CONTROL IN INFINITIVES IN SESOTHO

BY

PATRIC SERAME MOTAUNG

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Promotor: Prof. J.A. du Plessis

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DECLARATION

I, the undersigned hereby declare that the research in this thesis is my own original work which has not partly or in full been submitted to any other University in order to obtain a degree.

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ACKNOWLEDGEMENTS

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ABSTRACT

The purpose of this study is to investigate how subject PRO of the infinitive in Sesotho is assigned an antecedent. The general framework which is assumed is the Government-Binding theory of generative grammar, in particular one of its subtheories, namely the Control theory which is concerned with the assignment of an antecedent to the subject PRO in the infinitive.

A survey of the work done by various linguists on the Infinitive in Bantu languages shows that much has been written on the properties of the infinitive. In the Nguni languages, especially in Xhosa, considerable research has been done to establish the syntactic nature of the infinitive in the various constructions that it may occur. The Infinitive in Sesotho has, however, not been studied extensively.

The central issue of this study relates to establishing the antecedent of the subject PRO of the infinitive in the various constructions in which it may appear. It is demonstrated that in some instances it is possible for two different NP arguments in a sentence to serve as a possible antecedent of the empty category PRO.

This examination of control of the subject PRO in the infinitive in Sesotho has revealed the following:

1.   The subject PRO in the infinitive must have an antecedent. In such cases the empty category PRO which is subject to obligatory control is considered to behave like an anaphor, because as an empty subject of the clausal complement it must take its referential index from either the subject or object argument of the matrix sentence. This implies that the empty category PRO has no capacity for independent reference.

2.   The subject PRO in the infinitive may have an antecedent. In such cases the empty category PRO which is subject to non-obligatory control is considered to behave like a pronoun, because the empty category PRO may either refer to individuals independently or co-refer to individuals already named on a given sentence.

3.   Finally the subject PRO in the infinitive can at times have no antecedent at all. In such cases the empty category PRO is subject to arbitrary control, because its antecedent may be implicit. This has been established in the following instances:

3.1   There are cases where the infinitive is a complement of a Verb or a Copulative with the subject position occupied by an empty existential pronominal which is associated

with the existential morpheme **Ho**. This pronominal is an empty category just like PRO, but is in a non-argument position, for it lacks a thetha-role. This is attributed to the fact that the existential pronominal associated with **Ho**, which signifies "it" or "there" is a dummy element and has therefore no semantic role. Therefore the antecedent of the subject PRO in the infinitive can be "anyone in general". The interpretation thereof is known as arbitrary control.

3.2   It has also been established that, the Nominal infinitive, which has in Sesotho, like all other nominals, a class prefix which is morphologically marked with a prefix **Ho**, is subject to arbitrary control (see 3 above). This is attributed to the fact that its subject NP-argument has a non-referential expression which is thus ungoverned, because it has no agreement (-AGR) and can therefore not be assigned Case.

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OPSOMMING

Die doel van hierdie studie is om die wyse te ondersoek waarop subjek PRO van die infinitief 'n antesedent toegeken word in Sesotho. Die algemene teoretiese raamwerk wat aanvaar word is die teorie van Regering en Binding ("Government-binding") van generatiewe grammatika, in die besonder, die teorie van Kontrole, wat relevant is vir die toekenning van 'n antesedent aan subjek PRO van die infinitief.

'n Oorsig van die navorsing oor die infinitief wat gedoen is deur verskillende taalkundiges toon aan dat heelwat geskryf is oor die eienskappe van die Infinitief. In die Nguni-tale, veral in Xhosa, is heelwat navorsing gedoen om die sintaktiese aard te bepaal van die infinitief in die verskeidenheid konstruksies waarin dit kan verskyn. Die infinitief in Sesotho, is egter nog nie uitgebreid ondersoek nie.

Die sentrale vraagstuk van hierdie studie hou verband met die bepaling van die antesedent van die subjek PRO van die Infinitief in die verskillende konstruksies waarin dit kan verskyn. Dit word aangetoon dat dit in sommige gevalle moontlik is dat twee verskillende NP argumente in 'n sin as 'n moontlike antesedent vir die leë kategorie PRO kan dien.

Hierdie studie van kontrole van die subjek PRO in die infinitief in Sesotho bring die volgende na vore:

1.   Die subjek PRO van die infinitief moet 'n antesedent hê. In hierdie gevalle word dit beskou dat die leë kategorie PRO, wat onderhewig is aan verpligte kontrole, ooreenkom met 'n anafoor omdat dit as 'n leë subjek van die sinskomplement die referensiële inhoud daarvan moet kry vanaf òf die subjek, òf die objek argument van die matrikssin. Dit impliseer dat die leë kategorie PRO geen kapasiteit het vir inherente grammatikale kenmerk verwysing.

2.   Die subjek PRO in die infinitief mag 'n antesedent hê. In hierdie gevalle, word dit beskou dat subjek PRO wat onderhewig is aan nie-verpligte kontrole, ooreenkom met 'n pronominaal, aangesien die leë kategorie PRO òf onafhanklik kan verwys na individue, òf koreferensie toon met individue wat reeds genoem is in 'n gegewe sin.

3.   Laastens, kan die subjek PRO in die Infinitief soms geen antesedent hê nie. In hierdie gevalle is die leë kategorie PRO onderhewig aan arbitrêre kontrole, aangesien die antesedent daarvan implisiet kan wees. Dit is vasgestel in die volgende gevalle:

3.1 Daar is gevalle waar die infintief 'n komplement is van 'n werkwoord of kopulatief met in die subjeksposisie die eksistensiële pronominaal wat geassosieer is met die eksistensiële morfeem **Ho**. Hierdie pronominaal is, soos PRO, 'n leë kategorie, maar dit verskyn in 'n nie-argument posisie aangesien dit nie 'n tematiese rol het nie. Dit word toegeskryf aan die feit dat die eksistensiële pronominaal geassosieer met **Ho**, wat "dit" of "daar" aandui 'n onpersoonlike element is, en dus geen tematiese (of semantiese) rol het nie. Dus kan die antesedent van subjek PRO in die infinitief "enige persoon in die algemeen" wees. Die interpretasie hiervan is bekend as arbitrêre kontrole.

3.2 Daar is ook vasgestel dat die Nominale infinitief, wat in Sesotho, soos ander naamwoorde 'n klasprefiks het, morfologies gerealiseer as **Ho**, onderhewig is aan arbitreêre kontrole (sien hfst. 3). Dit word toegeskryf aan die feit dat die subjek NP argument daarvan 'n nie-referensiële uitdrukking het wat nie regeer word nie weens die afwesigheid van kongruensie in infinitiewe, en dus ook nie kasus toegeken kan word nie.

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CONTENTS

CHAPTER 1

INTRODUCTION

1.1   AIM OF STUDY

The main aim of this thesis is to examine control in Infinitives in Sesotho. Within the framework of the Government-Binding (GB) theory the analysis of a sentence such as (1) exhibits according to Chomsky (LGB 20, 57) the crucial property stated below:

(1)   Ntate o tsamaile ho ya mosebetsing
        [$_{NP}$Ntate^i] o-tsamaile [$_s$PRO^i ho ya mosebetsing]]
        (The father has left to go to work)

The Infinitival complement, **ho ya mosebetsing** in (1) has an empty subject, which is represented by PRO. This empty category, PRO is, by devising interpretative rules, coindexed (i.e. marked as coreferential by the ascription of identical referential indices) with its antecedent, which is the subject NP, **Ntate** by co-superscripting.

The asumption underlying this property is that it is obvious that the complement of **tsamaile** (left) is propositional at Logic Form (LF), i.e. the empty subject must be supplied as part of the interpretation, because the empty subject is an argument which is assigned a Θ-role (in our case in sentence (1) that of an Agent). The question now is why the subject cannot be overt when the complement is Infinitival, and in the absence of lexical content, what sort of empty category are we dealing with? This raises the further question of what sort of mechanism we need, to express the control relation involved i.e. how does the empty category, PRO which appears as the subject of an Infinitive in (1) get coindexed and under what conditions.

It is clear (according to i.a. Horrocks (1987:132)) that the empty category in sentence (1) cannot be a trace. There is also no question of its being created by the rule Move α. This is made explicit by the fact that its antecedent, which is the Subject NP - **Ntate** has an independent Θ-role i.e. Agent. The antecedent of a trace can never be in a Θ-position.

Since the relationship between PRO and its antecedent in the discussion above, does not entail movement, this relationship is not subject to Subjacency, which stipulates that any application of Move α may not cross more than one bounding node. This may be illustrated by considering sentence (2) below:

```
(2)    Ntate o tsamaile mme a sa robetse ho ya toropong
     s [Ntate¹] o-tsamaile [s mme a sa robetse [s PRO¹ ho ya
     1                      2                    3

toropong]
(The father left while the mother was still asleep to go to
town)
```

In sentence (2) the antecedent of PRO which appears as the subject of an Infinitival clause is the subject NP of the matrix sentence (S_1) despite the fact that PRO in (S_3) is according to M.W. Visser (1989:172) removed from its antecedent by one clause namely (S_2).

1.2   PRESENTATION

This work is divided into 3 chapters. The first chapter will include a short survey of earlier work on the Infinitive in Bantu Languages. An evaluation of the contributions made on Control will be made. Some useful data on this aspect will also be obtained from these contributions. The second chapter will be devoted to the verbal and nominal properties exhibited by Infinitives. A systematic survey of their syntactic characteristics will be made. In the third chapter attention will be given to the control of Infinitives. The properties of control of verbs in Sesotho will be set out clearly and comprehensively.

1.3   A SHORT SURVEY OF EARLIER WORK ON THE INFINITIVES

Some views on the nature of the Infinitives in the various constructions in which they may appear have been expressed by various linguists in Bantu languages.

1.3.1   M. Visser (1989:155) expresses the view that the Infinitive in Bantu has been frequently noticed in the linguistic literature for the fact that it exemplifies both nominal and verbal properties. In this regard she refers to Doke (1955:28) who describes the dual nature of the Infinitive in Zulu as a genuine noun of class 8 (i.e. class 15) but also as a genuine verb. This assumption may be illustrated as follows with regard to Sesotho:

1.3.1.1 The Infinitive is viewed as a noun of Class 15, because:

(I)   it has the class prefix **ho** of this noun gender class, which is on a par with other nouns, in that its gender class is identified by its class prefix

> Example: Class 15   Ho tsamaya (walking)
>   Class 2   Ba-tho (person)

(II)   The Infinitive may appear in NP positions such as Subject and Object:

Examples: **Subject:**   **Ho sebetsa** ho lokile
(Working is alright)

Object: Ke a ho rata **ho sebetsa**
(I like working)

1.3.1.2 The Infinitive is also viewed as a verb, because:

(I)   it may be inflected for the negative

Example: Monna o kgetha **ho se je**
(Man chooses not to eat)

(II)   it may be inflected for tense

Example: Monna o batla **ho tla sebetsa hosane**
(Man wants to come and work tomorrow)

(III)   it may have an object which may be represented by an objectival concord.

Example: Monna o a rata ho **di ja dijo**
(Man likes eating it (food))

1.3.2 Doke and Mofokeng (1957:188) are of the opinion that, though the Infinitive acts as a noun of Class 15 in Sesotho, its verbal nature must not be overlooked. According to them such a word as **ho ja** may have the nominal significance of **eating** or **food** or the verbal significance of **to eat.** Example: **Ke a batla ho ja** (I want to eat).

1.3.3   S.M. Guma (1971:158) expresses the opinion that the Infinitive in Sesotho may syntactically be both a noun and a verb.

1.3.3.1 The Infinitive may according to Guma be a noun, because:

(I)   it has a prefix like other nouns, its syllabic structure being CV:

Examples: Class 15   ho-tseba (to know)
Class 1   mo-tho (a person)

(II)   it has a set of subjectival concords, objectival concords and qualificative concords that agree with its prefix as they do with those of other nouns:

Examples: (a)   Ho bua **ho** lokile
(Speaking is alright)

(b) Ba **ho** rata haholo ho bua
(They like to talk very much)
(c) Ho fihla **ha** hae ho thusitse
(His arrival was helpful)

1.3.3.2 The Infinitive may be a verb, because

(I) it has like other verbs a negative form:

Example: Ho **se** je (not to eat)

(II) it may have an object which is a syntactic feature that is characteristic only of verbs:

Example: Ho ja **dijo** (to eat food)

1.3.4 D.F. Cole (1975:237) expresses the opinion that the Infinitive in Tswana functions as a noun of class 8 (i.e. class 15) though it exhibits certain verbal characteristics:

Example: goswa (to die, dying, death)

1.4 THE EVALUATIONS OF THE CONTRIBUTIONS MADE ON CONTROL THEORY

In this section a review will be made on some developments in Control theory as exemplified by proposals in the literature on Control particularly in studies by H. Lasnik, T. Roeper and O. Jaeggli. The contributions made on Control will be explored in order to provide an account of Control phenomena in Sesotho. An attempt will be made to determine to what extent principles formulated in these studies are acceptable for Sesotho.

Different views on Control, including control by implicit arguments, have been advanced in these studies. Some of the proposed principles will be examined to determine their validity for Control phenomena in Sesotho.

1.4.1 Government-Binding theory

Before a review can be made on the contributions made on Control theory as envisaged above, it will be useful to have a general view of the main features of the Government-Binding theory (henceforth GB theory). The GB consists, as claimed by Chomsky, of a set of interacting subtheories. It will, according to Horrocks (1987:100), be noted that each of these subtheories comprising a principle or a set of principles, deals with some central area of grammatical enquiry. These subtheories will be briefly explained, with particular reference to Control theory.

1.4.1.1 Government theory

See i.a. P. Sells (1985:38): the relation of government is defined in terms of c-command i.e. α c-commands ß if and only if every maximal projection dominating α dominates ß and α does not dominate ß nor ß dominates α. In illustration of this, let us consider the Sesotho sentence (1) that may occur in the structure of the form in (2):

(1)   Monna o seha nama ka thipa
        (The man cuts the meat with the knife)

(2)
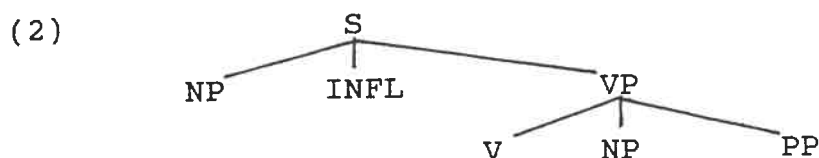
If we consider the VP structure in the diagram (2) we note that V c-commands the NP and PP, for the maximal projection i.e. VP dominating V also dominates NP and PP and V does not dominate NP and PP nor do NP and PP dominate V.

This illustration brings to light the fact that government is according to P. Sells (1985:40) a localized version of c-command, which can be defined as α governs ß if and only if α c-commands ß and α is an X° i.e. as a governor it must be one of the following head categories: N, V, P, A, INFL, and every maximal projection dominating α dominates ß (see i.a. Sells (1985:40)).

From this argument we deduce that government is essentially restricted to sisterhood relation. This is made explicit by means of a subcategorization principle, whereby any lexical item of category X will be subcategorized with respect to the range of idiosyncratic complements i.e. sister constituents which it permits within the maximal X bar containing it.

1.4.1.2 Case theory

Case theory is concerned with the assignment of abstract Case to constituents. Case theory is responsible for determining in large part the distribution of NP's (see i.a. Sells (1985:52)).

There is an assumption that all NP's with lexical content are assigned Case. If some NP fails to be assigned Case, then the structure is ruled ungrammatical. This requirement is stated as the Case filter in Chomsky (1981:49):

(3)   *NP if NP has phonetic content and has no Case.

The basic idea, according to i.a. Horrocks (1987:103), is that Case is assigned under government. If it is considered that government is essentially restricted to the sisterhood

relation, then it implies that a lexical head X^i governs its complements and therefore has the power to determine the Case of its complements which are in the majority of cases NP's.

In illustration of this assumption let us consider the VP structure (2) of sentence (1) in 1.4.1.1. In the said Verb Phrase, the Verb **seha** and the Preposition **Ka** are lexical heads that govern their complements, which are the NP's **Nama** and **Thipa** respectively and thus assigning Cases to them.

1.4.1.3   Theta theory

Theta theory is, according to i.a. Horrocks (1987:101), concerned with the assignment of what Chomsky calls thematic roles to sentential constituents.

Considering the argument structure of the verbs, it becomes obvious, according to i.a. P. Sells (1985:36) that each theta role is assigned by a head within its domain (i.e. NP, VP). With regard to sentence (4) which may occur in the structure of form (5), this can be illustrated as follows:

(4)   Monna o seha nama

(5)
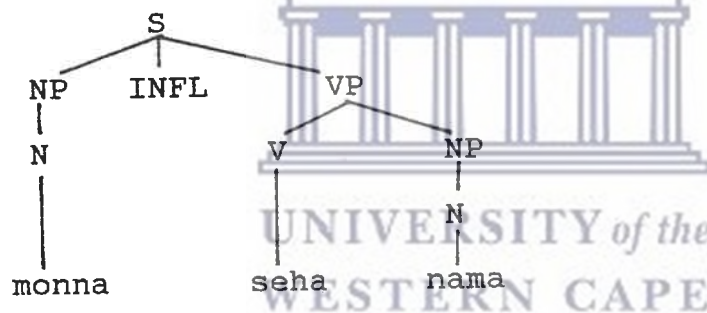
In structure (5) the principle that relates subcategorization and the assignment of theta roles is depicted. This principle makes the two subsystems to interact in the sense that if α subcategorizes for ß then it Θ-marks ß. Therefore, we deduce, from the structure (5) that the Verb **seha** subcategorizes for the NP object **nama** and assigns it a Patient role.

It is also noted that while verbs do not subcategorize for subjects, they may indirectly assign external Θ-roles to them. From the structure (5) it is obvious that the Verb **seha** does not subdategorize for the NP-subject **monna** but assigns it an Agent role.

1.4.1.4   Bounding theory

Bounding theory is, according to i.a. Horrocks (1987:128) concerned with the limitations to be placed on the displacement of constituents by the transformational rule schema Move α.

These limitations on the operations of transformations are provided by the subjacency principle, which requires that any application of Move α may not cross more than one bounding node i.e. the source position will be subjacent to the destination position.

In illustration of an assumption that bounded rules in Move α seem to operate either within the single clause or at most across one clause boundary, let us examine sentence (6), where the transformational rule, i.e. an operation that moves an NP from one location to another within a structure has been applied.

(6)   **Nama** e a sehwa _____
         (The meat is being cut) _____

In sentence (6) the NP **Nama (meat)** has been moved out of the position marked _____ into its present position by operation of NP Movement. This can be elucidated as follows with regard to sentence (6) that may occur in the structure of the form in (7):

(7)
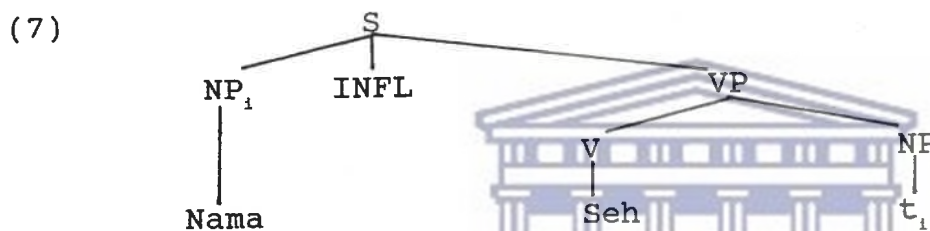
From the structure (7) we deduce that the c-commanded position which is an NP trace (t_i) is subjacent to the c-commanding position which is a maximal projection S.

1.4.1.5   Binding theory

The Binding theory is, according to i.a. Horrocks (1987:108), concerned with conditions under which NP's are interpreted as coreferential with the other NP's in the same sentence.

For the purpose of the binding theory NP's that are arguments are assumed to fall into one of the following three subcategories, each of which has a principle.

1.4.1.5.1   Anaphors

Anaphors are, according to i.a. Horrocks (1987:109) NP's whose reference is necessarily determined sentence internally and which cannot have independent reference i.e. they are elements that must have an antecedent. This is in accordance with the principle that stipulates that the binding conditions require anaphors to be A-bound in their governing categories. The only Argument position which is ungoverned and thus, does not have a governing category is the subject position of the Infinitive that is protected by an S-barrier.

This can be illustrated as follows with regard to the sentence in (8) that may occur in the structure of the form in (9):

(8)   Ngwana o a tseba ho bala
        [$_{NP}$Ngwana$_i$] o a tseba [$_s$PRO$_i$ ho bala]
        (The child knows (how) to read)

(9)

```
                    S
              _____|_____
            NP¹           VP
                     _____|_____
                    V             S
                          _____|_____
                        PRO¹              VP
```
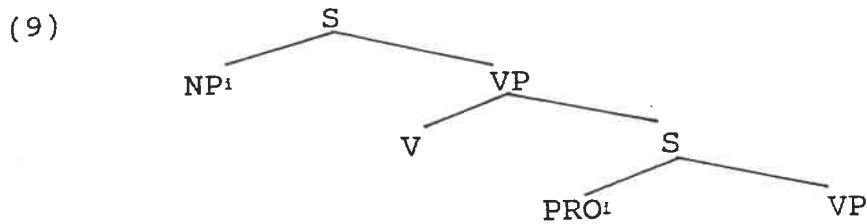
The term "bound" can, with regard to the structure (9) be defined as follows (see Sells (1987:67)):

        α binds ß if and only if:

(a)   α c-commands ß

(b)   α and ß are coindexed i.e. α is marked with the same referential index as ß.

Therefore the NP **Ngwana** of the matrix sentence may bind the subject PRO of the Infinitival clause. This PRO is said to behave like an anaphor, because as an empty subject of the clausal complement it must take its referential index from the subject NP **Ngwana** and has no capacity for independent reference.

1.4.1.5.2 Pronominals

Pronominals are, according to i.a. Horrocks (1987:109) NP's that may lack specific lexical content, and have only the features person, number and gender. Unlike anaphors they may either refer to individuals independently or co-refer to individuals already named in a given sentence i.e. they may have an antecedent.

This assumption relates to the principle which stipulates that a pronominal must be free in its governing category. Here "free" means, according to i.a. Horrocks (1987:116) that no c-commanding argument must bind the pronominals. This may be illustrated by considering the sentence (10):

(10)   Thabo o a tseba hore o rata **ho** bala
        (Thabo knows that he likes to read)

In sentence (10) for example the underlined subject concord **o** which is associated with an empty NP position may refer back to the individual denoted by the name **Thabo** or to some other individual not mentioned in the sentence.

1.4.1.5.3 Referential expressions

Referential expressions are, according to i.a. Horrocks (1987:109) Noun Phrases with lexical heads which potentially refer to something. Co-reference is excluded. This is in accordance with the principle that a Referential expression must be free anywhere. That is the Referential expression must, according to i.a. Horrocks (1987:118) not be bound by a c-commanding argument anywhere else within the same sentence. This can be made clear by considering the following sentence.

(11)   Lineo o rata Thabo
       (Lineo likes Thabo)

In sentence (11) the NP **Thabo** cannot be coindexed with the NP Lineo.

1.4.1.6 Control theory

Control theory is concerned with the assignment of an antecedent to the subject PRO of the Infinitival clause. This assumption can be illustrated by considering the sentence (12) below:

(12)   Moshemane o a rata ho tsamaya
       $[_{NP}$Moshemane$^i]$ o a rata $[PRO^i$ ho tsamaya$]]$
       (The boy likes to go)

From sentence (12) we may deduce that the Infinitival clause: **ho tsamaya** has an empty NP subject represented by PRO. This PRO is coindexed with its antecedent, which is the NP subject **Moshemane** of the matrix clause by making use of superscripts (i). This coindexing is done by the rule of control.

According to i.a. Horrocks (1987:131) if the subject of the matrix clause controls the empty category PRO we have an instance of subject control, as may be illustrated by considering the sentence (13) below:

(13)   Monna o tshepisa mosadi ho tlohela jwala
       $[_{NP}$Monna$^i]$ $[_{VP}$ V o-tshepisa $[_{NP}$ mosadi] $[_s$PRO^i ho tlohela jwala$]]$
       (The man promises the woman to abstain from beer)

In sentence (13) the subject NP **Monna** of the matrix clause is coindexed with the subject PRO of the Infinitival clause. This gives rise to subject control.

But if the object of the matrix clause controls the empty category PRO we have an instance of object control as may be illustrated by the sentence (14) below:

(14)   Monna o qekisa mosadi ho tlohela jwala
         [$_{NP}$Monna] [$_{VP}$ V o- qekisa [$_{NP}$ mosadi^i] [$_S$PRO^i ho tlohela jwala]]
         (The man persuades the wife to abstain from beer)

In sentence (14) the object NP **Mosadi** of the matrix clause is coindexed with the subject PRO of the Infinitival clause. This gives rise to object control.

From the argument thus far it is obvious that the complement of **tshepisa (promises)** or **qekisa (persuades)** in (13) and (14) respectively, which may not be finite is propositional at L.F. i.e. the empty subject must be supplied as part of the interpretation, because the empty subject in each case is an argument which is assigned a Θ-role.

In justification of the view that the NP subject **Monna** and the NP object **Mosadi** in sentences (13) and (14) respectively are specified as controllers of the empty subject of the Infinitival complement, mention can be made of the fact that if the verb takes an NP complement, in addition to the clausal complement or if it Θ-marks its subject one or other or these NP's will be specified as the controller of the empty subject of the complement as a lexical property (see Horrocks (1987:133)).

From the argument above it is clear that the empty category in sentences (13) and (14) cannot be a trace. There is also no question of its being created by the rule Move α. This is attributed to the fact that the antecedent has an independent Θ-role in each of the examples i.e. Agent in the case of **Monna** in (13) and Patient in the case of **Mosadi** in (14). The antecedent of a trace can never be in a Θ-position.

Since the relationship between PRO and its antecedent is not brought about by the application of a transformational rule i.e. an operation that moves an NP from one location to another, there is no question of it being subjected to subjacency, which stipulates that any application of Move α may not cross more than one bounding node.

1.4.2   H. Lasnik (1988)

Lasnik (1988:10) cites the proposals by Roeper (1987), Chomsky (1986) and Jaeggli (1986) that the Purposive Infinitival complement may be controlled by the implicit argument of the passive verb. This view may be exemplified as follows:

(1)   The land was burnt .... [PRO to scare the chief]
         Naha e ile ya tjheswa .... [PRO ho tshosa morena]

It is therefore with regard to sentence (1) assumed, according to Roeper (see 1.4.3), that the implicit agent (on some accounts, the passive morphology itself) receives the subject Θ-role assigned by the verb and acts as the controller of the subject PRO of the Infinitive. This raises the question of a **by**-phrase as in sentence 2 where, according to Jaeggli (see 1.4.4) the subject Θ-role is transmitted from the passive **en** (corresponding to the Sotho **w**) to the object of the **by**-phrase (in Sotho the **ke**-phrase):

(2)   The land was burnt **by enemies** [PRO to scare the chief]
        Naha e ile ya tjheswa **ke dira** [PRO ho tshosa morena]

Lasnik (1988:11) proposes that, where there is a general inability of an implicit agent to serve as a controller, the matrix sentence can serve as the controller of the Infinitival complement. He refers to this phenomena as S-control. This assumption may be illustrated by considering the following English example, whose corresponding Sesotho example below is ungrammatical:

(3)   The land was burnt by fire [PRO to scare the chief]
        *Naha e ile ya tjheswa ke mollo [PRO ho tshosa morena]

With regard to sentence (3) Lasnik is of the opinion that the controller of the subject PRO of the Infinitive is the matrix clause: The land was burnt by fire. He, hereby, implies that, it is the land's being burnt either by fire or in some unspecified way that was intended to scare the chief.

In the corresponding Sesotho example the matrix sentence in (3) cannot take the Infinitive as complement. This is attributable to the fact that the NP **mollo** (fire) of the **Ke** (**by**) phrase indicates an unintentional subject, which cannot take the Infinitival complement. Instead of the **Ke**-phrase which in Sesotho implies 'non-means' (i.e. non-instrument), usage is made of **Ka** (**by**) phrase as exemplified below:

(4)   The land was burnt by fire [PRO to scare the chief]
        Naha e ile ya tjheswa ka mollo [PRO ho tshosa morena]

In sentence (4) the **Ka**-phrase is an Instrument which implies "means". This in turn gives rise to the fact that the controller of the subject PRO of the Infinitive is implicit but it may be explicit, as in the following example:

(5)   The land was burnt by enemies with fire [PRO to scare the chief]
        Naha e ile ya tjheswa ke dira ka mollo [PRO ho tshosa morena]

From the discussion thus far, we deduce that in Sesotho the controller of the subject PRO may either be implicit or explicit. This illustrates that where S-control is necessary in English as suggested by Lasnik (1988:11) we need not invoke it for Sesotho.

With regard to the argument above, Lasnik is of the opinion that if there is no mechanism of control by the implicit argument, then we should expect that where the matrix subject is not an appropriate controller, a purposive clause disallowing a clause as its subject should be ill-formed with a PRO subject. This can be exemplified as follows:

(6)   *The lion was killed to receive the reward.
        Tau e ile ya bolawa ho fumana moputso.

According to Lasnik (1988:12) the English sentence in (6) is disallowed, because the event of the lion being killed cannot receive the reward, hence S-control is unavailable. In contrast to this, in the corresponding Sesotho example in sentence (6) there is an implicit subject argument. But this subject argument can be explicit by using the **Ke (by)** phrase. Consider the following sentence in (7) below:

(7)   The lion was killed by the hunter[i] [PRO[i] to receive the reward]
        Tau e ile ya bolawa ke setsomi[i] [PRO[i] ho fumana moputso]

This assumption that the Object NP of the **Ke (by)** phrase is the controller of the subject PRO of the Infinitive may be verified by considering the following paraphrases of the sentences in (7), where the NP **the hunter (setsomi)** is the matrix subject:

(8)   The hunter[i] killed the lion [PRO[i] to receive the reward]
        Setsomi[i] se ile sa bolaya tau [PRO[i] ho fumana moputso]

One further proposal by Lasnik that control by implicit argument is, as claimed by Roeper (1987), not possible into a passive Infinitival complement, seems not to obtain in Sesotho. This may be illustrated by contrasting the following English and Sesotho sentences in (9):

(9)   *The chief is wanted [PRO to be helped]
        Morena o a batlwa [PRO ho thuswa]

While the subject NP **the hunter (setsomi)** is a possible controller for PRO in (8) neither the chief nor the matrix S would make sense as the controller in the English example in (9). Example (9) of English is problematic if the implicit argument is available as controller. This is attributed to the fact that the PRO is not in a position where it could be controlled as may be illustrated by considering the following example in (10):

(10)   The chief is wanted by the people [e to be helped PRO]

In Sesotho on the other hand it is assumed that the sentence in (9) has an implicit subject argument. The agent argument may be overt by occuring in the Ke (by) phrase as shown by the following Sesotho example which corresponds with an English example in (10):

(11)   Morena o batlwa ke batho ho thuswa.

The sentence in (11) renders some ambiguity in Sesotho. This ambiguity is attributed to the fact that either the object NP of the **ke** phrase or the object NP of the passive verb may serve as the controller of the Infinitival complement. This assumption may be elucidated as follows:

Where the object NP of the **ke** phrase is regarded as the controller, the interpretation pertaining to sentence (11) will be as follows:

(12)   Morena o batlwa ke batho hore a thuswe
        (The chief is wanted by the people so that he may be helped)

Where the object NP of the passive verb is regarded as the controller of the Infinitive, the interpretation pertaining to sentence (11) will be as follows:

(13)   Morena o batlwa ke batho hore ba thuswe
        (The chief is wanted by the people so that they may be helped)

1.4.3   T. Roeper (1987)

Roeper argues that implicit arguments are thematic roles that may fail to appear in explicit positions but retain syntactic functions. He outlines the following approaches to representing implicit arguments:

He proposes a morphological approach which associates implicit arguments with affixes such as passive -ed, whose Sesotho analogue is -w-. This approach may be exemplified by considering the following constructions:

(1)   a.   The land burned
             Naha e tjhele

       b.   The land was burned
             Naha e ile ya tjheswa

In (1b) there is an implicit agent, where none exists in (1a). The optional **by (Ke)** Phrase provides a syntactic diagnostic for its presence:

(2)   a.   *The land burned by enemies
             *Naha e tjhele ke dira

       b.   The land was burned by enemies
             Naha e ile ya tjheswa ke dira.

Therefore the claim that the implicit agent is an argument is demonstrated by its capacity to function as a syntactic controller as exemplified below:

(3) a. *The land burned to scare the chief.
        Naha e tjhele ho tshosa morena.

     b. The land was burned to scare the chief.
        Naha e ile ya tjheswa ho tshosa morena.

Because (3a) involves no Agent, control is impossible. In (3b) the implicit Agent functions as a controller.

The discussion thus far supports Roeper's argument that the morphological affix -**ed** (-**w**-) above, plays the role of an explicit trigger for the presence of implicit arguments. He proposes that those affixes that carry a thematic grid be called thematic affixes. This view may be illustrated by considering the sentence in (3b) repeated below:

(4) The land was burned [PRO to scare the chief]
     Naha e ile ya tjheswa [PRO ho tshosa morena]

In sentence (4) the affix -**ed** (-**w**-) licences a **by** (**ke**) Phrase that covers the semantic space that would have been covered by the Agent if -**ed** (-**w**-) carried an Agent role in its thematic grid. This can be exemplified as follows:

(5) The land was burned (by the enemies) [PRO to scare the chief]
     Naha e ile ya tjheswa (ke dira) [PRO ho tshosa morena]

This proposed analysis is according to Roeper attributed to the fact that in passive sentence (5) there is a matrix subject controller at D-structure that carries the Agent role. But on account of Dethematization in the lexicon, then there would be no subject agent at D-structure i.e. at D-structure there is no controller in subject position. At D-structure, sentence (5) must for example have the following form where PRO_{ARB} denotes the dethematized subject:

(6) PRO_{ARB} was burned the land [PRO_{ARB} to scare the chief]
     PRO_{ARB} ile ya tjheswa naha [PRO_{ARB} ho tshosa morena]

In sentence (6) the PRO_{ARB} in subject position undergoes Dethematization (loss of agent) and the position is occupied by the Object via Move α to give rise to a construction as follows:

(7) The land was burned [PRO to scare the chief]
     Naha e ile ya tjheswa [PRO ho tshosa morena]

This implies that the Agent is implicit. Thus the affix -**ed** (-**w**-) which carries the thematic grid functions as the controller and optionally transmits it into the **by** (**Ke**) Phrase that becomes a copy of the Agent as exemplified by the following sentence:

(8)   The land was burned (by the enemies[i]) [PRO[i] to scare the chief]
        Naha e ile ya tjheswa (ke dira[i]) [PRO[i] ho tshosa morena]

Roeper proposes, with regard to Nominal Infinitives, the syntactic approach, which associates implicit arguments with argument positions. He argues that the Determiner of a Nominal Infinitive contains a PRO, which carries the external argument of the verb, as may be exemplified by the following sentence:

(9)   PRO to use drugs PRO to become happy is bad
        PRO ho sebedisa dithethefatsi PRO ho ithabisa ho hobe.

According to Williams (1987) the external argument is demoted to an internal argument as for example in passive (as illustrated by sentence (8) in 1.4.2) where the Subject argument has been demoted to the Object and the Subject Agent has been dethematized. This is also the case with the Nominal Infinitives. With regard to sentence (9) the external argument becomes an internal argument (assuming dethematization of the subject PRO). This may be illustrated by considering the following sentence:

(10)   The using (of people[i]) drugs [PRO[i] to become happy] is bad.
        Ho sebedisa (ha batho[i]) dithethefatsi [PRO[i] ho ithabisa] ho hobe.

It may be proposed, analogously, that in sentence (10) the genetive **a** licences an argument position. This is the Genetive determiner of the Infinitive verb (bearing an external Θ-role, i.e. being external argument.

From the argument thus far we may assume that an Implicit argument arises when an argument position associated with a particular argument structure of the available predicate is not satisfied by the expression filling or occupying the syntactic argument position.

1.4.4   O. Jaeggli (1986)

With regard to the observation of Manzini (1983) that a Passive sentence allows a Purpose clause, Jaeggli proposes that an Implicit argument functions as the controller of the PRO subject of the Infinitival Purpose clause. This assumption may be made explicit by considering sentence (1) in 1.4.1, repeated below:

(1)   The land was burned ... [PRO to scare the chief]
        Naha e ile ya tjheswa ...[PRO ho tshosa morena]

Jaeggli is, with regard to sentence (1) above of the opinion that Control is claimed to be involved because the Subject of the Infinitival Purposive clause is interpreted as co-referential with the Implicit argument. In actual fact, the Implicit argument is interpreted as arbitrary in reference, and so is the subject of the Infinitival Purposive clause.

This assumption supports the proposal that all instances of arbitrary control are instances of control by an Implicit argument. This seems to be acceptable in Sesotho.

The above point of view may be assumed to have originated from Jaeggli's argument that in the construction of Passive sentence there is, according to Chomsky (1981:124) an assumption that a passive sentence such as (2) below exhibits two properties stated in (3):

(2)   The land was burnt
         Naha e ile ya tjheswa

(3)   a.   [NP, S] does not receive a Θ-role

         b.   [NP, VP] does not receive Case within VP.

With regard to sentence (2) the subject [NP, S] position is thus a non-argument position. That is, the surface subject of a passive sentence corresponds to the logical object of the verb. To understand what brought about these properties, we need, according to Jaeggli, to consider the theory of lexical structures.

The lexicon can, according to Jaeggli, be considered as a set of syntactic subcategorization features as well as Θ-roles to be assigned to the arguments of the predicate.

Subcategorization features include elements strictly within the government domain of the subcategorizing element as may be exemplified as follows:

(4)   The enemies burnt the land (burn: V, + [__ NP])
         Dira di tjhesitse naha. (tjhes: V, + [__ NP])

However, a predicate may take an argument that does not fall within that domain. That argument is called the 'external argument' of a predicate. In sentence (4) above **enemies (dira)** is the external argument.

From the discussion thus far it may be deduced that there is a relation between subcategorization and the assignment of Θ-roles to arguments. Jaeggli assumes that Θ-roles and subcategorization features are linked. By his linking it is understood that Θ-roles are to be associated with a subcategorization feature. Thus the lexical entry for the verb: **burn (tjhes)** in sentence (4) will be as follows:

```
Burn: _____NP
                          |
      Θ                   Θ
```

This implies tha the NP **the land (naha)** falls within the verb's domain of subcategorztion and its Θ-role is linked with its subcategorization feature. Thus it is called internal Θ-role.

Since the Subject argument does not fall within its domain of subcategorization its Θ-role remains unlinked. The Θ-role that is unlinked in the lexical entry of a predicate is called an external Θ-role.

In the case of the Passive construction: **The land was burnt** the Subject argument of the D-structure is missing as may be shown by considering it with its Sesotho analogue below:

(5)   [e] was burnt the land
        [e] e ile ya tjheswa naha.

If such a constituent contains a referential expression, it will require a Θ-role. That is to say, if an optionally subcategorized position is not present in a D-structure we will assume that the Θ-role that would have been assigned to a position is also missing from the lexical entry of the predicate.

The passive suffix -ed (-w-) in **burn (tjhes)** may optionally subcategorize for a Prepositional Phrase with **by (Ke)**. This subcategorization property of the passive suffix is listed in its lexical entry and will therefore have to assign the by (Ke) Phrase a Θ-role in adherence to the condition that if X subcategorizes for Y, then X assigns a Θ-role to Y. This may be illustrated by considering the following English example with its Sesotho analogue:

(6)   The land was burnt (by the enemies)
        Naha e ile ya tjheswa (ke dira)

In sentence (6) the Object NP the enemies (dira) of the by (Ke) Phrase is thus assigned a Θ-role by the passive suffix -ed (-w-). This passive suffix is not listed as having a Θ-role. It receives such a Θ-role only after it has been suffixed to a verbal stem.

From the discussion above, in particular taking into consideration the property of passive stated in (3a) we may assume, following to Jaeggli, that the Θ-role absorption involves the role played by the passive suffix -ed (-w-). This passive suffix functions as the recipient of the external Θ-role of the predicate. Once the Θ-role is assigned to this suffix it can no longer be assigned to [NP, S] position (as shown by sentence (5) in 1.4.3), because Θ-roles cannot be assigned by a predicate to more than one element.

The fact that the [NP, S] position is not assigned a Θ-role allows movement into that position. Thus sentence (5) in 1.4.3 is derived as follows:

(7)   The land$_i$ was burnt t$_i$
        Naha$_i$ e ile ya tjheswa t$_i$

This is attributed to the fact that the external Θ-role of the predicate is the only unlinked Θ-role in the lexical entry and thus is free to be associated with any element whatsoever. Since

it is the only Θ-role that has freedom, it is the only Θ-role that can be absorbed by a suffix without violating the linking conventions.

The argument presented so far makes us aware of the fact that the passive suffix functions as the recipient of the external Θ-role of the predicate. This passive suffix is crucially involved in transferring the external Θ-role into the NP in the **by (Ke)** phrase in the passive sentence. That is, it acts as a Θ-role assigner to that NP. This assumption may be illustrated by considering the following sentence:

(8)   The land$_i$ wat burnt t$_i$ (by the enemies)
        Naha$_i$ e ile ya tjheswa t$_i$ (ke dira)

With regard to sentence (8) Jaeggli proposes that the passive suffix -ed (-w-) subcategorizes for a **by (Ke)** Phrase. This subcategorization property of the passive suffix is listed in its lexical entry. This emanates from the assumption that, if the **by (Ke)** phrase is subcategorized by the passive suffix, the passive suffix will have to assign the **by (Ke)** phrase a Θ-role given the condition that if X subcategorizes for Y, then X assigns a Θ-role to Y.

This leads us to conclude that the NP in a passive **by (Ke)**-phrase is, according to Jaeggli, interpreted as bearing the external Θ-role of the passivized predicate. This is realized in terms of percolation through Θ-role transmission, which is simply interpreted as Θ-role assignment from the passive suffix to the **by (Ke)**-phrase.

The verbal head **burn (tjhes)** and the passive suffix -ed (-w-) (in our case in sentence (8)) percolate to the branching node dominating them. The external Θ-role is assigned to the passive **by (ke)**-phrase. Assuming that it is assigned to the PP, it percolates to the head of the PP, the preposition **by (Ke)** and from there it is assigned to the object NP of the **by (Ke)**. This, in short, implies that the **by (Ke)**-phrase is not an argument of the verb. The NP in question does not receive its Θ-role from the predicate or from a projection of the predicate, rather, it receives it from the preposition, **by (Ke)**, because the NP is the argument of **by (Ke)**.

CHAPTER TWO

THE SYNTACTIC DISTRIBUTION OF THE INFINITIVE

In this chapter an attempt will be made to outline the verbal and nominal properties exhibited by Infinitives in Sesotho. The Infinitive in Bantu has, as asserted by Visser (1989:159), been frequently noticed in the linguistic literature for the fact that it exemplifies both verbal and nominal properties. This will be reviewed by establishing, with reference to the following structures, the syntactic nature of the Infinitive in the various constructions in which it may appear:

2.1   TRANSITIVE VERBS

2.1.1   The Infinitive as complement of an Intransitive verb (without Ho)

There are cases in the Bantu languages, where Infinitives regularly appear as complements of intransitive verbs such as: **tsamaya, baleha, kgutla, tla, tswa, fihla,** etc. These intransitive verbs may be represented in a structure like the following when followed by Infinitival complements:

(1)
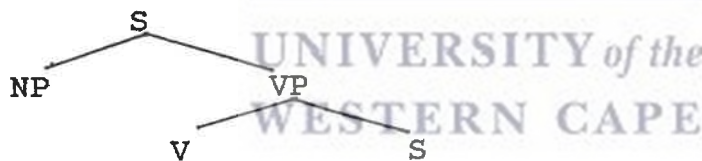
The following Sesotho sentences will have the above structure in (1):

(2)   a.   Ngwana o balehile ho ya lebollong
[$_{NP}$ Ngwana^i] o-balehile [$_s$ PRO^i ho-ya lebollong]]
(The child ran away to go to the initiation school)

b.   Bana ba kgutlile ho tswa sekolong
[$_{NP}$Bana^i] ba-kgutlile [$_s$PRO^i ho-tswa sekolong]]
(The children returned to come from school)

In sentence (2) the Subject NP i.e. **Ngwana** in (2)a and **Bana** in (2)b of the matrix clauses: **Ngwana o balehile** and **Bana ba kgutlile** are the controllers of the subject PRO of the Infinitival sentences.

2.1.2 Complement of an intransitive verb with HO as subject

Subject Inversion

The subject argument of an intransitive verb may, by application of the transformational rule of Subject inversion, be moved to a post-verbal adjunct position, leaving behind an empty NP category filled by the existential pro associated with the subject concord **ho**. This phenomenon is common in Sesotho whenever emphasis is expressed. Such a construction may be found in a structure like the following:

(3)
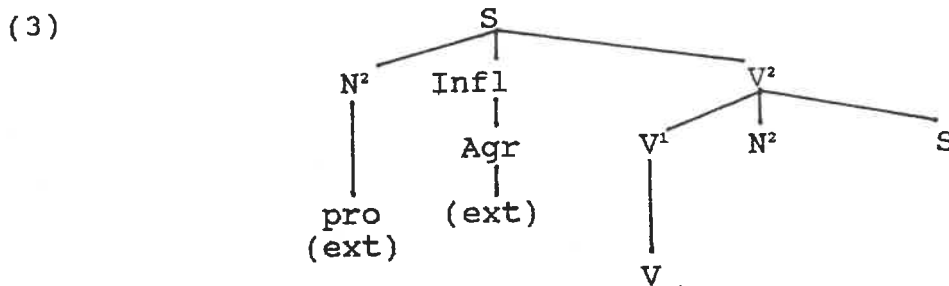
The following sentences will then fit into structure (3):

(4)   a.   Ho tswile banna ho ya tsoma tau
         [pro$_i$] [ho$_i$-tswile banna^i] [$_s$ PRO^i ho-ya-tsoma tau]]
         (There went out men to hunt the lion)

      b.   Ho kgutlile Thabo feela ho tswa sekolong
         [pro$_i$] [ho$_i$-kgutlile Thabo^i feela] [$_s$ PRO^i ho-tswa sekolong]]
         (There returned Thabo only to come from school)

From sentence (4) we deduce that the adjuncts i.e. the NP **banna** in (4)a and the NP **Thabo** in (4)b, which are in these cases in focus positions, share the syntactic indices with the existential morphemes expressed by **Ho**. Thus the post verbal subject serves as controller of the subject PRO of the Infinitival sentences in (4)a and (4)b respectively.

Weather verbs

Some weather verbs must be used with their referential arguments or the latters' concordial agreement elements such as subjectival concords as exemplified below:

(5)   **Lehodimo** le sele
       Le sele
       (It has stopped raining)

When these types of weather verbs are used with the existential morphemes expressed by **Ho** they tend to give rise to ambiguity in Sesotho as exemplified by the following sentence:

(6)   Ho sele
         *(It has stopped raining)

The Sesotho sentence in (6) is disallowed with an English translation as above but may, with the usage of **Ho**, be allowed if the following meaning is expressed:

(7)   Ho sele
         (It is dawn)

Other weather verbs such as: **Tjhesa, futhumetse, photse, bata**, are usually used without referential arguments. Instead the morpheme **Ho** which has the same form as the existential pronoun is used, to give rise to the following structure, when Infinitives appear as their complements:

(8)
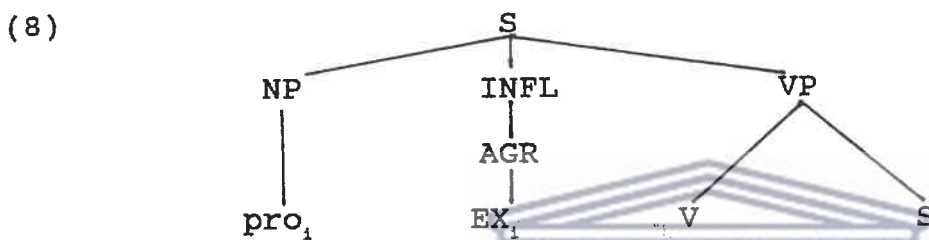
The following sentences may be represented in the structure (8):

(9)   a.   Ho a tjhesa ho dula kantle
                 [pro$_i$] [ho$_i$-a-tjhesa] [$_s$ PRO ho-dula kantle]]
                 (It is hot to sit outside)

         b.   Ho photse hamonate ho sebetsa
                 [pro$_i$] [ho$_i$-photse hamonate] [$_s$ PRO ho-sebetsa]]
                 (It is nicely cool to work)

With regard to the sentences in (9) above it is assumed that the quasi-argument **Ho**, which is similar in form to an existential pronoun, does not have a referential function. The missing argument, which controls the Infinitive is always implied. In this case, it may be assumed that arbitrary control obtains.

This implied subject argument may be explicit by using it with the locative preposition **ho** as represented in the structure (10):

(10)
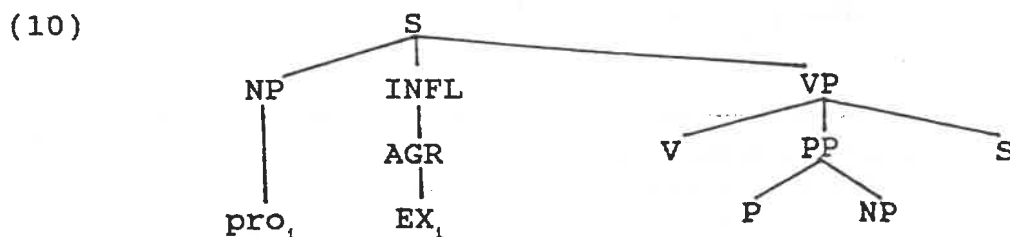
The following sentence will then take the structure in (10):

(11)   Ho a tjhesa ho bana ho bapala kantle
        [pro$_i$] [ho$_i$-a-tjhesa] [$_{PP}$ [$_P$ ho [$_{NP}$bana^i] [$_s$PRO^i ho-bapala kantle]]
        (It is hot for children to play outside)

In some instances the implied argument, which serves as controller of PRO may be overt by using the NP argument with a locative morpheme -**eng**. This will give rise to the structure shown in (12) below:

(12)
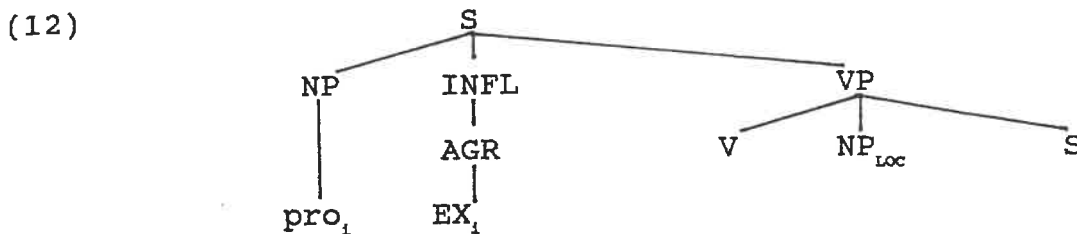
The following sentence will then take the structure (12) above:

(13)   Ho a tjhesa baneng ho bapala kantle
        [pro$_i$] [ho$_i$-a-tjhesa] [$_{NLOC}$ baneng^i] [$_s$PRO^i ho-bapala kantle]]
        (It is hot for children to play outside)

The subject argument expressed in a characteristic PP **ho bana** in sentence (11) and NP locative **baneng** in sentence (13) controls the subject PRO of the Infinitival sentence.

Sentential pronouns

There are instances where the Infinitives may appear as complements of intransitive verbs with a sentential subject pronoun which takes the form of the existential morpheme **Ho**. This morpheme **Ho** has reference to something mentioned in the discourse. This may be exemplified as follows:

(14)   a.   Ho lokile ho sebetsa mona
              [pro$_i$] [ho$_i$-lokile] [$_s$PRO ho-sebetsa mona]]
              (It is right to work here)

        b.   Ho atile ho bolaya diphoofolo
              [pro$_i$ [ho$_i$-atile] [$_s$PRO ho-bolaya diphoofolo]]
              (It is common to kill animals)

From the sentences in (14) above, we deduce that the controllers of the Infinitives are missing i.e. they are implicit arguments. In such cases as in (14) it may be assumed that arbitrary control obtains.

The missing arguments above may be explicit by using overt NP's with the locative morpheme -eng as illustrated in sentence (15)a or the locative Preposition Ho as illustrated in sentence (15)b below:

(15)   a.   Ho lokile basading ho sebetsa mona
            [pro$_i$][ho$_i$-lokile [$_{NPLOC}$ basading^i] [$_s$PRO^i ho-sebeetsa mona]]
            (It is right for women to work here)

       b.   Ho atile ho ditsomi ho bolaya diphoofolo
            [pro$_i$][ho$_i$-atile [$_{PP}$ [$_P$ ho [$_{NP}$ditsomi^i][$_s$PRO^i ho-bolaya diphoofolo]]
            (It is common for hunters to kill the animals)

In sentence (15) the NP-arguments which have been expressed in a characteristic NP locative **basading** in (15)a and Preposition Phrase **ho ditsomi** in (15)b serve as the controllers of the subject PRO of the Infinitival sentence.

In addition to the fact that the Infinitives may occur as complements (as shown in sentences (14) and (15)), they may also appear as subjects (see the section on Nominal Infinitives). This may be exemplified by the following sentences in (16):

(16)   a.   Ho sebetsa mona ho lokile
            [NP[S[$_s$PRO ho-sebetsa mona] [pro$_i$] [ho$_i$-lokile]
            (Working here is right)

       b.   Ho bolaya diphoofolo ho atile
            [NP[S[$_s$PRO ho bolaya diphoofolo] [pro$_i$] [ho$_i$-atile]
            (Killing animals is common)

In sentences (16) it will be noticed that the controllers of the subject PRO of the Infinitives are missing i.e. they are implicit arguments.

These implied arguments may be explicit by using overt NP's with a possessive morpheme **Ha** as shown in the following sentences in (17):

(17)   a.   Ho sebetsa ha basadi mona ho lokile
            [NP[S[[PRO$_i$ ho$_i$-sebetsa [$_{PP}$[$_P$ ha [$_{NP}$basadi^i] mona [pro$_i$] [ho$_i$-atile]]
            (Working of women here is right)

       b.   Ho bolaya ha ditsomi diphoofolo ho atile
            [NP[S[PRO^i ho$_i$-bolaya [$_{PP}$ [ha [$_{NP}$ditsomi^i] diphoofolo [pro$_i$] [ho$_i$-atile]]
            (The hunters' killing of animals is common)

In sentences (17) the NP-arguments, **basadi** in (17)a and **Ditsomi** in (17)b, which have been used in the Possessive Phrases serve as the controllers of the subject PRO of the Infinitival complements.

There are cases of these intransitive verbs with sentential pronouns such as for example **setse**, which in contrast to verbs like **lokile** and **atile**, allows the Infinitive to be used only as a complement as in (14). This may be illustrated by considering the following sentences in (18) below:

(18)   a.   Ho setse ho kotula
             [pro$_j$] [ho$_i$-setse] [$_s$ PRO ho-kotula]]
             (There remained to reap)

        b.   Ho setse basading ho kotula
             [pro$_j$] [ho$_i$-setse [$_{NPLOC}$ basading^i][$_s$PRO^i ho-kotula]]
             (There remained for women to reap)

        c.   Ho setse ho basadi ho kotula
             [pro$_j$] [ho$_i$-setse [$_{PP}$[$_P$ ho [$_{NP}$ basadi^i][$_s$PRO^i ho-kotula]]
             (There remained for women to reap)

But once the Infinitive is used as a Subject (as is the case with **lokile** and **atile** in (16) the sentences with the intransitive verb setse are disallowed as may be shown by the following sentences in (19) below:

(19)   a.   *Ho kotula ho setse

        b.   *Ho kotula ho setse basading

        c.   *Ho kotula ho setse ho basadi

2.1.3   Verbs with the applicative -el-

There are some intransitive verbs which may take Infinitives as their complements only if they are used with an applicative **-el-**.

This assumption may be illustrated by looking closely at the following Sesotho sentences, where the matrix verbs have been used with and without the applicative -el-:

(20)   a.   Thabo o llela ho tsamaya

        b.   *Thabo o a lla ho tsamaya
             (Thabo is crying to go)

        c.   Ntate o phelela ho sebetsa

        d.   *Ntate o phela ho sebetsa
             (Father lives only to work)

The sentences in (20)b and d are ill-formed. This is attributed to the fact that the matrix verbs: **lla** (cry) and **phela** (live) are not verbs of movement and therefore they cannot take an Infinitive as complement, unless they are used with the applicative -el- as in (20)a and c.

There is one exception to the compulsory use of the applicative in the matrix verb, and that is to be found with the verb **thaba** as exemplified below:

(21)   Ke a thaba ho utlwa taba ena.
         (I am glad to hear this news)

The Infinitives which appear as complements of intransitive verbs with applicative -el- have the following structure:

(22)

```
                 S
              /     \
           NP        VP
                   /    \
                V-el      S
```

The sentences in (20)a and c repeated below will then have the structure in (22):

(23)   a.   [_NP Thabo^i] o-llela [_s PROi ho-tsamaya]]
              (Thabo is crying for he wants to go)

        b.   [_NP Ntate^i] o-phelela [_s PRO^i ho-sebetsa]]
              (Father lives only to work)

In sentence (23) it is clear that the subject of the matrix sentence is the controller of the Infinitive i.e. **Thabo** in (23)a and **Ntate** in (23)b.

2.1.4   Adjunct + Infinitive

Infinitives may also appear as complements of intransitive verbs, which, without changing their verb forms (as in 2.1.3), allow Adjuncts like Adverbs, Prepositions with **ka/le** and Locative NP's. These constructions may be represented in structures like the following:

(24) a.   ADV   b.   PP   c.   NP_LOC

```
       S                     S                      S
     /   \                 /   \                  /   \
   NP     VP             NP     VP              NP     VP
        / | \                 / | \                  / | \
       V ADVP S              V  PP  S               V NP_LOC S
```

The following sentences will then have the structures in (24a-c) respectively:

(25) a. Leshodu le baleha haholo ho ya morung.
[$_{NP}$leshodu^i] le-baleha [$_{ADVP}$haholo] [$_s$PRO^i ho-ya morung]]
(The thief runs quickly to go to the forest)

  b. Ntate o tla kgutla ka terene ho tswa Kapa.
[$_{NP}$Ntate^i] o-tla kgutla [$_{PP}$ ka terene] [$_s$PRO^i ho-tswa Kapa]]
(Father will return by train to come from Cape Town)

  c. Moshemane o ile a fihla lebenkeleng ho tla reka.
[$_{NP}$Moshemane^i] o-ilea-fihla [$_{NPloc}$ lebenkeleng] [$_s$PRO^i ho-tla-reka]]
(The boy did arrive at the shop to come and buy)

In the sentences in (25) the Subject NP arguments, **Leshodu** in (25)a, **Ntate** in (25)b and **Moshemane** in (25)c of the matrix sentences are the controllers of the subject PRO of the Infinitival clauses.

There are instances where the Adjuncts (as cited in (25)) are used with intransitive verbs, which otherwise will not take Infinitives as their complements, unless they are used with the applicative -el- (as in 2.1.3). This assumption may be elucidated by considering the following sentences:

(26) a. *Moshemane o a robala ho disa dikgomo
[$_{NP}$Moshemane^i] o-a-robala [$_s$PRO^i ho-disa dikgomo]]
(The boy sleeps to look after the cattle)

  b. Moshemane o robala naheng ho disa dikgomo
[$_{NP}$Moshemane^i] o-robala [$_{NPloc}$ naheng] [$_s$PRO^i ho-disa dikgomo]]
(The boy sleeps in the field to look after the cattle)

Sentence (26)a is ill-formed because the matrix verb **robala** (sleep) is not a verb of movement and can therefore not take an Infinitive as its complement. Sentence (26)b on the other hand is well-formed, because the Adjunct (which is the NP$_{LOC}$ in the case above) makes the verb to allow the Purposive clause. The subject NP argument **Moshamane** (boy) serves as the controller of the subject PRO in the Purposive Infinitival clause.

2.1.5   Deficient verbs and Infinitives

The Infinitives may also appear as complements of deficient verbs in the structure (1) in 2.1.1.

The following Sesotho sentences with deficient verbs such as **atisa** and **tshwanetse**, which strictly take Infinitives as their complements will fit into the structure (1) in 2.1.1:

(27) a. Monna o atisa ho nwa jwala
[_{NP}Monna^i] o-atisa [_sPRO^i ho-nwa jwala]]
(The man usually drinks beer)

  b. Masilo o tshwanetse ho ya sekolong
[_{NP}Masilo^i] o-tshwanetse [_sPRO^i ho-ya sekolong]]
(Masilo is supposed to go to school)

In sentence (27) the subject NP argument of the matrix sentence is the controller of the Infinitive i.e. **Monna** in (27)a and **Masilo** in (27)b.

2.2 Transitive verbs

2.2.1 The Infinitive as complement of a transitive verb without an object

The Infinitive may regularly appear as a complement of transitive verbs, with their objects omitted in the following structure:

(28)
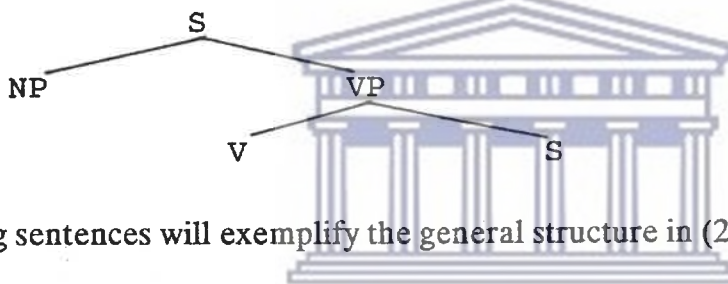
The following sentences will exemplify the general structure in (25):

(29) a. Ntate o nahana ho reka koloi
[_{NP}Ntate^i] o-nahana [_sPRO^i ho-reka koloi}}
(Father thinks about buying a car)

  b. Barutwana ba hopotse ho jala difate
[_{NP}Barutwana^i] ba-hopotse [_sPRO^i ho-jala difate]]
(Students remembered to plant the trees)

In sentence (29) the Subject NP of the matrix sentence is the controller of the Infinitival complement i.e. **Ntate** in (29)a and **Barutwana** in (29)b.

In each of the sentences in (29) the subject of the Infinitive is, according to Doke (1957:189), the same as that of the main verb, i.e. the matrix subject is interpreted as the logical subject of a Non-Purposive Infinitival complement.

This control by NP subject of the matrix sentence may also be illustrated by considering the Non-Applied verbs with the associated meaning of "wish" or "desire", for example **batla** (want), **rata** (like).

When the Infinitive is used as a complement of this transitive verb e.g. **batla** (want) with an object omitted, it has, in intent, the same subject as that verb. This may be exemplified as follows:

(30)   a.   Morutwana o batla ho bona titjhere
            [$_{NP}$Morutwana^i] o-batla [$_s$PRO^i ho-bona titjhere]]
            (The student wants to see the teacher)

       b.   Banana ba rata ho bapala tenese
            [$_{NP}$Banana^i] ba-rata [$_s$PRO^i ho-bapala tenese]]
            (The girls like to play tennis)

In sentence (30) the NP subject of the matrix sentence is the controller of the subject PRO of the Non-Purposive Infinitival complement i.e. **Morutwana** in (30)a and **Banana** in (30)b.

With regard to this argument thus far, it will also be noticed that the matrix subject of some verbs, without objects are interpreted as the logical subjects of the Purposive Infinitival complements. This assumption may be made explicit by considering the following sentences:

(31)   a.   Barutwana ba a bala ho atleha dihlahlobong
            [$_{NP}$Barutwana^i] ba-a-bala [$_s$PRO^i ho-atleha dihlahlobong]]
            (The students study to pass the exams)

       b.   Banna ba a tsuba ho hlaphola dihlooho
            [$_{NP}$Banna^i] ba-a-tsuba [$_s$PRO^i ho-hlaphola dihlooho]]
            (Men smoke to clear their heads)

In sentence (31) the NP subject of the matrix sentence is the controller of the subject PRO of the Purposive Infinitival complement i.e. **Barutwana** in (31)a and **Banna** in (31)b.

2.2.2   The Infinitive as complement of transitive verb with an object

Monotransitive verbs

The Infinitive may also appear as a complement of monotransitive verbs in the following structure:

(32)
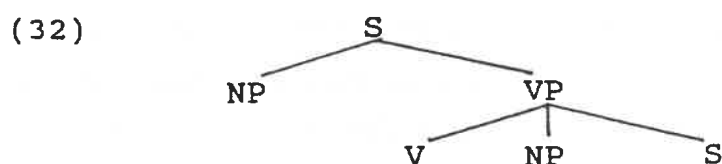
Purposive Infinitives

Inanimate Objects

Some monotransitive verbs in Sesotho may only be used with inanimate objects. This may be illustrated by considering the following sentences, which when taking Infinitival complements fit into the structure (32) above:

(33) a. Bashemane ba rema difate ho aha lesaka.
[$_{NP}$Bashemane^i] [$_{VP}$ [$_V$ ba-rema [$_{NP}$ difate] [$_S$PRO^i ho-aha lesaka]]
(The boys cut down the trees to build a kraal)

b. Moshemane o nwa metsi ho tlosa lenyora.
[$_{NP}$Moshemane^i] [$_{VP}$ [$_V$ o-nwa [$_{NP}$ metsi] [$_S$PRO^i ho tlosa lenyora]]
(A boy drinks water to quench the thirst)

In sentence (33) it will be-noticed that the verbs **rema** (cut down) in (33)a and **nwa** (drinks) in (33)b may only be used with inanimate objects. These verbs cannot subcategorize for animate objects, because of the subcategorized selectional restrictions, which are restrictions on the range of categories which a given item (**rema** and **nwa** in our case) permits as its complements. This is made explicit by the following sentences which are disallowed in Sesotho:

(34) a. *Bashemane ba rema mme
(Boys cut down the mother)

b. *Moshemane o nwa ntate
(A boy drinks the father)

From the argument thus far, we may deduce that, when the verb takes an inanimate object, the subject NP of the matrix sentence will be the controller of the Purposive Infinitival complement. Therefore, in sentence (33) the subject NP of the matrix sentence is the controller of the Infinitival clause i.e. **Bashemane** in (33)a and **Moshemane** in (33)b.

Animate Objects

On the other hand there are certain monotransitive verbs, which can only take animate objects. Their sentences as cited below, will, when used with a Purposive Infinitival complement fit into the structure (32).

(35) a. Mme o bitsa ngwanana ho tla kga metsi
[$_{NP}$Mme] [$_{VP}$ [$_V$ o-bitsa [$_{NP}$ ngwanana^i] [$_S$PRO^i ho-tla-kga metsi]]
(Mother calls the girl to come and draw water)

b.   Morena o roma leqosa ho epa pitso
[$_{NP}$Morena] [$_{VP}$ [$_{V}$ o-roma [$_{NP}$ leqosa^i] [$_S$PRO^i ho-epa pitso]]
(The chief sends the messenger to call a gathering)

These verbs i.e. **bitsa (call)** in (35)a and **roma (send)** in (35)b cannot take inanimate objects on account of selectional restrictions, as may be shown by the following sentences which are disallowed in Sesotho:

(36)   a.   *Mme o bitsa sefate
(Mother calls the tree)

b.   *Morena o roma lenaka
(The chief sends the horn)

With the argument above in mind, it is clear that, when a verb, which takes a Purposive Infinitival complement, is used with an animate object, the controller of the subject PRO of the Infinitive will be the NP-object of the matrix sentence.

Thus, in sentence (35) the NP-object of the matrix sentence is the controller of the Infinitival clause i.e. **Ngwanana** in (35)a and **leqosa** in (35)b.

Animate and inanimate objects

The Infinitive may also appear as a complement of monotransitive verbs, which may take either animate or inanimate objects. Such a construction may be found in a structure like (32) of which the following sentences are representatives:

(37)   a.   Ntate o fumane mobu ho aha ntlo
[$_{NP}$Ntate^i] [$_{VP}$ [$_V$ o-fumane [$_{NP}$ mobu] [$_S$PRO^i ho-aha ntlo]]
(Father found the soil to build a house)

b.   Ntate o fumane seahi ho aha ntlo
[$_{NP}$Ntate] [$_{VP}$ [$_V$ o-fumane [$_{NP}$ seahi^i [$_S$PRO^i ho-aha ntlo]]
(Father found the builder to build a house)

In sentence (37)a the NP-subject **Ntate** of the matrix sentence with its verb taking an inanimate object i.e. **mobu**, is the controller of the subject PRO in the Infinitival clause.

In sentence (37)b the NP-object of the matrix sentence, with its verb taking an animate object i.e. **seahi**, is the controller of the subject PRO in the Infinitival clause.

Relativized Infinitives

Inanimate Objects

The relativized Infinitives with a Nominal head commonly appear as complements of monotransitive verbs, which subcategorize for inanimate objects as illustrated by the following structure:

(38)
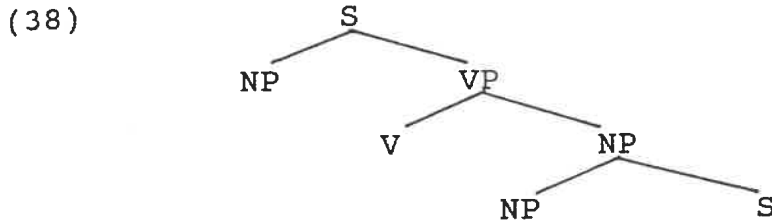
The following sentence can be represented by the structure (38).

(39)   Ntate o batla koloi ya ho ya Kapa
[NP Ntate] [VP [V o-batla [NP koloi] [ya [S PRO ho-ya Kapa]]
(The father looks for a car for going to Cape)

In sentence (39) the NP-argument which may serve as the controller of the Infinitival clause is missing i.e. it is an implicit argument.

This implicit argument may be explicit by being used with the possessive morpheme, **ha** of the Infinitive as may be illustrated by the following sentence:

(37)   Ntate o batla koloi ya ho ya ha dibini Kapa
[NP Ntate] [VP [V o-batla [NP koloi] [ya [PRO¹ hoya [PP ha dibini¹] Kapa]]
(The father looks for a car for going of the singers to Cape)

In sentence (40) the NP argument **dibini** in the possessive phrase serves as the controller of the Infinitival complement.

Animate Objects

The Relativized Infinitives with a Nominal head may also appear as complements of monotransitive verbs, which take animate objects in the structure (38).

The following sentence can be represented by the structure (38):

(41)   Ntate o batla ntja ya ho disa dinku
[NP Ntate] [VP [V o-batla [NP ntja¹] [ya [PRO¹ ho-disa dinku]]
(The father wants the dog for looking after the sheep)

In sentence (41) the NP-object **Ntja** of the matrix sentence is the controller of subject PRO of the Infinitival complement.

Ditransitive verbs

The Infinitives may appear as complements of ditransitive verbs in the structure (42) below:

(42)

```
              S
         /         \
       NP           VP
              /    |    \    \
             V    NP    NP    S
```
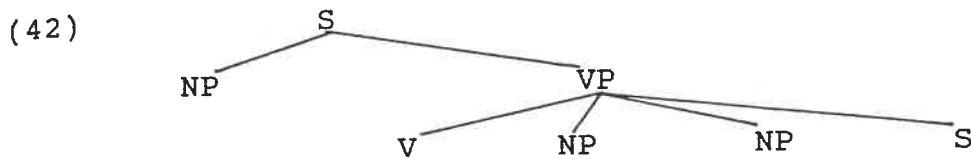
The following sentences will have the structure in (42):

(43) a.   Ntate o adima tjhelete banneng ho reka dikgomo
           [$_{NP}$Ntate^i] [$_{VP}$ [$_V$ o-adima [$_{NP}$ tjhelete] [$_{NPloc}$ banneng] [$_S$PRO^i ho-reka dikgomo]]
           (The father borrows money from the men to buy cows)

      b.   Ntate o adima banna tjhelete ho reka dikgomo
           [$_{NP}$Ntate] [$_{VP}$ [$_V$ o-adima [$_{NP}$ banna^i] [$_{NP}$ tjhlete] [$_S$PRO^i ho-reka dikgomo]]
           (Father lends the men money to buy cows)

In sentence (43)a the subject NP Ntate of the matrix sentence is the controller of the subject PRO in the Infinitival complement. This may be verified by considering the following paraphrase which is in the subjunctive mood:

(44)   Ntate o adima tjhelete banneng hore a reke dikgomo
       [$_{NP}$Ntate$_i$] [$_{VP}$ [$_V$ o-adima [$_{NP}$ tjhelete] [$_{NP}$ banneng] [$_S$COMP [$_S$pro$_i$ a-reke dikgomo]]
       (The father borrows money from the men so that he can buy cows)

In (43)a the indirect object has been put in the locative, i.e. **banneng**. In sentence (43)b the indirect object NP **banna** of the matrix sentence is the controller of the Infinitival complement. This may be verified by considering the following paraphrase which is in the subjunctive mood:

(45)   Ntate o adima banna tjhelete hore ba reke dikgomo.
       [$_{NP}$Ntate] [$_{VP}$ [$_V$ o-adima [$_{NP}$ banna^i] [$_{NP}$ tjhelete] [$_S$COMP [$_S$pro$_i$ ba-reke dikgomo]]
       (The father lends the men money so that they can buy cows)

There are instances in the occurrence of other ditransitive verbs where the Infinitive may be a complement of a ditransitive verb with one object, while the other object is the Infinitival clause.

In such cases where for example a ditransitive verb such as **Kopa** (ask) has been used, there will always be some ambiguity. This is attributed to the fact that either the Subject argument

or the Object argument may be the controller of the Infinitive. This may be illustrated by considering the following sentence which will fit into structure (32):

(46)   Thakane o kopile batswadi ho reka koloi
         [$_{NP}$Thakane^i] [$_{VP}$ o-kopile [$_{NP}$batswadi^i] [$_S$PRO^i ho-reka koloi]]
         (Thakane has asked the parents to buy the car)

In sentence (46) one may be inclined to interpret the subject NP **Thakane** of the matrix sentence as the controller of the subject PRO in the Infinitive. This may be made explicit by the following paraphrase:

(47)   Thakane o kopile batswadi hore a reke koloi
         [$_{NP}$Thakane^i] [$_{VP}$ [$_V$ o-kopile [$_{NP}$ batswadi] [$_S$COMP [pro^i a-reke koloi]]
         (Thakane has asked parents that she should buy the car)

On the other hand, one may be inclined to interpret the Object NP **batswadi** of the matrix sentence as the controller of the subject PRO in the Infinitive. This may be supported by the following paraphrase:

(48)   Thakane o kopile batswadi hore ba reke koloi.
         [$_{NP}$Thakane] [$_{VP}$ [$_V$ o-kopile [$_{NP}$ batswadi^i][$_S$COMP [pro^i ba-reke koloi]]
         (Thakane has asked parents that they should buy the car)

In an attempt to minimize the ambiguity depicted in sentence (41), let us consider the following sentences:

(49)   a.   Thakane o kopile batswadi ho reka koloi
                [$_{NP}$Thakane] [$_{VP}$ [$_V$ o-kopile [$_{NP}$batswadi^i] [$_S$PRO^i ho-reka koloi]]
                (Thakane has asked parents to buy the car)

         b.   Thakane o kopile ho batswadi ho reka koloi
                [$_{NP}$Thakane^i][$_{VP}$ [$_V$ o-kopile [$_{PP}$ ho batswadi] [$_S$PRO^i ho-reka koloi]]
                (Thakane has asked from parents to buy the car)

In sentence (49)a the Object NP **batswadi** of the matrix sentence may be the controller of the subject PRO in the Infinitive only if it is assumed that the verb-**kopa** (ask) subcategorizes for two complements, of which one is the Infinitive.

In sentence (49)b the Subject NP **Thakane** of the matrix sentence is the controller of the subject PRO in the Infinitival clause. This is made explicit by the fact that, even if the Prepositional Phrase **ho batswadi** is omitted, the interpretation that, it is **Thakane who will buy the car** will not be affected, as exemplified below:

(50)   Thakane o kopile ho reka koloi
         [$_{NP}$Thakane^i] [o-kopile [$_s$PRO^i ho reka koloi]]
         (Thakane has asked to buy the car)

There are some instances where only the Subject NP of the ditransitive verb of the matrix sentence can control the subject PRO of the Infinitival complement. This may be illustrated by considering the following sentence:

(51)   Thakane o kopa ntate tjhelete ho reka koloi
         [$_{NP}$Thakane^i] [$_{VP}$ [$_V$ o-kopa [$_{NP}$ ntate] [$_{NP}$ tjhelete] [$_s$PRO^i ho-reka koloi]]
         (Thakane asks money from father to buy the car)

In sentence (51) the Subject NP **Thakane** of the matrix sentence is the controller of the subject PRO of the Infinitival complement.

There are, on the other hand, some instances, where only the Object NP of the ditransitive verb in the matrix sentence can control the subject PRO in the Infinitival complement. This may be illustrated by considering the following sentence:

(52)   Ntate o fa mme tjhelete ho reka dijo
         [$_{NP}$Ntate] [$_{VP}$ [$_V$ o-fa [$_{NP}$mme^i] [$_{NP}$tjhelete] [$_s$PRO^i ho-reka dijo]]
         (The father gives money to the mother to buy food)
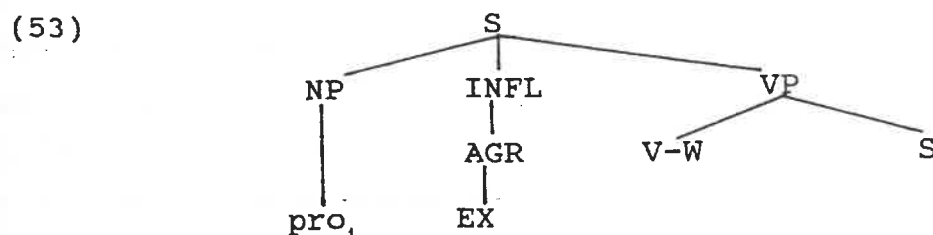
In sentence (52) the indirect object NP **Mme** of the matrix sentence is the controller of the subject PRO of the Infinitival complement.

2.3   PASSIVE VERBS

2.3.1   Intransitive verbs

[+ Passive, - Passive]

The Infinitive with a non-passive verb may appear as a complement of an intransitive verb in a passive form in a structure like the following:

(53)

The following sentences will have the structure in (53):

(54)   a.   Ho a tsamauwa ho ya Gauteng
           [pro$_i$] [ho$_i$-a-tsamauwa] [$_s$PRO ho-ya Gauteng]]
           (There is being walked to go to Johannesburg)

       b.   Ho a tsuwa ho fa baeti sebaka
           [pro$_i$] [ho$_i$-a-tsuwa] [$_s$PRO ho-fa baeti sebaka]]
           (There is being gone out to give room to visitors)

In sentence (54) the Agent argument of the matrix sentence is missing. Instead the existential morpheme **HO** appears in the non-argument subject position. Since the existential pronoun does not have a referential function (as has been noted in (8)) the missing Agent argument is always implied.

This implicit Agent argument in sentence (54) can be explicit in the Prepositional Phrase with **Ke (by)** as illustrated in sentence (55) below:

(55)   a.   Ho a tsamauwa ke ntate ho ya Gauteng
           [pro$_i$] [ho$_i$-a-tsamauwa [$_{PP}$ [$_P$ ke [$_{NP}$ ntate^j] [$_s$PRO^j ho-ya Gauteng]]
           (There is being travelled by father to go to Johannesburg)

       b.   Ho a tsuwa ke bana ho fa baeti sebaka
           [pro$_i$] [ho$_i$-a-tsuwa [$_{PP}$ [$_P$ ke [$_{NP}$bana^j][$_s$PRO^j ho fa baeti sebaka]]
           (There is being gone out by children to give room to visitors)

In sentence (55) the NP arguments which have been expressed in the Prepositional Phrase may be the controllers of the subject PRO in the Infinitival complement i.e. **Ntate** in (55)a and **Bana** in (55)b.

[+ Passive, + Passive]

The Infinitive with a passive verb may appear as a complement of a passivized intransitive verb in the same structure as in (53).

The following sentences can be presented as examples:

(56)   a.   Ho a enngwa ho fuwa dimpho
           [pro$_i$] [ho$_i$-a-enngwa] [$_s$PRO$_i$ ho-fuwa t$_i$ dimpho]]
           (There is being stood up to be given presents)

       b.   Ho a thajwa ho amohelwa moketeng
           [pro$_i$] [ho$_i$-a-thajwa] [$_s$PRO$_i$ ho-amohelwa t$_i$ moketeng]]
           (There is being rejoiced to be welcomed in the feast)

In the sentences in (56) the NP arguments which may occur as Agents of the matrix clauses of (a) and (b) are missing as in (54).

The implicit Agent argument of the matrix clause may be overt by being used in the Prepositional Phrase with the preposition **Ke (by)** as shown in the following sentences:

(57) a. Ho a enngwa ke bana ho fuwa dimpho
          [pro$_j$] [ho$_i$-a-enngwa [$_{PP}$ [$_P$ ke [$_{NP}$ bana^i] [$_s$PRO^i_i ho-fuwa t$_i$ dimpho]
          (There is being stood up by children to be given presents)

      b. Ho a thajwa ke baeka ho amohelwa moketeng
          [pro$_j$] [ho$_i$-a-thajwa [$_{PP}$ [$_P$ ke [$_{NP}$baeka^i] [$_s$ PRO^i_i ho-amohelwa t$_i$ moketeng]
          (There is being rejoiced by fellows to be welcomed in the feast)

In sentence (57) the NP arguments in the Prepositional Phrase are the Agent arguments in the Infinitival complement i.e. **bana** in (57)a and **baeka** in (57)b. See also (55).

[- Passive, + Passive]

The passivized Infinitive may appear as a complement of a non-passive intransitive verb as in the following sentences:

(58) a. Bana ba ema ho fuwa dimpho
          [$_{NP}$Bana^i] ba-ema [$_s$PRO^i_i ho-fuwa t$_i$ dimpho]]
          (The children stand up to be given presents)

      b. Baeka ba thaba ho amohelwa moketeng
          [$_{NP}$Baeka^i] ba-thaba [$_s$PRO^i_i ho-amohelwa t$_i$ moketeng]]
          (Fellows rejoice to be welcomed in the feast)

In the sentences in (58) the NP arguments which control the subject PRO of the Infinitive are the NP subject arguments in the matrix clause of (a) and (b) respectively.

The passivized Infinitive may also appear as a complement of a deficient verb as om the following sentences:

(59) a. Bana ba atisa ho shapuwa
          [$_{NP}$Bana^i] ba-atisa [$_s$PRO^i_i ho-shapuwa t$_i$]]
          (Children are usually flogged)

      b. Moeti o tshwanetse ho latwa seteisheneng
          [$_{NP}$Moeti^i] o-tshwanetse [$_s$PRO^i_i ho-latwa t$_i$ seteisheneng]]
          (The visitor must be fetched from the station)

In the sentences in (59) the NP arguments, which may serve as the controllers of the subject PRO in the Infinitival complements, are the Subject arguments in the matrix clauses of (a) and (b) respectively.
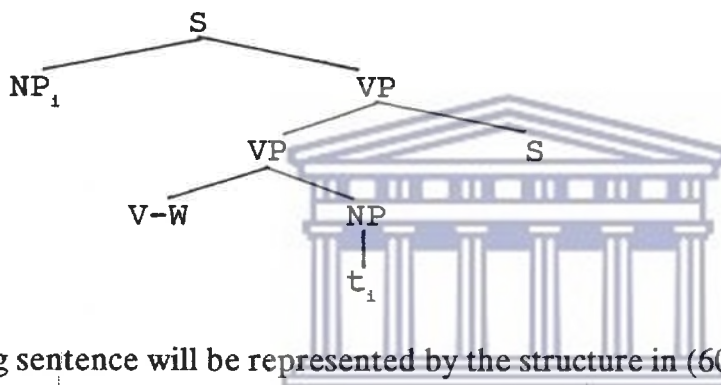
2.3.2 Transitive Verbs

[+ Passive, - Passive]

Inanimate Objects

The Infinitive may appear as a complement of a passivized transitive verb with an inanimate object moved to the subject position by transformational rule, Move α, in a structure such as the following:

(60)

The following sentence will be represented by the structure in (60):

(61)   Difate di a renngwa ho tla aha lesaka
         [$_{NP}$Difate$_i$] di-a-renngwa t$_i$ [PRO ho-tla-aha lesaka]]
         (Trees are being cut down to come and build the kraal)

In the sentence in (61) the Agent argument of the matrix sentence is missing. Therefore the controller of the subject PRO in the Infinitival complement is implicit.

This implicit Agent argument can be made explicit by appearing in the Prepositional Phrase with **Ke (by)** as illustrated in the sentence below:

(62)   Difate di renngwa ke bashemane ho tla aha lesaka.
         [$_{NP}$Difate$_i$] di-renngwa t$_i$ [$_{PP}$ [$_{P}$ ke [$_{NP}$ bashemane^i] [$_{S}$PRO^i ho-tla-aha lesaka]]
         (Trees are being cut down by the boys to build the kraal)

In sentence (62) the NP complement of the Preposition **Ke (by)** is the controller of the subject PRO in the Infinitival complement i.e. **Bashemane** (boys)

Animate Objects

The Infinitive may also appear as a complement of a passivized transitive verb with an animate object which has been moved to the subject position by transformational rule, Move α in a structure such as (60).

The following sentences can be represented by the structure (60):

(63)   a.   Ngwanana o a bitswa ho tla kga metsi
          [$_{NP}$Ngwanana^i] o-a-bitswa t_i [PRO^i ho-tla-kga metsi]]
          (The girl is being called to come and draw water)

        b.   Leqosa le a ronngwa ho epa pitso
          [$_{NP}$Leqosa^i] le-a-ronngwa t_i [PRO^i ho-epa pitso]]
          (The messenger is being sent to call the meeting)

In sentence (63) the moved Object NP of the matrix sentence is the controller of the subject PRO in the Infinitival complement i.e. **Ngwanana** in (63)a and **Leqosa** in (63)b.

[+ Passive, + Passive]

The Infinitive with a passive verb may appear as a complement of a transitive verb in a passive form in a structure such as (60).

The following sentences can be represented by the structure (60):

(64)   a.   Lesea le a pepjwa ho thodiswa
          [$_{NP}$Lesea^i] le-a-pepjwa t_i [$_s$PRO^i ho-thodiswa t_i]]
          (An infant is being carried on the back to be stopped from crying)

        b.   Ngwana o a bitswa ho ronngwa lebenkeleng
          [$_{NP}$Ngwana^i] o-a-bitswa t_i [$_s$PRO^i ho-ronngwa t_i lebenkeleng]]
          (The child is being called to be sent to the shop)

In sentence (64) the Agent argument of the passivized matrix sentence is implicit. The controller of the subject PRO in the Infinitival complement in (64) is the Subject argument which has been moved from its Deep structure object position, i.e. **lesea** in (64)a and **ngwana** in (64)b.

The implicit Agent argument in (64) can be overt if it occurs with the Preposition Ke (by). These agent arguments i.e. **mme** in (65)a and **ntate** in (65)b are not controllers of PRO: see (64) for the controllers of PRO:

(65) a. Lesea le pepjwa ke mme ho thodiswa
[$_{NP}$Lesea^i_j] le-pepjwa t$_i$ [$_{PP}$ [$_P$ ke [$_{NP}$mme] [$_S$PRO^i ho-thodiswa t$_j$]
(An infant is being carried on the back by the mother to be stopped from crying)

b. Ngwana o bitswa ke ntate ho ronngwa lebenkeleng
[$_{NP}$Ngwana^i_j] o-bitswa t$_i$ [$_{PP}$ [$_P$ ke [$_{NP}$ntate] [$_S$PRO^i_j ho-ronngwa t$_j$ lebenkeleng]]
(The child is being called by the father to be sent to the shop)

Consider the active analogues of the sentences in (65):

(66) a. Mme o pepa lesea ho le thodisa
[$_{NP}$Mme^i] [$_{VP}$ [$_V$ o-pepa [$_{NP}$lesea$_j$] [$_S$PRO^i ho-le$_j$-thodisa pro$_j$]]
(The mother carries an infant on her back to stop him from crying)

b. Ntate o bitsa ngwana ho mo roma lebenkeleng
[$_{NP}$Ntate^i] [$_{VP}$ [$_V$ o-bitsa [$_{NP}$ngwana$_j$] [$_S$PRO^i ho-mo$_j$-roma pro$_j$ lebenkeleng]]
(The father calls the child to send him to the shop)

In the sentences in (66) it is clear that the Agent argument appearing as subject in the matrix sentences of (a) and (b) respectively is the controller of the subject PRO in the Infinitival complement i.e. **Mme** in (61)a. and **Ntate** in (66)b, in direct contrast to (65) where they are not the controllers.

[- Passive, + Passive]

The Infinitive with a passive verb may appear as a complement of a transitive verb.

In this regard we may have a sentence with a transitive verb which subcategorizes for an inanimate object as exemplified by the following sentence:

(67) Ntate o batla nama ho tla phehwa mantsiboya
[$_{NP}$Ntate] [$_{VP}$ [$_V$ o-batla [$_{NP}$nama^i] [$_S$PRO^i ho-tla-phehwa t$_i$ mantsiboya]]
(The father looks for meat to be cooked in the evening)

In sentence (67) the inanimate NP Object **Nama** of the matrix verb **batla** serves as the controller of subject PRO in the Infinitival complement.

We may have, on the other hand a sentence with a transitive verb which subcategorizes for an animate object as exemplified by the following sentence:

(68) Ntate o batla ngwana ho tla ronngwa lebenkeleng
[$_{NP}$Ntate] [$_{VP}$ [$_V$ o-batla [$_{NP}$ngwana^i] [$_S$PRO^i ho-tla-ronngwa t$_i$ lebenkeleng]]
(The father is looking for the child to be sent to the shop)

In sentence (68) the NP object **Ngwana** of the matrix sentence is the controller of the subject PRO of the Infinitival complement.

2.4 THE INFINITIVE AS A COMPLEMENT OF A COPULA

2.4.1 NP + Infinitive

The Infinitive may appear as complement of a copulative verb with a nominal complement in a structure such as the following:

(69)
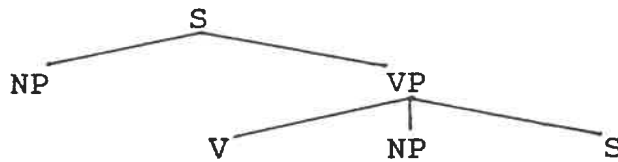
The following sentence can be represented by the structure (69):

(70) Masilo e tla ba ngaka ho thusa bakudi
[$_{NP}$Masilo^i] [$_{VP}$ e-tla-ba [ngaka [$_S$PRO^i ho-thusa bakudi]
(Masilo will be a doctor to help the patients)

In sentence (70) the Subject NP of the matrix sentence is the controller of the subject PRO in the Infinitival complement i.e. **Masilo**.

Relativized Infinitives

The Relativized Infinitive may appear as a complement of a copulative verb with a nominal complement in a structure such as the following:

(71)
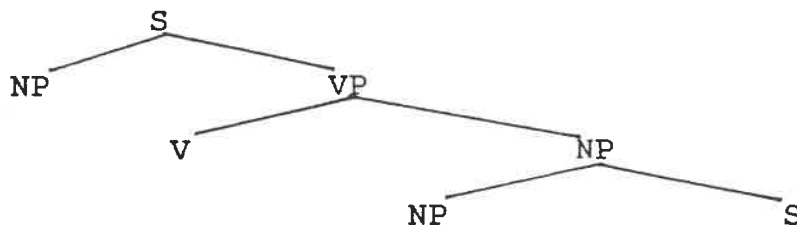
The following sentences have the structure in (71):

(72) a. Masilo ke ngaka ya ho ntsha meno
[$_{NP}$Masilo^i] [$_{VP}$ [$_V$ ke [$_{NP}$ngaka [ya [$_S$PRO^i ho-ntsha meno]]
(Masilo is a doctor of extracting teeth)

  b. Sethunya ke sebetsa sa ho itshereletsa direng
[$_{NP}$Sethunya] [$_{VP}$ [$_V$ ke [$_{NP}$sebetsa [sa [PRO ho-itshereletsa direng]]
(A gun is a weapon of protecting oneself from the enemies)

In sentence (72a) it will be noted that the Infinitive appears as part of the object of **ke** together with **Ngaka** (doctor), which is identified with the subject **Masilo**. Thus the subject **Masilo** in the matrix sentence is the controller of the subject PRO in the Relativized Infinitival complement.

In sentence (72b) it will be noted that the Infinitive appears together with an inanimate NP object i.e. **Sebetsa** (weapon). With regard to this sentence it is noted that the NP argument that may be a controller of the Infinitive is missing i.e. there is an implicit argument.

This implicit argument may be overt by using it in the Possessive Phrase with a possessive morpheme **Ha** as illustrated in the following sentence.

(73)   Sethunya ke sebetsa sa ho itshireletsa ha motsamai direng
        [$_{NP}$Sethunya] [$_{VP}$ [$_V$ ke [$_{NP}$ sebetsa [sa [$_s$PRO^i ho-itshireletsa [ha motsamai^i] direng]]
        (A gun is a weapon of protecting himself of the traveller from the enemies)

In sentence (73) the NP Object **Motsamai** (traveller) of the Possessive Phrase is the controller of the subject PRO in the Relativized Infinitival complement.

2.4.2   AP + Infinitive

The Infinitive may appear as a complement of a copulative verb with an adjectival complement in a structure such as the following:

(74)
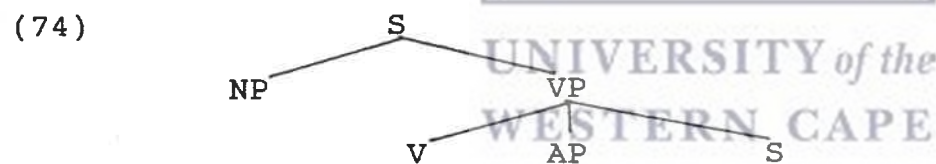
The following sentence has the structure in (74):

(75)   Tefo o monyane ho phahamisa lebokose
        [$_{NP}$Tefo^i] [$_{VP}$ o [$_{AP}$ monyane [$_s$PRO^i ho-phahamisa lebokose]]
        (Tefo is small to pick up the box)

In sentence (75) the Subject NP **Tefo** of the matrix sentence is the controller of the subject PRO in the Infinitival complement.

2.4.3   Nominal Relative + Infinitive

The Infinitive may appear as a complement of a copulative verb with a nominal relative in a structure such as the following:

(76)
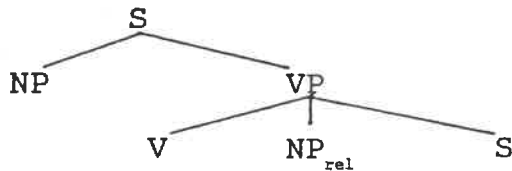
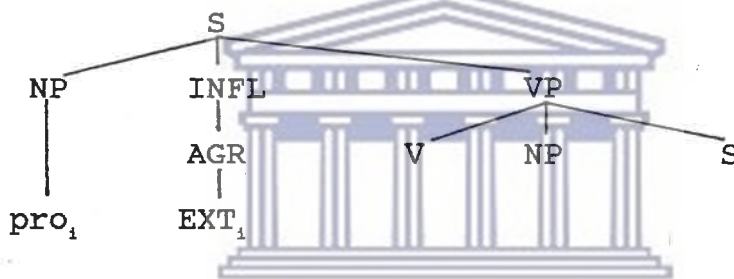The following sentence will then have the structure in (76):

(77)　　Monna o botswa ho sebetsa
[$_{NP}$Monna^i] [$_{VP}$ o [$_{NP}$botswa] [$_s$PRO^i ho-sebetsa]]
(The man is lazy to work)

In sentence (77) the Subject NP **Monna** of the matrix sentence is the controller of the subject PRO in the Infinitival complement.

There are instances where the Infinitive may appear as a complement of a copulative verb with a nominal relative which has as a Subject argument a sentential pronoun which takes the form of an existential morpheme **ho**. This construction may be represented in a structure such as the following:

(78)

The following sentences have the structure in (78):

(79)　　a.　　Ho monate ho bina
[pro^i [ho^i monate] [$_s$PRO ho bina]]
(It is nice to sing)

　　　　b.　　Ho boima ho sebetsa
[pro^i] [ho^i boima] [$_s$PRO ho sebetsa]]
(It is difficult to work)

In sentence (79) the Subject argument is implicit. The subject position is occupied by the existential pronoun, which does not have a referential function. Therefore in each of the sentences in (79) the argument which controls the subject PRO of the Infinitival complement is implied.

This implicit argument can be overt by using an overt NP in the Locative form with either the Preposition **ho** or the locative morpheme **-eng** as illustrated by the following sentences:

(80)   a.   Ho monate ho bana ho bina
[pro^i] [ho^i monate] [$_{PP}$ ho bana^j] [$_S$PRO^j ho-bina]]
(It is nice for children to sing)

        b.   Ho boima banneng ho sebetsa
[pro^i] [ho^i boima] [$_{NPloc}$ banneng^j] [$_S$PRO^j ho-sebetsa]]
(It is difficult for men to work)

In sentence (80)a the Object NP **Bana** of the Preposition **ho** is the controller of the subject PRO in the Infinitival complement. In (80)b the NP in the locative **Banneng** is the controller of the subject PRO in the Infinitival complement.

2.4.4   NP locative + Infinitive

The Infinitive may also appear as a complement of a Copulative verb with an NP in the locative in a structure such as the following:

(81)
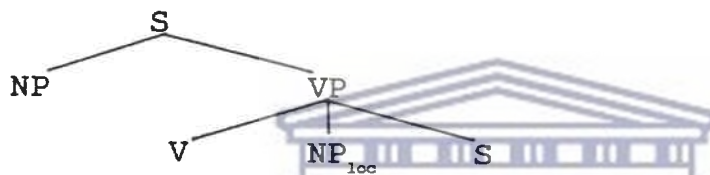
The following sentence can be represented by the structure in (81):

(82)   Bashemane ba naheng ho disa dikgomo
[$_{NP}$Bashemane^i] [$_{VP}$ ba [NP$_{loc}$ naheng [$_S$PRO^i ho disa dikgomo]]
(Boys are in the veld to look after the cattle)

In sentence (82) the subject NP **Bashemane** of the matrix sentence is the controller of the subject PRO in the Infinitival complement.

2.4.5   Na le + Infinitive

The Infinitive may appear in a copulative construction with the Copulative verb **na** in a structure such as the following:

(83)
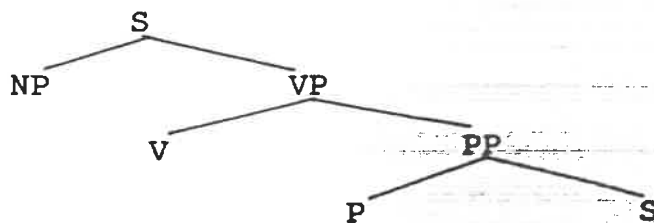
The following sentence will then have the structure in (83):

(84)   Batho ba na le ho bua leshano
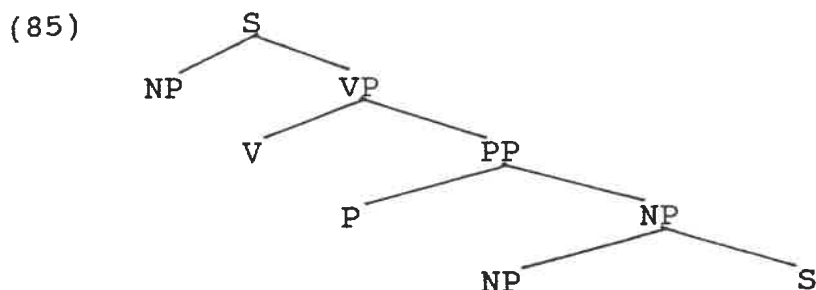   [$_{NP}$Batho^i] [$_{VP}$ [$_V$ ba-na [$_{PP}$ [$_P$le] [$_S$PRO^i ho-bua leshano]]
         (People do talk lies)

In sentence (84) the Subject NP **Batho** of the matrix sentence is the controller of the subject PRO in the Infinitival complement.

The Infinitive may appear **in a copulative construction with na** where **le** subcategorizes for a nominal complement in a structure such as (85):

(85)

The following sentence will then have the structure in (85):

(86)   Ntate o na le moahi ho aha ntlo.
         [$_{NP}$Ntate] [$_{VP}$ o-na [le [$_{NP}$ moahi^i] [$_S$PRO^i ho-aha ntlo]]
         (Father has a builder to build the house)

In sentence (86) the NP **Moahi** is the controller of the subject PRO in the Infinitival complement.

The subject NP in (85) may be filled by the existential pronoun **ho**:

(87)   Ho na le moahi ho aha ntlo.
         [pro^i] [ho^i na-le moahi^j] [$_S$PRO^j ho-aha ntlo]]
         (There is a builder to build the house)

In sentence (87) the NP **Moahi** of the matrix sentence is the controller of the subject PRO in the Infinitival complement.

The Relativized Infinitive with the descriptive possessive **a** may also appear in structure (85):

(88)   a.   Mme o na le motho wa ho hlatswa diphahlo
               [$_{NP}$Mme] [$_{VP}$ o-na [le [$_{NP}$motho^i] [wa [$_S$PRO^i ho-hlatswa diphahlo]]
               (The mother has a person to wash the clothes)

         b.   Mme o na le pitsa ya ho pheha nama
               [$_{NP}$Mme^i] [$_{VP}$ o-na [le [$_{NP}$pitsa] [ya [$_S$PRO^i ho-pheha nama]]
               (The mother has a pot to cook the meat)

In sentence (88a) the animate NP **Motho** is the controller of the subject PRO in the Infinitival complement. In sentence (88b) the inanimate NP **Pitsa** cannot control the subject PRO of the Infinitival clause. Thus the Subject NP **Mme** of the matrix sentence is the controller of the subject PRO.

2.5 COORDINATION

Two or more Infinitives which are coordinated by means of the conjunction **le** may appear as complements of transitive verbs as exemplified by the following sentence:

(89)   Bana ba rata ho ja le ho nwa.
         [$_{NP}$Bana] ba-rata [$_s$PRO ho-ja] [le] [$_s$PRO ho-nwa]
         (Children like to eat and to drink)

The coordinated Infinitive **ho ja le ho nwa** in sentence (89) above, may exemplify Nominal or Clausal properties as will be shown below.

Nominal Infinitive

An assumption that the Infinitival complement in sentence (89) may exemplify Nominal properties may be attributed to the fact that it may appear in NP positions such as Subject (see section 2.9: Nominal Infinitives). This may be illustrated by considering the following sentence:

(90)   Ho ja le ho nwa ho monate.
         [NP [S [PRO ho-ja] [le] [NP [S [PRO ho-nwa] [$_{VP}$ ho monate]
         [Eating and drinking is nice)

In sentence (90) an NP argument that may control the subject PRO of the Infinitive is implicit. This implicit argument may be explicit in the Possessive Phrase as illustrated in the following sentence:

(91)   Ho ja le ho nwa ha baeti ho monate
         [NP [S [PRO^i ho-ja] [le] [NP [S [PRO^i ho-nwa] [$_{PP}$ [P ha [NP baeti^i] [VP ho monate]
         (The eating and the drinking of the visitor is nice))

In sentence (91) the NP **Baeti** in the Possessive Phrase is the controller of the subject PRO in the Nominal Infinitive.

Clausal Infinitive

An assumption that the coordinated Infinitive in sentence (89) may exemplify Clausal properties may be elucidated by the fact that the matrix verb which subcategorizes for it will be in the long form of the Present tense. This construction may be represented as follows:

(92)
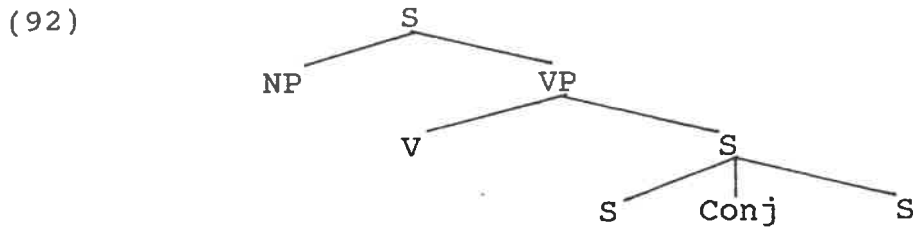
The following sentence has the structure in (92):

(93)   Bana ba a rata ho ja le ho nwa.
        [$_{NP}$Bana^i] ba a rata [$_s$PRO^i ho-ja] [le] [$_s$PRO^i ho-nwa]]
        (Children like to eat and to drink)

In sentence (93) the Subject NP **Bana** of the matrix sentence is the controller of the subject PRO in the coordinated Infinitival complement.

There are instances where the Infinitival clause is coordinated with an Indicative sentence and therefore sharing the Subject argument in a structure such as the following:

(94)
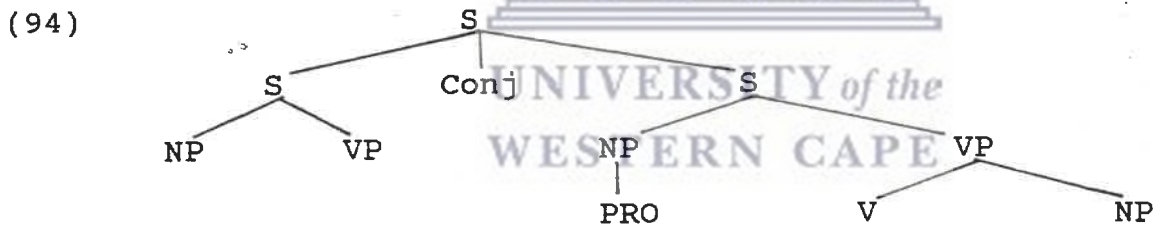
The following sentence has the structure in (94):

(95)   Baeti ba tla ja nama le ho phoka teye
        [$_{NP}$Baeti^i] [$_{VP}$ ba-tla-ja nama] [le] [$_s$PRO^i ho-phoka teye]]
        (The visitors will eat food and drink tea)

In sentence (95) the Subject NP **Baeti** may be the controller of the subject PRO in the Infinitive.

There are also instances where the Infinitive is coordinated with the Subjunctive clause and thus sharing the same Subject argument in a structure such as the following:

(96)

```
                    S
         ┌──────────┴──────┐
        NP                 VP
              ┌────────────┴────────────┐
              V                         S
                        ┌───────────────┴───────────────┐
                        S                               S
                  ┌─────┴─────┐               ┌──────────┴──────┐
                 NP          VP              NP                 VP
                  │                           │
                 PRO                         pro
```
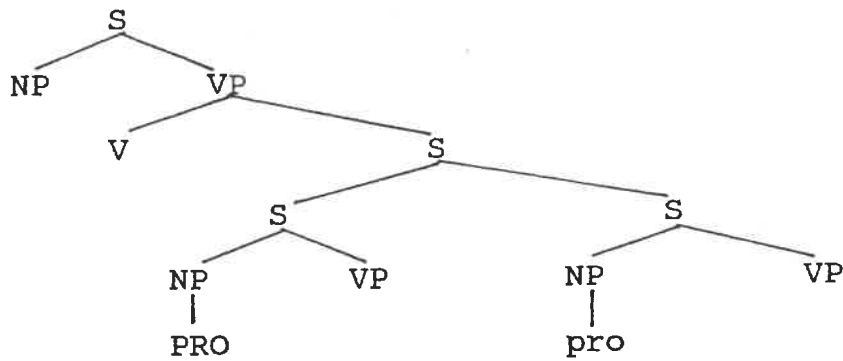
The following sentence has the structure in (96):
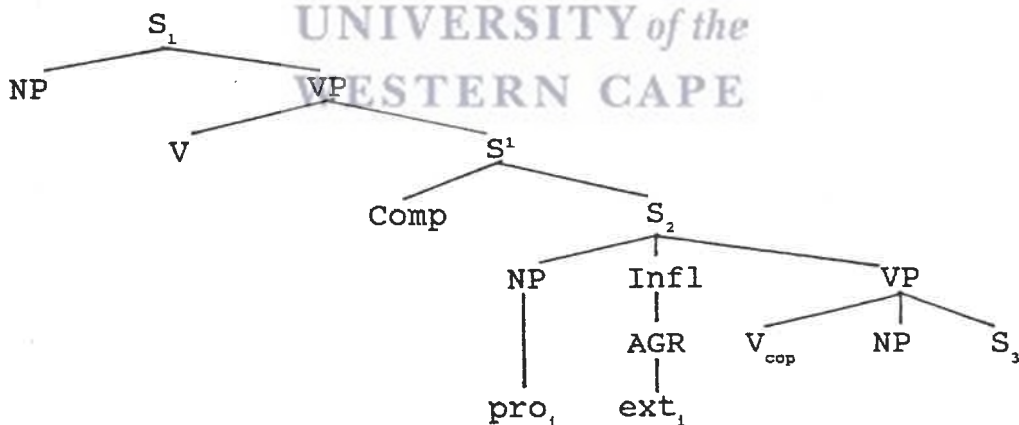
(97)   Leshodu le batla ho utswa tjhelete le balehe
        [$_{NP}$Leshodu^i] le-batla [$_s$PRO^i ho-utswa tjhelete] [$_s$pro^i le-balehe]]
        (The thief wants to steal money and run away)

In sentence (97) the Subject NP **Leshodu** of the matrix sentence is the controller of the subject PRO of the Infinitival complement.

2.6   LONG DISTANCE CONTROL

The Infinitive may appear as a complement of the verb of the matrix sentence, which has been separated from the Infinitive by another sentence consisting of an NP with no identifiable reference in the structure like the following:

(98)

```
                    S$_1$
         ┌──────────┴──────┐
        NP                 VP
              ┌────────────┴────────────┐
              V                         S$^1$
                              ┌──────────┴──────┐
                            Comp               S$_2$
                                   ┌────────────┼────────────┐
                                  NP          Infl           VP
                                   │           │      ┌───────┼───────┐
                                   │          AGR   V$_{cop}$  NP     S$_3$
                                   │           │
                                 pro$_1$      ext$_1$
```

The following sentence has the structure in (98):

(99)   Mothusi a bona hore ho molemo ho arolela bana lefa
        [$_{NP}$Mothusi] a-bona [$_s$hore [pro^j [ho^j molemo] [$_s$PRO ho-arolela bana lefa]]
        (Mothusi realizes that it is important to divide the inheritance among the children)

The subject PRO of the Infinitival complement in sentence (99) may be controlled by either the Subject NP of the matrix sentence or the implicit argument of the subordinate sentence. This assumption may be illustrated as follows:

In the case where the Subject NP of the matrix sentence in (99) above is assumed to be the controller of the Infinitival complement, the Subject NP in question has been separated from the Infinitival sentence by another sentence as exemplified below:

(100) $[_{S1} [_{NP}$Mothusi$^i]$ a-bona $[_{S2}$hore [pro^j [ho^j molemo]
          (Mothusi realizes that it is important
          $[_{S3}$ PRO^i ho-arolela bana lefa]]
   to divide the inheritance among the children)

In sentence (100) the Subject NP **Mothusi** of the matrix sentence (S_1) is the controller of the subject PRO of the Infinitival sentence (S_3), which is separated from its controller by one clause namely (S_2).

It may also, with regard to sentence (99), be assumed that the subordinate clause, which contains the existential subject pronoun, represented by the morpheme **ho**, has an implied argument, which may control the subject PRO of the Infinitival complement. This implicit argument may be overt by occurring in the Prepositional Phrase with **ho** or any locative NP as may be illustrated in the following sentence:

(101) $[_{S1} [_{NP}$Mothusi] a-bona $[_{S2}$hore [pro^j [ho^j molemo $[_{PP}$ ho
          (Mothusi realizes that it is important to
          mme$^i]$ $[_{S3}$PRO^i ho arolela bana lefa]]
          the mother to divide the inheritance among the children)

In sentence (101) the NP **Mme** of the Prepositional Phrase with **ho** may be the controller of the subject PRO in the Infinitival complement.

There are cases where the Infinitive may appear after a subordinate clause, in a structure such as the following:

(102)
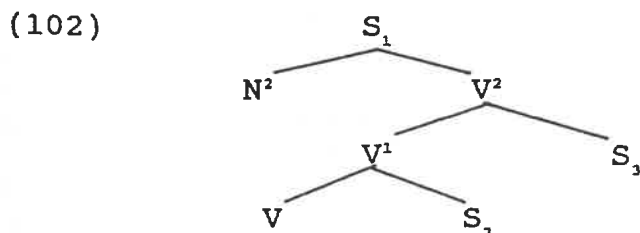
The following sentences can be represented by the structure in (102):

(103) a. Bashemane ba fihlile ntate a se a robetsa ho tswa sekolong.
[$_{S1}$ [$_{NP}$Bashemane^i][$_{VP}$ba-fihlile [$_{S2}$ntate a-se a-robetse [$_{S3}$ PRO^i ho-tswa sekolong]]
(The boys arrived when father was already asleep to come from school)

b. Mme o roma bana letsatsi le sa tjhabile ho kga metsi
[$_{S1}$ [$_{NP}$Mme] [^{VP} o-roma [$_{NP}$ banana^i] [$_{S2}$ letsatsi le-sa-tjhabile [$_{S3}$PRO^i ho-kga metsi]]
(The mother sends the girls while it is day time to draw water)

In sentence (103) the NP argument of the matrix sentence (S$_1$) may, though removed from the Infinitival complement (S$_3$) by another clause (S$_2$), be the controller of the subject PRO in the Infinitival complement.

Therefore the Subject NP **Bashemane** of the matrix sentence in (103a) is the controller of the subject PRO in the Infinitival complement. In sentence (103b) the Object NP **Banana** of the matrix sentence is the controller of the subject PRO of the Infinitival complement.

2.7   SPLIT ANTECEDENTS

2.7.1   The verb thusa

The Infinitive may appear as a complement of a transitive verb such as **thusa** "help" which tends to give rise to ambiguity. This ambiguity is attributed to the fact that in the occurrence of this verb, **thusa**, it is not always clear which argument of the matrix sentence may be the controller of the subject PRO in the Infinitival complement:

(104) Molemi o thusa ntate ho jala
[$_{NP}$Molemi^i] [$_{VP}$ o-thusa [$_{NP}$ntate^j] [$_S$PRO$^{i/j}$ ho-jala]
(The agriculturist helps the father to sow)

In sentence (104) the NP arguments of the matrix sentence may both be the controllers of the subject PRO of the Infinitival complement i.e. the NP subject **Molemi** and the NP object **Ntate**. This implies that both are performing the action of 'sowing'.

There are some cases where the Infinitive may be a complement of the transitive verb such as **thusa** "help", which in addition to an NP object may subcategorize for a Prepositional Phrase with **ka (with)** having either an animate or an inanimate:

(105) a. Molemi o thusa ntate ka bajadi ho jala koro
[$_{NP}$Molemi] [$_{VP}$ o-thusa [$_{NP}$ntate] [$_{PP}$ ka bojadi^i] [PRO^i ho-jala koro]]
(The agriculturist helps the father with sowers to sow wheat)

b.   Molemi o thusa ntate ka terekere ho jala koro
      [$_{NP}$Molemi^i] [$_{VP}$ o-thusa [$_{NP}$ntate^j] [$_{PP}$ ka NP terekere] [$_S$PRO$^{i/j}$ ho-jala koro]]
      (The agriculturist helps the father with the tractor to sow wheat)

In sentence (105a) the animate NP object **Bajadi** of the Prepositional Phrase is the controller of the subject PRO in the Infinitival complement. This may be made explicit by considering its paraphrase with a subordinate clause in the subjunctive:

(106)   Molemi o thusa ntate ka bajadi^i hore ba^i jale koro.

In sentence (105b) the inanimate NP object **terekere** of the Prepositional Phrase cannot be the controller. Thus the NP subject **Molemi** and the NP-object **Ntate** may be the controllers of the subject PRO in the Infinitival complement.

2.7.2   Causative verbs

The Infinitive may be a complement of a transitive verb with a causative affix -is-, which renders the verb the meaning of assistance e.g. "help to". In this construction it is not always clear which argument of the matrix sentence controls the Infinitive:

(107)   Thabo o tshwarisa ntate mokotla ho o theola koloing
        [$_{NP}$Thabo^i] [$_{VP}$ o-tshwarisa [$_{NP}$ntate^j] [mokotla] [$_S$PRO$^{i/j}$ ho-o-theola koloing]]
        (Thabo helps the father to seize the bag to bring it down from the car)

In sentence (107) both the NP subject and the NP object of the matrix sentence may be the controllers of the Infinitival complement i.e. **Thabo** and **Ntate**.

The Infinitive may also be a complement of an intransitive verb, which can be made transitive by affixing the causative -is-:

(108)   Morwesi o tsamaisa mme tsela ho ya toropong
        [$_{NP}$Morwesi^i] [$_{VP}$ o-tsamaisa [$_{NP}$mme^j] [$_{NP}$ tsela] [$_S$PRO$^{i/j}$ ho-ya toropong]]
        (Morwesi goes with the mother en route to go to town)

In sentence (108) both the NP subject **Morwesi** and the NP object **Mme** of the matrix sentence may be controllers of the subject PRO in the Infinitival complement.

2.7.3   Reciprocal constructions

Reciprocal Infinitives

The Infinitive with a Reciprocal verb may appear as a complement of an intransitive verb, which is followed by a Prepositional Phrase with **le** in a structure such as the following:

(109)
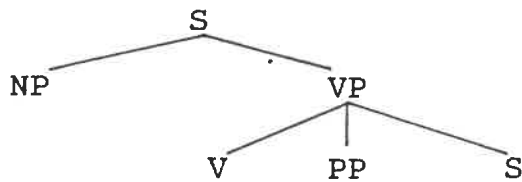
The following sentence can be represented by the structure in (109):

(110)   Ntate o tsamaya le moshemane ho thusana tseleng
         [$_{NP}$Ntate^i] [$_{VP}$ o-tsamaya [$_{PP}$ [$_P$ [le] [$_{NP}$ moshemane^j] [$_S$PRO^i ho thus-ana tseleng]]
         (The father goes with the boy to help each other on the way)

In sentence (110) the two arguments i.e. the NP **Ntate** and the NP **Moshemane** of the preposition **le** are bound by argument binding, because of the presence of the reciprocal morpheme -**an**- in the Infinitive. Therefore the NP subject **Ntate** and the NP **Moshemane** in the matrix sentence control the subject PRO in the Infinitival complement.

Reciprocal matrix verbs

The Infinitive may appear as a complement of a transitive verb with a reciprocal affix -**an**- in a structure such as the following:

(111)

The following sentence can be represented by the structure in (111):

(112)   Batho ba thusana ho kotula koro
         [$_{NP}$Batho^i] [$_{VP}$ ba-thus-ana^i] [$_S$PRO^i ho-kotula koro]]
         (People help one another to reap the wheat)

In sentence (112) the Reciprocal verb **thusana** has an argument which is reflected by the reciprocal morpheme -**an**-. This argument is bound to the NP subject by argument binding.

Therefore we may assume that the NP subject **Batho** and the NP argument of the verb **thusana**, which has been taken over by the reciprocal affix -**an**- serve as the controllers of the subject PRO of the Infinitival complement.

2.8   REFLEXIVE VERBS

The Infinitive may appear as a complement of a transitive verb with a reflexive prefix **iN** in a structure like the following:

(113)
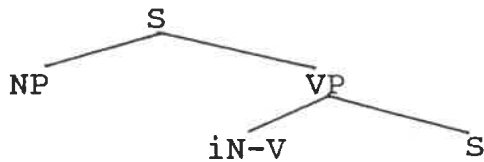
The following sentence can be represented by the structure in (113):

(114)   Ntate o a itokisa ho ya Kapa
          [$_{NP}$ Ntate^i] o^i-a-i^i-tokisa [$_S$PRO^i ho-ya Kapa]]
          (The father prepares himself to go to Cape)

The construction of sentence (114) is the same as the one of the Reciprocal exemplified in (112). But in (114) the agent and theme arguments are coreferential. These two arguments are bound by argument binding, because of the presence of the Reflexive morpheme iN.

Therefore the Subject NP **Ntate** and the argument reflected by the morpheme iN in the verb **itokisa** may serve as the controllers of the subject PRO in the Infinitival complement.

The Infinitive with a reflexive verb may also appear as a complement of a reflexive matrix verb in a structure such as the following:

(115)
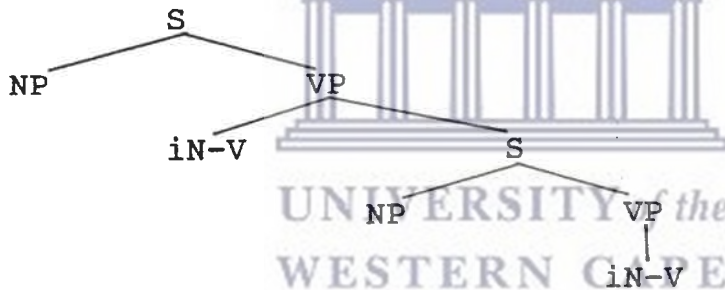
The following sentence can be represented by the structure in (115):

(116)   Mme o itjheba seiponeng ho itokisa
          [$_{NP}$Mme] [$_{VP}$ o-itjheba seiponeng] [$_S$PRO ho-i tokisa]]
          (The mother looks at herself in the mirror to prepare herself)

In sentence (116) the Agent argument **Mme** and the theme argument, which are on account of the reflexive morpheme iN relating to the same entity serve as controllers of the subject PRO of the Infinitival complement. This is made explicit by the fact that the Infinitive, whose Subject argument is represented by **Ho** has, on account of its reflexive verb been bound to its object argument by the reflexive morpheme iN. Therefore it relates to the arguments in the matrix sentence.

The Infinitive with a reflexive verb may also appear as a complement of a matrix verb without a reflexive morpheme:

(117)   Ngwanana o a rata ho itlhatswa.
         [_NP Ngwanana^i] o-a-rata [_S PRO^i ho-i_i-tlhatswa]]
   (The girl likes to wash herself0

In sentence (117) the subject PRO of the Infinitival complement, which is related to the Subject NP of the matrix sentence, is bound by a reflexive morpheme iN to its object. Thus the Subject NP **Ngwanana** is the controller of the subject PRO in the Infinitival complement.

2.9   NOMINAL INFINITIVES

The Infinitive may exemplify Nominal properties. Thus, it may appear in NP positions such as subject and object. Since in its most general occurrence, the Infinitive functioning as an NP is not, according to Visser (1989:163) an Infinitival (Class 15) noun, but rather a clause dominated by an NP node, we will henceforth refer to it as a Nominal Infinitive.

2.9.1   Nominal Infinitive as Subject

The Nominal Infinitive with a monotransitive verb may appear as a subject of a sentence in a structure such as the following:

(118)
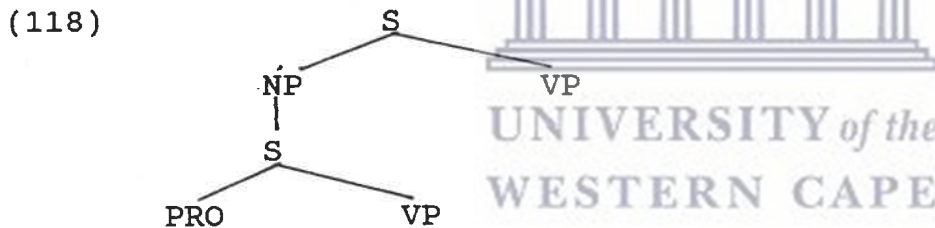
The following sentence can be represented by the structure in (118):

(119)   Ho bapala bolo ho a thusa
         [NP [S [PRO ho-bapala] [_NP bolo] ho-a-thusa]]
         (Playing soccer is helpful)

In sentence (119) the NP argument is implicit. This implicit argument may be explicit in the Possessive phrase in the structure such as the following:

(120)
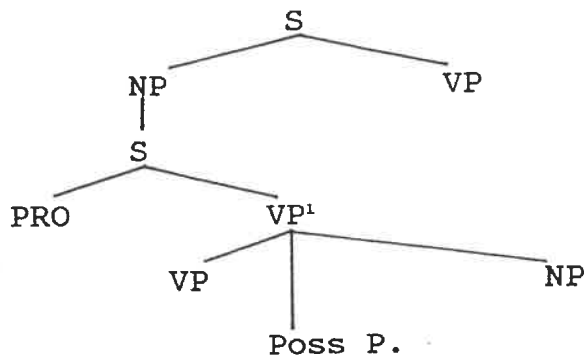
The following sentence will have the structure in (120):

(121)   Ho bapala ha bana bolo ho a thusa
        [NP[S[PRO^i ho-bapala [$_{PP}$ ha bana^i] [$_{NP}$bolo] ho-a-thusa]]
        (To play soccer of children is helpfull)

In sentence (121) the NP **Bana** of the Possessive phrase serves as the controller of the subject PRO in the Infinitival complement.

2.9.2   Nominal Infinitive as Object

The Nominal Infinitive may also appear as an Object of the verb in a structure such as the following:

(122)
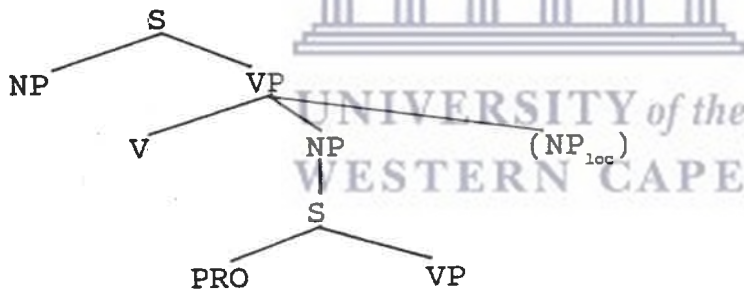
The following sentence has the structure in (122):

(123)   Ke bona ho tahwa mona
        [$_{NP}$Ke] bona [NP[S[PRO ho-tahwa mona]
        (I see drunkenness here)

In sentence (123) the NP argument which may control the Infinitive is implicit. This implicit argument may be overt in the Possessive Phrase in a structure such as the following:

(124)

```
              S
      NP            VP
          V      NP      (NP_loc)
                 |
                 S
          PRO        VP1
                 VP      Poss P.
```

The following sentence will have the structure in (124):

(125)   Ke bona ho tahwa ha batho mona
         [Ke-bona [NP[S[PRO^i ho-tahwa] [_PP ha batho^i] mona]
         (I see drunkenness of people here)

In sentence (125) the complement NP argument **Batho** in the Possessive Phrase serves as the controller of the subject PRO in the Nominal Infinitive.

2.9.3   Nominal infinitive as a complement of a preposition

Preposition Ka

The Nominal Infinitive may appear as a complement of a Preposition **Ka** in a structure such as the following:

(126)

```
              S
      NP            VP
          V            PP
              P            NP
                           |
                           S
```
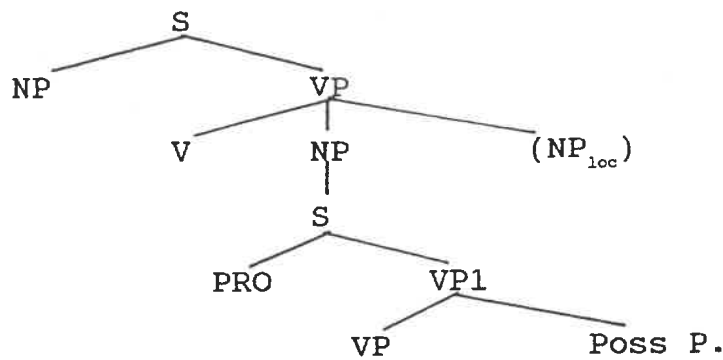
The following sentence will have the structure in (126):

(127)   Ra bona ka ho kena holong
         [Ra-bona [ka [NP [S [PRO ho-kena holong]]
         (We saw by entering the hall)

In sentence (127) the NP argument, which serves as the controller of the subject PRO in the Nominal Infinitive is implicit. This implicit argument may be made explicit in the Possessive Phrase as illustrated in a structure such as the following:

(128)

```
              NP
              |
              S
            /   \
        PRO      VP¹
               /    \
             VP      Poss P
```

The following sentence has the structure in (128):

(129)   Ra bona ka ho kena ha batho holong
         [Ra-bona [ka [NP [S [PROⁱ ho-kena [_{PP} ha N bathoⁱ] holong]
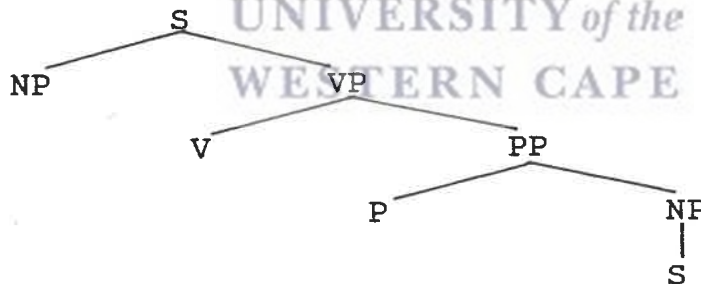   (We saw by people entering the hall)

In sentence (129) the complement NP **Batho** in the Possessive phrase may be the controller of the subject PRO in the Nominal Infinitive.

Preposition Ke

The Nominal Infinitive may also appear as a complement of a Preposition **Ke** in a structure such as the following:

(130)

```
                  S
                /   \
             NP      VP
                    / \
                 V-w   NP      PP
                       |      / \
                       t     P
                                NP
                                 |
                                 S
                               /   \
                            PRO     VP
```
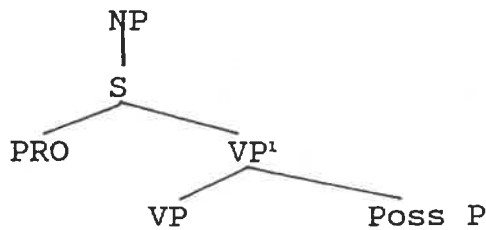
The following sentence has the structure in (130):

(131)   Mme o kgutlisitswe ke ho tjha ka tlung
         [_{NP}Mme_i] o-kgutlisitswe t_i [ke [NP [S [PRO ho-tjha ka tlung]
         (The mother was brought back by the burning in the house)

In sentence (131) the NP argument which controls the subject PRO in the Infinitive is implicit. This implicit argument may be made explicit in the Possessive Phrase as illustrated in structure (128).

The following sentence has the structure in (128):

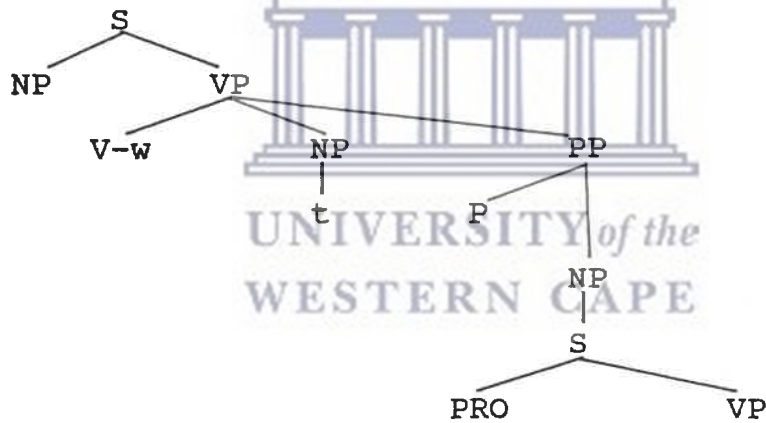(132)   Mme o kgutlisitswe ke ho tjha ha pitsa ka tlung
[ₙₚMme_j] o-kgutlisitswe t_j [ke [NP [S [PRO^i ho tjha] [ha pitsa^j] ka tlung]
(The mother was brought back by the burning of the pot in the house)

In sentence (132) the complement NP Pitsa in the Possessive Phrase serves as the controller of the subject PRO in the Nominal Infinitive.

2.9.4   Locative infinitive

The Locative Infinitive, which mostly denotes time, exemplifies nominal properties because it may appear with a locative affix -**eng** which is only found with nouns:

(133)   Ho fihleng mona ntate o ile a kula
[NP_LOC [S [PRO ho-fihleng mona]] ntate o-ile a-kula]]
(On arrival here the father became ill)

In sentence (133) the NP argument which may be the controller of the Infinitive is implicit. This implicit argument may be overt in the Possessive Phrase:

(134)   Ho fihleng ha mora mona ntate o ile a kula.
[NP_LOC [S [PRO^i ho-fihleng] [_PP ha mora^i] mona]] ntate o- ile a-kula]]
(On the arrival of the son here the father became ill)

In sentence (134) the complement NP **Mora** of the Possessive Phrase serves as the controller of the subject PRO in the Locative Infinitive.

2.10   REDUPLICATED INFINITIVES

The Reduplicated Infinitives are commonly used in Sesotho to put emphasis on the action. This is done by repeating the predicate, with the conjunct **le**.

The Reduplicated Infinitive may appear with any verb as illustrated in the following structure:

(135)
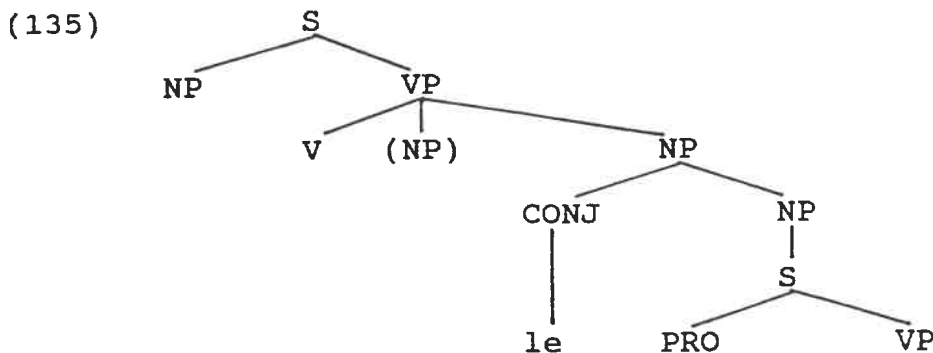
The following sentence can be represented by the structure in (135):

(136) Mme ha a a ka di pheha le ho di pheha dijo

[$_{NP}$Mme^i] ha-a-a-ka-di pheha] [le] [NP [S [PRO^i ho-di pheha dijo]]

(The mother did not even cook the food)

In sentence (136) the subject NP **Mme** in the matrix sentence is the controller of the subject PRO in the Reduplicated Infinitive.

CHAPTER THREE

CONTROL PROPERTIES OF SESOTHO VERBS

3.1 INTRODUCTION

The Control theory, which is concerned with the assignment of an antecedent to an empty category PRO, appearing mostly as the subject in Infinitival clauses, involves argument structure. This implies that the subject PRO in the Infinitival complement is usually controlled by one or more arguments of the matrix sentence. An assumption that there are apparent cases where the arguments that control the subject PRO in the Infinitival complement may be 'missing' involves the fact that arguments may remain implicit.

These assumptions about control are primarily concerned with argument structures determined by a Verb or a Copulative. Therefore in this chapter an examination will be made of the properties of Sesotho verbs that take an Infinitival clause as complement. Similar observations will also be made about Nominal Infinitives.

3.2 SUBJECT CONTROL

If the subject argument of the matrix sentence controls the subject PRO in the Infinitival complement we have an instance of subject control (see i.a. Horrocks (1987:131)). This can be made explicit by considering the following properties of Sesotho verbs:

3.2.1 Intransitive verbs

When the intransitive verb is a motion verb it may take an Infinitive as a complement, but only if the verb of the Infinitive is also a motion verb. This assumption can be illustrated by considering the following sentence:

(1)   Bana ba kgutlile ho tswa sekolong.
        [$_{NP}$Bana^i] ba-kgutlile [$_S$PRO^i ho-tswa sekolong]]
        (The children returned to come from school)

The intransitive verb **kgutlile**, which is a motion verb in the matrix clause of sentence (1), is a subject control verb: the matrix subject **Bana** is coindexed with the subject PRO of the Non-Purposive Infinitival complement with a motion verb i.e. **tswa**.

When the intransitive verb is not a motion verb it cannot take an Infinitive as a complement, unless the matrix verb is used with the applied affix -el- to allow the Infinitival complement. This can be illustrated by considering the following sentence:

(2)   Thabo o llela ho tsamaya.
        [$_{NP}$Thabo^i] o-llela [$_s$PRO^i ho-tsamaya]]
        (Thabo is crying (for) to go)

The applied verb **llela** in the matrix clause in sentence (2) is a verb of subject control. Thus the subject argument **Thabo** in the matrix clause is coindexed with the subject PRO of the Purposive Infinitival complement.

In the absence of the applied affix -el- in the matrix verb, the complement clause must be in the subjunctive mood. This is illustrated in sentence (3), where the ungrammatical sentence in (3a) exemplifies the corresponding non-applied verb of the matrix verb in (2). On the other side, the matrix verb in (3b) has a subjunctive complement clause:

(3)   a.   *Thabo o a lla ho tsamaya.

        b.   Thabo o a lla hore a tsamaye.
               (Thabo is crying so that he may go)

When the intransitive verb which is a motion verb has to take an Infinitive with a non-motion verb as a complement, the applied affix -el- has to be used with the matrix verb to allow a Purposive Infinitival complement as exemplified in the following sentences:

(4)   a.   Bana ba tsamaela ho bona ditulo.
               (The children are going to see the places)

        b.   Banna ba kgutlela ho nwa jwala.
               (The men are returning to drink beer)

The applied verbs in the matrix clause of the above examples are verbs of subject control: the matrix subject is coindexed with the subject PRO of the Purposive Infinitival complement. The applied suffix, which adds the meaning of purpose to the verb to which it is suffixed in the sentences in (4) seems to authorize the subcategorization of an Infinitival complement. This can be ascribed to the fact that the purposive complement clause of the corresponding verb that lacks the applied suffix cannot be in the Infinitive as is the case with the following sentences, which are ungrammatical in Sesotho:

(5)   a.   *Bana ba tsamaya ho bona ditulo.

        b.   *Banna ba kgutla ho nwa jwala.

The one major exception to this rule is to be found when the verb of the matrix clause in (5) takes an Infinitival complement, which has the future infix **ya** or **tla**. These infixes **ya** and **tla** indicate, according to Cole (1975:238) a future action which is dependent on some previous action or condition. However, it is not at all clear that tense may be ascribed to the Infinitive with the appearance of **ya** and **tla** which originated as motion verbs. These sentences are most probably allowed because of this property and is thus comparable to the issue in sentence (1). This can be exemplified as follws:

(6) a. Bana ba tsamaya ho ya bona ditulo.
(The children are going to go and see the places)

b. Banna ba kgutla ho tla nwa jwala.
(The men are returning to come and drink beer)

Adjuncts such as Adverbs, Prepositional Phrases or Locative Nouns, which are sisters of V^1 may appear freely between the matrix verb and its Infinitival complement. This indicates that the Infinitival complement is not the object of the matrix verb. This can be ascribed to the fact that in Sesotho an Adjunct like for example an Adverb may not appear before the NP object in a sentence unless the objectival concord is present. Therefore the sentence in (7a) is ill formed, because of the appearance of the adverb **hantle** (well) before the NP object while the object concord is absent in the verbal morphology. On the other hand the sentence in (7b) is acceptable because the object concord is present:

(7) a. *Ntate o-bua hantle Sesotho
The father S.C.-talk well Sesotho
(The father talks well Sesotho)

b. Ntate o-se-bua hantle Sesotho
The father S.C.-O.C.-talk well Sesotho
(The father talks Sesotho well)

The fact that Adjuncts may occur before the Infinitival complement of a verb, implies that this Infinitive is a clausal complement, as illustrated in (8):

(8) a. **Verb + Adverb**

Ntate o rata haholo ho bua Sesotho
[$_{NP}$Ntate] [$_{VP}$ o-rata [$_{ADV}$ haholo] [$_s$PRO' ho bua Sesotho]]
(The father much likes to talk Sesotho)

(8) b. **Verb + Prepositional Phrase with Ka**

Ntate o tsamaya ka terene ho ya Kapa
[$_{NP}$Ntate] [$_{VP}$ o-tsamaya [$_{PP}$ ka terene] [$_s$PRO' ho ya Kapa]]
(The father goes by train to go to Cape)

(8) c. **Verb + Locative Noun**

Moshemane o ile a baleha sekolong ho ya Gauteng
[$_{NP}$Moshemane^i] [$_{VP}$ o-ile a-baleha [$_{NPloc}$ sekolong] [$_S$PRO^i ho-ya Gauteng]]
(The boy ran away from school to go the Johannesburg)

In the sentences in (8) above, the matrix verbs are subject control verbs: the matrix subjects are coindexed with the subject PRO of the Non-Purposive Infinitival complement.

The Deficient verbs, which are sometimes called auxiliary verbs, are verbs which cannot on their own serve as predicates. They require a subordinate or complementary verb to complete their predication.

There are in Sesotho, certain deficient verbs such as **atisa, tshwanela, anela** which exclusively require their complement verbs to be in the Infinitive i.e. they are strictly subcategorized for an Infinitival clause.

These deficient verbs are characterized by the fact that they are never used in the long form of the Present tense with the morpheme a in Sesotho. This is attributed to the fact that deficient verbs are never complete or definite in themselves. This gives rise to the fact that they should take an Infinitive as a complement, which can only have a clausal structure, as exemplified in sentence (9) below:

(9) Monna o atisa ho nwa jwala
[$_{NP}$Monna^i] o-atisa [PRO^i ho-nwa jwala]]
(The man usually drinks beer)

In sentence (9) the verb **atisa** is a verb of subject control: the matrix subject **Monna** is coindexed with the subject PRO in the Infinitival complement.

The subject argument in a sentence with an intransitive verb may be moved to a post-verbal Adjunct position. This can be illustrated by considering the following sentence:

(10) a. Banna ba tswile
(Men went out)

b. Ho tswile banna
(There went out men)

In (10b) the NP subject **Banna** has been adjoined to the VP by the application of the transformational rule of Subject inversion. This moved NP subject leaves behind an empty NP category, which is filled by an existential pronoun. This adjunct **Banna** and the pronoun with **Ho** share the syntactic indexes, indicating that these two elements enter into a chain for the purpose of Case and theta role assignments.

When the intransitive verb, with an adjunct subject argument (as in 10b), takes an Infinitive as a complement, the adjunct subject argument, which is in a focus position serves as the controller of the subject PRO of the Infinitival complement. This may be illustrated by considering the following sentence:

(11)   Ho tswile banna ho ya tsoma tau
         [pro$_j$] [ho$_i$-tswile banna^i] [PRO^i ho-ya-tsoma tau]]
         (There went out men to go and hunt the lion)

From the discussion thus far, we may with regard to sentence (11) deduce that the verb **tswile** is a subject control verb. This is attributed to the fact that it assigns an Agent thematic role to the post-verbal subject **Banna** which is coindexed with the subject PRO in the Infinitival complement.

3.2.2   Transitive verbs

When considering the Infinitive as a complement of a transitive verb, it is clear that transitive verbs have to be viewed with their objects or without their objects.

It will be noted that the use of transitive verbs without objects, subcategorizing for the Infinitival complement, occurs freely in the Bantu languages with the so called long form of the Present tense represented by the morpheme **a** in Sesotho. These verbs are, according to Visser (1989:173) generally verbs of subject control in that the subject of the matrix sentence in which they appear is coindexed with the subject PRO of the Infinitival complement. Consider the following example:

(12)   Barutwana ba a hopola ho jala difate
         [$_{NP}$Barutwana^i] ba-a-hopola [$_s$PRO^i ho-jala difate]]
         (The students remember to plant the trees)

With regard to sentence (12) the subject of the Infinitive is, according to Doke and Mofokeng (1957:189) the same as the subject of the matrix verb i.e. the NP subject **Barutwana** is coindexed with the subject PRO in the Non-Purposive Infinitival complement.

In this regard, there are cases of Non-applied verbs with the associated meaning of wish or desire like for instance **batla** (want). These non-applied verbs are subject control verbs, if they take an Infinitive as a complement. Consider the following example:

(13)   Ngwanana o a batla ho bapala tenese
         [$_{NP}$Ngwanana^i] o-a-batla [$_s$PRO^i ho-bapala tenese]]
         (The girl wants to play tennis)

In sentence (13) the non-applied verb **batla** in the matrix sentence has, in intent, the same subject as that of the verb in the Non-Purposive Infinitival complement. This implies that the subject PRO of the Infinitive, which is subject to obligatory control, is said to behave like an anaphor, because as an empty subject of the clausal complement it must take its referential index from the subject NP **Ngwanana** and has no capacity for independent reference (see i.a. Horrocks (1987:135)).

On the other hand it will be noted that the matrix subjects of some transitive verbs without objects may be interpreted as logical subjects of the Purposive Infinitival complement. Consider the following example:

(14)   Barutwana ba a bala ho atleha dihlahlobong
        [$_{NP}$Barutwana^i] ba-a-bala [PRO^i ho-atleha dihlahlobong]]
        (The students study (in order) to pass the exams)

In sentence (14) the matrix verb **bala** is a verb of subject control: the matrix subject **Barutwana** is coindexed with the subject PRO of the Purposive Infinitive complement.

This assumption can be illustrated further by the fact that the verb **bala** in (14) may be used with the applicative affix -el-, which adds the meaning of purpose or reason to the verb to which it is suffixed. Consider the following example:

(15)   Barutwana ba balla ho atleha dihlahlobong
        [$_{NP}$Barutwana^i] [$_{VP}$ ba bal-la] [PRO^i ho atleha dihlahlobong]]
        (The students study (for) to pass the exams)

In sentence (15) the subject **Barutwana** of the matrix sentence with the applied verb **balla** is coindexed with the subject PRO of the Purposive Infinitival complement.

When considering transitive verbs with objects, one should distinguish between animate and inanimate objects. There are in Sesotho some transitive verbs which can only be used with inanimate objects. When these verbs such as **rema** (cut down) take an Infinitive as a complement, they are generally verbs of subject control as can be illustrated by examining the following sentence:

(16)   Bashemane ba rema difate ho aha lesaka
        [$_{NP}$Bashemane^i] ba-rema difate [PRO^i ho-aha lesaka]]
        (The boys cut down the trees to build a kraal)

In sentence (16) it will be noted that, when the matrix verb **rema**, which can only be used with inanimate objects, takes an Infinitive as a complement, the matrix subject is coindexed with the subject PRO of the Infinitival complement. Thus the subject NP **Bashemane** in (16) is the controller of the subject PRO in the Purposive Infinitival complement.

There are some transitive verbs which may be used with either inanimate or animate objects. In the case where they are used with inanimate objects only and they take an Infinitive as a complement, they are subject control verbs in the sense that their matrix subjects are coindexed with the subject PRO of the Infinitival complement. This is not the case when the object is animate. Consider this example:

(17)   Ntate o fumane mobu ho aha ntlo.
         [$_{NP}$Ntate^i] [$_{VP}$ o-fumane [$_{NP}$ mobu] [PRO^i ho-aha ntlo]]
         (The father found the soil to build the house)

In sentence (17) the subject NP **Ntate** in the matrix sentence, with the verb having an inanimate object **mobu**, is the controller of the subject PRO in the Infinitival complement.

3.2.3   Ditransitive verbs

There are certain ditransitive verbs, such as **kopa** (ask), which may only use one object if they take an Infinitive as a complement. This assumption can be explained by considering the following example:

(18)   Thakane o kopile batswadi ho reka koloi
         [$_{NP}$Thakane^i] [$_{VP}$ [$_v$o-kopile [$_{NP}$ batswadi^j] [$_s$PRO$^{i/j}$ ho-reka koloi]]
         (Thakane has asked the parents to buy the car)

The verb **kopa** in sentence (18) has rendered the sentence ambiguous. This ambiguity can be ascribed to the fact that either the Subject argument or the Object argument in the matrix sentence may, by virtue of being coindexed with the subject PRO of the Infinitival complement, serve as the controller.

To nullify this ambiguity, so as to enable us to regard the verb **kopa** in (18) as being a subject control verb, the object NP **batswadi** must be in the Locative with either the locative preposition **ho** or the locative suffix **-eng** as exemplified below:

(19)   Thakane o kopile ho batswadi ho reka koloi
         [$_{NP}$Thakane^i] [$_{VP}$ [$_v$o-kopile [$_{PP}$ [$_P$ho][$_{NP}$ batswadi] [$_s$PRO^i ho-reka koloi]]
         (Thakane has asked from parents to buy the car)

In sentence (19) the subject NP **Thakane** in the matrix sentence is coindexed with the subject PRO in the Infinitival complement. This can be further illustrated by the fact that, even if the Prepositional Phrase in sentence (19) is left out, the interpretation that it is Thakane who buys the car, will not be affected as exemplified below:

(20)   Thakane o kopile ho reka koloi
         [_NP Thakane^i] o-kopile [_s PRO^i ho-reka koloi]]
         (Thakane has asked to buy the car)

There are also some ditransitive verbs such as **adima** with two objects, of which one is an indirect object, which is in the Locative with either the locative preposition **ho** or the locative suffix -**eng**. This type of ditransitive verb generally take a Purposive Infinitive as a complement. Consider this example:

(21)   Ntate o adima tjhelete banneng ho reka dikgomo
         [_NP Ntate^i] [_VP [_V o-adima [_NP tjhelete][_NPloc banneng] [_s PRO^i ho-reka dikgomo]]
         (The father borrows money from men to buy the cows)

In sentence (21) the verb **adima** is the subject control verb: the matrix subject **Ntate** is coindexed with the Purposive Infinitival complement. The indirect object **banneng** which is in the Locative, has been assigned by the verb **adima** the thematic role of Source i.e. it is an object from which money proceeds, to enable the NP subject **Ntate** to fulfill his purpose of buying the cattle.

3.2.4   Passive verbs

Intransitive V-w

There are cases where the non-passive intransitive verbs take an Infinitive with a passive verb as a complement. In such cases these intransitive verbs are verbs of subject control in the sense that their subjects are coindexed with the subject PRO in the Infinitival complement. This can be illustrated by considering the following sentence:

(22)   Bana ba ema ho fuwa dimpho
         [_NP Bana^i] ba-ema [PRO_i ho-fuwa t_i dimpho]]
         (The children stand up to be given presents)

In sentence (22) the Subject NP **Bana** in the matrix sentence is coindexed with the subject PRO of the Purposive Infinitival complement.

Deficient verbs

The deficient verbs which are strictly subcategorized for an Infinitive may in some instances take an Infinitive with a passive verb as a complement. These deficient verbs are verbs of subject control: their matrix subjects are coindexed with the subject PRO in the Infinitival complement as can be illustrated by the following example:

(23)   Bana ba atisa ho shapuwa
        [Bana^i] ba-atisa [PRO$_i$ ho shapuwa t$_i$]
        (The children are usually flogged)

In sentence (23) the subject argument **Bana** in the matrix sentence is coindexed with the subject PRO in the Non-purposive Infinitival complement.

Transitive V-w

We have cases of transitive verbs with the passive morpheme -**w**-. This passive morpheme -**w**- allows objects of the verbs to be moved to the subject positions by means of a transformation Move α. These moved object arguments to subject positions leave behind an empty category, as can be illustrated by considering the following sentence:

(24)   Ngwanana$_i$ o a bitswa t$_i$
        (The girl is being called)

This operation of Move α that moves an argument from one location to another within a structure as in (24) above is brought about by the fact that the passive morpheme -**w**- has absorbed the Case assigning features of the verb. Therefore the subject argument, **Ngwanana**, unable to get Case in the object position, moves to the subject position that is empty because passive verbs do not assign an external theta role.

When this passive transitive verb with an animate object is used to take an Infinitive as a complement, it is a verb of subject control. The subject argument of the matrix sentence which has been moved from its deep structure object position, is coindexed with the subject PRO of the Purposive Infinitival complement, as can be illustrated in the following example:

(25)   Ngwanana o a bitswa ho tla kga metsi
        [$_{NP}$Ngwanana$_i$] o-a-bitswa t$_i$ [PRO^i ho-tla-kga metsi]]
        (The girl is being called to come and draw water)

In some other instances the passivized transitive verbs may take an Infinitive with a passivized verb as a complement as can be exemplified by the following sentence:

(26)   Ngwanana o a bitswa ho tla ronngwa
        [$_{NP}$Ngwanana^i$_i$] o-a-bitswa t$_i$ [$_s$PRO$_i$ ho-tla-ronngwa t$_i$]
        (The girl is being called to be sent)

In this case the verb is a subject control verb. The matrix subject argument, **Ngwanana**, which has been moved from its deep structure object position is coindexed with the subject PRO of the Purposive Infinitival complement. This subject PRO which is an empty subject argument that may contain the grammatical features person, number and gender but no

phonological features, has by means of the transformation Move α been moved from its object position to the Surface structure subject position. The subject PRO being an anaphor in that it lacks the potential for independent reference, has as referent the subject argument, **Ngwanana** in the matrix sentence.

3.2.5 Copulative sentences

Nominal complements

In a case where the Copulative verb takes a nominal as a complement, the subject of the copulative and the nominal complement may express the relation of identification.

The identifying copulative may take a Relativized Infinitive as a complement as exemplified by the following sentence:

(27)   Masilo e tla ba ngaka ho thusa batho
        $[_{NP}$Masilo$^i]$ $[_{VP}$ $[_{V}$ba $[_{NP}$ ngaka] [PRO^i ho-thusa batho]]
        (Masilo will become a doctor to help people)

In sentence (27) the copulative verb **ba**, which has a nominal complement **Ngaka**, which can also be descriptive, is a verb of subject control. The matrix subject argument **Masilo** is coindexed with the subject PRO of the Infinitival complement.

Adjectives and Nominal Relatives

In a case where the copulative verb takes adjectives or nominal relatives as a complement, the subject of the copulative and the qualificative complement will express the relation of description.

Adjectives

If the copulative verb takes an adjective as a complement, it is assumed that the adjective describes the physical feature of the subject argument of the copulative. If for example in Sesotho we say: **Tefo o monyane**, the subject argument, **Tefo** is being described as being small; which is a description of his features.

The descriptive copulative above may take an Infinitive as a complement as illustrated in the example below:

(28)   Tefo o monyane ho phahamisa lebokose
        $[_{NP}$Tefo$^i]$ $[_{VP}$ o $[_{AP}$ monyane] $[_{S}$PRO^i ho-phahamisa lebokose]]
        (Tefo is small to pick up the box)

In sentence (28) the copulative verb is a verb of subject control. The matrix subject argument, Tefo is coindexed with the subject PRO of the Infinitival complement.

Nominal Relatives

If the copulative verb takes the nominal relative as a complement, it is assumed that the nominal relative describes the characteristic qualities of the subject argument of the copulative. If for example in Sesotho we say: **Monna o botswa**, the subject argument **Monna** is described as being lazy which is a description of his characteristic traits.

This descriptive copulative above may take an Infinitive as a complement as illustrated in the example below:

(29)   Monna o botswa ho sebetsa
        [$_{NP}$Monna^i] [$_{VP}$ o [$_{NP}$ botswa] [$_S$PRO^i ho-sebetsa]]
        (The man is lazy to work)

In sentence (29) the copulative verb is a verb of subject control. The matrix subject argument **Monna** is coindexed with the subject PRO of the Infinitival complement.

Locatives

When the copulative takes a Locative NP with the locative suffix -**eng** or the preposition **ho** as a complement, the subject of the copulative and the Locative will express the relation of description.

If for example in Sesotho we say: Bashemane ba naheng it will be noted that **Bashemane** are being described with regard to their location.

The copulative verb may also take an Infinitive as a complement, in which case it becomes a verb of subject control. The matrix subject of the copulative is the controller of the subject PRO of the Infinitival complement. This can be illustrated by considering the following sentence:

(30)   Bashemane ba naheng ho disa dikgomo
        [$_{NP}$Bashemane^i] [$_{VP}$ ba [NP$_{loc}$ naheng] [$_S$PRO^i ho-disa dikgomo]]
        (The boys are in the veld to look after the cattle)

In sentence (30) the subject argument, **Bashemane** is coindexed with the subject PRO in the Infinitival complement.

The copulative verb na

There is an instance where the subject in the sentence with a verb stem -**na** is associated with the nominal complement. This relation is recognized through the presence of the preposition **le** in the complement. This associative copulative expresses [pssessopm. If for example in Sesotho we say: **Ntate o na le thipa** it will be noted that the relation between the subject argument **Ntate** and the complement **thipa** is possessive. The associative copulative verb **na** can take an Infinitive as a complement as exemplified by the following sentence:

(31)   Ntate o na le ho seha nama
         [$_{NP}$Ntate^i] [$_{VP}$ o-na [le [PRO^i ho-seha nama]
         (Father may cut the meat)

In sentence (31) the copulative verb **na** is a subject control verb. The matrix subject argument **Ntate** is coindexed with the subject PRO of the Infinitival complement.

3.3   OBJECT CONTROL

If the object argument of the matrix sentence controls the subject PRO in the Infinitival complement we have an instance of object control (see i.a. Horrocks (1987:131)). This assumption can be made explicit by considering the following properties of Sesotho verbs:

3.3.1   Transitive verbs

There are in Sesotho transitive verbs which can only be used with animate objects. When these verbs, such as for example **bitsa** (call), take an Infinitive as a complement they are generally verbs of object control. This may be illustrated by considering the following example:

(32)   Mme o bitsa ngwanana ho tla kga metsi
         [$_{NP}$Mme] [$_{VP}$ [$_V$o bitsa [$_{NP}$ ngwanana^i] [PRO^i ho-tla-kga metsi]]
         (The mother calls the girl to come and draw water)

In sentence (32) it will be noted that the object of the matrix verb **bitsa**, which is an animate object **ngwanana**, is coindexed with the Purposive Infinitival complement.

This argument above may emanate from the assumption that in Sesotho (see Doke and Mofokeng, 1957:188) the transitive verbs without applied suffix -el- in the matrix sentence may take a Purposive Infinitival complement.

The transitive verb **bitsa** in sentence (32) may be used with the applied affix -el-, which adds the meaning of purpose to the verb to which it is suffixed. This may be done on one

condition i.e. that the object argument may not follow the applied verb according to Visser (1989:175). This object argument must rather be indicated by the clitic as illustrated in the following sentence:

(33)   Mme o mmitsetsa ho tla kga metsi
         [NPMme] [VP o-mi-mits-etsa] [PROi ho-tla-kga metsi]]
         (The mother calls her to come and draw water)

An alternative is that such an NP object (i.e. **ngwanana** in our case) which bears a thematic role of theme, may occur in the Topic position. The clitic which is coreferential with the NP object in the Topic position must occur in the verbal morphology of the particular applied verb as illustrated in the following sentence:

(34)   Ngwanana mme o mmitsetsa ho tla kga metsi
         [TopicNgwananai] [smme o-mi-mits-etsa] [PROi ho-tla-kga metsi]
         (Mother calls the girl (in order) to come and draw water)

There are certain transitive verbs which may be used with either inanimate objects or animate objects. If they are used with animate objects with an Infinitive as a complement, they are object control verbs. The matrix objects serve as the controllers of the subject PRO in the Infinitival complement. Consider the following example:

(35)   Ntate o fumane seahi ho aha ntlo.
         [NPNtate] [VP [Vo-fumane [NP seahii] [PROi ho-aha ntlo]]
         (The father found the builder to build the house)

In sentence (35) the object argument of the matrix verb **fumane**, which is an animate object **seahi** is coindexed with the subject PRO in the Purposive Infinitival complement.

It is a common phenomenon in Sesotho that the transitive verbs which may be used with either animate or inanimate objects can take a Relativized Infinitive as a complement. Let us consider the following example:

(36)   Ntate o batla ntja ya ho disa dikgomo
         [NPNtate] [VP [Vo-batla [NP ntjai] [ya [PROi ho-disa dikgomo]]
         (The father wants the dog for looking after the cattle)

In sentence (36) the verb **batla** has been used with the animate object **ntja** to take a Relativized Infinitival complement. In this case the verb **batla** is a verb of object control. The object argument **ntja** of the matrix sentence is the controller of the subject PRO in the Relativized Infinitive. This controller **ntja** has no argument status on its own and thus no theta-role. This antecedent together with the following Relativized Infinitival clause is the argument of the matrix verb **batla** in (36).

3.3.2   Ditransitive verbs

There are some ditransitive verbs such as **adima (lend to)** with an indirect object which is not in the locative. This ditransitive verb can take a Purposive Infinitive as a complement as exemplified below:

(37)   Ntate o adima banna tjhelete ho reka dikgomo
        [$_{NP}$Ntate] [$_{VP}$ [$_V$o-adima [$_{NP}$ banna^i] [$_{NP}$ tjhelete] [$_s$PRO^i ho-reka dikgomo]]
        (The father lends money to men to buy the cows)

In sentence (37) it will be noted that the verb **adima** is an object control verb. The indirect object **banna** is coindexed with the subject PRO in the Purposive Infinitival complement.

This assumption may further be illustrated by considering some ditransitive verbs such as for example **fa (give)**. This verb, which is exclusively an object control verb, does not allow any of its objects to be in the locative. This can be illustrated by considering sentence (38) where (38a) is unacceptable in Sesotho, because of the indirect object which is in the locative, while (38b) is acceptable:

(38)   a.   *Ntate o fa tjhelete banneng ho reka dikgomo.

        b.   Ntate o fa banna tjhelete ho reka dikgomo
              [$_{NP}$Ntate] [$_{VP}$ [$_V$o-fa [$_{NP}$ banna^i] [$_{NP}$ tjhelete] [$_s$PRO^i ho-reka dikgomo]
              (The father gives men money to buy the cows)

In sentence (38) the indirect Object NP **banna** of the matrix sentence is coindexed with the subject PRO of the Infinitival complement.

3.3.3   Passive verbs

There are instances where the transitive verbs which are not in the passive take an Infinitive with a passive verb as a complement. Consider the following example:

(39)   Ntate o batla nama ho tla phehwa mantsiboya
        [$_{NP}$Ntate] [$_{VP}$ [$_V$o-batla [$_{NP}$ nama^i] [PRO^i, ho-tla-phehwa t$_i$ mantsiboya]]
        (The father wants meat to be cooked in the evening)

The non-passive verb **batla** of the matrix clause in sentence (39) is a verb of object control. The matrix object **nama** which is an inanimate object is coindexed with the subject PRO of the Purposive Infinitival complement.

This subject PRO has on account of the passive morpheme -w- in the verb of the Infinitive been moved from its Deep structure object position to the Surface structure subject position.

The PRO being an anaphor in that it lacks the potential for independent reference, has as referent the object argument **nama** in the matrix sentence.

An assumption that the transitive verb **batla** in sentence (39) is an object control verb can be illustrated further by the fact that it may be used with the applied suffix -el- as exemplified in the following sentence:

(40)   Ntate o e batlela ho tla phehwa mantsiboya
        [$_{NP}$Ntate] [$_{VP}$ o-e^i-batl-ela] [PRO^i ho-tla-phehwa t$_i$ mantsiboya]
        (The father wants it to be cooked in the evening)

3.3.4   Copulative verb Na + le

In the case where the subject in the sentence with the verb stem **na** is associated with the nominal complement which is animate, the copulative becomes an object control verb. This may be illustrated by considering the following sentence:

(41)   Mme o na le motho wa ho hlatswa diphahlo
        [$_{NP}$Mme] [$_{VP}$ V$_{cop}$ [o-na [le [motho^i] [wa [PRO^i ho-hlatswa diphahlo]]
        (The mother has a person who washes the clothes)

In sentence (41) the copulative verb with an animate object **motho** is an object control verb. The matrix object argument **motho** is coindexed with the subject PRO in the Relativized Infinitival complement.

3.4   ARBITRARY CONTROL

According to Culicover and Wilkens (1986:137) arbitrary control presents itself only under restricted circumstances namely where the subject PRO in the Infinitival complement has no index, because it is not locally coindexed with the referring NP. Its antecedent can therefore be any individual or set of individuals. This assumption can be made explicit by examining the following properties of verbs used in the constructions in which the subject PRO in the Infinitive has no controller and hence it is arbitrary in reference:

3.4.1   Intransitive verbs

There are intransitive verbs which may be used with an indefinite concord **Ho** in the subject position. This morpheme **Ho** signifies "it" or "there" in English which is a non-referential dummy element and thus it has no semantic role. Such verbs may take an Infinitive as a complement without either the matrix sentence or the Infinitive sentence having any argument. This assumption may be made explicit by considering the following cases:

Weather verbs

There are some weather verbs, such as for example **tjhesa** which may be used without referential arguments. Instead of the referential arguments the morpheme **Ho** which has the same form as the existential pronoun is used. When such weather verbs take an Infinitive as a complement we find constructions such as exemplified in the sentence below:

(42)   Ho a tjhesa ho dula kantle
      [pro$_i$] [ho$_i$-a-tjhesa] [$_s$PRO ho-dula kantle]]
      (It is hot to sit outside)

In sentence (42) it will be noticed that the quasi argument **Ho** does not have a referential argument. Therefore the missing subject is implied i.e. there is an implicit argument. In this case it may be assumed that arbitrary control obtains.

Sentential pronouns

There are some cases where the intransitive verbs may be used with a sentential pronoun which takes the form of the existential morpheme Ho. This morpheme **Ho** has reference to something mentioned in the discourse, and thus is related to what is known as the sentential pronoun in Sesotho. When such verbs with a sentential pronoun subcategorize for an Infinitival complement we find the following constructions:

(43)   a.   Ho lokile ho sebetsa mona
           [pro$_i$] [ho$_i$-lokile] [$_s$PRO ho-sebetsa mona]]
           (It is right to work here)

       b.   Ho setse ho kotula
           [pro$_i$] [ho$_i$-setse] [$_s$PRO ho-kotula]]
           (There remianed to reap)

In the sentences in (43) it will be noticed that the subject PRO of the phrase forming Infinitive has no argument with which it is coindexed i.e. there is an implicit argument. Thus control by an implicit argument (as is the case in 43) may be viewed as an instance of arbitrary control.

In sentences (42) and (43) the implicit argument may be made overt. Such an argument will always be found with the Locative morpheme **-eng** or the Locative preposition **ho**. Consider the following examples:

(44)   a.   Ho a tjhesa baneng ho dula kantle
           [pro$_i$] [ho$_i$-a-tjhesa [$_{NPloc}$baneng^i] [PRO^i ho dula kantle]]
           (It is hot for children to sit outside)

b.   Ho setse ho basadi ho kotula
      [pro$_i$] [ho$_i$ setse [$_{PP}$ [$_P$ ho [$_{NP}$ basadi^i] [PRO^i ho kotula]]
      (There remained to women to reap)

In sentence (44) the Locative NP **baneng** in (44a) and the object NP of the locative preposition **ho** i.e. **basadi** in (44b) are coindexed with the subject PRO of the Infinitival complement.

3.4.2   Passive verbs

Intransitive V-w

When the passive affix -**w**- is added to the intransitive verb, which is generally a one place predicate with one argument which is assigned a theta role, this one and only argument will be empty. In its place the existential pronoun **Ho**, which may only appear in non-argument positions in Sesotho will be used and thus may never receive a theta role. This verb may take an Infinitive as a complement as may be exemplified by the following sentence:

(45)   Ho a tsamauwa ho ya Gauteng
        [pro$_i$] [ho$_i$-a-tsamauwa][$_s$PRO ho-ya Gauteng]]
        (There is being walked to go to Johannesburg)

In sentence (45) the Agent argument in the matrix sentence is missing. In its place there is an existential morpheme **Ho**. Since the existential pronoun does not have a referential function the Agent argument is implied. This implicit argument may be made overt in the Prepositional Phrase with **Ke** as illustrated in sentence (46) below:

(46)   Ho a tsamauwa ke ntate ho ya Gauteng
        [pro$_i$] [ho$_i$-a-tsamauwa] [$_{PP}$ [$_P$ke [$_{NP}$ ntate^i] [$_s$PRO^i ho-ya Gauteng]]
        (There is being walked by father to go to Johannesburg)

In sentence (46) the NP object **ntate** of the preposition **Ke** is coindexed with the subject PRO in the Infinitival complement.

In the case where the passive affix -**w**- is added to the verb of the Infinitival complement, it implies that the subject of the Infinitive represented by PRO has been moved from its D-structure position.

(47)   Ho a enngwa ho fuwa dimpho
        [pro$_i$] [ho$_i$-a-enngwa [PRO ho-fuwa dimpho]]
        (There is being stood up to be given presents)

In sentence (47) the Agent argument in the Infinitival complement is implicit. This implicit Agent argument may be made overt by being used in the Prepositional Phrase with the preposition **Ke** as illustrated in the following example:

(48)   Ho a enngwa ke bana ho fuwa dimpho
[pro$_j$] [ho$_i$-a-enngwa [$_{PP}$ [$_P$ke [$_{NP}$bana^i [$_S$PRO^i ho-fuwa dimpho]
(There is being stood up by the children to be given presents)

In sentence (48) the NP object **bana** of the Preposition **Ke**, is coindexed with the subject PRO in the Infinitival complement.

Transitive V-w

A passivized transitive verb with an inanimate object which has been moved to the subject position by a transformational rule, Move α may take an Infinitive as a complement. In such a case the Agent argument in the matrix sentence is implicit. Consider the following example:

(49)   Difate di a renngwa ho tla aha lesaka
[Difate$_i$] di-a-renngwa t$_i$ [PRO ho-tla-aha lesaka]]
(Trees are being cut down to come and build the kraal)

In sentence (49) the subject PRO in the Infinitival complement has no index, because it is not locally coindexed with the referring NP. Its antecedent, which is an implied Agent argument can therefore be any (set of) individuals. In this case we may assume that arbitrary control obtains. This implicit Agent argument can be made overt by being used with the preposition **Ke** as is the case in the following example:

(50)   Difate di renngwa ke bashemane ho tla aha lesaka
[$_{NP}$Difate$_i$] di-renngwa t$_i$ [$_{PP}$ [$_P$ke [$_{NP}$ bashemane^i] [PRO^i ho-tla-aha lesaka]
(Trees are being cut down by the boys to come and build the kraal)

In sentence (50) the NP object **Bashemane** of the Prepositional Phrase is coindexed with the subject PRO of the Infinitival complement.

Copulative verbs

There are some cases of copulative verbs with nominal relatives where the subject position is generally filled by the sentential pronoun which takes the form of the existential morpheme **Ho**. The reference of this pronoun **Ho** can be an indefinite or unspecified person, thing or place. These copulatives with the construction outlined above may take an Infinitive as a complement. Consider the following examples:

(51)   a.   Ho monate ho bina
            [pro^i [ho^i monate] [PRO ho-bina]]
            (It is nice to sing)

       b.   Ho boima ho sebetsa
            [pro^j] [ho^i boima] [$_s$PRO ho-sebetsa]]
            (It is difficult to work)

In sentence (51) the Subject argument in the matrix clause is missing i.e. there is an implicit argument. The subject position is occupied by the existential pronoun which does not have a referential function. This implies that the subject PRO in the Infinitival complement has no argument with which it is coindexed, hence it is arbitrary in reference.

This implicit argument can be made explicit by using an overt NP in the Locative form with either the Preposition **Ho** or the Locative affix **-eng** as illustrated by the following sentences:

(52)   a.   Ho monate ho bana ho bina
            [pro^i] [ho^i monate] [$_{PP}$ [$_p$ ho [$_{NP}$ bana^j] [PRO^j ho-bina]]
            (It is nice for children to sing)

       b.   Ho boima banneng ho sebetsa
            [pro^i] [ho^i boima] [$_{NPloc}$ banneng^j] [PRO^j ho-sebetsa]]
            (It is difficult for men to work)

In sentence (52a) the Object NP **bana** of the Preposition Ho is coindexed with the subject PRO in the Infinitival complement. In sentence (52b) the Locative NP **banneng** is coindexed with the subject PRO in the Infinitival complement.

3.4.4   Nominal Infinitives

According to Doke and Mofokeng (1957:188) and Guma (1971:188) the Nominal Infinitive in Sesotho has, like all other nominals, a class prefix which is morphologically marked with a prefix **Ho** of Class 15. These grammarians are also of opinion that the nominal Infinitive is verbal in nature, because it has a verb stem and may have an object. As a nominal it may appear in all the different sentence positions. This assumption can be made explicit by considering the following sentence in which the Nominal Infinitive has been used as a subject, associated with its subjectival concord.

(53)   Ho bapala bolo **ho** a thusa
       [NP [S [$_s$PRO ho-bapala] [$_{NP}$bolo]] ho-a-thusa]]
       (Playing soccer is helpful)

In sentence (53) the subject PRO in the Nominal Infinitive has no controller and hence it is arbitrary in reference, because it may refer to "any one in general". This is attributed to the fact that the subject argument in (53) is implicit.

This implicit argument can be made overt in the Possessive Phrase as illustrated in the following example:

(54)   Ho bapala ha bana bolo ho a thusa
         [NP [S [$_s$PRO^i ho-bapala [$_{PP}$ ha bana^i] [$_{NP}$bolo]] ho-a-thusa]]
         (To play soccer of children is helpful)

In sentence (54) the subject PRO in the Nominal Infinitive is controlled by an antecedent which does not c-command it namely **Bana**, which is the object of the preposition **ha** in the Possessive Phrase.

The Nominal Infinitive may also be used as an object, associated with its objectival concord. This may be illustrated by considering the following example:

(55)   Ho bapala ke a ho rata
         [NP [S [$_s$PRO ho-bapala]] [ke-a-ho^i-rata pro^i]
         (To play I like it)

In sentence (55) the Infinitive **ho bapala** has been moved to the front of the sentence, while leaving its object concord **ho** with the verb. In this sentence it will be noted that the NP argument which controls the subject PRO in the Nominal Infinitive is implicit, hence it is arbtrary in reference.

This implicit argument may be overt in the Possessive Phrase as exemplified in the following sentence:

(56)   Ho bapala ha bana ke a ho rata
         [Np [S [$_s$PRO^i ho bapala [$_{PP}$ ha bana^i] ke-a-ho-rata pro]]
         (Playing of the children I like it)

In sentence (56) the Object NP **Bana** of the Possessive Phrase is coindexed with the subject PRO in the Nominal Infinitive.

3.5   LONG DISTANCE CONTROL

There are cases in Sesotho where either the subject argument or the object argument of the verb in the matrix sentence may be separated from the subject PRO in the Infinitival complement by another sentence. The argument in the matrix sentence and the subject PRO in the Infinitival complement will, in spite of being separated, still be coindexed. This can be

attributed to the fact that the relation between the argument in the matrix sentence and the subject PRO in the Infinitival complement does not entail movement. Therefore there is no question of this relation being subjected to Subjacency (see 1.4.1). This, in short, implies that the subject PRO may have a remote controller in which case there exists according to Visser (1989:172) a long distance dependency between PRO and its antecedent. This assumption may be illustrated by considering the following examples:

(57) a. Bashemane ba fihlile ntate a se a robetse ho tswa sekolong.
$[_{S1}\ [_{NP}$Bashemane$^i]$ ba-fihlile $[_{S2}[_{NP}$ntate$]$ a-se a-robetse $[_{S3}[$PRO^i ho-tswa sekolong$]]$
(The boys arrived when the father was already asleep to come from school)

b. Mme o roma banana letsatsi le sa tjhabile ho ya kga metsi
$[_{S1}[_{NP}$Mme$]\ [_{VP}$ o-roma banana$^i]\ [_{S2}[_{NP}$ letsatsi$]$ le-sa-tjhabile $[_{S3}[$PRO^i ho-ya-kga metsi$]]$
(The mother sends the girls while it is still daytime to go and draw water)

In sentence (57a) the intransitive verb of the matrix sentence, **fihlile (arrived)** which is a motion verb, is a subject control verb. Its matrix subject argument, **Bashemane (the boys)** is coindexed with the subject PRO of the Infinitival complement, despite the fact that they have been seperated by one subordinate clause (S_2).

In sentence (57b) the transitive verb **roma (sends)** is an object control verb. Its matrix object argument, **Banana (the girls)** is, though removed from the Infinitival complement by another clause (S_2) coindexed with the subject PRO in the Infinitival complement.

3.6 SPLIT ANTECEDENTS

The issue of transitive verbs with an object subcategorizing for an Infinitival complement is a complicated problem in Sesotho. This can be ascribed to the fact that one or more arguments of the transitive verb can serve to control the subject PRO in the Infinitival complement. This assumption can be illustrated by examining the following properties of the Sesotho verbs of control.

3.6.1 Transitive verbs

In the case of some transitive verbs such as for example: **thusa (help)** which has a meaning of "assistance" it is not always clear which argument of the matrix sentence is the controller of the subject PRO in the Infinitival complement. This assumption can be illustrated by considering the following example:

(58)   Molemi o thusa ntate ho jala
        [$_{NP}$Molemi^i] [$_{VP}$ [$_V$o-thusa [$_{NP}$ntate^j] [$_S$PRO$^{i/j}$ ho jala]]
        (The agriculturist helps the father to sow)

In sentence (58) it will be noted that the subject argument **Molemi** and the object argument **ntate** in the matrix sentence are split antecedents in the sense that they are both coindexed with the subject PRO in the Infinitival complement. This implies that both the agriculturist and the father are sowing.

3.6.2   Causative verb

There are certain transitive verbs which may take a causative affix -is- which renders the meaning of assistance e.g. "help to". If these verbs such as for example **tshwara** (to seize) with a causative affix -is-, takes an Infinitive as a complement, an impression of ambiguity is portrayed. This ambiguity can, with regard to an example in (59), be attributed to the fact that it is not always clear which argument in the matrix sentence controls the subject PRO in the Infinitival complement:

(59)   Thabo o tshwarisa ntate mokotla ho o theola koloing
        [$_{NP}$Thabo^i] [$_{VP}$ [$_V$o tshwar-isa] [$_{NP}$ntate^j] [$_{NP}$mokotla] [$_S$PRO$^{i/j}$ ho-o-theola koloing]]
        (Thabo helps the father to seize the bag to offload it from the car)

From sentence (59) we deduce that the causative verb **tshwarisa** in the matrix sentence has given rise to split antecedents in the sense that the subject PRO in the Infinitival complement is controlled by both arguments in the matrix sentence. In this case the subject argument **Thabo** is an assistive agent, helping the indirect object **ntate** in the action i.e. to offload the bag from the car.

On the other hand the subject PRO in the Infinitival complement may, in sentence (59) be controlled by the indirect object argument only. In this case the subject argument **Thabo** is a causative agent causing the indirect object argument **ntate** to offload the bag from the car.

3.6.3   Reciprocal verbs

In the majority of cases it will be noted that the reciprocal affix -an- in Sesotho which renders the English meaning of "each other" can be affixed to transitive verbs. These reciprocal verbs generally force their subjects to be in the plural as may be exemplified by comparing the following sentences:

(60)   a.   Batho ba a thusana
              (People help one another)

b.   *Motho o a thusana
       (A person helps one another)

The sentence in (60b) with a singular subject argument will be ungrammatical, while the sentence in (60a) with a plural subject argument is acceptable in Sesotho.

If a reciprocal verb such as in sentence (60) takes an Infinitive as a complement we find a case of split antecedents. This may be illustrated by considering the following example:

(61)   Batho ba a thusana ho kotula koro
         [$_{NP}$Batho^i] [$_{VP}$ ba-a-thus-ana^i] [$_s$PRO^i ho-kotula koro]
         (People help one another to reap the wheat)

In sentence (61) the reciprocal verb **thusana** has, besides an external argument **Batho**, an internal argument, which is reflected by the reciprocal morpheme -an-. This internal argument is bound to the external argument by argument binding. Therefore we may assume that the external argument **Batho** and the internal argument which has been taken over by the reciprocal affix -an- serve as the controllers of the subject PRO in the Infinitival complement.

3.7   REFLEXIVE VERBS

It is a general phenomena that Sesotho verbs can take a reflexive prefix -iN-. This -iN- which reflects the internal argument which is bound by the external argument is an invariable morpheme which cannot be considered to contain any of the grammatical features person, number and gender, since it can appear with any antecedent regardless of the latter's grammatical features. If this reflexive morpheme -iN- is attached to the verb it gives rise to a construction where the subject argument and the object argument reflected by -iN- relate to the same entity. This assumption may be illustrated by considering the following example.

(62)   Ntate o a itokisa
         [$_{NP}$Ntate^i] o^i-a-i^i-tokisa
         (The father prepares himself)

In the case where an Infinitive appears as a complement of a reflexive verb, the Agent argument and the Theme argument reflected by the morpheme -iN- in the verb which are bound by argument binding, serve as the controllers of the subject PRO in the Infinitival complement. This can be illustrated by considering the following example:

(63)   Ntate o a itokisa ho ya Kapa
         [NPNtate^i] o-a-i^i-tokisa [sPRO^i ho-ya Kapa]]
         (The father prepares himself to go to Cape)

In sentence (63) the subject argument **Ntate** and the object argument which is reflected by -
iN- in the verb **itokisa** are coindexed with the subject PRO in the Infinitival complement.

In some cases the Infinitival complement can have a reflexive verb as exemplified in the
following setnence:

(64)   Ngwanana o a rata ho itlhatswa
         [NPNgwanana^i] o-a-rata [sPRO^i ho-i^i-tlhatswa]]
         (The girl likes to wash herself)

In sentence (64) the subject PRO in the Infinitival complement, which is coreferential with
the subject argument in the matrix sentence is bound by the reflexive morpheme -iN- to its
object. Therefore the subject argument **Ngwanana** in the matrix sentence and the object
argument of the subject PRO reflected by the morpheme -iN- are coindexed with the subject
PRO in the Infinitival complement.

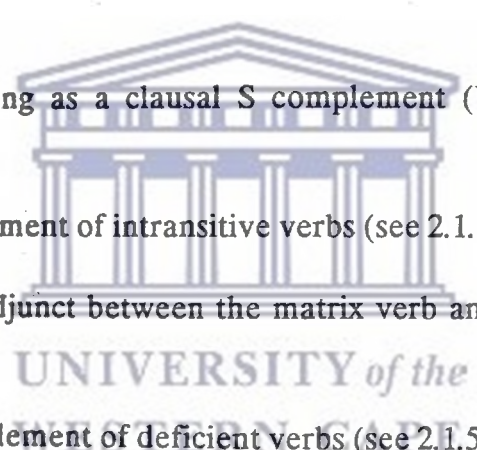# CHAPTER 4

CONCLUSION

In the Introduction of this study a brief account of the nature of the Infinitives in the various constructions in which they may appear in Bantu languages has been given (see 1.3). It has been ascertained, with reference to the contributions from the previous research by M.W. Visser (1989:159), Doke and Mofokeng (1957:188), S.M. Guma (1971:158) and D.F. Cole (1975:237), that the Infinitive in Bantu languages exemplfies both nominal and verbal properties.

This has, with special reference to Sesotho, been established by indicating the distinction between the following two grammatical functions of the Infinitives as follows (see chapter 2):

I   The infinitive functioning as a clausal S complement (Verbal properties of the Infinitives).

i)   The infinitive as complement of intransitive verbs (see 2.1.1, 2.1.2 and 2.1.3).

ii)   The occurence of an Adjunct between the matrix verb and Infinitival complement (see 2.1.4).

iii)   The infinitive as a complement of deficient verbs (see 2.1.5).

iv)   The infinitive as a complement of the matrix verb with the long form of Present tense (represented by the morpheme a in Sesotho (see 2.1.3 (21) and 2.2.1 (31) and 3.2.2 examples (12), (13), (14)).

v)   The infinitive may have an object which may occur with an objectival concord (see 2.2.1, 2.2.2).

vi)   The infinitive may be modified by adverbs and locatives (see 2.3.2 (67) and (68)).

vii)   The infinitive may be inflected for tense (see 2.2.2 and 2.3.2).

viii)   The infinitive may be extended by means of verbal suffixes (see 2.7.3 (110)).

This has been ascertained by taking a closer view at the following constructions where the controller which is implicit is made overt:

(1) Nominal infinitives which, in their following functions, are, according to M. Visser (1989:163) not infinitival (class 15) nouns, but rather clauses dominated by NP nodes (see 2.9):

(a)   Nominal infinitive as subject (see 2.9.2 example (120)).

(b)   Nominal infinitive as object (see 2.9.2 example (125)).

With reference to an investigation made of principle B of the Binding theory which stipulates that a pronominal must be free in its governing category, it was ascertained that in the case where the empty category PRO is seperated from the matrix sentence by another clause (see long distance control in 2.6 and 3.5) PRO is free. Here free means that no c-commanding argument must bind the pronominals (which is PRO in this instance). This has been established in the case of long distance control where it has been determined that either the NP subject argument or the NP object argument of the matrix sentence that may serve as the controller of the subject PRO in the infinitival complement is not c-commanding the subject PRO. This implies therefore that the c-command condition has been violated (see 2.6 example (103) and 3.5 example (57)).

A review was given of the contributions on Control made by Lasnik (1988), Roeper (1987) and Jaeggli (1986). It has been established that these constributions provide an account of Control phenomena, and certain proposals can be employed in the analysis of Sesotho infinitives.

As a result of these contributions it has been established (see chapter 2. and 3) that subject PRO in the Sesotho Infinitive has a controller, which may, according to Lasnik (1988) be either implicit or explicit. This has been outlined in the cases of passive verbs that take an infinitival clause as a complement (see 2.3.1 and 2.3.2) a well as in Nominal Infinitives (see 2.9).

A proposal by Roeper (1987) concerning his morphological approach whereby implicit arguments are associated with affixes such as the passive -w- (-ed in English) (see 2.3.2 example (61)), it was concluded that the morphological affix -w-(-ed) has played the role of an explicit trigger for the presence of implicit arguments in the sense that it licences a Ke (by) Phrase that covers the semantic space that would have been covered by an overt Agent argument of the passive verb. Roeper is supported by Jaeggli (1986) in this respect, who argues that the passive suffix -w-(-ed) may optionally subcategorize for a Preposional

Phrase with **Ke (by)** containing an NP argument serving as the controller (see 2.3.2 example (62)).

It has in addition been established in accordance with Roeper's syntactic approach, which associates implicit argument with argument positions, that an Implicit argument in Nominal Infinitives occur when an argument position associated with a particular argument structure of the available predicate is not satisfied by the expression occupying the syntactic argument position (see 2.9.1 examples (119) and (123)).

This has led to the conclusion that the external argument in Nominal Infinitives, as in passives, (see 2.3) is demoted to an internal argument, and the subject Agent has been dethematized (loss of Agent). This internal argument is being licenced by the genitive **a** which is a determiner of the infinitive verb (bearing an external thetha role) (see 2.9.1 examples (121) and (124)).

In chapter 3 a survey has been given of the antecedent which controls the subject PRO and the properties of control of Sesotho verbs. In this regard the properties of Sesotho verbs that take an infinitival clause as a complement have been explored. Similar observations have also been made about Nominal Infinitives.

It was established, with regard to Infinitival clause as a complement, that the subject PRO in the infinitival complement is usually controlled by one or more arguments of the matrix clause.

It was ascertained that the following properties of verbs characterise subject control verbs, for the subject arguments of the matrix sentences in which they appear control the subject PRO in the infinitival complement:

i)   Intransitive verbs (see 3.2.1).

ii)   Deficient or auxiliary verbs (see 3.2.1).

iii)   Transitive verbs without objects (see 3.2.2).

iv)   Ditransitive verbs with one object (see 3.2.3).

v)   Passivized transitive verbs (see 3.2.4).

vi)   Copulative verbs (see 3.2.5).

vii)   Transitive verbs with inanimate objects (see 3.2.2).

It was further established that the following properties of verbs characterise object control verbs, for the object arguments of the matrix sentences in which they appear control-the subject PRO in the infinitival complement.

i)   Transitive verbs with animate objects (see 3.3.1).

ii)   Ditransitive verbs (see 3.3.2).

iii)   Copulative verb Na + le (see 3.3.4).

It has also been established that the properties of Sesotho verbs, listed below, give rise to arbitrary control. In this regard it has been ascertained that the subject PRO in the infinitival complement has no index, because it is not locally coindexed with a referring NP. Its antecedent can therefore be any individual or set of individuals:

i)   Intransitive verbs with the existential pro associated with **HO** in the subject position (see 3.4.1).

ii)   Passivized intransitive verbs with the existential pronominal associated with the morpheme **HO** (see 3.4.2).

iii)   Passivized transitive verbs (see 3.4.2).

iv)   Copulative verbs with their subject positions filled by the existential pronominal associated with the sentential pronoun **HO** (see 3.4.2).

v)   Transitive verbs of the matrix sentences that are separated from the Infintival sentence by another sentence which contains the existential pronominal associated with **HO** (see long distance control in 2.6 example (100)).

It has been further established, with regard to Nominal Infinitives, that the subject PRO in the Nominal Infinitive has no controller and hence it is arbitrary in reference. This implies, in accordance with an assumption by Roeper (1987) (see 1.4.3) that the Nominal Infintive with particular reference to Sesotho has a controller which may be implicit. This implicit controller can be made overt in the Possessive Phrase (see 3.4.4).

It has been further established that some properties of Sesotho verbs seem to be ambiguous. This is attributed to the fact that it is not always clear which argument in their matrix sentence controls the subject PRO in the Infinitival complement. This has been ascertained by exploring the properties of Sesotho verbs such as the following:

i)   Ditransitive verbs with one object (see 3.2.3).

ii)   Transitive verbs which give rise to split antecedents such as:

a)   transitive verbs which renders the meaning of assistance e.g. **thusa** (help) (see 3.6.3 example (60)).

b)   causative verbs with an affix -is which renders the meaning of assitance e.g. "help to" (see 3.6.2 example (59)).

c)   reciprocal verbs with an affix **-an** in Sesotho which renders the English meaning of "each other" (see 3.6.3 example (60)).

It has been further established that some properties of Sesotho verbs are as such that they may give rise to a construction where the subject and the object arguments serve as the controllers of the subject PRO in the infinitival complement. This has been ascertained in cases such as:

i)   Reflexive verbs having a prefix -in- which is an invariable morpheme appearing with any antecedent regardless of the latter's grammatical features (see 3.7 example (62)).

Finally, a distinction has also been made between the verbs that take Purposive infinitival clauses as complements and those that take Non-purposive clauses as complements. This has been established by exploring the following properties of Sesotho verbs:

Purposive Infintives

i)   Intransitive verbs, which are not motion verbs and must therefore be used with the applied suffix -el that seems to authorize the subcategorization of an infintival complement (see 3.2.1 example (2)).

ii)   Intransitive verbs which are motion verbs, and must, on account of having to take an infinitival complement with a non-motion verb, have an applicative suffix -el (see 3.2.1 example (4)).

iii)   Transitive verbs without objects, which may also be used with the applicative -el (see 3.2.2 example (14) and (15)).

iv)   Transitive verbs with objects (see 3.2.2 examples (16) and (17); 3.3.1 example (35) and 3.3.3 example (39)). In addition there are those transitive verbs with objects which may also be used with the applied suffix -el which adds to the meaning of purpose to the verb to which it is suffixed (see 3.3.1 example (32), (33) and (34)).

v)   Ditransitive verbs (see 3.2.3 xample (21) and 3.3.2 example (37).

vi)   Intransitive verbs which are motion verbs subcategorizing for an infinitival complement with a passive verb (see 3.2.4 example (22).

vii)   Passivized transitive verbs taking an infinitival clause with a non-passive verb as a complement (see 3.2.4 example (25) or both verbs of the matrix sentence and the subordinate clause are passivized (see 3.2.4 example (26)).

Non-purposive Infinitive

i)   Intransitive verbs which are motion verbs taking an infintival clause with a motion verb as a complement (see 3.2.1 example (1)).

ii)   Transitive verb with the long form of Present tense which occurs if the transitive verb is not followed by an object (see 3.2.2 examples (12) and (13)).

iii)   Ditransitive verbs with one object (see 3.2.3 example (18)).

iv)   Deficient or auxiliary verbs (see 3.2.1 example (9) and 3.2.4 example (23)).
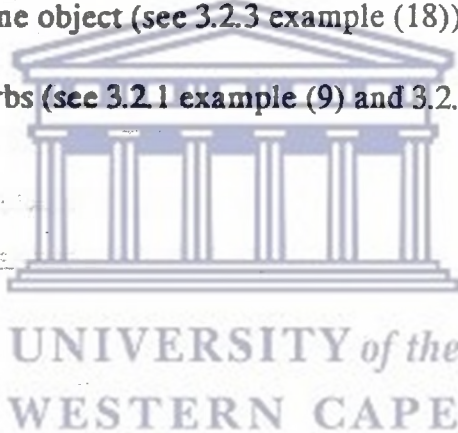
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