

BREAK AND BEND VERBS IN SESOTHO

I, the undersigned, hereby declare that this work is
my own original work and that I have not previously
submitted it at any university for a

BY

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DECLARATION

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

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ABSTRACT

The break and bend verbs in Sesotho are investigated with a view to account for the unique properties of these verbs.

The study gives a full account of the predicate argument structure of break and bend verbs. In Sesotho we have three types of predicates, namely, one-place, two-place and three-place predicates. The study also focuses on the number of arguments these verbs may assign. Some of these verbs are intransitive and therefore they assign one argument, which is an external argument. Other verbs are transitive and as such they assign more than one argument (i.e. external and internal arguments).

These verbs are investigated as to whether they would select certain arguments to appear with them and it was found that when they do, they also select semantic features which these arguments must have in order to appear with such verbs.

These verbs are also examined with the view to account for their difference. It was found that certain bend verbs show the same syntactic properties as the break verbs, except those bend verbs name reverse actions. Another observation was that not all break and bend verbs have zero-related nominals. When they do, the nominals describe the result of the action named by the verb.

The study investigate these verbs as to whether they would allow cognate objects, verbal alternations and derived verbs (in the case of bend verbs), and it was found that some of them would allow such lexical items.

OPSOMMING

Die breek en buig werkwoorde in Sesotho is ondersoek met die doel om die unieke kenmerke van hierdie werkwoorde te bepaal.

Die studie verskaf 'n beskrywing van die predikaat argumentstruktuur van breek en buig werkwoorde in Sesotho. Ons het drie tipes predikate, teweete eenplek, tweeplek en drieplek predikate.

Die studie fokus ook op die aantal argumente wat hierdie werkwoorde kan toeken. Sommige van hierdie werkwoorde is onoorganklik, derhalwe ken hulle een argument toe wat ekstern is. Ander werkwoorde is oorganklik, sodat meer as een argument, teweete ekstern en intern, toegeken word.

Daar is ook ondersoek of hierdie werkwoorde argumente kan selekteer om met hulle te verskyn, en dit is bevind dat as hulle dit doen, hulle ook die semantiese kenmerk selekteer wat hierdie argumente moet hê as hulle saam met daardie werkwoorde verskyn.

Hierdie werkwoorde is ondersoek met die doel om hul verskil te bepaal. Daar is bevind dat sommige buig werkwoorde dieselfde sintaktiese eienskappe het as die breek werkwoorde, behalwe dat buig werkwoorde ook reversiet is. 'n Verdere kenmerk is dat nie alle breek en buig werkwoorde voorkom met nul-verwante nominale. As hulle dit doen, beskryf die nominale die uitslag van die handeling in die werkwoord.

Daar is ondersoek of kognitiewe voorwerpe, werkwoord alternasies en afgeleide werkwoorde toegelaat kan word, en daar is bevind dat sommiges dit toelaat.

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1.1 – AIM OF THE STUDY

The fundamental aim of this study is to look at the lexical structure of break and bend verbs in Sesotho. This will be done within the context of the study will explore the properties of transitive and intransitive break and bend verbs of change, and the sub-categories of break and bend verbs. A preliminary investigation into the classification of English verbs and the study will be taken as a point of departure for this study. The verbs will be classified in different categories and each category will be compared with past investigations of the semantic and syntactic properties of verbs. The classification have lead to sub-classification of verbs into transitive and intransitive verbs.

The Predicate Argument Structure (PAS) of the break and bend verbs will be examined to see how many arguments they may take. The use of verbal affixes in the construction will be looked at. An exploration of the arguments of the different categories of the break and bend verbs will be done. These arguments are external, internal, detail and auxiliary arguments.

Verbal alternations that may appear with break and bend verbs will be examined to see if they are all possible with the break and the bend verbs in Sesotho.

1.2 – ORGANIZATION OF THE STUDY

This study comprises of five chapters. Chapter 1 is an introduction, which spells out the main aim of the study and the organization of the study. The basis of the study is the lexical semantics.

CHAPTER ONE

INTRODUCTION

This chapter is an introductory one, which spells out the main aim of the study and the organization of the study. The basis of the study is the lexical semantics. The investigation of the break and bend verbs will rely heavily on it.

1.1 AIM OF THE STUDY

The fundamental aim of this study is to look at the lexical semantic representation of break and bend verbs in Sesotho. This will be done within the ambit of lexical semantics. This study will explore the properties of transitive and intransitive verbs under the category of verbs of change, and the sub categories of break and bend verbs. Levin (1993) made a preliminary investigation into the classification of English verbs including verbs of change and her study will be taken as a point of departure for this study. Break and bend verbs will be classified in different categories and each category will be given a definition. In the past investigations of the semantic and syntactic properties of words as criteria for group classification have lead to sub-categorization of verbs into two, i.e. intransitive and transitive verbs.

The Predicate Argument Structure (PAS) of the break and bend verbs will be examined to see how many arguments they may take. The use of verbal affixes in the bend verbs will be looked at. An exploration of the arguments of the different categories of the break and bend verbs will be done. These arguments are external, internal, default and shadow arguments.

Verbal alternations that may appear with break and bend verbs will be examined as well as to find out whether they are all possible with the break and the bend verbs in Sesotho.

1.2 ORGANIZATION OF THE STUDY

This study comprises of five chapters. Chapter 1 is an introduction, which spells out the main aim of the study and the organization of the study. The basis of this study is the lexical semantics.

Chapter 2 deals with the broader view of lexical semantics. We look at the verb classes with regard to their classification. Organization of English verbs in Wordnet will be examined. All the syntactic properties relevant to the argument structure of verbs will be looked at such as argument structure, event structure, lexical conceptual paradigm, verbal alternations, derived affixes, and lexical inheritance structure. The predicate argument structure (PAS) will be looked at with regard to the lexical syntactic representation of verbs.

Chapter 3 deals with the subgroups of the break verbs. Each subgroup is defined and one example of a sentence is given with each break verb. Four groups will be identified in terms of the syntactic structure in which they may appear. An example will be given with each group.

In the first section we will concentrate on the transitive break verbs, in which all the syntactic properties of these verbs will be investigated whether they are possible in Sesotho. The intransitive break verb will be in the second section in which the same procedure, as in the first section, will prevail. The third section will deal with the transitive / intransitive alternation. Section four will concentrate on the ideophones and verbs derived from ideophones.

Chapter 4 deals with sub classification of bend verbs. Bend verbs can appear either as transitive or intransitive verbs or as both transitive / intransitive, but with a different form. Bend verbs will be divided into two subgroups, i.e. those that may appear with any physical object or a body part that may bend. The first section will concentrate on the bending of any physical object while the second section will deal with the bending of any body part.

Chapter 5 deals with the general conclusions of the whole study.

CHAPTER TWO

LEXICAL SEMANTICS

2.1 AIM

The chapter will look at the broader view of lexical semantics in terms of various lexical categories of a language. The issue of verb classes will be discussed with regard to how they are classified. The recent organization of verbs in Wordnet is another issue to be looked at. All the syntactic properties relevant to the argument structure of verbs will be looked at. The predicate argument structure (PAS) will be looked at with regard to the lexical-syntactic representation of verbs. The chapter will be concluded by highlighting all the relevant properties of lexical semantics.

2.2 LEXICAL SEMANTICS

Lexical semantics is the study of the meaning of the various lexical categories of a language. These lexical categories are present in a lexicon of the language where they appear as lexical items with various category labels such as noun (N), verb (V) and adjective (A). Lexical semantics is than the study of these lexical items in isolation i.e. a study of how and what the lexical items of a language denote, i.e. what is their meaning, what do they refer to in the real world? Such lexical items nowadays also supply much of the structural information of a sentence, i.a. its syntactic category as noun or verb etc.

In the study of the meaning of lexical items, two issues have received considerable attention:

- a) The creative use of words in novel contexts, e.g. the word "**koranta**" (newspaper) may refer to a "product" i.e. the actual paper that one can read, or the "producer" of the paper which may hire or fire journalists. The actual meaning of the word will then depend on the specific context in which it appears.
- b) The combination of lexical items, i.e. the issue of compositionality. Central to this issue is the specification of i.a. the selection restrictions which are placed on words which

may combine with each other e.g. the lexical items **"koqa"** (bend the knees) may only appear with one specific noun as its object i.e. **"mangwele"** (knees).

It is important to note that linguistic studies nowadays need computational tools for lexicology as well as an appreciation of the computational complexity of large lexical databases. On the other hand, "Computational research" needs the grammatical and syntactic distinctions of lexical differences in their lexicons and grammars. These two disciplines need to be married because it is very difficult to carry out serious computational research in linguistics and NLP without the help of electronic dictionaries and computational lexicographic resources. Right in the center of this marriage is the study of word meaning, i.e. "lexical semantics".

Two assumptions need to be taken into account in the study of lexical semantics:

- a) Lexical semantics need syntactic structure. Meaning can never be completely divorced from the structure that carries it.
- b) The meaning of words should reflect the deeper conceptual structures in the cognitive system, and the domain it operates in. Older assumptions include the notion that words must somehow refer to some person, place, or thing in the real world.

There are a further three principles which should guide the study of lexical semantics:

1. The notion of semantic well-formedness should be formulated to arrive at a theory of possible word meaning, i.e. other influences on the meaning of word should be avoided e.g. discourse and pragmatic factors.
2. Thematic roles (A-roles) are not enough information for semantic decomposition. A principled method for lexical decomposition will include a recursive theory of semantic composition, the notion of semantic well-formedness (see above) and an appeal to several levels of interpretation in the semantics (Pustejovsky 1996:6).
3. Lexical semantics must study all the categories, which appear in i.a. syntactic structures in order to characterise the semantics of a language. Thus, such a semantic

study should include the following lexical categories which have been recognized for the African language:

Noun (including locative noun and relative noun), verb, adjective, quantifier, preposition, complementizer, adverb, conjunct and demonstrative.

It should be noted that there are many separate semantic levels, which are necessary for the representation of the context of an utterance. The semantic level on which we are concentrating here is lexical semantics. Other levels include pragmatics and discourse structure as well as temporal structure (i.e. the interpretation of the functional category of inflection).

2.3 VERB CLASSES

A. Levin

Levin (1993) presents 49 semantically coherent classes of verbs whose members' pattern in the same way with respect of alternations within the argument structure of the VP such as Instrument-Subject alternation, and other properties, which are syntactically relevant. Basically, verbs are grouped together related by meaning, i.e. they share one or more meaning components, and they are related through similar behaviour in syntax and/or morphology. Thus, one may find a verb class which include mostly verbs of removing. Such verbs relate to the removal of an entity from a location e.g.

Mosadi o -ntsha nama pitseng

(The woman takes the meat from the pot)

Such verbs as "**ntsha**" share a basic meaning of removal, which includes a specification of the source from which something is removed, i.e. "**pitseng**" above.

In this thesis, attention will only be given to the verbs of change of state in which we find "break" and "bend" verbs as subcategories.

B. Wordnet

The verb lexicon has been the focus of the attention for many linguists and psychologists proposing different assumptions and frame works. According to Fellbaum (1998) their main aim was to characterize the structure of the verb lexicon and its representation.

Though they appear to be similar, Wordnet distinguishes itself from other efforts by examining the entire lexicon. Wordnet's construction represents an experiment that tests the validity of a model of the lexicon that will fit all verbs. It contains more information about verb classes and their semantic and syntactic properties that can be found within the web structures.

2.3.1 HOW VERBS ARE ORGANIZED IN WORDNET

Breaking up the lexicon into semantic fields is another way of organizing the English verb lexicon as a relational network. It provides an initial, semantically based organization of many polysemous verbs in the English lexicon. As old researchers have pointed out that words that are linked by semantic and lexical relations usually belong to the same semantic field, a relational analysis is also analysis of the lexicon in terms of semantic fields.

Semantic fields have been shown to be organized by relations like hyponymy. For an example, in the relation between "sprint" and "run"; to sprint is to run (and to run is to move), "sprint" and "run" can be said to belong to the same semantic domain of motion verbs.

Verbs have no established lexical and semantic relations as most work on semantic networks had focused on nouns. Dividing the verb lexicon into semantic fields led one to discover relations that organize verbs and verb concepts. Verbs were divided and subdivided into 14 more specific semantic domains (called "files" in Wordnet). This classification was based on some of the perceptually based semantic verb classes and on a semantic classification that accommodate all verbs. The only group that does not constitute a semantic domain is the stative verbs, auxiliaries, control verbs and aspectual verbs.

All the verb synonym sets that have been added over the years have been accommodated in the 15th group. The borders between the verb domains are vague. In Wordnet the meaning of a given verb is expressed by are relations to other verbs and synonyms sets.

The breaking up of the verb lexicon into semantic fields is compelled by the absence of a single root verb that could head the entire verb lexicon. Learning of this absence linguists

like Lyons (1977) and Pulman (1983) proposes a set of root verbs including “act”, “move”, “get”, “become”, “be”, “do”, which amounts to a division between activity and stative verbs, reflecting Jackendoff’s (1983) major conceptual categories “event” and “state”. Fellbaum (1998) observes that for Wordnet, adopting verbs like “be” and “do” as unique beginners did not seem appropriate as they are polysemous.

The particular semantic relations settled on the created network made it awkward to link abstract verbs as “do” to the next level of subordinates as “communicate” and “move”. Fellbaum (1998) points out that there is no psycholinguistic evidence that people link “do” and activity verbs like “move” in their minds, but there is evidence that people associate pairs like “move” and “run”. He disagrees with Lyons (1977) and Pulman (1983) with preposition of unique beginners. He settled on more meaningful unique beginners for 14 semantic domains.

Some semantic domains can be represented by several independent trees. Motion verbs have two homophonous top nodes. Verbs of possession go up to three concepts, expressed by the synonym sets. Communications verbs are divided into two independent trees expressing verbal and non-verbal communication. Verbs of bodily care and functions consist of a number of independent hierarchies. Verbs of social interaction encompass a number of different semantic sub domains i.e. politics, work and interpersonal relations.

Verb synonym sets assist in organizing the English verb lexicon. Synonyms and near synonyms; idioms and metaphors are other classes of verbs that are grouped together as synonyms in Wordnet. Not all words, which are synonyms, tolerate substitution in a given context. Wordnet does not account for different usage of relations among synonyms. That is why verbs that differ with respect to their selection restrictions are not placed into the same synonym sets.

Idiomatic verb phrases and verbs that have metaphorical senses in addition to their literal meaning are included in the appropriate synonym sets. Metaphorical senses extensions of verbs also short the syntax and meaning of their literal synonyms expressed in Wordnet by sentence frames.

2.3.2 EVIDENCE FOR LEXICAL AND SEMANTIC RELATION AMONG VERBS

According to Fellbaum (1998), the work of Evens (1988) and Mel'čuk (1984) on relational lexicons, extend beyond nouns to verbs, as their work include a large number of relations including not only semantic, but also morphologically and syntactically based ones. This happens before Wordnet. Hence a thorough exploration of a relational organization of the verb lexicon is required. There is psycholinguistic evidence, evidence from typicality and category membership judgement and lastly the dictionary definition as heuristic discovery semantic relations, in an attempt to prove this relation.

Little attention has been paid as to how speakers store and access verbs in their mental lexicon. Word association data for verbs are thinly scattered. Where verbs are given as the stimulus the results association show that half the responses are verbs, pointing to the existing parallel between a syntagmatic organization and a paradigmatic one. Garrett (1992) classified substitution errors as pairs of opposites helpful in studying the mental organization of words and concepts. He further classifies the relation between intended and actual utterance which he termed "Weak function contrast". This includes verbs like "start-stop", "ask-tell", and "remember-forget". According to Fellbaum (1998) the relation between these verbs seems less one of contrast than one of lexical entailment, because they come from the same semantic domain and select for the same semantically related arguments.

According to Fellbaum (1988) a good source for insights into which words and concepts are related in speaker's minds, is data obtained from typicality and membership graduation judgements. Most work has been done in this area with nouns taking the upper hand. He further states that Pulman (1983) 's data is limited to eight categories with six member verbs each, with respect to verbs.

Traditional dictionaries reflect the way in which speakers specify their meanings. Dictionary definitions can give evidence about semantic relations among verbs and shows how the verb taxonomies might be constructed. Fellbaum (1998) states that other verbs are defined by means of formula to X while y-ing. Many verbs that have both a transitive and an intransitive sense are defined in dictionaries by means of the formula to become or make X. Dictionary definitions are therefore useful in providing heuristic for discovering

verb pairs linked by various semantic relations (entailment, semantic opposition and causation).

2.3.3 LEXICAL AND SEMANTIC RELATION AMONG VERBS AND SYNSETS

According to Fellbaum (1998) lowering the number of relations in Wordnet was kept small and ignoring certain semantic distinctions has meant that they can be displayed in Wordnet interface. Again the subjects do not distinguish between different types of manner relation or semantic opposition. Semantically opposed verbs co-occur in text with frequencies higher than expected by chance.

2.3.3.1 Entailment

This is a lexical relation between two verbs, whereby verb₁ entails another verb₂. It is a unilateral relation, whereby if verb₁ entails another verb₂, then it cannot be the case that verb₂ entails verb₁. Two verbs are mutually entailing when they are synonyms. This relation between verbs resembles meronymy between nouns.

Fellbaum (1998) argue that verbs cannot be taken apart in the same way as nouns. Dividing the verb lexicon into semantic domains shows that verbs cannot easily be decomposed into referents denoted by verbs. The relations found in the verb parts differ from those among the referents of noun parts.

The temporal relation between the activities that the verbs denotes, shows that one activity or event is part of another activity or event when it is part of, or a stage in, its temporal realization. For an example, "snoring" or "dreaming" can be part of "sleeping", in the sense that the two activities temporally co-extensive. The differences between pair like "snore" and "sleep" is due to the temporal relation. The activities can be simultaneous, or one can include the other. Either the entailing or the entailed verb may properly include the other.

This relation may be viewed in conjunction with hyponymy among verbs, troponymy and entailment and finally verb taxonomies. In a hyponimic relation the semantic distinction between two verbs is different from the features that distinguish two nouns. Fellbaum (1998) have dubbed different kinds of elaborations that distinguish a verb hyponym from its superordinate and merged it into a manner relation, a troponymy. Troponymy can be

related to their superordinates along many semantic dimensions. Synonym sets of particular kinds of manner tend to cluster within a given semantic field.

Troponymy represents a special case of entailment; pairs that are always temporally co-extensive and are related by entailment. Every troponym V_1 of a more general verb V_2 also entails V_2 . The activities referred to by a troponym and its general superordinate are always temporally co-extensive. Verbs related by entailment and proper temporal inclusion cannot be related by troponymy.

Verb hierarchies constructed by means of the troponymy relation tend to have more superficial structures. This verb taxonomy classification is based on the different levels in the hierarchy. These levels range from L+2 to L. For an example, the taxonomy arising from (one sense of) the verb "talk". The highest level (L+2) verb is "communicate"; the next lower level L+1 has few verbs, including "talk" and "write". "Talk" in this regard has many troponyms and is called a bulge. When descending in a verb hierarchy, nouns that verbs can take as arguments decreases. It is difficult to assign a verb to a single superordinate. A tangled hierarchy is indicated by the existence of two appropriate superordinates. Some knowledge about a verb concept is inherited from its superordinate.

2.3.3.2 Semantic opposition among verbs

Opposition in the verb lexicon expresses a complex relation encompassing several distinct sub types of semantic opposition. Converses are opposites that are associated with no common superordinate or entailed verb: e.g. give / take; buy / sell; lend / borrow etc. They occur within the same semantic field. They refer to the same activity, but thematic roles associated with them are differently mapped in the surface structure in which they occur. Fellbaum (1998) states that most opposing verbs are stative or change of state verbs. They are also frequent in change verbs. The organization of this suburb of the lexicon is flat not hierarchical. As there are no superordinate, there are no troponyms. These verbs have a structure resembling that of direct adjectives. Much of the opposition among verbs is based on the morphological markedness of one member of an opposed pair e.g. "tie / untie"; "appear / disappear". Semantic opposition among verbs is a lexical relation holding among particular verb forms. Most semantically opposed verb pairs are co-troponyms whose opposition is contained in the way that differentiates them from their shared

superordinate. An entailed verb may be shared by other semantically opposed pairs. For an example, “fail” and “succeed” both entail “try”.

2.3.3.3 The relation of cause

This is a relation which picks out two verb concepts; one causative and the other resultative. English has lexicalized causative pairs, which are linked in Wordnet by the appropriate pointer. Fellbaum (1998) states that Wordnet contains cause pointers from causative, transitive verbs, intransitive sense of the same word; mostly are found among the verbs of change. This relation also shows up among the motion verbs. According to Fellbaum (1998), Carter (1976) notes that causation of the state or activity referred to by the extended verb. Cause is unidirectional like all entailment relations.

2.3.4 POLYSEMY

According to Fellbaum (1998) in English there are more nouns than verbs, but verbs are more polysemous than nouns. During the course of creating the semantic index many extended uses of verbs that do not follow straightforwardly from standard dictionary definitions were encountered. To fit the particular context in which a verb was found, senses were splitted i.e. fine sense distinctions were drawn. Highly polysemous verbs are the most frequently used verb “have”; “be”; “make”; “set”; “go”; “take” and others. Their meaning depend entirely on the nouns which they co-occur with. They have several meanings even if they work as light verbs. The noun class that constitutes the arguments of the verbs plays an important role in discerning different kinds of polysemy. According to Fellbaum (1998), regarding this issue, Pustejovsky (1995) proposes a general lexicon notion, in which he points out polysemy of some aspectual verbs, experiencer verbs and many causatives whose meanings depend on the particular context in which they occur. He postulates that verb’s arguments to its meaning should be captured in a systematic fashion. Fellbaum (1998) concludes by saying that if nouns and verbs were linked, this proposal by Pustejovsky (1995) could be captured in Wordnet. In this regard Fellbaum (1998) distinguishes a relation between polysemy and troponymy, polysemy and entailment and polysemy and opposition.

The verb lexicon as a semantic network shares certain properties with the noun lexicon. The semantic relation links some of the senses of a number of polysemous verbs, which

are found between word forms. Some of these polysemous verbs's sense is related by troponymy, i.e. a more elaborate verb can be expressed by the same surface form as its superordinate. In this regard "behave" in its broader sense means "conduct oneself", in another, in more specific sense it means "conduct oneself well":

1. The children behaved (well) last night.
2. The children behaved last night.

The superordinate subcategorizes for an adverb appears in (1). The second sense of "behave" in (2), the superordinate sense of the verb has been conflated with a particular adverb, "well". Some denominal verbs have several meanings, this issue according to Fellbaum (1998) was observed by Clark and Clark (1979) who studied the meaning relation between nouns and the homophonous verbs derived from them.

Concerning polysemy and entailment, few polysemous verbs are noticed whose senses are related by the kind of entailment that appear between verb pairs like "snore" and "sleep". Polysemy and opposition is noticed when the speaker wants to be absolutely certain to avoid ambiguity. According to Fellbaum (1998), Horn (1988) points out that under one reading the verb selects a goal argument, whereas under the opposite reading it selects a source. Fellbaum (1998) argues that when the direct object is a source, those verbs have synonyms with a negative prefix. Therefore polysemous verbs, whose two senses are in a relation of semantic opposition are the result of avoidance of redundancy.

2.3.5 EVALUATING THE PSYCHOLOGICAL REALITY OF THE WORDNET MODEL

Several experiments to prove that the semantic organization of verb in Wordnet has some psychological validity were conducted by Chaffin, Fellbaum, and Jenei (1994) according to Fellbaum (1998). Their first move was to see whether subjects could identify different relations among verb pairs. They conducted three experiments involving the four kinds of entailment relations.

In an analogy task, half the answers disagreed with the Wordnet classification. A hierarchical clustering analysis shows that subjects identify four main groups of relations corresponding to the Wordnet classification of four kinds of entailment in a sorting experiment. In the final part of the experiment, the results revealed that subjects agreed

with the Wordnet classification of the relations. In these three experiments, there was a greatest agreement about troponymy. Beside troponymy, the least amount of agreement was found concerning other kinds of entailment relations.

Greater success was realized when Chaffin, Fellbaum and Jenei examined data from association experiments. According to Fellbaum (1998), they analyzed the existing association data collected by Parlemo and Jerkins (1964). From this data, the result was that troponymy and opposition was most frequent represented. According to Fellbaum (1998), Chaffin, Fellbaum and Jenei gathered their own association data based on verbs from different semantic domains as stimuli. Their results were just like that of Parlemo and Jerkins's data. In these experiments more than half of the responses were nouns. These noun responses were used as typical members of the semantic class nouns that express the arguments of the verb stimuli. The results were that half of the responses to verbs are nouns. The noun-verb pairs that emerge from association experiments shows that verbs are related to other verbs in semantic memory. The relations organizing the verb lexicon in Wordnet serve to link some verbs and verb concepts in speaker's minds. This notion is supported by the results from these experiments.

2.3.6 OTHER MODELS OF THE VERB LEXICON

Wordnet contains much of the information that is visible in other models of the verb lexicon. Its information could be augmented without changing its weblike design. This will include semantic field analysis, that the meaning of a word in a given field emanates from similarity and contrast relation between it and other words in field. In Wordnet, semantic field analysis employ both paradigmatic and syntagmatic relations.

2.3.6.1 Schemata and frame analysis

A purely relational analysis was considered insufficient to describe speaker's representation of the verb lexicon. According to Fellbaum (1998) Schank and Abelson (1977) proposes a theory based on knowledge schemata, i.e. words and concepts share membership in common frames or schemata. He further states that Fillmore and Atkins (1992) proposes a "frame-based" dictionary in which word senses are linked with cognitive structures. They discuss the commercial transaction from in which they distinguish categories (money, buyer, seller, and goods) and the verbs (buy, sell, change, costs, etc)

associated with this frame. According to Fellbaum (1998) “buy” and “pay” are related in Wordnet by entailment. In that case the opposition relation between verb pairs like “buy” and “sell” would be reflected in the reversal of the noun arguments as well.

2.3.6.2 Compositional analysis

This verb semantic approach was noticed after early attempts at semantic decomposition was criticised as an inadequate theory of semantic representation and was lately abandoned. The meaning of a verb in terms of its lexical conceptual structures (LCS) was similar which represent more recent approaches to verb semantics (Fellbaum: 1998). An analysis of verb in terms of their LCS reveal patterns of lexical structure and their syntactic behaviour. Even though the relational analysis adopted in Wordnet shares some aspects of decomposition, Wordnet’s approach take only other verbs as the smallest unit of analysis. Some categories that make up LCS, as verb concepts (change; go, stay, be, do and other); and they correspond to high-level verbs in the Wordnet hierarchies. The conceptual category “cause”, which is one element of verb's LCS’s has the status of semantic relation in Wordnet. Semantic components of some verbs found in many verbs of motion, according to Fellbaum (1998), are implicit in the troponymy relation. The representation of verb meaning in the Wordnet shares some aspects of a compositional analysis even though their treatment of verbs differs formally.

2.3.6.3 Lexical subordination

This means that many verbs are semantically composed of other verbs. According to Fellbaum (1998) Levin and Rapport (1988) argued that different types of extended meaning constructions form a natural class of verbs. In Wordnet the compositional meanings of verbs like “brush” and “nod” are represented as distinct senses of these polysemous verbs. Verbs of communicating bodily gestures (nod, shrug, and wink) are examples of verbs with extended meaning in their membership in a class of such verbs as well as the polysemy of the individual verbs.

2.3.7 SYNTACTIC REGULARITIES AND SEMANTIC RELATIONS

There are many syntactic properties, which can be revealed by an analysis of verbs in terms of their semantic and conceptual components. Verbs with identical LCS in specific

meaning components tend to share syntactic behaviour. According to Fellbaum (1998), Levin (1993)'s study of semantically verb classes shows how syntactic patterns systematically accompany the semantic classification. Many of his verb classes share certain syntactic properties and also constitute verb "tree" in Wordnet.

2.3.7.1 Distinguishing subtrees

What is needed here is the sub classification of creation verbs that distinguishes verbs referring to acts of mental creation from those denoting creation from raw materials. According to Fellbaum (1998), mental creation verbs do not participate in syntactic alternation, though they may be semantically similar. In Wordnet they are distinguished by means of two generic verb concepts "create from raw material" and "create from mind". This shows how syntactic differences between apparently similar verbs can be represented in Wordnet.

2.3.7.2 The verb's position within a tree structure

The semantic relation in verbs can provide clues to the verb's syntactic behaviour. A number of a class of English verbs which has been studied, that participate in the transitive-intransitive alternations showed that they fall into two syntactic classes. A transitive class and intransitive class. The semantics of the troponyms that appears in each case provide a classification of two distinct hierarchies matching the syntactic distinctions between the two verb groups.

2.3.7.3 Restrictions on middle construction

The verb lexicon also assists in determining syntactic constraint that appears to be semantically based in terms of taxonomic trees. An adverb or adverbial is usually one of the requirements of the middle construction. This can lead to the relaxation of the adverb requirement. Synonyms are then regarded as troponyms or superordinate verbs that are semantically elaborated. A verb like "cook" has troponyms of "fry", "boil", "braise" and "microwave". This troponyms can occur in middles without adverbs, but the superordinate verbs must be accompanied by an adverb in the middle.

Fellbaum (1998) states that an adverb is needed in the middle when the verb is a basic-level verb referring to an expected property of the subject. The syntactic behaviour can be understood by viewing verbs in terms of semantic relations when transitive – intransitive alternations and adverb requirement in middle is demonstrated.

2.4 ARGUMENT STRUCTURE

2.4.1 ASSIGNMENT OF ARGUMENTS

There are two distinct lexical representations. The term “thematic role” is used ambiguously within these representations.

In the first instance, linguistic expressions such as NPs that are assigned θ - roles are called arguments. The potential arguments are the NPs and clauses, which have some sort of referential function: they have to refer to persons, things and places. In this usage the term θ – role is synonymous to the term argument. The lexical representation in this usage is a reflection only of a lexical-syntactic representation, i.e. predicate argument structure (PAS). The particular semantic relation between the argument and the predicate is thus not relevant. The θ – roles within this lexical representation are not referred to by any semantic labels, i.e. no mention is made of the semantic content of such θ – roles.

On the other side, the term thematic role may also name a specific semantic relationship, which an argument may bear to its predicate. Such a lexical representation refers to a lexical –semantic representation. There are various theories which refer to the semantic content of θ – roles. The theory developed by i.a. Jackendoff (1990) refers to the lexical – semantic representation as lexical conceptual structure (LCS).

In the lexical – syntactic representation the PAS of a verb indicates the number of arguments it takes. According to the number of arguments, which a predicate may take, it will be described as a one-place, two-place or three-place predicate. Each argument will have a specific variable corresponding to such an argument, or alternatively, such variables may have certain semantic labels such as agent, theme. The following verbs give an indication of the number of arguments it may take:

One-place predicate: **(1)** **fofa** : x (a variable)

Theme (a semantic label)

verb subcategorizes are theta positions, i.e. the verb assign a theta role to a position, it θ – marks that position. The arguments that appear in the position sub categorized by a verb are called internal arguments.

The internal NP arguments are assigned their roles in the syntax under government, i.e. the verb or preposition that assign a θ – role must govern such an internal NP argument. The external NP argument must be in relation of mutual C-command with the maximal projection of the verb.

The lexical representation of a verb must include a specification of how each NP argument is assigned its θ – role together with the number of arguments of each verb:

- (5) **Seha**: X < Y LOC Z (variables)
Agent < Theme LOC location > (semantic labels)

The verb “**seha**” may appear in the following sentence:

- (6) [Ntate] o seha [nama] [nkung]
(Father is cutting the meat from the sheep)

There are three variables in the structure in (5). The verb “**seha**” is thus a three-place predicate and these NP arguments are in brackets in (6).

The variables Y and Z or theme and location in (5) are inside the brackets and they represent the internal arguments. One internal argument (i.e. the underlined one in (5)) is a direct argument, and the other one Z is an indirect argument which is assigned its θ – role by a locative morpheme or a location preposition “**ho**”. This θ – role assigned its designated as LOC in (5). The manner of θ – role assignment must tell which variables in the PAS are direct, indirect, internal or external arguments.

The θ – role labels often indicated are agent, theme, experiencer, patient and others, and they have played a role in various grammatical rules and principles.

There seems to be no consensus about an appropriate set of θ – role labels and the criteria for determine what θ – role label an argument may have. A list of θ – role labels is inadequate as a lexical – semantic representation.

Jackendoff (1990) argued that a NP may bear more than one θ – role e.g. the subject of “**palama**” can be assigned both actor and theme θ – roles.

Another theta theory called a “bare” theta theory was developed by Williams (1994). This is also a lexical – syntactic representation because no mention is made of the semantic contents of the theta roles.

The theta theory is concerned with a relation between a verb and a noun – phrase: a NP in a sentence must be an argument of a verb. This relation between a verb and a noun phrase has three features:

(i) This relation is obligatory: a NP in a sentence must be an argument of some verb.

(7) **[Morena] o batla [nama]**
(The chief wants the meat)

The verb “**batla**” is a two-place relation where the NPs “**morena**” and “**nama**” are arguments of the verb “**batla**”. Some arguments must be obligatorily filled: the subject argument is always obligatory.

(8) **[Thabang] o a bina**
(Thabang is singing)

The object argument of a verb like “**bina**” need not to be specified, i.e. it may be optional:

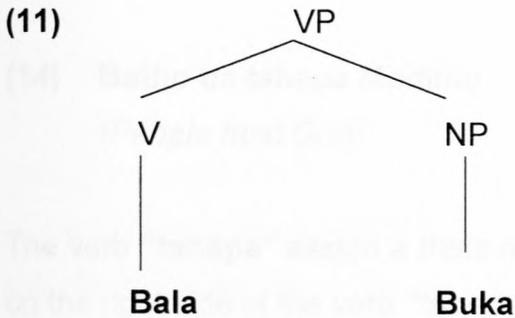
(9)a. **Ke a bina**
(I am singing)

(b) **Ke bina pina**
(I am singing a song)

(ii) The relation between a verb and a NP is unique. The theta criterion says that one NP may not be assigned two theta-roles: That is why this relation is unique:

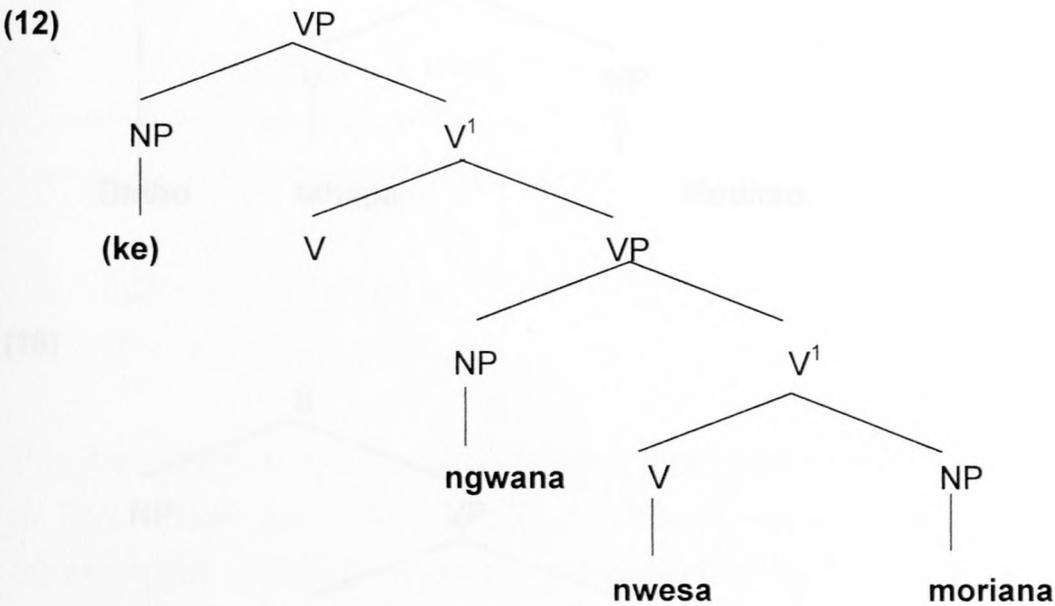
(10) **[Mme] o bala [buka]**
 (Mother read a book)

(iii) The relation between a verb and a NP is structurally local, i.e. the verb and its arguments must be sisters:



The NP “**buka**” which is a complement of the verb “**bala**” is also its sister.

But with a verb like “**nwesa**” which has two object arguments, the argument NPs may not be sister of the verb:



(13) **Ke nwesa [ngwana] [morianana]**
 (I make the child to drink medicine)

The NP “**ngwana**” in (13) is not a sister of V but of V¹. This relation is thus not local while the relation between “**nwesa**” and “**moriana**” is local. “**Moriana**” is a sister of the V “**nwesa**”. In this case the M-command is necessary; a verb and its arguments must be dominated by the same maximal projection, i.e. the VP is a maximal projection and it dominates the verb “**nwesa**” and its two arguments “**ngwana**” and “**moriana**”.

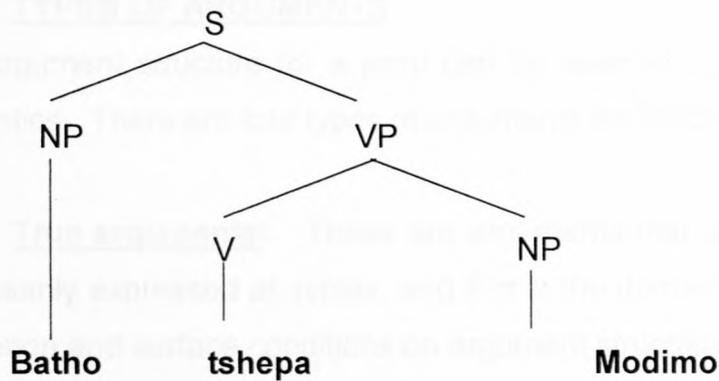
The theta directionality parameter is another issue, which is brought up by Williams (1994) with regard to the theta theory: it states that lexical theta-role assignment takes place from left to right:

(14) Batho ba tshepa Modimo
(People trust God)

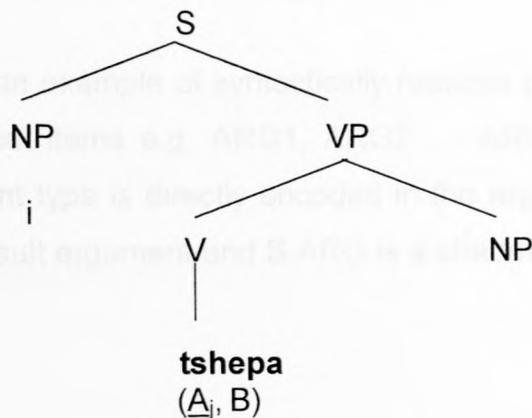
The verb “**tshepa**” assign a theta-role to its complement “**Modimo**”. This complement is on the right side of the verb “**tshepa**”.

The external argument: Subject argument is a sister of the maximal projection of the verb:

(15)



(16)



In (16) the verb “**tshepa**” which is the head of the VP, assigns two θ – roles, i.e. A and B where A is the external argument. This argument is always underlined. This A is then co-indexed with the VP, i.e. A_j and VP_j . This means that the VP binds the A role of the head verb “**tshepa**”. The subject NP can now bear the A argument of “**tshepa**”. This θ – role assignment relation is a binding relation between an argument of the verb (A) and the external argument of the head of the NP. The second complement of this θ – role assignment relation is the ordinary relation between the projection of the predicate, i.e. the VP and an argument which is the subject argument in this case.

Another instance of θ – role assignment, i.e. clausal predication which is NP VP, is the predication. The θ – role assignment between the verb “**tshepa**” and its object is lexical theta role assignment. The theta role assignment between the VP and the subject Np is phrase θ – role assignment: the VP assigns a theta role to the subject argument because the NP is a predicate. The verb and the VP are the θ – role donors and the NPs are θ – role receivers. Predicates may thus be θ – role donors while referential NPs are θ – role receivers. Adjectives and prepositions may also be θ – role donors.

2.4.2 TYPES OF ARGUMENTS

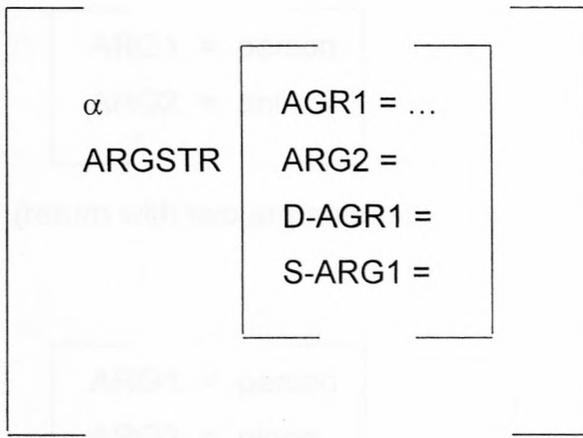
The argument structure for a word can be seen as a minimal specification of its lexical semantics. There are four types of arguments for lexical items. They are:

(a) **True arguments**: These are arguments that define those parameters which are necessarily expressed at syntax, and this is the domain that is generally covered by the θ – criterion and surface conditions on argument structure e.g.

(17) [**batho bana**] ba hodile
(*These people are old*)

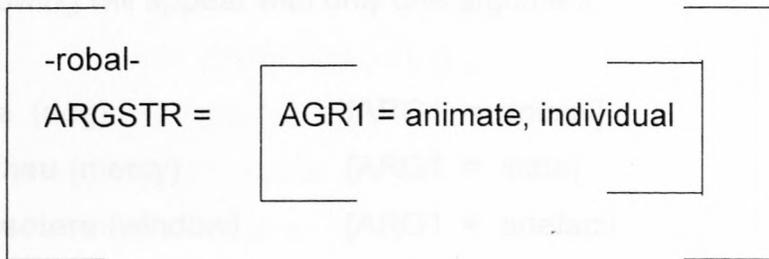
This is an example of syntactically realized parameters of the lexical item. The argument for lexical items e.g. ARG1, ARG2ARG_n are represented in a list structure where argument type is directly encoded in the argument structure i.e. ARGSTR, where D-ARG is a default argument and S-ARG is a shadow argument. This can be expressed like this:

(18)



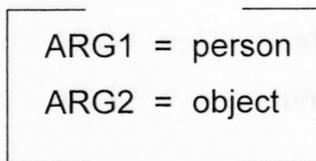
The verb *-robal-* assign one argument only and this argument has the following two features because only animate being is able to sleep.

(19)



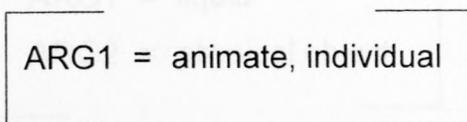
A verb such as “**nahana**” (think) will need a person as subject and any object as complement:

(20)



Thimula (sneeze) with one argument:

(21)



hama (milk) with two arguments:

(22)

ARG1 = person ARG2 = animal

Kgutla (return with two arguments:

(23)

ARG1 = person ARG2 = place

When coming to the nouns, we learn that the argument structure of nouns depends entirely on the number of different senses, which a specific noun may have. Nouns such as the following will appear with only one argument:

- (24) **Ntja** (dog) : [ARG1 = animal]
mohau (mercy) : [ARG1 = state]
fensetere (window) : [ARG1 = artefact]
mokokotlo (back) : [ARG1 = limb]

The noun “**lemati**” (door) may refer either to the opening through which one may enter or it may refer to the actual door itself:

(25)

ARG1 = Physical object ARG2 = a perture
--

A noun like “**jwala**” (beer may refer to the liquid itself or the bottle:

(26)

ARG1 = liquid ARG2 = physical object

(b) **Default arguments:**

These are parameters, which participate in the logical expressions in the qualia, but are not expressed syntactically, e.g.

- (27) (i) **Ka betla Mptjhane ka sefate**
(I carved an African spoon out of wood)
- (ii) **Ka aha lesaka ka majwe**
(I built a kraal out of stones)

In (27) we have examples of material / product alternations because the material (**sefate, majwe**) is optional, its status as an argument is different from the created object (**Mptjhane, lesaka**). These optional arguments in alternations pair above are default arguments.

Default arguments as in (27) can be satisfied by full phrasal expression as PP with “**ka**” as a phrase incorporated into a true argument (descriptive possession).

- (28) (i) **Ka betla [Mptjhane ya sefate]**
(I carved a wooden spoon)
- (ii) **Ka aha [lesaka la majwe]**
(I built a stone kraal)

Verbs like “**fihla**” (arrive) may also appear with default argument:

- (29) **Ka fihla [hae]**
(I arrived at home)

The locative phrase above is an example of a default argument.

The following representation is for the argument structure of verbs with default arguments with the verb “**-ah-**” (built) as an example:

- (30)
- | | |
|-------------------------|---|
| -ah-
ARGSTR = | ARG1 = animate, individual
ARG2 = artefact
D-ARG = material |
|-------------------------|---|

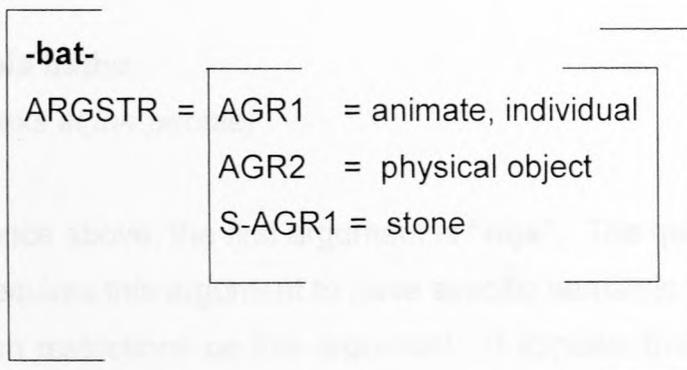
(c) Shadow arguments:

These are parameters, which are semantically incorporated into the lexical item. They can be expressed only by operations by sub typing or discourse specification. They often refer to semantic content that is not necessarily expressed in syntax. Here are some examples:

- (31) (i) **Ka ipata [ka lejwe] monwaneng**
(I hit myself with a stone on the finger)
- (ii) **Ka tima mollo [ka mokotla]**
(I extinguished the fire with the sack)
- (iii) **Ke tshetse metsi [ka kgalaseng]**
(I poured water into the glass)
- (iv) **Ke tla lefa koloi [ka dikgomo]**
(I will pay for the car with cattle)
- (v) **O mo amohele [ka atla tse mofuthu]**
(Welcome her with warm hands)

All the bracketed words in (31 i – v) above are shadow arguments. They are expressible only under specific conditions within the sentence itself namely when the expressed arguments stand in a sub typing relation to the shadow argument. In (31 i) the hitting could have been done by anything but the specific instrument is a stone and not e.g. a hammer. The same type of argument is noticeable in (31 ii – v); e.g. in (18 iv) the car could have been paid with anything but here specifically with cattle.

Shadow argument may be expressed as follows with the verb “-bat” in (31 i) above as an example:

(32)

(d) True adjuncts:

These are parameters, which modify the logical expression but are part of the situational interpretation, and are not tied to any particular lexical items semantic representation. These include adjunct expressions of temporal or spatial modification:

- (33) (i) **Ha re ya mmona [maobane]**
(We did not see him yesterday)
- (ii) **Ngwana o a kgasa [ka tlung]**
(The child is crawling in the house)
- (iii) **Ke dutse mona [kgwedi ya boraro]**
(I stayed here for three months)
- (iv) **O robotse [veke tse nne sepetlele]**
(He slept for four weeks in hospital)
- (v) **Moya o a foka [thabeng]**
(The wind is blowing on the mountain)

From (33) above all the bracketed words are true adjuncts. These arguments are associated with the verb classes and not individual verbs. The ability of these verbs to be modified by temporal expressions as in (33 i, iii and iv) or locative modifiers in (33 ii, iv and v) is inherent by virtue of the verbs classification as an individuated event.

2.4.3 SELECTION RESTRICTIONS

When a verb select certain arguments to appear with them, they also select semantic features which these arguments must have in order to appear with such a verb, e.g. the verb "**bohola**" will assign two arguments: The first argument will be assigned to the noun phrase in the subject position:

Ntja e-bohola batho

(The dog barks at the people)

In the sentence above, the first argument is "**ntja**". The question then is whether the verb "**bohola**" requires this argument to have specific semantic features, i.e. whether there are any selection restrictions on this argument. It appears that a dog can only do the act of barking. Thus, this argument will have a selection restriction of "**ntja**".

[ARG1 = **ntja**]

The second argument above is “**batho**” and the question is whether “**bohola**” requires any selection restriction on this argument. To answer this question, one should be able to say that if a dog barks, what is it that he barks at. One can then see that dogs may bark at anything, i.e. there may be no clear selection restriction on this argument:

[ARG2 = physical object]

2.4.4 COGNATE OBJECT

Cognate objects are non-arguments and thus adjuncts of the verb. Their adjunct status is determined by the semantic relation between the head nouns and the verb rather than as a lexical property of the head noun:

- (1) a. **O ne a tshaba [tshabo]**
(He feared a fear)
- b. **Ntate o nyetse [sethepa]**
(Father married a polygamous marriage)
- c. **Bana ba kgutsa [lerata]**
(The children are silent the noise, i.e. they stop being noisy)
- d. **Ke robetse [boroko bo monate]**
(I slept a nice sleep)

There are some verbs, which seem to be related to those intransitive verbs in (1) but in this case the cognate object is not an adjunct but a full argument of an intransitive verb. This can be seen when we try to use a clitic with these intransitive verbs to effect objectival agreement – in each case the verb accept the clitic, i.e. in the (b) sentence:

- | | | | |
|--------|----------------------------|----|------------------------------|
| (2) a. | Ke bona [pono] | b. | Pono ka e bona |
| | (I – past – saw - vision) | | (Vision I – past – it saw) |
| | <i>(I saw a vision)</i> | | <i>(A vision I saw it)</i> |
| c. | Ka lora [toro] | | Toro ka e lora |
| | (I – past – dream – dream) | | (Dream I – past – it dream) |
| | <i>(I dreamt a dream)</i> | | <i>(A dream I dreamt it)</i> |

The verbs in (2) are intransitive verbs but with cognate object they have a transitive reading taking argument NPs. The problem is to distinguish between those intransitive verbs in which a cognate object is an adjunct and the intransitive verbs in (2) in which a cognate object is not an adjunct. It seems then as if the verbs in (2) have to be distinguished from their intransitive counterparts in the predicates taking two thematic roles, while their intransitive counterparts are one-place predicates.

Here are some examples of such sentences with cognate objects as in (2):

(3) a. **O nyala sethepa**

(He marry a polygamous marriage)

b. **O robala boroko**

(He sleep a sleep)

c. **O lwana ntwá**

(He fight a fight)

2.4.5 INALIENABLE POSSESSIVE

this syntactic phenomenon is also known as the syntax of body parts. An inalienable body part may be used as an adjunct of an intransitive verb. The inalienable possession, which started off as a possession in the subject of the intransitive verb, ended up as adjunct of that verb. This adjunct shares the theta-role to be found in the subject position, having no theta-role of its own.

(1) a. **[Letsoho la ka] le ruruhile**

Ke ruruhile [letsoho]

(MY arm is swollen)

b. **[Leoto] la monna le shwele**

Monna o shwele [leoto]

(The man's leg is paralyzed)

c. **Ke fokotse [mmele]**

(I am weak)

d. Ke holofetse [letsoho]*(My arm is crippled)*

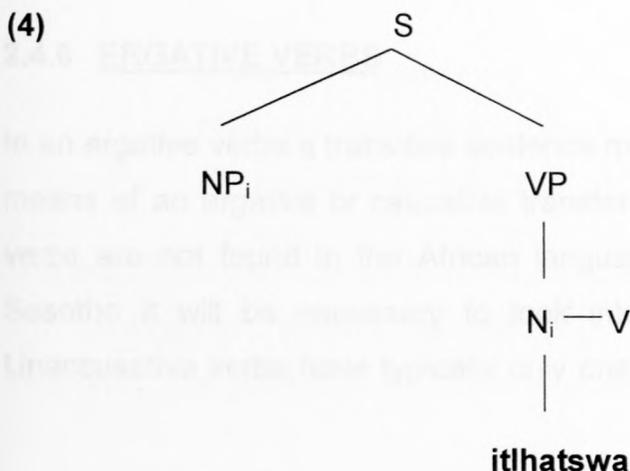
The following are some examples with transitive verbs:

(2) a. Ke rata [sefahleho sa morwetsana]*(I like the face of the girl)***b. Ke rata [morwetsana] [sefahleho]***(I like the girl's face)***c. [Morwetsana]_i ke mo_j rata [sefahleho]****d. [Sefahleho]_i ke se_j rata [morwetsana]**

A further development in the syntax of body parts is concerned with the use of the reflexive morpheme **-in-** together with body parts. It is accepted that reflexives are to be treated in the same way as the reciprocal affix **-an-**, i.e. they are dependent on argument binding and not syntactic binding. They will thus have no syntactic NP as object:

(3) [Bana]_i ba a _i - tlhatswa*(The children wash themselves)*

This sentence will have the following structure:



This reflexive IN may be found regularly with body parts:

(5) a. **Ke itsheha monwana**

(I cut myself a finger)

b. **Ke ikuta moriri**

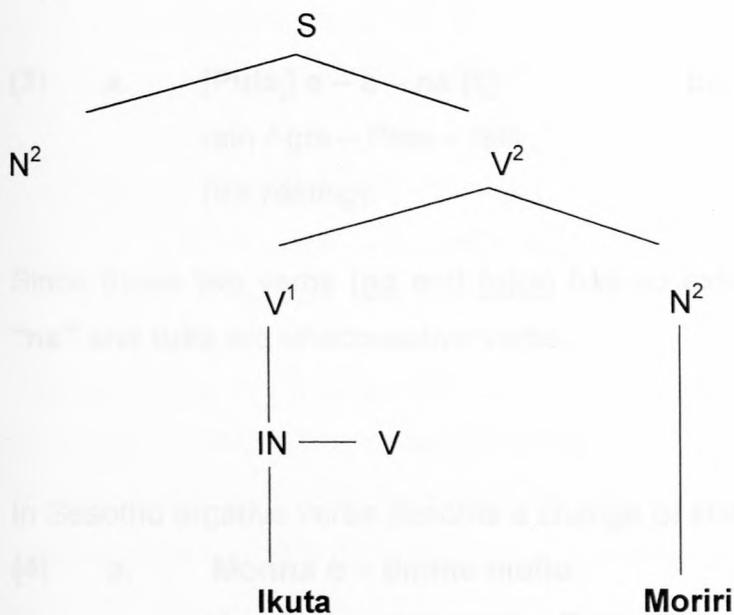
(I am cutting myself the hair)

c. **Ke ipjhemola meno**

(I draw myself teeth)

The body part in (5) is also an adjunct but sharing a thematic role with the reflexive:

(6)



2.4.6 ERGATIVE VERBS

In an ergative verbs a transitive sentence may be derived from an intransitive sentence by means of an ergative or causative transformation. It is therefore assumed that ergative verbs are not found in the African languages. To understand ergative construction in Sesotho it will be necessary to look into the issue involved in unaccusative verbs. Unaccusative verbs have typically only one internal argument and no external argument.

These verbs include weather verbs, stative verbs and verbs that are typical in body syntax e.g.

- (1) a. **Pula e – a – na**
- rain Agrs – Pres – rain
(*It is raining*)
- b. **Mollo o – a – tuka**
fire Agrs – Pres – burn
(*The fire's burning*)

When the above sentences are represented in the d-structure, it becomes clear that there is no external argument for them e.g.

- (2) a. **[e] na [pula]**
"rain rain "
- b. **[e] tuka [mollo]**
"burn fire"

The structure for these sentences above also shows that both "**pula**" and "**mollo**" has been moved to the subject position but they had left a trace (**t**) behind.

- (3) a. **[Pula_j] e – a – na [t_j]**
rain Agrs – Pres – rain
(*It's raining*)
- b. **[Mollo_k] o – a – tuka [t_k]**
fire Agrs – Pres – burn
(*The fire is burning*)

Since these two verbs (**na** and **tuka**) has no external argument, it is clear that the verb "**na**" and **tuka** are unaccusative verbs.

In Sesotho ergative verbs denotes a change of state e.g.

- (4) a. **Monna o – timme mollo**
Man Agrs – extinguish – Perf – fire
(*The man extinguished the fire*)
- b. **Mollo – o – timme – e**
Fire Agrs – extinguish – Perf
(*The fire is extinguished*)

The sentence (4a) represents the transitive half of ergative pairs in (4a,b). In the case of (4b) the external argument "**monna**" of (4a) has been eliminated from the theta-grid of the verb **tim-**. The subject position is now empty, which allows "**mollo**" (fire) to be moved into

this empty position as in (4b). Their verb **tim-** therefore behave exactly like an unaccusative verb. It is clear that “**mollo**” (fire) is not the external argument.

Ergative predicates in Sesotho indicates a change of state and they may be **ideophones** “**kope**”, “**tswape**” in:

- (5) a. **Ntja e re tswape mohatla**
 dog Agrs – re rolled tail
(The dog rolled its tail behind)
- b. **Mohatla o – re tswape**
 tail Agrs – re – perf – roll
(The tail is rolled behind)
- c. **Ntate o – re kope senotlolo**
 Father Agrs – re lock key
(Father locked the key)
- d. **Senotlolo se – re kope**
 Key Agrs – re – perf lock
(The key is locked)

The sentences in (5) are ergative pairs, which will receive the same treatment in syntax as the ergative pairs in (4). In Sesotho ideophones appear as predicates only with the verb “-re’ which is related with the verb “-re” (say). This verb is the carrier of inflectional while the ideophone itself determines the argument structure.

There is a clear pattern between unaccusative and ergative verb in Sesotho, Setswana and Northern Sotho. In both cases there is clear evidence that these verbs have the status of unaccusative verbs. This is also evident from the semantics of these verbs: the semantic feature cause which is present in (4a) is absent in (4b) and (1).

In unaccusative verbs there is only an internal argument whereas in ergative pairs the transitive counterpart has an external and an internal argument while the intransitive counterpart is an unaccusative verb with only an internal argument as far as the predicate argument structure of these verbs is considered.

Ergative pairs as in (4a,b) exhibit a causative / inchoative alternation (change state). In (4a) the ergative verb has a causative interpretation while the unaccusative verbs in (1) and (4b) has an inchoative interpretation. This the verb in **-tim-** (extinguish) in (4b) has the interpretation <Y comes to be extinguish >.

Even though ergative pairs are not as frequent as in languages like English, in Sesotho we have the following verbs, which may appear in ergative pairs:

- (6)
- **phalla** (overflow)
 - **tlala** (be full)
 - **tswa** (go out)
 - **tiya** (tie up)
 - **nkgga** (smell) etc.

2.4.7 VERBAL SUFFIXES AS CONTROLLERS OF TRANSITIVITY

The verbal derivational suffixes **-l-** and **-h-** often alternate as transitive and intransitive verbs. These verbs are similar to ergative verbs, in that their verbal root assign two internal thematic roles: an agent, patient or theme. These verbs with the **-l-** (transitive) and **-h-** (intransitive) alternation occur in sentences which have a similar derivation occur to the ergative pairs. These verbs differ from ergative verbs in that overt morphemes determine the transitivity of the verb. In some instances the verbal root of these verbs occur as an ideophone, while in other instances, the verbal root cannot occur as a verb independently. Here are some examples:

- (1) a. **Mosadi o tabo - l - a mose** (b) **Mose o - a - tabo - h - a**
Woman Agrs – tear dress *dress Agrs – is – torn*
 (The woman tears the dress) (The dress is torn)

The transitive suffix **-l-** bears the semantic feature Causative whereas the intransitive suffix **-h-** has an Anticausative semantic feature.

(1a) contains transitive counterpart of these verbs, characterized by the suffix **-l-** correspond to the ergative verb sentences previously discussed, whereas the example sentences in (1b) with the intransitive counterpart of these verbs, characterized by the suffix **-h-** correspond to the ergative verb sentences also discussed previously. The deep-structure representation of the sentences containing the transitive (-l-) counterpart of these verbs is as follows:

(2) [NP] INFL [VP **tabola mosadi mose**]

“tear” “woman” “dress”

Sentences such as (1a) with the transitive counterpart (-l-) of these verbs are derived by movement of the agent argument to the subject position. Thus these sentences have the following S-structure representation:

(3) [**Mosadi_i**] INFL [VP – **tabola t_i mose**]

The intransitive suffix **-h-** has the property of controlling the agent argument. It suppresses the agent argument and prevents it from occurring, similar to the suppression of the agent argument by the passive morpheme **-w-**.

Sentence constructions with the intransitive counterpart as in (1) have the following deep-structure representation.

(4) [NP] INFL [VP **-taboha mose**]

“be torn” “dress”

The patient / theme argument is moved to the subject position yielding the following s-structure:

(5) [**Mose_i**] INFL [VP **taboha t_i**]

“dress” “be torn”

The transitive-intransitive alternation correlated with the suffixes **-l-** and **-h-** is crucially associated with the case-assignment properties. The intransitive suffix **-h-** is crucially associated with the case-assignment features, that necessitating movement of the patient / theme object argument in (4) to the subject position where it can be assigned nominative

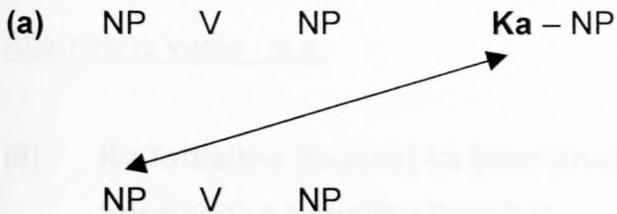
case by the agreement element of infl (ection). By contrast the transitive suffix **-l-** bears accusative case assignment features, thus it assigns case to the patient / theme NP in (3).

Other verbs, exemplifying the transitive –intransitive alternation associated with the suffixes **-l-** and **-h-** respectively, they are:

- (6) **- tabola** “break off” **-taboha** “burst”
 -kgoala “break off; “stop” **-kgoaha** ‘be broken off’, “stopped”
 -arola “separate”, “part” **-aroha** “be separated”, “be parted”

2.4.8 INSTRUMENT – SUBJECT ALTERNATION

This is one of the oblique subject type which has been characterized as an instrument. There is also distinction between an enabling instrument (which cannot turn as a subject) and intermediary which can. Therefore whether an instrument may turn up as subject depends both on the verb and the choice of instrument. In this regard the NP which is a complement of the instrumental preposition –“**ka**”- is assigned a theta-role of instrument by –“**ka**”-. This NP may appear as subject of a sentence.



In this new position it still has the interpretation of instrument, but it is now an external argument which is assigned by the verb phrase via predication. This alternation may appear with:

Verb of state: e.g.

- (1) **Ke thubile [fesetere] ka [lejwe]**
 [Lejwe] le thubile [fesetere]
 (*The stone broke the window*)

- (2) **Ke kapile [patsi] ka [selepe]**
[Selepe] se kapile [patsi]
(An axe splitted the wood)

Verb of bend: e.g.

- (3) **Ke kobile [terata] ka [tang]**
[Tang] e kobile [terata]
(The pliers bent the wire)

Cook verbs: e.g.

- (4) **Ke phehile [mahe] ka [pane]**
[Pane] e phehile [mahe]
(The pan cooked the eggs)

- (5) **Ke hadikile [nama] ka [pitsa]**
[Pitsa] e hadikile [nama]
(The pot roasted the meat)

Alternating verbs : e.g.

- (6) **Ke fodisitse [leqeba] ka [morianana]**
[morianana] o fodisitse [leqeba]
(The medicine healed the wound)

- (7) **Ke bonesa [lebhone] ka [mollo]**
[Mollo] a bonesa [lebhone]
(The matches lighted the lamp)

The instrument: e.g.

- (8) a. **[Monna] o ptjhatla [fesetere] [ka hamore]**
 b. *(The man break the window with the hammer)*

b. **[Hamore] e ptjhatla [fesetere]**

(The hammer break the window)

In this sentence (8) “**hamore**” (hammer) is a complement of the preposition “**ka**” which assign a θ – role to “**hamore**”. The NP “**hamore**” has the interpretation of instrument and may appear as the subject to the sentence:

(9) **[Hamore] e ptjhatla [fesetere]**

(The hammer break the window)

Cause:

[Ka + NP]

(10) **[Morwetsana] o thuba setswalle [ka ntwá]**

(The girl broke the friendship because of the fight)

“**Ntwa**” is a complement because of the interpretation “**ka**” which assign a θ – role to “**ntwa**”. The NP argument “**ntwa**” is interpreted as cause and may appear as the subject of the sentence because the object has the feature [ABSTRACT].

(11) **[Ntwa] e thuba setswalle**

(The fight broke the friendship)

In this sentence “**ntwa**” is the subject argument of the sentence, which still has the interpretation of cause. This construction of subject alternation may appear with the following verbs:

Break verbs:

(12) a. **[Moshemane] o robile matla a morwetsana [ka dipuo]**

(The boy broke the girl's strength because of the talks)

b. **[Dipuo] di robile morwetsana matla**

(The talks broke the girl's strength)

- (13) a. **[Thabo] a tjhwatlile pelo [ka lefu]**
(Thabo broke the heart because of the death)
- b. **[Lefu] le tjhwatlile pelo**
(The death broke the heart)

Alternating verbs:

- (14) a. **[Monna] o tletse mashano a mangata [ka dipuo]**
(The man has many lies through his talks)
- b. **[Dipuo] di tletse mashano**
(The talks are full of lies)

[Ka + infinitive]

Break verb:

- (15) a. **[Morwetsana] o thuba setswalle [ka ho seba]**
(The girl broke the friendship because of gossiping)
- b. **[Ho seba] ho thuba setswalle**
(Gossiping broke the friendship)

[Ka + hore – clause]

Break verb:

- (16) a. **O thuba setswalle [ka hore a se tshepahale]**
(He broke the friendship because of his unfaithfulness)
- b. **[Hore a se tshepahale] ho thuba setswalle**
(Being unfaithful broke the friendship)

Alternating verbs:

- (17) a. **O baka mathata [ka hore a se mamele dikeletso]**
(He creates problems because he does not want to be advised)
- b. **[Hore a se mamele dikeletso] ho baka mathata**
(That he does not want to be advised, creates problems)

Manner:**[Ka + NP]**Break verbs:

- (18) a. **Ke thubile diphaphang [ka tsela ena]**
(I broke the differences in this way)
- b. **[Tsela ena] e thubile diphaphang**
(This way broke the differences)

Alternating verbs:**[ka + infinitive]**

- (19) a. **Ke rarolotse bothata [ka ho potlaka]**
(I solved the problem quickly)
- b. **[Ho potlaka] ho rarolotse bothata**
(Being quick solved the problem)

2.5 EVENT STRUCTURE

There are three types of aspectual class, i.e. state, activity and event. The last class which is the event can be broken down into accomplishment and achievement events, e.g. in the verb “**tsamaya**” in sentence (1a) denotes an activity of unspecified duration. It does not convey information regarding the temporal extent of the activity although deictically it is an event in the past, which did terminate.

- (1) a. **Thabo o tsamaile maobane**
(Thabo walked yesterday)
- b. **Thabo o tsamaetse ha bona maobane**
(Thabo walked to his home yesterday)

Sentence (1a) denotes an activity. Sentence (1b) convey the same information as (1a) with additional constraint, that “**thabo**” terminate his activity of walking at his home. Although not making explicit reference to the temporal duration of the activity, (1b) does not assert that the process has logical culmination, whereby the activity is over when “**Thabo**” is at home. This sentence denotes an accomplishment event. There are other examples of accomplishment event such as “**aha**”, “**qhala**” etc. because there is a logical culmination to the activity performed.

- (2) a. **Thabo o aha mokhukhu**
(Thabo built a shack)
- b. **Thabo o qhadile tafole**
(Thabo destroyed the table)

In (2a) the existence of the shack is the culmination of Thabo’s act, while in (2b), the non-existence of something denotable as table is the direct culmination or consequence of his act. Creation verbs are the best example of accomplishments. Verbs such as “**bapala**” permit both activity usage and accomplishments usage depending on the complete structure. In the following sentences: (3a) shows activity usage and (3b) shows an accomplishment usage.

- (3) a. **Thabo o bapetse bolo [nako etelele]**
(Thabo played soccer (for a long time))
- b. **thabo o bapetse bolo [metsotso e leshome]**
(Thabo played soccer in ten minutes)

The last conventional aspectual classification is that of achievement. Achievement is an event that result in a change of state, just as an accomplishment does, but where the change is thought of as occurring instantaneously. For an example, in sentence (4a), (4b) and (4c) the change is not a gradual one, but something that has a point-like quality to it. Hence modification by point adverbial such as 4pm is suggestive that a sentence denotes an achievement.

- (4) a. **Monaheng o shwele ka 4.**
(Monaheng died at 4pm)
- b. **Thabo o fumane tjhelete ka 4.**
(Thabo found the money at 4pm)
- c. **Thabo o fihlile thapama**
(Thabo arrived at noon)

The point adverbial modification is not restricted to achievement it can also indicates the starting time of an event of some specific duration. The pressure of a bare plural objects shifts the interpretation of a typical telic (or completive) event to an unbounded process, just like in (5a) and (5b) below:

- (5) a. **Thabo o jele dipompong**
(Thabo ate sweets) (activity)
- b. **Thabo o jele pompong**
(Thabo ate a sweet) (accomplishment)

When coming to the issue of states, we can distinguish between two types of stative predicates i.e. individual-level and stage-level. Predicates such as tall, lazy, intelligent

and thin are thought of as properties that an individual retains, more or less, throughout its life-time, and can be identified directly with an individual. These are individual-level predicates. But properties like hunger, sick and clean are usually identified with non-permanent states of individuals, and have been called stage-level predicates.

Individual level predicates may appear in the present tense and may be verbal, adjectival or relative predicates e.g.

Adjectives: **-holo** (old); **-kgutshwane** (short); **-telele** (long)

Nominal: -relative stems: **-sweu** (white); **-tsho** (black)

Verbs: **-hlanya** (be mad) **-pota** (be crazy)

Stage-level predicates appear mostly in the perfect tense with a present-tense meaning e.g. “**-fokotse**” (thin); “**-nonne**” (fat); “**-lapile**” (hungry) etc. But there are also stage-level predicates which may appear in the present tense: e.g. ‘**kula**’ (be sick); “**-tsola**” (be naked) etc.

Event types and their treatment in a lexicon:

Events can be sub-classified into three sorts: processes (activity); states and transitions (accomplishments and achievements).

State (s): This is a single event, which is evaluated relative to no other event.

Examples: **kula, rata, tseba**

(1) a. **Ngwana o a kula**

(The child is sick)

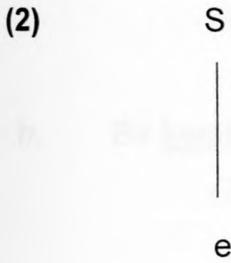
b. **Ke rata bana**

(I love children)

c. **Ke tseba ho bina**

(I know how to sing)

From (1a-c) above examples all those underlined denotes a stated event. This can be structurally represented as in (2) below:

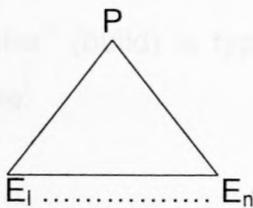


Process (P): This is a sequence of events identifying the same semantic expression:

Examples: **hula, kganna, matha**

- (3)
- a. **Dipere di hula koloji**
(The horses drag a car)
 - b. **banna ba mathela ho hlola**
(Men are running to win)
 - c. **Modisa o kganna koloji**
(The herdboyc drives a car)

In (3a-c) above, “**hula**”, “**kganna**” and “**matla**” are verbs that denotes a process event. This can be structurally represented as in (4):



In this structure P is assumed to be a process verb, then if the semantic expression P¹ identified with P is true at an interval I, then P¹ is true for all subintervals of I larger than a moment.

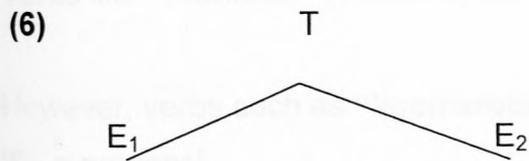
Transition (T): This is an event identifying a semantic expression, which is evaluated to its opposition.

Examples are: **-fa, kwala, aha**

(5) a. **Mme o fa ngwana nama**
 (Mother gives the child meat)

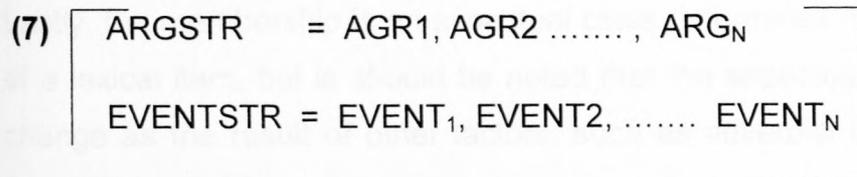
b. **Ba kwala dikolo hosane**
 (They close schools tomorrow)

c. **Ntate o aha lesaka**
 (Father build the kraal)

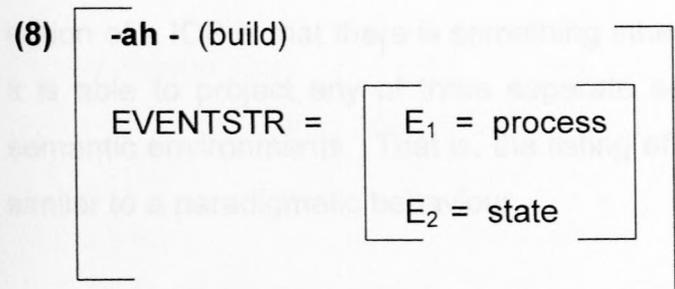


Where E is a variable for an event type.

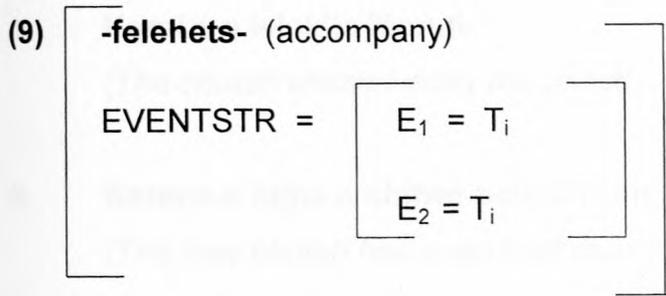
The following is a listing of an event structure represented as a listing of event variables:



The verb “**aha**” (build) is typically analyzed as involving a development process and a resulting state:



While the verb “**felehetsa**” permits either telic events, transition, or processes.



A verb like “**nahana**” (think) will have one event: $[E_1 = \text{state}]$

Verbs like “**hlahloba**” (examine) will also have one event: $[E_1 = \text{process}]$

However, verbs such as “**kgomaretsa**” (adhere) may have two events:

$[E_1 = \text{process}]$

$[E_2 = \text{state}]$

In this regard the process will change something into state, i.e. two things are now connected, thus referring to state.

Lastly, the membership in an aspectual class determines much of the semantic behaviour of a lexical item, but it should be noted that the aspectual properties of a sentence may change as the result of other factors, such as adverbial modification (both durative and frame), the structure of the NP in an argument position (e.g. definite vs bare plural), or the presence of a prepositional phrase.

2.6 LEXICAL CONCEPTUAL PARADIGM

This is the ability of a lexical item to cluster multiple senses. The intuition behind the notion of a ICP is that there is something inherent in the semantics of a noun such as that it is able to project any of three separate senses of the noun in distinct syntactic and semantic environments. That is, the listing of the noun in these separate environments is similar to a paradigmatic behaviour.

The ICP provides a means of characterizing a lexical item as a meta-entry. This turns out to be very useful for capturing the systematic ambiguities, which are so pervasive in

language. Nouns as “**kereke**” appear in many semantically distinct contexts, able to function sometimes as organization, or a physical object.

a. Kereke e lelekile Moruti

(The church chased away the priest)

b. Kereke e ntjha e ahilwe pela toropo

(The new church has been built near the town)

What the notion of an ICP allows us to do is to treat these not as distinct senses, but as logical expressions of different aspects to the meta-entry for church. Among the alternations that can be analyzed in this way are the following nominal alternations that exhibit logical polysemy:

- | | | | |
|----|------------------------------------|-----------------|---------------|
| a. | Count / mass alternations : | Nku | (sheep) |
| b. | Container/ containee alternations: | botlolo | (bottle) |
| c. | Figure / ground reversal: | lemati | (door) |
| d. | Product / producer diathesis : | koranta | (newspaper) |
| e. | Plant / food alternations: | meroho | (vegetables) |
| f. | Process / result diathesis: | hlahlobo | (examination) |
| g. | Place / people diathesis: | toropo | (town) |

Syntactic information is inheritable between lexical items. This is illustrated clearly by the lexical conceptual paradigms. The class of process/result nominals such as “**hlahlobo**” (examination), illustrate this point. These nominals are ambiguous between a process interpretation (the act of examining) versus the resulting entity or state (the examine which result). This is a property of the whole paradigm indicating that the alternation can be captured by an ICP. Here are some of the nouns that may have various senses:

Thaba (mountain)

[Mountain, large heap – ICP]

Jwala (beer)

[Liquid, physical object – ICP]

Lemati (door)

[Physical object – aperture – ICP]

Verbs may also have various meanings:

Hlahloba:

[Examine, scrutinise – ICP]

Hadika:

[Fry, roast, grill – ICP]

2.7 LEXICAL INHERITANCE STRUCTURE

A lexical inheritance structure is when the semantic concepts are organized hierarchically into levels from specific to generic. Each of these generic concepts is treated as the unique beginner of a separate hierarchy. These hierarchies are inheritance systems, hence there is no reason to limit the number of levels they might contain. Here are some examples:

For nouns we have:

- Jwala** (beer) - liquid, intoxicating, food
- Lefielo** (broom) - artefact, household, broom
- Lengau** (leopard) - carnivore, wild animal, vertebrate, animal
- Ngaka** (doctor) - doctor, professional, medical workers, person
- Mohofe** (poorman) - poor, person, wealth

For verbs we have:

- Utswa** (steal) - steal, remove, contact
- Tsoha** (fear) - fear, experience
- Phela** (live) - live, existence
- Hloma** (plant) - plant, putting

CHAPTER THREE

BREAK VERBS

3.1 AIM

Break verbs can appear either as transitive or intransitive verbs or as both transitive / intransitive, but with a different form.

These verbs may be divided into five subgroups according to the meaning of the verbs. These subgroups will be defined and one example of a sentence will be given with each break verb. Break verbs in Sesotho may be classified into the four groups considering the syntactic structures in which they may appear. An example will be given with each group. The first section below will concentrate on the transitive verbs. The intransitive verbs will be found in the second section. The third section will deal with the transitive / intransitive alternation verbs. Lastly the fourth section will concentrate on the ideophones and verbs derived from ideophones.

3.2 SEMANTIC CLASSIFICATION

Break verbs in Sesotho may be classified into five subgroups according to the meaning of the verbs:

3.2.1 BREAK (to become broken into pieces by force, intentionally or unintentionally)

Qhetsola / qhetsoha, re kamo / kamola / kamoha, kgoaha / kgoala, re qepho / qephola / qephoha, re shoqo / shoqola / shoqoha, pjhatla, thua / thuakana / thuakanya, roba / robakana / robakanya

Qhetsola / qhetsoha

[Ngwana] o qhetsola [kuku]

(The child break a piece of cake off)

[Kuku] e – a – qhetsoha

(A piece of cake is broken off)

Re kamo / kamola / kamoha

[Bohobe] bo re kamo!

(The bread breaks)

[Monna] o – kamola [bohobe]

(The man break the bread)

[Bohobe] bo – a – kamoha

(The bread breaks)

Kgaola / kgaoha**[Kolobe] e kgaola [ropo]***(A pig break the rope)***[Ropo] e – a – kgaoha***(A rope breaks loose)***Re qepho / qephola / qephoha****[Kopi] e – itse qepho!***(A cup breaks)***[Ngwana] o – qephola letlapa***(The child break the slate)***[Letlapa] le – a – qephoha***(The slate breaks)***Re shoqo / shoqola / shoqoha****[Lerapo] le – itse shoqo***(The strap broke loose)***[Ntate] o shoqola [lerapo]***(Father breaks the strap loose)***[Lerapo] le – a – shoqoha***(The strap breaks loose)***Pjhatla****[Monna] o pjhatla [galase]***(The man breaks a glass)***Thua / thuakana / thuakanya****[Mme] o thua [pitsa]***(Mother breaks a pot)***[Pitsa] e – a – thuakana***(A pot breaks into pieces)***[Mme] o thuakanya [pitsa]***(Mother breaks a pot into pieces)***Roba / robakana / robakanya****[Monna] o roba [molamu]***(The man break the stick)***[molamu] o – a – robakana***(The stick breaks into pieces)***[Monna] o – robakanya [molamu]***(The man break the stick into pieces)***Kgephola / kgephoha****[Ngwana] o – kgephola [kuku]***(The child breaks a piece of cake off)***[Kuku] e – a – kgephoha***(A piece of cake breaks off)***3.2.2 TEAR (to pull apart or into pieces by force, intentionally or unintentionally)****Tabola / taboha, mamola / mamoha, runsolla, hahola / hahoha, harola / haroha,****tamolla / tamoloha, tsekolla / tsekoloha, haraswana / haraswanya, tlerola / tleroha**

Tabola / taboha**[Mosadi] o – tabola [mose]***(The woman tears the dress)***[Mose] o – a – taboha***(The dress is torn)***Mamola / mamoha****[Mosadi] o – mamola [lesela]***(The woman tears a cloth)***[Lesela] le – a – mamoha***(A cloth is torn)***Runsolla****[Tau] e – runsolla [nama]***(The lion tears the meat)***Tamolla / tamoloha****[Nanyana] e – tamolla [noha]***(A bird tears the snake to pieces)***[Noha] e – a – tamoloha***(The snake is stretched out)***Tsekolla / tsekoloha****[Ntja] e – tsekolla [sekatana]***(A dog tears a rag into pieces)***[Sekatana] se – a – tsekoloha***(A rag is torn into pieces)***Haraswana / haraswanya****[Lesela] le – a – haraswana***(A cloth is torn into pieces)***[Ntja] e – haraswanya [lesela]***(A dog tears a cloth into pieces)***3.2.3 BURST (to break up open forcefully, intentionally or unintentionally)****Qhoma, qhashola / qhashoha, phatlola / phatloha****Qhoma****[Bomo] e – a – qhoma***(A bomb explodes)***Qhashola / qhashoha****[Monna] o – qhashola [mokotla]***(The man burst open a sack)***[Mokotla] o – a – qhashoha***(A sack is burst open)*

Phatlola / phatloha

[Nswana] o – phatlola [balone] *(The child burst a balloon open)*

[Balone] e – a – phatloha *(A balloon is burst open)*

3.2.4 SPLIT / CRACK (to break by dividing openly into parts either intentionally or unintentionally)

Peperana / peperanya, patsola / patsoha, ngamola / ngamoha, tletsola / tletsoha, re tletlere / tletlerana / tletleranya

Peperanya / peperana

[Mme] o – peperanya [lehe] *(Mother cracks an egg)*

[Lehe] le – a – peperana *(An egg cracks)*

Patsola / patsoha

[Monna] o – patsola [patsi] *(The man split a wood into pieces)*

[Patsi] e – a – patsoha *(A wood split into pieces)*

Ngamola / ngamoha

[Monna] o – ngamola [senotlo] *(The man cracks the key apart)*

[Senotlo] se – a – ngamoha *(The key cracks apart)*

Tletsola / tletsoha

[Mosadi] o tletsola [lepolanka] *(The woman cracks the plank apart)*

[Lepolanka] le – a – tletsoha *(The plank cracks apart)*

Re tletlere / tletlerana / tletleranya

[Katse] e – tletleranya [kobo] *(The cat cracks a blanket apart)*

[Kobo] e – a – tletlerana *(A blanket cracks apart)*

[kobo] e – re tletlere ! *(A blanket cracks)*

3.2.5 **CRUSH / SMASH** (to compress violently, press out of shape and to break into many pieces either intentionally or unintentionally)

Re bjara / bjaramana / bjaratsa, tlepenya, tlepetsa, pidila, re phetse / phetsela, tlenya, nepola, thuma / thumisa / thumakana / thumakanya, thuba / thubakana / thubakanya

Re bjara / bjaramana

[Mme] o – bjaratsa [pitsa]	<i>(Mother smashes a pot into pieces)</i>
[Pitsa] e – a – bjaramana	<i>(A pot smashes into pieces)</i>
[Pitsa] e – itse bjara!	<i>(A pot is smashed into pieces)</i>

Tlepenya

[Mme] o – tlepenya [lehe]	<i>(Mother crushes an egg)</i>
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Tlepetsa

[Batho] ba – tlepetsa [leshodu]	<i>(The people crushes a thief)</i>
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Pidila

[Mme] o – pidila [kokonyana]	<i>(Mother crushes an insect)</i>
-------------------------------------	-----------------------------------

Re phetse / phetsela

[Mme] o – itse [nta] phetse !	<i>(Mother crushed a louse violently)</i>
[Mme] o – phetsela [nta]	<i>(Mother crushes a louse violently)</i>

Thuma / thumisa / thumakanya / thumakana

[Mosadi] o – thuma [poone]	<i>(The woman grind mealies)</i>
[Mosadi] o – thumisa [poone]	<i>(The woman grind mealies very fine)</i>
[Mosadi] o – thumakanya [poone]	<i>(The woman grind mealies thoroughly)</i>
[Poone] e – a – thumakana	<i>(Mealies is ground thoroughly)</i>

Thuba / thubakana / thubakanya

[Mosadi] o – thuba [galase]	<i>(The woman smashes a glass)</i>
[Mosadi] o – thubakanya [galase]	<i>(The woman smashes a glass into pieces)</i>
[Galase] e – a – thubakana	<i>(A glass smashes into pieces)</i>

Nepola**[Mme] o nepola [motoho]***(Mother crushes soft porridge)***3.3 SYNTACTIC CLASSIFICATION**

The break verbs in Sesotho may be classified into the following groups if one considers the syntactic structures in which they may appear:

3.3.1 TRANSITIVE VERBS

These verbs appear with an external argument in the subject position and an internal argument, which is the object of the verb:

Runsolla**[Tau] e – runsolla [nama]***(The lion tears the meat)***Nepola****[Mme] o – nepola [motoho]***(Mother crushes soft porridge)***Pidila****[Ngwana] o – pidila [nta]***(The child crushes a louse violently)***Tlenya****[Ntate] o – tlenya [lamunu]***(Father crushes an orange)***Tlepetsa****[Batho] ba – tlepetsa [seemahale]***(The people smashes the statue)***3.3.2 INTRANSITIVE VERB**

There is only one intransitive break verb, i.e. a verb which appears with only an external argument:

Qhoma**[Qhomane] e – a – qhoma***(An explosive burst up)*

3.3.3 THE TRANSITIVE / INTRANSITIVE ALTERNATION

3.3.3.1 Verbs with the suffixes [-l-] and [-h-]

The suffix [-l-] indicates a transitive verb while the suffix [-h-] appears with intransitive verbs:

Qhetsola / qhetsoha

[Mme] o qhetsola [kuku] (Mother breaks a piece of cake off)
 [Kuku] e – a – qhetsoha (A cake breaks off)

Kgaola / kgaoha

[Ntate] o – kgaola [kgwele] (Father breaks a string)
 [Kgwele] e – a – kgaoha (A string breaks)

Kgephola / kgephoha

[Mme] o – kgephola [bohobe] (Mother breaks a piece of bread off)
 [Bohobe] bo – a – kgephoha (A piece of bread breaks off)

Tabola / taboha

[Ngwana] o – tabola [bUka] (The child tears a book apart)
 [Buka] e – a – taboha (A book is torn apart)

Mamola / mamoha

[Ngwana] o – mamola [lesela] (The child tears a cloth apart)
 [lesela] le – a – MAMOHA (A cloth is torn apart)

Hahola / hahoha

[Moshemane] o – hahola [borikgwe] (The boy tears a trouser apart)
 [Borikgwe] bo – a- hahoha (A trouser is torn apart)

Harola / haroha

[Tau] e – harola [nama] (The lion tears the meat to pieces)
 [Nama] e – a – haroha (The meat is torn to pieces)

Tlerola / tleroha

[Ntja] e – tlerola [letlalo]	<i>(A dog tears a skin to pieces)</i>
[Letlalo] le – a – tleroha	<i>(A skin is torn to pieces)</i>

Qhashola / qhashoha

[Monna] o – qhashola [mokotla]	<i>(The man burst open the sack)</i>
[Mokotla] o – a – qhashoha	<i>(The sack is burst open)</i>

Phatlola / phatloha

[Ngwana] o – phatlola [balöne]	<i>(The child burst a balloon)</i>
[Bölone] e – a – phatloha	<i>(A balloon is burst)</i>

Patsola / patsoha

[Mosadi] o – patsola [patsi]	<i>(The woman split the wood apart)</i>
[patsi] e – a – patsoha	<i>(The wood is split apart)</i>

Ngamola / ngamoha

[Monna] o – ngamola [sefi]	<i>(The man cracks a snare)</i>
[Sefi] se – a – ngamoha	<i>(A snare cracks)</i>

Tletsola / tletsoha

[Monna] o – tletsola [lepolanka]	<i>(The man split the plank apart)</i>
[Lepolanka] le – a – tletsoha	<i>(The plank split apart)</i>

3.3.3.2 Verbs with the suffixes [-oll-] and [-oloh-]

Although these two suffixes have the same form as the reversive suffixes, they do not have their reversive meaning:

Tamolla / tamoloha

[Nanyana] e - tamolla [noha]	<i>(A bird tears the snake to pieces)</i>
[Noha] e - a - tamoloha	<i>(The snake is stretched out)</i>

Tsekolla / tsekoloha

[Ntja] e - tsekolla [letlalo]	<i>(A dog tears a skin into pieces)</i>
[Letlalo] le - a - tsekoloha	<i>(A skin is torn into pieces)</i>

3.3.3.3 Verbs with the suffixes [-akan-] and [-akany-y-]

Verbs like "thua" and "roba" may appear with an intransitive suffix **[-akan-]** which denotes an iterative action which is carried out intensively or repeatedly. A transitive or causative suffix **[-y-]** may be added onto the suffix **[-akan-]** as **[-akan-y-]**:

Thua / thuakanya / thuakana

[Mme] o - thua [poone]	<i>(Mother crushes mealies)</i>
[Mme] o - thuakanya [poone]	<i>(Mother crushes mealies into pieces)</i>
[Poone] e - a - thuakana	<i>(Mealies are crushed into pieces)</i>

Roba / robakanya / robakana

[Ntate] o - roba [molamu]	<i>(Father breaks the stick)</i>
[Ntate] o - robakanya [molamu]	<i>(Father breaks the stick into pieces)</i>
[Molamu] o - a - robakana	<i>(The stick breaks into pieces)</i>

Thuba / thubakanya / thubakana

[Ntate] o - thuba [lerako]	<i>(Father smashes the wall)</i>
[Ntate] o - thubakanya [lerako]	<i>(Father smashes the wall very much)</i>
[Lerako] le - a - thubakana	<i>(The wall smashes very much)</i>

Thuma / thumakanya / thumakana

[Mme] o - thuma [koro]	<i>(Mother crushes the wheat)</i>
[Mme] o - thumakanya [koro]	<i>(Mother crushes the wheat thoroughly)</i>
[Koro] e - a - thumakana	<i>(The wheat crushes thoroughly)</i>

3.3.3.4 Verbs with the suffixes [-an -] and [-an-y-]

The suffix **[-an-]** refers to an intransitive verb and although it has the same form as the reciprocal suffix, it does not have a reciprocal meaning. As above, this suffix may be made transitive with the addition of a causative suffix **[-y-]** **[-an-y-]**:

Pjhatla / pjhatlanya / pjhatlana

[Ngwana] o - pjhatla [kopi]	(The child breaks the cup)
[Ngwana] o - pjhatlanya [kopi]	(The child smashes the cup into pieces)
[Kopi] e - a - pjhatlana	(The cup smashes into pieces)

Haraswanya / haraswana

[Katse] e - haraswanya [mosamo]	(The cat tears the pillow to pieces)
[Mosamo] o - a - haraswana	(The pillow is torn to pieces)

Peperanya / peperana

[Ngwana] o - peperanya [lamunu]	(The child cracks an orange open)
[Lamunu] e - a - peperana	(An orange cracks open)

3.3.4 IDEOPHONES AND VERBS DERIVED FROM IDEOPHONES**3.3.4.1 With an intransitive suffix [-h-] and a transitive suffix [-l-]:****Re kamo / kamola / kamoha**

[Bohobe] bo - re kamo!	(The bread breaks)
[Monna] o - kamola [bohobe]	(The man breaks the bread)
[Bohobe] bo - a - kamoHA	(The bread breaks)

Re qepho / qephola / qephoHA

[Kopi] e - itse - qepho!	(A cup breaks)
[Ngwana] o - qephola [kopi]	(The child breaks a cup)
[Kopi] e - a - qephoHA	(A cup breaks)

Re shoqo / shoqola / shoqoha

[Lerapo] le - itse shoqo!	(The strap break loose)
[Kolobe] e - shoqola [lerapo]	(The pig break loose the strap)
[Lerapo] le - a - shoqoha	(The strap breaks loose)

3.3.4.2 With the affixes [-an-] and [-an-y-]**Re tletlere / tletleranya / tletlerana**

[Pitsa] e - itse tlere!	(The pot cracked)
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[Motjheso] o - tletleranya [pitsa] (The heat cracks the pot)

[Pitsa] e - a - tletlerana (The pot cracks)

3.3.4.3 With the affixes [-man-] and [-ts-]

Re bjara / bjaratsa / bjaramana

[Kopi] e - itse bjara! (The cup is smashed into pieces)

[Ngwana] o - bjaratsa [kopi] (The child smashes the cup into pieces)

[Kopi] e - a - bjaramana (The cup smashes into pieces)

3.3.4.4 With the transitive [-l-]

Re phetse / phetsela

[Ngwana] o - itse [nta] phetse! (The child crushed the louse violently)

[Ngwana] o - phetsela [nta] (The child crushes the louse violently)

3.4 LEXICAL-SEMANTIC REPRESENTATION OF TRANSITIVE VERBS

The lexical-semantic representation of the verbs in paragraph 3.3.1 above will be given below:

3.4.1 ARGUMENT STRUCTURE

The verb "-runsolla-" assigns two arguments, i.e. agent and patient:

[Tau] e - runsolla [nama] (The lion tears the meat)

In the above structure, the NP "**tau**" is the external argument. Regarding the argument structure of the above verb, the subject argument is assigned by the VP. The NPs in the subject position need to be animate as they are agents:

[Monna] o - runsolla [pampiri] (The man tears the paper into pieces) (human)

[Katse] e - runsolla [tweba] (The cat tears a mouse into pieces) (animal)

The subject argument will appear with the following selection restriction:

[AGR1 = animate]

The second argument appears in the object position above, i.e. "**nama**". This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be torn to pieces are any physical object which is made of leather, material, paper or flesh:

[Seroki] se-runsolla [letlalo]	(The tailor tears a skin)	(leather)
[Monna] o-runsolla [borikgwe]	(The man tears trousers)	(material)
[Tweba] e-runsoll [koranta]	(A mouse tears newspaper)	(paper)
[Tau] e-runsolla [phoofolo]	(A lion tears an animal)	(flesh)

Objects such as **lesela**, **borikgwe**, **pampiri**, **letlalo**, **tweba** may readily appear with "**runsolla**". The selection restriction on the object argument of "**runsolla**" may be given as follows:

[AGR2 = Ntho e ka tshwarehang e bobebe, e phelang le e sa pheleng, e tabohang ha bonolo, e entsweng ka pampiri, letlalo kapa lelapi]

There is a third argument with this verb which is a **Shadow argument**. This argument is introduced by the preposition "**ka**" and it may indicate an instrument:

Tau e-runsollotse nama [ka [dinala]] (The lion tore the meat with claws)

[S - ARG1 = instrument]

A **cognate object** is possible with this verb, e.g.:

Tau e runsollotse [morunsollo o mongata] (The lion tore a huge portion)

[Ke thunsollo e kgolo] e runsollotsweng ke batho

(It is a huge portion which has been torn by the people)

Inalienable possession is possible with this tear verb:

Tau e-runsollotse [letlalo la nku] (The lion tore the skin of a sheep)

Tau e-runsollotse [nku] [letlalo] (The lion tore a sheep's skin)

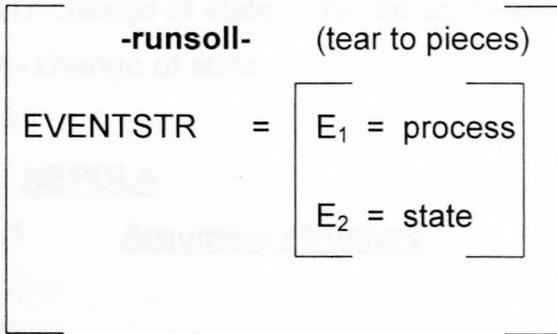
With the **instrument-subject alternation**, this verb is able to determine whether an instrument may turn up as subject:

[Katse] e runsolla [tweba] [ka meno] [Meno] a runsolla [tweba]

(A cat tears a mouse to pieces with teeth) (Teeth tore a mouse)

3.4.1.2 Event structure

The event structure of this verb **"-runsoll-"** (tear to pieces) involves two events, i.e. process or activity and state.



Process or activity event

[Ntja] e runsollotse [letlalo]

(The dog tore a skin)

[Moshemane] o runsollotse [lengolo]

(The boy tore a letter)

State events

Mose o runsollehile wa - ba dikatana

(A dress is torn and became rags)

Lesela le runsollehile la - ba dikatana

(A cloth is torn and became rags)

Borikgwe bo runsollehile ba - ba dikatana

(A trouser is torn and became rags)

Nama e runsollehile ya - ba dikgetjhana

(The meat is torn and became portions)

Pampiri e runsollehile ya - ba dikgetjhana

(A paper is torn and became portions)

Letlalo le runsollehile la - ba dikatana

(A skin is torn and became rags)

3.4.1.3 Lexical conceptual paradigm (LCP)

This verb **"-runsoll-"** has the following meanings or senses:

Meaning of "tearing to pieces / to fall apart"

[Monna] o runsollotse [borikgwe]

(The man tore the trousers apart)

[Moshemane] o runsollotse [lengolo]

(The boy tore a letter into pieces)

Meaning of devour or to root out

[Tau] e runsollotse [nku] *(The lion devoured a sheep)*

[Katse] e runsollotse [tweba] *(A cat devoured a mouse)*

3.4.1.4 Lexical inheritance structure

This verb falls under the **tear** verbs, a subclass of the break verbs and the main class of verbs of change of state. The hierarchy will follow that of the tear verbs i.e. tear to pieces - break - change of state.

3.4.2 NEPOLA**3.4.2.1 Argument structure**

The verb "-nepol-" assigns two arguments, i.e. agent and patient:

[Mme] o - nepola [motoho] *(Mother crushes soft porridge)*

With regard to the argument structure of this verb above, it will be necessary firstly to give attention to the subject argument in the sentence above which is assigned by the VP. The NP in the subject position need to be human because only human beings are able to grind:

[Ngwanana] o-nepola [mahleu] *(The girl crushes corn beer) (human)*

The subject argument will then appear with the following selection restriction:

[ARG1 = human]

The second argument appears in the object position in the above structure, i.e. "**motoho**". This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be crushed and ground are anything wet or soft which is food:

[Mme] o nepola [motoho] *(Mother grinds thin porridge) (food)*

It seems as if food such as **motoho**, **mahleu**, may readily appear with "**nepola**". The selection restriction on the object argument of "**nepola**" may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e bonolo, e silehang ha bonolo e entsweng ka dijo]

There is a third argument with this verb, which is a **Shadow argument**. This argument is introduced by the preposition "**ka**" and it may indicate an instrument:

Mosadi o nepotse motoho [ka [tshilo]]

(The woman crushed a thin porridge with a grinding stone)

[S - ARG1 = instrument]

A **cognate object** is possible with this verb, e.g.:

Mosadi o nepola manepola *(The woman grind crushed things)*

Inalienable possession is not possible with this verb.

The instrument-subject alternation is also possible with this verb in an attempt to interpret an argument as an instrument:

[Mosadi] o nepola [mahleu] [ka lenepolo]

(The woman crushes maize beer with a grinding stone)

[Lenepolo] le nepola [mahleu]

(A grinding stone crushes maize beer)

3.4.2.2 Event structure

This verb has two events, i.e. process and state.

Process events

[Mosadi] o nepola [mahleu] *(The woman crushes maize beer)*

[Ngwanana] o nepola [motoho] (*The girl crushes thin porridge*)

State events

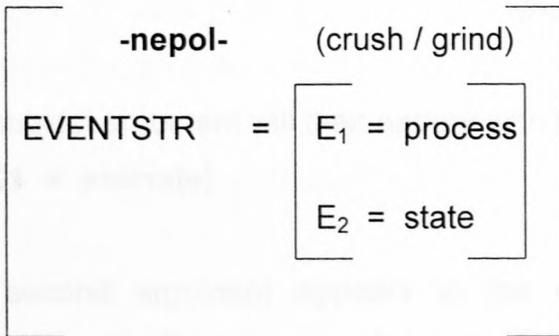
Motoho o nepotswe wa-ba manepolwa

(*The thin porridge is crushed and became fine soft porridge*)

Mahleu a nepotswe a-ba manepolwa

(*The maize beer is crushed and became a crushed drink*)

The event structure will be represented like this:



3.4.2.3 Lexical conceptual paradigm (LCP)

There is only a meaning of grinding or crushing:

[Mosadi] o nepola [motoho] (*The woman crushes thin porridge*)

3.4.2.4 Lexical inheritance structure

According to this hierarchy: crush - break - change of state; it becomes clear that this is a crush verb which is classified under the break verbs and it may fall under the verbs of change of state.

3.4.3 PIDILA

3.4.3.1 Argument structure

The verb **"-pidil-"** assigns two arguments, i.e. agent and patient.

[Mme] o pidila [kokonyana] (*Mother crushes an insect violently*)

In the above structure the NP "**Mme**" is the external argument.

Regarding the argument structure of this verb above, it will be necessary firstly to give attention to the subject in the above sentence which is assigned by the VP. The NPs in the subject position need to be animate because they are agents:

[Tlou] e pidila [mokgodutswane] (*An elephant crushed a lizard*) (*animal*)

[Moshemane] o pidila [phepheng] (*The boy crushes a scorpion violently*)
(*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in the above structure, i.e. "**kokonyana**". This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be crushed are smaller animals, insects and small objects like food:

[Mme] o pidila [lamunu] (*Mother crush an orange*) (*food*)

[Moshemane] o pidila [notshi] (*The boy crush a bee violently*) (*insect*)

[Kgomo] e pidila [senqanqane] (*A cow crush a frog*) (*small animal*)

It seems as if objects such as **lamunu**, **kokonyana**, **senqanqane**, **nta** and **tshitshidi** may readily appear with "**pidila**". The selection restriction on the object argument of "**-pidila-**" may then be given as follows:

[ARG2 = Ntho e ka hatehang ka leoto kapa e tshwarehang ka letsoho, pidilehang ha bonolo e phelang kapa e sa pheleng]

There is a third argument with this verb which is a **shadow argument**. This argument is introduced by the preposition "**ka**" and it may indicate an instrument.

Monna o pidila katse [ka [koloji]] (*The man crushes a cat with a car*)

[S = ARG1 = instrument]

A **cognate object** is not possible with this verb.

Inalienable possession is possible with this verb, e.g.:

Monna o piditse [hlooho ya katse] (The man crushed the head of the cat)

Monna o piditse [katse] [hlooho] (The man crushed the cat's head)

Instrument-subject alternation is possible with this verb, e.g.:

[Monna] o piditse [nta] [ka menwana] (The man crushed a louse with fingers)

[Menwana] e piditse [nta] (Fingers crushed a louse)

3.4.3.2 Event structure

This verb has two events, i.e. process and state:

Process events

[Mme] o pidila [noha] (Mother crushes snake violently)

[Moshemane] o piditse [tshintshi] (The boy crushed a fly flat)

State events

Lamunu e pidilehile ya-ba dikgetjhana (An orange crushed and became pieces)

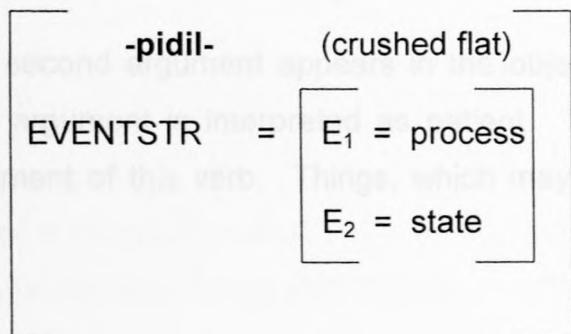
Kokonyana e pidilehile ya-ba dikgetjhana (An insect crushed and became pieces)

Senqanqane se pidilehile sa-ba dikarolwana (A frog is crushed and became portions)

Tshitshidi e pidilehile ya-ba dikgetjhana (A bedbug is crushed and became pieces)

Nta e pidilehile ya-ba dikgetjhana (A louse is crushed and became pieces)

The event structure will look like this :



4.3.3 LEXICAL CONCEPTUAL PARADIGM (LCP)

There is only a meaning of crushing into a flat object with this verb:

[Monna] o piditse [noha] *(The man crushed the snake flat)*

3.4.3.4 Lexical inheritance structure

This is a verb of crush which is classified under a sub class of break verbs and it is found under the main class of verbs of change of state. Its hierarchy will look like this: Crush flat - crush - break - change of state.

3.4.4 TLENYA

3.4.4.1 Argument structure

The verb "-tleny-" assigns two arguments, i.e. agent and patient:

[Ngwana] o-tlenya [nta] *(The child crushes a louse)*

With regard to the argument structure of this verb above, it will be necessary firstly to give attention to the subject argument in the sentence above which is assigned by the VP. The NPs in the subject position need to be animate because they are agents:

[Mme] o-tlenya [lehe] *(Mother crushes an egg) (human)*

[Ntja] e-tlenya [boseleise] *(A dog crushes a tick) (animal)*

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in the above sentence, i.e. "Nta". This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be crushed are smaller animals, insects and food:

- [Nonyana] e-tlenya [tsie] (A bird crushes locust) (insect)
 [Monna] o-tlenya [senqanqane] (The man crushes frog) (small animal)
 [Mme] e-tlenya [lamunu] (Mother crushes orange) (food)

It seems as if things such as **boseleise, nta, lehe, lamunu and senqanqane** may readily appear with “-tlenya”. The selection restriction on the object argument of “-tlenya” may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e tlenyehang ha bonolo e kang dijo, dikokonyana kapa diphoofofswana].

The third argument with this verb is a shadow argument.

Ngwana o tlentse nta [ka [manala]]
 (The child crushed a louse with nails)

[S – ARG1 = instrument]

A cognate object is not possible with this verb.

Inalienable possession is possible with this verb, e.g.:

Ngwana o tlentse [hlooho ya senqanqane] (The child crushed the head of a frog)
Ngwana o tlentse [senqanqane] [hlooho] (The child crushed a frog's head)

Instrument-subject alternation is possible with this verb:

[Monna] o tlenya [lamunu] [ka matsoho] (The man crushes an orange with hands)
[Matsoho] a tlenya [lamunu] (Hands crushes an orange)

3.4.4.2 Event structure

This verb has two events, i.e. process and state.

Process events

[Mme] o tlenya [lamunu] (Mother crush an orange)
[Moshemane] o tlenya [tshintshi] (The boy crushes a fly)

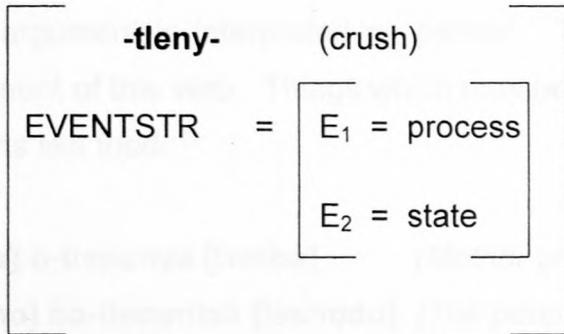
State events

Lamunu e tlenyehile ya-ba dikgetjhana (*An orange is crushed and became pieces*)

Senqanqane se tlenyehile sa-ba dikarolwana (*A frog is crushed and became portions*)

Nta e tlenyehile ya-ba dikarolwana (*A louse is crushed and became portions*)

The event structure will look like this:



3.4.4.3 Lexical conceptual paradigm (LCP)

There is only a meaning of crushing into pieces, with this verb:

[Monna] o-tlentse [lamunu] (*The man crushed an orange*)

3.4.4.4 Lexical inheritance structure

This is a verb of crush which is classified under a sub class of break verbs and it is found under the main class of verbs of change of state. Its hierarchy will look like this:

Crush to pieces – crush – break – change of state.

3.4.5 TLEPENYA

3.4.5.1 Argument structure

The verb “-tlepeny- assigns two arguments, i.e. agent and patient:

[Ditshwene] di-tlepenya [noha] (*The baboons crush the snake*)

The NPs in the subject position need to be animate because they are agents:

- [Ditshwene] di-tlepenya [noha] (*Baboons crush the snake*) (*animal*)
 [Mme] e-tlepentse [mokopu] (*Mother crushed the pumpkin*) (*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in the above sentence, i.e. “noha”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be crushed are any living creatures and physical objects like food.

- [Mme] o-tlepenya [tweba] (*Mother crushes a mouse*) (*animal*)
 [Batho] ba-tlepentse [leshodu] (*The people crushed a thief*) (*human*)
 [Ngwana] o-tlepenya [nta] (*The child crush a louse violently*) (*insect*)
 [Ntja] e-tlepentse [mahe] (*The dog crushed eggs*) (*food*)

It seems as if objects such as **lamunu**, **noha**, **senqanqane**, **leshodu**, **mahe** and **tweba** may readily appear with “tlepenya”. The selection restriction on the object argument of “tlepenya” may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e tlenyehang ha bonolo ha ntho e boima e e hatelletse jwalo ka dijo, phoofolo, kokonyana kapa motho]

The third argument is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

- Mosadi o tlepentse tweba [ka [lejwe]] (*The woman crushed a mouse with a stone*)
 [S – ARG1 = instrument]

A **cognate object** is not possible with this verb.

Inalienable possession is possible with this verb.

- Ditshwene di tlepentse [mohatla wa noha]
 (*Baboons crushed the tail of the snake*)

Ditshwene di tlepentse [noha] [mohatla]*(Baboons crushed the snake's tail)*

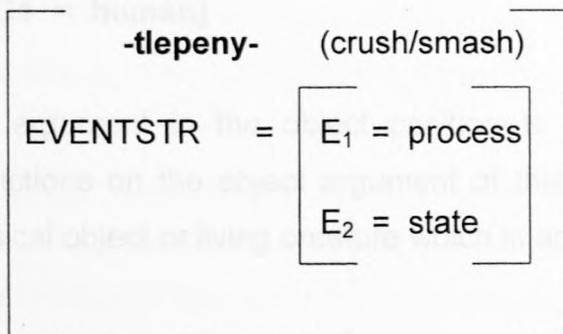
Instrument subject alternation is also possible with this verb.

Ditshwene di tlepentse [noha] [ka lefika]*(Baboons crushed the snake with a rock)***[Lefika] le tlepentse [noha]***(A rock crushed the snake)***3.4.5.2 Event structure**

This verb has two events i.e. process and state.

Process events**[Ditshwene] di tlepenya [noha]** *(Baboons crushes a snake)***[Mosadi] o tlepenya [mahe]** *(The woman smashes eggs)***State events****Noha e tleponentswe ya-ba dikarolwana** *(The snake is crushed and became pieces)***Mahe a tleponentswe a-ba dikgetjhana** *(Eggs are smashed and became pieces)***Tweba e tleponentswe ya-ba dikarolwana** *(The mouse is crushed and became portions)*

The event structure will look like this:

**3.4.5.3 Lexical conceptual paradigm (LCP)**

There are two meanings with this verb:

a. **To crush by throwing something heavy on****[Ditshwene] di tlepentse [noha] [ka lefika]***(Baboons crushed the snake with a rock)*b. **To stone****[Basadi] ba tlepentse [leshodu] [ka majwe]***(The women stoned a thief)***3.4.5.4 Lexical inheritance structure**

This is a crush verb which is classified under the break verbs and it may fall under the verbs of change of state. The hierarchy will be like this:

crush with heavy object – crush – break – change of state.

3.4.6 TLEPETS**3.4.6.1 Argument structure**

The verb “-tlepets-“ assigns two arguments, i.e. agent and patient:

[Bashemane] ba-tlepetsa [noha] *(The boys crushes a snake)*

The NP in the subject position need to be human because only human beings are able to throw a stone to crush:

[Ngwana] o tlepetsa [fenstere] *(The child smashes a window) (human)***[ARG1 = human]**

The argument in the object position is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be crushed are any physical object or living creature which is an animal, human being and food:

[Bana] be tlepeditse [koloji] *(The children smashed the car) (artefact)***[Bakreste] ba tlepeditse [leshodu]** *(Christians crushed a thief) (human)***[Mme] o tlepetsa [mahe]** *(Mother smashes eggs) (food)***[Batho] ba tlepeditse [katse]** *(The people crushed the cat) (animal)*

It seems as if physical object such as **koloi, mahe, katse and leshodu** may readily appear with “-tlepetsa”. The selection restriction on the object argument of “tlepetsa” may then be given as follows:

[ARG2 = Ntho e bonahalang e ka tlepetsehang ha bonolo, e entsweng ka dijo, phoofolo, motho kapa tshepe]

There is a third argument with this verb which is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

[Mosadi o tlepeditse Monna [ka [majwe]]

(The woman crushed the man with stones)

[S – ARG1 = instrument]

A **cognate object** is possible with this verb, e.g.:

Katse e tlepeditswe tlepetso e tshosang

(The cat was stoned a frightening crush)

Inalienable possession is possible with this verb:

Mosadi o tlepeditse [hlooho ya monna]

(The woman crushed the head of the man)

Mosadi o tlepeditse [monna] [hlooho]

(The woman crushed the man's head)

Instrument-subject alternation is also possible with this verb:

[Mosadi] o tlepeditse [monna] [ka tshepe]

(The woman crushed the man with an iron)

[Tshepe] e tlepeditse [monna]

(An iron crushed the man)

3.4.6.2 Event structure

This verb has two events, i.e. process and state.

Process events

[Mosadi] o-tlepetsa [monna] (The woman crush the man)

[Bashemane] ba-tlepetsa [katse] (The boys crush the cat)

State events

Noha e tlepeditswe ya-ba dikarolwana

(The snake is crushed and became portions)

Mahe a tlepeditswe ya-ba dikgetjhana

(Eggs are smashed and became pieces)

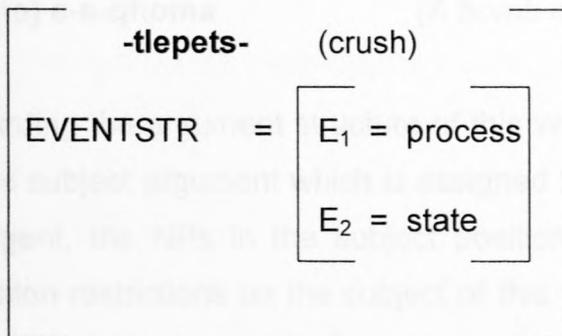
Ntlo e tlepeditswe ya-ba dithako

(The house is crushed and became ruins)

Leshodu le tlepeditswe la-ba dikarolwana

(A thief is crushed and became parts)

The event structure will look like this:



3.4.6.3 Lexical conceptual paradigm (LCP)

There are two meanings with this verb:

- a. **To stone**
[Monna] o-tlepeditse [noha] (*The man stoned the snake*)
[Bakreste] ba tlepeditse [leshodu] (*Christians stoned a thief*)
- b. **To crush**
[Mme] o tlepeditse [mahe] (*Mother crushed eggs*)
[Ngwana] o-tlepeditse [nta] (*The child crushed a louse*)

3.4.6.4 **Lexical inheritance structure**

This is sa crush verb which is classified under break verb and it may fall under the verbs of the change of state. The hierarchy may look like this:

Crush by stoning – crush – break - change of state.

3.5 INTRANSITIVE VERBS

There is only one intransitive **break** verb: **qhoma**

3.5.1 **ARGUMENT STRUCTURE**

This is a one-place predicate with only one argument. This argument is assigned to the NP in the subject position, i.e. patient:

[Bomo] e-a-qhoma (*A bomb explodes*)

Regarding the argument structure of this verb above, it will be necessary to give attention to this subject argument which is assigned by the VP. As this subject is a patient and not an agent, the NPs in the subject position need not be animate. There are no clear selection restrictions on the subject of this verb. Things which may explode are anything or any physical object that may explode or burst:

[Mollo] o-a-qhoma	(<i>The fire burst</i>)	(<i>fire</i>)
[Bomo] e-a-qhoma	(<i>A bomb explodes</i>)	(<i>bomb</i>)
[Pompo] e-a-qhoma	(<i>A water tap burst</i>)	(<i>tap</i>)

The subject argument will appear with the following selection restriction:

[ARG1 = physical object]

The above selection restriction on the subject arguments are all interpreted as patients.

This verb does not assign a **shadow argument**.

A **cognate object** is possible with this verb:

Bomo e qhomme [qhomo e tshosang]

(A bomb exploded with a frightening explosion)

Pompo ya metsi e qhomme [qhomo e matla]

(A water tap exploded with a powerful explosion)

Inalienable possession is also possible with this verb, e.g.:

[Mohala wa bomo] o qhomme *(The cord of a bomb exploded)*

[Bomo] e qhomme [mohala] *(A bomb's cord exploded)*

Instrument-subject alternation is not possible with this verb.

3.5.2 EVENT STRUCTURE

There are two events regarding this verb, i.e. process and state:

Process events

[Pompo] e-a-qhoma *(The water tap explodes)*

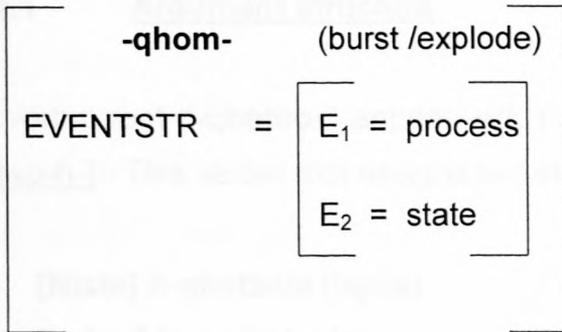
[mollo] o-a-qhoma *(The fire explodes)*

State event

[Bomo] e qhomme [qhomo e tshosang]

(A bomb exploded with a frightening explosion)

The event structure will look like this:



3.5.3 Lexical conceptual paradigm (LCP)

There are few senses or meanings regarding this verb, e.g.:

A sense of bursting or exploding

[Pompo] e-qhomme ba sa lebella

(A water tap burst unexpectedly)

[Bomo] e-qhomme ba sa robetse

(A bomb exploded while they were sleeping)

A sense of starting or beginning

[Ntwa] e-qhomme

(The battle got started)

[Mollo] o-a-qhoma

(The fire begins)

A sense of jumping

[Monna] o-qhomela hodimo

(The man jumps upward)

[Mollo] o-qhomela mose ho noka

(The fire jumps over the river)

3.5.4 LEXICAL INHERITANCE STRUCTURE

This is a **burst** verb which is classified under the verbs of break and it is found in the main class of change of state. The hierarchy will look like this:

Explode – burst – break – change of state.

3.6 VERBS WITH THE SUFFIXES [-i-] AND [-h-]

See paragraph 3.3.3.1 above.

3.6.1 QHETSO

3.6.1.1 Argument structure

The verbal root “-qhetso-“ appear with the suffixes [-l-] and [-h-] as [-qhetso-l-] and [-qhetso-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. [Ntate] o-qhetsola [lejwe] (*Father breaks a piece of stone*)
 b. [Lejwe] le-a-qhetsoha (*A piece of stone breaks*)

These S-structures above are derived from the following d-structures:

- a. [NP [VP -qhetso-l- ntate lejwe]
 b. [NP [VP -qhetso-h- lejwe]

In (a) above the NP “ntate” has been moved and in (b) the NP “lejwe”. The NP “ntate” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-qhetso-“ with transitive affix [-l-]. The NPs in the subject position need to be animate because they are agents:

- [Ngwana] o-qhetsola pompong (*The child breaks a sweet*) (*human*)
 [Tweba] e-qhetsola bohobe (*A mouse breaks bread*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appear in the object position in (a) above, i.e. “lejwe”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be broken are any physical object which is firm and whole and consists of food, glass, wood or stone.

- [Sebetli] se-qhetsola [lepolanka] (*A carpenter break a plank*) (*wood*)
 [Tweba] e-qhetsose [bohobe] (*A mouse broke the bread*) (*food*)
 [Ntate] o-qhetsola [lejwe] (*Father breaks a stone*) (*stone*)

[Moshemane] o-qhetsotse [kopi] (The boy broke a cup) (glass)

It seems as if objects such as **lejwe, galase, leqhwa, pompong, bohobe and lepolanka** may readily appear with “**qhetsola**” and the selection restriction may be given as follows:

[ARG2 = Ntho e tiling e ka tshwarehang e hlephohang ha bonolo e entsweng ka lejwe, dijo, patsi kapa galase]

The verb “-qhetso-h-“ which has the intransitive suffix [-h-] which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “-qhetso-l-“ above.

[Lepolanka] le-a-qhetsoha	(The plank breaks)	(wood)
[Bohobe] bo-a-qhetsoha	(A bread breaks)	(food)
[Lejwe] le-a-qhetsoha	(A stone breaks)	(stone)
[Kopi] e-a-qhetsoha	(A cup breaks)	(glass)

These arguments are all interpreted as patients. The selection on this argument will be the same as the one on the object argument of “-qhetso-l-“ above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

Ntate o qhetsotse lejwe [ka [tshepe]]

(Father broke the stone with an iron)

[S – ARG1 = instrument]

A **cognate object** is possible with these verbs, e.g.:

Lejwe le qhetsohile [maqhetso a mangata] (A stone is broken into many pieces)

Bohobe bo qhetsohile [diquhetso tse nyane]

(The bread is broken into little pieces)

Inalienable possession is also possible with these verbs, e.g.:

With qhetsoha

[Mohele wa kopi] o qhetsohile (*The handle of the cup is broken*)

[Kopi] e qhetsohile [mohele] (*A cup's handle is broken*)

With qhetsola

Moshemane o-qhetsotse [mohele wa kopi]

(*The boy broke the handle of the cup*)

Moshemane o-qhetsotse [kopi] [mohele]

(*The boy broke the cup's handle*)

Instrument-subject alternation is possible with regard to the interpretation as instrument:

[Moshemane] o-qhetsotse [bohobe] [ka letsoho]

(*The boy broke the bread with a hand*)

[letsoho] le-qhetsotse [bohobe]

(*A hand broke the bread*)

3.6.1.2 Event structure

The event structure of the verbal root “-qhetso-“ (break) involves two events, i.e. process and state:

Process events

[Monna] o-qhetsola [lejwe] (*The man break a stone*)

[Tweba] e-qhetsotse [bohobe] (*A mouse broke the bread*)

State events

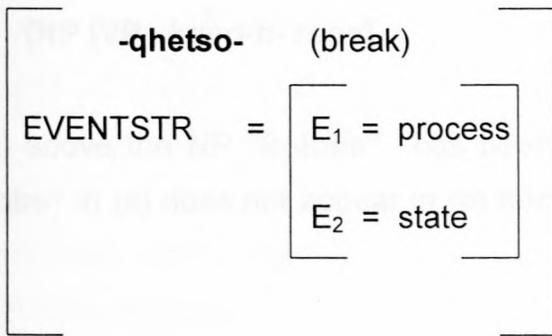
Lejwe le qhetsohile la-ba maqhetso (*A stone broke and became small pieces*)

Bohobe bo qhetsohile ba-ba dikgetjhana (*A bread broke and became pieces*)

Kopi e qhetsohile ya-ba maqhetso (*A cup broke and became small pieces*)

Lepolanka le qhetsohile la-ba maqhetso (*A plank broke and became small pieces*)

The event structure will look like this:



3.6.1.3 Lexical conceptual paradigm (LCP)

The verbal root “-qhetso-“ has the meaning of break off a piece of something. There is only one meaning of breaking or cutting, e.g.:

[Ngwana] o-qhetsola [kuku] (*The child break a cake*)

[Ntate] o-qhetsotse [lejwe] (*Father broke a stone*)

3.6.1.4 Lexical inheritance structure

This is a break verb which is classified under a sub class of break verbs and it is from the main class of verbs of change of state. The hierarchy will look like this: break off – break – change of state.

3.6.2 KGAO

3.6.2.1 Argument structure

The verbal root “-kgao-“ appears with the suffixes [-l-] and [-h-] as [-kgao-l-] and [-kgao-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

a. [Kolobe] e-kgaola [ropo] (*A pig breaks the rope*)

b. [Ropo] e-a-kgoaaha (*A rope breaks loose*)

The S-structure above are derived from the following d-structures:

- a. [NP [VP -kgao-l- kolobe ropo]
 b. [NP [VP -kgao-h- ropo]

In (a) above the NP “**kolobe**” has been moved and in (b) the NP “**ropo**”. The NP “**kolobe**” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-kgao-“ with the transitive affix [-l-]. The NPs in the subject position need to be animate because they are agents:

- [Kolobe] e-kgaoia [ropo] (The pig breaks the rope loose) (animal)
 [ngwana] o-kgaoia [thapo] (The child breaks the string) (human)

The subject argument will then appear with the following restriction:

[ARG1 = animate]

The second argument appear in the object position in (a) above, i.e. “**ropo**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be broken are any physical object which is made of material, wire, string and leather:

- [Mme] o-kgaoia [kgaretene] (Mother breaks a curtain) (material)
 [monna] o-kgaoia [terata] (The man breaks a wire) (wire)
 [Ngwana] o-kgaoia [kgwele] (The child breaks a string) (string)
 [Kgomo] e-kgaoia [lerapo] (A cow break loose a strap) (leather)

It seems as if objects such as **ropo**, **terata**, **kgwele**, **sefaha**, **mohala** and **lerapo** may readily appear with “**kgaoia**”. The selection restriction on the object argument of “**kgaoia**” may then be given as follows:

[ARG2 = Ntho e telele e kgaohang dikoto tse pedi e entsweng ka thapo, terata, kapa lerapo]

The verb “-kgao-h” which has the intransitive suffix [-h-] which control the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “-kgao-l-“ above:

[Kgaretene] e-a-kgaoha	<i>(A curtain breaks loose)</i>	<i>(material)</i>
[Terata] e-a-kgaoha	<i>(A wire breaks)</i>	<i>(wire)</i>
[Kgwele] e-a-kgaoha	<i>(A string breaks loose)</i>	<i>(string)</i>
[Lerapo] le-a-kgaoha	<i>(A strap breaks loose)</i>	<i>(leather)</i>

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-kgao-l-“ above:

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

Monna o kgaotse terata [ka [tang]] *(The man broke a wire with pliers)*
[S – ARG1 = instrument]

Cognate objects are possible with these verbs, e.g.:

Kgwele e kgaohile [kgaoho tse pedi] *(A string is broken into two divisions)*

Mohala o kgaohile [kgaolo e tshabehang]
(The cord is broken into a frightening division)

Inalienable possession is also possible with these verbs, e.g.:

With kgaoha

[Mohatla wa kgomo] o kgaohile *(The tail of the cow is broken)*

[Kgomo] e kgaohile [mohatla] *(The cow's tail is broken)*

With kgaola

Monna o kgaotse [mohatla wa kgomo] *(The man broke the tail of the cow)*

Monna o kgaotse [kgomo] [mohatla] (*The man broke the cow's tail*)

Instrument-subject alternation is also possible with these verbs:

[Ntate] o kgaola [mohatla] [ka thipa] (*Father breaks the tail with a knife*)

[Thipa] e kgaola [mohatla] (*A knife breaks the tail*)

3.6.2.2 Event structure

This verbal root “-kgao-“ has two events, i.e. process and state:

Process events

[Monna] o kgaola [terata] (*The man breaks a wire*)

[batho] ba kgaola [lerapo] (*The people breaks a strap*)

State events

Sefaha se kgaohile sa-ba dikotwana (*A necklace broke and became bids*)

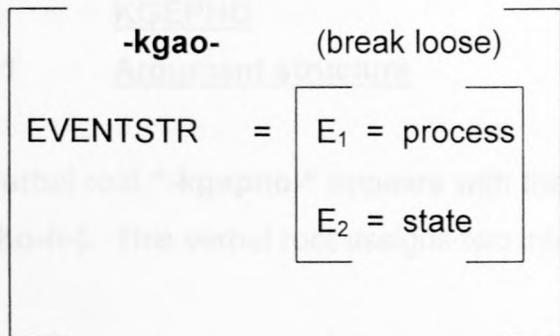
Terata e kgaohile ya-ba dikotwana (*A wire broke and became pieces*)

Mohala o kgaohile wa-ba dikotwana (*A cord broke and became pieces*)

Lerapo le kgaohile la-ba dikotwana (*A strap broke and became pieces*)

Kgareng e kgaohile ya-ba dikotwana (*A thread broke and became pieces*)

The event structure will look like this:



3.6.2.3 Lexical conceptual paradigm (LCP)

There are different meanings or senses with these verbs:

The meaning of break loose

- [Terata] e-a-kgaotha (*The wire break loose*)
 [Ntate] o-kgaotha [mohala] (*Father breaks the cord*)

The meaning of “to cut and interrupt to communicate”

- [Mohala] o kgaotse [puisano] (*The line was cut in their conversation*)
 Ba kgaotse puo ya hae a sa bua (*They cut his speech while talking*)

The meaning of separation and division

- Ba kgaotse [lenyalo] (*They had divorced*)
 [Buka] ena e kgaohile ka dikgaolo (*This book is divided into chapters*)

The meaning of dying, cease, go away

- [Selemo] se kgaohile (*The year is finished*)
 [Bohadi] bo kgaohile (*The marriage is concluded*)
 [Ntate] o kgaohile ka kgitla bosiu (*Father died in the midnight*)

3.6.2.4 lexical inheritance structure

This is a **break** verb which falls under the break verbs and it is classified under the main class of verbs of change of state. The hierarchy will look like this: break loose – break – change of state.

3.6.3 KGEPHO**3.6.3.1 Argument structure**

The verbal root “-kgepho-“ appears with the suffixes [-l-] and [-h-] as [-kgepho-l-] and [-kgepho-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. [Ngwana] o-kgephola [kuku] (*The child breaks off a cake*)
 b. [Kuku] e-a-kgephoha (*A cake breaks off*)

These S-structure above are derived from the following d-structures:

- a. [NP [VP – kgepho-l- ngwana kuku]
 b. [NP [VP – kgepho-h- kuku]

In (a) above the NP “**ngwana**” has been moved and in (b) the NP “**kuku**”. The NP “**ngwana**” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-**kgepho-**” with the transitive affix [-I-]. The NPs in the subject position need to be animate because they are agents:

[Ngwana] o kgephola [kuku]	(<i>The child breaks off a cake</i>)	(<i>human</i>)
[Ntja] e kgephola [bohobe]	(<i>A dog breaks off a bread</i>)	(<i>animal</i>)

The subject argument will then appear with the following selection restriction:

[**ARG1 = animate**]

The second argument appears in the object position in (a) above i.e. “**kuku**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be broken are any physical object which is made of wood, stone, food or glass:

[Ntate] o- kgephola [sefate]	(<i>Father breaks off a tree</i>)	(<i>wood</i>)
[Monna] o- kgephola [lejwe]	(<i>The man breaks off a stone</i>)	(<i>stone</i>)
[Ntja] e- kgephola [bohobe]	(<i>A dog breaks off a bread</i>)	(<i>food</i>)
[Ngwana] o- kgephola [galase]	(<i>The child breaks off a glass</i>)	(<i>glass</i>)

It seems as if objects such as **letlapa**, **kopi**, **pompong**, **kuku** and **pitsa**, may readily appear with “**kgephola**”. The selection restriction on the object argument of “**kgephola**” may then be given as follows:

[**ARG2 = Ntho e tiileng e ka tshwarehang e kgephohang ha bonolo e entsweng ka lejwe, dijo, patsi kapa galase**]

The verb “-**kgepho-h-**” which has the intransitive suffix [-h-] which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “-**kgepho-l-**” above:

[Patsi] e-a-kgephoha	(A firewood breaks off)	(wood)
[Lejwe] le-a-kgephoha	(A stone breaks off)	(stone)
[Bohobe] bo-a-kgephoha	(A bread breaks off)	(food)
[Galase] e-a-kgephoha	(A glass breaks off)	(glass)

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-kgepho-l-“ above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument :

Ngwana o kgephotse kuku [ka [meno]]

(The child broke off a cake with his teeth)

[S – ARG1 = instrument]

A **cognate object** is possible with these verbs, e.g.:

Lejwe le kgephohile [dikgepho tse ngata] *(A stone is broken into many pieces)*

Bohobe bo kgephohile [sekgepho se seholo]

(A bread is broken off into a big piece)

Inalienable possession is also possible with these verbs, e.g.:

With kgephoha

[Mohele wa galase] o kgephohile *(The handle of a glass is broken off)*

[Galase] e kgephohile [mohele] *(The glass's handle is broken off)*

With kgephola

Ngwana o-kgephotse [mohele wa galase]

(The child broke the handle of a glass off)

Ngwana o-kgephotse [galase] [mohele]

(The child broke the glass's handle off)

Instrument-subject alternation is possible with this verb:

[Monna] o kgephotse [patsi] [ka selepe]

(The man broke off a firewood with an axe)

[Selepe] se kgephotse [patsi]

(An axe broke off a firewood)

3.6.3.2 Event structure

The verbal root “-kgepho-“ has two events i.e. process and state:

Process events

[Ngwana] o kgephola [kuku] *(The child breaks off a cake)*

[Morutwana] o kgephotse [letlapa] *(The pupil broke off a slate)*

State events

Letlapa le kgephohile la-ba dikgepho *(A slate broke and became pieces)*

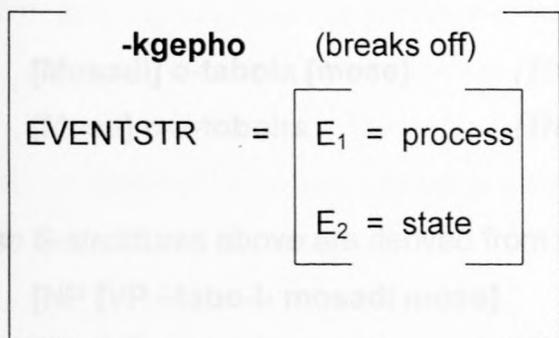
Kopi e kgephohile ya-ba dikgepho *(A cup broke and became pieces)*

Kuku e kgephohile ya-ba dikgepho *(A cake broke off and became pieces)*

Patsi e kgephohile ya-ba dikgepho *(A firewood broke off and became portions)*

Pompong e kgephohile ya-ba dikgepho *(A sweet broke off and became pieces)*

The event structure will look like this:



3.6.3.3 Lexical conceptual paradigm (LCP)

This verbal root “-kgepho-“ has the following senses or meanings:

Meaning of break off a piece

[Nswana] o-kgephola [pompong] *(The child breaks off a piece of sweet)*

[Ntja] e-kgephola [papa] *(A dog breaks off a piece of porridge)*

Meaning of using a bad language

[Letahwa] le kgephola feela ha le bua

(The drunkard uses bad language when talking)

[Morena] o kgephola feela ha a kwatile

(The chief uses bad language only when he is angry)

3.6.3.4 Lexical inheritance structure

This is a **break** verb which is classified under a sub class of break verbs and is found under the main class of the verbs of change of state. Its hierarchy will look like this: break off a piece – break – change of state.

3.6.4 TABO**3.6.4.1 Argument structure**

The verbal root “-tabo-“ appears with the suffixes [-l-] and [-h-] as [-tabo-l-] and [-tabo-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. **[Mosadi] o-tabola [mose]** *(The woman tears the dress)*
 b. **[Mose] o-a-toboha** *(The dress is torn)*

These S-structures above are derived from the following d-structures:

- a. **[NP [VP -tabo-l- mosadi mose]**
 b. **[NP [VP -tabo-h- mose]**

In (a) above the NP “**mosadi**” has been moved and in (b) the NP “**mose**”. The NP “**mosadi**” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-**tabo-**” with transitive affix [-I-]. The NPs in the subject position need to be animate because they are agents.

[Ngwana] o-tabola [lesela]	(The child tears the cloth)	(human)
[Tweba] e-tabotse [pampiri]	(A mouse tore the paper)	(animal)

The subject will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**mose**”

This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be torn are any physical object which is made of material, paper or leather.

[Ngwana] o-tabola [lesela]	(The child tears the cloth)	(material)
[Tweba] e-tabola [koranta]	(A mouse tears the newspaper)	(paper)
[Seroki] se-tabotse [letlalo]	(A tailor tore the skin)	(leather)

It seems as if objects such as **mose, lesela, borikgwe, hempe, buka, kobo, pampiri, koranta and letlalo** may readily appear with “**tabola**”. The selection restriction on the object argument of “**tabola**” may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e bobebe e tabohang ha bonolo, e entsweng ka lelapi, pampiri kapa letlalo]

The verb “-**tabo-h-**” which has the intransitive suffix [-h-] which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “-**tabo-l-**” above.

[lesela] le-a-taboha	(The cloth is torn)	(material)
[Koranta] e-a-taboha	(The newspaper is torn)	(paper)
[Letlalo] le-a-taboha	(The skin is torn)	(leather)

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-**tabo-l-**” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

[Mosadi] o-tabotse lesela [ka [sekere]]

(The woman tore the cloth with scissors)

[S – ARG1 = instrument]

Cognate objects are also possible with these verbs, e.g.:

Tsebe ya hae e tabohile [motabolo o tshabehang]

(Her ear has been torn a deep frightening earmark)

Lesela le tabohile [tabolo e sa rokeheng]

(A cloth is torn an unrepairable tear)

Inalienable possession with intransitive verb and transitive verb:

With taboha:

[Letsoho la hemepe] le-tabohile *(The arm of the shirt is torn)*

[Hempe] e-tabohile [letsoho] *(The shirt's arm is torn)*

With tabola:

Monna o-tabotse [letsoho la hemepe] *(The man tore the arm of the shirt)*

Monna o-tabotse [hempe] [letsoho] *(The man tore the shirt's arm)*

With an **instrument-subject alternation**, these verbs are able to determine whether an instrument may turn up as subject:

[Monna] o-tabola [letlalo] [ka thipa] *(The man tears the leather with a knife)*

[Thipa] e-tabola [letlalo] *(A knife tears the leather)*

3.6.4.2 Event structure

The verbal root “-tabo-” (tear) has the following events, i.e. process and state:

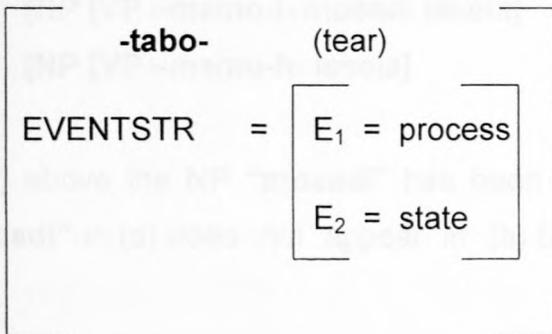
Process events

[Mosadi] o-tabola [mose]	(The woman tears the dress)
[Tweba] e-tabola [pampiri]	(A mouse tears paper)

State events

Mose o tabohile wa-ba <u>dikatana</u>	(A dress is torn and became rags)
Lesela le tabohile la-ba <u>dikatana</u>	(A cloth is torn and became rags)
Pampiri e tabohile ya-ba <u>dikgetjhana</u>	(A paper is torn and became pieces)
Letlalo le tabohile la-ba <u>dikatana</u>	(A skin is torn and became rags)
Kobo e tabohile ya-ba <u>dikatana</u>	(A blanket is torn and became rags)

The event structure can be represented as follows:



3.6.4.3 Lexical conceptual paradigm (LCP)

The verbal root “-tabo-” (tear) has the following different senses or meanings:

Meaning of tear

Mosadi o tabola mose	(The woman tears the dress)
Tweba e tabola koranta	(A mouse tears a newspaper)

Meaning of cross

Monna o tabotse tshimo ka lehare	(The man crossed the field)
Monna o tabola noka ka lehare	(The man crossed the river)

3.6.4.4 Lexical inheritance structure

The verb “-**tabo-**” (tear) is found in a sub class of break and in the main class of verbs of change of state: tear – break – change of state.

3.6.5 MAMO

3.6.5.1 Argument structure

The verbal root “-**mamo-**” appears with the suffixes [-**l-**] and [-**h-**] as [-**mamo-l-**] and [-**mamo-h-**]. This verbal root assigns two internal arguments, i.e. agent and patients:

- a. **[Mosadi] o-mamola [lesela]** (*The woman tears a cloth*)
 b. **[Lesela] le-a-mamoha** (*The cloth tears*)

These S-structures above are derived from the following d-structures:

- a. **[NP [VP –mamo-l- mosadi lesela]**
 b. **[NP [VP –mamo-h- lesela]**

In (a) above the NP “**mosadi**” has been moved and in (b) the NP “**lelapi**”. The NP “**mosadi**” in (a) does not appear in (b) because this argument is controlled by the affix [-**h-**].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-**mamo-**” with the transitive affix [-**l-**]. The NPs in the subject position need to be animate because they are agents:

- [Morena] o-mamola [lengolo]** (*The chief tears the letter*) (*human*)
[Tau] e-memola [letlalo] (*The lion tears the skin*) (*animal*)

The subject argument will then appear with the following selection restrictions:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**lesela**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be torn are any physical object which is made of material, paper or leather.

- [**Tau**] e-mamola [**letlalo**] (*The lion tears the skin violently*) (leather)
 [**Ngwana**] o-mamola [**koranta**] (*The child tears the newspaper*) (paper)
 [**Monna**] o-mamola [**baki**] (*The man tears a jacket*) (material)

It seems as if objects such as **lengolo**, **lesela**, **borikgwe**, **koranta**, **senepe** and **hempe** may readily appear with “**mamola**”. The selection restriction on the object argument of “**mamola**” may then be given as follows:

[ARG2 = Ntho e ka tshwarehang, e bobebe, e tabohang ha bonolo, e entsweng ka lelapu, pampiri kapa letlalo]

The verb “**-mamo-h-**” which has the intransitive suffix “[**-h-**” which controls the external argument appears only with an argument in the subject position. This argument is the same as the object of “**-mamo-h-**” above.

- [**Letlalo**] le-a-mamoha (*The skin is torn violently*) (leather)
 [**Koranta**] e-a-mamoha (*The newspaper is torn violently*) (paper)
 [**Baki**] e-a-mamoha (*The jacket is torn violently*) (material)

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “**-mamo-l-**” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

Tau e-mamotse – letlalo [ka [meno]]
 (*The lion tore the skin with the teeth violently*)

[S – ARG1 = instrument]

A **cognate object** is also possible with these verbs, e.g.:

Kobo e mamohile [mamolo e sa rokeheng]

(The blanket is torn an unrepairable mark)

Inalienable possession is possible with these verbs, e.g.:

With mamoha

[Leoto la borikgwe] le mamohile *(The leg of the trousers is torn violently)*

[Borikgwe] bo mamohile [leoto] *(the trousers leg is torn violently)*

With mamola

Monna o mamotse [leoto la borikgwe] *(The man tore the leg of the trousers)*

Monna o mamotse [borikgwe] [leoto] *(The man tore the trousers' leg)*

Instrument-subject alternation is also possible with these verbs, e.g.:

[Tan] e mamotse [letlalo] [ka meno a yona] *(The lion tore the skin with its teeth)*

[Meno] a mamotse [letlalo] *(Teeth tore the skin)*

3.6.5.2 Event structure

This verbal root “-mamo-” involves two events, i.e. process and state.

Process events

[Moshemane] e-mamola [kobo] *(The boy tears the blanket violently)*

[Ngwanana] o-mamola [lengolo] *(The girl tears the letter violently)*

State events

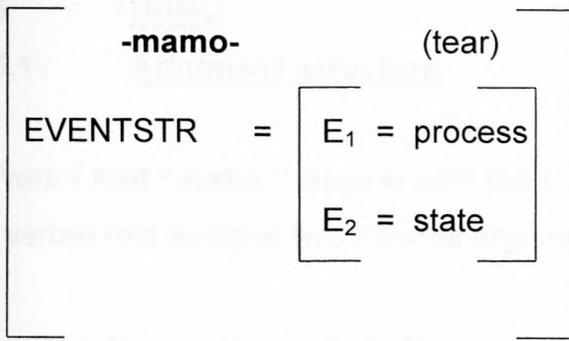
Lengolo le mamohile la-ba dikgetjhana *(A letter is torn and became pieces)*

Senepe se mamohile sa-ba dikgetjhana *(A photo is torn and became pieces)*

Hempe e mamohile ya-ba dikatana *(A shirt is torn and became rags)*

Koranta e mamohile ya-ba dikgetjhana *(A newspaper is torn and became pieces)*

The event structure can be represented as follows:



3.6.4.3 Lexical conceptual paradigm (LCP)

The verbal root “-mamo-” (tear) has the following meanings or senses:

Meaning of striking / beating

[Monna] o mamola [mosadi] ka molamu (*The man strikes the woman with a stick*)

[Lehadima] le mamotse [sefate] (*Lightning stroke a tree*)

Meaning of saying an important thing

[Moruti] o mamotse feela ntle le ho qoba letho (*The priest spoke straight*)

Puong ya hae o ne a mamola a sa tshohe (*In his speech he spoke without fear*)

Meaning of tear violently

[Monna] o mamola [borikgwe] (*The man tears the trousers violently*)

[Hempe] e mamohile (*The shirt is torn violently*)

Meaning of crossing

[Morena] o mamotse [tshimo] ka le hare (*The chief divided the field*)

[Mmuso] o mamotse [naha] (*The government divided the land*)

3.6.5.4 Lexical inheritance structure

The hierarchy of the verbal root “-mamo-” is:

Tear violently – break – change of state. This is a “tear” verb like “-tabo-”

3.6.6 HAHO

3.6.6.1 Argument structure

The verb / root “-haho-” appear with the suffixes [-l-] and [-h-] as [-haho-l-] and [-haho-].

This verbal root assigns two internal arguments, i.e. agent and patient:

- a. **[Moshemane] o-hahola [borikgwe]** (*The boy tears the trousers*)
 b. **[Borikgwe] bo-a-hahoha** (*The trousers are torn*)

The S-structure above are derived from the following d-structures:

- a. **[NP [VP -haho-l- moshemane borikgwe]**
 b. **[NP [VP -haho-h- borikgwe]**

In (a) above the NP “**moshemane**” has been moved and in (b) the NP “**borikgwe**”. The NP “**moshemane**” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the arguments structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-haho-” with the transitive affix [-l-]. The NPs in the subject position need to be animate because they are agents:

- [Ngwana] o-hahola [lesela]** (*The child tears the cloth*) (*human*)
[Ntja] e-hahola [pampiri] (*The dog tears the paper*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**borikgwe**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be torn are any physical object which is made of material, paper or leather:

- [Ngwana] o-hahola [katiba]** (*The child tears a hat*) (*material*)
[Ntja] e-hahola [pampiri] (*A dog tears a paper*) (*paper*)

With hahola

Ngwana o-hahotse [leqephele buka] (*The child tore the page of the book*)

Ngwana o-hahotse [buka] [leqephe] (*The child tore the book's page*)

With hahola

Ngwana o-hahotse [leqephele buka] (*The child tore the page of the book*)

Ngwana o-hahotse [buka] [leqephe] (*The child tore the book's page*)

Instrument-subject alternation is also possible:

[Ntja] e hahotse [buka] [ka meno] (*The dog tore the book with teeth*)

[Meno] a hahotse [buka] (*Teeth tore the book*)

3.6.6.2 Event structure

The event structure of these verbal root “-haho-” involves two events, i.e. process and state.

Process events

[Ntja] e hahotse [kobo] (*The dog tore the blanket*)

[Moshemane] o-hahotse [lengolo] (*The boy tore a letter*)

State events

Lesela le hahohile la-ba dikatana (*The cloth is torn and became rags*)

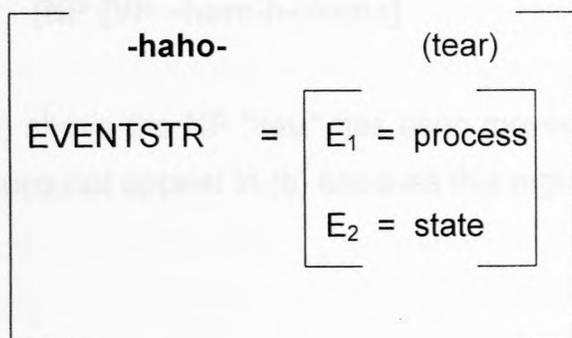
Mose o hahohile wa-ba dikatana (*The dress is torn and became rags*)

Letlalo le hahohile la-ba dikatana (*The skin is torn and became rags*)

Buka e hahohile ya-ba dikgetjhana (*The book is torn and became pieces*)

Lengolo le hahohile la-ba dikgetjhana (*A letter is torn and became pieces*)

The event structure can be represented as follows:



3.6.6.3 Lexical conceptual paradigm (LCP)

The verbal root “-haho-” (tear) has different meanings or senses like:

Meaning of tear violently

[Ngwana] o hahotse [lengolo] (*The child tore a letter violently*)

[Lesela] le hahohile (*The cloth is torn*)

Meaning of rent

[Moaho wa kereke] o-hahohile [ka kgahoho e phahameng]

(*The church's building has been rented with a high price*)

3.6.6.4 Lexical inheritance structure

These verbs will fall under the following hierarchical form: tear violently – break – change of state. This is another (tear) verb like “-mamo-”. It falls under a sub class of break and the main class of verb of change of state.

3.5.7 HARO

3.6.7.1 Argument structure

The verbal root “-haro-” appears with the suffixes [-l-] and [-h-] as [-horo-l-] and [-horo-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. [Tau] e-harola [nama] (*The lion tears the meat violently*)
- b. [Nama] e-a-haroha (*The meat is torn violently*)

These S-structures above are derived from the following d-structures:

- a. [NP [VP – haro-l- tau nama]
- b. [NP [VP –haro-h- nama]
- c.

In (a) above the NP “tau” has been moved and in (b) the NP “nama”. The NP “tau” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-haro-” with the transitive affix [-I-]. The NPs in the subject position need to be animate because they are agents:

[Ntja] o-harola [letialo]	(The dog tears the skin)	(animal)
[Ntate] o-harola [kobo]	(Father tears a blanket)	(human)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above i.e. “nama”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be torn are any physical object which is made of meat, material, paper and leather:

[Ntja] e-harola [nama]	(The dog tears meat)	(meat)
[Katse] e-harola [lengolo]	(The cat tears a letter)	(paper)
[Ntate] o-harola [lesela]	(Father tears cloth)	(material)
[Seroki] se-harola [letlalo]	(A tailor tears a skin)	(leather)

It seems as if objects such as **sehwapa, nama, letlalo, borikgwe, mose, kobo and buka** may appear with “harola”. The selection restriction on the object argument of “harola” may be given as follows:

[ARG2 = Ntho e ka tshwarehang, e tabohang ha bonolo e entsweng ka lelapi, pampiri, letlalo kapa nama].

The verb “-haro-h-” which has the intransitive suffix [-h-] which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “-haro-I-” above.

[Nama] e-a-haroha	(The meat tears)	(meat)
[Lengolo] le-a-haroha	(A letter tears)	(paper)
[Lesela] le-a-haroha	(A cloth tears)	(material)

[letlalo] le-a-haroha (A skin tears) (leather)

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-haro-l-” above.

The third argument with these verbs is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

Ntja e-harotse name [ka [meno]] (The dog tore the meat with teeth)

[S-ARG1 = instrument]

In this regard **cognate object** is not possible with these verbs.

Inalienable possession is possible with these verbs, e.g.:

With haroha

[Leoto la borikgwe] le harohile (The leg of the trouser is torn)

[Borikgwe] bo harohile [leoto] (The trouser’s leg is torn)

With harola

Ntate o harotse [leoto la borikgwe] (Father tore the leg off the trouser)

Ntate o harotse [borikgwe] [leoto] (Father tore the trouser’s leg)

The **instrument-subject alternation** is also possible:

[Monna] o harotse [sehwapa] [ka meno] (The man tore dry meat with teeth)

[Meno] a harotse sehswapa (Teeth tore dry meat)

3.6.7.2 **Event structure**

The event structure of this verbal root “-haro-” (tear) involves two events, i.e. process and state:

Process events

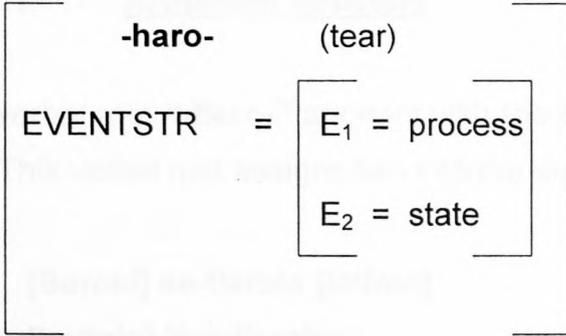
[Ntja] e-harola [letlalo] (The dog tears the skin)

[Moshemane] o-harotse [lengolo] (The boy tore the letter)

State events

- Nama e harohile ya-ba dikotwana** (*The meat is torn and became pieces*)
Mose o harohile wa-ba dikatana (*A dress is torn and became pieces*)
Lengolo le harohile la-ba dikgetjhana (*A letter is torn and became pieces*)
Sehwapa se harohile la-ba dikatana (*The dry meat is torn and became pieces*)

The event structure can be represented as follows:

**3.6.7.3 Lexical conceptual paradigm (LCP)**

The verbal root “-haro-” has different meanings or senses like:

Meaning of tearing to pieces

- [Ntja] e harotse [letlalo]** (*The dog tore the shin*)
[Ntja] e harola [kobo] (*The dog tears the blanket*)

Meaning of devour or to root out

- [Tau] e-harotse nama** (*The lion tore the meat*)
[Katse] e-harotse tweba (*The cat devoured the mouse*)

Meaning of fright (to be moved)

- [Moshemane] o harohile letswalo ke pono eo**
(The boy has been frightened by that scene)

3.6.7.4 Lexical inheritance structure

These verbs falls under the **tear** verbs, and a sub-class of break verbs and the main class of verbs of change of state. The hiearcharhy will be like this: tear to pieces – tear – break – change of state.

3.6.8 TLERO

3.6.8.1 Argument structure

The verbal root “-tlero-” appears with the suffixes [-l-] and [-h-] as [-tlero-l-] and [-tlero-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. **[Seroki] se-tlerola [letlalo]** (*The tailor tears the skin apart*)
 b. **[Letlalo] le-a-tleroha** (*The skin is torn apart*)

The S-structures above are derived from the following d-structures:

- a. **[NP [VP -tlero-l- seroki letlalo]**
 b. **[NP [VP -tlero-h- letlalo]**

In (a) above the NP “**seroki**” has been moved and in (b) the NP “**letlalo**”. The NP “**seroki**” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-tlero-” with the transitive affix [-l-]. The NPs in the subject position need to be animate because they are agents:

- [Mme] o-tlerola [lesela]** (*Mother tears the cloth apart*) (*human*)
[Tweba] e-tlerola [pampiri] (*A mouse tears a paper apart*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**letlalo**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be torn apart are any physical object which is made of material, paper or leather:

[Nswana] o- tlerola [buka]	(The child tears a book apart)	(paper)
[Tweba] e- tlerotse [lesela]	(A mouse tore a cloth apart)	(material)
[Seroki] se- tlerotse [letlalo]	(The tailor tore the skin apart)	(leather)

It seems as if objects such as **mose**, **lesela**, **hempe**, **buka**, **pampiri** and **letlalo** may readily appear with “**-tlerola**”. The selection restriction on the object argument of “**tlerola**” may be given as follows:

[ARG2 = Ntho e ka tshwarehang e bobebe e tabohang e entsweng ka lesela, pampiri kapa letlalo].

The verb “**-tlero-h-**” which has the intransitive suffix [-h-] which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “**-tlero-l-**” above.

[Buka] e-a- tlero ha	(The book is torn apart)	(paper)
[lesela] le-a- tlero ha	(The cloth is torn apart)	(material)
[letlalo] le-a- tlero ha	(The skin is torn apart)	(leather)

These arguments will all be interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “**-tlero-l-**” above.

The third argument with these verbs is a shadow argument. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

Mosadi o-tlerotse** lesela [ka [lehare]]** (The woman tore a cloth apart with a blade)

[S-ARG1 = instrument]

A cognate object is not possible with these verbs.

Inalienable possession is possible with these verbs, e.g.:

With tleroha

[Letsoho la baki] le-tlerohile (The arm of the jacket is torn apart)

[Baki] e-tlerohile [letsoho] (The jacket's arm is torn apart)

With tlerola

Monna o-tlerotse [letsoho la baki] (The man tore the arm off the jacket)

Monna o-tlerotse [baki] [letsoho] (The man tore the jacket's arm)

The instrument-subject alternation is also possible with these verbs, e.g.:

[Mosadi] o-tlerola [baki] [ka lehare] (The woman tears the jacket apart with a blade)

[Lehare] le-tlerola [baki] (The blade tears the jacket apart)

3.6.8.2 Event structure

The verbal root “-tlero-” has the process and state events:

Process events

[Baki] e-a-tleroha (A jacket is torn apart)

[lesela] le-a-tleroha (A cloth is torn apart)

State events

Buka e tlerohile ya-ba dikatana (A jacket is torn apart and became rags)

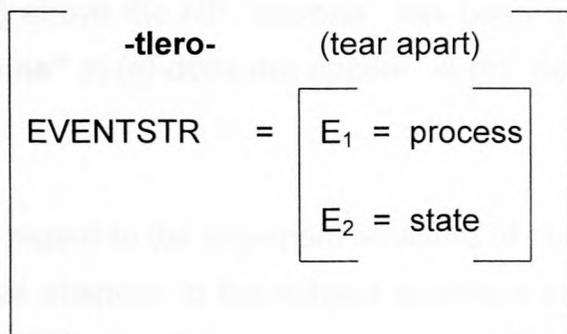
Pampiri e tlerohile ya-ba dikgetjhana (A paper is torn apart and became pieces)

Letlalo le tlerohile la-ba dikgetjhana (A skin is torn apart and became pieces)

Mose o tlerohile wa-ba dikatana (The dress is torn apart and became rags)

Borikgwe bo tlerohile ba-ba dikatana (The trouser is torn apart and became rags)

The event structure can be represented as follows:



3.6.8.3 Lexical conceptual paradigm (LCP)

"Tlerola" has only one meaning of "tlerola / tleroha", i.e. to tear apart.

[Monna] o-tlerola [baki] (The man tears a jacket apart)

[Pampiri] e-a-tleroha (A paper is torn apart)

3.6.8.4 Lexical inheritance structure

From the hierarchy: tear apart – tear – break – change of state, it becomes clear that this is a verb of **tear**, falling under the verb of break, and it is from the main class of verbs of change of state.

3.6.9 QHASHO

3.6.9.1 Argument structure

The verbal root "**-qhasho-**" appears with the suffixes **[-l-]** and **[-h-]** as **[-qhasho-l-]** and **[-qhasho-h-]**. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. [Monna] o-qhashola [mokotla] (The man burst open the sack)
- b. [Mokotla] o-a-qhashoha (The sack is burst open)

The S-structures above are derived from the following d-structures:

- a. [NP [VP -qhasho-l-monna mokotla]
- b. [NP [VP -qhasho-h- mokotla]

In (a) above the NP “**monna**” has been moved and in (b) the NP “**mokotla**”. The NP “**monna**” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-qhasho-” with the transitive affix [-I-]. The NPs in the subject position need to be animate because they are agents:

[Ngwana] o-qhashola [buka]	<i>(The child burst a book open)</i>	<i>(human)</i>
[Tweba] e-qhashola [dieta]	<i>(The mouse burst open shoes)</i>	<i>(animal)</i>

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**mokotla**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be burst open are any physical object which is made of material, paper or leather:

[Ngwana] o-qhashola [borikgwe]	<i>(The child breaks open a trouser)</i>	<i>(material)</i>
[Tweba] e-qhashola [buka]	<i>(The mouse breaks open a book)</i>	<i>(paper)</i>
[Seroki] se-qhashola [seeta]	<i>(The tailor breaks open a shoe)</i>	<i>(leather)</i>

It seems as if objects such as **mose**, **thae**, **buka**, **dieta** and **hempe** may readily appear with “-qhashola”. The selection restriction on the object argument of “qhashola” may be given as follows:

[ARG2 = Ntho e ka tshwarehang e bobebe e qhashohang ha bonolo e entsweng ka lelapi, pampiri kapa letlalo].

The verb “-qhasho-h-” which has the intransitive suffix [-h-] which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “-qhasho-l-” above.

[Borikgwe] bo-a-qhashoha	<i>(A trouser burst open)</i>	<i>(material)</i>
[Buka] e-a-qhashoha	<i>(A Book burst open)</i>	<i>(paper)</i>
[Seeka] se-a-qhashoha	<i>(A shoe burst open)</i>	<i>(leather)</i>

These arguments will all be interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-qhasho-l-” above.

The third argument with these verbs is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

Monna o qhashotse hempe [ka [dimpa]]

(The man burst open a shirt with his belly)

[S-ARG1 = instrument]

A **cognate object** is not possible with these verbs.

Inalienable possession is possible with these verbs, e.g.:

With qhashoha

[Konopo ya hempe] e-qhashohile *(The button of the shirt burst open)*

[hempe] e-qhashohile [konopo] *(The shirt's button burst open)*

With qhashola

Monna o qhashotse [konopo ya hempe]

(The man burst open the button of the shirt)

monna o qhashotse [hempe] [konopo]

(The man burst open the shirt's button)

The **instrument-subject alternation** is also possible with these verbs, e.g.:

[Monna] o qhashola [hempe] [ka dimpa]

(The man burst open the shirt with belly)

[Dimpa] di qhashola [hempe] *(Belly burst open the shirt)*

3.6.9.2 **Event structure**

The verbal root “-qhasho-” has the process and state events:

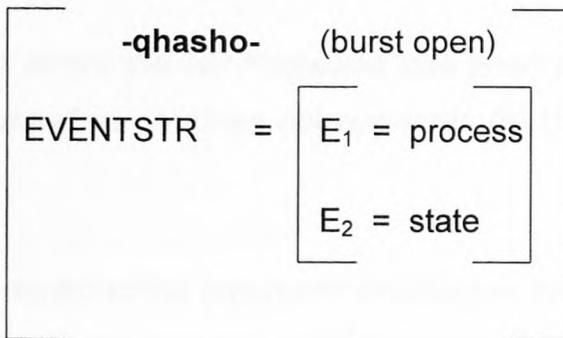
Process events

[Ngwana] o-qhashola [dieta]	<i>(The child breaks open shoes)</i>
[Pere] e-qhashola [ropo]	<i>(The horse breaks a rope)</i>

State events

Mose o qhashohile wa-ba <u>dikatana</u>	<i>(The dress burst and became rags)</i>
Thae e qhashohile ya-ba <u>dikgetjhana</u>	<i>(A tie burst became pieces)</i>
Buka e qhashohile ya-ba <u>dikatana</u>	<i>(A book burst open and became pieces)</i>
Dieta di qhashohile tsa-ba <u>dikgetjhana</u>	<i>(Shoes burst open and became rags)</i>
Hempe e qhashohile ya-ba <u>dikatana</u>	<i>(A shirt burst and became rags)</i>

The event structure can be represented as follows:

**3.6.9.3 Lexical conceptual paradigm (LCP)**

The following are the different meaning which are noticed with these verbs:

The meaning of: “to burst open or unfold”

[Mose] o-qhashohile	<i>(A dress burst open)</i>
[Borikgwe] bo qhashohile ka tlase	<i>(A trouser burst open underneath)</i>

The meaning of heartbroken

[Mosadi] o-qhashohile [pelo]	<i>(The woman's heart is broken)</i>
[Lerato] le-qhashohisa [maikutlo]	<i>(Love break heart)</i>

3.6.9.4 Lexical inheritance structure

This is a **burst** verb, which falls under a sub class of the break verbs, it is also classified under the main class of verbs of change of state. The hierarchy will be like this: burst open – burst – break – change of state.

3.6.10 PHATLO

3.6.9.1 Argument structure

The verbal root “-**phatlo-**” appears with the suffixes [-**I-**] and [-**h-**] as [-**phatlo-I-**] and [-**phatlo-h-**]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. **[Nswana] o-phatlola [balone]** (*The child burst open the balloon*)
- b. **[Balone] e-a-phatloha** (*The balloon burst open*)

These S-structures above are derived from the following d-structures:

- a. **[NP [VP -phatlo-I- nswana balone]**
- b. **[NP [VP -phatlo-h- balone]**

In (a) above the NP “**nswana**” has been moved and in (b) the NP “**balone**”. The NP “**nswana**” in (a) does not appear in (b) because this argument is controlled by the affix [-**h-**].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-**phatlo-**” with the transitive affix [-**I-**]. The NPs in the subject position need to be animate because they are agents:

- [Dikgomo] di phatlotse [peipi ya metsi]** (*The cattle burst open a water pipe*) (*animal*)
- [Monna] o phatlotse [mosamo]** (*The man burst open a pillow*) (*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**balone**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be burst open are any physical object which has air in it, in a form of a container with water or anything:

- [Mme] o-phatlola [mosamo]** (*Mother burst open the pillow*) (*feathers*)
- [Nswana] o-phatlola [balone]** (*The child burst open the balloon*) (*air*)

[Tweba] e-phatlola [mokotla wa poone] (A mouse burst open a Mealie sack)
(mealies)

[Dikgomo] di-phatlotse [letamo] (The cattle burst open a dam) (water)

It seems as if objects such as **mokotla wa poone**, **letamo**, **balone**, **mosamo**, **bolo** and **lebidi** may readily appear with “-qhashola”. The selection restriction on the object argument of “qhashola” may be given as follows:

[ARG2 = Ntho e nang le moya ka hare, e bonolo e nang le hohong ka hare e phatlohang].

The verb “-phatlo-h-” which has the intransitive suffix [-h-], which controls the external argument, appears only with an argument in the subject position. This argument is the same as the object argument of “-phatlo-l-” above.

[Mosamo] o-a-phatloha (The pillow burst open) (feathers)

[Balone] e-a-phatloha (The balloon burst open) (air)

[Mokotla wa poone] o-a-phatloha (A mealie sack burst open) (mealies)

[Letamo] le-a-phatloha (A dam burst open) (water)

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-phatlo-l-” above.

The third argument with these verbs is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

Monna o phatlotse peipi ya metsi [ka [peke]]

(The man burst opens the water pipe with a pickaxe)

[S-ARG1 = instrument]

A **cognate object** is possible with these verbs, e.g.:

Letamo le phatlohile [phatloho e tshabehang]

(A dam burst open with a frightening burst)

Inalienable possession is possible with these verbs, e.g.:

With phatloha

[Moya wa lebidi] o phatlohile *(The air of the wheel burst open)*

[Lebidi] le phatlohile [moya] *(The wheel's air burst open)*

With phatlola

Monna o phatlotse [moya wa lebidi] *(The man burst open the air of the wheel)*

Monna o phatlotse [lebidi] [moya] *(The man burst open the wheel's air)*

The **instrument-subject alternation** is also possible with these verbs, e.g.:

[Moshemane] o phatlola [lebidi] [ka nale]

(The boy burst opens the wheel with a needle)

[Nale] e phatlola [lebidi] *(The needle burst open the wheel)*

3.6.10.2 Event structure

There are two events with these verbs, i.e. process and state:

Process events

[Ngwana] o-phatlola [balone] *(The child burst a balloon open)*

[Monna] o-phatlotse [lebidi] *(The man burst the wheel open)*

State events

Emere ya metsi e phatlohile ya-ba dikgetjhana

(The water bucket burst and became pieces)

Mokotla wa poone o phatlohile wa-ba dikgetjhana

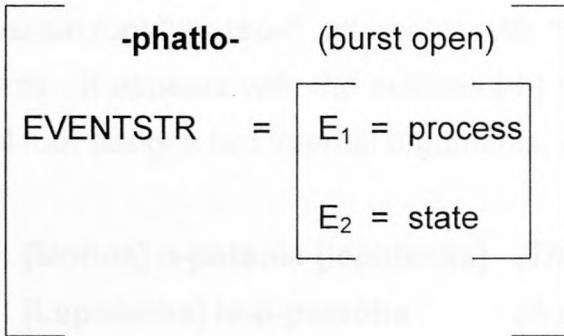
(The mealie's sack burst and became pieces)

Balone e phatlohile ya-ba dikgetjhana

(The balloon burst open and became pieces)

Mosamo o phatlohile wa-ba dikgetjhana*(A pillow burst open and became rags)***Bolo e phatlohile ya-ba dikgetjhana***(A ball burst open and became pieces)*

The event structure can be represented as follows:

**3.6.10.3 Lexical conceptual paradigm (LCP)**

The verbal root “-**phatlo-**” has the following different senses, e.g.:

The meaning of: “burst open”**[Monna o-phatlotse [mosamo]** *(The man burst the pillow open)***[Ngwana] o-phatlotse [balone]** *(The child burst a balloon open)***The meaning of “to break open or break through”****[Monna] o phatlola [batho] tseleng ya hae***(The man forces his way through people)***[Setsomi] se phatlola [jwang] ho batla tsela***(The hunter forces his way through the grass searching a way)***Meaning of crying aloud****[Mosadi] o phatlohile feela lefung***(The woman cried aloud in the funeral)*

3.6.10.4 Lexical inheritance structure

This is a **burst** verb, which is classified under a sub class of the break verbs, it is also classified under the main class of verbs of change of state. The hierarchy will be like this: burst open – burst – break – change of state.

3.6.11 PATSO

3.6.9.1 Argument structure

The verbal root “-patso-” alternates with “-petso-” and it has the same implication in all respects. It appears with the suffixes [-l-] and [-h-] as [-patso-l-] and [-patso-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. **[Monna] o-patsola [lepolanka]** (*The man split a plank*)
- b. **[Lepolanka] le-a-patsoha** (*A plank is split*)

The S-structures above are derived from the following d-structures:

- a. **[NP [VP –patso-l- monna lepolanka]**
- b. **[NP [VP –patso-h- lepolanka]**

In (a) above the NP “**monna**” has been moved and in (b) the NP “**lepolanka**”. The NP “**monna**” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-patso-” with the transitive affix [-l-]. The NPs in the subject position need to be animate because they are agents:

- [Ntja] e patsola [lesapo]** (*A dog split a bone*) (*animal*)
- [Monna] o patsola [lebota]** (*The man cracks the wall*) (*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**lepolanka**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be, burst open are any physical objects which is made of stone, wood, leather or plastic ware:

- [Ntate] o patsola [lebota] (Father cracks the wall) (stone)
 [Moshemane] o-patsola [patsi] (The boy split a firewood) (wood)
 [Seroki] se-patsola [dieta] (The tailor split shoes) (leather)

[Mosadi] o-patsola[sejana sa polasetiki]
 (The woman split a plastic dish) (plastic ware)

It seems as if objects such as **lebota**, **patsi**, **dieta**, **fuluru**, **lepolanka**, **sejana sejana** and **sa polasetiki** may readily appear with “-patsola”. The selection restriction on the object argument of “qhashola” may be given as follows:

[ARG2 = Ntho e tiileng e patsohang ha bonolo e entsweng ka lejwe, patsi, letlalo kapa polasetiki].

The verb “-patso-h-” which has the intransitive suffix [-h-], which controls the external argument, appears only with an argument in the subject position. This argument is the same as the object argument of “-patso-l-” above.

- [Lebota] le-a-patsoha (A wall split) (stone)
 [Patsi] e-a-patsoha (The firewood split) (wood)
 [Dieta] di-a-patsoha (The shoes cracks) (leather)
 [Sejana sa polasetiki] se-a-patsoha (The plastic dish split) (plastic ware)

These arguments will all be interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-patso-l-” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

Monna o-patsotse patsi [ka [selepe]]*(The man split firewood with an axe)***[S-ARG1 = instrument]****Cognate objects** are possible with these verbs, e.g.:**Ntlo e patsohile [patsolo e kgolo]** *(The house is split into a big crack)***Fuluru e patsohile [patsoho e tshabehang]***(The floor is split into a frightening split)***Monna o patsotse sefate [lepatso le leholo]***(The man split a tree into a big crack)*This verb is able to appear with **inalienable possession**, e.g.:**With patsoha****[Lekala la sefate] le patsohile** *(The branch of the tree is split)***[Sefate] se patsohile [lekala]** *(The tree's branch is split)***With patsola****Monna o-patsotse [Lekala la sefate]** *(The man split the branch of the tree)***Monna o-patsotse [sefate] [lekala]** *(The man split the tree's branch)***Instrument-subject alternation** is possible with these verbs, e.g.:**[Monna] o patsola [patsi] [ka selepe]** *(The man split firewood with an axe)***[Selepe] se patsola [patsi]** *(An axe split a firewood)***3.6.11.2 Event structure**

There are two events for these verbs, i.e. process and state:

Process events**[Monna] o patsola [sefate]** *(The man split a tree)*

[Ntja] e patsola [lesapo]

(A dog split the bone)

State events

Lebota le patsohile la-ba mapatso-latso

(The wall cracked and have cracks)

Lejwe le patsohile la-ba dikarolwana

(A stone split and became pieces)

Dieta di patsohile tsa-ba dikarolwana

(The shoes split and have cracks)

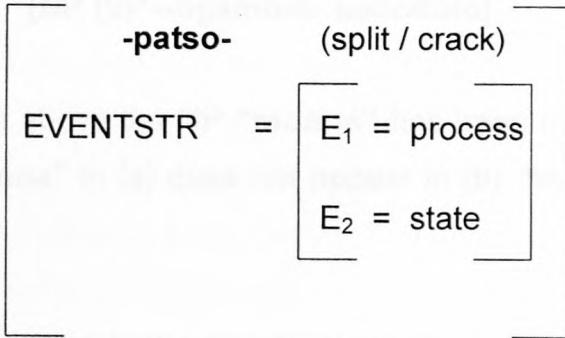
Fuluru e patsohile ya-ba mapatso-patso

(The floor cracked and have cracks)

Patsi e patsohile ya-ba mafatsa

(A firewood cracked and became splinters)

The event structure can be represented as follows:



3.6.11.3 Lexical conceptual paradigm (LCP)

There is a meaning of split open and to crack:

The meaning of: “split open”

[Monna] o patsola [lesapo]

(The man split open a bone)

[Ngwana] o patsotse [lamunu]

(The child split open an orange)

Meaning of “crack”

[Lebopo] le-a-patsoha

(The river's bank cracks)

[Fuluru] e-patsohile

(The floor cracked)

3.6.11.4 Lexical inheritance structure

This is a split verb, which falls under a sub class of the break verbs, it is also classified under the main class of verbs of change of state. The hierarchy will be like this: split open – break – change of state.

3.6.12 NGAMO

3.6.12.1 Argument structure

The verbal root “-ngamo-” appears with the suffixes [-l-] and [-h-] as [-ngamo-l-] and [-ngamo-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. [Monna] o-ngamola [senotlolo] *(The man cracks the key)*
 b. [Senotlolo] se-a-ngamoha *(The key cracks)*

The S-structures above are derived from the following d-structures:

- a. [NP [VP -ngamo-l- monna senotlolo]
 b. [NP [VP -ngamo-h- senotlolo]

In (a) above the NP “monna” has been moved and in (b) the NP “senotlolo”. The NP “monna” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-ngamo-” with the transitive affix [-l-]. The NPs in the subject position need to be animate because they are agents. In this regard only human being are able to do the act of cracking with hands:

- [Monna] o ngamola [senotlolo] *(The man cracks the key) (human)*
 [Moshemane] o ngamola [sefi] *(The boy cracks a snare) (human)*

The subject argument will then appear with the following selection restriction:

[ARG1 = human]

The second argument appears in the object position in (a) above, i.e. “senotlolo”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may crack or split are any physical objects which is made of iron, zinc or leather :

- [Monna] o ngamola [senotlolo] *(The man cracks a key) (iron)*
 [Banna] ba ngamola [lesenke] *(The men cracks zinc) (zinc)*

[Moshemane] o ngamola [terata]	<i>(The boy cracks wire)</i>	<i>(wire)</i>
[Seroki] se ngamola [seeta]	<i>(A tailor cracks a shoe)</i>	<i>(leather)</i>

It seems as if objects such as **sefi**, **lemati**, **senotlolo**, **fensetere**, **terata** and **seeta** may readily appear with “-ngamola”. The selection restriction on the object argument of “ngamola” may be given as follows:

[ARG2 = Ntho e ka tshwarehang e thata e ngamohang, e entsweng ka tshepe, lesenke, terata kapa letlalo].

The verb “-ngamo-h-” which has the intransitive suffix [-h-], which controls the external argument, appears only with an argument in the subject position. This argument is the same as the object argument of “-ngamo-l-” above.

[Senotlolo] se-a-ngamoha	<i>(The key cracks)</i>	<i>(iron)</i>
[Lesenke] le-a-ngamoha	<i>(A zinc cracks)</i>	<i>(zinc)</i>
[Terata] e-a-ngamoha	<i>(A wire cracks)</i>	<i>(wire)</i>
[Seeta] se-a-ngamoha	<i>(A shoe cracks)</i>	<i>(leather)</i>

These arguments will all be interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-ngamo-l-” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

[Monna] o-ngamotse terata [ka [tang]]
(The man cracked the wire with pliers)

[S-ARG1 = instrument]

A **cognate object** is possible with this verb, e.g.:

Lebota le ngamohile [ngamoho e tshabehang]
(A wall is cracked into a frightening crack)

Ho ngamola lesenke ke ngamolo empe

(To crack zinc is a tiresome business)

Inalienable possession, is possible with these verbs, e.g.:

With ngamoha

[Serethe sa seeta] se ngamohile *(The heel of the shoe is cracked)*

[Seeta] se ngamohile [serethe] *(The shoe's heel is cracked)*

With ngamola

Monna o-ngamotse [serethe sa seeta] *(The man cracked the heel of the shoe)*

Monna o-ngamotse [seeta] [serethe] *(The man cracked the shoe's heel)*

Instrument-subject alternation is possible with these verbs, e.g.:

[Monna] o ngamotse seeta [ka thipa] *(The man cracked the shoe with a knife)*

[Thipa] e ngamotse seeta *(The knife cracked the shoe)*

3.6.12.2 Event structure

The verbal root “-ngamo-” has two events, i.e. process and state:

Process events

[Monna] o ngamola [seeta] *(The man cracks a shoe)*

[Banna] ba ngamola [tshepe] *(The men cracks an iron)*

State events

Sefi se ngamohile sa-ba dikarolo *(A snare cracked and became portions)*

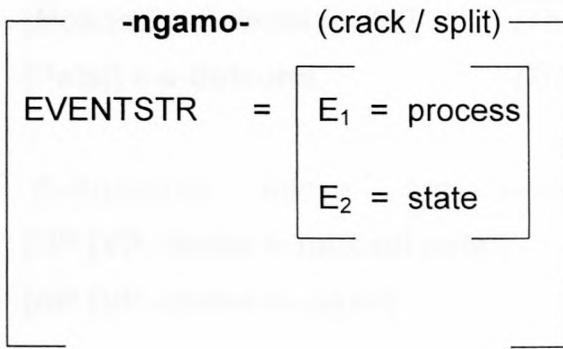
Lemati le ngamohile la-ba dikarolo *(A door cracked and became portions)*

Senotlolo se ngamohile sa-ba dikarolwana *(A key cracked and became portions)*

Terata e ngamohile ya-ba dikarolo *(A wire cracked and became portions)*

Lesenke le ngamohile la-ba dikarolo *(A zinc cracked and became portions)*

The event structure of this verb will look like this:



3.6.12.3 Lexical conceptual paradigm (LCP)

There are a number of senses or meanings, which are brought forward by this verb, e.g.:

Sense of crack or split

[Lebota] le-a-ngamoha (A wall cracks)

[Senotlolo] se-ngamohile (A zinc cracked)

Sense of break

[Moshemane] o-ngamola [sefi] (The boy breaks a snare)

[Senotlolo] se-ngamohile (A key broke)

Sense of tiring or importune

[Menejara] o ngamohile hlooho (The manager's head is stuck)

Ho sala le bana ho ngamola hlooho (To look after children is a tiresome business)

3.6.12.4 Lexical inheritance structure

This is a **crack** verb, which is classified under a sub class of the break verbs, and it is also classified under the main class of verbs of change of state. The hierarchy may look like this: split / crack - break – change of state.

3.6.13 TLETSO

3.6.13.1 Argument structure

The verbal root “-tletso-” appears with the suffixes [-l-] and [-h-] as [-tletso-l-] and [-tletso-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. **[Mosadi] o-tletsola [patsi]** (*The woman split firewood*)
 b. **[Patsi] e-a-tletsoha** (*The firewood split*)

The S-structures above are derived from the following d-structures:

- a. **[NP [VP –tletso-l- mosadi patsi]**
 b. **[NP [VP –tletso-h- patsi]**

In (a) above the NP “**mosadi**” has been moved and in (b) the NP “**patsi**”. The NP “**mosadi**” in (a) does not appear in (b) because this argument is controlled by the affix **[-h-]**.

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “**-tletso-**” with the transitive affix **[-l-]**. The NPs in the subject position need to be animate because they are agents:

- [Ntja] e tletsola [nama]** (*The dog split meat*) (*animal*)
[Ngwana] o tletsola [lamunu] (*The child split an orange*) (*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**patsi**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be split, are any physical objects which is made of wood, leather, plastic ware or food:

- [Moshemane] o tletsola [patsi]** (*The boy split a wood*) (*wood*)
[Ngwana] o tletsola [emere ya polasetiki] (*The child split a plastic bucket*) (*plastic ware*)

[Ntja] e tletsola [letlalo] (*The dog split a skin*) (*leather*)
[Mosadi] o tletsola [nama] (*The woman split meat*) (*food*)

It seems as if objects such as **patsi**, **emere ya polasetiki**, **letlalo**, **nama** and **bohobe** may readily appear with “-tletsola”. The selection restriction on the object argument of “-tletsola” may be given as follows:

[ARG2 = Ntho e ka tshwarehang e tletsohang ha bonolo e entsweng ka patsi, letlalo, nama kapa polasetiki].

The verb “-tletso-h-” which has the intransitive suffix [-h-], which controls the external argument, appears only with an argument in the subject position. This argument is the same as the object argument of “-tletso-l-” above.

[Patsi] e-a-tletsoha	<i>(The firewood split)</i>	<i>(wood)</i>
[Emere ya polasetiki] e-a-tletsoha	<i>(A plastic bucket split)</i>	<i>(plastic ware)</i>
[Letlalo] le-a-tletsoha	<i>(The skin split)</i>	<i>(leather)</i>
[Nama] e-a-tletsoha	<i>(The meat split)</i>	<i>(food)</i>

These arguments will all be interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-tletso-l-” above.

Shadow argument is the third argument which often appear with three verbs. This argument is introduced by the preposition “ka” and it may indicate an instrument:

[Mosadi] o tlepotse bohobe [ka [letsoho]]

(The woman split bread with a hand)

[S-ARG1 = instrument]

A **cognate object** is possible with these verbs, e.g.:

Mosadi o tletsotse bohobe [ka tletsoho e kgolo]

(The woman split bread with a big split)

Bohobe bo tletsohile tletsoho e nyane]

(The bread split a small split)

Inalienable possession, is possible with these verbs, e.g.:

With tletsoha

[Ngwana o tletsotse [lekgapetla la lamunu]

(The child spit the peel of an orange)

Ngwana o tletsotse [lamunu] [lekgapetla]

(The child split an orange's peel)

Instrument-subject alternation is possible with these verbs, e.g.:

[Ngwana] o tletsotse [lamunu] [ka meno] *(The child split an orange with teeth)*

[Meno] a tletsotse [lamunu] *(Teeth split an orange)*

3.6.13.2 Event structure

There are two events with this verb, i.e. process and state:

Process events

[Patsi] e-a-tletsoha *(The firewood split)*

[Bohobe] bo-a-tletsoha *(The bread split)*

State events

Patsi e tletsohile ya-ba mafatsa *(The firewood split and became splinters)*

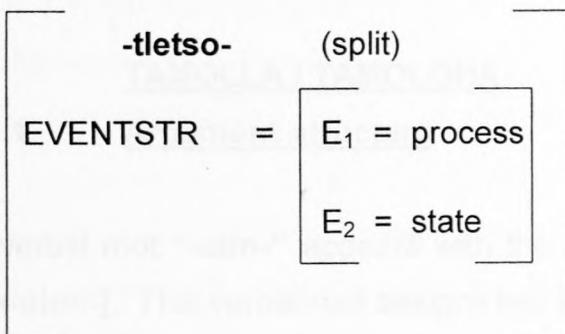
Letlalo le tletsohile la-ba dikarolo *(The skin split and became portions)*

Nama e tletsohile ya-ba dikarolo *(The meat split and became portions)*

Bohobe bo tletsohile ba-ba dikarolo *(The bread split and became portions)*

Lamunu e tletsohile ya-ba dikarolo *(An orange split and became portions)*

The event structure of this verb will look like this:



3.6.13.3 Lexical conceptual paradigm (LCP)

There are few meaning or senses with these verbs, e.g.:

Meaning of split or divide

[Mme] o tletsotse [bohobe] *(Mother split the bread)*

[Ngwana] o tletsotse [lamunu] *(The child split an orange)*

Meaning of running

Leshodu ha le bona mapolesa la tletsoha *(A thief seeing the policeman run away)*

Ha tau e hlaha a tletsoha ke tshabo *(When the lion appear he run away with fright)*

Meaning of crack

Ntate o tletsola patsi ka selepe *(Father cracks firewood with an axe)*

Mme o tletsotse emere ya metsi *(Mother cracked a bucket of water)*

3.6.13.4 Lexical inheritance structure

This is a **split** verb, which is classified under a sub class of the break verbs, and it is also classified under the main class of verbs of change of state. The hierarchy will be like this: split - break – change of state.

3.7 VERBS WITH THE SUFFIXES [-OLL-] AND [-OLOH-]

See paragraph 3.3.3.2 above. Although these verbs appear with reversive-transitive suffix [-oll-] and a reversive-intransitive suffix [-oloh-], these suffixes do not have a reversive meaning with these verbs below. As such, they are treated in the same way as the verbs in paragraph 6 above:

3.7.1 TAMOLLA / TAMOLOHA

3.7.1.1 Argument structure

The verbal root “-tam-” appears with the suffixes [-oll-] and [-oloh-] as [-tam-oll-] and [-tam-oloh-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. **[Nonyana] e-tamolla [noha]** (*A bird tears the snake to pieces*)
 b. **[Noha e-a-tamoloha]** (*The snake is stretched out*)

The S-structures above are derived from the following d-structures:

- a. **[NP [VP -tam-oll- nonyana noha]**
 b. **[NP [VP -tam-oloh- noha]**

In (a) above the NP “**nonyana**” has been moved and in (b) the NP “**noha**”. The NP “**nonyana**” in (a) does not appear in (b) because this argument is controlled by the affix **[-oloh-]**.

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “**-tamoll-**” with the transitive affix **[-oll-]**. The NPs in the subject position need to be animate because they are agents:

- [Monna] o-tamolla [borikgwe]** (*The man tears the trouser to pieces*) (*human*)
[Katse] e-tamolla [tweba] (*The cat tears the mouse to pieces*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**noha**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be torn to pieces, are any physical objects made of material, paper or leather and flesh:

- [Monna] o tamolla [borikgwe]** (*The man tears the trouser to pieces*) (*material*)
[Tweba] e tamolla [pampiri] (*The mouse tears the paper to pieces*) (*paper*)
[Seroki] se tamolla [letlalo] (*The tailor tears the skin to pieces*) (*leather*)
[Ntja] e tamolla [nama] (*A dog tears meat to pieces*) (*flesh*)

It seems as if objects such as **nama**, **borikgwe**, **lesela**, **mose**, **nyamatsane**, **letlalo** and **pampiri**, may readily appear with “**-tamolla**”. The selection restriction on the object argument of “**tamolla**” may be given as follows:

[ARG2 = Ntho e ka tshwarehang e tamollehang ha bonolo e entsweng ka lelapi, pampiri, letlalo kapa nama].

The verb “**-tam-oloh-**” which has the intransitive suffix [-oloh-], which controls the external argument, appears only with an argument in the subject position. This argument is the same as the object argument of “**-tam-oll-**” above.

[Lesela] le-a-tamoloha	(A cloth stretches)	(material)
[Pampiri] e-a-tamoloha	(The paper torn to pieces)	(paper)
[Letlalo] le-a-tamoloha	(The skin is torn to pieces)	(leather)
[nama] e-a-tamoloha	(The meat is torn to pieces)	(flesh)

These arguments will all be interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “**-tam-oll-**” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

[Monna o-tamollotse borikgwe [ka [matsoho]]
(The man tore trousers to pieces with hands)

[S-ARG1 = instrument]

A **cognate object** is not possible with these verbs.

Inalienable possession, is possible with these “**tear**” verbs, e.g.:

With tamoloha

[Leoto la borikgwe] le tamolohile	(The leg of the trouser is torn to pieces)
[Borikgwe] bo tamolohile [leoto]	(The trouser’s leg is torn to pieces)

With tamolla

Monna o-tamollotse [leoto la borikgwe]	(The man tore the leg off the trouser)
Mouna o-tamollotse [borikgwe] [leoto]	(The man tore the trouser’s leg)

Instrument-subject alternation is possible with these verbs, e.g.:

[Monna] o tamollotse [borikgwe] [ka matsoho]

(The man tore the trouser with hands)

[Matsoho] a tamollotse [borikgwe] *(The hands tore the trouser)*

3.7.1.2 Event structure

The event structure of this verbal root “-tamol-” involves two events, i.e. process and state:

Process events

[Ntja] e tamolla [nama] *(A dog tears meat to pieces)*

[moshemane] o tamolla [lesela] *(The boy tears the cloth to pieces)*

State events

Nama e tamolohile ya-ba dikotwana *(The meat is torn and became pieces)*

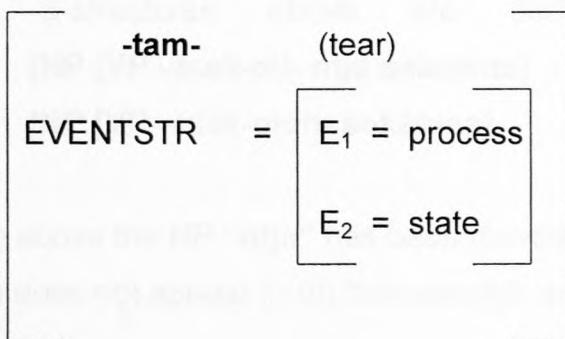
Borikgwe bo tamolohile ba-ba dikatana *(The trouser is torn to pieces and became rags)*

Lesela le tamolohile la-ba dikatana *(The cloth is torn to pieces and became rags)*

Pampiri e tamolohile ya-ba dikgetjhana *(A paper is torn to pieces and became pieces)*

Noha e tamolohile ya-ba dikarolwana *(A bird is torn to pieces and became pieces)*

The event structure of this verb will look like this:



3.7.1.3 Lexical conceptual paradigm (LCP)

The verbs have the following meanings or senses :

Meaning of tearing to pieces

- [Monna] o tamollotse [nama] (*The man tore meat to pieces*)
 [Katse] e tamollotse [tweba] (*The cat tore the mouse to pieces*)

Meaning of stretched out

- [Moshemane] o tamollotse [dimpa] (*The boy stretched out his stomach*)
 [Nonyana] e tamollotse [noha] (*The bird stretched out the snake*)

3.7.1.4 Lexical inheritance structure

From this hierarchy: tear to pieces – tear – break – change of state; it becomes clear that this is a **tear** verb which falls under a sub class of break verbs and it is from the main class of change of state.

3.7.2 TSEKOLLA / TSEKOLOHA**3.7.2.1 Argument structure**

The verbal root “-tsek-” appears with the suffixes [-oll-] and [-oloh-] as [-tsek-oll-] and [-tsek-oloh-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. [**Ntja**] e-tsekolla [sekatana] (*The dog is tearing the rag to pieces*)
 b. [**Sekatana**] se-a-tsekoloha (*A rag is torn to pieces*)

The S-structures above are derived from the following d-structures:

- a. [**NP [VP -tsek-oll- ntja sekatana]**]
 b. [**NP [VP -tsek-oloh- sekatana]**]

In (a) above the NP “**ntja**” has been moved and in (b) the NP “**sekatana**”. The NP “**ntja**” in (a) does not appear in (b) because this argument is controlled by the affix [-oloh-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject argument in the (a) sentence above which is assigned by the verb “-tsekoll-” with the transitive affix [-oll-]. The NPs in the subject position need to be animate because they are agents:

[Ngwana] o-tsekolla [apole]	<i>(The child tears an apple to pieces)</i>	<i>(human)</i>
[Katse] e-tsekolla [nama]	<i>(The cat tears meat to pieces)</i>	<i>(animal)</i>

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**sekatana**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be torn to pieces or cut, are any physical object made of food, flesh, material, paper or leather:

[Bashemane] ba tsekolla [bohobe]	<i>(The boys tear a bread to pieces)</i>	<i>(food)</i>
[Ntja] e tsekolla [nama]	<i>(A dog tears meat to pieces)</i>	<i>(flesh)</i>
[Ngwana] o tsekolla [lesela]	<i>(The child tears a cloth to pieces)</i>	<i>(material)</i>
[Tweba] e tsekolla [koranta]	<i>(A mouse tears a newspaper to pieces)</i>	<i>(paper)</i>
[Seroki] se tsekolla [letlalo]	<i>(The tailor tears a skin to pieces)</i>	<i>(leather)</i>

It seems as if objects such as **borikgwe**, **sekatana**, **apole**, **bohobe**, **nama**, **lesela**, **koranta** and **letlalo** may readily appear with “**-tsekolla**”. The selection restriction on the object argument of “**-tsekolla**” may be given as follows:

[ARG2 = Ntho e ka tshwarehang e phelang kapa e sa pheleng e bobebe e tsekollehang ha bonolo e entsweng ka lelapi, pampiri, letlalo kapa ho jehang].

The verb “**-tsek-oloh-**” which has the intransitive suffix **[-oloh-]**, which controls the external argument, appears only with an argument in the subject position. This argument is the same as the object argument of “**-tsekoll-**” above.

[Bohobe] bo-a-tsekoloha	<i>(The bread tear to pieces)</i>	<i>(food)</i>
[Nama] e-a-tsekoloha	<i>(The meat tear to pieces)</i>	<i>(flesh)</i>
[Lesela] le-a-tsekoloha	<i>(The cloth tear to pieces)</i>	<i>(material)</i>
[Koranta] e-a-tsekoloha	<i>(A newspaper tear to pieces)</i>	<i>(paper)</i>
[Letlalo] le-a-tsekoloha	<i>(A skin tear to pieces)</i>	<i>(leather)</i>

These arguments will all be interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “-tsek-oll-” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

[Ngwana] o-tsekollotse koranta [ka [matsoho]]

(The child tore the newspaper with hands)

[S-ARG1 = instrument]

A **cognate object** is not possible in this regard.

Inalienable possession, is possible with these verbs, e.g.:

With tsekoloha

[Leoto la borikgwe] le tsekolohile *(The leg of the trouser is torn to pieces)*

[Borikgwe] bo tsekolohile [leoto] *(The trouser's leg is torn to pieces)*

With tsekolla

Monna o-tsekollotse [leoto la borikgwe] *(The man tore the leg off the trouser)*

Monna o-tsekollotse [borikgwe] [leoto] *(The man tore the trouser's leg to pieces)*

Instrument-subject alternation is also possible with these verbs, e.g.:

[Monna] o tsekolla [borikgwe] [ka diatla]

(The man tear a trouser to pieces with hands)

[Diatla] di tsekolla [borikgwe] *(The hands tear the trouser to pieces)*

3.7.2.2 **Event structure**

Two events are noticeable in this case, i.e. process and state:

Process events

[Bana] ba tsekollotse [apole] *(The children tore an apple)*

[Monna] o tsekollotse [borikgwe] *(The man tore a trouser)*

State events

Borikgwe bo tsekolohile ba-ba dikatana (A trouser is torn and became rags)

Sekatana se tsekolohile sa-ba dikgetjhana (A rag is torn and became pieces)

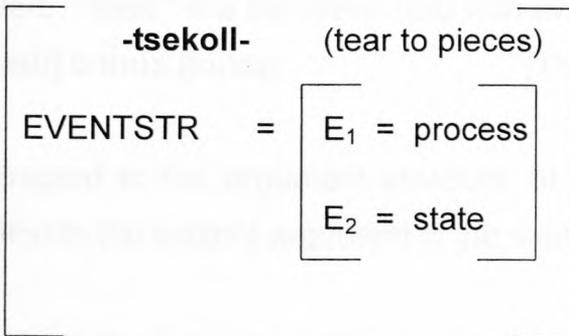
Apole e tsekolohile ya-ba dikgetjhana (An apple is torn to pieces and became pieces)

Nama e tsekolohile ya-ba dikarolo (The meat is torn and became portions)

Koranta e tsekolohile ya-ba dikgetjhana (A newspaper is torn and became pieces)

Letlalo le tsekolohile la-ba dikatana (The skin is torn and became rags)

The event structure of this verb will look like this:



3.7.2.3 Lexical conceptual paradigm (LCP)

These verbs have the following meanings or senses :

Meaning of tearing or cutting to pieces

[Monna] o tsekollotse [nama] (The man tore the meat to pieces)

[Katse] e tsekollotse [letlalo] (A cat tore the skin to pieces)

The meaning of dividing

[Mosadi] o tsekolla apole pakeng tsa bana

(The woman divides an apple amongst the children)

[Moshemane] o tsekollotse bohobe (The boy divided the bread)

3.7.2.4 Lexical inheritance structure

From this hierarchy: tear to pieces – tear – break – change of state; it becomes clear that this is a **tear** verb which is sub categorized under the break verbs and is from the main class of change of state.

[ARG2 = Ntho e ka tshwarehang e thata e thuehang ha bonolo e entsweng ka letsopa, galase, lejwe kapa dijo].

The verb “**thua**” which has the intransitive suffix [-**akan-**]. Such a verb appears only with an argument in the subject position. This argument is the same as the object argument of “**thua**” above:

[Fensetere] e-a-thuakana	(A window-pane breaks)	(glass)
[Pitsa ya letsopa] e-a-thuakana	(A claypot breaks)	(pottery)
[Thaele] e-a-thuakana	(A tile breaks)	(stone)
[kuku] e-a-thuakana	(A cake breaks)	(food)

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “**thua**” above.

Such a verb with [-**akan-**] may then appear with a causative suffix [-**y-**]: [**thu-akan-y-**]. In the case of causative verbs, there are certain conditions on such verbs:

- a. A new external argument is added, i.e. a causative argument.
- b. The “old” external argument has to be internalized:

[Fensterere] e-a-thuakana	(A window-pane breaks)
[Ngwana] o-thuakanya fensetere	(The child breaks the window pane fine)

The selection restrictions on “**thuakanya**” are the same as with “**thua**” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

[Monna o-thuile pitsa [ka [molamu]] (The man broke the pot with the stick)

[S-ARG1 = instrument]

A **cognate object** is not possible with these verbs.

Inalienable possession is possible to appear with these verbs, e.g.:

Mosadi o-thuile [mohele wa emere] (*The woman broke the handle off the bucket*)

Mosadi o-thuile [emere] [mohele] (*The woman broke the bucket's handle*)

Instrument-subject alternation is possible with these verbs, e.g.:

[Monna] o thuile [pitsa] [ka koto] (*The man broke the pot with a knobkierie*)

[Koto] e-thuile [pitsa] (*A knobkierie broke the pot*)

3.8.1.2 Event structure

Process events

[Monna] o thua [pitsa] (*The man break the pot*)

[Ngwana] o thuile [kuku] (*The child broke the cake*)

State events

Mokopu o thuehile wa-ba dikgetjhana (*The pumpkin broke and became pieces*)

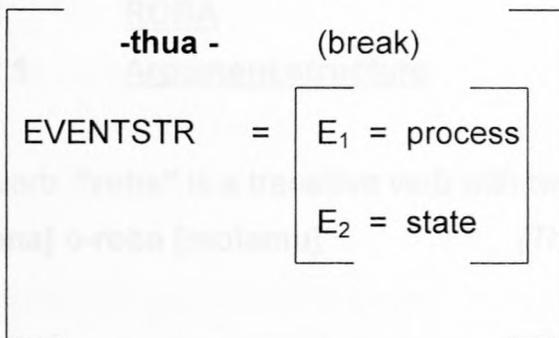
Kopi e thuehile ya-ba dikgetjhana (*A cup broke and became pieces*)

Poone e thuehile ya-ba dikgetjhana (*Mealies broke and became pieces*)

Letlapa le thuehile la-ba dikgetjhana (*The slate broke and became pieces*)

Emere e thuehile ya-ba dikgetjhana (*A bucket broke and became pieces*)

The event structure of this verb will look like this:



3.8.1.3 Lexical conceptual paradigm (LCP)

There are number of senses or meanings with this verb, e.g.:

Meaning of breaking

[Monna] o thua [emere] (The man break the bucket)

[Kgomo] e-thua [lesaka] (A cow break the kraal)

Meaning of crushing or retriturate

[Ditweba] di-thuile [poone] (Mice crushed mealies)

[Ngwana] o-thuile [pompong] (The child crushed a sweet)

Meaning of beating

[Mapolesa] a-thuile [leshodu] (Policemen bit a thief)

[Monna] o-thuile [mosadi] (The man bit the woman)

Meaning of dividing or change (money)

[Mosadi] o-thua [diranta tse lekgolo] (The woman change R100)

[Mme] o-thuela [bana] [dipompong] (Mother divides sweets among the kids)

3.8.1.4 Lexical inheritance structure

This is a **break** verb, which is sub categorized under the break verbs, and it is in the main class of the verbs of change of state. Its hierarchy will look like this: break - change of state.

3.8.2 ROBA**3.8.2.1 Argument structure**

The verb “**roba**” is a transitive verb with two arguments, i.e. agent and patient:

[Monna] o-roba [molamu] (The man break the stick)

With regard to the argument structure of this verb, it will be necessary firstly to give attention to the subject argument in the sentence above, which is assigned by the VP. The NPs in the subject position need to be animate because they are agents:

[Ditshwene] di-robile [lehlaka] (Baboons broke the common-reed) (animal)

[Ngwana] o-roba [lemata] (The child breaks the door) (human)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be broken, are any physical objects made of something elongated that breaks in its middle like wood, limb or bone:

[Ngwana] o-roba [molamu] *(The child break the stick) (wood)*
[Tau] e-roba [ntja] [molala] *(The lion breaks the dog's neck) (limb)*
[Ntja] e-roba [lesapo] *(The dog breaks the bone) (bone)*

It seems as if objects such as **molamu, lemati, Fenstere, lesapo, patsi, lehlaka** and **leoto**, may readily appear with “**roba**”. The selection restriction on the object argument of “**roba**” may be given as follows:

[ARG2 = Ntho e ka tshwarehang e thata e robehang ha bonolo e entsweng ka patsi, lesapo kapa setho sa mmele].

The verb “**roba**” which has the intransitive suffix **[-akan-]**. Such a verb appears only with an argument in the subject position. This argument is the same as the object argument of “**roba**” above:

[Molamu] o-a-robakana *(The stick is broken into pieces) (wood)*
[Molala] o-a-robakana *(The neck is broken into pieces) (limb)*
[Lesapo] le-robakana *(The bone is broken into pieces) (bone)*

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “**roba**” above.

Such a verb with **[-akan-]** may then appear with a causative suffix **[-y-]: [rob-akan-y-]**.

In the case of causative verbs, there are certain conditions on such verbs:

- a. A new external argument is added, i.e. a causative argument.
- b. The “old” external argument has to be internalized:

[Molamu] o-a-robakana (The stick breaks into pieces)

[Monna] o-robakanya [molamu] (The man breaks the stick into pieces)

The selection restrictions on “**robakanya**” are the same as with “**roba**” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

[Monna o robile lemati [ka [tshepe]] (The man broke the door with an iron)

[S-ARG1 = instrument]

Cognate objects are possible with these verbs, e.g.:

Ho bolaya motho [ke thobo ya molao]

(To kill a human being is the breaking of the law)

Molamu o robehile [morobo o sa lokiseheng]

(The stick is broken into unrepairable break)

Molamu o robehile [thobakanyo]

(The stick is broken into broken pieces)

Inalienable possession is possible to appear with this verb, e.g.:

Mosadi o robile [mohele wa lemati] (The woman broke the handle off the door)

Mosadi o robile [lemati] [mohele] (The woman broke the door's handle)

Instrument-subject alternation is possible with this verb, e.g.:

[Monna] o robile [molamu] [ka lejwe] (The man broke the stick with a stone)

[Lejwe] le robile [molamu] (A stone broke the stick)

3.8.2.2 Event structure

There are two events in the event structure of this verb, i.e. process and state:

Process events

[Monna] o roba [thupa] (The man breaks the rod)

[Ntja] e roba [lesapo] (The dog breaks the bone)

State events

Lehlaka le robehile la-ba dikotwana (The common-reed is broken and became pieces)

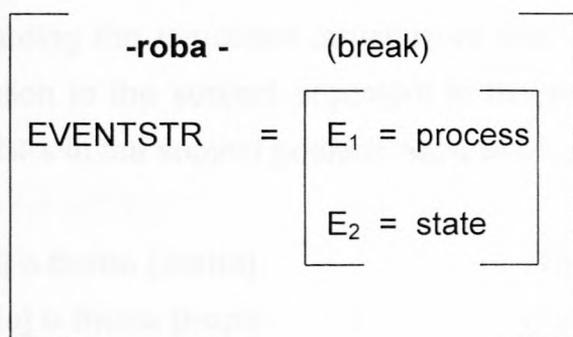
Lemati le robehile la-ba dikarolwana (The door is broken and became portions)

Pitsa e robehile ya-ba dikarolwana (The pot is broken and became portions)

Molala o robehile wa-ba dikarolo (The neck is broken and became parts)

Thupa e robehile ya-ba dikotokoto (The rod is broken and became pieces)

The event structure of this verb will look like this:



3.8.2.3 Lexical conceptual paradigm (LCP)

There are a number of senses or meanings with this verb, e.g.:

Meaning of break

[Monna] o roba [thupa] (The man break the rod)

[Ntja] e roba [lesapo] (The dog break the bone)

Meaning of transgression / law-breaking

[Monna] o roba [molao] (The man breaks the law)

Meaning of “to speak (a language) badly

[Letswantle] le robella feela ha le bua (The foreigner speak badly when talking)

Meaning of breaking an agreement

[Moshe] o robile selekane sa hae le Modimo (Moses broke his Covenant with God)

[ARG2 = Ntho e ka tshwarehang e thata e thubehang ha bonolo e entsweng ka galase, lejwe kapa dijo]

The verb “**thuba**” which has the intransitive suffix **[-akan-]**. Such a verb appears only with an argument in the subject position. This argument is the same as the object argument of “**thuba**” above:

[Kuku] e-a-thubakana	<i>(A cake smashes)</i>	<i>(food)</i>
[Watjhe] e-a-thubakana	<i>(A watch smashes)</i>	<i>(glass)</i>
[Thaele] e-a-thubakana	<i>(A tile smashes)</i>	<i>(stone)</i>

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “**thuba**” above.

Such a verb with **[-akan-]** may then appear with a causative suffix **[-y-]**:

[thub-akan-y-]. In the case of causative verbs, there are certain conditions on such verbs:

- A new external argument is added, i.e. a causative argument.
- The “old” external argument has to be internalized:

[Watjhe] e-a-thubakana	<i>(A watch smashes)</i>
[Monna] o-thubakanya [watjhe]	<i>(The man smashes a watch)</i>

The selection restrictions on “**thubakanya**” are the same as with “**thuba**” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

[Monna o thubile pitsa [ka [molamu]] *(The man smashed the pot with the stick)*
[S-ARG1 = instrument]

Cognate object is not possible with this verb.

Inalienable possession is possible to appear with this verb, e.g.:

Moshemane o thubile [mohele wa kopi] *(The boy smashed the handle of the cup)*

[Moshemane o thubile [kopi] [mohele] (*The boy smashed the cup's handle*)

Instrument-subject alternation is also possible with this verb, e.g.:

[Monna] o-thubile [watjhe] [ka lejwe] (*The man smashed a watch with stone*)

[Lejwe] le-thubile [watjhe] (*A stone smashed a watch*)

3.8.3.2 Event structure

There are two events in the event structure of this verb, i.e. process and state:

Process events

[Watjhe] e-thuehile (*A watch is smashed*)

[Ntja] e-thuba [lesapo] (*A dog smashes a bone*)

State events

Lesapo le thubehile la-ba mafoforane (*A bone is smashed and became remnants*)

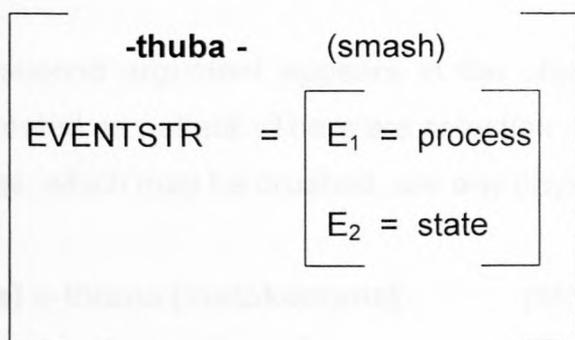
Thaele e thubehile ya-ba maqhetso (*A tile is smashed and became pieces*)

Lehe le thubehile la-ba maqhetso (*An egg is smashed and became pieces*)

Watjhe e thubehile ya-ba maqhetso (*A watch is smashed and became pieces*)

Kopi e thubehile ya-ba maqhetso (*A cup is smashed and became pieces*)

The event structure of this verb will look like this:



3.8.3.3 Lexical conceptual paradigm (LCP)

There is only one meaning, i.e. to smash, e.g.:

[Monna] o thuba [kopi] (*The man smashes a cup*)

[Mosadi] o thubile [lehe] (*The man smashed an egg*)

3.8.3.4 Lexical inheritance structure

From this hierarchy: smash to pieces - break - change of state, it becomes apparent that this is a **smash** verb which is classified under a sub class of break verbs and it is found in the main class of verbs of change of state.

3.8.4 THUMA

3.8.4.1 Argument structure

The verb “**thuma**” is a transitive verb with two arguments, i.e. agent and patient:

[Mosadi] o-thuma [poone] (*The woman grind mealies very fine*)

With regard to the argument structure of this verb above, it will be necessary firstly to give attention to the subject argument in the sentence above, which is assigned by the VP. The NPs in the subject position need to be human being only, as they are able to grind by using hands:

[Mme] o-thuma [poone] (*Mother grinds mealies*) (*human*)

[Ngwanana] o-thuma [mabele] (*The girl grinds the Sorghum grain*) (*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 = human]

The second argument appears in the object position, i.e. “**poone**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be crushed, are any physical objects which is made of grain or plants:

[Mme] o-thuma [matokomane] (*Mother crushes peanuts*) (*grain*)

[Monna] o-thuma [kwae] (*The man crushes tobacco*) (*plant*)

It seems as if objects such as **poone**, **mabele**, **kwae**, **matokomane**, **koro** and **setlhare** may readily appear with “**thuma**”. The selection restriction on the object argument of “**thuma**” may be given as follows:

[ARG2 = Ntho e ka tshwarehang e bobebe e thumehang e entsweng ka dithollo kapa dimela].

The verb “**thuma**” which has the intransitive suffix [-**akan-**]. Such a verb appears only with an argument in the subject position. This argument is the same as the object argument of “**thuma**” above:

[**Matokomane**] a-a-thumakana (*Peanuts crushes*) (*grain*)

[**Kwae**] e-a-thumakana (*Tobacco crushes*) (*plant*)

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of “**thuma**” above.

Such a verb with [-**akan-**] may then appear with a causative suffix [-**y-**]:

[**thum-akan-y-**]. In the case of causative verbs, there are certain conditions on such verbs:

- a. A new external argument is added, i.e. a causative argument.
- b. The “old” external argument has to be internalized:

[**Kwae**] e thumakane (*Tobacco is crushed*)

[**Mme**] o thumakanya [**kwae**] (*Mother crushes tobacco*)

The selection restrictions on “**thumakanya**” are the same as with “**thuma**” above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

[**Monna o thumile koro ka [tshilo]**]

(*The woman ground a wheat with a grinding stone*)

[**S-ARG1 = instrument**]

A **cognate object** is not possible with this verb.

Inalienable possession is possible to appear with this verb, e.g.:

Monna o thumile [lehlaku la kwae] (*The man crushed the leaf of a tobacco*)

Monna o thumile [kwaε] [lehlaku] (*The man crushed tobacco's leaf*)

Instrument-subject alternation is also possible with this verb, e.g.:

[Mosadi] o-thumile [kwaε] [ka lejwe]

(*The woman crushed a tobacco with a stone*)

[Lejwe] le-thumile [kwaε]

(*The stone crushed a tobacco*)

3.8.4.2 Event structure

There are two events in the event structure of this verb, i.e. process and state:

Process events

[Mosadi] o-thuma [kwaε] (*The woman crushes tobacco*)

[Banna] ba-thuma [koro] (*The men crushes wheat*)

State events

Koro e thumehile ya-ba mathumisa (*A wheat crushed and became fine flour*)

Poone e thumehile ya-ba mathumisa (*Mealies crushed and became fine meal*)

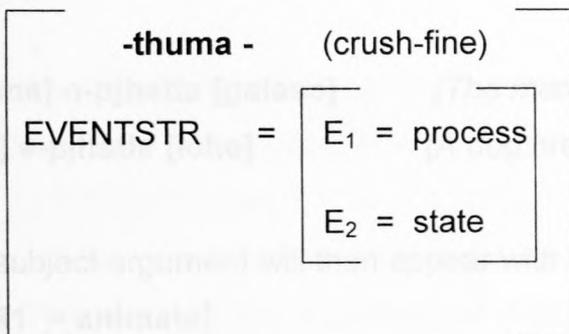
Mabele a thumehile ya-ba mathumisa (*Sorghum grain crushed and became fine-meal*)

Kwaε e thumehile ya-ba dikarolwana (*Tobacco crushed and became pieces*)

Setlhare se thumehile sa-ba mathumisa

(*A medicine crushed and became a fine medicine*)

The event structure of this verb will look like this:



3.8.4.3 Lexical conceptual paradigm (LCP)

There is only one meaning of crushing and grinding very fine:

[Mosadi] o thuma [poone] (*The woman grind mealies very fine*)

[Banna] ba thuma [kwae] (*The men crushes tobacco fine*)

3.8.4.4 Lexical inheritance structure

This is a **crush** verb, which falls under the break verbs, and it is classified under the main class of verbs of change of state. The hierarchy will be like this: crush fine - break - change of state.

3.9 VERBS WITH THE SUFFIX [-AN-]

See paragraph 3.3.3.4 above. The suffix [-an-] refers to an intransitive verb and although it has the same form as the reciprocal suffix, it does not have a reciprocal meaning. As above, this suffix may be made transitive with the addition of a causative suffix [-y-]: [-an-y-].

3.9.1 PJHATLA

3.9.1.1 Argument structure

The verb “**pjhatla** assigns two arguments, i.e. agent and patient:

[Monna] o-pjhatla [galase] (*The man breaks a glass*)

With regard to the argument structure of **pjhatla**, it will be necessary firstly to give attention to the subject argument in the sentence above, which is assigned by the VP. The NPs in the subject position need to be animate because they are agents:

[Monna] o-pjhatla [galase] (*The man breaks a glass*) (*human*)

[Ntja] e-pjhatla [lehe] (*A dog breaks an egg*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position, i.e. "**galase**". This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be broken to pieces, are any physical objects made of glass, earthenware, stone or food:

- [Morutwana] o-pjhatla [letlapa] (*The pupil breaks a slate to pieces*) (stone)
 [Ngwanana] o-pjhatlile [botlolo] (*The girl broke a bottle to pieces*) (glass)
 [Nkgono] o-pjhatlile [nkgo ya letsopa] (*Grandmother broke a claypot*) (earthen ware)
 [Ntja] e-pjhatlile [lehe] (*A dog broke an egg to pieces*) (food)

It seems as if objects such as **lehe**, **kopi**, **galase**, **nkgo ya letsopa** and **letlapa** may readily appear with "**-pjhatla**". The selection restriction on the object argument of "**pjhatla**" may be given as follows:

[ARG2 = Ntho e ka tshwarehang e thata e pjhatlehang ha bonolo e entsweng ka lejwe, letsopa, galase kapa dijo].

The verb "**pjhatla**" may appear with an intransitive suffix **[-an-]**. Such a verb appears only with an argument in the subject position. This argument is the same as the object argument of "**pjhatla**" above:

- [Letlapa] le-a-pjhatlana (*The slate breaks to pieces*) (stone)
 [Botlolo] e-a-pjhatlana (*A bottle breaks to pieces*) (glass)
 [Nkgo ya letsopa] e-a-pjhatlana (*A claypot breaks to pieces*) (earthen ware)
 [Lehe] le-a-pjhatlana (*An egg breaks to pieces*) (food)

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of "**pjhatla**" above.

The suffix **[-an-]** may also appear with a causative suffix **[-y-]** as **[-an-y-]**:

[pjhatl-an-y-]. The causative suffix **[-y-]** will force some conditions on the appearance of the verb in a sentence:

- A new external argument will appear.
- The "old" external argument will now become a new internal argument:

[Botlolo] e-a-pjhatlana (A bottle breaks to pieces)

[_____] pjhatl-an-y-a botlolo

[Ngwana] o-pjhatlanya [botlolo] (The child break the bottle to pieces)

The selection restrictions on the arguments of this causative will be the same as those of the verb “**pjhatla**” above.

The third argument with this verb is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

[Ngwana] o pjhatlile fenstere [ka [lejwe]] (The child broke a window to pieces with a stone)

[S-ARG1 = instrument]

This verb **pjhatla** does not accommodate **cognate objects**.

In the case of **inalienable possession**, this verb **pjhatla** will easily accommodate it:

Ngwana o-pjhatla [mohele wa kopi] (The child breaks the handle of the cup)

Ngwana o-pjhatla [kopi] [mohele] (The child breaks the cup's handle)

Instrument-subject alternation is also possible:

[Monna] o-pjhatlile [seipone] [ka hamore] (The man broke the mirror with a hammer)

[Hamore] e pjhatlile seipone (The hammer broke the mirror)

3.9.1.2 **Event structure**

This verb has two events, i.e. process and state:

Process events

[Monna] o-pjhatla [galase] (The man breaks a glass to pieces)

[Ntja] e-pjhatlile [lesapo] (The dog broke a bone)

State events

Lehe le pjhatlehile la-ba dikgaketla (An egg broke and became shells)

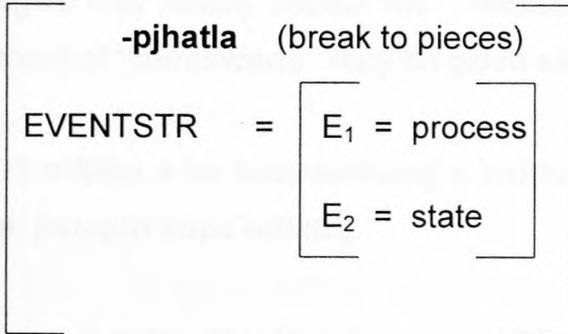
Letlapa le pjhatlehile la-ba dikgetjhana (A slate broke and became pieces)

Kopi e pjhatlehile ya-ba dikgetjhana (A cup broke and became pieces)

Galase e pjhatlehile ya-ba dikgetjhana (A glass broke and became pieces)

Nkgo ya letsopa e pjhatlehile ya-ba dikgetjhana (A claypot broke and became pieces)

The event structure verb will look like this:



3.9.1.3 Lexical conceptual paradigm (LCP)

This verb has the following meaning or sense of **"to break to pieces"**

[Mme] o-pjhatla [galase] (Mother breaks a glass to pieces)

[Ngwana] o-pjhatla [kopi] (The child breaks a cup to pieces)

3.9.1.4 Lexical inheritance structure

This is a break verb, which is classified under a sub class of break verbs and is found under the main class of verbs of change of state. The hierarchy will be: to break to pieces - break - change of state.

3.9.2 HARASWANA

3.9.2.1 Argument structure

The verb root **"-harasw-** appears with an intransitive suffix **[-an-]** as **[-harasw-an-]**.

[Lesela] le-a-haraswana (A cloth is torn to pieces)

The verb **"haraswana"** appears only with an argument in the subject position:

[Bohobe] bo-haraswane	(The bread is torn to pieces)
[Tweba] e-a-haraswana	(A mouse is torn to pieces)
[Lesela] le-a-haraswana	(A cloth is torn to pieces)
[Letlalo] le-a-haraswana	(The skin is torn to pieces)

These arguments are all interpreted as patients.

It seems as if objects such as **buka, tweba, letlalo, bohobe, lesela, kobo, hempe** and **borikgwe** may readily appear with “-haraswana”. The selection restriction on the object argument of “haraswana” may be given as follows:

[ARG1 = Ntho e ka tshwarehang e bobebe e haraswanang ha bonolo e entsweng ka lelapi, pampiri kapa letlalo].

A causative suffix “[-y-]” may appear with this verb: [-haraswa-an-y-]. In such a case a new causative external argument will appear with this verb and the “old” external argument will now become an internal argument :

[Bohobe] bo-haraswane	(The bread is torn to pieces)
[] harasw-an-y-a [bohobe]	
[Mosadi] o-haraswanya [bohobe]	(The woman tear the bread to pieces)

The selection restriction on the object argument above will be the same as the selection restriction on the subject of “haraswana” above. As indicated above, the new external argument will be a causative agent.

A **shadow argument** is another argument which appear with this verb:. This argument is introduced by the preposition “ka” and it may indicate an instrument:

Bohobe bo haraswane [ka [memo]] (The bread is torn to pieces with teeth)
[S-ARG1 = instrument]

The **cognate object** is accommodated with this verb, e.g.:

Lesela le harswane [kgaraswano e sa rokeheng]

(A cloth is torn an unmenderable parting)

Inalienable possession is also possible with this verb, e.g.:

[Letlalo la tweba] le harswane *(The skin of the mouse is torn to pieces)*

[Tweba] e-haraswane [letlalo] *(The mouse's skin is torn to pieces)*

The **instrument-subject alternation** is possible with this verb, e.g.:

Bohobe bo-haraswane [ka matsoho] *(The bread is torn to pieces with hands)*

[Matsoho] a-haraswantse bohobe *(Hands torn the bread to pieces)*

3.9.1.2 Event structure

There are two events with this verb, i.e. process and state:

Process events

[Mose] o haraswane *(The dress is torn to pieces)*

[Buka] o haraswane *(A book is torn to pieces)*

State events

Buka e haraswane ya-ba dikgetjhana *(A book is torn and became pieces)*

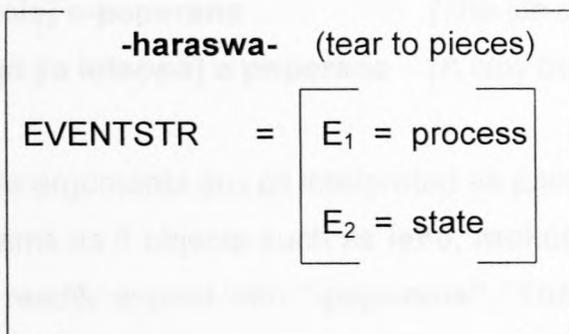
Kobo e haraswane ya-ba dikatana *(The blanket is torn and became rags)*

Nama e haraswane ya-ba dikgetjhana *(The meat is torn to pieces and became pieces)*

Hempe e haraswane ya-ba dikatana *(A shirt is torn and became rags)*

Letlalo le haraswane la-ba dikgetjhana *(The skin is torn and became pieces)*

The event structure verb will look like this:



3.9.2.3 Lexical conceptual paradigm (LCP)

This verb "**haraswana**" has the following meanings:

Meaning of tearing to pieces

- [Hempe] e-haraswane (A shirt is torn to pieces)
 [Buka] e-haraswane (The book is torn to pieces)

Meaning of spoiling or destroying

- [Dijo] di haraswane (Food is destroyed)
 [Mokete] o haraswane (The occasion is spoiled)

3.9.2.4 Lexical inheritance structure

From the hierarchy: tear to pieces - tear - break - change of state, it becomes apparent that this verb is from the break verbs and is found in the main class of verbs of change of state.

3.9.3 PEPERANA

3.9.3.1 Argument structure

The verb root “-peper-” appears with an intransitive suffix [-an-] as [-peper-an-].

- [Lehe] le-a-peperana (An egg cracks)

The verb "**peperana**" appears only with an argument in the subject position:

- [Lehe] le-a-peperana (An egg cracks)
 [Kopi] e-a-peperana (A cup cracks)
 [Thaele] e-peperane (The tile cracked)
 [Nkgo ya letsopa] e peperane (A clay bucket cracked)

These arguments are all interpreted as patients.

It seems as if objects such as **lehe**, **mokotla**, **nkgo ya letsopa**, **kopi**, **lebota** and **thaele**, may readily appear with “-peperana”. The selection restriction on the object argument of “peperana” may be given as follows:

[ARG1 = Ntho e thata e ka tshwarehang e peperanang ha bonolo e entsweng ka lejwe, galase, kgaketla kapa letsopa]:

A causative suffix “[y-]” may appear with this verb: **[-pepera-an-y-]**. In such a case a new causative external argument will appear with this verb and the “old” external argument will now become an internal argument :

[Lehe] le peperane (An egg cracked)

[] peper-an-y-a [lehe]

[Mosadi] o-peperanya [lehe] (The woman crack an egg)

The selection restriction on the object argument above will be the same as the selection restriction on the subject of “peperana” above. As indicated above, the new external argument will be a causative agent.

Another argument with this verb is a **shadow argument**. This argument is introduced by the preposition “ka” and it may indicate an instrument:

Lehe le peperane [ka [kgaba]] (An egg is cracked with a spoon)

[S-ARG1 = instrument]

A **cognate object** is not possible with this verb.

Inalienable possession is also possible with this verb, e.g.:

[Kgaketla ya lehe] e peperane (The shell of an egg is cracked)

[Lehe] le peperane [kgaketla] (An egg's shell is cracked)

The **instrument-subject alternation** is possible with this verb, e.g.:

[Lehe] le-peperane [ka kgaba] (An egg is cracked with the spoon)

[Kgaba] e-peperantse [lehe] (The spoon cracked an egg)

3.9.3.2 **Event structure**

The verb has two events, i.e. process and state:

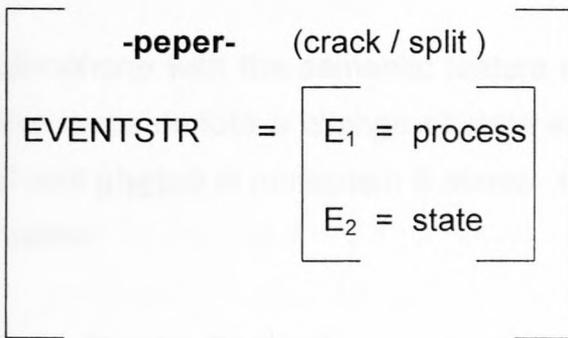
Process events

[Lehe] le-a-peperana	(An egg cracks)
[Lebota] le-a-peperana	(A wall cracks)

State events

Lehe le peperane la-ba <u>dikarolo</u>	(An egg cracked and became portions)
Lebota le peperane la-ba <u>dikarolo</u>	(A wall cracked and became parts)
Mokotlana o peperane wa-ba <u>dikarolo</u>	(A sack cracked and became parts)
Thaele e peperane ya-ba <u>dikarolo</u>	(A tile cracked and became parts)
Kopi e peperane ya-ba <u>dikarolo</u>	(A cup cracked and became parts)

The event structure verb will look like this:

**3.9.3.3 Lexical conceptual paradigm (LCP)**

This verb has the following meanings or senses:

Meaning of crack / split

[Lebota] le-peperane	(A wall cracked)
[Lehe] le-a-peperana	(An egg cracks)

Meaning of singing aloud

[Ngwanana] ha a bine o a peperana	(The girl does not sing, she sings aloud)
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3.9.3.4 Lexical inheritance structure

This is a verb of **crack**, and it is found under a sub class of break verbs and the main class of verbs of change of state. The hierarchy will look like this:

split / crack - break - change of state.

3.10 IDEOPHONE AND VERBS DERIVED FROM IDEOPHONES

See paragraph 3.3.4 above.

3.10.1 WITH AN INTRANSITIVE SUFFIX [-H-] AND A TRANSITIVE SUFFIX [-L-]

See also paragraph 3.6 above.

3.10.1.1 KAMO

3.10.1.1.1 Assignment of arguments

The ideophone with the semantic feature of **break** has the features of an ergative verb. Ergative verbs denote a change of state and they appear in the same d-structure as the verbal root **ghetso** in paragraph 6 above: the ideophone will then also assign two internal arguments:

[e] [kamo [Agent, Patient]

In the first place, the argument will be moved to receive nominative case. In this case the patient argument remains in its place and will receive accusative case from the verb:

- a. [Agent_i [kamo [t_i , patient]
- b. [Monna] [o-itse kamo [letsoho (The man broke his hand)

In the second place, the patient argument will be moved to the empty subject position. This patient argument will now receive nominative case. The agent argument will then not surface, because it will be controlled by the patient argument in the subject position.

- a. [Patient_{i/j} [kamo [agent_i t_j]
- b. [Letsoho] le-itse kamo (The hand broke)

The control relation is indicated by the co-indexing with [i] and the trace relation with [j].

These ergative ideophones may appear with the intransitive suffix **[-h-]** and the transitive suffix **[-l-]**. The transitive suffix **[-l-]** will allow movement of the agent argument:

- a. **[e] [kamo-l- [agent , patient]**
- b. **[Agent_{t_j}] [kamo-l- [t , patient]**
- c. **[Monna] o-kamola [letsoho]** (*The man breaks the hand*)

The intransitive suffix **[-h-]** will control the agent argument with the result that the patient will have to move to fill the empty subject position:

- a. **[e] [kamo-h- [agent , patient]**
- b. **[Patient_{ijj}] [kamo-hⁱ- [agent_{t_j} , t_j]**
- c. **[Letsoho] le-kamohile** (*A hand breaks off*)

Control is indicated by co-indexation with **[i]**

With regard to the argument structure of these verbs above, it will be necessary firstly to give attention to the subject argument above which is assigned by the ideophone "**kamo**" with the transitive affix **[-l-]**. The NPs in the subject position need to be animate because they are agents:

- [Ngwana] o-kamola [bohobe]** (*The child breaks off bread*) (*human*)
- [Ntja] e-kamola [lesapo]** (*A dog breaks off a bone*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position above, i.e. "**letsoho**". This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be broken off, are any physical object that is firm and made of limb, food, glass or wood:

- [Ngwana] o-kamola [bohobe]** (*The child breaks off bread*) (*food*)
- [Ntate] o-kamola [letsoho]** (*Father breaks off a hand*) (*limb*)
- [Moshemane] o-kamola [galase]** (*The boy breaks a glass*) (*glass*)

[Mosadi] o-kamola [patsi] (*The woman breaks a firewood*) (*wood*)

It seems as if objects such as **letsoho**, **bohobe**, **galase**, **patsi**, **koto** and **leoto** may readily appear with "**kamola**". The selection restriction on the object argument of "**kamola**" may then be given as follows:

[ARG2 == Ntho e tiileng e kamolehang ho tswa nthong e felletseng e entswentsweng ka patsi, nama, dijo kapa galase]

The verb "**-kamo-h-**" which has the intransitive suffix **[-h-]**, which controls the external argument, appears only with an argument in the subject position. This argument is the same as the object argument of "**-kamo-l-**" above.

[Bohobe] bo-a-kamoha	<i>(Bread breaks off)</i>	<i>(food)</i>
[Letsoho] le-a-kamoha	<i>(A hand breaks off)</i>	<i>(limb)</i>
[Galase] e-a-kamoha	<i>(A glass breaks off)</i>	<i>(glass)</i>
[Patsi] e-a-kamoha	<i>(A firewood breaks off)</i>	<i>(wood)</i>

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of "**-kamo-l-**" above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition "**ka**" and it may indicate an instrument:

Ntate o-kamotse bohobe [ka [thipa]] (*Father broke off bread with a knife*)

[S-ARG1 = instrument]

A **cognate object** is not possible with these verbs.

Inalienable possession is possible with these verbs, e.g.:

With kamoha

[Letsoho la ntate] le kamohile (*The hand of father broke off*)

[Ntate] o-kamohile [letsoho] (*Father's hand is broken off*)

With kamola

Monna o-kamotse [letsoho la popi] (The man broke off the hand of the doll)

Monna o-kamotse [popi] [letsoho] (The man broke off the doll's hand)

The **instrument-subject alternation** is possible with this verb, e.g.:

[Monna] o-kamotse [seemahale] [ka molamu]

(The man broke the statue with a stick)

[Molamu] o-kamotse seemahale (The stick broke the statue)

3.10.1.1.2 Event structure

The verb has two events, i.e. process and state:

Process events

[Letsoho] le-a-kamoha (The hand breaks off)

[Mohele] o-a-kamoha (The handle breaks off)

State events

Letsoho le kamohile la-ba dikarolo (The hand broke off and became parts)

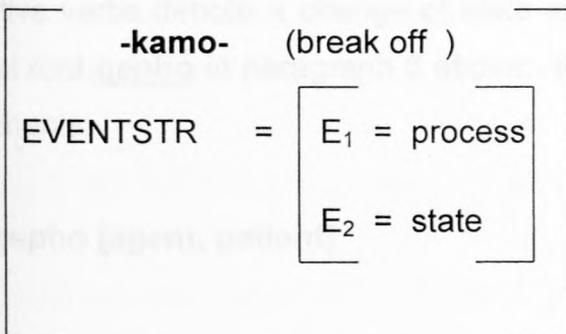
Bohobe bo kamohile ba-ba dikgetjhana (The bread broke off and became pieces)

Galase e kamohile ya-ba dikarolwana (A glass broke off and became parts)

Patsi e kamohile ya-ba difatsa (A firewood broke off and became bits)

Koto e kamohile ya-ba dikarolwana (A knobkierie broke off and became parts)

The event structure verb will look like this:



3.10.1.1.3 Lexical conceptual paradigm (LCP)

This verb has the following meanings:

Meaning of breaking

[Ntate] o-kamola] patsi] (Father breaks off the firewood)

[Ngwana] o-kamotse [popi] [letsoho] (The child broke off the doll's hand)

Meaning of eating

[Ntate] o-kamotse [dijo -] feela a sa botse (Father ate food without asking)

[Ngwana] o-kamola haholo (The child eat too much)

Meaning of going through

[Motsamai] o-kamola feela hara thota (The traveller goes through the land)

[Sebui] se-kamotse feela se sa emise (The speaker spoke without stopping)

3.10.1.1.4 Lexical inheritance structure

This is a **break** verb, which falls under break verbs, and it is found in the main class of verbs of change of state. The hierarchy will look like this: break off - break - change of state.

3.10.1.2 QEPHO

3.10.1.2.1 Assignment of arguments

The ideophone with the semantic feature of **break** has the features of an ergative verb. Ergative verbs denote a change of state and they appear in the same d-structure as the verbal root **qepho** in paragraph 6 above: the ideophone will then also assign two internal arguments:

[e] [qepho [agent, patient]

The ideophone has no external argument. Therefore one of the internal arguments has to move to this empty subject position to receive nominative case.

In the first place, the agent argument will be moved to receive nominative case. In this case the patient argument remains in its place and will receive accusative case from the verb:

- a. **[Agent_i [qepho [t_i , patient]**
- b. **[Ngwana] [o-itse qepho [kopi]** (*The child break a cup*)

In the second place, the patient argument will be moved to the empty subject position. This patient argument will now receive nominative case. The agent argument will then not surface, because it will be controlled by the patient argument in the subject position.

- a. **[Patient_{i/j} [qepho [agent_i t_j**
- b. **[Kopi] e-itse qepho** (*A cup broke*)

The control relation is indicated by the co-indexing with **[i]** and the trace relation with **[j]**

The ergative ideophones may also appear with the intransitive suffix **[-h-]** and the transitive suffix **[-l-]**. The transitive suffix **[-l-]** will allow movement of the argument:

- a. **[e] [qepho-l- [agent, patient]**
- b. **[Agent_i] [qepho-l- [t_i patient]**
- c. **[Ngwana] o-qephola [kopi]** (*The child breaks a cup*)

The intransitive suffix **[-h-]** will control the agent argument with the result that the patient will have to move to fill the empty subject position:

- a. **[e] [qepho-h- [agent_i , patient]**
- b. **[Patient_{i/j}] [qepho-h- [agent_i , t_j**
- c. **[Kopi] e-qephohile** (*A cup broke*)

Control is indicated by in co-indexation with **[i]**

With regard to the argument structure of these verbs above, it will be necessary firstly to give attention to the subject argument in the sentence above, which is assigned by the ideophone “**qepho**” with the transitive affix **[-l-]** . The NPs in the subject position need to be animate because they are agents.

[Ngwana] o-qephola [kopi].	<i>(The child breaks a cup)</i>	<i>(human)</i>
[Katse] e-qephotse [kuku]	<i>(The cat broke the cake)</i>	<i>(animal)</i>

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position above, i.e. "**kopi**". This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be broken, are any physical objects that splits and are brittle and breakable into two or more pieces and is made of glass, food, brick or earthenware:

[Ngwana] o-qephola [kopi]	<i>(The child breaks a cup)</i>	<i>(glass)</i>
[Tweba] e-qephola [bohobe]	<i>(A mouse breaks a bread)</i>	<i>(food)</i>
[Monna] o-qephotse [setene]	<i>(The man broke the brick)</i>	<i>(stone)</i>
[Nkgono] o-qephotse [pitsa ya letsopa]		
<i>(Grandmother broke the claypot) (earthenware)</i>		

It seems as if objects such as **kopi**, **bohobe**, **setene**, **pitsa ya letsopa**, **seipone** and **sejana** may readily appear with "**qephola**". The selection restriction on the object argument of "**qephola**" may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e thata, e qepohang ha bonolo e entsweng ka galase, lejwe, letsopa kapa dijo]

The verb "**-qepho**" which has the intransitive suffix **[-h-]**, which controls the external argument, appears only with an argument in the subject position. This argument is the same as the object argument of "**qepho -l-**" above:

[Kopi] e-a-qephoha	<i>(A cup breaks)</i>	<i>(glass)</i>
[Bohobe] bo-a-qephoha	<i>(Bread breaks)</i>	<i>(food)</i>
[Setene] se-a-qephoha	<i>(The brick breaks)</i>	<i>(brick)</i>
[Pitsa ya letsopa] e-a-qephoha	<i>(A claypot breaks)</i>	<i>(earthenware)</i>

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of "**qepho -I-**" above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition "**ka**" and it may indicate an instrument:

Monna o-qephotse setene [ka [hamore]]

(The man broke the brick with a hammer)

[S-ARG1 = instrument]

A **cognate object** is possible with these verbs, e.g.:

Pitsa e qepohile [seqepho se seholo]

(The pot is broken into a big portion)

Tweba e qephola bohobe [seqetswana se senyane]

(The mouse breaks the bread a small portion)

Inalienable possession is also possible with these verbs, e.g.:

With qepho

[Mohele wa pitsa] o-qepohile *(The handle of the pot is broken)*

[Pitsa] e-qepohile [mohele] *(The pot's handle is broken)*

With qephola

Monna o-qephotse [mohele wa pitsa] *(The man broke the handle of the pot)*

Monna o-qephotse [pitsa] [mohele] *(The man broke the pot's handle)*

Instrument-subject alternation is also possible:

[Monna] o qephola [pitsa] [ka koto]

(The man break the pot with a knobkierie)

[Koto] e qephola [pitsa] *(A knobkierie breaks the pot)*

3.10.1.2.2 Event structure

The verb has two events, i.e. process and state:

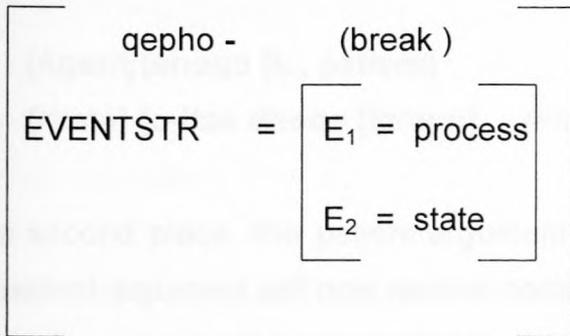
Process events

[Ngwana] o-qephola [kopi]	(The child breaks a cup)
[Mosadi] o-qephola [seipone]	(The woman break a mirror)

State events

Kopi e-qephohile ya-ba <u>diqetswana</u>	(A cup broke and became pieces)
Bohobe bo-qephohile ba-ba <u>diqetswana</u>	(A bread broke and became portions)
Setene se-qephohile sa-ba <u>diqetso</u>	(The brick broke and became parts)
Pitsa e-qephohile ya-ba <u>diqetso</u>	(The pot broke and became parts)
Letlapa le-qephohile la-ba <u>diqetswana</u>	(The slate broke and became portions)

The event structure verb will look like this:



3.10.1.2.3 Lexical conceptual paradigm (LCP)

There is only one meaning of break and fall off in this verbal root “-qepho-”

[Mme] o-qephola [galase]	(Mother breaks a glass)
[Morutwana] o-qephotse [letlapa]	(The pupil broke the slate)

Lexical inheritance structure

This is the verb of **break**, which falls under a sub class of break verbs, and it is found under the main class of verbs of change of state. The hierarchy will look like this: break - change of state.

3.10.1.3 SHOQO

3.10.1.3.1 Assignment of arguments

The ideophone with the semantic feature of **break** has the features of an ergative verb. Ergative verbs denote a change of state and they appear in the same d-structure as the verbal root **ghetso** in paragraph 6 above: the ideophone will then also assign two internal arguments:

[e] [shoqo [agent, patient]

The ideophone has no external argument. Therefore one of the internal arguments has to move to this empty subject position to receive nominative case.

In the first place, the agent argument will be moved to receive nominative case. In this case the patient argument remains in its place and will receive accusative case from the verb:

- a. **[Agent_j [shoqo [t_j, patient]**
- b. **[Ntate] [o-itse shoqo [lerapo]** (*Father broke the strap loose*)

In the second place, the patient argument will be moved to the empty subject position. This patient argument will now receive nominative case. The agent argument will then not surface, because it will be controlled by the patient argument in the subject position.

- a. **[Patient_{i/j} [shoqo [agent_i t_j]**
- b. **[Lerapo] le-itse shoqo** (*The strap broke loose*)

The control relation is indicated by the co-indexing with **[i]** and the trace relation with **[j]**

The ergative ideophones may also appear with the intransitive suffix **[-h-]** and the transitive suffix **[-l-]**. The transitive suffix **[-l-]** will allow movement of the argument:

- a. **[e] [shoqo-l- [agent, patient]**
- b. **[Agent_i] [shoqo-l- [t_i patient]**
- c. **[Ntate] o-shoqola [lerapo]** (*Father breaks the strap loose*)

The intransitive suffix [-h-] will control the agent argument with the result that the patient will have to move to fill the empty subject position:

- a. [e] [shoqo-h- [agent, patient]]
 b. [Patient_{i/j}] [shoqo-h- [t_i patient]]
 c. [Ntate] o-shoqola [lerapo] (*Father breaks the strap loose*)

The intransitive suffix [-h-] will control the agent argument with the result that the patient will have to move to fill the empty subject position:

- a. [e] [shoqo-h- [agent_i, patient]]
 b. [Patient_{i/j}] [shoqo-h- [agent_i, t_j]]
 c. [Lerapo] le-a-shoqoha (*The strap break loose*)
 d.

Control is indicated by in co-indexation with [i]

Regarding the argument structure of these verbs above, it will be necessary firstly to give attention to the subject argument in the sentence above which is assigned by the ideophone "shoqo" with the transitive affix [-l-]. The NPs in the subject position need to be animate because they are agents:

- [Ngwana] o-shoqola [lerapo] (*The child breaks the strap loose*) (*human*)
 [Tweba] e-shoqotse [kgwele] (*The mouse broke the string loose*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position above, i.e. "lerapo". This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things, which may be broken loose, are any physical objects that is made of material, leather, wire, string, chain or plant:

- [Titjhere] e-shoqotse [thae] (*The teacher broke a tie loose*) (*material*)
 [Kgomo] e-shoqotse [lerapo] (*The cow broke the strap loose*) (*leather*)
 [Ntja] e-shoqola [ketane] (*The dog break loose a chain*) (*chain*)

[Leshodu] le-shoqotse [terata]	(A thief broke a wire loose)	(wire)
[Monna] o-shoqola [kgwele]	(The man break loose a string)	(string)
[Banana] ba-shoqotse [tele]	(Girls broke the plant <i>morae edulis</i> loose)	(plant)

It seems as if objects such as **lerapo**, **thae**, **thapo**, **terata**, **tele**, **ketane** and **kgwele** may readily appear with "**shoqola**". The selection restriction on the object argument of "**shoqola**" may then be given as follows:

[ARG2 = Ntho e telete e ka tshwarehang e bobebe e shoqohang ha bonolo e entsweng ka kgwele, lerapo, terata, lesela kapa semela]

The verb "**-shoqo**" which has the intransitive suffix **[-h-]**, which controls the external argument, appears only with an argument in the subject position. This argument is the same as the object argument of "**shoqo -l-**" above:

[Thae e-a-shoqoha	(A tie breaks loose)	(material)
[Lerapo] le-a-shoqoha	(The strap breaks loose)	(leather)
[Terata] e-a-shoqoha	(The wire breaks loose)	(wire)
[Kgwele] e-a-shoqoha	(The string breaks loose)	(string)
[Tele] e-a-shoqoha	(The plant <i>morae-edulis</i> breaks loose)	(plant)
[Ketane] e-a-shoqoha	(A chain breaks loose)	(chain)

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of "**shoqo -l-**" above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition "**ka**" and it may indicate an instrument:

Ngwanana o-shoqotse lebanta [ka [letsoho]]

(The girl broke the belt loose with hands)

[S-ARG1 = instrument]

A **cognate object** is not possible with this verb.

Inalienable possession is possible with these verbs, e.g.:

With shoqoha

[Leleme la thae] le-shoqohile (The tongue of the tie is broken loose)

[Thae] e-shoqohile [leleme] (The tie's tongue is broken loose)

With shoqola

Ngwanana o-shoqotse [leleme la thae] (The girl broke the tongue of the tie loose)

Ngwanana o-shoqotse [thae] [leleme] (The girl has broken the tie's tongue)

Instrument-subject alternation is also possible with these verbs:

[Ngwana] o-shoqola [terata [ka tang]

(The child break loose the wire with pliers)

[Tang] e-shoqola [terata] (Pliers breaks loose the wire)

3.10.1.3.2 Event structure

The ideophone “-shoqo” consists of two events, i.e. process and state events:

Process events

[Ngwana] o-shoqotse [terata] (The child broke the wire loose)

[Mme] o-shoqola [ketane] (Mother breaks loose a chain)

State events

Lerapo le-shoqohile la-ba dikgetjhana (The strap broke and became portions)

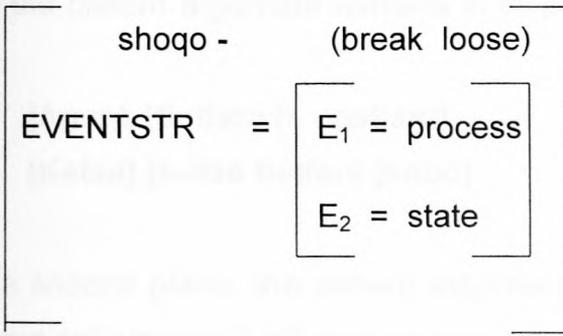
Thae e-shoqohile ya-ba dikarolo tse pedi (The tie is broken into two pieces)

Terata e-shoqohile ya-ba dikarolwana (A wire broke and became two parts)

Ketane e-shoqohile ya-ba dikarolo (A chain broke and became portion)

Thapo e-shoqohile ya-ba dikarolo (A rope broke and became two portions)

The event structure verb will look like this:



Lexical conceptual paradigm (LCP)

There is only one meaning of these verbs, i.e. to break easily or to cut clean at once, e.g.:

[Mme] o-shoqola [palesa] (*Mother breaks a flower*)

[Ntate] o-shoqotse [terata] (*Father broke a wire*)

Lexical inheritance structure

These are verbs of **break**, which falls under a sub class of the break verbs and is classified under the main class of the verbs of change of state. The hierarchy will look like this: break easily – break - change of state.

3.10.2 WITH AN INTRANSITIVE SUFFIX [-an-]

See also paragraph 3.3.4.2 above.

The ideophone **tletlere** is intransitive and it may also appear as a derived intransitive verb **[-an-]**, i.e. **tletlerana**:

3.10.2.1 Argument structure

The ideophone assign two internal arguments, i.e. agent and patient:

[e] [tletlere [Agent, Patient]

As the ideophone has no external argument, one of the internal arguments has to move to this empty subject position to receive nominative case.

In the first place, the agent argument will be moved to receive nominative case. In this case the patient argument remains in its place and will receive accusative case from the verb:

- a. **[Agent_i [tletlere [t_i , patient]**
 b. **[Katse] [e-itse tletlere [kobo]** (*The cat cracked the blanket*)

In the second place, the patient argument will be moved to the empty subject position. This patient argument will now receive nominative case. The agent argument will then not surface, because it will be controlled by the patient argument in the subject position.

- a. **[Patient_{i/j} [tletlere [agent_i t_j**
 b. **[Kobo] e-itse tletlere** (*The blanket is cracked*)
 c.

The control relation is indicated by the co-indexing with **[i]** and the trace relation with **[j]**.

The external argument appear in the subject position above, i.e. "**kobo**". This argument is interpreted as patient. There are selection restrictions on the argument of this verb. Things, which may be cracked, are any physical object, which is made of material, wood, glass, leather or pottery:

[Kobo] e-a-tletlerana	<i>(The blanket cracks)</i>	<i>(material)</i>
[Kopi] e-tletlerane	<i>(The cup is cracked)</i>	<i>(glass)</i>
[Patsi] e-a-tletlerana	<i>(A firewood cracks)</i>	<i>(wood)</i>
[Seeta] se-a-tletlerana	<i>(A shoe cracks)</i>	<i>(leather)</i>
[Pitsa ya letsopa] e-tletlerane	<i>(A claypot is cracked)</i>	<i>(pottery)</i>

It seems as if objects such as **kobo, kopi, patsi, seeta, pitsa ya letsopa** and **lemati** may readily appear with "**tletlere**". The selection restriction on the object argument of "**tletlere**" may then be given as follows:

[ARG1 = Ntho e ka tshwarehang e tletleranang ha bonolo e entsweng ka lelapi, galase, patsi, letlalo kapa letsopa]

These arguments are all interpreted as patients.

The intransitive verb **tletlerana** may appear with a causative suffix [-y-]:

[tletler-an-y-]

In such a case the conditions on causative verbs are applicable:

- a. A new causative external argument has to be introduced
- b. The “old” external argument will now become an internal argument:

[Kobo] e-a-tletlerana (*The blanket cracks*)

[] tletleranya [kobo]

[Ngwana] o-tletleranya [kobo] (*The child cracks the blanket*)

The selection restrictions on the internal argument above will be the same as the restrictions on the subject argument of **tletlerana**.

The second argument is a **shadow argument** which appear with this verb. This argument is introduced by the preposition “ka” and it may indicate an instrument:

Pitsa e tletlerane [ka [tshepe] (*The pot is cracked with an iron*)

[S-ARG1 = instrument]

A **cognate object** is not possible with this verb, e.g.:

Seeta se tletlerane [matlere] (*A shoe is cracked into cracks*)

Lebota le tletlerane [letlere le leholo] (*The wall is cracked into a big crack*)

Inalienable possession is also possible with this verb, e.g.:

[Leoto la pitsa] letletlerane (*The leg of the pot is cracked*)

[Pitsa] e-tletlerane [leoto] (*the pot's leg is cracked*)

Instrument-subject alternation is not possible with this verb.

3.10.2.2 **Event structure**

The verb has two events, i.e. process and state:

Process events

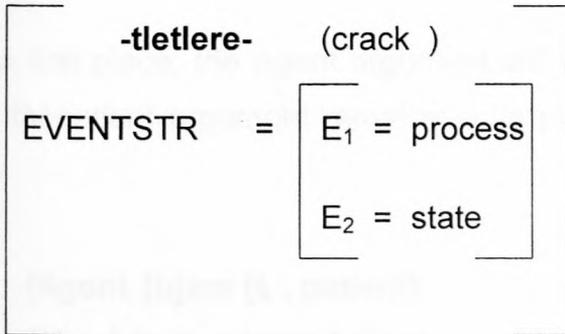
[Letlalo] le-a-tletlerana (*The skin cracks*)

[lemati] le-tletlerane (*The door is cracked*)

State events

Kobo e-tletlerane ya-ba <u>dikarolo</u>	<i>(The blanket is cracked and became parts)</i>
Kopi e-tletlerane ya-ba <u>dikarolo</u>	<i>(A cup cracked and became parts)</i>
Patsi e-tletlerane ya-ba <u>mafatsa</u>	<i>(The firewood cracked and became splinters)</i>
Seeta se-tletlerane sa-ba <u>matlere</u>	<i>(A shoe cracked and became cracks)</i>
Lemati le-tletlerane la-ba <u>mafatsa</u>	<i>(The door is cracked and became splinters)</i>

The event structure verb will look like this:



3.10.2.3 Lexical conceptual paradigm (LCP)

The verbal root “-tletler-” has the following meanings:

Meaning of split

[Patsi] e-tletlerane	<i>(The firewood is split)</i>
[Lerapo] le-a-tletlerana	<i>(The strap split)</i>

Meaning of crack

[Lebota] le-a-tletlerana	<i>(The wall cracks)</i>
[Fuluru] e-a-tletlerana	<i>(The floor cracks)</i>

3.10.2.4 Lexical inheritance structure

From this hierarchy; crack / split – break –change of state, it becomes clear that this is a **crack / split** verb which is classified under a sub class of break verbs and it is found in the main class of verbs of change of state.

3.10.3 WITH THE SUFFIX [-man-] and [-ts-]

See also paragraph 3.3.4.3 above.

3.10.3.1 BJARA

3.10.3.1.1 Argument structure

The ideophone assign two internal arguments, i.e. agent and patient:

[e] [bjara [Agent, Patient]

The ideophone has no external argument. Therefore one of the internal arguments has to move to this empty subject position to receive nominative case.

In the first place, the agent argument will be moved to receive nominative case. In this case the patient argument remains in its place and will receive accusative case from the verb:

- a. **[Agent_i [bjara [t_i , patient]**
 b. **[Mme] [o-itse bjara [pitsa]** (*Mother smashed the pot*)

In the second place, the patient argument will be moved to the empty subject position. This patient argument will now receive nominative case. The agent argument will then not surface, because it will be controlled by the patient argument in the subject position.

- a. **[Patient_{ij} [bjara [Agent_i t_j]**
 b. **[Pitsa] e-itse bjara** (*The pot smashed*)

The control is indicated by the coindexing with [i] and the trace relation with [j].

These ergative ideophones may also appear with the intransitive **[-man-]** and the transitive suffix **[-ts-]**. The transitive suffix **[-ts-]** will allow movement of the agent argument:

- a. **[e] [bjara - ts -[Agent, Patient]**
 b. **[Agent_i [bjara-ts- [t_i , patient]**
 c. **[Mme] o-bjaratsa [pitsa]** (*Mother smashes the pot*)

The intransitive suffix **[-man-]** will control the agent argument with the result that the patient will have to move to fill the empty subject position:

- a. [e] [bjara - ts -[Agent, Patient]
 b. [Patient_i /_j] [bjara-man_i- [Agent_i , t_i]
 c. [Pitsa] e-bjaramane (The pot is smashed)

Control is indicated by coindexation with [i]

With regard to the argument structure, it will be necessary firstly to give attention to the subject argument in the sentence above which is assigned by the ideophone "**bjara**" with the transitive affix [-ts-]. The NPs in the subject position need to be animate as they are agents:

- [Tau] e-bjaratsa [lesapo] (The lion crushes a bone) (animal)
 [Ngwana] o-bjaratsa [kuku] (The child crushes a cake) (human)

The subject argument will then appear with the following selection restrictions:

[ARG1 = animate]

The second argument appears in the object position above, i.e. "**pitsa**". This argument is interpreted as patient. There are selection restrictions on the argument of this verb. Things which may be crushed are any object which is made of stone, glass or a hard food:

- [Ngwana] o-bjaratsa [kuku] (The child crushes a cake) (food)
 [Monna] o-bjaratsa [watjhe] (The man smashes a watch) (glass)
 [Moshemane] o-bjaratsa [thaele] (The boy smashes a tile) (stone)

It seems as if objects such as **lesapo**, **seipone**, **kopi**, **pompong**, **thaele** and **watjhe** may readily appear with "**bjaratsa**". The selection restriction on the object argument of "**bjaratsa**" may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e thata e bjaretsehang ha bonolo e entsweng ka galase, lejwe kapa dijo]

The verb "**bjara**" which has the intransitive suffix [-man-] which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of "**bjara-ts-**" above:

- [Kuku] e-a-bjaramana (A cake crushes) (food)

[Watjhe] e-a-bjaramana	<i>(A watch smashes)</i>	<i>(glass)</i>
[Thaele] e-a-bjaramana	<i>(A tile smashes)</i>	<i>(stone)</i>

These arguments are all interpreted as patients. The selection restriction on this argument will be the same as the one on the object argument of "**bjara-ts-**" above.

There is a third argument with these verbs which is a **shadow argument**. This argument is introduced by the preposition "**ka**" and it may indicate an instrument:

Ngwana o bjaraditse kuku [ka [meno]]

(The child crushed a cake with teeth)

[S-ARG1 = instrument]

A **cognate object** is not possible with these verbs.

Inalienable possession is possible with these verbs of smash, e.g.:

With bjaramana

[Galase ya watjhe] e-bjaramana *(The glass of the water is smashed)*

[Watjhe] e bjaramane [galase] *(The watch's glass is smashed)*

With bjaratsa

Monna o-bjaraditse [galse ya watjhe] *(The man smashed the glass of the watch)*

Monna o-bjaraditse [watjhe] [galase] *(The man smashed the watch's glass)*

Instrument-subject alternation is also possible with these verbs.

[Monna] o-bjaraditse [watjhe] [ka molamu]

(The man smashed a watch with a stick)

[Molamu] o-bjaraditse [watjhe] *(The stick smashed the watch)*

3.10.3.1.2 **Event structure**

There are two events with the verb "**bjara**" i.e. process and state.

Process events

[Watjhe] e-a-bjaramana (A watch smashes)

[Ntja] e-bjaraditse [lesapo] (The dog crunched a bone)

State events

Lesapo le bjaramane la-ba **mafoforane** (A bone is crunched and became remnants)

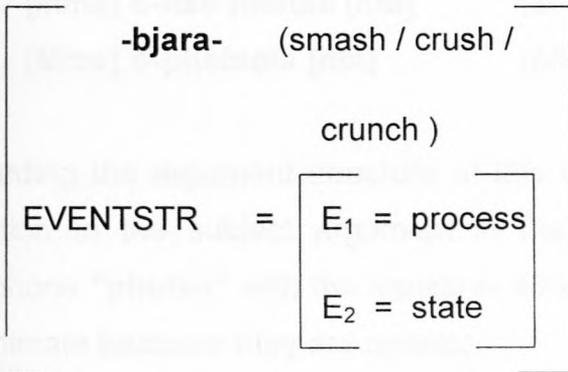
Seipone se bjaramane sa-ba **maqhetso** (The mirror is smashed and became pieces)

Thaele e bjaramane ya-ba **maqhetso** (A tile is smashed and became pieces)

Kopi e bjaramane ya-ba **maqhetso** (A cup is smashed and became pieces)

Watjhe e bjaramane ya-ba **maqhetso** (A watch is smashed and became pieces)

The event structure verb will look like this:



3.10.3.1.3 **Lexical conceptual paradigm (LCP)**

There are different meanings or senses which are noticed with this verb:

A sense of breaking or crushing

[Monna] o-bjaratsa [watjhe] (The man breaks a watch)

[Mosadi] o-bjaratsa [lehe] (The woman crushes an egg)

A sense of crunch or munch

[Ngwana] o-bjaratsa [kuku] (The child crunches a cake)

[Ntja] e-bjaraditse [lesapo] (The dog crunched a bone)

3.10.3 Lexical inheritance structure

The hierarchy of this verb is : smash or crunch - break - change of state. From this hierarchy it may be explained that this is a **smash** verb which is classified under the break verbs and it is found in the main class of verbs of change of state.

3.10.4 WITH THE TRANSITIVE SUFFIX [-I-]

3.10.4.1 PHETSE

3.10.4.1.1 Argument structure

The ideophone "**phetse**" may also appear with the transitive suffix [-I-] as [-**phetse-I-**]. This ideophone assigns two arguments, i.e. agent and patient:

- a. **[Mme] o-itse phetse [nta]** (*Mother crushed the louse*)
 b. **[Mme] o-phetse-la [nta]** (*Mother crushes the louse*)

Regarding the argument structure of this verb above, it will be necessary firstly to give attention to the subject argument in the above sentence which is assigned by the ideophone "**phetse**" with the transitive affix [-I-]. The NPs in the subject position need to be animate because they are agents:

- [Ntja] e-phetse-la [boseleise]** (*A dog crush a tick*) (*animal*)
[Ngwana] o-phetse-la [kokonyana] (*The child crush an insect*) (*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position above, i.e. "**nta**". This argument is interpreted as patient. There are selection restrictions on the argument of this verb. Things which may be pinched or crushed are any physical object which can be crushed under foot or between the fingers, more especially insects:

- [Monna] o-phetse-la [tshitshidi]** (*The man crush a bedbug*) (*insect*)
[Ngwana] o-phetsetse [lerwana] (*The child crushed a driver-ant*) (*insect*)

It seems as if objects such as **lerwana**, **nta**, **tshitshidi**, **tshintshi** and **böselëise** may readily appear with "**phetsela**". The selection restriction on the object argument of "**phetsela**" may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e bobebe e phetselehang ha bonolo ka tlasa leoto kapa pakeng tsa menwana]

There is a third argument with this verb which is a **shadow argument**. This argument is introduced by the preposition "**ka**" and it may indicate an instrument:

Monna o phetsetse nta [ka [monwana]] (*The man crushed a louse with a finger*)
[S-ARG1 = instrument]

A **cognate object** is possible with this verb, e.g.:

[Monna] o phetsetse nta [mophetselo o tshabehang]
 (*The man crushed a louse a frightening crush*)

Inalienable possession is also possible with this verb, e.g.:

Monna o-phetsetse [hlooho ya nta] (*The man crushed the head of the louse*)
Monna o-phetsetse [nta] [hlooho] (*The man crushed the louse's head*)

Instrument-subject alternation is also possible with this verb.

[Monna] o-phetsetse [nta] [ka monwana]
 (*The man crushed the louse with a finger*)

[Monwana] o-phetsetse [nta] (*A finger crushed the louse*)

3.10.4.1.2 Event structure

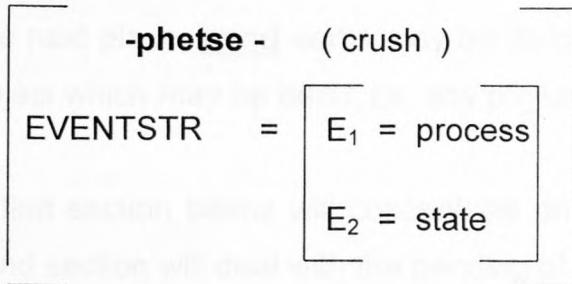
There are two events with this verb, i.e. process and state, e.g.:

Process events

[Monna] o-phetsetse [nta] (*The man crushed a louse*)
[Ngwana] o-phetsetse [tshitshidi] (*The child crushed a bedbug*)

State events**Lerwana le-phetselehile la-ba dikarolwana***(A driver-ant is crushed and became pieces)***Tshitshidi e-phetselehile ya-ba dikarolwana***(A bedbug is crushed and became pieces)***Nta e-phetselehile ya-ba dikarolwana***(A louse is crushed and became pieces)***Tshintshi e-phetselehile ya-ba dikarolwana***(A fly is crushed and became pieces)***Böselëise e-phetselehile ya-ba dikarolwana***(A tick is crushed and became pieces)*

The event structure verb will look like this:

**3.10.4.1.3 Lexical conceptual paradigm (LCP)**

There is only one meaning of "crushing under foot or between fingers", e.g.:

[Ntate] o-phetsetse [böselëisi] *(Father crushed a tick)*

3.10.4.1.4 Lexical inheritance structure

This is a crush verb which falls under the break verb and it is found in the main class of verbs of change of state. The hierarchy will look like this: crush - break - change of state.

CHAPTER FOUR

BEND VERBS

4.1 AIM

Regarding a sub classification of these verbs, **bend** verbs can appear either as transitive or intransitive verbs or as both transitive / intransitive, but with a difference in form.

The transitive **bend** verbs may have the following meaning: to force into a curve, angle or sloping position, away from a straight or upright position, e.g.:

[Ngwana] o koba [terata] (*The child bends a wire*)

The intransitive **bend** verbs may be referred to as verbs which have or take on a curved shape or sloping position, e.g.:

[Sefate] se-a-sekama (*A tree is inclining*)

In the next place, **bend** verbs may be divided into two sub groups depending on the type of object which may be bend, i.e. any physical object or a body part may be bend.

The first section below will concentrate on the bending of any physical object while the second section will deal with the bending of a body part.

4.2 ANY PHYSICAL OBJECT

In this category of the bend verbs, we find that the object that may be bend is any physical object. In most cases only transitive **bend** verbs are applicable. These verbs are divided into the following semantic sub categories:

4.2.1 BEND VERBS [koba, putlamisa, tenyetsa]

4.2.1.1 Koba (to bend)

4.2.1.1.1 Argument structure

This is a transitive bend verb which assigns two arguments, i.e. agent and patient:

[Ngwana] o-koba [terata] (*The child bends a wire*)

The NPs in the subject position need to be animate because they are agents:

[Nonyana] e-koba [lehlaku] (A bird bends a leaf) (animal)

[Ngwana] o-koba [terata] (The child bends a wire) (human)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position above, i.e. "terata". This argument is interpreted as patient. There are selection restrictions on the argument of this verb. Things which may be bend are any physical object which is made of wire, material, paper, leather, iron or a plastic:

[Moshemane] o-koba [katiba] (The boy bends a hat) (material)

[Ntate] o-koba [terata] (Father bends a wire) (wire)

[Ngwana] o-koba [buka] (The child bends a book) (paper)

[Seroki] se-koba [lebanta] (The tailor bends a belt) (leather)

[Kgomo] e-koba [lesenke] (The cow bends a zink) (iron)

[Monna] o-koba [lethompo] (The man bends a hose pipe) (plastic)

Objects such as **katiba**, **terata**, **buka**, **lebanta**, **lesenke** and **lethompo** may readily appear with "koba". The selection restriction on the object argument of "koba" may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e kobehang, e entsweng ka tshepe, lelapi, pampiri, letlalo, terata kapa polasetiki]

There is also a third argument which is introduced by the preposition "ka" and it may indicate an instrument. This is a shadow argument:

Monna o koba terata [ka [tang]] (The man bends a wire with pliers)

[S-ARG1 = instrument]

A cognate object is possible with this verb, e.g.:

[Monna] o kobile terate [koba e sa kobolleheng]

(The man bent a wire an unbendable bend)

Inalienable possession is also possible with this verb, e.g.:

Monna o koba terata [ka tang] (The man bends a wire with pliers)

[Tang] e koba terata (Pliers bend a wire)

Instrument-subject alternation is also possible with this verb, e.g.:

Monna o-koba [lekala la sefate] (The man bend the branch of a tree)

Monna o-koba [sefate] [lekala] (The man bends a tree's branch)

Derived verbs are possible with this verb:

Reversive -oll- and -oloh-

Mme o-kob-oll-a terata (Mother unbend a wire)

Terata e-a-kob-oloh-a (A wire gets unbend)

Applicative -el- and -ets-

Mme o kob-el-a [ngwana] terata (Mother bend a wire for the child)

Ntate o kob-ets-e [koloi] tshepe (Father bent an iron for the car)

Causative -is-

Mme o kob-is- [ngwana] terata (Mother cause the child to bend a wire)

Ntate o kob-is-a [tang] tshepe (Father cause the pliers to bend an iron)

Passive -w-

Terata e-a-koj-w-a (A wire bend)

4.2.1.1..2 **Event structure**

This verb has two events, i.e. process and state:

Process events

[Ngwana] o-koba [terata] (The child bends a wire)

State events

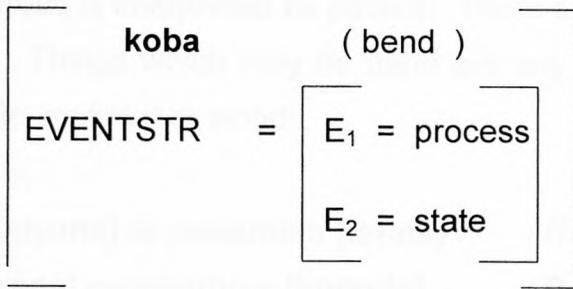
Katiba e-kobehile (The hat is bent)

Lebanta le-kobehile (The belt is bent)

Terata e-kobehile (A wire is bent)

Lethompo le-kobehile (A hose pipe is bent)

The event structure verb will look like this:



4.2.1.1.3 Lexical conceptual paradigm (LCP)

The verb may have the following meanings, e.g.:

To bend

[Ngwana] o-koba [terata] (The child bends a wire)

[Lebanta] le-a-kobeha (The belt get bend)

To abstain

[Morutwana] o-e-kobile (The pupil is absent from school)

[Ntate] ha-a-theohela, o e kobile (Father did not got to work, he is absent)

4.2.1.1.4 Lexical inheritance structure

This is a **bend** verb which is found in the main class of verbs of change of state. The hierarchy will be: bend - change of state.

4.2.1.2 Putlamisa (to bend)

4.2.1.2.1 Argument structure

This is also a transitive bend verb which assigns two arguments, i.e. agent and patient:

[Ntate] o-putlamisa [molamu] (Father bends the stick)

The NPs in the subject position need to be animate because they are agents:

[Dinonyana] di-putlamisa [lekala] (The birds bend a a branch) (animal)

[Ntate] o-putlamisa [molamu] (Father bends the stick) (human)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position above, i.e. "**molamu**". This argument is interpreted as patient. There are selection restrictions on the argument of this verb. Things which may be bend are any physical object which is made of wire, paper, plastic, material or wood:

[Dinonyana] di-putlamisa [terata]	(The birds bends a wire)	(wire)
[Ngwana] o-putlamisa [koranta]	(The child bends a newspaper)	(paper)
[Moshemane] o-putlamisa [kepisi]	(The boy bends a cup)	(material)
[Ntate] o-putlamisa [phafa]	(Father bends a sjambok)	(plastic)
[Monna] o-putlamisa [molamu]	(The man bends the stick)	(wood)

Objects such as **terata**, **koranta**, **kepisi**, **phafa** and **molamu** may readily appear with "**putlamisa**". The selection restriction on the object argument of "**putlamisa**" may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e kobehang, e entsweng ka lelapi, pampiri, terata, polasetiki kapa patsi]

Shadow argument is the third argument which is introduced by the preposition "**ka**" and it may indicate an instrument:

Dinonyana di putlamisa terata [ka [maoto]]
[S-ARG1 = instrument]

This verb dot not allow a **cognate object** to appear with it.

Inalienable possession is possible with this verb, e.g.:

[Dinonyana] di putlamisa terata [ka maoto] (The birds bend the wire with legs)
[Moato] a putlamisa terata (Legs bend the wire)

Instrument-subject alternation is also possible with this verb, e.g.:

Monna o putlamisa [hlooho ya popi] (The man bend the head of a doll)
Monna o putlamisa [popi] [hlooho] (The man bend the doll's head)

When coming to the **derived verbs**, this verb may appear with the passive affix only. This verb by itself is in the state of causative.

Reversive -wl-

Terata e-a-pultamis-w-a (A wire is being bend)

4.2.1.2.2 Event structure

There are two events with this verb, i.e. process and state:

Process events

[Ntate] o-putlamisa [moato] (Father bend his feet)

[Monna] o-putlamisa [molamu] (The man bent the stick)

State events

Terata e putlamisitswe (The wire is bent)

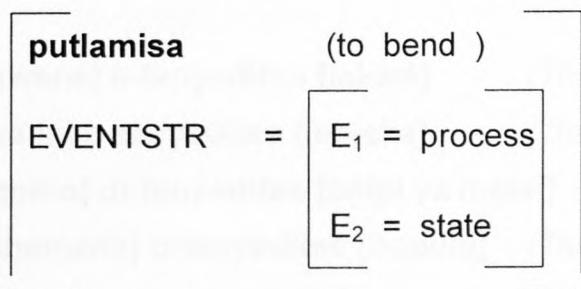
Molamu o putlamisitswe (The stick is bent)

Koranta e putlamisitswe (The newspaper is bent)

Phafa e putlamisitswe (The sjambok is bent)

Kepisi e putlamisitswe (The cap is bent)

The event structure verb will look like this:



4.2.1.2.3 Lexical conceptual paradigm (LCP)

This verb has the following meaning or sense, e.g.:

To bend

[Ngwana] o-koba [terata] (The child bends a wire)

[Ntate] o-putlamisa [molamu] (Father bends the stick)

4.2.1.2.4 Lexical inheritance structure

This is a **bend** verb which is found in the main class of verbs of change of state. The hierarchy will be: bend - change of state.

4.2.1.3 Tenyetsa (to bend)

4.2.1.3.1 Argument structure

This is also a transitive bend verb which assigns two arguments, i.e. agent and patient:

[Ngwana] o-tenyetsa [mohala] (*The child bends a cable*)

The NPs in the subject position need to be animate as they are agents:

[Tshwene] e-tenyetsa [lekala] (*The baboon bend a branch*) (animal)

[Monna] o-tenyeditse [lesenke] (*The man bent a zink*) (human)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position above, i.e. "**mohala**". This argument is interpreted as patient. There are selection restrictions on the argument of this verb. Things which may be bend are any physical object which is made of wire,, plastic, plant, zink or wood:

[[Tshwene] e-tenyeditse [lekala] (*The baboon bent a branch*) (Wood)

[Ngwana] o-tenyeditse [lehlaka] (*The child bent a common-reed*) (plant)

[Dikgomo] di-tenyeditse [peipi ya metsi] (*The cattle bent a water pipe*) (plastic)

[Moshemane] o-tenyeditse [hupulu] (*The boy bent a hoop-iron*) (zink)

[Mme] o-tenyetsa [mohala] (*Mother bend a cable*) (wire)

It seems as if objects such as **lekala**, **lehlaka**, **peipi ya metsi**, **hupulu** and **mohala** may readily appear with "**tenyetsa**". The selection restriction on the object argument of "**tenyetsa**" may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e kobehang ha bonolo e entsweng ka terata, polasetiki, semela, patsi kapa hupulu]

There is a third argument with this verb which is a **shadow argument**. This argument is introduced by the preposition "ka" and it may indicate an instrument:

Tshwene e tenyeditse lekala [ka [matsoho]]

(The baboon bent a branch with hands)

[S-ARG1 = instrument]

A **cognate object** is also possible with this verb:

Moshemane o tenyeditse lesenke [tenyetseho e mpe]

(The boy bent a zink a bad bend)

Instrument-subject alternation is possible with this verb, e.g.:

Tshwene e tenyetsa lekala [ka matsoho] *(The baboon bend a branch with hands)*

[Matsoho] a-tenyetsa lekala *(Hands bend a branch)*

Inalienable possession is also possible with this verb, e.g.:

Tshwene e tenyetsa [lekala la sefate] *(The baboon bend the branch of a tree)*

Tshwene e tenyetsa [sefate] [lekala] *(The baboon bend the tree's branch)*

This verb may appear with the following affixes, when coming to the **derived verbs**:

Reversive -oll- and -oloh-

Tshwene e tenyets-oll-a lekala *(The baboon unbend a branch)*

Lekala le a tenyets-oloh-a *(The branch unbend)*

Applicative -el-

Lekala le tenyetseh-el-a kutung *(The branch bend towards the stem)*

Passive -w-

Mohala o a tenyets-w-a *(A cable is bent)*

4.2.1.3.2 Event structure

There are two events with this verb, i.e. process and state:

Process events

[Ngwana] o-tenyetsa [lehlaka] (The child bends the common-reed)

[Mme] o-tenyetsa [mohala] (Mother bend a cable)

State events

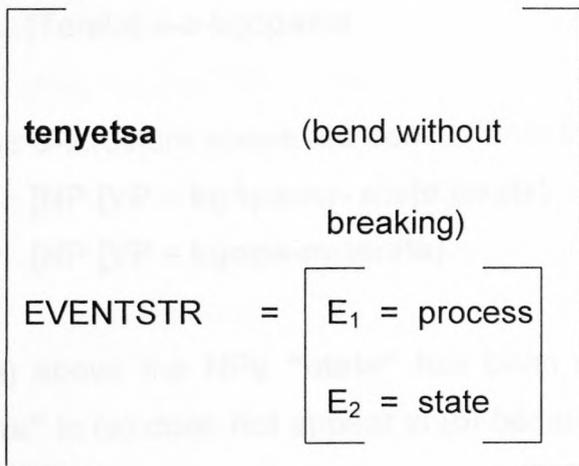
Lekala le-tenyetsehile (The branch bend without breaking)

Mohala o-tenyetsehile (The cable is bend half-broken)

Hupulu e-tenyetsehile (The hoop-iron is bend half-broken)

Lethompo le-tenyetsehile (The hose pipe is bend without breaking)

The event structure verb will look like this:



4.2.1.3.3 Lexical conceptual paradigm (LCP)

There is only one meaning with this verb, e.g.:

To bend without breaking

[Molamu] o tenyetsehile (The stick bend without breaking)

[Molala] o tenyetsehile (The neck bend without breaking)

4.2.1.3.4 Lexical inheritance structure

This is a **bend** verb which is found in the main class of verbs of change of state. The hierarchy will be: bend without breaking - change of state.

4.2.2 CROOKED VERBS

These verbs may either be transitive or intransitive but with clear distinction in form.

4.2.2.1 Kgopama / Kgopanya

4.2.2.1.1 Argument structure

The verbal root “-kgopa-” appears with the suffixes [-ny-] and [-m-] as [-kgopa-ny-] and [-kgopa-m-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. [Ntate] o-kgopanya [terata] (*Father bend a wire*)
 b. [Terata] e-a-kgopama (*A wire is crooked*)

These S-structure above are derived from the following d-structures:

- a. [NP [VP – kgopa-ny- ntate terata]]
 b. [NP [VP – kgopa-m-terata]] (*Father bend a wire*)

In (a) above the NPs “ntate” has been moved and in (b) the NP “terata”. The NP “ntate” in (a) does not appear in (b) because this argument is controlled by the affix [-m-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give an attention to the subject argument in the (a) sentence above which is assigned by the “kgopa” with the transitive [-ny-]. The NPs in the subject position need to be animate because they are agents:

- [Ntate] o-kgopanya [tshepe] (*Father bend an iron*) (*human*)
 [Dikgomo] di-kgopanya [lehlaka] (*The cows bend a common-reed*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appears in the object position in (a) above, i.e. “**terata**”. This argument is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be bend or crooked are any physical object which is made of wire, plant, plastic, zink or iron:

[Mme] o-kgopanya [mohala]	(Mother bends a cable)	(wire)
[Tshwene] e-kgopantse [lehlaku]	(The baboon crooked a leaf)	(plant)
[Ntate] o-kgopanya [kubu]	(Father bends a sjambok)	(plastic)
[Banna] ba-kgopanya [tanka ya metsi]	(The men bend a water tank)	(zink)
[Mohwebi] o-kgopantse [tshepe]	(The merchant crooked an iron)	(iron)

It seems as if objects such as **terata**, **lehlaku**, **lekala**, **tshepe** and **tanka ya metsi** may readily appear with “**kgopanya**”. The selection restriction on the object argument of “**kgopanya**” may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e kobehang ha bonolo e entsweng ka terata, polasetiki, lesenke, semela kapa tshepe]

The verb “**kgopa-m**” which has the intransitive suffix [-m-] which controls the external argument appears only with argument in the subject position. This argument is the same as the object argument of “**kgopa-ny-**” above:

[Mohala] o-a-kgopama	(A cable is bent)	(wire)
[Lehlaku] le-kgopame	(A leaf is crooked)	(plant)
[Kubu] e-a-kgopama	(A sjambok is bent)	(plastic)
[Tanka ya metsi] e-a-kgopama	(A water tank is crooked)	(zink)
[Tshepe] e kgopame	(An iron is crooked)	(iron)

There is a third argument with this verb which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

Mme o kgopantse mohala [ka [hamore]] (Mother bent a cable with a hammer)

[S-ARG1 = instrument]

A cognate object is not possible with this verb.

Instrument-subject alternation is possible with these verbs, e.g.:

Monna o kgopanya kubu [ka matsoho]	<i>(The man bend a sjambok with hands)</i>
[Matsoho] a kgopanya kuba	<i>(Hands bends a sjambok)</i>

Inalienable possession is also possible with these verbs, e.g.:

Transitive verb [kgopanya]

Monna o kgopantse [lehlaku la lekala]	<i>(The man crooked the leaf of a branch)</i>
Monna o kgopantse [lekala] [lehlaku]	<i>(The man crooked the branch's leaf)</i>

Derived verbs are also possible with the intransitive bend verb “**kgopama**” e.g.:

Reversive -oll- and -oloh-

Moya o kgopamolla lekala	<i>(The wind stretch out a branch)</i>
Lekala le-a-kgopamoloha	<i>(The branch become straight)</i>

Causative -is-

Ntate o kgopamisa [bana] terata	<i>(Father cause the children to crook a wire)</i>
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4.2.2.1.2 Event structure

The verbal root “**-kgopa-**” has two events, i.e. process and state:

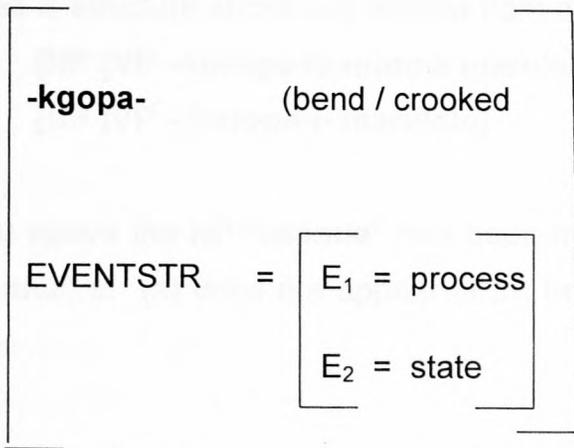
Process events

[Terata] e-a- kgopama	<i>(A wire is bent)</i>
[Ntate] o-kgopanya [terata]	<i>(Father bend a wire)</i>

State events

Mohala o kgopame	<i>(The cable is bent)</i>
Terata e kgopame	<i>(A wire is crooked)</i>
Tshepe e kgopame	<i>(The iron is crooked)</i>
Kubu e kgopame	<i>(The sjambok is bent)</i>
Lekala le kgopame	<i>(The branch is bent)</i>

The event structure verb will look like this:



4.2.2.1.3 Lexical conceptual paradigm (LCP)

The following meanings may be found with this verbal root “**kgopa**”, e.g.:

To become crooked

[Terata] e-a-kgopama (The wire is crooked)

[Tshwene] e-kgopantse (The baboon crooked the branch)

To distort

[Molaetsa ono] o-kgopame (That message is distorted)

To bend

[Ntate] o-kgopamisitse [terata] (Father bent the wire)

[Mohala] o-a-kgopama (The cable is bent)

4.2.2.1.4 Lexical inheritance structure

This is a **bend** verb which is found in the class of verbs of change of state. The hierarchy will be: crook - bend - change of state.

4.2.2.2 Koropela / korepetsa

4.2.2.2.1 Argument structure

The verbal root “-korope-” appears with the suffixes [-ts-] and [-l-] as [-korope-ts-] and [-korope-l-]. This verbal root assigns two internal arguments, i.e. agent and patient:

a. [Monna] o-koropetsa [marulelo] (The man bend the roof)

b. [Marulelo] a-a-koropela (The roof gets crooked)

These S-structure above are derived from the following d-structures:

- a. **[NP [VP –korope-ts-monna marulelo]**
 b. **[NP [VP – korope-l- marulelo]** (*The man bend the roof*)

In (a) above the NP “**monna**” has been moved and in (b) the NP “**marulelo**”. The NP “**monna**” in (a) does not appear in (b) because this argument is controlled by the affix [-l-].

Regarding the argument structure of these two verbs above, it will be necessary firstly to give an attention to the subject argument in the (a) sentence above which is assigned by the “**korope**” with the transitive [-ts-]. The NPs in the subject position need to be animate because they are agents:

- [Monna] o koropetsa [masenke]** (*The man bend the zink*) (*human*)
[Dinonyana] di koropeditse [sehlaha] (*Birds bent the nest*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The object argument in (a) above, i.e. “**marulelo**” is interpreted as patient. There are selection restrictions on the object argument of this verb. Things which may be bend or crooked are any physical object which is made of wire, zink, material, plant or string:

- [Monna] o koropetsa [lesenke]** (*The man bend the zink*) (*zink*)
[Mme] o-koropetsa [hanyere ya diphahlo] (*Mother bend the clothes' hanger*) (*wire*)
[Moshemane] o-koropeditse [thae] (*The boy crooked a tie*) (*material*)
[Dinonyana] di-koropeditse [sehlaha] (*The birds crooked the nest*) (*plant*)
[ngwana] o-koropetsa [thapo] (*The child bend a rope*) (*string*)

Objects such as **terata**, **sehlaha**, **hanyere**, **lesenke**, **thae** and **thapo** may readily appear with “**koropetsa**”. The selection restriction on the object argument of “**koropetsa**” may then be given as follows:

[ARG2 = Ntho e ka tshwarehang e kobehang ha bonolo e entsweng ka terata, lesenke, dimela, lesela kapa thapo]

The verb “**korope-l-**” which has the intransitive suffix **[-l-]** which controls the external argument appears only with argument in the subject position. This argument is the same as the object argument of “**korope-ts-**” above:

[Hanyere ya diphahlo] e-a-koropela	(A clothes hanter is crooked)	(wire)
[Lesenke] le-a-koropela	(The zink is crooked)	(zink)
[Thae] e-koropetse	(A tie is crooked)	(material)
Sehlaha] se-koropetse	(The nest is crooked)	(plant)
[Thapo] e-a-koropela	(A rope is crooked)	(string)

There is a third argument with this verb which is a **shadow argument**. This argument is introduced by the preposition “**ka**” and it may indicate an instrument:

Mme o koropeditse terata [ka [tang]] (*Mother made crooked the wire with pliers*)
[S-ARG1 = instrument]

A **cognate object** is possible with these verbs, e.g.:

Marulelo a koropeditse [mokokoropetso]
 (*The roof has been bent into an arch*)

Instrument-subject alternation is also possible with these verbs, e.g.:

Mosadi o koropetsa terata [ka matsoho] (*The woman bend a wire with hands*)
[matsoho] a-koropetsa terata (*Hands bend a wire*)

Inalienable possession is also possible with these verbs, e.g.:

Transitive verb [koropetsa]
Moshemane o koropeditse [lemeno la thae]
 (*The boy made crooked a knot of a tie*)

Moshemane o koropeditse [thae] [lemeno]
 (*The boy made crooked a tie's knot*)

Intransitive verb: [korepela]

[Lemono la thae] le-koropetse (*The knot of a tie is crooked*)

[Thae] e-koropetse [lemeno] (*A tie's knot is crooked*)

When coming to the **derived verbs**, only passive affix is possible with the transitive verb “koropetsa”

Passive -w-

Thae e-a-koropetswa (A tie is crooked)

4.2.2.2.2 Event structure

The verbal root “-koro~~pe~~-” has two events, i.e. process and state:

Process events

[Monna] o-koropetsa [marulelo] (The man bend the roof)

[Ngwana] o-koropetsa [thapo] (The child bend the rope)

State events

Thae e koropetse (The tie is crooked)

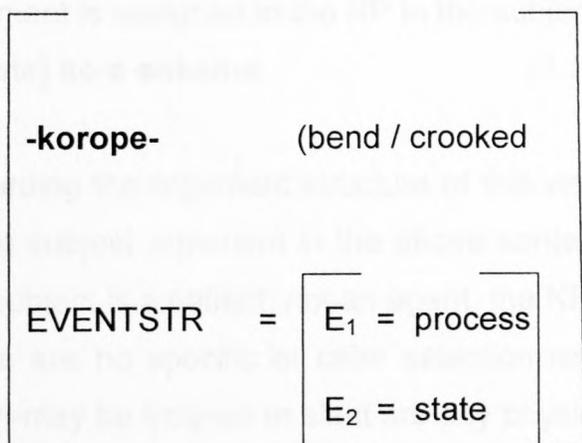
Lesenke le koropetse (The zinc is crooked)

Marulelo a koropetse (The roof is crooked)

Thapo e koropetse (The rope is crooked)

Terata e koropetse (The wire is bent)

The event structure verb will look like this:



4.2.2.2.3 Lexical conceptual paradigm (LCP)

The verbal root “koro~~pe~~” may have the following meanings, e.g.:

To be crooked / to make an arch

[Lesaka] le-koropetse	(The zink is crooked)
[Ntate] o-koropeditse [marulelo]	(Father crooked the roof)

To bent

[Ngwana] o-koropeditse [terata]	(The child bent the wire)
[lesenke] le-koropetse	(The zink gets bent)

4.2.2.2.4 Lexical inheritance structure

This is a **bend** verb which is found in the main class of verbs of change of state. The hierarchy will be: crook - bend - change of state.

4.23 LEANING VERBS [Sekama, Obama, Kebesela]

These verbs indicate a support or rest in a bent or sloping position. There are three intransitive verbs in this category:

4.2.3.1 Sekama (slant, be inclined)**4.2.3.1.1 Argument structure**

This is a one-place predicate in which it assigns only one external argument. This argument is assigned to the NP in the subject position, i.e. patient:

[Sefate] se-a-sekama	(A tree is inclining)
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Regarding the argument structure of this verb above, it will be necessary to give attention to the subject argument in the above sentence which is assigned by the “**sekam-**”. As this subject is a patient, not an agent, the NPs in the subject position need not be animate. There are no specific or clear selection restrictions on the subject of this verb. Things which may be inclined or slant are any physical object that may be bent.

[Sefate] se-a-sekama	(A tree inclines)	(plant)
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[Tafole] e-sekame	(A table is inclined)	(wood)
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The subject argument will then appear with the following selection restrictions:

[ARG1 =physical object]

The verb may not accommodate a **shadow argument**.

This verb "**sekama**" may accommodate a **cognate object**

Sefate se sekame [tshekamo e tshosang] (*A tree is inclined a frightening bend*)

Mongolo o sekama [masekama] (*A writing is inclining an italics*)

Inalienable possession is also possible with this verb, e.g.:

[Lekala la sefate] le sekame (*The branch of a tree is inclined*)

[Sefate] se sekame [lekala] (*The tree's branch is inclined*)

This verb may appear with the following affixes, when coming to the **derived verbs**:

Reversive -oll- and -oloh-

Ngwana o sekamolla setulo (*The child put up a chair right*)

Setulo se a sekamoloh (*A chair is put up right*)

Applicative -ets-

Mme o sekamisets [ngwana] botlolo (*Mother inclines a bottle for the child*)

Causative -is-

Mme o sekamisa botlolo (*Mother causes a bottle to incline*)

Passive -w-

Ho-a-sekangwa ke difate (*It has been inclined by the trees*)

4.2.3.1.2 Event structure

This verb has two events, i.e. process and state events, e.g.:

Process events

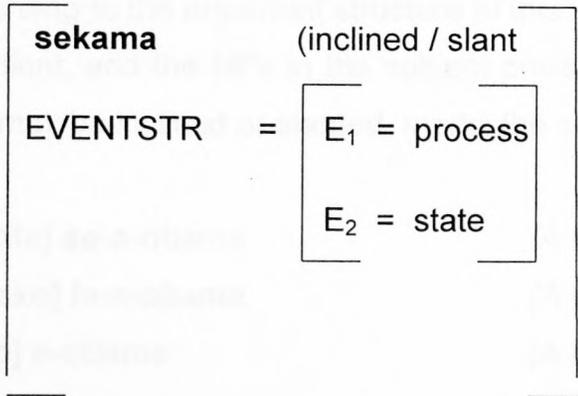
[Sefate] se-a-sekama (*A tree is inclining*)

[Tafole] e-sekame (*The table is inclined*)

State events

Tafole e-sekame	<i>(The table is inclined)</i>
Sefate se-sekame	<i>(A tree is inclined)</i>
Setulo se-sekame	<i>(The chair is inclined)</i>
Botlolo e-sekame	<i>(The bottle is inclined)</i>

The event structure verb will look like this:

**4.2.3.1.3 Lexical conceptual paradigm (LCP)**

The verbal meanings are found with this verb, e.g.:

To be inclined / to slant

Ke sekame	<i>(I am inclined)</i>
[Sefate] se sekame	<i>(A tree is inclined)</i>

To be disheartened

Pelo ya hae e sekame	<i>(He is disheartened)</i>
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4.2.3.1.4 Lexical inheritance structure

This is a **bend** verb which is found in the main class of verbs of change of state. The hierarchy will be: incline - bend - change of state.

4.2.3.2 Obama (lean)

4.2.3.2.1 Argument structure of obama

This is a one-place predicate in which it assigns only one external argument. This argument is assigned to the NP in the subject position, i.e. patient:

[Lekala] le-a-obama (A branch is inclining)

According to the argument structure of this verb above, it becomes clear that the subject is a patient, and the NPs in the subject position need not be animate. Any physical object that may be inclined or slanted, marks the selection restrictions on the subject:

[Sefate] se-a-obama	(A tree inclines)	(tree)
[Lerako] le-a-obama	(A wall inclines)	(bricks)
[Palo] e-obame	(A pole is inclined)	(wood)

The subject argument will appear with the following selection restrictions:

[ARG1 =physical object]

A **shadow argument** is also possible with this verb, e.g.:

Lekala le obame [ka [ntlo]] (A branch leant against the house)

[S - ARG1 = object]

A **cognate object** is not possible with this verb.

Inalienable possession is possible with this verb, e.g.:

[Lehlaku la lekala] le obame (The leaf of a branch is inclined)

[Lekala] le obame [lehlaku] (The branch's leaf is inclined)

The following affixes may appear with this verb, when coming to the **derived verbs**:

Causative -is-

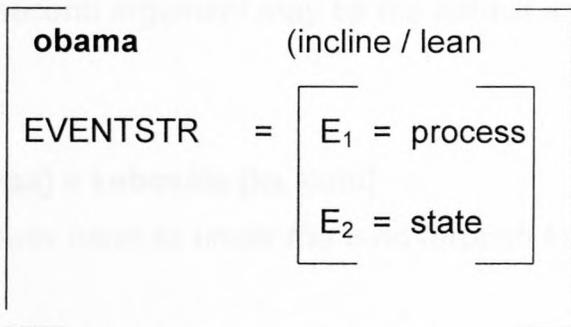
Moya o obamisa lekala (The wind causes a branch to incline)

Applicative -el-**Safate se obame**la ntlo*(A tree lean towards a house)***4.2.3.2.2 Event structure**

This verb has two events, i.e. process and state events, e.g.:

Process events**[Lekala] le-a-obama***(The branch is inclining)***[Botlolo] e-obame***(The bottle is inclined)***State events****Palo e obame***(The pole is inclined)***Lerako le obame***(The wall is inclined)***Sefate se obame***(A tree is inclined)***Botlolo e obame***(The bottle is inclined)*

The event structure verb will look like this:

**4.2.3.1.3 Lexical conceptual paradigm (LCP)**

This verb has only one meaning of inclining or leaning, e.g.:

[Botlolo] e-obame*(The bottle is inclined)***[Lekala] le-obame [ka ntlo]***(A branch leant against the house)***4.2.3.2.4 Lexical inheritance structure**

This is a **lean** verb which is classified under a sub class of bend verbs and is found in the main class of verbs of change of state. The hierarchy will be: lean - bend - change of state.

4.2.3.3 Kebesela (bend as under a wind)

4.2.3.3.1 Argument structure of obama

This is a one-place predicate in which it assigns only one external argument. This argument is assigned to the NP in the subject position, i.e. patient:

[Sefate] se-a-kebesela (A tree bend as under a wind)

According to the argument structure of this verb above, it is clear that the subject is a patient, and the NPs in the subject position need not be animate. Any physical object that may be bend under a wind or is slanted, marks the selection restrictions on the subject:

[Palesa] e-a-kebesela (A flower bend as under a wind) (plant)

[Terata] e-a-kebesela (The wire bend as under a wind) (wire)

[Hupulu] e-a-kebesela (A hoop-iron bend as under a wind) (iron)

The subject argument will appear with the following selection restrictions:

[ARG1 =physical object]

The second argument may be the default argument where the means may be indicated by "ka"

[Palesa] e kebesela [ka kutu]

(A flower bend as under the wind through the stem)

[D - ARG1 = physical object]

A cognate object is not possible with this verb.

Inalienable possession is possible with this verb, e.g.:

[Kutu ya palesa] e-a-kebesela (The stem of a flower bend as under the wind)

[Palesa] e kebesela [kutu] (The flower's stem bend as under the wind)

There are no **derived verbs** with this verb.

4.2.3.3.2 Event structure

This verb has two events, i.e. process and state, e.g.:

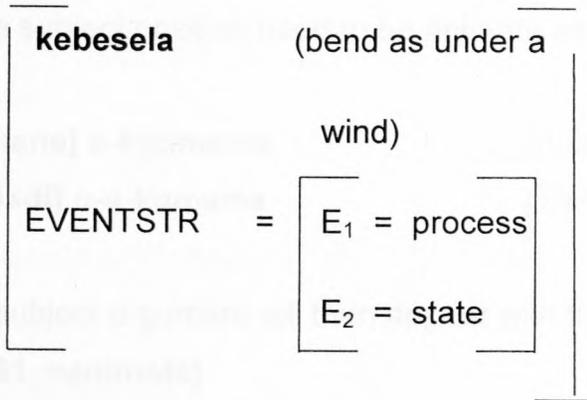
Process events

[Safate] se-a-kebesela	(A tree bend as under a wind)
[Palesa] e-a-kebesela	(A flower bend as under a wind)

State events

Palesa e kebesetse	(A flower bent as under a wind)
Terata e kebesetse	(A wire bent as under a wind)
Hupulu e kebesetse	(An iron-hop bent as under a wind)
Sefate se kebesetse	(A tree bent as under a wind)

The event structure verb will look like this:



4.2.3.3.3 Lexical conceptual paradigm (LCP)

There is only one meaning with this verb, i.e. to bend as under a wind:

[Palesa] e-a-kebesela	(A flower bend as under a wind)
[Sefate] se-kebesetse	(A tree bend as under a wind)

4.2.3.3.4 Lexical inheritance structure

This is a bend verb which is found in the main class of verbs of change of state. The hierarchy will be: bend - change of state.

4.3 A BODY PART

In this sub group, most of the verbs that appears here are the verbs that involve certain parts of the body that may be bent. Hence they may be classified under parts of the body, i.e. **knees**, **head** and the **back**. These verbs will also be treated like the verbs that involve any physical object in 4.2 above.

4.3.1 Knees [kgumama, koqa / koqama, ribama, kotsomala]

4.3.1.1 Kgumama (to kneel)

4.3.1.1.1 Argument structure

This is a one-place predicate in which it assigns only one external argument. This argument is assigned to the NP in the subject position, i.e. agent.

[Mosadi] o-a-kgumama (The woman kneels down)

Regarding the argument structure of this verb above, it will be necessary to give attention to the subject in the above sentence which is assigned by the verb "**kgumama**". The NPs in the subject position need to be animate as they are agents:

[Namane] e-kgumame (A calf knelt down) (animal)

[Mosadi] o-a-kgumama (The woman kneels down) (human)

The subject argument will then appear with the following selection restriction:

[ARG1 =animate]

A **default argument** is the second argument with this verb:

a. **Mosadi o kgumame [ka mangwele]** (The woman knelt down with knees)

[D - ARG1 = knees]

In (a) above "**mangwele**" is a default argument because it is there for logical well-formedness of the sentence and is optional.

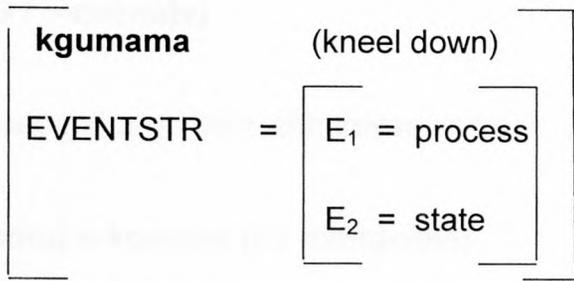
A **cognate object** is possible with this verb, e.g.:

Setjhaba se kgumame [kgumamo e hlomolang]*(The nation knelt down a moving act)***Verbal alternations** are not possible with this verb.The following affixes may appear with this verb, when considering the **derived verbs**:**Applicative -el-****Ntate o kgumamela morena** *(Father is kneeling down for the Lord)***Reversive -oloh-****Mosadi o-a-kgumamoloha** *(The woman get up from kneeling position)***Caustive -is-****Ntate o kugmamisa bana** *(Father cause the children to kneel down)***Passive -w-****Ho-a-kgumangwa ke batho** *(It has been knelt down by the people)***4.3.1.1.2 Event structure**

This verb has two events, i.e. process and state:

Process events**[Mosadi] o-a-kgumama** *(The woman kneels down)***[Namane] e-kgumame** *(The calf knelt down)***State events****Mosadi o-kgumame** *(The woman knelt down)***Namane e-kgumame** *(The calf knelt down)***Setjhaba se kgumame** *(The nation knelt down)*

The event structure verb will look like this:



4.3.1.1.3 Lexical conceptual paradigm (LCP)

There is only one meaning with this verb, i.e. to kneel down:

[Mosadi] o-a-kgumama (*The woman kneels down*)

4.3.1.1.4 Lexical inheritance structure

This is a **kneel** verb which is found under a sub class of bend verbs and it is in the main class of verbs of change of state. The hierarchy will be: kneel - bend - change of state.

4.3.1.2 Koqa / koqama (to kneel down)

These two verbs can be used alternatively as they have the same meaning.

4.3.1.2.1 Argument structure

These verbs are one-place predicates in which only one external argument is assigned. These arguments are assigned to the NPs in the subject position, i.e. agent:

[Mosadi] o-a-koqa (*The woman kneels down*)

[Mosadi] o-a-koqama (*The woman kneels down*)

With regard to the argument structure of this verb above, it will be necessary firstly to give attention to the subject in the above sentence which is assigned by the verb "**koqa**" and "**koqama**". The NPs in the subject position need to be animate because they are agents:

[Kgomo] e-koqame (*A cow knelt down*) (*animal*)

[Mosadi] o-koqile (*The woman knelt down*) (*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 =animate]

The second argument with these verbs is a **default argument**:

[Kgomo] e-koqame [ka mangwele]

(A cow knelt down with knees)

[Mosadi] o-koqile [ka mangwele]

(The woman knelt down with knees)

[D - ARG1 = knees]

Verbal alternations are not possible with this verb.

When coming to the **derived verbs**, these verbs are able to appear with these affixes:

Caustive -is-

Kgomo e koqamisa namane

(A cow cause a calf to kneel down)

Mme o koqisa ngwana

(Mother put the child in a kneeling position)

Passive -w-

Ho-a-koqangwa ke batho

(It has been knelt down by the people)

4.3.1.2.2 **Event structure**

These verbs have two events, i.e. process and state:

Process events

[Mosadi] o-a-koqa

(The woman kneels down)

[Ntate] o-a-koqama

(Father kneels down)

State events

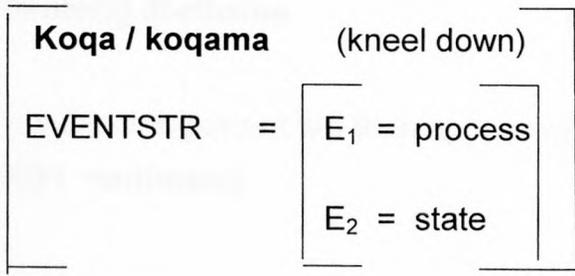
Mosadi o koqile

(The woman knelt down)

Kgomo e koqame

(The cow knelt down)

The event structure will be as follows:



4.3.1.2.3 Lexical conceptual paradigm (LCP)

There are two meanings with these verbs, e.g.:

To kneel down:

[Mosadi] o-koqile (The woman knelt down)

[Kgomo] e-koqame (The cow knelt down)

To squat

[Ntate] o-hama a koqile (Father squat while milking)

[Namane] e-a-koqama ha e nyanya (The calf squat while suckling)

4.3.1.2.4 Lexical inheritance structure

There are **kneel** verbs which are sub classified under the bend verbs and they are in the main class of verbs of change of state. The hierarchy will be: kneel - bend - change of state.

4.3.1.3 Ribama (kneel down)

4.3.1.3.1 Argument structure

This is also a one-place predicate in which it assign only one external argument. This argument is assigned to the NPs in the subject position, i.e. agent:

[Mosadi] o-ribame (The woman knelt down)

Regarding the argument structure of this verb above, it will be necessary to give attention to the subject in the above sentence which is assigned by the verb "**ribam**". The NPs in the subject position need to be animate because they are agents:

[Konyana] e-ribame	(A lamb knelt down)	(animal)
[Ditantshi] di-ribame	(Dancers knelt down)	(human)

The subject argument will then appear with the following selection restriction:

[ARG1 =animate]

There is a second argument with this verb which is a **default argument**. This argument is introduced by the preposition “ka”

[Mosadi] o ribame [ka mangwele] (The woman knelt down with knees)
[D - ARG1 = knees]

A **cognate object** is not possible with this verb.

Verbal alternations are not possible with this verb.

This verb does not accommodate the **derived verbs** to appear with it.

4.3.1.3.2 **Event structure**

This verb has two events, i.e. process and state:

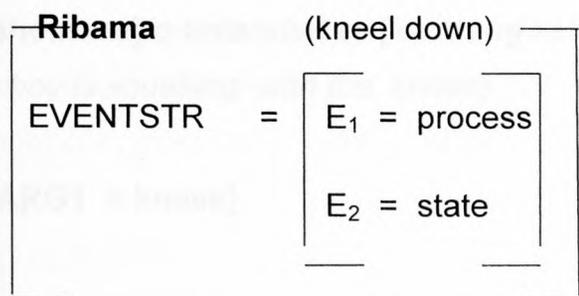
Process events

[Konyana] e-a-ribama	(The lamb kneels down)
[Setantshi] se-a-ribama	(The dancer kneels down)

State events

Mosadi o-ribame	(The woman knelt down)
Ntate o-ribame	(Father knelt down)

The event structure will be as follows:



4.3.1.3.3 Lexical conceptual paradigm (LCP)

There is only one meaning with this verb, i.e. to kneel down with bent head:

[Mosadi] o-ribame (*The woman knelt down*)

4.3.1.3.4 Lexical inheritance structure

This is a **kneel** verbs which is found under a sub class of bend verbs and it is in the main class of verbs of change of state. The hierarchy will be: kneel down - bend - change of state.

4.3.1.4 Kotsomala (to squat)

4.3.1.4.1 Argument structure

This is a one-place predicate in which it assigns only one external argument. This argument is assigned to the NPs in the subject position, i.e. agent:

[Moshamane] o-a-kotsomala (*The boy is squatting*)

The NPs in the subject position need to be animate because they are agents:

[Tshwene] e-kotsometse (*The baboon is squatting*) (*animal*)

[Moshamane] o-kotsometse (*The boy is squatting*) (*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 =animate]

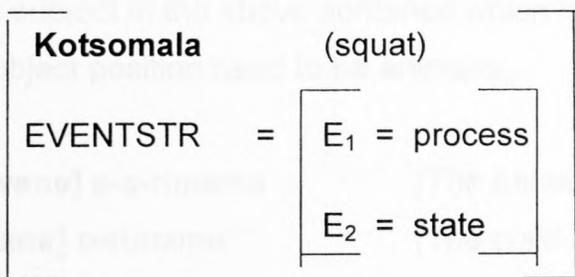
The second argument with this verb which is a **default argument**. This argument is introduced by the preposition “**ka**”

[Moshemane] o-kotsometse [ka mangwele]*(The boy is squatting with the knees)***[D - ARG1 = knees]**A **cognate object** is not possible with this verb.**Verbal alternations** are not possible with this verb.This verb does not accommodate the **derived verbs** to appear with it.**4.3.1.4.2 Event structure**

This verb has two events, i.e. process and state:

Process events**[Ngwana] o-a-kotsomala** *(The child squats)***[Tshwene] e-a-kotsomala** *(The baboon squats)***State events****Moshemane o kotsometse** *(The boy is squatting)***Tshwene e kotsometse** *(The baboon is squatting)*

The event structure will be as follows:

**4.3.1.4.3 Lexical conceptual paradigm (LCP)**

There are two meanings with this verb:

To squat or to squat on top of:

[Tshwene] e-kotsometse (The baboon is squatting)

[Monna] o-kotsometse [pere] (The man is squatting on top of a horse)

To conquer

[Raditebele] o-kotsometse sekola sa lefatshe

(A boxer conquered the world championship)

4.3.1.4.4 Lexical inheritance structure

This is a **squat** verb which falls under the bend verbs and it is in the main class of verbs of change of state. The hierarchy will be: squat - bend - change of state.

4.3.2 HEAD [Rimama; qethola / qethoha]**4.3.2.1 Rimama (to kneel with a bent head)****4.3.2.1.1 Argument structure**

This verb can also be analysed in the same way as “**ribama**” in the above section. This is also a one-place predicate in which it assigns only one external argument. This argument is assigned to the NPs in the subject position, i.e. agent:

[Ngwana] o-a-rimama (The child bent the head while kneeling)

Regarding the argument structure of this verb above, it will be necessary to give attention to the subject in the above sentence which is assigned by the verb “**-riman-**”. The NPs in the subject position need to be animate:

[Tshwene] e-a-rimama (The baboon kneels with a bent head) (animal)

[Ngwana] o-rimame (The child knelt with a bent head) (human)

The subject argument will then appear with the following selection restriction:

[ARG1 =animate]

The second argument with this verb is a **default argument**.

[Mosadi o-rimama [ka hlooho] (The woman bend down with a head)

[D - ARG1 = head]

A **cognate object** is not possible with this verb.

Inalienable possession is possible with this verb, e.g.:

[Hlooho ya ngwana] e-rimame (*The head of the child is bent down*)

Ngwana o rimame [hlooho] (*The child's head is bent down*)

This verb does not accommodate the **derived verbs** to appear with it.

4.3.2.1.2 Event structure

There are two events with this verb, i.e. process and state:

Process events

[Ngwana] o-a-rimame (*The child knelt down with a bent head*)

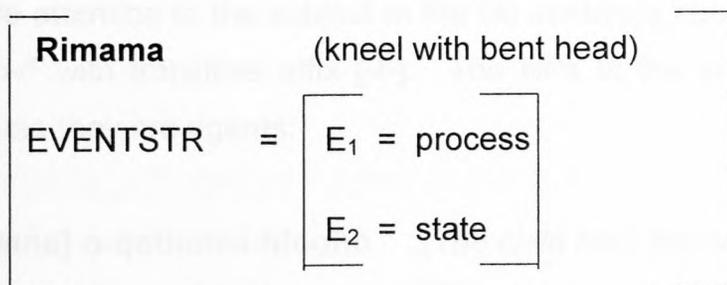
[Tshwene] e-rimame (*The baboon kneels down with a bent head*)

State events

[Ngwana] o-rimame (*The child knelt down with a bent head*)

[Tshwene] e-rimame (*The baboon knelt down with a bent head*)

The event structure will be as follows:



4.3.2.1.3 Lexical conceptual paradigm (LCP)

There is only one meaning of “**to kneel with bend head**” with this verb:

[Ngwana] o-a-rimama (*The child kneels with a bent head*)

4.3.2.1.4 Lexical inheritance structure

This is a **bend** verb which is found in the main class of verbs of change of state. The hierarchy will be: bend - change of state.

4.3.2.2 Qethoha / Qethola (to bend the head back)

4.3.2.2.1 Argument structure

The verbal root “-qetho-” appears with the suffixes [-l-] and [-h-] as [-qetho-l-] and [-qetho-h-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. **[Ntate] o-qethola [hlooho]** (*Father bend the head backwards*)
 b. **[Hlooho] e-a-qethoha** (*The head is bent backwards*)

These S-structures above are derived from the following d-structures:

- a. **[NP [VP – qetho-l- ntate hlooho]**
 b. **[NP [Vp –qetho-h-hlooho]**

In (a) above the NP “**ntate**” has been moved and in (b) the NP “**hlooho**”. The NP “**ntate**” in (a) does not appear in (b) because this argument is controlled by the affix [-h-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject in the (a) sentence above which is assigned by the verb “-qetho-” with transitive affix [-l-]. The NPs in the subject position need to be animate because they are agents:

- [Ngwana] o-qethotse hlooho** (*The child bent the head backwards*) (*human*)
[Ntja] e-qethotse hlooho (*The dog bent the head backwards*) (*animal*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appear in the object position in (a) above, i.e. “**hlooho**”. This argument is interpreted as patient. There is a selection restriction on the object argument of this verb. This object may only be the head:

[Ngwana] o-qethola hlooho (*The child bend the head backwards*) (*head*)

[Ntja] e-qethotse hlooho (*The dog bent the head backwards*) (*head*)

The selection on the object argument of “**qethola**” may be given as follows:

[ARG2 = Ntho e tiileng e kobehang ha bonolo ntle le ho lemala, e leng hlooho]

The verb “**-qetho-**” which has the intransitive suffix [**-h-**] which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “**-qetho-l-**” above.

[Hlooho] e-a-qethoha (*The head bend backwards*)

This argument is interpreted as patient. The selection on this argument of “**-qetho-**” will be the same as the one on the object argument of “**-qetho-l-**” above.

The third argument is a **default argument**

Ntate o qethotse hlooho [ka molala] (*Father bent back the head with the neck*)

D - ARG1 = neck]

A **cognate object** is not possible with these verbs.

Inalienable possession is possible with these verbs, e.g.:

Transitive verb [qethola]

Ntate o-qethola [hlooho ya ngwana]

(*Father bend the head of the child backwards*)

Ntate o qethola [ngwana] [hlooho] (*Father bend the child's head backwards*)

Intransitive verb [qethoha]

[Hlooho ya ngwana] e qethohile (*The head of the child is bent backwards*)

[Ngwana] o qethohile [hlooho] (*The child's head is bent backwards*)

When coming to the **derived verbs** the following suffixes may appear with these verbs:

Applicate –el-

Hlooho e qethohela pele (*The head bend forward*)

Causative

Ntate o qethosa [ngwana] hlooho

(*Father cause the child's head to bent backwards*)

Passive -w-

Hlooho e-a-qetholwa (*The head is being bent backwards*)

4.3.2.2.2 **Event structure**

The verbal root “-qetho-” has two events, i.e. process and state:

Process events

[Ntate] o-qethola [hlooho] (*Father bend the head backwards*)

[Ntja] e-qethotse [hlooho] (*The dog bent the head backwards*)

State events

[Hlooho e-qethohile] (*The head is bent backwards*)

4.3.2.2.3 **Lexical conceptual paradigm (LCP)**

The verbal root “-qetho-” has the following meanings:

To overthrow or to conquer

[Marabele] a qethotse Mmuso (*Rebels overthrew the Government*)

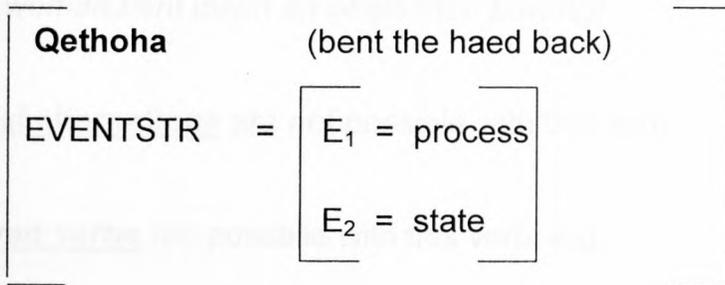
To fall backwards or bent backwards

[Hlooho] e-qethohile (*The head is bent backwards*)

To fall upside-down**[Ditaola] di qethohile***(Divine bones fall upside-down)***4.3.2.2.4 Lexical inheritance structure**

This is a **bend** verb which is found in the main class of verbs of change of state. The hierarchy will be: bend head - change of state.

The event structure will be as follows:

**4.3.3 Back**

In this category the back with other body parts are involved.

4.3.3.1 Be bent down [inama]**4.3.3.1.1 Argument structure**

This is a one-place predicate in which it assigns only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Mosadi] o-a-inama*(The woman bend down)*

Regarding the argument structure of this verb above, it will be necessary to give attention to the subject argument in the above sentence which is assigned by the verb “-inam-”.

The NPs in the subject position will be animate:

[Kgomo] e-a-inama*(The cow bend down)**(animal)***[Ngwanana] o-iname***(The girl bent down)**(human)*

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

A **default argument** is the second argument, and it is introduced by a preposition “ka”

e.g.:

[Mosadi] o-iname [ka mokokotlo] (*The woman bent with her back*)

[D - ARG1 = neck]

A **cognate object** is possible with this verb:

[Mosadi] o-iname [kinamo e hlomphehang]

(*The woman bent down an obeisance bowing*)

Verbal alternations are not possible with this verb.

Derived verbs are possible with this verb, e.g.:

Applicate –el-

Ntate o-inamela ngwana (*Father bend down for the child*)

Causative –is-

Ntate o-inamisa ngwana (*Father cause the child to bend down*)

Reversive –oll- and –oloh-

Ngwana o-a-inamoloha (*The child stand up straight*)

Ngwana o-inamolla hlooho (*The child unbend his head*)

4.3.3.1.2 **Event structure**

This verb has two events, i.e. process and state:

Process events

[Ngwana] o-a-inama (*The child bend down*)

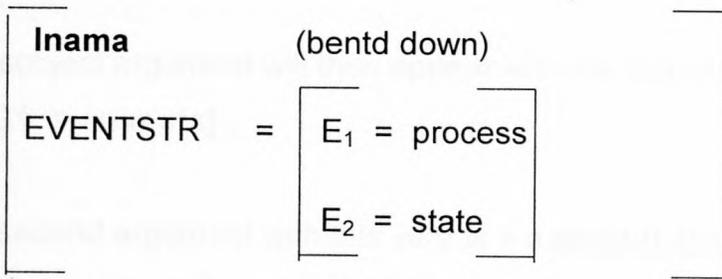
[Mme] o-iname (*Mother bent down*)

State events

[Ntate] o-iname (*Father bent down*)

[Mme] o-iname (Mother bent down)

The structure will be as follows:



4.3.3.1.3 Lexical conceptual paradigm (LCP)

This verb has the following meanings:

To bend or lean down

[Ntja] e-inametse metsing (The dog bent towards the water)

[Sefate] se-inametse nokeng (The tree bent towards the river)

To bow down

[Setjhaba] se-inamele [morena] (The nation bowed for the chief)

[Bakreste] ba-inamela [Jesu] (Christians bowed down for Jesus)

4.3.3.1.4 Lexical inheritance structure

This is a **bend** verb which is found under the sub class of bend verbs and it is in the main class of verbs of change of state. The hierarchy will be: bend down – bend - change of state.

4.3.3.2 Be bent in [menama]

4.3.3.2.1 Argument structure

This is a one-place predicate in which it assigns only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Monna] o-a-menama ha a matha (The man bend in his back when running)

The NPs in the subject position need to be animate because they are agents:

[Pere] e-a-menama (The horse bend its back) (animal)

[Setantshi] se-a-menama (The dancer bend in his back) (human)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument with this verb is a a **default argument**:

[Pere e-menama [ka mokokotlo] (The horse bend in with its back)

[D - AGR1 = back]

A **cognate object** is not possible with this verb.

Verbal alternations are not possible with this verb.

Derived verbs are not possible with this verb.

4.3.3.2.2 Event structure

This verb has two events, i.e. process and state:

Process events

[Moshemane] o-a-menama (The boy bent in his back)

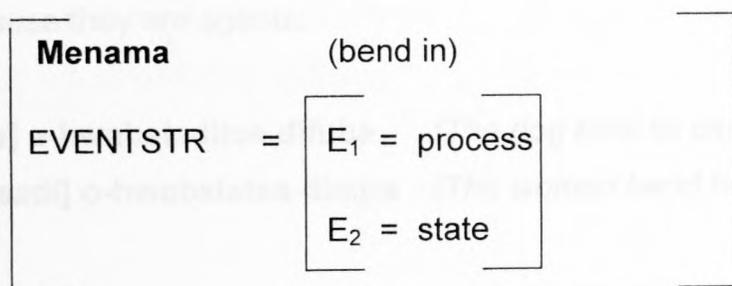
[Ngwana] o-mename (The child bent in his back)

State events

[Ntja e-mename (The dog has bent in its back)

[Moshemane o-mename (The boy has bent in his back)

The structure will be as follows:



4.3.3.2.3 Lexical conceptual paradigm (LCP)

This verb has only one meaning of “to bend one’s back in”:

[Moshemane] o-a-menama ha a matha (*The boy bend in his back when running*)

4.3.3.2.4 Lexical inheritance structure

This is a **bend** verb which is classified under the verbs of change of state. The hierarchy will be: bend back in – bend - change of state.

4.3.3.3 Be bent forward [hwaballa / hwabalatsa]

4.3.3.3.1 Argument structure

The verbal root “--hwabala-” appears with the suffixes [-ts-] and [-l-] as [-hwabala-ts-] and [-hwabal-l-]. This verbal root assigns two internal arguments, i.e. agent and patient:

- a. **[Ntate] o-hwabalatsa difuba** (*Father arched his chest*)
- b. **[Difuba] di-a-hwaballa** (*The chest is bent forward*)

These S-structures above are derived from the following d-structures:

- a. **[NP [VP –hwabala-ts- ntate difuba]**
- b. **[NP [VP –hwabal-l- difuba]**

In (a) above the NP “**ntate**” has been moved and in (b) the NP “**difuba**”. The NP “**ntate**” in (a) does not appear in (b) because this argument is controlled by the affix [-l-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject in the (a) sentence above which is assigned by the verb “-hwabal-” with transitive affix [-ts-]. The NPs in the subject position need to be animate because they are agents:

- [Ntja] e-hwabaladitse difuba** (*The dog bent its chest forward*) (*animal*)
- [Mosadi] o-hwabalatsa dimpa** (*The woman bend her stomach forward*) (*human*)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument appear in the object position in (a) above, i.e. “**difuba**”. This argument is interpreted as patient. There is a selection restriction on the object argument of this verb. Any body part which is able to bend forward or arched:

[Ngwana] o-hwabalatsa dipeta (*The girl bend her breast forward*) (breast)

[Pere] e-hwabaladitse difuba (*The horse has bent its chest forward*) (chest)

The selection on the object argument of “**-hwabal-**” may be given as follows:

[ARG2 = Karolo ya mmele e ka kgonang ho kobeha, e tje ka mpa, difuba]

The verb “**-hwabal-**” which has the intransitive suffix **[-I-]** which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “**-hwabal-I-**” above.

[Difuba] di-a-hwaballa (*The chest bends forward*)

This argument is interpreted as patient. The selection on this argument of “**-qetho-**” will be the same as the one on the object argument of “**-hwabal-ts-**” above.

A **cognate object** is not possible with these verbs.

Inalienable possession is possible with these verbs, e.g.:

Transitive verb [hwabalatsa]

Ntate o hwabalatsa [difuba tsa pere] (*Father bend the chest of the horse forward*)

Ntate o hwabalatsa [pere] [difuba] (*Father bend the horse's chest forward*)

Intransitive verb [hwaballa]

[Difuba tsa pere] di hwaballetse (*The chest of the horse is bent forward*)

[Pere] e hwaballetse [difuba] (*The horse's chest is bent forward*)

Derived verbs are not possible with these verbs.

4.3.3.3.4 Lexical inheritance structure

These are **bend** verbs which are classified under the verbs of change of state. The hierarchy will be: bend forward - change of state.

4.3.3.4 Be bent under a load [pesella]

4.3.3.4.1 Argument structure

This is a one-place predicate which assign only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Kgomo] e-a-pesella tlasa mohoma (A cow bend its back under the plough)

The NPs in the subject position need to be animate because they are agents:

[Kgomo] e-a-pesella (A cow bend its back) (animal)

[Mosadi] o-a-pesella (The woman bend her back) (human)

The subject argument will then appear with the following selection restriction:

[ARG1 = animate]

The second argument with this verb is a a **default argument**:

[Kgomo e-pesella [ka mokokotlo] (A cow bend with its back)

[D - ARG1 = back]

A **cognate object** is not possible with this verb.

This verb does not allow **verbal alternations** to appear with it.

Derived verbs are also not possible with this verb.

4.3.3.4.2 Event structure

This verb has two events, i.e. process and state:

Process events

[Kgomo] e-a-pesella (A cow bend its back)

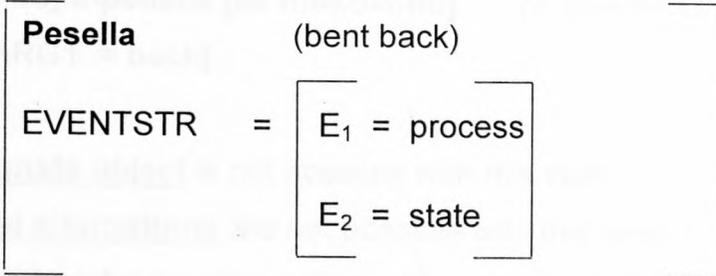
[Mosadi] o-a-pesella (The woman bend her back)

State events

[Kgomo e-peseletse (A cow bent its back)

Mosadi o-peseletse (The woman bent her back)

The structure will be as follows:



4.3.3.4.3 Lexical conceptual paradigm (LCP)

This verb has the following meanings:

To become hollow or crooked

[Mokopu] o-peseletse (The pampkin is hollow inside)

To bend one's back as under a load

[Mosadi] o-peseletse (The woman bent her back)

4.3.3.4.4 Lexical inheritance structure

This is a **bend** verb which is classified under the verbs of change of state. The hierarchy will be: bent - change of state.

4.3.3.5 Petlella (to bent under a load)

4.3.3.5.1 Argument structure

This is another verb which can also alternate with “**pesella**”. It is also a one-place predicate which assign only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Kgomo] e-petleletse tsa mohoma (A cow bent its back under the plough)

The NPs in the subject position need to be animate because they are agents:

[Kgomo] e-a-petlella	<i>(A cow bend its back)</i>	<i>(animal)</i>
[Ntate] o-a-petlella	<i>(Father bend his back)</i>	<i>(human)</i>

The **default argument** will be the second argument:

[Kgomo] e-petlella [ka mokokotlo]	<i>(A cow bend with its back)</i>
[D - ARG1 = back]	

A **cognate object** is not possible with this verb.

Verbal alternations are not possible with this verb.

Derived verbs are also not possible with this verb.

4.3.3.5.2 Event structure

This verb has two events, i.e. process and state:

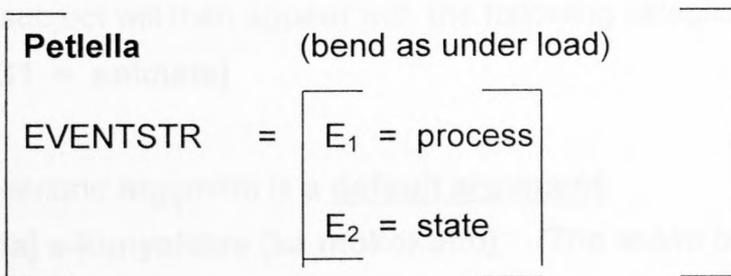
Process events

[Kgomo] e-a-petlella	<i>(A cow bend its back)</i>
[Ntate] o-a-petlella	<i>(Father bend his back)</i>

State events

[Kgomo e-petleletse	<i>(A cow bent its back)</i>
Ntate o-petleletse	<i>(Father bent his back)</i>

The structure will be as follows:



4.3.3.5.3 Lexical conceptual paradigm (LCP)

There is only one meaning with this verb, i.e. “**to bend as under a heavy load**”:

[Kgomo] e-petleletse tlasa mohoma (*A cow bent its back under the plough*)

4.3.3.5.4 Lexical inheritance structure

This is a **bend** verb which is classified under the verbs of change of state. The hierarchy will be: bend under load - change of state.

4.3.3.6 Be bent down under a burden [kunyalla]

4.3.3.6.1 Argument structure

This verb may be treated like “**pesella**” in the previous section above. It is a one-place predicate which assign only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Noha] e-a-kunyalla tlasa lejwe. (*The snake bend its back under the stone*)

The NPs in the subject position need to be animate because they are agents:

[Mosadi] o-kunyalla tlasa morwalo

(*The woman bend her back under a burden*) (*human*)

[Pere] e-kunyaletse kariking (*A horse bent its back in a horse-cart*) (*animal*)

The subject will then appear with the following selection restriction:

[ARG1 = animate]

The second argument is a **default argument**:

[Noha] e-kunyaletse [ka mokokotlo] (*The snake bent with its back*)

[D - ARG1 = back]

A **cognate object** is not possible with this verb.

Verbal alternations are also not possible with this verb.

This verb does not accommodate derived verbs.

4.3.3.6.2 Event structure

This verb has two events, i.e. process and state:

Process events

[Noha] e-a-kunyalla tlasa lejwe (*The snake bend its back under the stone*)

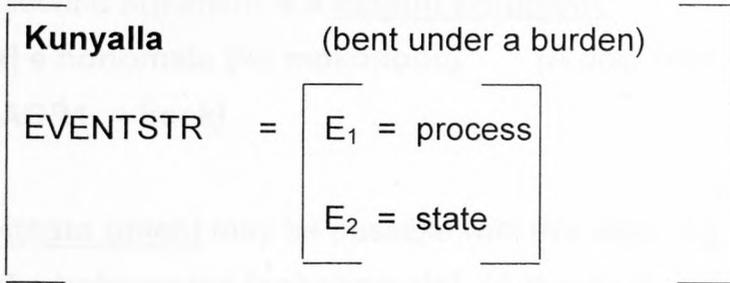
[Mosadi] o-kunyalla tlasa morwalo (*The woman bend her back under the burden*)

State events

[Pere e-kunyaletse kariking (*The horse bent its back in a horse-cart*)

Noha e-kunyaletse tlasa lejwe (*The snake bend its back under the stone*)

The structure will be as follows:



4.3.3.6.3 Lexical conceptual paradigm (LCP)

There is only one meaning with this verb, i.e. **"to bend the back under a burden"**.

[Pere] e-kunyaletse kariking (*The horse bent its back in a horse-cart*)

4.3.3.6.4 Lexical inheritance structure

This is a **bend** verb which is classified under the verbs of change of state. The hierarchy will be: bend back - change of state.

4.3.3.7 Hohomala (to bend under something)

4.3.3.7.1 Argument structure

This is a one-place predicate which assign only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Kgomo] e-hohometse tlasa joko (A cow bent under a yoke)

The NPs in the subject position need to be animate because they are agents:

[Ngwana] o-hohomete dikobong (*The child bend under the blankets*) (human)

[Ntja] e-hohometse tlasa lesenke (*A dog bent under a zink*) (animal)

The subject will then appear with the following selection restriction:

[ARG1 = animate]

The second argument is a **default argument**:

[Ntja] e hohomala [ka mokokotlo] (*A dog bent with its back*)

[D - AGR1 = back]

A **cognate object** may be possible with this verb, e.g.:

[Ntja] e hohometse [sehohomale] (*A dog bent under, as a thing that carries a burden*)

Verbal alternation is possible with this verb. That is only with the **inalienable possession**, e.g.:

[Mokokotlo wa pere] o-hohometse

(*The back of the horse is bent under something*)

[Pere] e-hohometse [mokokotlo]

(*The horse's back is bent under something*)

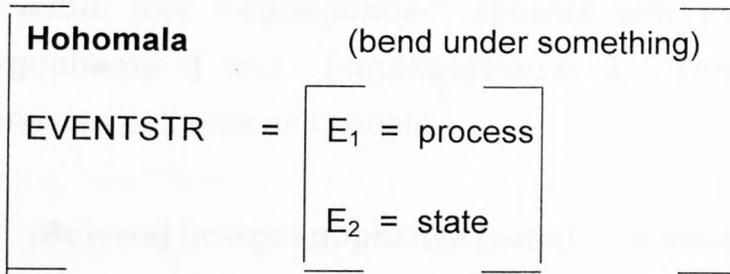
Derived verbs are not possible with this verb.

4.3.3.7.2 Event structure

This verb has two events, i.e. process and state:

Process events**[Ntja] e-hohomala tlasa lesenke** (*The dog is bend under the zink*)**[Ngwana] o-hohomala tlasa dikobo** (*The child is bend under the blankets*)**State events****Ntja e hohometse tlasa lesenke** (*The dog is bent under the zink*)**Kgomo e hohometse tlasa joko** (*A cow is bent under a yoke*)

The structure will be as follows:

**4.3.3.7.3 Lexical conceptual paradigm (LCP)**

This verb has the following meanings:

To sit quiet**[Ngwana] o-hohometse** (*The child sat quiet*)**To bend under something****[Kgomo] e-hohometse tlasa joko** (*A cow is bent under a yoke*)**To accept a burden****[Ngwana] o-hohometse feela ha a omangwa***(The child just accept a burden when he is critized)***4.3.3.7.4 Lexical inheritance structure**

This is a **bend** verb which is classified under the verbs of change of state. The hierarchy will be: bend under something - change of state.

4.3.3.8 Be bent from age [kgokgomana / kgokgophana; kgokgophanya]

Kgokgomana and **kgokgophana** are the alternating intransitive verbs which may be substituted in terms of meaning. In this regard **kgokgophana** will be treated together with its counter-part transitive verb **kgokgophanya**. In this regard **kgokgomana** may be taken as **kgokgophana**.

4.3.3.8.1 Argument structure

The verbal root “-kgokgopha-” appears with the suffixes [-ny-] and [-n-] as [-kgokgopha-ny -] and [-kgokgophan-n -]. This verbal root assigns two internal arguments, i.e. theme and patient:

- a. [Botswa] bo-kgokgophanya [bana] (*Laziness bend the children*)
- b. [Bana] ba-a-kgokgophana (*The children are bent*)

These S-structures above are derived from the following d-structures:

- a. [NP [VP -kgokgopha-ny- botswa bana]
- b. [NP [VP -kgokgopha-n- bana]

In (a) above the NP “botswa” has been moved and in (b) the NP “bana”. The NP “botswa” in (a) does not appear in (b) because this argument is controlled by the affix [-n-].

With regard to the argument structure of these two verbs above, it will be necessary firstly to give attention to the subject in the (a) sentence above which is assigned by the verb “-kgokgopha-” with transitive affix [-ny-]. The NPs in the subject position need to be animate because they are themes:

- [Siki] e-kgokgophantse nkgono (*Illness bent Grandmother*) (*disease*)
- [Bohlaswa] bo-kgokgophanya motho (*Filthness bent an individual*) (*habit*)
- [Botsofadi] bo-kgokgophantse phoofolo (*Oldage bent an animal*) (*state*)

The subject argument will then appear with the following selection restriction:

[ARG1 = state]

The second argument appear in the object position in (a) above, i.e. “**bana**”. This argument is interpreted as patient. There is a selection restriction on the object argument of this verb. Any animate object which can bent or disfigured as a result of a disease or a habit (i.e. state):

[Botelele] bo-kgokgophanya motho (*Tallness bent a human being*) (state)

[Botswana] bo-kgokgophantse mosadi (*Laziness bent a woman*) (state)

The selection on the object argument may be given as follows:

[ARG2 = Boemo boo phoofolo kapa motho a iphumanang a le ho bona ka lebaka la siki kapa boitshwaro]

The verb “**-kgokgopha-**” which has the intransitive suffix **[-n-]** which controls the external argument appears only with an argument in the subject position. This argument is the same as the object argument of “**-kgokgopha-ny-**” above:

[Motho] o-a-kgokgophana (*A human being is bent*) (state)

[Mosadi] o-a-kgokgophana (*The woman is bent*) (state)

These arguments are interpreted as patients. The selection on these arguments will be the same as the one on the object argument of “**-kgokgopha-ny-**” above.

A cognate object is not possible with these verbs.

Inalienable possession is possible with these verbs, e.g.:

Transitive verb **[kgokgophanya]**

Bofuma bo kgokgophantse [mokokotlo wa ntate] (*Poverty bent the back of father*)

Bofuma bo kgokgophantse [ntate] [mokokotlo] (*Poverty bent father's back*)

Intransitive verb **[kgokgophana]**

[Mokokotlo wa ntate] o-kgokgophane (*The back of father is bent*)

[Ntate] o-kgokgophane [mokokotlo] (*Father's back is bent*)

There are no derived verbs with these verbs.

4.3.3.8.2 Event structure

The verbal root “-kgokgopha-” has two events, i.e. process and state:

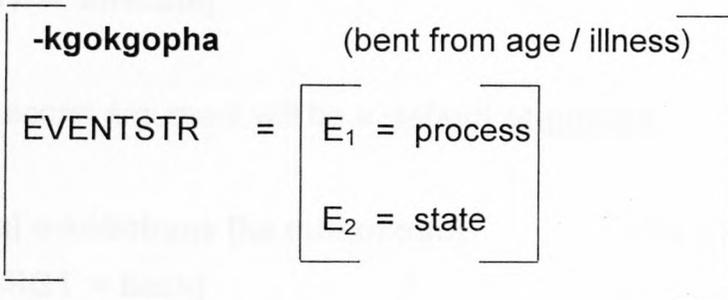
Process events

[Bana] ba-a-kgokgophana	(Children gets bend)
[Botswa] bo-kgokgophanya [bana]	(Laziness bend children)

State events

Bana ba-kgokgophane	(Children are bent)
Motho o-kgokgophane	(A human being is bent)
Ntja e-kgokgophane	(A dog is bent)

The structure will be as follows:



4.3.3.8.3 Lexical conceptual paradigm (LCP)

The following meanings are found with this verbal root "kgokgopha":

To become bowed down from old age or illness

[Nkgono] o-kgokgophane	(Grandma is bent down)
------------------------	------------------------

To bend or disfigure

[Botsofadi] bo-kgokgophantse phoofolo	(Old age bent an animal)
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4.3.3.8.4 Lexical inheritance structure

This is a **bend** verbs which are classified under the verbs of change of state. The hierarchy will be: bend down - change of state.

4.3.3.9 Bent in pain [kotlobana]

4.3.3.9.1 Argument structure

This verb may be alternated with the verb "**korobana**". It is a one-place predicate which assign only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Ntja] e-kotlobane ka hokong (*The dog is bent in a severe pain in its cage*)

The NPs in the subject position need to be animate because they are agents:

[Motshwaruwa] o-kotlobane (*A prisoner is bent in severe pain*) (*human*)

[Dikgomo] di-kotlobane lesakeng

(*The cows are bent in severe pain in the kraal*) (*animal*)

The subject will then appear with the following selection restriction:

[ARG1 = animate]

The second argument will be a **default argument**:

[Noha] e-kotlobane [ka mokokotlo] (*The snake bent severly on its back*)

[D - ARG1 = back]

A **cognate object** is not possible with this verb.

Inalienable possession is possible with this verb:

[Mokokotlo wa noha] o-kotlobane (*The back of the snake is bent in severe pain*)

[Noha] e-kotlobane [mokokotlo] (*The snake's back is bent in severe pain*)

Derived verbs are not possible with this verb.

4.3.3.9.2 Event structure

This verb has two events, i.e. process and state:

Process events

[Ntja] e-kotlobane hokong (*The dog is bent in severe pain in its cage*)

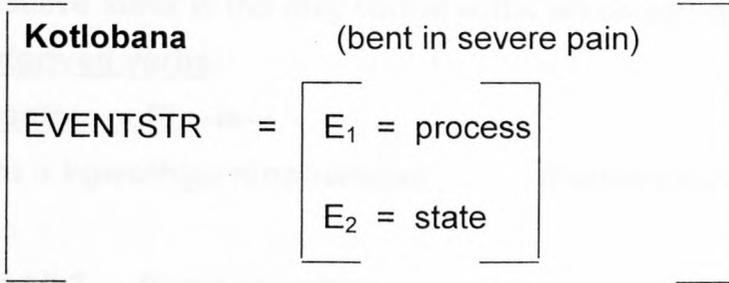
[Dikgomo] di-kotlobane sakeng (*The cows are bent in severe pain in the kraal*)

State events

Noha e kotlobane (*The snake bent in severe pain*)

Ntja e kotlobane (*The dog bent in severe pain*)

The structure will be as follows:



4.3.3.9.3 Lexical conceptual paradigm (LCP)

There is only one meaning with this verb, i.e. "to become bent in severe pain":

[Noka] e-kotlobane [ka mokokotlo] (*The snake bent severely on its back*)

4.3.3.9.4 Lexical inheritance structure

This is a **bend** verb which is classified under the verbs of change of state. The hierarchy will be: bent in pain - change of state.

4.3.3.10 Be bent down for whipping [kgwatha]

4.3.3.10.1 Argument structure

This is a one-place predicate which assign only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Moshemane] o-a-kgwatha (*The boy bend down for a whip*)

The NPs in the subject position need to be human being:

[Moshemane] o-kgwathile (*The boy bent down for a whip*) (*human*)

The subject will then appear with the following selection restriction:

[ARG1 = human]

The second argument will be a **default argument**:

[Moshemane] o-kgwatha [ka marago] (*The boy bend down with his buttocks*)

[D - ARG1 = buttocks]

A **cognate object** is not possible with this verb.

Verbal alternations are not possible with this verb.

Causative suffix is the only verbal suffix which can appear with this verb, when coming to the **derived verbs**:

Causative suffix -is-

Ntate o kgwathisa moshemane (*Father cause the boy to bend down*)

4.3.3.10.2 **Event structure**

This verb has two events, i.e. process and state:

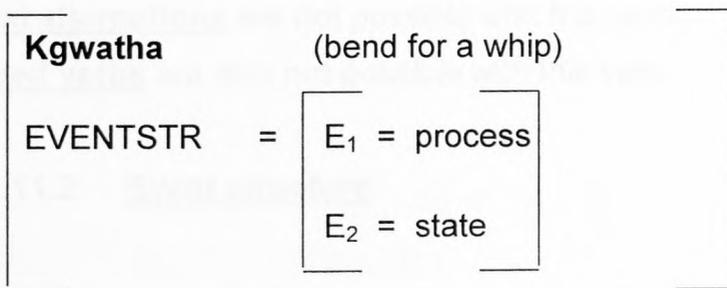
Process events

[Moshemane] o-a-kgwatha (*The boy bend down for a whip*)

State events

[Moshemane] o-kgwathile (*The boy bent down for a whip*)

The structure will be as follows:



4.3.3.10.3 **Lexical conceptual paradigm (LCP)**

There is only one meaning with this verb, i.e. "to bend down":

[Moshemane] o-kgwathile (*The boy bent down for a whip*)

4.3.3.10.4 Lexical inheritance structure

This is a **bend** verb which is classified under the verbs of change of state. The hierarchy will be: bend down - change of state.

4.3.3.11 Sit bent [koralla]

4.3.3.11.1 Argument structure

This is a one-place predicate which assign only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Ntate] o-koraletse lefikeng (*Father sit bent on the rock*)

The NPs in the subject position need to be animate as they are agents:

[Tshwene] e-koraletsa sefateng (*The baboon sit bent on a tree*) (*animal*)

[Ngwana]o-a-koralla (*The child sit bend*) (*human*)

The subject will then appear with the following selection restriction:

[ARG1 = animate]

The second argument will be a **default argument**:

[Ngwana] o-koralla [ka mokokotlo] (*The child sit bend with his back*)

[D - ARG1 = back]

A **cognate object** is not possible with this verb.

Verbal alternations are not possible with this verb.

Derived verbs are also not possible with this verb.

4.3.3.11.2 Event structure

This verb has two events, i.e. process and state:

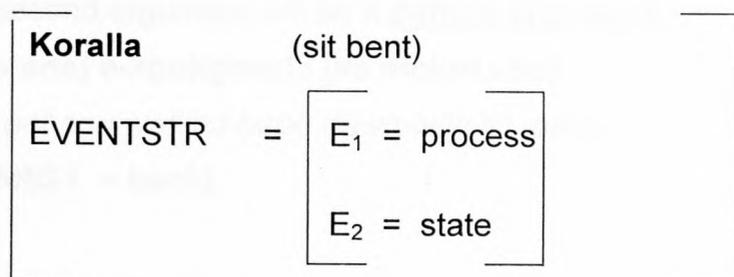
Process events

[Tshwene] e-a-koralla (*The baboon sit bend*)

[Ntate] o-koralla lefikeng (*Father sit bent on the rock*)

[State events]**[Ngwana o-koraletse** *(The child sat bent)***Tshwene e-koraletse** *(The baboon sat bent)*

The structure will be as follows:

**4.3.3.11.3 Lexical conceptual paradigm (LCP)**

The following are the meanings which are found with this verb:

To stand up or sit bent**[Ntate] o-koraletse lefikeng** *(Father sit bent on the rock)***To be crooked or bent****[Lebota] le-koraletse** *(The wall is crooked)***4.3.3.11.4 Lexical inheritance structure**

This is a **bend** verb which is classified under the verbs of change of state. The hierarchy will be: sit bent - change of state.

4.3.3.12 Walk bent down [kgokgosela]**4.3.3.12.1 Argument structure**

This is a one-place predicate which assign only one external argument. This argument is assigned to the NP in the subject position, i.e. agent:

[Nkgono] o-a-kgokgosela *(Grandmother walk bend down)*

The NPs in the subject position need to be animate as they are agents:

[Tshwene] e-a-kgokgosela *(The baboon walk bent down)* *(animal)*

[Nkgono] o-a-kgokgosela (Grandmother walk bent down) (human)

The subject will then appear with the following selection restriction:

[ARG1 = animate]

The second argument will be a **default argument**:

[Tshwene] e-kgokgosela [ka mokokotlo]

(The baboon walked bend down with its back)

[D - ARG1 = back]

A **cognate object** is not possible with this verb.

There are no **verbal alternations** with this verb.

Derived verbs are not possible with this verb.

4.3.3.12.2 Event structure

This verb has two events, i.e. process and state:

Process events

[Nkgono] o-a-kgokgosela (Grandmother walk bent down)

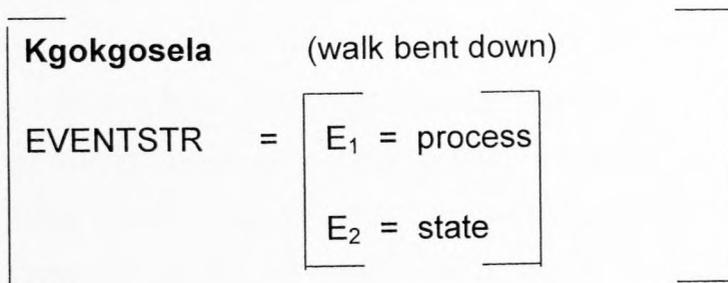
Tshwene e-kgokgosetsa (The baboon walked bent down)

State events

Nkgono o-kgokgosetse (Grandmother walked bent down)

Tshwene e-kgokgosetse (The baboon walked bent down)

The structure will be as follows:



4.3.3.12.3 Lexical conceptual paradigm (LCP)

The following are the meanings which are found with this verb:

To walk with difficulty

[Lesea] le-a-kgokgosela (*The toddler walk with difficulty*)

To walk bent down or to stoop

[Nkgono] o-a-kgokgosela (*Grandmother walk bent down*)

4.3.3.12.4 Lexical inheritance structure

This is a **bend** verb which is classified under the verbs of change of state. The hierarchy will be: walk bent - change of state.

CHAPTER FIVE

CONCLUSION

This chapter will deal with the conclusions of the study as a whole. These conclusions will be based mainly on chapter 2, 3 and 4 which form the core of the study. Suggestions if any, will be given as to how to deal with the break and bend verbs.

Firstly, the study concentrated on the definition and the objectives of Lexical Semantics. In the study of the meaning of lexical items, two issues have received considerable attention, i.e. the creative use of words in novel contexts and the issue of compositionality. Three principles which guide the study of lexical semantics were outlined and highlighted. A brief discussion on verb classes was also looked at where 49 semantically coherent classes of verbs were presented.

The discussion on the organization of English verb in Wordnet was also highlighted. It was discovered that Wordnet's construction represents an experiment that will test the validity of a model of the lexicon that will fit all verbs. The issue of Predicate Argument Structure was also highlighted with different examples as part of the properties of the theta theory. These are found in sub section 2.4.1, under the assignment of argument. The types of arguments are discussed in which four main types were mentioned. These arguments, paved a way towards the discussion on the selection restriction. This was discussed with the view that if verbs select certain arguments to appear with them, they also select semantic features which these argument must have in order to appear with such a verb. Cognate objects as non-arguments were also discussed and their adjunct status was found to be determined by the semantic relation between the head noun and the verb.

The inalienable possessive was discussed as a form of an argument structure. The issue of ergative verbs was looked at with all the relevant focus needed for this study. It was found that ergative verbs are closely related to unaccusative verbs. Du Plessis (1999) maintains that there is a clear pattern between unaccusative and ergative in Sesotho, Setswana and Northern Sotho. In both cases enough evidence was found that ergative verbs have the status of unaccusative verbs. The difference between ergative verbs and unaccusative verbs was highlighted with series of examples.

In the Verbal Suffixes as controllers of transitivity, focus was placed on two affixes, i.e. transitive suffix "-l-", which has the semantic feature causative, and intransitive suffix -h-, which has an anti-causative semantic feature. The intransitive suffix "-h-" has the property of controlling the agent argument. It suppresses the agent argument and prevents it from occurring, which is similar to the suppression of the agent argument by the passive morpheme "-w-".

The instrument subject alternation was also discussed with the view that when this alternation occurs, the NP which is a complement of the instrumental preposition "ka" is assigned a theta-role of instrument.

We then distinguished between three types of aspectual class, i.e. state, activity and event. Examples regarding these aspectual types were provided. It was also discovered that an aspectual class determine much of semantic behaviour of a lexical item and it was also noted that the aspectual properties of a sentence changes as the result of other factors, such as adverbial modification, the structure of the NP in an argument position or the presence of a preposition phrase.

The lexical conceptual paradigm as the ability of a lexical item to cluster multiple sense was also discussed with few examples. In this aspect the focus was on the appearance of lexical items in many semantically distinct contexts, able to function as organization, or a physical object.

The organization of the semantic concepts into levels of hierarchy from specific to generic were discussed with the view that these levels are not limited in number they might contain.

Chapter 3 looked at the break verbs as they appear either as transitive or intransitive or as both transitive / intransitive and with a different form.

These verbs were divided into five sub groups according to their meaning, i.e. break, tear, burst, split / crack and crush ./ smash. Each sub group was defined and an example of a sentence was provided. These break verbs were also classified into the four groups considering the syntactic structure in which they appear, i.e. transitive, intransitive,

transitive / intransitive alternation verbs and ideophones and verbs derived from ideophones.

In the first section, i.e. 3.3.1, more concentration was placed on the transitive break verbs. It was discovered that most of these 6 verbs complied with some of the assumptions and principles that govern the study of Lexical Semantics mentioned in Chapter 2, above, few of these verbs do reflect a benefit of doubt, more especially when coming to the issue of a Cognate object. In this group, **pidila**, **tlenya**, **tlepenya** do not allow cognate object to appear with them. **Tlepetsa** and **nepola** allow the subject argument to appear with [ARG1 = human] as the selection restriction. It is only **runsolla** which complied with the above mentioned issues.

The second section, i.e. 3.3.2, concentrated on only one Sesotho intransitive break verb. It was found that this verb is a one-predicate with only one argument and that this argument is assigned to a patient. A shadow argument is not possible with this verb. Instrument-subject alternation is not possible with this verb. The selection-restriction is [ARG1 = physical object].

The third section looked at the transitive / intransitive alternation in which the first sub section (3.3.3.1) examined verbs with the suffixes [-l-] and [-h-]. In this section 22 break verbs were treated and it was discovered that these verbs do comply with the properties of Lexical Semantics as a study in Sesotho. It was also found that the suffix [-h-] of the intransitive verb controls the external argument, while the suffix [-l-] shows that the transitive verb assigns two internal arguments, i.e. agent and patient.

The sub section (3.3.3.3) examined verbs with suffixes [-akan-] and [-akany-y-]. The break verbs that are found in this sub section may appear with an intransitive iterative suffix [-akan-]. This intransitive verb may then be made transitive by the addition of a causative suffix [-y-]. We discovered four break verbs of this kind. They all follow the same pattern. These verbs are **thua**, **roba**, **thuba** and **thuma**. Consider the following examples displaying causative verbs:

[Watjhe] e-a- thubakana (A watch smashes)

[Monna] o-thubakanya [watjhe] (The man smashes a watch)

In this case we discovered the following conditions on these verbs:

- A new external argument is added, i.e. a causative argument,
- The "old" external argument has to be externalized.

The selection restrictions on **thubakanya** are the same as with **thuba** in 3.8.3 above.

The third sub section explored verbs with the suffixes **[-an-]** and **[-an-y-]**. Although these verbs appear with a reciprocal - intransitive suffix **[-an-]**, it does not have a reciprocal meaning. This suffix was made transitive with the addition of a causative suffix **[-y-]**: **[-an-y-]**. Three break verbs of this kind were discovered in Sesotho. They are **pjhatla**, **haraswana**, **peperana**. Consider the following examples displaying causative verbs:

[Lehe] le peperane (An egg cracked)

[] peper -an-y-a [lehe]

[Mosadi] o-peperanya [lehe] (The woman crack an egg)

The new external argument will be a causative agent. The selection restriction on the object argument above will be the same as the selection restriction on the subject **peperana** above.

The next sub section treated verbs with the suffixes **[-oll-]** and **[-oloh-]**. These two suffixes have the same form as the reversive suffixes, but they do not have reversive meaning. Walaza (1997:169) in her article pointed out that when these reversive suffixes appear with verbs of removing in Setswana they display the view that the use of reversive suffixes is not "to reverse the action but it is to show the seriousness of an action done by the agent / patient in a sentence". These suffixes were then treated as the verbs in par. 3.6 above. In this sub section we treated two break verbs.

The fourth section dealt with the ideophones and verbs derived from ideophones in which the first sub section looked at an intransitive suffix **[-h-]** and a transitive suffix **[-l-]**. In this sub section we found that the ideophone with the semantic feature of **break** has the features of an ergative verb. The ideophone was found to assign two internal arguments like break verbs in par. 3.6 above. Regarding the issue of ideophone, the case theory plays a major role. This emanate from the fact that ideophone has no external argument.

Therefore one of the internal arguments has to move to this empty subject position to receive nominative case:

[e] [shoqo [Agent, Patient]

The agent argument will be moved to receive nominative case. In this case the patient argument remains in its place and will receive accusative case from the verb:

- **[Agent_i [shoqo [t_i , Patient]**
- **[Ntate] [o-itse shoqo [ropo]** (*Father broke the rope loose*)

The patient argument will be moved to the empty subject position. This patient argument will now receive nominative case. The agent argument will then not surface, as it will be controlled by the patient argument in the subject position:

- **[Patient_i /_j [shoqo [agent_i t_j**
- **Ropo e-itse shoqo** (*The rope broke loose*)

The control relation is indicated by the coindexing with **[i]** and the trace relation with **[j]**.

It was also discovered that ergative ideophones may appear with the intransitive suffix **[-h-]** and the transitive suffix **[-l-]** as in par. 3.6 above. The transitive suffix **[-l-]** will allow movement of the agent argument:

- **[e] [shoqo -l- [Agent, Patient]**
- **[Agent_i /_j [shoqo-l- [t_j , Patient]**
- **Ntate o-shoqola ropo** (*Father breaks the rope loose*)

The intransitive suffix **[-h-]** will control the agent argument with the result that the patient will have to move to fill the empty subject position:

- **[e] [shoqo-h- [Agent_i , Patient]**
- **[Patient_i /_j [shoqo-h- [Agent_i , t_j]**
- **Ropo e-shoqohile** (*The rope broke loose*)

In this regard control is indicated by coindexation with [i]. In this sub section we have three break verbs.

In the second sub section we looked at verb, with the affixes [-an-] and [-an-y-]. The ideophone "tletlere" as an intransitive may also appear as a derived intransitive verb [-an-], i.e. "tletlerana". This verb is treated the same way as the first sub section 3.3.4.1 above.

The third sub section dealt with the affixes [-man-] and [-ts-]. The verb that is found in this section was treated as the verb in sub section 3.3.4.1 above. There is only one verb in this sub section. The last sub section concentrated on the suffix [-l-] alone. It was also treated as the verb in sub section 3.3.4.1 above. Concerning these ideophones and verbs derived from ideophones, it was found that in Sesotho both mentioned assumptions and principles in Chapter 2 are possible.

Chapter 4 looked at the bend verbs as they appear either as transitive or intransitive or as both transitive / intransitive, but with a different form.

A distinction between transitive bend verbs and intransitive bend verbs was given with some examples. Bend verbs were divided into two sub groups, i.e. any physical object and a body part.

In the first section we concentrated on the bending of any physical object. This section was divided into three sub sections, i.e. **bend, crooked and leaning verbs**.

In the sub section, par. 4.2.1, that focused on the bend verbs, it was discovered that the bend verbs that are found here are transitive. These verbs can be treated like break verbs in Chapter 3. In Sesotho we found that we have three examples of these bend verbs.

It was also found that the sub section, par. 4.2.2, that looked at the crooked verbs, appears as either transitive or intransitive but with clear distinction in form. The intransitive bend verbs which have only one argument, i.e. **ARG1**, signify objects which are crooked or bent. This one argument was found to be the same as the **ARG2** of the transitive counterparts. The selection restrictions of these verbs we established. Learning verbs which are treated at the third sub section, par. 4.2.3, reflected verbs that indicate a support

or rest in a bent or sloping position. There are two intransitive verbs under this sub section. It was found that these verbs appeared with one external argument: **ARG1**.

The second section dealt with the bending of a body part. These verbs were classified under parts of the body that may bend, i.e. **knees**, **head** and **the back**. They were treated like the verbs that involved any physical object in par. 4.2 above. The verbs that were classified under the subsection of **knees** were found to be all intransitive and it was also discovered that verbal alternations are not possible with these verbs. The **head** as the second sub section dealt with one intransitive verb and transitive / intransitive alternation with the suffixes **[-l-]** and **[-h-]**. It was found that the intransitive verb does not appear with derived verbs whereas the transitive verbs do appear with them.

In the last sub section that involved **the back**, it was discovered that there are intransitive and transitive / intransitive alternation. The intransitive verbs in this section do not accommodate the verbal alternation to appear with them, whereas the transitive verbs do appear with them. It was found that some bend verbs do appear with a cognate object, verbal alternations and derived verbs whereas some do not.

The bend verbs that appear with verbal alternation, fit well with the inalienable possession than the instrument subject alternation. This could be attributed to the fact that instrument subject alternation involves an instrument which is an object, while in this section, a body part cannot be an instrument.

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