabo in (a), gae in (b), mosimeng in (c), nokeng in (d) and kgetsing in (e).

The theta roles assigned to the external arguments is **agent** to **mosimane** in (a), **malome** in (b), **monna** in (c), **mosetsana** in (d) and **banna** in (e). The internal arguments in the direct object position assign a theta role **theme** to **mosetsana** in (a), **baeng** in (b), **ngwana** in (c), **ntswa** in (d) and **korong** in (e). The internal arguments in the indirect

position (locatives) assign a thetarole source to gaabo in (a), mosimeng in (c), nokeng in (d) and kgetsing in (e), while the thetarole direction is assigned to gae in (b).

#### The external argument

The test in this section is whether an animate external argument in the subject position of a sentence can be changed to an inanimate argument. What theta role will be assigned to the new argument, will also be investigated and tested.

266. a. [Serori] se tsaya matlakala mo motseng.(A truck takes rubbish from the location.)

The external argument [mosimane] in (265), which is **animate**, is replaced with an **inanimate** argument [serori] in (266). The verb [-tsay-] can take an inanimate external argument in the subject position. The theta role assigned to **serori** is **instrument**.

b. [Phefo e e matla] e lere lorole mo ntlong.(A strong wind brought dust in the house.)

The external argument [malome] in (265), which is **animate**, is replaced with an **inanimate** argument [phefo] in (266). The verb [-ler-] can take an inanimate external argument in the subject position. The theta role assigned to **phefo** is **cause**.

c. [Mogote] o ntsha tlhapi mo metsing.(Heat takes the fish out of the water.)

The external argument [monna] (265), which is **animate**, is replaced with an inanimate argument [mogote] in (266). The verb [-ntsh-] can take an inanimate external argument in the subject position. The theta role assigned to **mogote** is **cause**.

d. [Letloa] le inola ditlhapi mo metsing.(A net takes out fish from the water.)

The external argument [mosetsana] in (265), which is **animate**, is replaced with an **inanimate** argument [letloa] in (266). The verb [-inol-] can take an inanimate external argument in the subject position. The theta role assigned to **letloa** is **instrument**.

e. [Anglo American] e rafa gauta kwa Welkom.

(Anglo-American mines gold at Welkom.)

The external argument [banna] in (265), which is animate, is replaced with an **inanimate** argument [Anglo-American] in (266). The verb [-raf-] can take an inanimate external argument in the subject position. The theta role assigned to **Anglo-American** is **cause**.

In the sentences in (265) and (266) above it has been proved and accepted that both an animate and an inanimate external argument can appear in the subject position of the verbs [-tsay-], [-ler-], [-ntsh-],-inol-] and [-raf-].

## Internal argument

The internal arguments in the object position in (265) that are animate are changed and replaced with inanimate arguments and those that are inanimate are also changed and replaced with animate arguments. The theta roles will be assigned to these new arguments and tested.

267. a. Mosimane o tsaya [diaparo] mo lebentleleng. (The boy takes clothes from the store.)

The internal argument [mosetsana] in (265a), which is **animate**, is replaced with an **inanimate** argument [diaparo] in (267a). The verb [-tsay-] can take an inanimate argument in the object position. The theta role assigned to this argument **diaparo** is **theme**, as they are things moved by the action expressed by the predicate.

b. Mosimane o lere [maswi] mo gae.(The boy brings milk at home.)

The internal argument [baeng] in (265), which is animate, is replaced with an inanimate argument [maswi] in (267b). The verb [-ler-] can take an inanimate argument in the object position. The theta role assigned to this argument **maswi** is **theme**, as it is a thing that is moved by the action expressed by the predicate.

c. Ngaka e ntsha [meno] kwa bookelong.(The surgeon extracts teeth at the hospital.)

The internal argument [ngwana] in (265), which is **animate**, is replaced with an inanimate argument [meno] in (267c). The verb [-ntsh-] can take an inanimate argument in the object position. The theta role assigned to this argument **meno** is **theme**, as they are things that are moved by the action expressed by the predicate.

d. Mosimane o inola [kgwele] mo metsing.(The boy takes the ball out of the water.)

The internal argument [mosetsana] in (265), which is **animate**, is replaced with an **inanimate** argument [kgwele] in (267d). The verb [-inol-] can take an inanimate argument in the object position. The theta role assigned to this argument **kgwele** is **theme**, as it is the thing that is moved by the action expressed by the predicate.

e. Bafalosi ba rafa [badiri] kwa dimaeneng.(The rescuers take workers out of the mines.)

The internal argument [korong] in (265), which is **inanimate**, is replaced with an **animate** argument [badiri] in (267e). The verb [-raf-] can take an animate argument in the object position. The theta role assigned to this argument **badiri** is **theme**, as they are persons moved by the action expressed by the predicate.

Through the investigation above it is realised that the verbs [-tsay-], [-ler-], [-ntsh-], [-inol-] and [-raf-] can take both animate and inanimate arguments in the object position. The thematic roles assigned to both these arguments is **theme**.

#### The locative argument

The internal arguments in the locative position in (265) are inanimate. These arguments are now changed and replaced with animate arguments.

268. a. Mosimane o tsaya ngwana mo [batsading]. (The boy takes the girl from the parents.)

A locative argument [gaabo] in (265), which is **inanimate**, is replaced with an **animate** locative argument [batsading] in (268a). The verb [-tsay-] can take an animate argument in the locative position. The locative argument **batsading** assumes the theta role **source**, which indicates the entity from which something is moved as a result of the activity expressed by the predicate.

b. Malome o lere baeng kwa [morutabaneng].(Uncle brings visitors to the teacher.)

An **inanimate** locative argument [gae] in (265) is replaced with an **animate** locative argument [morutabaneng] in (268b). The verb [-ler-] can take an animate argument in the locative position. The locative argument **morutabaneng** assumes the theta role **direction**, which indicates the entity towards which the activity expressed by the predicate is directed.

c. Ngaka e ntsha meno mo [ngwaneng].(The surgeon extracts teeth from the child.)

The **inanimate** locative argument [mosimeng] in (265) is replaced with an **animate** locative argument [ngwaneng] in (268b). The verb [-ntsh-] can take an animate argument in the locative position. The locative argument **ngwaneng** assumes the theta role **source**, which indicates the entity from which something is moved as a result of the activity expressed by the predicate.

d. Mosimane o inola mosetsana mo [ditsaleng] tse di bosula.(The boy takes the girl out of bad friends.)

An **inanimate** locative argument [nokeng] in (265) is replaced with an **animate** locative argument [ditsaleng] in (268d). When the verb [-inol-] is used figuratively as in (268d), it can take an animate argument in the locative position. The locative argument **ditsaleng** assumes the theta role **source**, which indicates the entity from which something is moved as a result of the activity expressed by the predicate.

e. Banna ba rafa tshelete mo [mohuming].(The men are mining money from the rich man.)

An **inanimate** locative argument [kgetsing] in (265) is replaced with an **animate** locative argument [mohuming] in (268e). When the verb [-raf-] is used figuratively as in (268e), it can take an animate argument in the locative position. The locative argument **mohuming** assumes the theta role **source** which indicates the entity from which something is moved as a result of the activity expressed by the predicate.

The investigation reveals that the verbs [-tsay-], [-ler-], [-ntsh-] can take both animate and inanimate arguments in the locative position. The verb [-inol-], which means "take out of water", and [-raf-], which means "take out of a container, or mine minerals", can take inanimate arguments, and also animate argument when they are used in a figurative manner. The other verbs assign a theta role **source** to the locative arguments except [-ler-], which assigns a theta role **direction** to the locative argument.

#### The applicative -el-

The bring and take verbs in (265) are now used with the applicative affix **-el-**. The investigation whether the applicative can appear with these verbs and the interpretation of the locative which is now dependent on it, will follow after the examples.

#### 269. a. (i) Inanimate locative

\*Mosimane o tseela mosetsana kwa [ditshwantshong]. (The boy takes ... for/from the girl at the movies.)

## (ii) Animate locative

\*Mosimane o tseela mosetsana kwa [batsading]. (The boy takes ... for/from the girl at the parent.)

#### b. (i) Inanimate locative

\*Malome o leretse baeng kwa [gae].

(Uncle brings for the visitors at home.)

#### (ii) Animate locative

\*Malome o leretse baeng kwa [morutabaneng].
(Uncle brings for the visitors at the teacher's place.)

## c. (i) <u>Inanimate locative</u>

\*Monna o ntshetsa ngwana mo [mosimeng].

(The man takes out for the child from the hole.)

## (ii) Animate locative

\*Ngaka ntshetsa meno mo [ngwaneng].

(A surgeon takes the teeth out at the child.)

(A surgeon extracts the teeth from the child.)

#### d. (i) Inanimate locative

\*Mosimane o inolela mosetsana mo [nokeng]. (The boy takes out for the girl from the river.)

## (ii) Animate locative

\*Mosimane o inolela mosetsana mo [ditsaleng] tse di bosula. (The boy takes out for the girl from bad friends.)

#### e. (i) <u>Inanimate locative</u>

Banna ba rafela korong mo [kgetsing]. (The men take corn out into the sack.)

#### (ii) Animate locative

Banna ba rafela gauta mo [mohuming]. (The men mine gold to the rich man.)

The locative arguments [kgetsing] and [mohuming] can appear with the applicative affix -el-. The thematic role assumed by the locatives kgetsing and mohuming is direction.

#### 2.6.3.2 Causative verbs

271.

a.

The causative verbs are verbs that use the affix -is-, which increases the number of arguments in the P.A.S. by one. The new argument becomes the new external argument in the subject position and the old external argument becomes the new internal argument in the direct object position. The new subject influences or makes the direct object perform an activity expressed by the predicate.

- (i) These verbs are used without -is- with animate and inanimate subjects.
- 270. a. [+animate]: [Ngwana] o tla mo sekolong.

(A child comes to school.)

- b. [-animate]: [Pula] e tla mo **Mangaung**. (The rain comes to Mangaung.)

[+animate]:

(The girl goes to Kimberley.)

b. [-animate]: [Molaetsa] o ya kwa **Teemaneng**.

(The message goes to Kimberley.)

[Mosetsanal o ya kwa kerekeng.

272. a. [+animate]: [Ngwetsi] e goroga mo **bogadi**.

(A daughter-in-law arrives at the in-laws.)

b. [-animate]: [Dithoto] di goroga mo gae.

(The goods arrive at home.)

273. a. [+animate]: [Ntswanyana] e efoga mo **mojakong**.

(A puppy moves away from the door.)

b. [-animate]: [Sefofane] se efoga mo boemelafofane.

(A plane moves away from the airport.)

In sentences (270-273) above, the animate subjects **ngwana** in (270), **mosetsana** in (271), **ngwetsi** in (272) and **ntswanyana** in (273) are the doers of the action expressed by the predicates, thus they assume the thematic role **agent**. The inanimate subjects **pula** in (270), **molaetsa** in (271), **ditholo** in (272) and **sefofane** in (273) are **themes**.

The arguments which are printed in bold in sentences (270-273) are locative NPs. These locative NPs assume different thematic roles according to the actions expressed by the predicates. The locatives **sekolong** (270), **Mangaung** (270), **kerekeng** (271), **Teemaneng** (271), **bogadi** (272) and **gae** (272) assume a thematic role **direction** since they are entities towards which the activity expressed by the predicate is directed. The locatives **mojakong** (273) and **boemelafofane** (273) assume the thematic role **source** since they are entities from which some things are moved as a result of the activity expressed by the predicate.

- (ii) The (a) sentences in (270-273) above are changed to causatives with the affix -is-, with both animate and inanimate subjects.
- 274. a. [+animate]: [Mosetsana] o tlisa [ngwana] mo [sekolong].

(The girl brings the child to school.)

- b. [-animate]: [Bese] e tlisa [ngwana] mo [sekolong].
  - (The bus brings the child to school.)
- 275. a. [+animate]: [Malome] o isa [mosetsana] kwa [kerekeng].

(Uncle takes the girl to church.)

b. [-animate]: [Thero] e isa [mosetsana] kwa [kerekeng].

(The sermon makes the girl go to church.)

276. a. [+animate]: [Lekau] le gorosa [ngwetsi] kwa [bogadi].

(The young man brings the daughter-in-law to the

in-laws.)

b. [-animate]: [Tshelete] e gorosa [ngwetsi] kwa [bogadi].

(Money brings the daughter-in-law to the in-laws.)

277. a. [+animate]: [Mosimane] o efosa [ntswanyana] mo [mojako].

(The boy moves the puppy away from the door.)

b. [-animate]: [Molamu] o efosa [ntswanyana] mo [mojako].

(A stick moves the puppy away from the door.)

The (b) sentences in (270-273) above are also changed to causatives with the affix -is-, using animate and inanimate arguments in the subject position.

278. a. [+animate]: Kgosigadi ya pula e tlisa pula mo Mangaung.

(The Rain Queen brings rain to Mangaung.)

b. [-animate]: Maru a tlisa pula mo Mangaung.

(The clouds bring rain to Mangaung.)

279. a. [+animate]: Raposo o isa molaetsa kwa Teemaneng.

(The postman takes the message to Kimberley.)

b. [-animate]: Telekerama e isa molaetsa kwa Teemaneng.(The telegram takes the message to Kimberley.)

280. a. [+animate]: Morongwa o gorosa dithoto mo gae.

(The messenger brings the goods home.)

b. [-animate]: Serori se gorosa dithoto mo gae.(The truck brings the goods home.)

281. a. [+animate]: Mofofisi o efosa sefofane mo boemelafofane.

(The pilot flies the plane away from the airport.)

b. [-animate]: Setsuatsue se efosa sefofane mo boemelafofane.(The thunderstorm flies the plane away from the airport.)

In the examples in (274-281) all the external arguments are subjects of those sentences. The animate subjects in (a) sentences, mosetsana (274), malome (275), lekau (276) and mosimane (277), and in the (a) sentences, kgosigadi ya pula (278), raposo (279), morongwa (280) and mofofisi (281), are intentional initiators and the cause of the action expressed by the predicates of their sentences. Therefore these arguments receive

the theta role causative agent. The inanimate subjects in (b) sentences bese (274), thero (275), tshelete (276) and molamu (277), and in the (b) sentences maru (278), telekeramo (279), serori (280) and setuatsue (281), although they are inanimate, are also the cause of the action expressed by the predicates of their sentences and are assigned the theta role causative theme.

All the internal arguments on the object position of examples (274-281) are direct objects. They retain their roles of agent or theme.

All the internal arguments in the locative position of examples (274-281) are locatives. They also retain their theta roles.

- (iii) Sentences with the predicate used with the applicative affix -el-, with inanimate locatives
- 282. a. Ngwana o tlela thuto mo **sekolong**. (The child comes to school for education.)
  - b. Mosetsana o tlisetsa ngwana dijo mo sekolong.(The girl brings food at school for the child.)
  - c. Kgosigadi ya pula e tlisetsa dimela pula mo Mangaung.(The Rain Queen brings rain for the plants to Mangaung.)
- 283. a. Mosetsana o ela thero kwa **kerekeng**. (The girl goes to church for the sermon.)
  - b. Malome o isetsa mosetsana thero kwa kerekeng.(Uncle takes the girl to church for the sermon.)
  - c. Raposo o isetsa mosetsana molaetsa kwa Teemaneng.(The postman takes the message to Kimberley for the girl.)
- 284. a. Ngwetsi e gorogela mo **bogadi**. (The daughter-in-law arrives at the in-laws.)
  - b. Lekau le gorosetsa ngwetsi mo bogadi.(The young man makes the daughter-in-law arrive at the in-laws.)

- c. Morongwa o gorosetsa dithoto mo gae.(The messenger makes the goods arrive at home.)
- 285. a. Ntswanyana e efogela mo **mojakong**. (A puppy moves away to the door.)
  - b. Mosimane o efosetsa ntswanyana mo mojakong.(The boy makes the puppy to move away to the door.)
  - c. Mofofisi o efosetsa sefofana mo boemelafofane.(The pilot makes the plane to move away to the airport.)

The locative NPs printed in bold in (282-285) above are assigned a theta role **direction**, as they are entities towards which the activities expressed by their predicates are directed.

- (iv) Sentences with the predicate used with the applicative affix -el-, with animate locatives.
- 286. a. Ngwana o tlela thuto mo **morutabaneng**. (The child comes to the teacher for education.)
  - b. Mosetsana o tlisetsa ngwana dijo mo morutabaneng.(The girl brings food to the teacher for the child.)
  - c. Kgosigadi ya pula e tlisetsa dimela pula mo balemiruing.(The Rain Queen brings rain for the plants to the farmers.)
- 287. a. Mosetsana o ela thero kwa **morering**.

  (The girl goes to the preacher for the sermon.)
  - b. Malome o isetsa mosetsana thero kwa morering.(Uncle takes the girl to the preacher for the sermon.)
  - c. Raposo o isetsa mosetsana molaetsa kwa batsading.(The postman takes the message to the parents for the girl.)
- 288. a. Ngwetsi e gorogela go **batsadi**. (The daughter-in-law to the parents.)

- b. Lekau le gorosetsa ngwetsi mo batsading.(The young man make the daughter-in-law arrive to the parents.)
- c. Morongwa o gorosetsa dithoto mo go malome.(The messenger makes the goods arrive to uncle.)
- 289. a. Ntswanyana e efogela mo **ngwaneng**. (The puppy moves away to the child.)
  - b. Mosimane o efosetsa ntswanyana mo ngwaneng.(The boy makes the puppy move away to the child.)
  - c. Mofofisi o efosetsa sefofane mo bataboging.(The pilot makes the plane move away to the runners.)

The locative NPs which are printed in bold in (286-289) are assigned the theta role direction because they are entities towards which the activity expressed by the predicate is directed.

## 2.6.4 Carry Verbs

Carry verbs are verbs that relate to the causation of accompanied motion. These verbs assign only two arguments. The third argument that can be used, is a locative that will be an adjunct. The Predicate Argument Structure of these verbs is:

P.A.S.:[x(y)]

#### a. Carry verbs without a locative

- 290. [Mosetsana] o tshotse [sejana]. (The girl carried the dish.)
- 291. [Monna] o sikere [kota]. (The man carried the pole.)
- 292. [Mosimane] o menyame [telebishene]. (The boy carried a television.)

- [Mosetsana] o kamakame [merogo].(The girl carried the vegetables.)
- 294. [Mosetsana] o rwele [ngata ya dikgong]. (The girl carried a bunch of wood.)
- 295. [Mosadi] o leseletse [nkgo]. (The woman carried the bucket.)
- 296. [Mosimane] o belege [kgetsana ya samente].(The boy carried the cement bag.)
- 297. [Dikgomo] di gogile [selei].(The cattle pulled the sledge.)
- 298. [Mosetsana] o kgokgoeditse [nku]. (The girl pushed a sheep.)
- 299. [Mosimane] o kgarameditse [setilo]. (The boy pushed the chair.)
- 300. [Mosadi] o kgaphile [mabele].(The woman pushed back the grain.)
- 301. [Mosetsana] o sukunyeditse [lokwalo]. (The girl pushed in the letter.)
- 302. [Monna] o kgothile [mosimane].(The man forcibly pulled back the boy.)
- 303. [Mosadi] o kabile [ngwana]. (The woman carried the child.)

- 304. [Mosetsana] o kakamere [dikgong].(The girl carried wood in her arms.)
- 305. [Mosetsana] o nenekeditse [kopi ya tee]. (The girl carefully carried a cup of tee.)
- 306. [Rapolasi] o rorile [korong]. (The farmer carried corn.)
- 307. [Lephodisa] le gogotse [seretse]. (The police scraped off mud.)
- 308. [Mme] o somile [tlhale]. (Mother inserted a thread.)
- 309. [Senokoane] se phololetse [maphodisa].(A criminal went through the police.)
- 310. [Ngwana] o subetse [nama]. (The child cramed meat.)
- 311. [Morutabana] o swapotse [buka].(The teacher forcibly pulled out the book.)
- 312. [Mosadi] o tomotse [mmutlwa]. (The woman pulled out the thorn.)
- 313. [Kgomo] e tlhomotse [kota ya legora]. (The cow pulled out the fence pole.)

The NP-arguments in the **subject** position in (290-313) are animate and are **doers** of the action expressed by their predicates. These arguments are thus assigned a theta role **agent**. The NP-arguments in the **object** position are both animate and inanimate. The

animate arguments, nku (298), mosimane (302), ngwana (303) and maphodisa (309), are persons undergoing the action expressed by their predicate. These arguments are assigned the theta role patient. The inanimate arguments, sejana (290), kota (291), telebishene (292), merogo (293), ngata ya dikgong (294), nkgo (295), kgetsana ya samente (296), selei (297), setilo (399), mabele (300), lokwalo (303), dikgong (304), kopi ya tee (305), korong (306), seretse (307), tlhale (308), nama (310), buka (311), mmutlwa (312) and kota ya legora (313), are things moved by the action effected by their predicates. These arguments are thus also assigned the theta role patient.

## b. Carry verbs above with a locative as an adjunct

- 314. Mosetsana o tshotse sejana mo [boapelong]. (The girl carried the dish in the kitchen.)
- 315. Monna o sikere kota mo [jarateng]. (The man carried the pole in the yard.)
- 316. Mosimane o menyame telebishene mo [lebentleleng]. (The boy carried a television in the store.)
- 317. Mosetsana o kamakamile merogo mo [mmarakeng]. (The girl carried the vegetables at the market.)
- 318. Mosetsana o rwele ngata ya dikgong kwa [sekgweng]. (The girl carried a bunch of wood at the forest.)
- 319. Mosadi o leseletse nkgo mo [mmileng].(The woman carried the bucket on the street.)
- 320. Mosimane o belege kgetsana ya samente kwa [tirong]. (The boy carried a bag of cement at work.)

- 321. Dikgomo di gogile selei kwa [masimong].(The cattle pulled the sledge at the fields.)
- 322. Mosimane o kgokgoeditse nku kwa [lesakeng]. (The boy pushed a sheep at the kraal.)
- 323. Mosimane o kgarameditse setilo mo [boapelong]. (The boy pushed the chair in the kitchen.)
- 324. Mosadi o kgaphile mabele mo [tafoleng]. (The woman pushed back the grain on the table.)
- 325. Mosetsana o sukunyeditse lokwalo mo [mojakong]. (The girl pushed the letter through the door.)
- 326. Monna o kgothile mosimane kwa [holong]. (The man pulled the boy back at the hall.)
- 327. Mosadi o kabile ngwana Kwa [gae]. (The woman carried the child at home.)
- 328. Mosetsana o kakamere dikgong mo [sekgweng].(The girl carried wood in the forest.)
- 329. Mosetsana o nenekeditse kopi ya tea mo [bojelong]. (The girl carefully carried a cup of tea in the dining-room.)
- 330. Rapolasi o rorile korong mo [polasing]. (The farmer carried corn on the farm.)
- 331. Lephodisa le gogotse seretse mo [dibutsheng]. (The police scraped mud from the boots.)

- 332. Mme o somile tlhale mo [nnaleng].
  (Mother inserted a thread in the needle.)
- 333. Senolwane se phololetse maphodisa kwa [nageng]. (A criminal went through the police at the veld.)
- 334. Ngwana o subetse nama mo [molomong]. (The child crammed meat in the mouth.)
- 335. Morutabana o swapotse buka mo [mabolokela dibuka]. (The teacher forcibly pulled out the book from the library.)
- 336. Mosadi o tomotse mmutlwa mo [lonaong].

  (The woman pulled out the thorn from the foot.)
- 337. Kgomo e tihomotse kota ya legora mo [masimong]. (The cow pulled out the fence pole at the fields.)

The locatives above have the meaning of **location**, with the exception of a few examples. The locatives **dibutsheng** (331), **mabolokela dibuka** (335) and **lonaong** (336) receive the meaning of **source** as assigned by their predicates.

- c. The sentences in (b) above are used with the applicative -el-
- 338. Mosetsana o tsholetse sejana mo [boapelong]. (The girl carried the dish to the kitchen.)
- 339. Monna o sikaretse kota mo [jarateng]. (The man carried the pole to the yard.)
- 340. Mosimane o menyametse thelebishene mo [lebentleleng]. (The boy carried the television to the store.)

- 341. Mosetsana o kamakametse merogo mo [mmarakeng]. (The girl carried the vegetables to the market.)
- 342. Mosetsana o rwaletse ngata ya dikgong kwa [sekgweng]. (The girl carried a bunch of wood to the forest.)
- 343. Mosadi o leseletse nkgo mo [mmileng]. (The woman carried the bucket to the street.)
- 344. Mosimane o belegetse kgetsana ya samente kwa [tirong]. (The boy carried a bag of cement to work.)
- 345. Dikgomo di gogetse selei kwa [masimong]. (The cattle pulled the sledge to the fields.)
- 346. Mosimane o kgokgoeleditse kgomo mo [lesakeng]. (The boy pushed the cow to the kraal.)
- 347. Mosimane o kgarameleditse setilo mo [boapelong]. (The boy pushed the chair to the kitchen.)
- 348. Mosadi o kgaphetse mabele mo [tafoleng]. (The woman pushed back the grain to the table.)
- 349. Mosetsana o sukunyeleditse lokwalo mo [mojakong]. (The girl pushed the letter towards the door.)
- 350. Monna o kgothetse mosimane kwa [holong]. (The man pulled the boy back to the hall.)
- 351. Mosadi o kabetse ngwana kwa [gae].(The woman carried the child towards home.)

- 352. Mosetsana o kakamaretse dikgong mo [sekgweng]. (The girl carried wood to the forest.)
- 353. Mosetsana o nenekeleditse kopi ya tee mo [bojelong].

  (The girl carefully carried the cup of tea to the dining room.)
- 354. Rapolasi o roretse korong mo [polasing]. (The farmer carried corn to the farm.)
- 355. Lephodisa le gogoletse seretse mo [dibutsheng]. (The police scrapped mud on the boots.)
- 356. Mme o sometse tlhale mo [nnaleng].(The mother inserted a thread towards the needle.)
- 357. Senokwane se phololetse maphodisa kwa [nageng]. (A criminal went through the police to the veld.)
- 358. Ngwana o subeletse diaparo kwa [kgetsaneng]. (The child crammed the clothes towards the bag.)
- 359. Morutabana o swapotse buka mo [mabololokela dibuka]. (The teacher pulled out the book to the library.)
- 360. Mosadi o tomotse mmutlwa mo [lonaong].

  (The woman pulled out the thorn towards the foot.)
- 361. Kgomo e tlhomotse kota ya legora mo [masimong]. (The cow pulled out the fence pole to the fields.)

The locatives above now have the meaning of **direction**, because they are entities towards which the action expressed by the predicate is directed.

#### 2.6.5 Drive Verbs

These verbs denote the accompanied motion of arguments and the cause thereof, and within them they specify something about the manner of the motion, which is typically the vehicle or the means used. A locative argument can be used as an adjunct. The Predicate Argument Structure of these verbs is:

P.A.S.:[x(y)]

#### 2.6.5.1 Non-derived verbs

- a. Drive verbs without a locative
- 362. [Monna] o kgweeditse [sejanaga]. (The man drove the car.)
- 363. [Mosimane] o huduile [mokoro].(The boy rowed the boat.)
- 364. [Lekau] le pagame [setobetobe].(The young man rode the bicylce.)
- 365. [Mosadinyana] o fula [sethuthuthu].(An old lady drove the motor-cycle.)
- [Mofofisi] o tsubaladitse [sefofane].(The pilot flew the aeroplane.)
- 367. [Tau] e kuolotse [batsomi].(The lion dispersed the hunters.)
- 368. [Moshemane] o patikeletse [katse]. (The boy drove the cat.)

The NP-arguments in the **subject** position in (362-368) are animate and are doers of the action expressed by their predicates. These arguments are thus assigned a theta role

agent. The NP-arguments in the object position above are both inanimate and animate. The inanimate arguments sejanaga (362), mokoro (363), setobetobe (364), sethuthuthu (365) and sefofane (366) are affected by their predicates. These arguments are thus assigned the theta role patient. The animate arguments batsomi (367) and katse (368) receive the theta role patient because they are also effected by their predicates.

# b. Drive verbs with a locative as an adjunct

- 369. Monna o kgweeditse sejanaga kwa [toropong]. (The man drove the car in town.)
- 370. Mosimane o huduile mokoro kwa [nokeng]. (The boy rowed the boat at the river.)
- 371. Lekau le pagame setobetobe mo [mmileng].(A young man rode a bicycle on the rode.)
- 372. Mosadinyana o futse sethuthuthu mo [motseng]. (An old lady drove the motor-cycle in the township.)
- 373. Mofofisi o tsubaladitse sefofane kwa [lefaufaung]. (The pilot flew the aeroplane in the sky.)
- Tau e kuolotse batsomi kwa [sekgweng].(The lion dispersed the hunters in the forest.)
- 375. Mosimane o patikeletse katse mo [sekhutlwaneng]. (The boy drove the cat into the corner.)

The locatives in this case have the theta role of **location** because they are places in which the action expressed by the predicates is situated.

# c. The sentences in (b) above are used with the applicative <u>-el-</u>

- 376. Monna o kgweeleditse sejanaga kwa [toropong]. (The man drove the car towards the town.)
- 377. Mosimane o huduetse mokoro kwa [lebopong]. (The boy rowed the boat to the bank.)
- 378. Lekau le pagametse setobetobe mo [mmileng]. (The young man rode the bicycle to the road.)
- 379. Mosadinyana o fuletse sethuthuthu mo [motseng].

  (An old lady drove the motor-cycle to the township.)
- Mofofisi o tsubalaleditse sefofane kwa [lefaufaung]. (The pilot flew the aeroplane to the sky.)
- Tau e kuololetse batsomi kwa [sekgweng].(The lion dispersed the hunters towards the forest.)
- 382. Mosimane o patikeleletse katse mo [sekhutlwaneng]. (The boy drove the cat towards the corner.)

The locatives above receive the theta role of **direction**, because they are entities towards which the actions expressed by their predicates is directed.

#### 2.6.5.2 Causative verbs

- a. Causative verbs without a locative
- 383. [Mma] o fofisitse [sefofane]. (Mother flew the aeroplane.)

384. [Mokgwetsi] o potlakisitse [khombi]. (The driver hurried the minibus.)

The NP-arguments in the subject position in (383-384) are animate and doers of the action expressed by their predicates. These arguments are thus assigned a theta role **agent**. The NP-argument in the object position above are inanimate. These arguments are moved by the actions expressed by their predicates, they thus receive the theta role **theme**.

# b. Drive verbs with a locative as an adjunct

- 385. Mma o fofisitse sefofane mo [Mangaung]. (Mother flew the aeroplane in Mangaung.)
- 386. Mokgweetsi o potlakisitse khombi mo [karatsheng]. (The driver hurried the minibus at the filling station.)

The locatives above receive the theta role of **location**, because they are places in which the action expressed by the predicate is situated.

# c. The sentences in (b) above are used with the applicative -el-

- 387. Mma o fofiseditse sefofane mo [Mangaung]. (Mother flew the aeroplane to Mangaung.)
- 388. Mokgweetsi o potlakiseditse khombi mo [karatsheng]. (The driver hurried the minibus to the filling-station.)

The locatives above receive the theta role of **direction**, because they are entities towards which the action expressed by the predicate is directed.

#### **SUMMARY**

The verbs of sending and carrying are related in causing an entity to change location accompanied and/or unaccompanied by the agent. The predicate argument structure assigns an external argument to the NP in the subject position, and an internal argument to the NP in the object position and to the locative NP to the subclasses of the verbs of sending and carrying, with the exception of carry verbs and drive verbs. The thematic roles assumed by the arguments assigned by these verbs of sending and carrying are:

## (a) With non-derived verbs

- the subject arguments are assigned the thematic roles agent, cause, instrument and theme
- (ii) the object arguments assume the theta roles patient and theme
- (iii) the locative arguments assume the thematic role location, direction and source.

# (b) With derived verbs

The causatives and the applicatives bring change in the thematic roles of the arguments of a derived sentence.

- (i) The subjects assume the new thematic role of causative agent and causative theme, while others retain their theta roles of agent and theme.
- (ii) The objects retain their thematic roles of **patient** and **theme**. Some subjects are moved to the object position and still retain their theta role of **agent** and **theme**.
- (iii) Locative arguments change their previous thematic roles and assume new ones, **location** and **source** mainly change to **direction**.

Machobane (1996) distinguishes between verbs that take a locative as an argument and verbs that take a locative as an adjunct. Locatives of send verbs, slide verbs and bring and take verbs exhibit locatives as arguments, while those of carry verbs and drive verbs exhibit locatives as adjuncts.

In summary, it has been demonstrated that verbs of sending and carrying are possible in Setswana with both non-derived and derived verbs of causative and applicative.

# CHAPTER THREE ALTERNATIONS

Alternations involve constructions where the arguments of the verb are inverted and occur in new positions of that construction. The arguments involved in alternations are the NP subject arguments, NP object arguments and the NP locative arguments. The alternations that will be tested in this chapter are the locative inversion, passive constructions, neuter-passive constructions and coreferential interpretations. Intransitive verbs and mainly transitive verbs will be used with these alternations.

#### 3.1 LOCATIVE INVERSION

Levin (1993: 88) identifies the locative inversion as one of the two alternations that involve the surface unaccusative constructions where the subject of the verb occurs after the verb, i.e. the postverbal position, the other being the There-Insertion construction. Although the two alternations are involved in the same constructions, they differ in what becomes the surface subject, even if Freeze (1992: 554) equate their structures. Bresnan *at al.* (1989: 2) points out that in locative inversion a locative phrase is preposted and the subject is post-posed i.e. the locative phrase is inverted to the external position, the position of the structural subject, and the inverted subject is internal to the minimal phrase containing the verb - the position of the structural object. Unlike the inversion with unaccusative constructions the S-structure object of an accusative does not become an S-structure subject, instead it maintains a post-verbal position. The status of the post-poned subject (NP) is unchanged since it still bears the same relation to the verb as the surface subject does when the verb is not used in this locative inversion construction.

Ackerman (1990: 2) distinguishes between locative and locative alternation to eliminate the confusion that may occur. Ackerman bases the interpretation of the two on the basic operations, namely **morphosyntactic operations** and **morpholexical operations**. Morphosyntactic operations are defined as operations which affect functions, (re-) assignment and suppression of the syntactic function of arguments, they are **locative** 

**inversion**, passive, indefinite null OBJ deletion, reciprocalization ..... Morpholexical operation, on the other hand, is an operation which alters the lexical semantics of predicates by deleting, adding, redistributing semantic properties among arguments, thereby affecting intrinsic freature assignments. There are **locative alternation**, causitivization, dative alternation, middle formulation .....

Locative inversion is typically found with certain intransitive verbs, such as the verbs be, go, appear and come, and passive verbs that take locative and directional prepositional phrase complements. These verbs are prototypical unaccusative verbs.\*

In the discussion of the locative inversion the properties of this construction were revealed, the first being canonical word order, where the NP V PP is inverted to the non canonical PP V NP word order, and secondly, the presence of a typically locative or directional PP in pre-verbal position. It is stated that locative inversion constructions are found with some intransitive verbs, which therefore gives rise to the argument that certain of these verbs are not found in this construction.

Bresnan (1987) further points out that in locative inversion the locative can precede or follow the VP but cannot separate the verb from the inverted subject. It is also pointed out that few of the intransitive verbs that undergo locative inversion also have a transitive case that takes locative object, for instance **arrive** (intransitive) or **reach** (transitive), **go through** (intransitive) or **cross** (transitive). In their transitive use, these verbs allow both locative object agreement and passivation of the locative object.

## AIM

The aim of this section is to find out whether the locative inversion in Setswana is possible with transitive verbs. The sentences below of verbs of sending and carrying are examples of transitive verbs.

#### Send Verbs

(1) (a) Mosimane o gapa dikgomo [kwa nageng]. (The boy drives the cows at the veld.)

- (b) [Kwa nageng] go gapa mosimane dikgomo.(At the veld the boy drives the cows.)
- (2) (a) Monna o roma lori [kwa ntlong].(A man sends a truck to/at the house.)
  - (b) [Kwa ntlong] go roma monna lori.(To/at the house a man sends a truck.)

#### Slide verbs

- (3) (a) Mosimane o pitika mosetsana [mo diretseng]. (The boy rolls the girl on the mud.)
  - (b) [Mo diretseng] go pitika mosimane mosetsana.(On the mud the boy rolls the girl.)
- (4) (a) Mosetsana o akga kgole [mo ntlong]. (The girl swings a rope at the house.)
  - (b) [Mo ntlong] go akga mosetsana kgole.(At the house the girl swings a rope.)

# Bring and take verbs

- (5) (a) Malome o lere baeng [kwa gae]. (Uncle brings the guest at home.)
  - (b) [Kwa gae] go lere malome baeng.(At home uncle brings the guests.)
- (6) (a) Mosimane o tsaya mosetsana [kwa gaabo].(The boy takes the girl from her home.)
  - (b) [Kwa gaabo] go tsaya mosimane mosetsana. (From her home the boy takes the girl.)

## Carry verbs

(7) (a) Mosetsana o tshotse sejana [mo boapelong]. (The girl carries the dish in the kitchen.)

- (b) [Mo boapelong] go tshotse mosetsana sejana.(In the kitchen the girl carries the dish.)
- (8) (a) Monna o sikere kota [mo segotlong]. (The man carries a pole in the yard.)
  - (b) [Mo segotlong] go sikere monna kota.

    (In the yard the man carries a pole.)

#### **Drive verbs**

- (9) (a) Mofifisi o tsubalatsa sefofane [kwa lefaufaung].(A pilot flies an aeroplane in the sky.)
  - (b) [Kwa lefaufaung] go tsubalatsa mofofisi sefofane.(In the sky a pilot flies an aeroplane.)
- (10) (a) Mosimane o hudua mokoro [kwa nokeng]. (The boy rows the boat at the river.)
  - (b) [Kwa nokeng] go hudua mosimane mokoro.(At the river the boy rows the boat.)

In the sentences above the locative NPs which are internal arguments, have been moved to the subject position vacated by the external argument and moved to the position after the verb. This process now moves the object argument to the clause final position.

The result of such movement is that both the locative and the external argument now occupy different positions than they previously had.

The question that needs to be answered, is what the status of the moved constituents is. This raises two problems to be solved. In the first instance one has to explain the status of the locative NP in the subject position and, secondly, the status of the two post-verbal NPs in the sentences above.

To solve the problems at hand one should consider the following example after locative inversion has taken place:

[Kwa nageng] go gapa mosimane dikgomo.

Firstly the status of **nageng** above will be considered. The question to be answered is whether this locative NP **nageng** is now the new subject of the sentence.

- (i) The locative NP nageng now occupies the subject position vacated by the external argument mosimane after locative inversion has taken place. This locative NP is not the external argument because it retains its internal theta role location. The NP mosimane also retains its theta-role agent after it has been moved.
- (ii) On the other hand the locative NP may be the new subject because of the subjectival agreement **go** which appears with this locative NP. It may also have the reference of a locative, that is, it may refer to any locative phrase.

The agreement together with tense assigns a case, which means that the NP in the subject position will have to receive case from these case assigners. Therefore the locative NP will receive the nominative case.

It may therefore be concluded that the inverted locative phrase is indeed the new subject of the sentence because of its appearance with the locative subjectival agreement **go-**.

The second aspect to be considered is the status of the two NPs that appear after gapa, namely mosimane, which is the external argument of gapa but has now moved to a potential indirect object position, and dikgomo, which is an internal argument of gapa. Dikgomo, which originally occupied the position of object but now appears in the new position after mosimane due to the movement, is in a potential direct object position.

To establish the status of these two potential syntactic objects as to whether they are complements to the VP gapa, each NP will be forced to appear with its objectival agreement. If the verb gapa allows the AgrO of both NPs, it will indicate that they are indeed syntactic objects. Consider the following example:

- (11) (a) Kwa nageng go [di<sub>i</sub>] gapa mosimane [dikgomo<sub>i</sub>]. (At the veld there them drove the boy the cattle.)
  - \*(b) Kwa nageng go [mo] gapa dikgomo [mosimane].

    (At the veld there (he) drives the cattle the boy.)

The result of this application is that in (11a) above the objectival agreement **di** is coindexed with dikgomo to display the status of dikgomo as the direct object, while in (11b) it is clear that if **mo** is used with **mosimane**, the sentence becomes ungrammatical, therefore **mosimane** is not an indirect object.

It can therefore be concluded that **dikgomo**, which has now moved to another position, retains its syntactic status of object, while **mosimane**, on the other hand, now assumes the new status of adjunct.

There is a possibility that locative inversion is the same construction as the subject inversion. To find evidence for this statement it is important first to understand what subject inversion is.

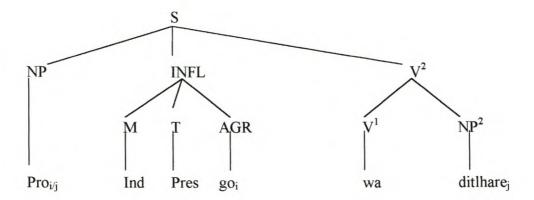
When subject inversion takes place with intransitive verbs, the subject is moved to a post-verbal adjunct position, as in the following example:

- (12) (a) [Ditlhare] di a wa. (The trees fall.)
  - (b) [Pro] go wa [ditlhare]. (There fall the trees.)

**Ditlhare** in (12b) above has been moved to the post-verbal adjunct position, while its position is now occupied by the empty **pro** and existential **go-**, which are under agreement of inflection. The new adjunct NP **ditlhare** and empty pro with existential **go-** are coindexed because they constitute the members of the chain. These coindexed elements do not share grammatical features because of the difference between **go-** and **ditlhare**, but it is accepted that they share syntactic index. This means that the

existential **go-**, **pro** and **ditlhare** are coindexed through syntactic indexing, and they enter into the chain for the purpose of case and theta role assignment.

# (12b) above can be represented as follows:



In the above structure **ditlhare** is in the adjunt position and is a sister to  $V^1$ . The empty subject position after the movement is filled by pro and **go**- with the feature [+ existential] which enters under agreement and is coindexed with pro. **Pro** and **ditlhare** have the same indexation to mean that **ditlhare** in 12a and b have the thematic role theme.

In the process of subject inversion with transitive verb, the subject argument of the sentence is moved to the position after the verb. This moved subject occupies the position of the object and the object moves from its object position:

- (13) (a) Mosimane o rwala ditlhako. (The boy wears shoes.)
  - (b) [Pro] go rwala mosimane ditlhako.(There wears the boy shoes.)

In (13b) **mosimane** moves the object **ditlhako** to the sentence final position and occupies the position adjacent to the verb. The position **mosimane** occupies, is a focus position.

With subject inversion, the locative NP may also move to the initial position of the sentence for stylistic reasons, as in the following example:

- (14) (a) [Pro] go tshameka bana kgwele ya dinao [kwa lebaleng].

  (There play the children soccer at the field.)
  - (b) [Kwa lebaleng] [pro] go tshameka bana kgwele ya dinao.(At the field there play the children soccer.)

In the above sentences it was found that during locative inversion, the surface structure of the sentence is exactly the same as the locative inversion sentence, but in the deep structure there is a difference: with the subject inversion there is an **empty pro**, which is absent in the locative inversion. Consider the following examples:

## Subject inversion

(a) [Kwa lebaleng] [pro] go tshameka bana kgwele ya dinao.(At the field there play the children soccer.)

# Locative inversion

(b) [Kwa lebaleng] go tshameka bana kgwele ya dinao.(At the field there play the children soccer.)

There is a difference in the reference of go- in these sentences.

In sentence (a) above the **go-** is coindexed with an empty pro. In such cases the Agr S **go-** is referred to as an impersonal or expletive **go-**. The impersonal **go-** may appear in various other constructions such as the passive construction where **Pro** coindexed with **go-** may fill the empty subject position, as in the following example:

[Pro<sub>i</sub>] go<sub>i</sub> a kwalwa ditlhatlhobo

In contrast, the reference of Agr S go- in sentence (b) above is clearly to a locative phrase.

It is therefore clear that subject inversion and locative inversion are not the same process because the reference of the Agr S go- is different in these two cases.

Levin *et al.* (1995) disagree that the locative inversion construction is an unaccusative disgnostic, because it is not restricted to unaccusative verbs, since certain unergative verbs appear in this construction. They claim that, although locative inversion is found with prototypical unaccusative and passive verbs, not all intransitive verbs appear to be compatible with this construction. However, this is clearly not the case in Setswana:

- (i) Baipelaetsi ba tletleba [kwa dikantoro-pusong].(The protesters complain at the government offices.)
- (ii) [Kwa dikantoro-pusong] go tletleba baipelaetsi.(At the government offices complain protesters.)

This example suggests that many intransitive verbs that are found in this construction, fall in the semantic class of verbs whose members are unergative. These include internally caused verbs of emission, agentive verbs of manner of motion, verbs of body internal motion and a scattering of other activity verbs.

- (iii) Motshidisi opela [kwa ntlo lehalahaleng].(Motshidisi sings at the hall.)
- (iv) [Kwa ntlo lehalahaleng] go opela Motshidisi.(At the hall there sing Motshidisi.)

#### 3.2 PASSIVE CONSTRUCTIONS

The most important effect of passive morphology on the structure of sentences is to deexternalise the subject argument of the sentence and place it somewhere else as agent or theme or take it out of the sentence. The first effect of passive morphology is realised on intransitive verb sentences, which are also known as one-place predicate with one argument sentences. This argument is assigned a theta role. The passive affix **-w-** deexternalises this only argument and make the intransitive passive verb, a predicate with no argument. The addition of the passive affix -w- to the verb makes the subject position thus to be empty, and it will be designated as pro. The agreement in Inflection will then receive the feature [+ existential] which will be spelt out as go-. The Agr S go- will then be coindexed with the empty pro so that both may have the feature [+ existential]. Consider the following:

(15) (a) Go a opelwa.

Agr-S-Pres-sing-Pass-Pres

(There is being singing.)

The sentence in (15) may be expressed in the following structure

[NP Pro [Agr S go] [VP [V opel-w-]]

The existential pro which is associated with the existential morpheme, appears only in a position which does not have an argument and thus they may never receive a theta role. The disappeared subject argument in intransitive passive construction is always implied. One may therefore say that the missing argument in (15) is implicit.

The second effect of the passive morphology is realised on transitive verbs. As the subject argument is de-externalised by the passive morpheme and placed somewhere else as agent and theme, the object of the sentence may be moved to the empty subject position. Consider the following examples:

- (16) (a) Mosetsana o rwalela dikgong. (The girl gathers fire-wood.)
  - (b) Dikgong di rwalelwa [tl] ke mosetsana.(The fire-wood is gathered by the girl.)

The object argument **dikgong** in (16a) above has moved to the subject position in (16b). This was made possible by the transformational rule and a trace left in the vacated object position. The theta role of **theme** in **dikgong** is carried along to the subject position in (16b).

Another important effect of the passive morphology is that it has taken away the objective case from **dikgong**, which now has a nominative case through the subjectival agreement morpheme. The object **dikgong** has therefore no longer objective case, it has been absorbed by the passive morphology.

Also in the case of transitive verbs, the object may remain in its position when the existential pro associated with the existential morpheme is inserted in the empty subject position.

(17) (a) Go jelwe nama.

(There was eaten meat.)

The object **nama** in (17a) has retained its status and its thematic role of theme but lost its objective case because of the passive morphology. Since the existential pro does not have the status of an argument in a subject position of a passive verb, it may never have any theta role.

# 3.2.1 Morphology of the passive

Morphology has certain means of specifying relations among arguments in an argument structure, i.e. by means of control.

Control must be invoked to explain the difference between the deverbative suffixes -i and -o. Both are functors but -i specifies control of the external argument and -o specifies control of the non-external argument:

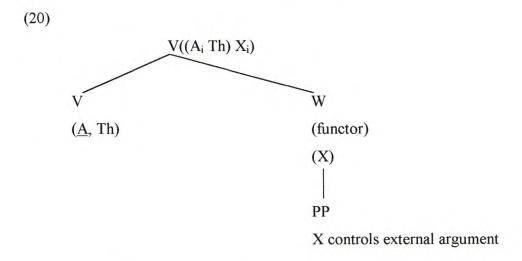
- (18) (a) Mo-pagam- i
  (A, Th) (R)

  R controls external argument of the predicate (A).
  - (b) Se-pagam- o  $(A, Th) \qquad (\underline{R})$  R controls internal argument of the predicate (Th).

The passive morpheme -w- must be given some means of eliminating the external argument of the non-head. A means already available for this is control, and the likely controller is the ke- phrase argument.

(19) Ngwana o rongwa ke mmagwe.(The child is sent by her mother.)

The verb **rongwa** in 19 will be assigned the following representation:



Because -w- is a functor, the arguments of the non-head will be taken over as arguments of the whole. In addition the X argument of -w- will be the argument of the whole because -w- is the head with regard to argument structure. The external argument of the non-head does not become the external argument of the whole because it is controlled by the X (ke-) argument of the phrase. So the whole has no external argument. The control relation is indicated by coindexing with [i] in (20).

# 3.2.2 Passive constructions with verbs of sending and carrying

The purpose of this section is to observe whether the passive morpheme -w- may be used with verbs of sending and carrying, with the emphasis on the [NP] object movement and the Locative movement.

# 3.2.2.1 [NP] object movement and [NP Loc] movement

# Send verbs

- (21) (a) [Go] rongwa [lori] kwa ntlong.

  (There sends the lorry to the house.)
  - (b) [Lori] e rongwa [t<sub>i</sub>] kwa ntlong.(The lorry is sent to the house.)

# [NP Loc] movement

- (c) [Go] rongwa lori [kwa ntlong].(There sent the lorry to the house.)
- (d) [Kwa ntlong] go rongwa lori [t<sub>i</sub>].(To the house there sent the lorry.)
- (22) (a) [Go] poswa [makwalo] kwa posong.

  (There posted the letters at the post office.)
  - (b) Makwalo a poswa [t<sub>i</sub>] kwa posong.(The letters are posted at the post office.)

# [NP Loc] movement

- (c) [Go] poswa makwalo [kwa posong].(There posted the letters at the post office.)
- (d) [Kwa posong] go poswa makwalo [t<sub>i</sub>].(At the post office there posted the letters.)

## Slide verbs

- (23) (a) [Go] pitikololwa [nama] mo molelong. (There turned over the meat on the fire.)
  - (b) [Nama] e pitikololwa [t<sub>i</sub>] mo molelong.(The meat is turned over on the fire.)

## [NP Loc] movement

- (c) [Go] pitikokolwa nama [mo molelong].(There turned over the meat on the fire.)
- (d) [Mo molelong] go pitikololwa nama [t<sub>i</sub>].(On the fire the meat is turned over.)
- (24) (a) [Go] akgwa [kgole] kwa ntlong. (There swung a rope at the house.)
  - (b) Kgole e akgwa [t<sub>i</sub>] kwa ntlong.(A rope is swung at the house.)

## [NP Loc] movement

- (c) [Go] akgwa kgole [kwa ntlong].(There swung a rope at the house.)
- (d) Kwa ntlong go akgwa kgole [t<sub>i</sub>].(At the house a rope is swung.)

# Bring and Take verbs

- (25) (a) [Go] tsewa [mosetsana] kwa gaabo. (There taken a girl from her home.)
  - (b) Mosetsana o tsewa [t<sub>i</sub>] kwa gaabo.(A girl is taken from her home.)

- (c) [Go] tsewa mosetsana [kwa gaabo].(There taken a girl from her home.)
- (d) Kwa gaabo go tsewa mosetsana [t<sub>i</sub>].(From her home a girl is taken.)
- (26) (a) [Go] lerwe [baeng] mo gae.

  (There brought visitors at home.)
  - (b) Baeng ba lerwe [t<sub>i</sub>] mo gae.(The visitors are brought at home.)

# [NP Loc] movement

- (c) [Go] lerwe baeng [mo gae].(There brought visitors at home.)
- (d) Mo gae go lerwe baeng [t<sub>i</sub>].(At home the visitors are brought.)

# Carry verbs

- (27) (a) [Go] tshotswe [sejana] mo boapelong. (There carried a dish in the kitchen.)
  - (b) Sejana se tshotswe [t<sub>i</sub>] mo boapelong.(The dish is carried in the kitchen.)

## [NP Loc] movement

- (c) [Go] tshotswe sejana [mo boapelong].(There carried a dish in the kitchen.)
- (d) Mo boapelong go tshotswe sejana [t<sub>i</sub>].(In the kitchen the dish is carried.)
- (28) (a) [Go] sikerwe [kota] mo segotlong. (There carried a pole in the yard.)
  - (b) Kota e sikerwe [t<sub>i</sub>] mo segotlong.(A pole is carried in the yard.)

# [NP Loc] movement

- (c) [Go] sikerwe kota [mo segotlong].(There carried a pole in the yard.)
- (d) Mo segotlong go sikerwe kota [t<sub>i</sub>].(In the yard a pole is carried.)

#### **Drive verbs**

(29) (a) [Go] tsubaladitswe [sefofane] mo lefaufaung. (There flown an aeroplane in the sky.)

(b) Sefofane se tsubaladitswe [ti] mo lefaufaung.(An aeroplane is flown in the sky.)

# [NP Loc] movement

- (c) [Go] tsubaladitswe sefofane [mo lefaufaung].

  (There flown an aeroplane in the sky.)
- (d) Mo lefaufaung go tsubaladitswe sefofane  $[t_i]$ . (In the sky an aeroplane is flown.)
- (30) (a) [Go] huduilwe [mokoro[ kwa nokeng. (There rowed the boat at the river.)
  - (b) Mokoro o huduilwe [t<sub>i</sub>] kwa nokeng.(The boat is rowed at the river.)

# [NP Loc] movement

- (c) [Go] huduilwe mokoro [kwa nokeng].

  (There rowed the boat at the river.)
- (d) Kwa nokeng go huduilwe mokoro [t<sub>i</sub>].(At the river the boat is rowed.)

When the passive morpheme -w- is added to the verbs of sending and carrying, the movement of the **object** argument as in (b) sentence and **locative NP** argument as in (d) sentences of 21-30 above is possible. In the (b) sentences above the object is moved to the subject position and this position receives a nominative case by means of the transformational **move alpha**. In the (d) sentences the locative NP is moved to the sentence initial position. In both these movements a trace is left in the positions vacated by the moved arguments.

In what Demuth (1990: 235) calls topicalisation, Demuth states that when a locative is topicalised, no grammatical agreement results between the topicalised locative and the verb.

Bresnan and Kanerva (1989: 9) agree with Demuth that when a locative is assigned the subject function, the presentational focus occurs. They argue that for presentational focus to occur, a locative has to be fronted with the impersonal subject marker go-.

## 3.3 NEUTER PASSIVE CONSTRUCTIONS

# 3.3.1 Neuter-passive with intransitive verbs

The effect that the passive morpheme has on the arguments where it has been applied, is applicable with the **neuter-passive**; that is, the subject argument is de-externalised and the existential morpheme occupies its place. The addition of the neuter-passive **-eg-** to the verb vacates the subject position and is thus designated as pro. The agreement in Inflection receives the feature [+ existential] and is spelt out as **go-**. The Agr S will be coindexed with the empty pro so that they both have the feature [+ existential].

(41) Go a kwal-eg-a

Agr-L-Pres-write-neut Pass-Pres

(there can be written)

The sentence (41) may exhibit the following structure.

(42) [NP PRO [AgrS go [VP Kwal-eg-a]]

## 3.3.2 Neuter-passive with transitive verbs

The neuter-passive affix -eg- may appear in the same type of structure as with the passive morpheme -w-. The subject argument is de-externalised and lands somewhere as agent or theme or is taken out of the sentence. The object argument will be moved to the subject position by means of the transformational rule move alpha while leaving a trace in the vacated object position.

The neuter passive morphology neutralises the case assignment of the object. Such moved object is therefore assigned the nominative case through the subjectival agreement morpheme. The neuter-passive morphology absorbs the objective case.

- (43) (a) Ngwana o nwa [molemo]. (A child drinks medicine.)
  - (b) Molemo o a nwega [t<sub>i</sub>].(The medicine is drinkable.)

The subject may also be an empty pronominal coindexed with the agreement morpheme, as in the example below.

(44) (a) Re bolok-eg-ile.

(We are saved.)

Agr-S save-Perf

The sentence in (43) may be exhibited in the following structure

(45) [NP Pro<sub>i</sub> [Agr S <u>re</u><sub>i</sub> [VP bolok-eg-ile] [t<sub>i</sub>]

# 3.3.3 Neuter-passive with verbs of sending and carrying

The purpose of this section is to observe whether the neuter-passive may be used with the transitive verbs of sending and carrying.

# 3.3.3.1 [NP] object movement and [NP Loc] movement

#### Send verbs

- (46) (a) Monna o roma [mosetsana]. (A man sends a girl.)
  - (b) [Mosetsana<sub>i</sub>] o a romega [t<sub>i</sub>].(A girl can be sent.)

- (c) Monna o roma mosetsana kwa [ntlong].(A man sends a girl to the house.)
- (d) [Kwa ntlong<sub>i</sub>] go romega mosetsana [t<sub>i</sub>].(To the house there can a girl be sent.)

- (47) (a) Mosadi o posa [lokwalo]. (A woman posts a letter.)
  - (b) [Lokwalo<sub>i</sub>] lo a posega [t<sub>i</sub>].(A letter can be posted.)

# [NP Loc] movement

- (c) Mosadi o posa lokwalo kwa [posong].(A woman posts a letter at the post office.)
- (d) [Kwa posong<sub>i</sub>] go posega lokwalo [t<sub>i</sub>].(At the post-office there can be letters posted.)

#### Slide verbs

- (48) (a) Monna o pitikolola [nama]. (A man turns the meat over.)
  - (b) [Nama<sub>i</sub>] e a pilikololega [t<sub>i</sub>].(The meat can be turned over.)

# [NP Loc] movement

- (c) Monna o pitikolola nama mo [molelong].(A man turns the meat over on the fire.)
- (d) [Mo molelong<sub>i</sub>] go pitikololega nama [t<sub>i</sub>].(On the fire there can meat be turned over.)
- (49) (a) Mosetsana o akga [kgole]. (A girl swings a rope.)
  - (b) [Kgole<sub>i</sub>] e a akgega [t<sub>i</sub>].(A rope can be swung.)

- (c) Mosetsana o akga kgole mo [ntlong].(The girl swings the rope in the house.)
- (d) [Mo ntlong<sub>i</sub>] go akgega kgole [t<sub>i</sub>].(In the house there can rope be swung.)

## Bring and take verbs

- (50) (a) Mosimane o tsaya [mosetsana]. (The boy takes the girl.)
  - (b) [Mosetsana<sub>i</sub>] o a tseega [t<sub>i</sub>].(The girl can be taken.)

## [NP Loc] movement

- (c) Mosimane o tsaya mosetsana kwa [gaabo].(The boy takes the girl from her home.)
- (d) [Kwa gaabo<sub>i</sub>] go tseega mosetsana [t<sub>i</sub>].(From her home there can a girl be taken.)
- (51) (a) Malome o lere [baeng]. (Uncle brings the visitors.)
  - (b) [Baeng<sub>i</sub>] ba a lerege [t<sub>i</sub>].(Visitors can be brought.)
  - (c) Malome o lere baeng mo [gae].(Uncle brings the visitors at home.)
  - (d) [Mo gae<sub>i</sub>] go lerege baeng [t<sub>i</sub>].(At home there can visitors be brought.)

# Carry verbs

- (52) (a) Mosetsana o tshola [sejana]. (The girl carries the dish.)
  - (b) [Sejana<sub>i</sub>] se a tsholega [t<sub>i</sub>].(The dish can be carried.)

- (c) Mosetsana o tshola sejana mo [boapelong].(The girl carries the dish in the kitchen.)
- (d) [Mo boapelong<sub>i</sub>] go tsholega sejana [t<sub>i</sub>].(In the kitchen there can a dish be carried.)

- (53) (a) Monna o sikara [kota]. (The man carries a pole.)
  - (b) [Kota<sub>i</sub>] e a sikarega [t<sub>i</sub>].(A pole can be carried.)

## [NP Loc] movement

- (c) Monna o sikara kota mo [segotlong].(The man carries a pole in the yard.)
- (d) [Mo segotlong<sub>i</sub>] go sikarega kota [t<sub>i</sub>].(In the yard there can a pole be carried.)

#### **Drive verbs**

- (54) (a) Mofofisi o tsubalatsa [sefofane]. (The pilot flies an aeroplane.)
  - (b) [Sefofane<sub>i</sub>] se a tsubalatsega  $[t_i]$ . (An aeroplane can be flown.)

# [NP Loc] movement

- (c) Mofofisi o tsubalatsa sefofane mo [lefaufaung].(The pilot flies an aeroplane in the sky.)
- (d) [Mo lefaufaung<sub>i</sub>] go tsubalatsega sefofane [t<sub>i</sub>].(In the sky there can an aeroplane be flown.)
- (55) (a) Mosimane o hudua [mokoro]. (The boy rows the boat.)
  - (b) [Mokoro<sub>i</sub>] o a huduega [t<sub>i</sub>].(The boat is rowable.)

- (c) Mosimane o hudua mokoro mo [nokeng].(The boy rows the boat in the river.)
- (d) [Mo nokeng<sub>i</sub>] go huduega mokoro [t<sub>i</sub>].(In the river there can a boat be rowed.)

The subject argument in sentences (46-55) is absorbed when the neuter-passive morpheme **-eg-** is added on the verbs. The objects in the (b) sentences move to the subject position. They receive a nominative case by the Agr S and leave a trace on the vacated position; this is because the neuter-passive suppresses case assignment to the object. The locative NPs in the (d) sentences move to the sentence initial position and leave a trace in the vacated positions. The observation is that the [NP] object and the [NP Loc] movement are possible. The thematic role of the locatives is **location**.

Bresnan (1991: 58) claims that a locative in Chichewa occurs freely in the subject and object position of semantically compatible verbs. This can also be proved in Setswana.

## 3.4 COREFERENTIAL INTERPRETATION

Coreferential interpretation is related to the argument in the post-verbal position relating to the argument in the subject position of the same sentence. Coreferential interpretation occurs between the subject and the object, and between the subject and the locative. This argument is an adjunct.

The purpose of this section is to examine whether coreferential interpretation is applicable with **bring and take verbs** as well as with **carry verbs**.

## Bring and take

- (56) [Mosadi<sub>I</sub>] o tsaya ngwana [nae<sub>i</sub>].(The woman takes the child with her.)
- \*(57) [Monna<sub>i</sub>] o rafa gauta [nae<sub>i</sub>].

  (The man mines gold with him.)
- (58) [Morutabana<sub>i</sub>] o tlisa bana [nae<sub>i</sub>].(The teacher brings the children with him.)
- (59) [Moipola<sub>i</sub>] o gorosa mahutsana [nae<sub>i</sub>].(Moipolai brings hardship with him.)

## Carry verbs

- (60) [Mosetsana<sub>i</sub>] o tshola sejana [go ena<sub>i</sub>]. (The girl carries the dish on her.)
- (70) [Monna<sub>i</sub>] o sikara mofago [nae<sub>i</sub>].(The man carries a provision with him.)
- (71) [Mosimane<sub>i</sub>] o menyama thelebishene [nae<sub>i</sub>].(The boy carried a television with him.)
- (72) [Mosetsana<sub>i</sub>] o kakamile merogo [nae<sub>i</sub>]. (The girl carried the vegetables with her.)
- \*(73) [Mosetsana<sub>i</sub>] o rewele ngata ya dikgong [nae<sub>i</sub>]. (The girl carried the bunch of wood with her.)
- (74) [Mosadi<sub>i</sub>] o leseletse nkgo [go ena<sub>i</sub>].(The woman carried the bucket on her.)
- (75) [Mosimane<sub>i</sub>] o belege kgetsi ya semanle [go ena<sub>i</sub>].(The boy carried a bag of cement on him.)
- (76) [Dikgomo<sub>i</sub>] di gogile selei [natso<sub>i</sub>].(The cattle pulled the sledge with them.)
- (77) [Mosetsana<sub>i</sub>] o kgokgoeditse nku [nae<sub>i</sub>]. (The girl pushed a sheep with her.)
- (78) [Mosimane<sub>i</sub>] o kgarameditse setilo [nae<sub>i</sub>]. (The boy pushed the chair with him.)
- \*(79) [Mosadi<sub>i</sub>] o kgapha mabele [nae<sub>i</sub>].

  (The woman pushes back the grain with her.)

- (80) [Mosetsana<sub>i</sub>] o sukunyetsa lokwalo [go ena<sub>i</sub>]. (The girl pushes in the letter on her.)
- (81) [Monna<sub>i</sub>] o kgothile mosimane [nae<sub>i</sub>].(The man forcible pulled back the boy.)
- (82) [Mosadi<sub>i</sub>] o kabile ngwana [nae<sub>i</sub>].(The woman carried the child with her.)
- (83) [Mosetsana<sub>i</sub>] o kakamere dikgong [nae<sub>i</sub>].(The girl carried (in her arms) wood with her.)
- (84) [Mosetsana<sub>i</sub>] o neneketsa kopi ya tee [nae<sub>i</sub>].(The girl carefully carried a cup of tea with her.)
- (85) [Rapolasi<sub>i</sub>] o rorile korong [nae<sub>i</sub>].(The farmer carried (with a truck) corn with him.)
- (86) [Lephodisa<sub>i</sub>] le gogotse seretse [go lona<sub>i</sub>].(The police scraped off mud from him.)
- \*(87) [Mme<sub>i</sub>] somile thale [nae<sub>i</sub>].

  (Mother inserted a thread with her.)
- \*(88) [Senokoane<sub>i</sub>] se phololetse maphodisa [naso<sub>i</sub>]. (A criminal went through the police with it.)
- (89) [Ngwana<sub>i</sub>] o subela nama [go ena<sub>i</sub>]. (The child crams meat into it.)
- (90) [Morutabana<sub>i</sub>] o swapotse buka [nae<sub>i</sub>].(The teacher forcibly pulled out the book with him.)

- (91) [Mosadi<sub>i</sub>] o tomotse mmutlwa [go ena<sub>i</sub>].(The woman pulled out the thorn from her.)
- (92) [Kgomo<sub>i</sub>] e tlhomotse kota ya legora [nayo<sub>i</sub>].(The cow pulled out the fence pole with it.)

The argument in brackets in the post-verbal position demonstrates coreferential PP with the subjects. These post-verbal arguments are object arguments and locative arguments. The sentences marked with an asterisk show ill-formedness. One may therefore conclude that not all these verbs allow coreferential PPs with the subject.

#### **SUMMARY**

Locative inversion is an alternation where the subject of the verb is moved to the post-verbal position. It is found that although locative inversion is typical of certain intransitive verbs, it is also possible with transitive verbs. Locative inversion affects the arguments of a sentence as follows:

- the locative becomes the new syntactic subject, retains its theta role and location, and receives a nominative case
- the object becomes the direct object and retains its syntactic status of object
- the subject moves to the indirect object position and assumes the status of adjunct.

The surface structure of the locative inversion and subject inversion looks exactly the same, but in the deep structure they are different. This is because in the subject inversion there is an empty pro, which is not there in the locative inversion.

The passive constructions can be used with transitive verbs of sending and carrying, the movement of the [NP] object and [NP Loc]. The thematic role of these locatives is **location**.

The neuter-passive constructions also appear in the same structure with transitive verbs of sending and carrying as with the passive. The object movement and the locative movement are possible. The thematic role of the locatives is also **location**.

Most of the bring and take verbs as well as Carry verbs allow coreferential PPs with the subject, while a few do not.

In summary, it can be pointed out that the alternations used in this chapter prove to be possible with the verbs of sending and carrying.

# CHAPTER FOUR CONCLUSION

In conclusion, it can be said that the verbs of sending and carrying in Setswana, have been intensively examined, in respect of the P.A.S. of their subclasses, the thematic roles of their arguments and the application of the alternations.

Chapter 2 investigated the predicate argument structure of verbs of sending and carrying. In the predicate argument structure predicates were described and named according to the number of arguments they assign. The argument structures of intransitive, transitive and ditransitive verbs were discussed and their lexical entries were treated. The predicates were described as one-place, two-place and three-place predicates according to the specific variables corresponding to the arguments the predicate has.

#### Intransitive verb

This is demonstrated by sentences (1-9).

#### Mono-transitive verb

This is demonstrated by sentences (10-15).

## Ditransitive verb

This is demonstrated by sentences (16-23).

The external and internal arguments were investigated, the predication theory, that is, how they are assigned, was explained. The issue of the VP internal subject hypothesis and the difference between the direct and the indirect object were discussed.

Sentences (27 and 28) demonstrate the external arguments while the internal arguments are demonstrated by examples (30 and 31).

Derived verbs with the causative affix -is- were investigated with the focus on the syntax and the morphology of the causative. The syntax of the causative is shown in examples (32 - 53) with intransitive, transitive and ditransitive verbs, while examples (54 to 58) exemplify the morphology of the causative.

The thematic roles of these verbs were given.

In this chapter the derived verbs with the applicative affix -el- were also investigated. The thematic roles of these verbs were focussed on in the discussion of the syntax of the applicative.

This notion of syntax of the applicative was demonstrated by sentences (59-97).

The morphology of the applicative was also investigated and demonstrated in examples (98-100).

The verbs of sending and carrying have been explored with its subclasses. These verbs are explored in both non-derived and derived verbs which are mainly causative verbs, also with the use of the applicative affix -el-. The subclasses of the verbs of sending and carrying are as follows:

## (a) Send verbs

These verbs have non-derived and derived verbs.

#### (i) Non-derived verbs

Sentences (101-137) demonstrate examples of these verbs.

## (ii) Derived verbs

Sentences (138-180) demonstrate examples of these verbs.

#### (b) Slide verbs

These verbs have non-derived and derived verbs.

## (i) Non-derived verbs

These verbs are demonstrated in sentences (181-185).

## (ii) Derived verbs

Examples of these verbs are demonstrated in sentences (186-233).

# (c) Bring and take verbs

These verbs include both non-derived and derived verbs.

## (i) Non-derived verbs

The non-derived verbs are demonstrated in sentences (234-238).

# (ii) Derived verbs

The derived verbs are demonstrated in sentences (239-250).

# (d) Carry verbs

Carry verbs contain non-derived verbs only.

Sentences (251-322) demonstrate examples of these verbs.

# (e) Drive verbs

These verbs have non-derived and derived verbs.

# (i) Non-derived verbs

Sentences (323-343) demonstrate examples of these verbs.

# (ii) Derived verbs

Sentences (344-349) demonstrate examples of these verbs.

The predicate argument structure of all subclasses of verbs of sending and carrying were analysed.

The P.A.S. of send verbs, slide verbs, bring and take verbs is  $[\underline{x} (y, Loc Z)]$  and of the carry verbs and drive verbs [x(y)].

The interchange of the animate and inanimate arguments was used in each of the subclasses and the effect of their thematic interpretations was analysed. Sentences (101-127) indicate animate and inanimate arguments with non-derived send verbs.

Examples (101-105) illustrate sentences with animate subjects while inanimate subjects are illustrated in sentences (107-116). The animate subjects have a thematic role of **agent** and the inanimate subjects a thematic role **cause** and **instrument**. Sentence (112) is unacceptable because it needs an agent.

Sentences (181-182) demonstrate sentences with slide verbs with animate and inanimate subjects. Animate and inanimate subjects interchange in these sentences. Animate subjects were interpreted as **agents** and inanimate subjects as **cause** and **instrument**. Animate and inanimate subjects of non-derived bring and take verbs are demonstrated in sentences (266-267). Theta roles assigned to animate subjects are **agent** and inanimate subjects are **cause** and **instrument**.

From the discussion above one may conclude that animate subjects have a thematic role of **agent**, while inanimate subjects are interpreted as **cause** or **instrument**.

The effect of animate and inanimate objects as well as their thematic interpretations was also analysed. Sentences (101-105) and (117-122) indicate animate and inanimate objects of send verbs. Animate and inanimate objects of slide verbs are demonstrated in sentences (181) and (183) respectively. Examples of animate and inanimate bring and take verbs are given in sentences (266) and (268) respectively.

The observation from the analyses of the animate and inanimate object argument above leads to the conclusion that the thematic interpretation of the animate objects is **theme** or **patient**, which is retained with the inanimate object argument.

The analyses of animate and inanimate locatives and their effect on thematic interpretation were also done. The interchange of animate and inanimate locatives was analysed in the subclasses of verbs of sending and carrying, with the exception of carry and drive verbs.

In most of the subclasses locatives have a thematic interpretation of **direction**, **location** and **source**.

The send verbs received the thematic role of **direction**, **location** and **source** with both the inanimate in (101-105) and animate locatives in (123-127).

The slide verbs received the thematic role of **location** and **source** with the inanimate locatives in (181) and animate locatives in (184).

In sentences (266) the inanimate locatives of bring and take verbs have an interpretation of **source** and **direction**. The interpretations are retained with animate locatives in (269).

The carry verbs and drive verbs used only inanimate locatives in their sentences. The thematic role of the locatives of carry verbs is location and source, as in (315-348), and the drive verbs have the interpretation **location** for its locatives, as in (380-386).

From the discussion above it may be concluded that the locatives of the verbs of sending, both animate and inanimate, make use of three thematic interpretations, namely: direction, location and source.

Sentences (128-137), (185), (234-239), (250-265), (270), (349-372) and (387-393) indicate verbs of sending and carrying with the applicative affix -el- with animate and inanimate locatives. All the locatives have the interpretation direction. The locatives of the applied slide verbs also have the interpretation location.

In this chapter the effect of the Causative affix -is- and the applicative affix -el-with verbs of sending and carrying was also analysed.

(i) The causative affix has an effect on the predicate argument structure of the verb as well as the external argument. The affixation of the causative to the verbs firstly increases the number of arguments in a sentence by one. Secondly, it moves the external argument to the internal argument position. The vacated external argument position is then filled by the new added argument. This new external argument receives the thematic role causative agent or causative theme. This notion is demonstrated in the sentences below:

Sentences (145-164) demonstrate the effect of the causative on the external arguments of send verbs and their thematic interpretation.

Sentences (202-217) demonstrate the effect of the causative on the external arguments of slide verbs and their thematic interpretation.

Sentences (275-282) demonstrate the effect of the causative on the external arguments of bring and take verbs and their thematic interpretation.

Sentences (394-399) demonstrate the effect of the causative on the external arguments of drive verbs and their thematic interpretation.

From the discussion above it can be concluded that the effect of the causative affix -isis to change the external argument to an internal argument, and the addition of a new
argument in the external argument position. The new external argument is interpreted as
causative agent or causative theme.

(ii) The applicative affix **-el-** has an effect on the locative interpretation. The applicative changes **location** to **direction** and **source** to **direction** in all subclasses of the verbs of sending and carrying. This is demonstrated in (128-137) with send verbs, in (184-185) with slide verbs, in (234-265) with bring and take verbs, in (315-372) with carry verbs and in (380-393) with drive verbs.

From the discussion above it can be concluded that the effect of the applicative affix -el- on the locative is to change location to direction and source to direction.

In Chapter 3 alternations were investigated. These alternations include locative inversions, passive construction and its morphology, and neuter-passive.

The investigations on locative inversion have been done to determine whether it is possible in Setswana with transitive verbs. Sentences (1-10) exemplify this possibility in all the subclasses of the verbs of sending and carrying. It is evident in locative

inversion that a locative can precede or follow the VP, but cannot separate the verb from the inverted subject.

The effect of the passive morphology on the structure of the sentence was investigated in sentences (15-17). The morphology of the passive was investigated in section 3.2.1. Sentences (18-20) exemplify this morphology.

The effect of the passive construction with the verbs of sending and carrying has been investigated. The emphasis was on the **[NP] object movement** and the **Locative PP movement**. In sentences (21-30) examples (a) and (b) indicate [NP] object movement and sentences (31-40) indicate Locative PP movement.

The effect of neuter-passive **-eg-** on the [NP] object movement and the Locative PP movement was also investigated. Sentences (41-42) indicate a neuter passive with intransitive verbs sentences (43-45) indicate neuter-passive with transitive verbs. In sentences (46-55) examples (a) and (b) indicate [NP] object movement and sentences (56-65) indicate the Locative PP movement.

From the discussion above it can be concluded that all the alternations are possible with verbs of sending and carrying.

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