#### **DERIVED VERBS IN XITSONGA**

Jacobus A du Plessis Dept of African Languages Stellenbosch University Stellenbosch 7600 South Africa

Key words: Bantu verbal affixes, causative alternation, Xitsonga

#### **Abstract**

There are ten derivational affixes in Xitsonga of which only the reflexive is a prefix of a verb. Many of these affixes have no syntactic influence on the structure of clauses but they are only semantic changing affixes. Only those affixes which have some influence on the syntactic structure of sentences have been given some attention.

The syntactic structures in which these derived verbs appear are related to the structures which are developing within the Minimalist program. Within these structures a new syntactic category has been added for each verbal affix. Thus, for instance with the applicative affix [-el-] a syntactic category "app" has been added as head of a category "applicative phrase" (APP). With each verbal affix such a category appears with various other syntactic categories as complement, or such complements may appear in other positions within the structure as for instance in the passive construction. All these constructions have also been semantically interpreted.

Special attention is also focused on causative alternation or causation where a category "cause" has been postulated as a possible solution to this alternation.

Lastly, the verbal affixes may appear in combination with each other and two such combinations for these affixes have been examined. In each case the two affixes retain their specific categories, structures, complements and semantic interpretation.

# Contents

1.	Derivational verbal affixes	3	
2.	Causation	4	
3.	Applicative	.24	
4.	Reflexive	.45	
5.	Reciprocal	.51	
6.	Passive	.53	
7.	Neuter-passive	.56	
8.	Derivational verbs with two verbal suffixes	.57	
Bibliography6			
Abbrev	Abbreviations		

There are ten derivational verbal affixes of which seven affixes have some influence on the syntactic structure of sentences while six suffixes merely add to the meaning of the verb. The seven structure changing affixes are the following and they will be discussed in some detail: applicative, causative, reflexive, reciprocal, neuter, passive and completive. The other six affixes are semantic changing affixes: reversive, associative, extensive, iterative, continuative and intensive.

The issues of the causative and locative alternation will also be given attention as they reflect on transitivity. Lastly the combination of two verbal affixes on a verb will be dealt with.

#### 1. DERIVATIONAL VERBAL AFFIXES

#### 1.1 APPLICATIVE

-vuv-el-a hosi

(-return-appl-fv chief: return for the chief)

#### 1.2 CAUSATIVE

[-is-]: -tsak-is-a vana

(-be.happy-caus-fv children: make happy the children)

[-t-]: -rival-a vana

(-forget-fv children)

-riva-t-a vana

(forget-caus-fv children: cause to forget the children)

#### 1.3 REFLEXIVE

[-ti-]

Vana v-a-ti-von-a vana

(Children AgrS-pres-refl-see-fv children: the children see themselves)

#### 1.4 RECIPROCAL

Vana v-a-von-an-a vana

(Children AgrS-pres-see-recipr-fy children: the children see each other)

#### 1.5 NEUTER

[-ek-]:

Vana v-a-lav-ek-a vana

(Children AgrS-pres-love-neut-fv children: the children are loveable)

[-akal-]:

Vana v-a-tw-akal-a vana

(Children AgrS-pres-hear-neut-fy children: the children are heard)

#### 1.6 PASSIVE

Vana v-a-von-iw-a vana

(Children AgrS-pres-see-pass-fv children: the children are seen)

#### 1.7 REVERSIVE

[-ulu-]

-boh-ulu-l-a fundzu

(-tie-revers-tr-fv knot: untie the knot)

#### 1.8 ITERATIVE

[-et-]

-phandluk-et-a khumbi

(-splash-iter-fv wall: splash again the wall)

#### 1.9 CONTINUATIVE

[-el-]

-lakats-el-a malekere

(-lick-cont-fv sweets: lick repeatedly sweets)

[-etel-]

-gandl-etel-a misava

(-compress-cont-fv soil: compress repeatedly the soil)

#### 1.10 INTENSIVE

[-el-el-]

-landz-el-el-a hosi

(-follow-el-el-fv chief: follow the chief very well)

[-is-is-}:

-von-is-is-a hosi

(-see-is-is-fv chief: see the chief very well)

#### 2. CAUSATION

There is an extensive bibliography dealing with various aspects of causation (see the bibliography for a list of such publications).

For the purpose of this overview on causation in the four languages of Tshivenda, Xitsonga, Sesotho and isiXhosa a number of causative alternations in various verb classes have been identified. The following is a summary of these findings in which the causation alternation appears in the following circumstances:

- a. Transitive and Intransitive Ideophones
- b. Ideophones and verbs with transitive and intransitive suffixes
- c. Verbs with transitive and intransitive suffixes
- Transitive and intransitive verbs.

## 2.1 Summary of causation predicates

	Ideophone	Ideoph. + verb	Verb + suffix	Verb
PUT	Tsonga	Tsonga k/l/s	Tsonga k/l, k/x, k/s, k/t, l/t	
CHANGE OF STATE		Tsonga k/, k/x, k/s, k/l/t	Tsonga k/l, k/x, k/s, k/l/x, k/t, l/t	Tsonga
REMOVE			Tsonga k/l, k/t, l/tl	
PSYCH			Tsonga k/l, k/s, l/t	
BODY			Tsonga k/l, l/t	
MOTION		Tsonga k/s/x	Tsonga k/x, k/x,t, l/t	Tsonga
ASPECT			Tsonga l/t	
CONSUMPT.			Tsonga l/t	
EXISTENCE			Tsonga l/t	
COMMUNIC.			Tsonga I/t	

#### 2.2 Structure of causation sentences

With Ideophones:

IsiXhosa: Intr.: [Timbita] ti-te fe

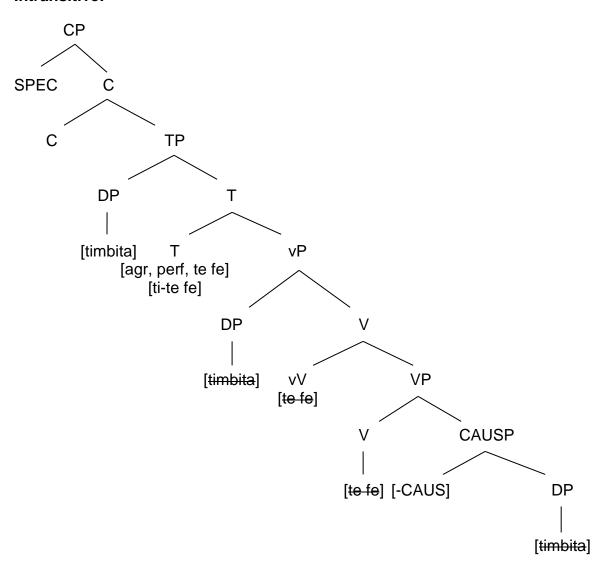
(Pots AgrS-perf.ri scatter: pots are scattered)

**Trans.:** [Wanuna] u-te fe [timbita]

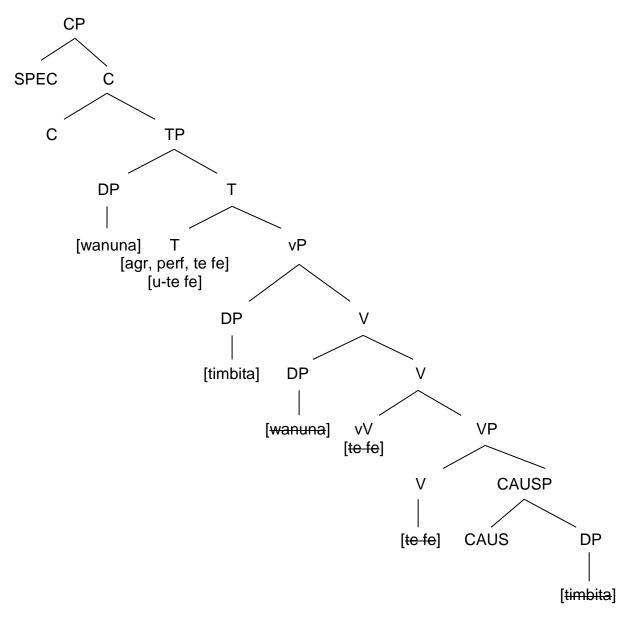
(man AgrS-perf.ri scatter pots: the man scattered the pots))

Ideophones are introduced into the structure of sentences by means of the verb **ri** (say). This verb is the carrier of inflectional and derivational morphemes. This **ri** may however never appear with a derivational suffix denoting the causative, i.e. [-is-] in \*[-r-is-]. This is because the transitive alternation above already implies a causative meaning. The DP **timbita** above is in both cases the patient and a new causer (wanuna) has been added. Otherwise these two sentences have almost the same structure:

# Intransitive:



#### **Transitive:**



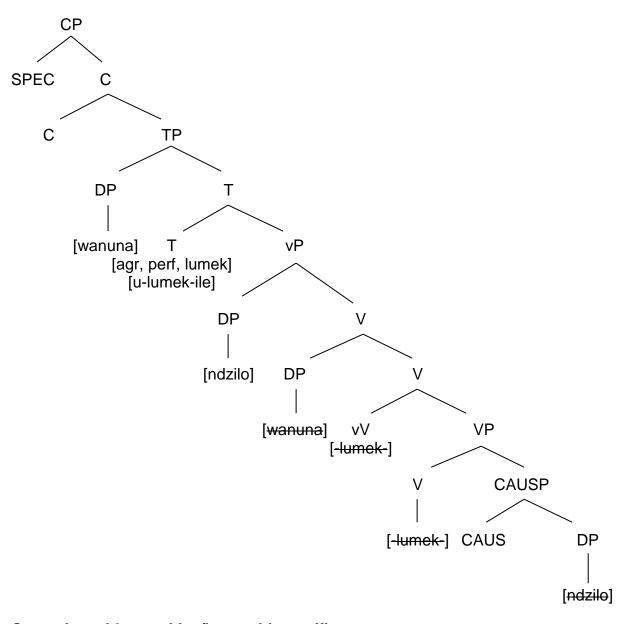
Provision has been made for a cause phrase to allow **timbita** to appear in both structures in the same position. The cause element has not been specified because it is not present within these causative alternations with ideophones. The structures with causation where the verb behaves similarly to the ideophones above, will also have this causal phrase:

Transitive: [Wanuna] u-lumek-ile [ndzilo]

(man AgrS-light-perf fire: the man lighted a fire)

Intransitive: [Ndzilo] wu-lumek-ile

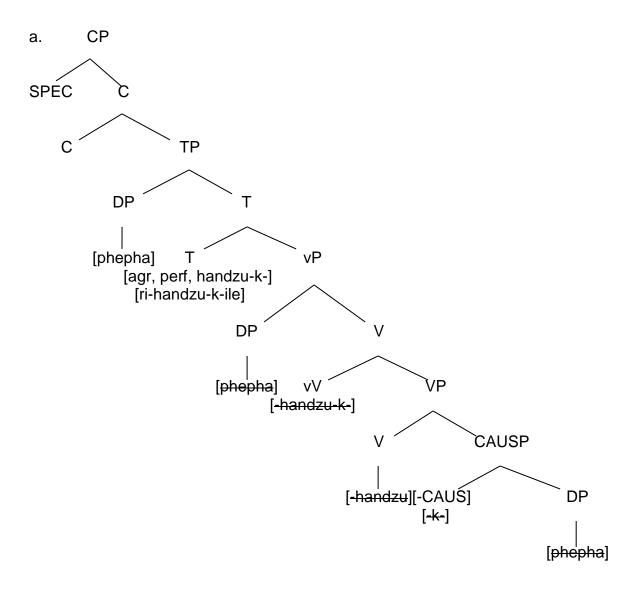
(Fire AgrS-light-perf: the fire is lighted))

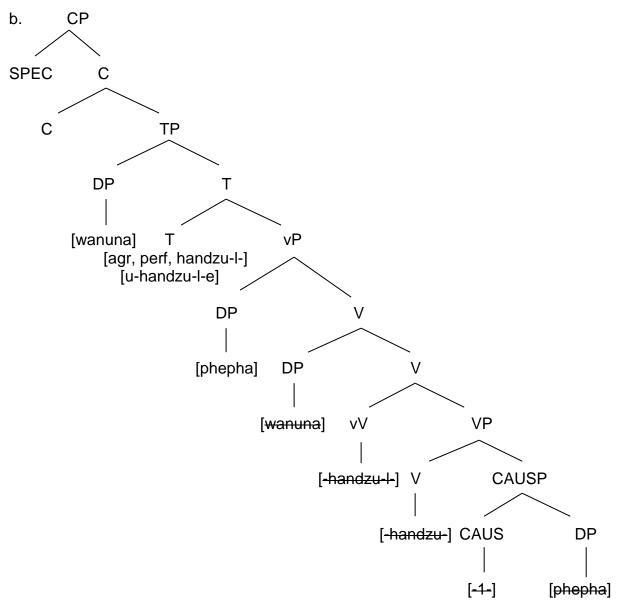


# Causation with transitive/intransitive suffixes

IsiXhosa: a. [Phepha] ri-handzu-k-ile (Paper AgrS-tear-k-perf: the paper is torn)

b. [Wanuna] u-handzu-l-e [phepha](Man AgrS-tear-l-perf paper: the man tore the paper)





In the (a) sentence above an intransitive suffix [-k-] appears while in (b) a causative suffix [-l-] is found.

## 2.3 Causation suffixes and verb classes

# 2.3.1 Transitive/Intransitive Ideophones

# Verbs of putting

Ideophone: fe

**Intr.:** Timbita ti-te fe ekhixinini

(Pots agr-perf.ri scatter in-kitchen: the pots lie scattered in the kitchen)

**Trans.:** Ndzi-te fe timbita ekhixinini

(I-perf.ri scatter pots in-kitchen: I scattered the pots in the kitchen)

#### 2.3.2 Ideophones and derived verbs with suffixes [-k-/-l-]

## Verbs of change of state

Ideophone: [tlhibu], verbs [-tlhibu-l-/-tlhibu-k-]

Trans. Ideoph.: Wanuna u-t-e tlhibu [ntambhu]

(Man AgrS-ri-perf break rope: the man broke the rope)

Trans. verb: Wanuna u-tlhibu-l-e [ntambhu]

(Man AgrS-break-tr-perf rope: the man broke the rope)

Intr. Ideoph.: [Ntambhu] yi-t-e tlhibu

(Rope AgrS-ri-perf break: the rope is broken)

Intr. verb: [Ntambhu] yi-tlhibu-k-ile

(Rope AgrS-break-intr-perf: the rope is broken)

Ideophone: [hahlu], verbs [-hahlu-l- / -hahlu-k-]

Trans. Ideoph.: Tatana u-t-e hahlu [lwangu]

(Father AgrS-ri-perf demolish roof: father demolished the roof)

Trans. verb: Tatana u-hahlu-l-e [lwangu]

(Father AgrS-demolish-tr-perf roof: father demolished the roof)

Intr. Ideoph.: [Lwangu] ri-t-e hahlu

(Roof AgrS-ri-perf demolish: the roof is demolished)

Intr. verb: (Lwangu] ri-hahlu-k-ile

(Roof AgrS-demolish-intr-perf: the roof is demolished)

## 2.3.3 Verbs with the suffixes [-k-/-l-]

## Verbs of change of state

## Verbs [-handzu-l- / -handzu-k-]

Trans.: N'wana u-handzu-l-e [phepha]

(Child AgrS-tear-tr-perf paper: the child tore the paper)

Intr.: [Phepha] ri-handzu-k-ile

(Paper AgrS-tear-intr-perf: the paper is torn)

## Verbs of removing

#### Verbs [-hlomu-l- / -hlomu-k-]

Trans.: Tatana u-hlomu-l-e mutwa enengeni

(Father AgrS-pull.out-tr-perf thorn loc-foot: father pulled out a

thorn from the foot)

Intr.: [Mutwa] wu-hlomu-k-ile enengeni

(Thorn AgrS-pull.out-intr-perf loc-foot: a thorn is pulled from the

foot)

## **Psych verbs**

## Verbs [-hlundzu-l- / -hlundzu-k-]

Trans.: Wansati u-hlundzu-l-e [vanhu]

(Woman AgrS-anxious-tr-perf people: the woman caused anxiety

to the people)

Intr.: [Vanhu] va-hlundzu-k-ile

(People AgrS-anxious-intr-perf: the people are anxious)

# Verbs relating to the body

#### Verbs [-pitsu-l- / -pitsu-k-]

Trans.: Swakudya swi-pitsu-l-e [vana]

(Food AgrS-be.nauseous-tr-perf children: the food caused nausea

to the children)

Intr.: [Vana] va-pitsu-k-ile

(Children AgrS-be.nauseous-intr-perf: the children are nauseous)

#### Verbs of putting

#### Verbs [-pewu-l- / -pewu-k-

Trans.: Manana u-pewu-l-e [bokisi] etafuleni

(Mother AgrS-lift-tr-perf box loc-table: Mother lifted the box onto

the table)

Intr.: [Bokisi] ri-pewu-k-ile etafuleni

(Box AgrS-lift-intr-perf loc-table: the box is lifted onto the table)

#### 2.3.4 Ideophones and derived verbs with suffixes [-k-/-x-]

#### Verbs of change of state

#### Ideophone [mbundzu], verbs [-mbundzu-x- / -mbundzu-k-]

Trans. Ideoph.: Wanuna u-t-e mbundzu [yindlu]

(Man AgrS-ri-perf demolish house: the man demolished the

house)

Trans. verb: Wanuna u-mbundzu-x-ile [yindlu]

(Man AgrS-demolish-tr-perf house: the man demolished the

house)

Intr. Ideoph.: [Yindlu] yi-t-e mbundzu

(House AgrS-ri-perf demolish: the house is demolished)

Intr. verb: [Yindlu] yi-mbundzu-k-ile

(House AgrS-demolish-intr-perf: the house is demolished)

## 2.3.5 Verbs with the suffixes [-k-/-x-]

# Verbs of change of state

#### Verbs [-pfu-x- / -pfu-k-]

Trans.: Wansati u-pfu-x-ile [vana]

(Woman AgrS-wake-tr-perf: the woman woke the children)

Intr.: [Vana] va-pfu-k-ile

(Children AgrS-wake-intr-perf: the children are awake)

## Verbs of putting

# Verbs [-longolo-x- / -longolo-k-]

Trans.: Wanuna u-longolo-x-ile [tihomu]

(Man AgrS-proceed (in single file)-tr-perf cattle: the man caused

the cattle to proceed in single file)

Intr.: [Tihomu] ti-longolo-k-ile

(Cattle AgrS-proceed (in single file)-intr-perf: the cattle proceed in

single file)

## Verbs of motion

## Verbs [-hirimu-x- / -hirimu-k-]

Trans.: Vana va-hirimu-x-ile mihandzu

(Children AgrS-fall.down-trans-perf fruit:The children caused the

fruit to fall down)

Intr.: [Mihandzu] yi-hirimu-k-ile

(Fruit AgrS-fall.down-intr-perf: the fruit fell down)

## 2.3.6 Verbs with the suffixes [-k-/-l-/-x-]

## Verbs of change of state

Transitive verbs: [-kukumu-x- / -kukumu-l-]

Intransitive verb: [-kukumu-k-]

Trans. verbs: Wansati u-kukumu-l-a / u-kukumu-x-a mbila

(Woman AgrS-rise/swell-tr-fv dough: the woman causes the

dough to rise)

Intr. verb: Mbila y-a-kukumu-k-a

(Dough AgrS-pres-rise-intr-fv: the dough is rising)

## 2.3.7 Verbs with the suffixes [-k-/-x-/-t-]

#### Verbs of motion

Transitive verbs: [-tsuvu-x- / -tsuvu-t-]

Intransitive verb: [-tsuvu-k-]

Trans. verbs: Hosi yi-tsuvu-x-a / yi-tsuvu-t-a vanhu enaleni

(Chief AgrS-flee-tr-fv people loc-enemy: the chief causes the

people to flee from the enemy

Intr. verb: Vanhu va-tsuvu-k-a enaleni

(People AgrS-flee-intr-fv loc-enemy: the people flee from the

enemy)

## 2.3.8 Ideophone and derived verbs with suffixes [-k-/-s-/-x-]

#### Verbs of motion

Ideophone: [vumbulu]

Transitive verbs: [-vumbulu-s- / -vumbulu-x-]

Intransitive verb: [-vumbulu-k-]

Trans. ideoph.: Wanuna u-te vumbulu ribye ehansi

(Man AgrS-ri-perf roll stone down: the man rolled the stone down)

Trans. verbs: Wanuna u-vumbulu-s-e /u-vumbulu-x-e ribye ehansi

(Man AgrS-roll-tr-perf stone down: the man rolled the stone down)

Intr. ideoph.: Ribye ri-te vumbulu ehansi

(Stone AgrS-ri-perf roll down: the stone rolled down)

Intr. verb: Ribye ri-vumbulu-k-ile ehansi

(Stone AgrS-roll-intr-perf down: the stone rolled down)

#### 2.3.9 Ideophones and derived verbs with suffixes [-k-/-s-]

#### Verbs of change of state

#### Ideophone [pfotlo], verbs [-pfotlo-s- / -pfotlo-k-]

Trans. Ideoph.: Wanuna u-t-e pfotlo [xitshatshana]

(Man AgrS-ri-perf smash basket: the man smashed the basket)

Trans. verb: Wanuna u-pfotlo-s-ile [xitshatshana]

(Man AgrS-smash-tr-perf basket: the man smashed the basket)

Intr. ideoph.: [Xitshatshana] xi-t-e pfotlo

(Basket AgrS-ri-perf smash: the basket is smashed)

Intr. verb: [Xitshatshana] xi-pfotlo-k-ile

(Basket AgrS-smash-intr-perf: the basket is smashed)

## Ideophone [hodlo[, verbs [-hodlo-s- / -hodlo-k-]

Trans. ideoph.: Wanuna u-t-e hodlo [xitlati]

(Man AgrS-ri-perf demolish barn: the man demolished the barn)

Trans. verb: Wanuna u-hodlo-s-ile [xitlati]

(Man AgrS-demolish-tr-perf barn: the man demolished the barn)

Intr. ideoph.: [Xitlati] xi-t-e hodlo

(Barn AgrS-ri-perf demolish: the barn is demolished)

Intr. verb: [Xitlati] xi-hodlo-k-ile

(Barn AgrS-demolish-intr-perf: the barn is demolished)

## 2.3.10 Verbs with the suffixes [-k-/-s-]

## Verbs of putting

## Verbs [-hangala-s- / -hangala-k-]

Trans.: Hosi yi-hangala-s-ile [vanhu]

(Chief AgrS-scatter-tr-perf people: the chief scattered the people)

Intr.: Vanhu va-hangala-k-ile

(People AgrS-scatter-intr-perf: the people are scattered)

#### Psych verbs

#### Verbs [-pfindlu-s- / -pfindlu-k-]

Trans.: N'anga yi-pfindlu-s-ile [mimoya ya vanhu]

(Doctor AgrS-trouble-tr-perf souls of people: the doctor troubled

the souls of the people)

Intr.: [Mimoya ya vanhu] yi-pfindlu-k-ile

(Souls of people AgrS-trouble-intr-perf: the souls of the people are

troubled)

#### Verbs of change of state

## Verbs [-bundlu-s- / -bundlu-k-]

Trans.: Vana va-bundlu-s-ile [mihandzu]

(Children AgrS-crush.open-tr-perf fruit: the children crushed the

fruit open)

Intr.: [Mihandzu] yi-bundlu-k-ile

(Fruit AgrS-crush.open-intr-perf: the fruit are crushed open)

#### 2.3.11 Verbs with the suffixes [-k-/-t-]

## Verbs of change of state

Verbs [-tshambulu-t- / -tshambulu-k-]

Trans. verbs: Wanuna u-tshambulu-t-ile miri

(Man AgrS-stretch.out-tr-perf body: the man stretched

out/exercised his body)

Intr. verb: Miri wu-tshambulu-k-ile

(Body AgrS-stretch.out-intr-perf: the body is stretched

out/exercised)

#### Verbs of removing

Verbs [-hala-t- / -hala-k-]

Trans. verbs: Wansati u-hala-t-ile mati eka bakiti

(Woman AgrS-spill-tr-perf water loc bucket: the woman spilt water

from the bucket)

Intr. verb: Mati ya-hala-k-ile eka bakiti

(Water AgrS-spill-intr-perf loc bucket: Water is split from the

bucket)

## Verbs of putting

Verbs [-mine-t- / -mine-k-]

Trans.verb: Wanuna u-mine-t-ile ntlhamu

(Man AgrS-set-tr-perf trap: the man set a trap)

Intr. verb: Ntlamu wu-mine-k-ile

(Trap AgrS-set-intr-perf: the trap is set)

#### 2.3.12 Ideophone and verbs with the suffixes [-k-/-l-/-t-]

#### Change of state verbs

Trans/Intr ideophone: khatlu (be broken off, break off)
Trans. verbs: -khatlu-l-, -khatlu-t- (break off)
Intrans. verb: -khatlu-k- (be broken off)

## 2.3.13 Ideophones and verbs with suffixes [-k-/-l-/-s-]

## Verbs of putting

Trans/Intr ideophone: tlaku (raise, be raised)

Trans. verbs: -tlaku-l-, -tlaku-s- (raise, lift up)
Intrans. verb: -tlaku-k- (be raised, higher up)

# 2.3.14 Verbs with the suffixes [-I- / -t-]

# Verbs of change of state

- -tsongaha-l- (be small in size)
- -tsongaha-t- (make small, humble)
- -titiva-I- (be unconscious)
- -titiva-t- (make unconscious)
- -karha-l- (be tired)
- -karha-t- (make tired)
- -miye-I- (be silent)
- -miye-t- (silence)
- -dyuha-l- (be old)
- -dyuha-t- (grow old)

#### Verbs of motion

- -tshine-I- (come near)
- -tshine-t- (cause to come near)
- -rhele-I- (descend)
- -rhele-t- (cause to descend)

## **Psych verbs**

- -nave-l- (desire)
- -nave-t- (make to desire)
- -swiha-l- (be disgusted)
- -swiha-t- (disgust)
- -riva-l- (forget)
- -riva-t- (cause to forget)

## Verbs of putting

- -nembele-I- (hang)
- -nembele-t- (make to hang)

## Verbs of removing

- -tsavu-l- (be taken out)
- -tsavu-t- (take out)
- -pfuma-l- (be lacking)
- -pfuma-t- (lack)

#### **Aspectual verbs**

- -he-l- (be finished)
- -he-t- (finish)

## Verbs relating to the body

- -la-l- (sleep)
- -la-t- (put to sleep)

## **Verbs of consumption**

- -fihlu-l- (have breakfast)
- -fihlu-t- (give breakfast)

#### **Exist verbs**

- -hlwe-l- (be delayed)
- -hlwe-t- (delay)
- -funenge-I- (be covered)
- -funenge-t- (cover)

#### **Verbs of communication**

- -pfume-I- (say yes)
- -pfume-t- (cause to say yes)

#### 2.3.15 Transitive/Intransitive verbs

## Verbs of change of state

Ndzi-ahlama numu (I-open mouth) Nomu w-a-ahlama (Mouth it-is-opening)

Ndzi-lumekile ndzilo (I-lighted fire) Ndzilo wu-lumekile (Fire it-is-lighted)

Ndzi-nuha nyama (I-smell meat) Nyama y-a-nuha (Meat it-smells)

#### Verbs of motion

Vana va-ndzulu-t-a ekamarini (Children they-spin in-room)

Ndzi-ndzulu-t-a vana ekamarini (I-cause-to-spin children in-room)

## 2.4 Causative suffix [-is-]

The causative suffixe [-is-] is much more productive than the causative/inchoative alternation because it can appear with almost all verbal classes. In other respects there is a clear basis for comparison between them. Thus, the effect of the process of causation in general is to introduce a causative agent in the subject position of sentences. In this process the old external argument or subject now becomes an internal argument or object.

#### 2.4.1 With Intransitive verbs:

#### Non-causative:

a. N'wana u-ta-etlel-a (Child AgrS-fut-sleep-fv: the child will sleep)

#### Causative:

b. [Nhwanyana] u-ta-etler-is-a [n'wana](Girl AgrS-fut-sleep-caus-fv child: the girl will put the child to sleep)

The subject such as **n'wana** in (a) above is the patient who is going to sleep. In (b) the same **n'wana** is now the object, who has been caused/permitted/assisted to sleep. Thus, in these causative constructions the subject becomes the object. The subject in the intransitive use bears the same semantic relation to the verb as the object in the transitive use (Schäfer 2009:641), i.e. patient in the sentence above.

The new subject may be a causer as in (a) and (b) or a permissive agent:

Mudyondzisi u-hum-es-a vana (Teacher AgrS-go.out-caus-fv children: the teacher lets the children go out)

The new subject may also be an assistive agent:

Wanuna u-vuy-is-a vana (Man AgrS-return -caus-fv children: the man helps the children to return)

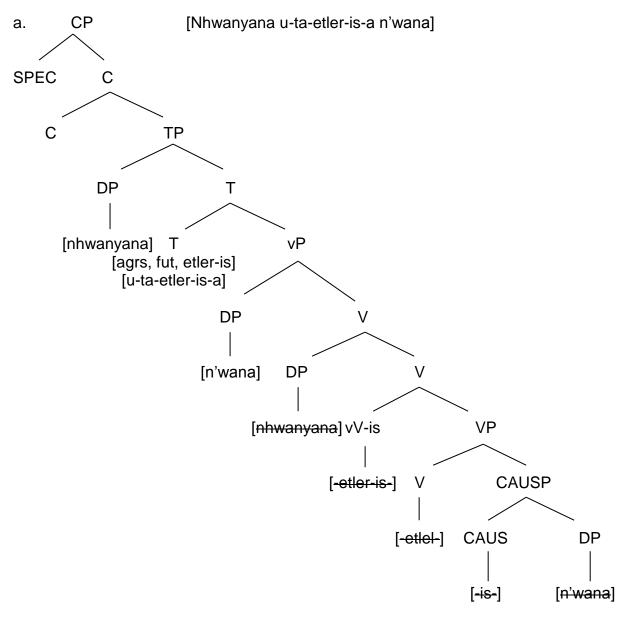
It is possible that the same sentence may be interpreted with any of these three agents depending n the specific discourse factors and the nature of the verb:

Wonsati u-vuy-is-a vana

(Woman AgrS-return-caus-fv children:

- (i) The woman causes the children to return
- (ii) The woman lets the children return
- (iii) The woman helps the children to return

The structure of these sentences will be on a par with those above:



There are various causative verbs with the suffix ]-is]- which appear with a non-causative meaning, i.e. the causative meaning has been lost:

IsiXhosa: a. Indoda i-ya-xok-a (Man AgrS-pres-lie-fv: the man is lying)

b. Indoda i-xok-is-a ixhego(Man Agrs-lie-caus-fv old.man: the man is lying to the old man)

In the (b) sentence above [ixhego] is now the recipient of the lying and thus no longer the causee of the causative construction.

## [V-is DP na-DP]

Verbs which end on [-an-] such as the reciprocal verbs or even non-reciprocal verbs usually appear with a PP with the preposition [na-] as head, such as [-diban-]:

- a. Vatswari va-hlangan-a [na mudyondzisi]
   (Parents AgrS-meet-fv with-teacher: the parents meet the teacher)
- b. Vatswari va-hlangan-is-a [vana] [na mudyondzisi]
   (Parents AgrS-meet-caus-fv children with-teacher: the parents let the children meet the teacher)

In the (b) sentence [vana] is the causee from the presence of the causative [-is-] and [vatswari] is the causer: [vana] now meets the teacher.

## [V-is LOC]

Any locative phrase may appear with causative verbs but it sometimes happens that the causative meaning of the verb may be lost:

Vanhu va-yimbelel-a [ku-y-is-a emahlweni] (People AgrS-sing-fv to-go-caus-fv forward: the people are singing to go on)

The causative verb above is [-y-is-] (case to go) but it has no longer a causative meaning.

However in most cases the verb retains its causative meaning when it appears with a locative phrase:

Maendlelo lawa a-ya-kongom-is-iw-ile [eka timhaka timbirhi] (Actions these past-AgrS-go.to-caus-pass-perf loc-cases two: these actions were caused to go to two cases)

#### [V-is DP LOC]

The locative phrase which appears with causative verbs with a causee dependent on the causative as a DP, is necessary because of mostly motion verbs which need locatives:

[pro] ndzi-ta-ta [pro] ndzi-ta-mi-vuy-is-a [pro] [kwale kaya] (I-will-come I will-you-return-caus-fv loc-there home: I will come and let you return there to the home)

#### [V-is CP]

## **CP** as an Infinitive clause

[pro] ndzi-he-t-ile [ku-tsala letere] [pro I-finish-caus-perf to-write letter\_ (I have to finished writing the letter)

The causative is necessary above to allow the Infinitive clause because the verb [-hel-] has an aspectual meaning of a process ending or coming to an end, i.e. of something finished or ended. The causative verb changed this aspectual meaning to allow the Infinitive as an argument of the verb from a position of external argument which it previously occupied before the causative verb.

#### CP with COMP as head

[pro] ndzi-von-is-a [leswaku [pro u-va ni nandzu]

(I-see-caus-fv that he-with-guilt:

I cause to see (show) that he is guilty)

# [pro AgrS8-V-is]

The anaphoric pronoun refers to a discourse segment by connecting to a prior referring expression or a later one. These anaphoric pronouns are empty of lexical content in Xitsonga and Tshivenda but they appear with AgrS of class 8 as **swi** in Xitsonga and **zwi** in Tshivenda. They frequently appear with causative verbs.

## [V-is DP]

[pro] swi-hlamar-is-a [ni vadyondzisi] (pro AgrS-be.surprised-caus-fv even teachers: it surprised even the teachers)

#### [V-is INF]

[pro] mi-ehleket-a leswaku [pro] a-swi-nyum-is-l [ku-famba [pro] ndzi-kombel-a migayo lomu mitini]:

(pro you-think-fv that [pro] neg-swi-be.ashamed-caus-neg to-go I-ask maize-meal here loc-village: do you think that it is not shameful to go and ask for maize meal here at the villages?)

#### [V-is [loko-CP]

[pro] a-swi-hlamar-is-i [loko [vanhu vo tala va-nga-wu-von-i wolowo] (pro neg-AgrS8-be.astonished-caus-neg when people AgrS-poss-Inf many AgrS-neg-AgrO-see-neg that:

It is not astonishing when many people do not see that)

#### [V-is DP Inf]

[pro] sw-a-ndzi-chav-is-a [pro] [ku-tirh-a laha] (pro AgrS8-pres-Agr0-fear-caus-fv to-work-fv here: it is fearful to me to work here)

[pro] sw-a-ndzi-loloh-is-a [pro] [ku-yim-a laha] (pro AgrS8-pres-Agr0-be.discouraged-caus-fv pro to-wait-fv here: it is discouraging for me to wait here)

## [V-is LOC INF]

[pro] sw-a-viler-is-a [eka mina] [ku-twa leswi] (pro AgrS8-pres-be.sad-caus-fv loc.me to-hear this: it is sad to me to hear this)

[pro] sw-a-khorw-is-a [eka mina] [ku-ku-yingisa [pro]] (pro AgrS8-pres-be.convinced-caus-fv loc me to-you-listen pro: it is convincing to me to listen to you)

## [V-is]

I munhu w-o hlamar-is-a (Cop person AgrS-poss-Inf be.astonished-caus-fv. he is an astonishing person)

## 2.4.2 With Transitive verbs

See Mqingwana (1993):

As indicated above the effect of the causative affix -is- on the predicate argument structure of predicates is to add a new **external argument** as subject to the sentence and to change the old external argument into an **internal argument**. This may have the result that transitive verbs become ditransitive verbs with two objects. In such cases the object which is dependent on the presence of the affix -is- is the indirect object and is always adjacent to the verb:

Vatswari va-pfar-is-a vana rivanti (Parents AgrS-close-caus-fv children door: the parents make (etc.) the children close the door)

In all these sentences the external argument may be interpreted with the semantic role of either causative agent, permissive agent or assistive agent. The "old" external argument retains its semantic role in this new position as internal argument, i.e. internal agent. The "old" external argument, ends up as internal agent in the position of indirect object.

#### 2.4.3 With ditransitive verbs

In the last place, ditransitive verbs with two internal arguments can extend these arguments to three with the causative affix on the verb. Such sentences are theoretically acceptable but conceptually very difficult to interpret. That is why they are all regarded as marginal:

- a. \*Ndzi nyikisa manana vana malekere'I help mother give sweets to the children'
- b. \*Ndzi lombisa mukhalabye wanuna mali'I make the old man lend money to the man'
- c. \*Ndzi rhumisa wantwana n'wana chukela 'I make the girl send a child for sugar'

## 2.4.4 Causative interrogative

The causative verb with suffix [-is-] may combine with an interrogative word [yini] (what) to effect a causative interrogative. The interrogative **yini** conbines with **ku**:

Hi-nga-fik-is-a [ku yini]?

(we-can-arrive-caus-fv how: how can we arrive?)

U-swi-tw-is-a [ku yini]?

(You-it-know-caus-fv ow: how do you know it?)

Hi-nga-fik-is-a [ku yini]?

(We-can-arrive-caus-fv how: How can we arrive?)

U-swi-tw-is-a [ku-yini?

(You-it-know-caus-fv how: how do you know it?)

#### 3. APPLICATIVE

The applicative in these African languages always functions as a suffix of the verb but with a wide application structurally, as is evident from the discussion below.

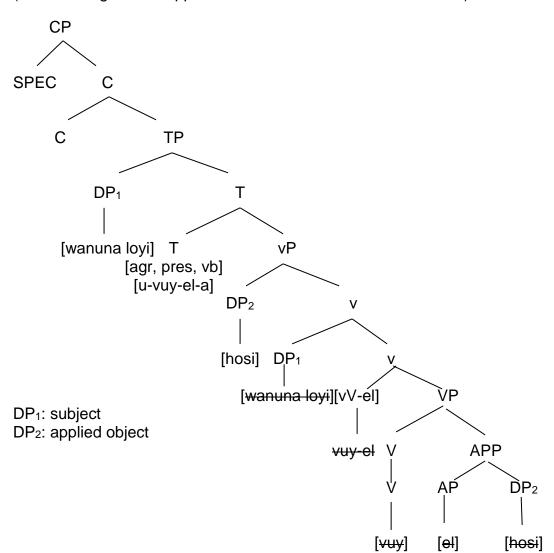
## 3.1 The applied object is a DP

# **Applicative with intransitive verbs**

# **Syntax**

[Wanuna loyi] u-vuy-el-a [hosi]

(This man Agr-return-appl-fv chief: this man returns for the chief)



## Semantics of applied object

# Benefactive, malefactive or substitution with animate object:

[Wanuna loyi] u-vuy-el-a [hosi] (This man agr-return-appl-fv chief: this man is returning for the chief)

# Purpose with inanimate objects

Vana va-tsutsum-el-a [mali] (Children Agr-run-appl-fv money: the children run for the money)

## Cause with inanimate objects:

Vavanuna va-ril-el-a [mali leyi lahlek-e-ke] (Men AgrS-cry-appl-fv money rel.det.Agr be.lost-perf-rel.marker: the men cry for the lost money)

## **Cause with interrogative object:**

Vavanuna va-ril-el-a yini? (Men Agr-cry-appl-fv-what: why are the men crying?)

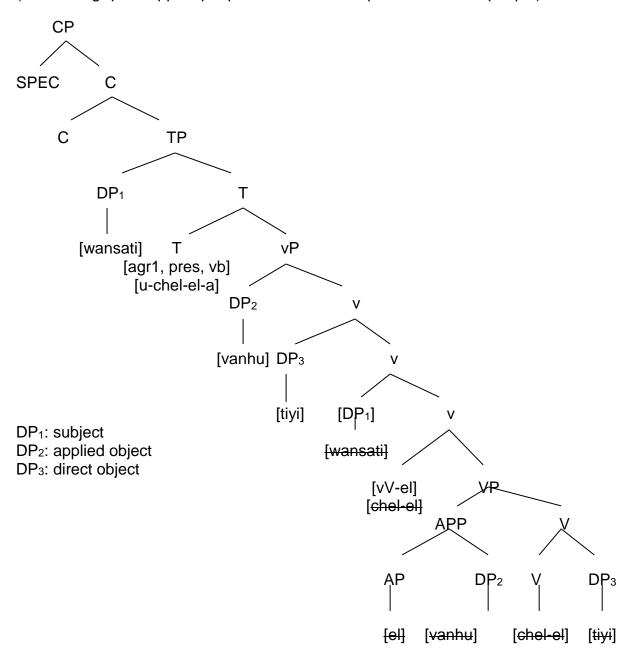
## Theme with animate or inanimate objects

Jaha ri-endz-el-a [sirha ra tata wa rona] (son Agr-visit-appl-fv grave of father of him: the son visits his father's grave)

# **Applicative with transitive verbs**

## **Syntax**

[Wansati] u-chel-el-a [vanhu] [tiyi] (Woman Agr-pour-appl-fv people tea: the woman pours tea for the people)



# Semantics of applied object

# Benefactive, malefactive or substitution with animate objects:

Wanuna u-lav-el-a [manana] rhoko

(Man Agr-want-appl-fv mother dress: the man wants a dress for mother)

Nhwana u-endl-el-a [manana] tiya

(Girl Agr-make-appl-fv mother tea: the girl makes tea for mother)

#### Recipient with animate objects:

Vana va-tsal-el-a [tatana] papila (Children Agr-write-appl-fv father letter: the children write a letter to father)

## **Purpose with inanimate objects:**

[pro] ndzi-hlawul-el-a [vukati] rhoko (pro l-choose-appl-fv wedding dress: I am choosing a dress for the wedding)

Wanuna u-tlang-el-a [mali] thenisi (Man Agr-play-appl-fv money tennis: the man plays tennis for money)

## **Cause with inanimate objects:**

Hosi yi-vitan-el-a [madzolonga] xividzo (Chief Agr-call-appl-fv violence meeting: the chief calls a meeting because of the violence)

#### **Cause with interrogative:**

[pro] u-hlawul-el-a yini [n'wana<sub>i</sub>] (pro you-him-choose-appl-fv-what son: why are you choosing the son?)

The direct object with applicative verbs may frequently be left out with only the applicative object remaining:

Purpose with applicative object:

[pro<sub>i</sub>] a-a<sub>i</sub>-swi-kot-ile ku-ambal-el-a [xona xirhami] (pro past-she-it-able-perf with to-dress-appl-fv it cold: she was able to dress for the cold)

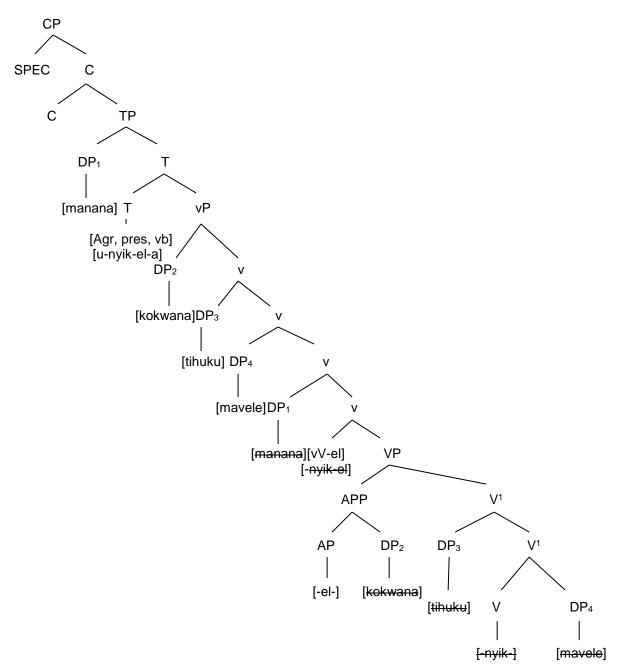
Benefactive with applicative object:

A-swi-pfun-i nchumu ku-vutis-el-a [loyi] (Neg-it-help-neg something to-ask-appl-fv this-one: it does not help anything to ask this one)

# **Applicative with ditransitive verbs**

## **Syntax**

Manana u-nyik-el-a [kokwana] [tihuku] [mavele] (Mother Agr-give-appl-fv grandmother chickens mealies: Mother gives mealies to the chickens on behalf of grandmother)



Such sentences as above with three internal arguments are very difficult to conceptualize and they appear infrequently. However, two internal arguments with ditransitive applied verbs are more acceptable:

## Recipient:

[pro] ndzi-rhum-el-a wansati mali (pro l-send-appl-fv wife money: I send money to the wife)

#### Benefactive:

[pro] ndzi-lomb-el-a tatana mali (pro l-borrow-appl-fv father money: I borrow money for father)

# Cause with interrogative

Manana u-nyik-el-a yini n'wana swakudya? (Mother Agr-give-appl-fv what child food: Why is mother giving food to the child?)

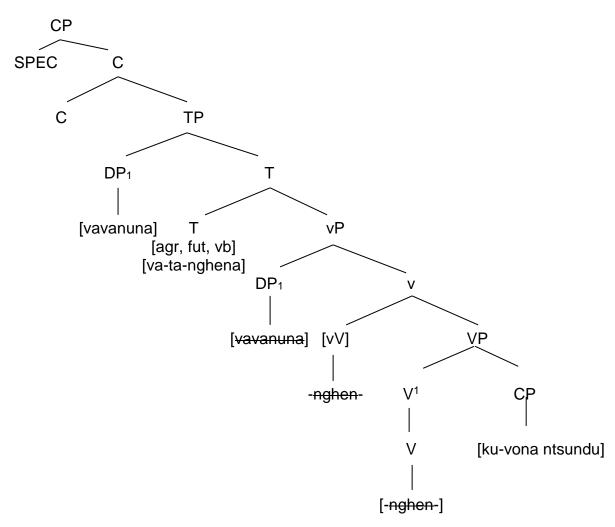
# 3.2 The applicative with an Infinitive clause

#### Intransitive verbs with the Infinitive

#### Structure

#### Intransitive verbs without the applicative:

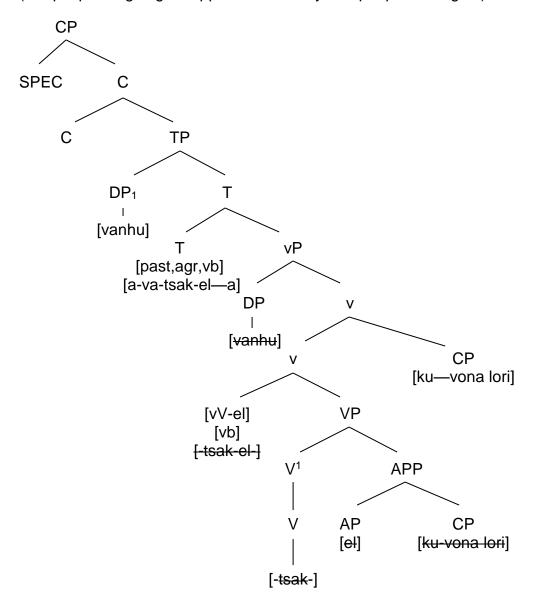
Vavanuna va-ta-nghena [ku-vona ntsumbu] (Men AgrS-fut-enter-fv to-see corpse: the men will enter to see the corpse)



The Infinitive clause [ku-vona ntsundu] is an adjunct of the intransitive verb [nghena] and thus it does not have the status of an argument and hence will not appear above the [VP]. [DP<sub>1</sub>] is the subject of the sentence.

#### Intransitive verbs with the applicative

Vanhu a-va-tsak-el-a [ku-vona lori] (People past-AgrS-glad-appl-fv to-see lorry: the people were glad)



The Infinitive clause [ku-vona lori] is an argument because of the applicative suffix [-el-] and hence appears within the [vP] with the applicative verb [-tsak—el-]. It has the reference of purpose from the applicative.

Intransitive verbs do not regularly appear with Infinitival clauses. They usually have to appear with the applicative suffix [-el-] as above. An exception to this is the intransitive verbs which are motion verbs. They may appear with Infinitival clauses with or without the applicative suffix. When they occur without the applicative suffix, the verb of the Infinitival clause must also be a motion verb:

#### Motion verb + Motion verb

Without applicative on matrix verb:

Vana v-a-tsutsum-a [ku-ya e-xikolwe-ni] (Children AgrS-pres-run-fv to-go loc-school: the children run to go to school)

The motion verb above represents running and the Infinitive clause in brackets is an adjunct of these verbs.

With applicative on matrix verb:

Vana va-tsutsum-el-a [ku-ya e-xikolwe-ni] (Children AgrS-run-appl-fv to-go loc-school: the children run to go to school)

The applicative [-el-] on the motion verbs above has a reference to purpose. The Infinitive has the status of an argument.

#### Motion verb + non-motion verb:

A matrix motion verb with a non-motion verb in the Infinitive clause is problematic:

Munna u-a-vhuy-a [u-renga modoro] (Man AgrS-pres-return-fv to-buy car: the man returns to buy a car)

However, with the applicative [-el-] on the matrix motion verb, the sentences above will be acceptable with a reference of purpose on the applicative:

Wanuna u-vuy-el-a [ku-xava movha] (Man AgrS-return-appl-fv to-buy car: the man returns to buy a car)

#### Non-motion verb + non-motion verb:

The non-motion verb in the matrix clause will need the applicative suffix [-el-] to be able to accept an Infinitival clause as its complement, also with a reference to purpose on the applicative:

\*Ricece r-a-ril-a [ku-vona manana]
Ricece ri-ril-el-a [ku-vona manana]
(Baby AgrS-cry-appl-fv to see mother: the baby cries to see his mother)

## Transitive verbs with the Infinitive

# Structure Transitive verbs without their objects Without the applicative suffix:

With psych verbs, specifically want verbs of desire:

Vana va-lav-a [ku-ngena] (Children AgrS-want-fv to-enter: the children want to come in)

With non-psych verbs:

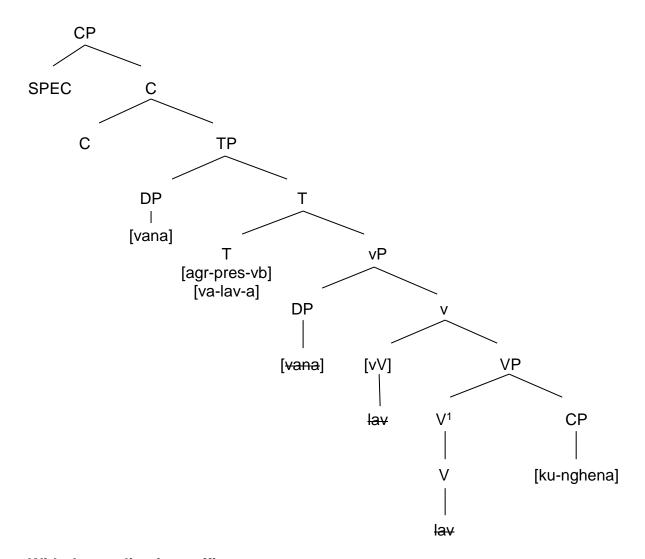
Vana v-a-dyondz-a [ku-humelela]

(Children AgrS-pres-read/study-fv to-pass: the children are studying/reading to pass)

The structure of these sentences will be the same as the structure of intransitive verbs without the applicative with an Infinitive clause as indicated above.

Van ava-lav-a [ku-nghena]

(Children AgrS-want-fv to-enter: the children want to come in)



## With the applicative suffix

\*Vana va-lav-el-a [ku-nghena]

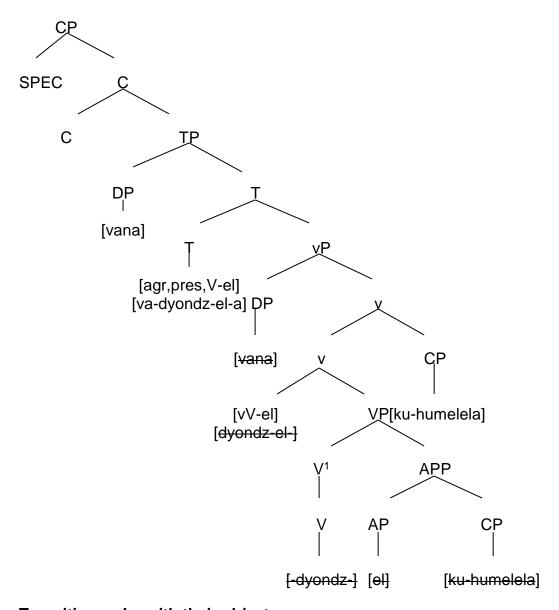
Non-psych verbs, however, may appear with the applicative suffix:

Vana va-dyondz-el-a [ku-humelela]

(Children AgrS-read/study-appl-fv to-pass: the children are reading/studying to pass)

The structure of this sentence will be similar to the one of intransitive verbs with the applicative above:

Van ava-dyondz-el-a [ku-humelela]

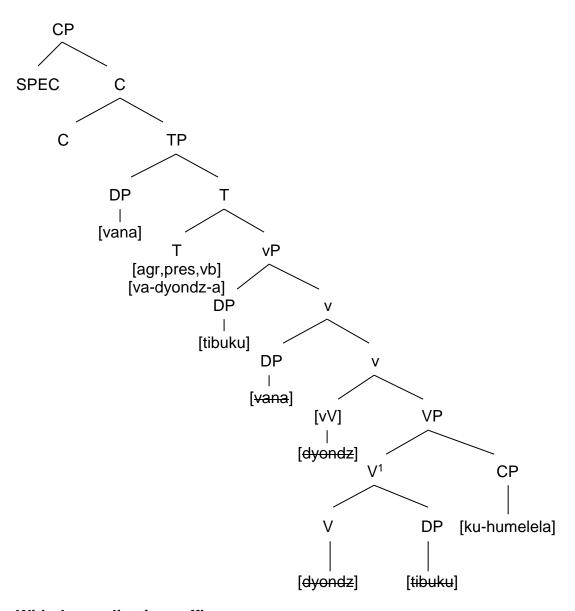


# Transitive verbs with their objects

# Without the applicatie suffix

Vana va-dyondz-a tibuku [ku-humelela] (Children AgrS-read/study-fv books to-pass: the children are reading/studying books to pass)

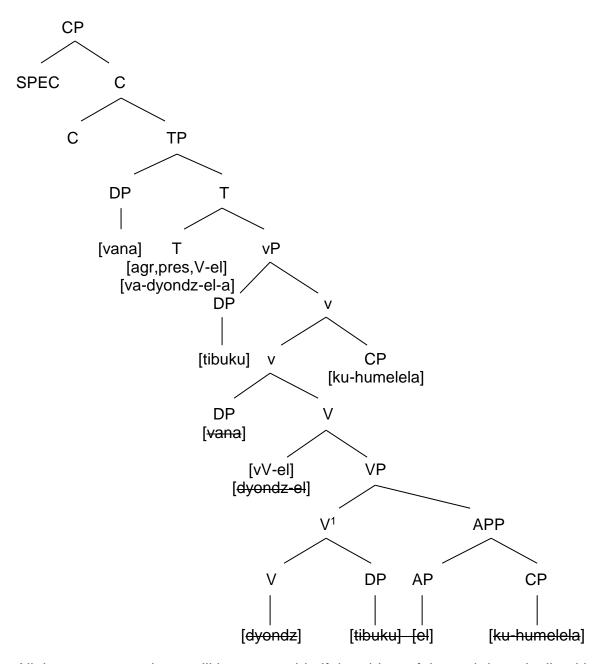
In this sentence above the Infinitive clause is an adjunct:



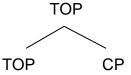
# With the applicative suffix:

Vana va-dyondz-el-a tibuku [ku-humelela] (Children AgrS-read/study-appl-fv books to pass: the children are reading/studying books to pass)

The infinitive clause is now an argument because it is dependent on the applicative suffix [-el-]:



All the sentences above will be acceptable if the object of the verb is topicalised in a structure such as the following:



AgrO of the topicalised object must be present on the verb:

[tibukui] [vana va-tii-dyondz-el-a [ku-humelela] (Books children AgrS-AgrO-read/study-appl-fv to-pass: books children read/study them to pass)

This structure allows the Infinitive clause to appear directly next to the applicative [-el-].

#### Ditransitive verbs with an Infinitive clause

# Without the applicative suffix

Manana u-nyika n'wana swakudya [ku-dy-el-a madyambu] (Mother AgrS-give-fv child food to-eat-appl-fv evening: Mother gives food to the child to eat for the evening)

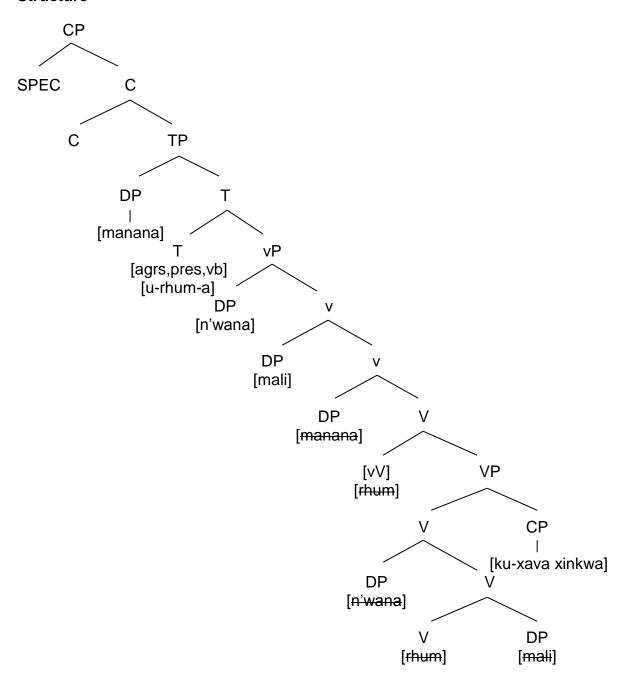
The ditransitive verb [nyik-] (give) above appear with two arguments i.e. a recipient (nwana) and a theme (swakudya). The Infinitive clause is thus an adjunct in the sentences above.

The verb for 'sending' behaves in a different way:

Manana u-rhum-a n'wana mali [ku-xava xinkwa] (Mother AgrS-send-fv child money to-buy bread: mother sends the child for money to buy bread)

The two arguments of [rhum] are [n'wana] and [mali]: [n'wana] is now the theme and [mali] is the purpose. The Infinitive remains an adjunct.

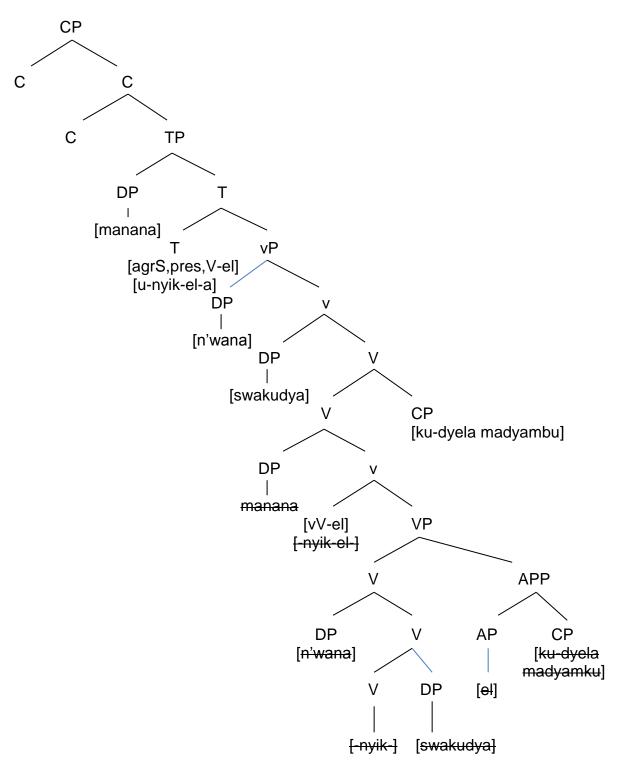
# **Structure**



# With the applicative suffix

Manana u-nyik-el-a n'wana swakudya [ku-dy-el-a madyambu] (Mother AgrS-give-appl-fv child food to-eat-appl-fv evening: mother gives food to the child to eat for the evening)

# Structure



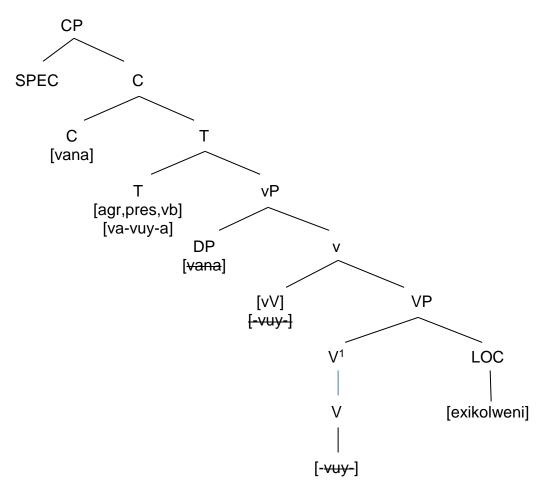
The applicative [-el-] is dependent on the Infinitive clause and gives it a reading of purpose.

# 3.3 The applicative with a locative phrase

# Intransitive verbs with a locative phrase

# Without the applicative

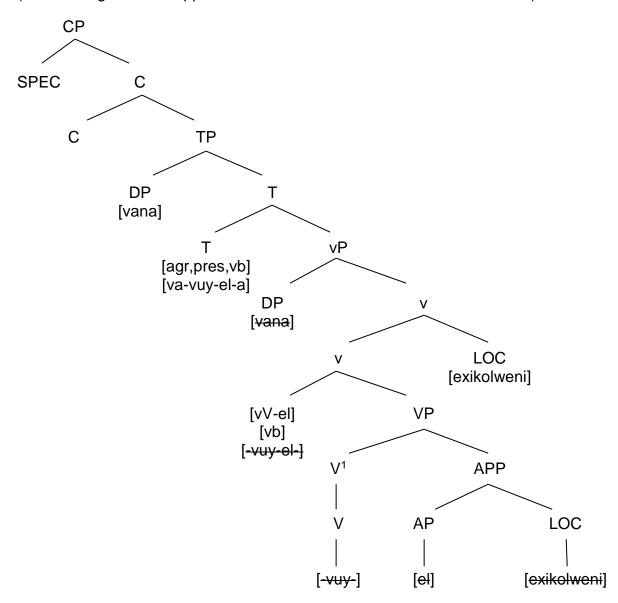
Van ava-vuy-a [exikolweni] (Chidlren AgrS-return-fv loc.school: the children return from school



The locative phrase [exikolweni] is an adjunct as indicated above and it has an interpretation of source from the verb [-vuy-] (return).

# With the applicative:

Van ava-vuy-el-a [exikolweni] (Children AgrS-return-appl-fv loc.school: the children return to the school)



The locative phrase is now dependent on the applicative [el] and its interpretation has changed from source to direction. It is an argument because of the applicative [el].

The interpretation of the locative argument:

# **Direction:**

Vana va-vuy-el-a [exikolweni] (Children AgrS-return-appl-fv school-loc: the children return to the school)

# Recipient:

Wanuna u-vilel-el-a [ehosini] (Man AgrS-complain-appl-fv loc-chief: the man complains to the chief)

# Purpose:

Wansati u-pfuk-el-a [entirhweni] (Woman AgrS-wake.up-appl-fv loc-work: the woman wakes up early to work)

## Location:

Mufana u-kul-el-a [la] (Boy AgrS-grow-appl-fv here: the boy grows up here)

# **Location or Exclusive location:**

Nhwana u-ril-el-a [ekerekeni] (Girl AgrS-cry-appl-fv loc-church: the girls cries in/only in church)

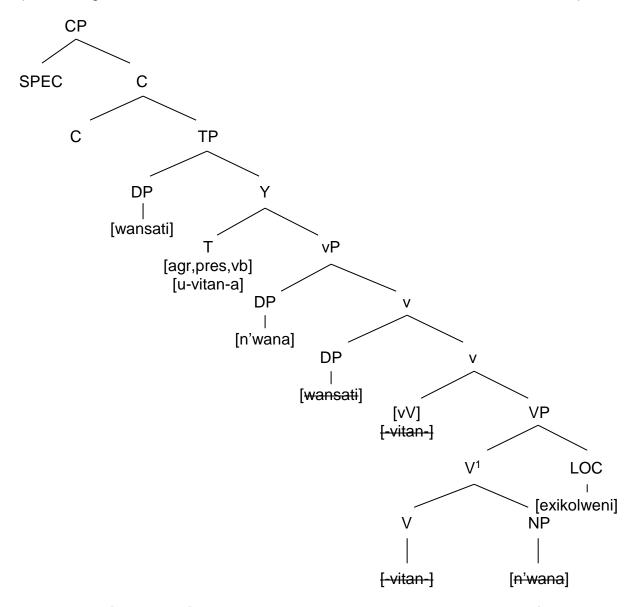
## **Direction or location:**

N'wana u-w-el-a [exitulwini] (Child AgrS-fall-appl-fv loc-chair: the child falls on/towards the chair)

# Transitive verbs with a locative phrase

# Without the applicative

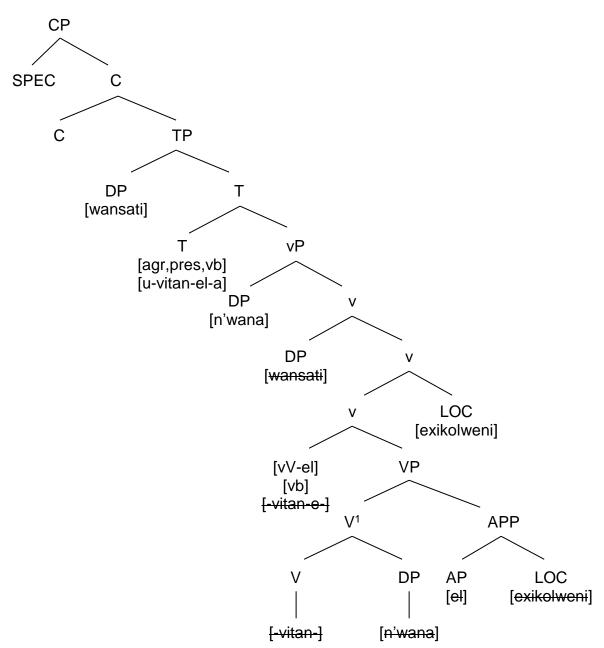
[Wansati] u-vitan-a [n'wana] [exikolweni] (woman AgrS-call-fv child loc.school: the woman calls the child from the school)



The locative [exikolweni] is an adjunct above and is interpreted as souce from the verb [-vitan-].

# With the applicative:

Wansati u-vitan-el-a [n'wana] [exikolweni] (Woman AgrS-call-appl-fv child loc.school: the woman calls the child to school)



The locative [exikolweni] is an argument because of the applicative [-el-] and it has an interpretation of direction.

The interpretation of the locative argument:

## **Direction**

Wansati u-vitan-el-a n'wana [exikolweni] (Woman AgrS-call-appl-fv child loc-school: the woman calls the child to school)

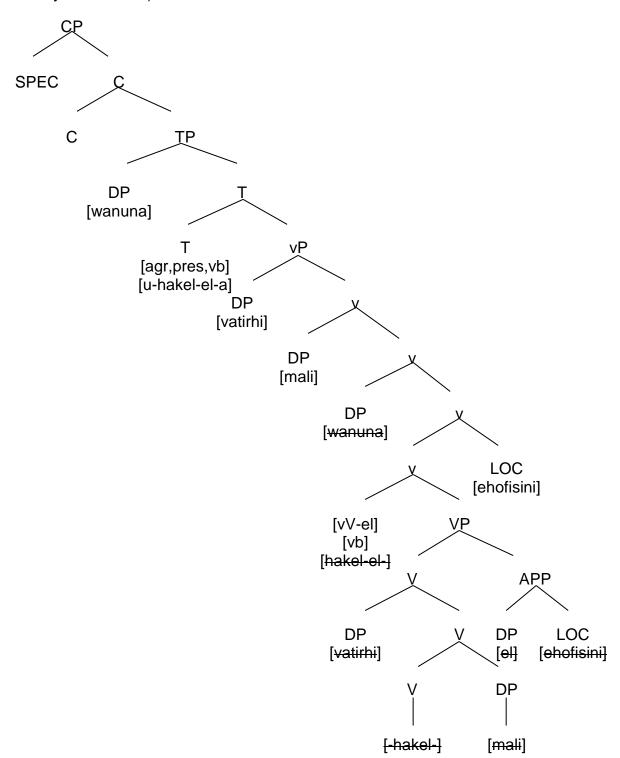
## **Location or Exclusive location**

Wansati u-tsem-el-a nyama [etafuleni] (Woman AgrS-cut-appl-fv meat loc-table: the woman cuts the meat on/only on the table)

# Ditransitive verbs with a locative phrase

Wanuna u-hakel-el-a vatirhi mali [ehofisini]

(Man AgrS-pay-appl-fv workers money loc-office: the man pays the workers money in/only in the office)



The applicative [-el-] gives the status of an argument to the locative [ehofisini] with the interpretation of exclusive location or implicit contrast. The recipient [vatirhi] and the theme [mali] are arguments of the verb [-hakel-].

#### 4. REFLEXIVE

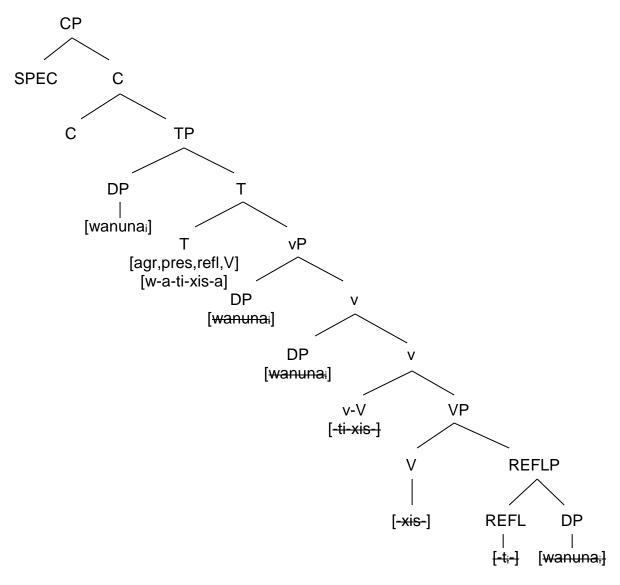
The reflexive appears as a prefix of a verb in all these languages and it always has only one form, i.e. it does not participate in any type of agreement. The prefixes are the following:

Xitsonga: [-ti-]

The reflexive refers to a construction where the subject and the object of a sentence relate to the same entity (Crystal 1980). The reflexive shows that the action in the sentence has its effect on the person or thing that does the action, e.g. "I enjoyed myself": **enjoy** is a reflexive verb and the pronoun **myself** is a reflexive pronoun (LDCE:873).

The reflexive is not a pronoun but a prefix of the verb as indicated above. It derives its properties from the subject and object of the sentence, both of which relate to the same entitity, as indicated in the structure below:

Wanuna wa-a-ti-xis-a (Man AgrS-pres-refl-deceive-fv: the man deceives himself)



The object **wanuna** is the same as the subject **wanuna** and it is thus controlled by the reflexive prefix.

# 4.1 Reflexive with transitive verbs

Without overt objects: [-refl-V-]:

See the structure above and the following example sentences with this structure:

Vana v-a-ti-dzun-a

(Children AgrS-pres-refl-praise-fv: the children praise themselves)

Vanhwana v-a-ti-rhandz-a

(Girls AgrS-pres-refl-like-fv: the girls like themselves)

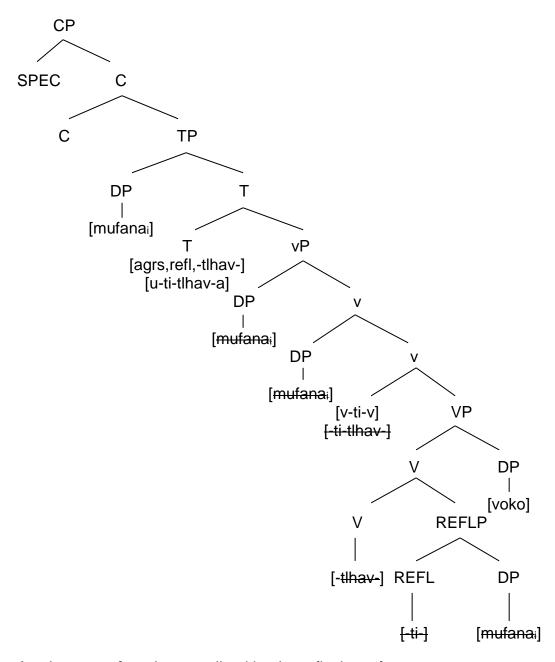
With overt DP: [-refl-V-DP]:

The DP above is not an object but an adjunct. The reflexive prefix will retain its structure above:

Mufana u-ti-tlhav-a voko (Boy AgrS-refl-stab hand: the boy stabs himself on the hand) Wansati u-ti-rival-a vusiwana

(Woman AgrS-refl-forget poverty: the woman forgets her poverty)

# **Structure**



As above, **mufana** is neutralized by the reflexive **-ti-**.

#### Reflexive verb with a locative:

Vana va-ti-hox-ile ematini

(Children AgrS-refl-throw-perf loc-water: the children threw themselves in the water)

Vanhu va-ti-hungat-a [hi nuwa]

(People AgrS-refl-amuse with game: the people amuse themselves with the game)

## Reflexive with an Infinitival clause

N'wana u-ti-sindziz-a [ku-ka [a-nga-nyanyuk-i] (Child AgrS-refl-force to-be-point he-neg-get.excited-neg: the child forced himself to the point when he does not get excited)

# Reflexive with a Participial clause

N'wana u-ti-kum-ile [a-ri endzeni ka hofisi ya nhloko] (Child AgrS-refl-find-perf [he-is inside of office of principal: the child found himself inside the office of the principal)

## 4.2 Reflexive with Ditransitive verbs

The indirect object reflects the reflexive:

Wansati u-ti-nyik-a tintangu

(Woman AgrS-refl-give-fv shoes: the woman gives herself shoes)

DP

[tintangu]

TP

DP T

[wansati]

T vP

[agr,pres,refl.V]

[u-ti-uyik-a]

DP v

[wansati]

DP v

[tintangu]

DP v

VP

This reflexive will appear in a structure such as the following:

# 4.3 Reflexive with the applicative verb

# With intransitive verbs

The reflexive is present because of the presence of the applicative which makes provision for an extra internal argument:

[v-ti-v-]

Refl

[ŧi]

[-ti-nyik-] RefIP

DP

[wansati][-nyik-]

Vana v-a-ti-vaby-el-a

(Children AgrS-pres-refl-be.ill-appl-fv: the children are just ill (without cause, on their own)

Vavanuna vh-a-ti-fik-el-a

(Men AgrS-pres-refl-arrive-appl-fv: the men are arriving by themselves (alone, without cause)

The reflexive prefix above with an intransitive verb with the applicative [-el-] has lost its meaning of reflexive and two new features are evident from the sentences above, i.e. without cause and solitary. These two features may both be present with this

type of applicative verb. The same interpretation of the reflexive as above is apparent when an idiomatic PP appears with these verbs:

Even with locatives no difference in interpretation appears because the locative is not dependent on the applicative:

Wansati u-ti-y-el-a [emakaya]

(Woman AgrS-refl-go-appl-fv loc-home: the woman goes by herself to home)

#### With transitive verbs:

# Without any object: [refl-V-el]

Vana v-a-ti-tlang-el-a

Vhana vha-a-di-tamb-el-a

(Children AgrS-pres-refl-play-appl-fv: the children are playing by themselves/for themselves)

As with intransitive verbs with the applicative as above, the reflexive may have another meaning of solitary but it may retain its reflexive meaning, making such sentences ambiguous.

# With objects: [refl-V-el-DP]

Wansati u-ti-swek-el-a swakudya

(Woman AgrS-refl-cook-appl-fv food: the woman cooks the food by herself/for herself)

As above both the solitary and the reflexive meaning are present, making these sentences also ambiguous.

#### With ditransitive verbs:

The ditransitive verb with the applicative ought to have three internal arguments, but with the reflexive only one overt DP appears and the reflexive meaning usually appears with the meaning of solitary as above:

Wanuna u-ti-lomb-el-a mali

(Man AgrS-refl-lend-appl-fv money: the man is just borrowing money for himself/by himself)

## 4.4 Reflexive with Causative verbs

The reflexive will retain its reflexive reference with causative verbs:

# With intransitive verbs

## [-refl-V-is-]

Munhu a-nga-kot-i [ku-ti-hany-is-a]

(Person AgrS-neg-be.able-neg to-refl-live-caus-fv: a person is not able to heal himself)

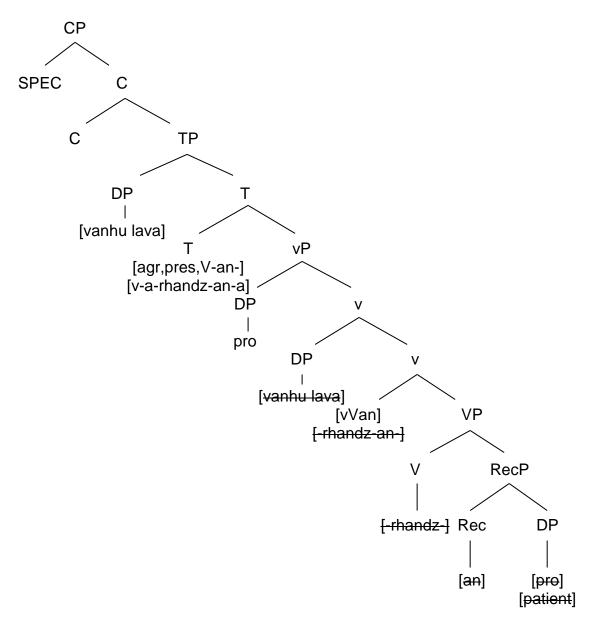
## 5. RECIPROCAL

Xitsonga has a reciprocal suffix [-an-] which is attached to transitive verbs:

Vanhu lava v-a-rhandz-an-a (People these AgrS-pres-love-recipr-fv: these people love one another)

The reciprocal expresses the meaning of mutual relationship with anaphors such as the reciprocal pronoun "each other" in English. This anaphor has to be bound by something within the sentence within which it appears, and it is usually bound by the subject of the sentence.

Xitsonga has no overt reciprocal pronouns but it may use an empty reciprocal pronoun with the feature of the internal argument, i.e. patient in the sentences above: [pro (patient)]. This empty anaphor is bound by the subject above which is the experiencer. A structure such as the following will show the reciprocal construction:



The subjects of reciprocal verbs need to be in the plural because the meaning of the reciprocal refers to a mutual relationship:

[Vavanuna] v-a-veng-an-a (Men AgrS-pres-hate-recipr-fv: the men hate one another) [Vana] v-a-landzel-an-a (Children AgrS-pres-follow-recipr-fv: the children follow one another)

Thus, if the subject of a reciprocal verb is in the singular, the sentence would be unacceptable:

\*Nhwana loyi] w-a-von-an-a (Girl this AgrS-pres-see-recipr-fv)

However, a mass noun may appear as subject with a reciprocal verb:

[Ndyangu] w-a-vita-an-a (Family AgrS-pres-call-recipr-fv: the family are calling one another)

The subject with a reciprocal verb may also be a coordinated DP with two or more members (see the (a) sentences below). Alternatively, one of the DPs may appear as complement of the associative **ni** or **na** (in the (b) sentences below):

- (a) [Wansati ni wanuna] vh-a-hlamul-an-a
   (Woman and man AgrS-pres-answer-recipr-fv: the woman and the man answer each other)
- (b) [Wansati] u-hlamul-an-a [ni wanuna] (Woman AgrS-answer-recipr-fv with man: the woman and the man answer one another)

A DP with a descriptive feature may appear as an adjunct with a reciprocal verb:

Vadyondzi lava va-navel-an-a [misisi] (Students these AgrS-admire-recipr-fv hair: these students admire each other's hair)

Vavasati va-von-an-a [ku-saseka] (Women AgrS-see-recipr-fv beauty: the women see each other's beauty)

There are various reciprocal verbs in which the reciprocal suffix has become fossilized and thus also dispensed with its meaning. However, most of these verbs appear in structures like the structures above with the verbs with a reciprocal suffix:

Sesotho: (a) Monna le ngwana ba-a-kopan-a (Man and child AgrS-pres-meet-fv: the man and the child meet)

(b) Monna o-kopan-a le ngwana (Man AgrS-meet-fv with child: the man meet with the child)

Some of these reciprocal verbs are given below:

Sesotho	IsiXhosa	Tshivenda	Xitsonga
kopana	dibana	ţangana	hlangana
fapana	ahlukana		
lekana	fana	fana	fana

A ditransitive verb with a reciprocal suffix may appear without its two objects or with one object, usually the direct object:

Vana v-a-vutis-an-a, va-vutis-an-a swivutiso (Children AgrS-pres-ask-recipr-fv, AgrS-ask-recipr-fv questions: the children are asking, they ask questions)

#### 6. PASSIVE

The passive causes a verb to loose its accusative case-marking capacity. Thus, passive constructions involve a process suppressing accusative assignment (checking) and it also changes the status of the external theta-role by realizing it as an adjunct (the "by"-phrase in English) (Hornstein o.a. 2005:103) or as an implicit argument. Government is however not necessary for case (Hornstein o.a. 2005:130). All cases should thus only be checked under the basic specifier-head relation.

#### 6.1 Intransitive verbs

Intransitive verbs have an external argument with a specific theta-role. This argument is de-externalized in the passive and may appear as an implicit argument or adjunct, as indicated above. The subject position of intransitive verbs will thus appear to be empty of any content. In effect, it will be designated as [pro] with the feature expletive or existential. The expletive pronoun resulting from this process has the following form:

[pro<sub>i</sub> ku-<sub>i</sub>]

The expletive morpheme coindexed with [pro] above may then appear in the empty subject position of sentences with intransitive passive verbs. These pronouns will have to be checked for nominative case:

[pro<sub>i</sub>] [k<sub>i</sub>-a-nghen-iw-a] (pro expl-pres-enter-pass-fv: there is being entered)

Passive sentences as above may appear with their de-exteralized arguments as an adjunct in a prepositional phrase with a preposition which has the form of a copula:

[pro<sub>i</sub>] ku<sub>i</sub>-etler-iw-ile hi vana [pro expl-sleep-pass-perf cop children: there has been slept by the children) (the verb **–etlel**- refers to sleeping)

There are various intransitive verbs which may appear with cognate or idiomatic objects (see i.a. Du Plessis 2010:14-22). In most of these cases, the intransitive verb now becomes a transitive verb:

Mpfula y-a-n-a

(Rain AgrS-pres-rain-fv: It is raining)

Mpfula yi-n-a [xihangu]

(Rain AgrS-rain-fv hail: hail is falling)

Xihangu xi-n-iw-a hi mpfula

(Hail AgrS-rain-pass-fv cop rain: hail is being rained by rain: hail is falling)

#### 6.2 Transitive verbs

Transitive verbs appear with an external and an internal argument in the subject and object position of a clause resp. With a passive verb, the external argument is deexternalized and the internal argument may not appear. As in the case of intransitive passive verbs, such verbs will also have no argument. The empty subject position will be filled by the expletive pronoun with an expletive morpheme:

[pro<sub>i</sub>] k-a-dy-iw-a

(pro expl-pres-eat-pass-fv: there is being eaten)

This expletive pronoun (pro) above will be checked for nominative case.

Alternatively, the internal argument may be retained with the passive verb. However, the passive suppresses the accusative case of this DP, but the expletive pronoun as above may be retained:

[proi]kui-dy-iw-ile [swakudya]

(pro expl-eat-pass-perf food: there has been eaten food)

The internal argument above may be moved to the empty subject position where it will be checked for nominative case:

[Swakudya] swi-dy-iw-ile [swakudya]

(Food AgrS-eat-pass-perf food: the food has been eaten)

The de-externalized argument may appear in a prepositional phrase as shown above for intransitive verbs. The sentences will be given below with this PP, i.e. [hi vana] (by the children):

- a. [pro] k-a-dy-iw-a [hi vana]
- b. [pro] k-a-dy-iw-a swakudya [hi vana]
- c. Swakudya sw-a-dy-in-a [swakudya] [hi vana]]

With a coindexed subject and object as in (c) above:

[Xitulu] xi-xav-iw-ile [xitulu] hi loyi wanuna

(Chair AgrS-buy-perf-pass chair cop this man: the chair has been bought by this man)

Some passive transitive verbs accept an adjunct DP:

Wanuna u-vek-iw-a [wanuna] hosi (Man AgrS-put-pass-fv man chief: the man is being installed as chief)

#### 6.3 Ditransitive verbs

As with the other verbs above, the external argument of ditransitive passive verbs is also de-externalized which will leave the subject position open:

```
[ ] –nyik-iw-a [wanuna] [mali] (-give-pass-fv man money)
```

Either of the two objects above may appear in the empty subject position.

[Wanuna] u-nyik-iw-a [wanuna] [mali] (Mali] yi-nyik-iw-a [wanuna] [mali]

- a. (man AgrS-give-pass-fv man money: the man is being given money)
- b. (Money AgrS-give-pass-fv man: money is being given to the men).

As second problem with the passive is the suppressing of the accusative case. In the sentences above only one of the objects will not appear with accusative case, i.e. the indirect object. The suppressing of the accusative case can clearly be seen in the presence or absence of objectival agreement of these two objects above:

```
[Wanuna] w-a-yii-nyik-iw-a [wanuna] [malii] (Man AgrS-pres-AgrO-give-pass-fv money: the man is being given it, the money) *[Mali] y-a-n'wi-nyik-iw-a [wanunai] [malii] (Money AgrS-pres-AgrO-give-pass-fv man: money is being given to him, the man)
```

Thus, the accusative case of the indirect object (wanuna) above has been suppressed because it cannot appear with its objectival agreement (**n'wi**) above.

The empty subject position may also be filled by an empty pro with an expletive morpheme:

```
[pro<sub>i</sub>] ku<sub>i</sub>-nyik-iw-a wanuna mali
(pro expl-give-pass-fv man money: there is being given money to the man)
```

However, with the expletive pronoun as above, the accusative case of both objects will be suppressed:

```
*[pro] ku-yii-nyik-iw-a [wanuna] [mali]
(pro-expl-AgrO-give-pass-fv man money
*[pro] ku-n'wii-nyik-iw-a wanunai mali
(pro expl-AgrO-give-pass-fv man money)
```

Both objects above may not appear with their objectival agreement.

Clauses with ditransitive passive verbs may appear without any arguments or sometimes with only one object argument:

```
[prop] ku-lomb-iw-ile (pro expl-lend-pass-perf: there has been lent)
```

[pro] ku-lomb-iw-ile mali (pro expl-lend-pass-perf money: there has been lent money)

#### 7. NEUTER PASSIVE

The syntax of clauses with neuter-passive verbs agrees with that of the passive with regard to the suppression of accusative case, the empty subject position, and the eventual co-indexing of subject and object. However, with the neuter-passive there is no implicit argument and it is also referred to as a non-agentive or agentless passive.

#### 7.1 With intransitive verbs

The empty subject position is filled by pro co-indexed with an expletive morpheme:

[pro<sub>i</sub>] k-a-etlel-ek-a (pro expl-pres-sleep-neut-fvc: there can be slept)

#### 7.2 With transitive verbs

The object argument loses its accusative case and may move to the empty subject position:

[Nhwana loyi<sub>i</sub>] w-a-rhandz-ek-a [nhwana loyi<sub>i</sub>] (Girl this AgrS-pres-love-neut-fv (girl this) (This girl is lovable)

The object argument above may not move although it will still loose its accusative case. The empty subject will be filled by pro with the expletive and the new subject and object will share a nominative case:

[proi] kui-rhandz-ek-a [nhwanai] (pro expl-love-neut-fv girl: there is lovable the girl)

#### 7.3 Ditransitive verbs

As in the case of the passive, either object of a ditransitive neuter verb may move to the empty subject position:

Indirect object:

[Vananunai] va-lomb-ek-ile [vavanunai] [mali] (Men AgrS-lend-neut-perf (men) money: the men could be lent money)

With a direct object:

[Mali<sub>i</sub>] yi-lomb-ek-ile [vavanuna] [mali<sub>i</sub>] (Money could be lent to the men)

As in the case of the passive, the indirect object always looses its accusative case because it may not appear with its agreement morpheme:

Vanuna va-yi-lomb-ek-ile <del>vanuna</del> [mali<sub>i</sub>] \*Mali yi-va-lomb-ek-ile [vanuna<sub>i</sub>] <del>mali</del>

The empty subject position may also be filled by an empty pro with an expletive morpheme (see the passive above):

pro ku-lomb-ek-a vavanuna mali

There is a general consensus in the literature on the semantics of the neuter-passive: see i.a. McLaren (1952:115) Bennie (1953:124), Van Eeden (1956:661), Doke (1965:138), Jordan (1966:105), Guma (1971:142), Pahl (ed.) (1989x1), Louwrens (1994:121).

The neuter-passive may refer to three possible meanings:

(a) Possibility: Tshimo e-a-lem-eh-a (the land can be ploughed)

(b) Obligation: Vana va-tsandz-ek-ile ku-ti-khoma (the children were unable

to control themselves)

Vanhu va-boh-ek-a [ku-thola vatirhi] (The people are bound to hire workers)

(c) State: Tshanda tsha monde tsh-o-vund-e-a (Left arm is broken)

## 8. DERIVATIONAL VERBS WITH TWO VERBAL SUFFIXES

# 8.1 Derivational verbs with the applicative and causative suffixes

#### With intransitive verbs:

# [V-is-el-[NP[NP]:

[N'wana] u-t-is-el-a [wansati] [kofi] (child AgrS-come-caus-appl-fv woman coffee: the child brings coffee for the woman)

In the sentence above the intransitive verb is [-t-] (come):

# Kofi y-a-t-a

(coffee AgrS-pres-come-fv: the coffee is coming)

When the applicative suffix [-el-] is added to this verb, a new internal argument will be necessary, i.e. [wansati] in the sentence above:

## Kofi yi-t-el-a wansati

(coffee AgrS-come-appl-fv woman: coffee is coming for the woman)

With the causative suffix ]-is-] a new external argument, a causative agent, will be necessary, i.e. [n'wana] above. The previous external argument [kofi] will now be an internal argument:

#### N'wana u-t-is-a kofi

(child AgrS-come-caus-fv coffee: the child brings the coffee)

With the suffixes [-is-el-] the verb will then have the two internal argtuments [wansati] with [-el-] and [kofi] with [-is-]:

N'wana u-t-is-el-a [wansati] [kofi]

# [V-is-el-[NP [LOC]:

[Wansati] [u-vuy-is-el-a [movha] [eka wanuna] (woman AgrS-come.back-caus-appl-fv car loc man: the woman is returning the car to the man)

The internal argument [movha] is dependent on the causative [-is-] and the locative [eka wanuna] on the applicative [-el-], denoting direction.

#### With transitive verbs

# [V-is-el-[NP [NP [nga-NP]

#### IsiXhosa

[Indodai] [ii-bhal-is-el-a [abazali [iileta [nga-bantwana]]] (Man AgrS-write-caus-appl-fv parents letters by-means-of-children: the man makes the children write letters to the parents).

The derivational verb **bhal-is-el-** above may appear with three internal arguments: **iileta** (letters) is the argument of the verb **bhala**, i.e. **-bhala iileta** (write letters); **abazali** (parents) is dependent on the applicative **-el-** and it has the semantic role of recipient; the PP with **nga-** has as complement **abantwana**. This is the internal causer which previously appeared as the external argument. The internal causer appears with the preposition **nga** in isiXhosa and Tshivenda only (see Du Plessis et al 1995:129 for Venda and Du Plessis, Visser 1992:38 for Xhosa). This argument is dependent on the causative **-is-**.

However, three internal arguments are infrequently attested in all of these languages, mainly because it is conceptually very difficult to interpret these arguments. Three internal arguments may appear frequently if one of the arguments is an interrogative which has to be dependent on the applicative **–el-**:

#### Sesotho:

[pro<sub>i</sub>] [o<sub>i</sub>-bola-is-ets-a-ng batho dikgomo?]]] (pro o-kill-caus-appl-fv-what people cattle: why are you making the people kill the cattle?)

The internal argument **dikgomo** is dependent on the verb **bolaya** (kill), i.e. **–bolaya dikgomo** (kill the cattle). The internal argument **batho** is the causer dependent on the causative **–is-** and the interrogative **–eng** (what) is dependent on the applicative **–el-** which appears as **–ets-** because of the presence of an [s] in **–is-**. It denotes **cause**, i.e. **–el-+-eng** (for what).

#### IsiXhosa

[pro<sub>i</sub>] [u<sub>i</sub>-m<sub>j</sub>-bhal-is-el-a-ni [umzali<sub>j</sub> [ileta?]] (pro you-him-write-caus-appl-fv-what parent letter: why do you let the parent write a letter?)

The only difference in structure with the Sotho sentence above is the compulsory presence of AgrO [-m-] of umzali. AgrO is compulsory in all sentences with [-el-+-ni-] (for what) denoting cause in isiXhosa.

The order of the suffixes is the opposite of the order in the section above, i.e. [-el-is-] vs [-is-el-].

# 8.2 Derivational verbs with the reciprocal and causative suffixes

# Causative and reciprocal

With intransitive verbs:

[V-is-an]:

#### Sesotho

[Ke [yena feela [eo [re-ka-phed-is-an-a-ng [le yena hamonate] (It-is he only rel.det we-can-live-caus-rec-fv-rel.suff. with him nicely: it is him only that we can cause each other to live with him nicely: it is only him that we can live together with him nicely).

The external causer with the causative suffix [-is-] is the empty pronoun pro with AgrS [re-] (we) together with the PP [le [yena]] (and/with him). The reciprocal suffix [-an-] gives rise to argument binding (Di Sciullo, Williams 1987). The internal causer above from the causative [-is-] will be bound by the external causer within the lexical structure of the verb [NP] [-phel-is-].

#### With transitive verbs

# [V-is-an-[NP]

[pro<sub>i</sub>] [a-va-<sub>i</sub>-nga-dzah-is-an-i [fole] (pro neg-they-pot-smoke-caus-rec-neg tobacco: they will not make each other smoke tobacco)

The internal argument of [-dzah-] (smoke) is **fole** (tobacco). The internal causer is bound by the external causer **pro** above within [-dzah-is-] because of the presence of the reciprocal [-an-].

# 8.3 Derivational verbs with the applicative and reciprocal suffixes

# [V-el-an-[NP]

[Vanai] [vai-lang-el-an-a [malekere] (Children AgrS-choose-appl-rec-fv sweets: the children choose sweets for one another

The internal argument such as [malekere] above is assigned by the verb [-lang-] (choose). The benefactive internal argument from the applicative [-el-] is not lexically present but it is bound by the external argument [vana] (children) through the reciprocal suffix [-an-].

# 8.4 Derivational verbs with the applicative and passive/neuter-passive suffixes

With both the passive and the neuter-passive constructions the subject and object of the verb are co-indexed but neuter-passives are non-agentive or agentless passives. The neuter-passive construction has thus no implicit argument:

# 8.4.1 Applicative and neuter-passive

# [V-el-ek-[NP]

[Vana<sub>i</sub>] [va<sub>i</sub>-tsem-el-ek-a [<del>vana</del><sub>i</sub>] [nyama] [Nyama<sub>i</sub>] [yi-tsem-el-ek-a [vana] [<del>nyama</del><sub>i</sub>]

- a. Children agrs-cut-appl-neut-fv meat: for the children are cut meat)
- b. Meat agrs-cut-appl-neut-fv children: meat is cut for the children

In both alternatives above, the children will remain the recipients from the applicative [-el-] and the meat will remain the patient as an internal argument of the verb **cut**. Either one of the objects above may appear as subject of the sentence because of the neuter affix.

# 8.4.2 Applicative and passive

#### Intransitive verbs

# [V-el-w-]

[wanunai] [ui-tal-el-w-e] [wanuna] (Man agrs-be.full-appl-pass-pf (man): for the man is being full, i.e. he is angry)

Wanuna is also dependent on the applicative [-el-]:

#### Transitive verbs

#### [V-el-w-[NP]

[Wanuna<sub>i</sub>] [u<sub>i</sub>-phem-er-iw-ile [wanuna] [ximarha] (Man agrs-break.off-appl-pass-pf.porridge; for the man has been broken off porridge)

**Wanuna** is dependent on [-el-] and has been moved because of [-w-]. It may sometimes happen that the applicative may be repeated after the passive morpheme in Xitsonga:

[Xikhongelo] xii-endl-iw-ile, [proi] [xii-endl-er-iw-el-a Nyiko] [xikhongeloi] (Prayer agrs-make-pass-pf, pro agrs-make-appl-pass-appl-fv Nyiko: (A prayer has been made, it has been made for Nyiko)

[Timhakai] [tii-vulavul-er-iw-el-a [ehansi] [timhakai] hi ku-hlevetala] (Events agrs-speak-appl-pass-appl-fv low (events) by to-whisper): events are being spoken in a low tone by whispering) (Mtombeni 65)

In the first sentence **xikhongelo** is the internal argument of **endla** (make), but is now the subject of the sentence. The NP **Nyiko** is dependent on the applicative [-el-] which appears before the passive  $-i\mathbf{w}$ - as  $-\mathbf{er}$ - ( $\mathbf{I} \rightarrow \mathbf{r}$  before [-i-], and after the passive as [-el-], but both referring to **Nyiko**. In the second sentence the applicative is also repeated both before and after the passive [-iw-]. The applicative refers to the locative [ehansi] (low). **Timhaka** is the internal argument of **vulavula** (speak).

# [-V-el-w-[INF]

[Vakrestii] [a-vai-pfumel-er-iw-i [ku-teka [vasati vambirhi] (Christians neg-agrs-allow-appl-pass-neg to-marry wives two: Christians are not allowed to marry two wives)

The infinitive with **ku-teka** is dependent on the applicative. The subject of the passive is **vakresti** which originated as the internal argument of [-pfumel-] (allow).

# 8.4.3 Neuter-passive and applicative

# [V-ek-el-[NP/LOC]

[Tindlelai] [tii-pful-ek-er-ile [vana] [tindlelai] (ways agrs-open-neut-appl-pf children (ways): (Ways have been opened for the children)

The neuter-passive verb [-pful-ek-] (be opened) above both refers to states. The applicative then denotes the receiver of this state, i.e. the beneficiary **vana** (children).

# 8.4.4 Passive and applicative

## [V-w-el-]

A combination of the passive suffix followed by an applicative suffix is not attested in these languages except for the combination of two applicative suffixes with a passive suffix between them in one instance in Xitsonga, as has been shown above, i.e. [-el-w-el-]. However, in such cases the two applicatives refer to the addition of one extra internal argument and not two arguments as expected from the presence of two applicative suffixes.

# 8.5 Derivational verbs with the causative and passive/neuter-passive suffixes

#### 8.5.1 Causative and neuter-passive

#### [V-is-ek-]

**IsiZulu:** Ku-ya-caca ukuthi abantu<sub>i</sub>] [a-ba<sub>i</sub>-fund-is-ek-ile [abantu<sub>i</sub>] [beze kahle

ukucula]

(It-pres-clear that people neg-agrs-learn-caus-neut-pf agrs-then well to-

sing: It is clear the people are not well taught to sing nicely)

The internal argument **abantu** from the causative morpheme [-is-] has moved through the neuter morpheme [-ek-].

# 8.5.2 Causative and passive

## [v-is-w-]

## Intransitive verbs

[Nuna<sub>i</sub>] [u<sub>i</sub>-vav-is-iw-ile [nuna<sub>i</sub>] hi vito leri (Husband agrs-hurt-caus-pass-pf (husband) by name this: the husband was hurt by this name)

The causative morpheme [-is-] is responsible for **nuna** which has been moved through the passive [-iw-].

#### **Transitive verbs:**

pro<sub>i</sub> va<sub>i</sub>-rivele [ni [leswi<sub>j</sub> [pro<sub>i</sub> a-va<sub>i</sub>-swi<sub>j</sub>-dyondz-is-iw-ile [pro<sub>j</sub>] [ekerekeni] (pro agrs-forget.pf also rel.det pro past-agrs-agro-learn-caus-pass-pf pro in-church: they have forgotten also what they were taught in church)

The subject of the relative clause [pro va-] is dependent on the causative [-is-] and has moved through [-w-].

# 8.5.3 Neuter-passive and causative

# [V-ek-is-]

[Wanunai] [ui-sas-ek-is-a [wanunai] [ku-biha ka mbilu yakwe] (Man agrs-be.beautiful-neut-caus-fv (man) (to-be.ugly of heart of-her: the man makes beautiful the ugliness of her heart)

wanuna is dependent on [-is-] and -ek-].

## 8.5.4 Passive and causative

# [V-w-y-]

## [V-w-is-]

Both are not attested.

# 8.6 Derivational verbs with the reciprocal and passive/neuter-passive suffixes

The combination of the reciprocal with a passive suffix is frequently attested.

## [V-an-w-]

[proi] [k-a-rhandz-an-w-a] (pro expl-pres-love-rec-pass-fv: there is being love by one another)

The empty subject is filled by an expletive because of the passive [-w-].

# 8.7 Derivational verbs with two applicative suffixes

It is possible for a reduplicated form of the applicative to appear with a verb.

# [V-el-el-[NP]

A noun phrase may appear as internal argument, but it is assigned by the verb and not by the applicative: the applicatives give an intensive meaning:

[pro] [a-va-ha-landz-el-el-i [mitila ya vatswari va vona] (pro neg-agrs-still-follow-appl-appl-neg spoor of parents of them: they no longer follow closely the spoor of their parents)

# [V-el-el-[LOC]

A locative phrase may appear with a reduplicated applicative suffix. The locative will have an interpretation of direction because of the applicative but the verb will also have an intensive meaning because of the reduplicated applicative:

[pro<sub>i</sub>] [u<sub>i</sub>-vuy-el-el-a [e-khixini-ni] (pro she-return-appl-appl-fv loc-kitchen: she returns repeatedly to the kitchen)

# [V-el-el-[NP][NP]

Each applicative suffix adds one internal argument. Thus, with intransitive verbs with reduplicated applicatives, there will now be present two internal arguments:

[proi] [ndzii-vuy-el-el-a [mudyondzi] [mali] (pro I-return-appl-appl-fv student money: I am returning to the student for money)

The two internal arguments above refer to direction and purpose. For other semantic roles with reduplicated applicatives see Du Plessis, Visser 1992:32-33.

One of the internal arguments may be an interrogative with a meaning of cause:

#### With intransitive verbs:

[proi] [ui-vuy-el-el-a yini [mali]? (pro you-return-appl-appl-fv-what money: why are you returning for the money?)

#### With transitive verbs:

Transitive verbs with reduplicated applicative suffixes may give rise to three internal arguments i.e. one from the verb and two from each of the applicatives. However, this is only possible if one of the internal arguments refers to cause as above:

Tshivenda: [proi] [ui-ńwal-el-el-a-ni [vhabebi] [luńwalo]?
Sesotho: [proi] [oi-ngol-l-el-a-ng [batswadi] [lengolo]?
Sitsonga: [proi] [ui-tsal-el-el-a yini [vatswari] [papilla]?
IsiXhosa: [proi] [ui-bai-bhal-el-el-a-ni [abazalii] [ileta]?

(pro you-write-appl-appl-fv-what parents letter: why are you writing

a letter to the parents?)

#### 8.8 Derivational verbs with two causative suffixes

The reduplicated causative suffix [-is-is-] denotes an intensifier which adds a stronger feeling to the meaning of a verb:

[pro<sub>i</sub>] [ndz<sub>i</sub>-a-va<sub>j</sub>-tw-is-is-a [pro<sub>j</sub>] (pro I-pres-them-hear-caus-caus-fv pro: I hear them very clearly)

#### **BIBLIOGRAPHY**

- Alexiadou, A. 2010. On the morphosyntax of (anti) causative verbs. In: M. Rappaport Hovav et al. (eds.): **Lexical semantics, syntax and event structure**. Oxford U.P.
- Alexiadou, A., Anagnostopoulou, E. 2007. Agent, causer and instrument PPs in Greek. **MIT working papers in linguistics** 20-22.5.
- Alexiadou, A., Anagnostopoulou, E. Everaert, M. 2004. Introduction (to Unaccusitivity). In: A. Alexiadou o.a. (eds.): **The unaccusativity puzzle**. Oxford U.P. (1-21).
- Alexiadou, A., Anagnostopoulou, E., Schäfer, F. 2006. The fine structure of (anti-)causatives **nels** vol. 36, 115-128.
- Alexiadou, A., Anagnostopoulou, E., Schäfer, F. 2006. The properties of anticausatives crosslinguistically. In: M. Frascarelli (ed.): Phases of Interpretation. Mouton de Gruyter (p. 187-211).
- Alexiadou, A., Anaguostopoulou, E. 2004. Voice morphology in the causative-inchoative alternation: evidence for a non-unified structural analysis of unaccusatives. In: A Alexiadou et al. (eds.): **The unaccusitivity puzzle**. Oxford U.P. (p. 114-136).
- Alsina, A., 1992. On the argument structure of causatives. **Linguistic Inquiry** 23(4), 517-555.
- Baker, M., Johnson, K., Roberts, I. 1989. Passive arguments raised. **Lingusitic Inquiry** 20(2), 219-251.
- Bennie, W.G. 1953. A grammar of Xhosa for the Xhosa-speaking. Lovedale Press.
- Bennis, Hans, 2004. Unergative adjectives and psych verbs. In: A Alexiadou et al (eds.): **The unaccusativity puzzle**. Oxford U.P. (84-113).

- Blanco, M.T. 2010. Contrasting causatives: a minimalist approach. D.Phil, Arizona.
- Boeckx, C. 2008. Bare syntax. Oxford University Press.
- Bordelois, I. 1988. Causatives: from lexicon to syntax. **Natural language and linguistic theory** 6(1), 57-93.
- Borer, Hagit. 1991. The causative-inchoative alternation: a case study in parallel morphology. **The linguistic review**, 8, 119-158.
- Brousseau, A-M., Ritter, E. 1991. A non-unified analysis of agentive verbs.

  Proceedings of the tenth West Coast Conference on Formal linguistics, 53-64.
- Chierchia, G. 2004. A semantics for unaccusatives and its syntactic consequences. In: A. Alexiadou et al (eds.): **The unaccusativity puzzle**. Oxford U.P. (22-59).
- Chomsky, N. 1993. A minimalist program for linguistic theory. In: K. Hale, S.J. Keyser (eds.):**The view from building 20**. The MIT Press.
- Chomsky, N. 1995. **The minimalist program**. The MIT Press.
- Chomsky, N. 2006. Approaching UG from below. M.S.
- Creissels, D. 2008. Remarks on split intransitivity and fluid intransitivity. **Empirical** issues in syntax and semantics, 7: 139-168.
- Crystal, D. 1980. A first dictionary of Linguistics and Phonetics. Andre Deutsch.
- Doke, C.M. 1965. **Textbook of Zulu grammar**. Longmans.
- Doke, C.M., Mofokeng, S.M. 1967. **Textbook of Southern Sotho Grammar**. Longmans.
- Du Plessis, J.A. 1995. Zulu syntax. MS.
- Du Plessis, J.A. 1996. The categories and phrase structures of the African languages. SCAL no. 5.
- Du Plessis, J.A., Musehane, N.M., Visser, M. 1995. Venda syntax. SCAL no. 1.
- Du Plessis, J.A., Nxumalo, N.E., Visser, M. 1995. **Tsonga syntax**. SCAL no. 2.
- Du Plessis, J.A., Visser, M. 1995. Sesotho syntax. SCAL no. 3.
- Du Plessis, J.A., Visser, M. 1996. Northern Sotho syntax. SCAL no. 4.
- Du Plessis, J.A., Visser, M. 1996. Tswana syntax. MS.
- Dyubeni, N.N. 1994. **Theta theory and the applicative in Xhosa**. M.A., Stellenbosch University.

- Embick, D. 2004. On the structure of resultative participles in English. **Lingusitic Inquiry** 35(3), 355-392.
- Embick, D., 2004. Unaccusative syntax and verbal alternations. In: A Alexiadou et al (eds.): **The unaccusitivity puzzle**. Oxford U.P. (p. 137-158).
- Erteschik-Shir, ., Rapoport, T. 2005. Introduction (to syntax of aspect). In: Erteschik-Shir, N., Rapoport, T. (eds.): **The syntax of aspect**. Oxford U.P.
- Erteschik-Shir, N. 2007. Information structure. Oxford University Press.
- Erteschik-Shir, N., Rapoport, T. 2005. Path predicates. In: N. ERteschik-Shir, T. Rapoport (eds.): **The syntax of aspect**. Oxford U.P.
- Erteschik-Shir, N., Rapoport, T. 2005. The syntax of aspect. Oxford U.P.
- Erteschik-Shir, N., Rapoport, T. 2007. Projecting argument structure: the grammar of hitting and breaking revisited. In: E. Reuland et al (eds.): **Argument structure**. John Benjamins (17-35).
- Erteschik-Shir, N., Rapoport, T. 2010. Contact and other results. In: M. Rappaport et al. (eds.): **Lexical semantics, syntax and event structure**. Oxford U.P.
- Fodor, J.A. 1970. Three reasons for not deriving "kill" from "cause to die". **Linguistic Inquiry**, 1(4), 429-438.
- Friendmann et al. 2008. The leaf fell (the leaf): the online processing of unaccusatives. **Linguistic Inquiry** 39(3), 355-377.
- Grimshaw, J. 1982. On the lexical representation of Romance reflexive clitics. In: J. Bresnan (ed.): **The mental representation of grammatical relations**. MIT (p. 87-148).
- Guasti, M.T. 1996. Semantic restrictions in Romance causatives and the incorporation approach. **Linguistic Inquiry** 27(2), 294-313.
- Gxowa, N.C. 1994. Ideophones in Xhosa. M.A., Stellenbosch University.
- Haiden, M. 2005. **Theta theory**. Mouton de Gruyter.
- Hale, K., Keyser, S.J. 1993. On argument structure and the lexical expression of syntactic relations. In: K. Hale, S.J. Keyser (eds.): **The view from building 20**. The MIT Press.
- Hale, K., Keyser, S.J. 1993. On argument structure and the lexical expression of syntactic relations. In: K. Hale, s.J. Keyser (ed.): **The view from building 20**. MIT.
- Hale, K., Keyser, S.J. 2002. **Prolegomena to a theory of argument structure**. The MIT Press (p. 1-27, 29-45, 205-225).

- Hale, K., Keyser, S.J. 2005. Aspect and the syntax of argument structure. In: N. Erteschik-Shir, T. Rapoport (eds.): **The syntax of aspect**. Oxford U.P.
- Härtl, Holden. 2003. Conceptual and grammatical characteristics of argument alternations: the case of decausative verbs. **Linguistics** 421(5), 883-916.
- Haspelmath, M. 1990. The grammaticization of passive morphology. **Studies in language** 14(1), 25-72.
- Haspelmath, M. 1993. More on the typology of inchoative/causative verb alternations. In: B. Comrie, M. Polinsky (eds.): **Causatives and transitivity**. John Benjamins (p. 87-120).
- Hlungwani, M.C. 1997. **The applicative construction in Xitsonga**. M.A., Stellenbosch University.
- Hornstein, N., Nunes, J., Grohmann, K.K. 2005. **Understanding Minimalism**. Cambridge University Press.
- Horvath, J., Siloni, T. 2010. Lexicon vs syntax: evidence from orphological causatives. In: M. Rappaport Hovav et. al. (eds.): **Lexical semantics, syntax and event structure.** Oxford U.P.
- Jackson, E.M. 2005. **Resultatives, derived statives and Lexical Semantic Structure**. D.Phil., U of California.
- Jokweni, C.K. 1991. Reflexive in Xhosa. M.A., Stellenbosch University.
- Kallulli, D. 2007. Rethinking the passive/anti-causative distinction. **Linguistic Inquiry** 38, 770-780.
- Katz, G. 2003. Event arguments, adverb selection and the strative adverb gap. In: E. Lang et al (eds.): **Modifying adjuncts**. Mouton de Gruyter.
- Kgoe, M.O.S. 1000. **Verbs of sending and carrying in Setswana**. M.A., Stellenbosch University.
- Koontz-Garboden, A. 2005. On the typology of state/change of state alternations. **Yearbook of Morphology**.
- Koontz-Garboden, A. 2009. Anticausativization. **Natural language and linguistic theory**, vol. 27 (p. 77-138).
- Kratzer, A. 1996. Severing the external argument from its verb. In: J. Rooryck, L. Zaring (eds.): **Phrase structure and the lexicon**. Kluwer Academic (p. 109-137).
- Labelle, M. 192. Change of state and valency. **Journal of linguistics** 28(2), 373-414.
- Labelle, M. 1990. Unaccusatives and pseudo-unaccusatives in French. **Proceedings of NELS 20**, vol. 2, 303-317.

- Lakoff, G. 1970. Irregularity in syntax. Holt, Rinehart and Winston (p. 91-107, 156-187).
- Larson, R. 1998. On the double object construction. Linguistic Inquiry vol. 19.
- Ledwaba, L.T. 1997. **Verbs of existence in Northern Sotho.** M.A., Stellenbosch University.
- Legate, J.A. 2005. Split ergativity in Warlpiri. In: K. Hiraiwa, J. Sabbagh (eds.): **Minimalist approaches to clause structure**. MITWPL (p. 129-149).
- Levin, B. 2009. Further explorations of the landscape of causation: comments on Alexiadou and Anagnostopoulou. **MIT working papers in linguistics** 49, 239-266.
- Levin, B. Rappaport Hovav, M. 2009. Lexical conceptual structure. In: K. von Heusinger et al (eds.): **Semantics: an international handbook of natural language meaning**. Mouton de Gruyter.
- Levin, B., Hovav, M.R. 2005. **Argument realization**, (par. 4.2: **aspectual approach**; par. 7: **Multiple argument realization**) Cambridge U.P.
- Levin, B., Rappaport Hovav, M. 1994. A preliminary analysis of causative verbs in English. **Lingua** 92, 35-77.
- Levin, B., Rappaport Hovav, M. 1995. **Unaccusativity: at the Syntax-Lexical Semantics interface**. The MIT Press.
- Louwrens, L.J. 1994. **Dictionary of Northern Sotho grammatical terms**. Via Afrika.
- Maboya, P.S. 1992. **Subject inversion in Sotho syntax**. M.A., Stellenbosch University.
- Mackenzie, I. Unaccusative verbs in Romance languages. Palgrave.
- Madadzhe, R.N., 1997. The copulative in Venda. D.Litt., Stellenbosch University.
- Madzivhandila, T.G. 1999. **Psych verb constructions in Venda**. M.A., Stellenbosch University.
- Mahlomaholo, N.E. 1993. **Agreement and concord in Southern Sotho**. M.A., Stellenbosch University.
- Makado, A.S. 1996. The semantic interpretation of the applicative in Venda. M.A., Stellenbosch University.
- Makgopa, M.A. 1996. **The relative clause in Northern Sotho**. M.A., Stellenbosch University.
- Makhubu, R.L. 19097. **The applicative construction in Zulu**. M.A., Stellenbosch University.

- Malete, E.N. 2001. **Negation in Sesotho**. D.Litt., Stellenbosch University.
- Mali, Z.O., 1995. **The existential sentences in Xhosa**. M.A., Stellenbosch University.
- Malima, N.N. 1993. **Ideophones in Tshivenda**. M.A., Stellenbosch University.
- Malungani, E.T. 2004. **Break and bend verbs in Xitsonga**. M.A., Stellenbosch University.
- Manzini, M.R. 1983. On control and control theory. **Linguistic Inquiry** 14(3), 421-446.
- Marantz, A. 1984. **On the nature of grammatical relations**. MIT (Alternations p. 166-291).
- Maudu, N.P. 1997. The syntax of predicates denoting change of state in Venda. M.A., Stellenbosch University.
- Mavumengwana, N.G. 1998. **Verbs of creation and transformation in Xhosa**. M.A., Stellenbosch University.
- McKoon, G., Macfarland, t. 2000. Externally and internally caused change of state verbs. **Language** 76(4), 833-858.
- McLaren, J. 1952. **A Xhosa grammar**. Longmans.
- Mdumela, T.A. 1996. Weather verbs in Tsonga. M.A., Stellenbosch University.
- Mendu, V.B.N. 1997. **The verbs of change of state in Xhosa**. M.A., Stellenbosch University.
- Miller, D.G. 1993. **Complex verb formation**. John Benjamins.
- Mini, D.M., a.o. 2003. **The greater dictionary of Xhosa. Vol. 2**. University of Fort Hare.
- Mittwoch, A. 2010. Event measurement and containment. In: M. Rappaport Hovav et al. (eds.): **Lexical semantics, syntax and event structure**. Oxford U.P.
- Mkhabele, Z.G.G. 1999. The applicative consruction in Northern Sotho. M.A., Stellenbosch University.
- Mletshe, L.K. 1995. **The subject in Xhosa**. M.A., Stellenbosch University.
- Mmbulaheni, N.D. 1997. **Causative constructions in Tshivenda**. M.A., Stellenbosch University.
- Mnqumeni, C.N. 1996. **Motion verbs in Xhosa**. M.A., Stellenbosch University.
- Mojapelo, M.L. 1997. **Weather verb constructions in Northern Sotho**. M.A., Stellenbosch University.

- Moloto, A.N. 1992. Agreement and concord with conjoined noun phrases in Northern Sotho. M.A., Stellenbosch University.
- Molotsi, K.J. 1993. **The characteristics of Southern Sotho ideophones**. M.A., Stellenbosch University.
- Motaung, P.S. 1991. **Control in Infinitives in Sesotho**. M.A., Stellenbosch University.
- Motsei, A.S. 1993. The semantic interpretation of the applicative in Sesotho. M.A., Stellenbosch University.
- Mpeko, N.G. 1992. The existential sentences in Southern Sotho. M.A., Stellenbosch University.
- Mphigalale, T.A. 1997. **Verbs of change of possession in Venda**. M.A., Stellenbosch University.
- Mpola, M.N. 1996. **The question word constructions in Xhosa**. M.A., Stellenbosch University.
- Mqingwana, V.J. 1994. **Theta theory and the causative in Xhosa**. M.A., Stellenbosch University.
- Mtimka, N.S. 1999. **Verbs of change of possession in Xhosa**. M.A., Stellenbosch University.
- Musehane, N.M. 1991. **The locative categories in Tshivenda**. M.A., Stellenbosch University.
- Mushiane, A.C. 1999. **The preposition <u>na</u> in Tshivenda**. M.A., Stellenbosch University.
- Neethling, S.J. 1972. Die ideofoon in Xhosa. M.A., U.P.E.
- Nekhumbe, M.G. 1995. Weather verbs in Venda. M.A., Stellenbosch University.
- Nemudzivhadi, N.E. 1995. **The syntactic properties of the subject in Venda**. M.A., Stellenbosch University.
- Nokele, A.B.B. 1996. **The syntax of the ideophone in Xhosa**. M.A., Stellenbosch University.
- Onozuka, H. Remarks on causative verbs and object deletion in English.
- Pahl, H.W. a.o. 1989. **The greater dictionary of Xhosa. Vol. 3.** University of Fort Hare.
- Paroz, R.A. 1946. **Elements of Southern Sotho**. Morija Sesuto Book Depot.
- Paroz, R.A. 1974. **Southern Sotho English dictionary**. Morija Sesuto Book Depot.

- Parsons, T. 1990. Events in the semantics of English: a study in subatomic semantics. The MIT Press (p. 20-39, 105-126, 167-206).
- Perlmutter, D.M. 1978. Impersonal passives and the unaccusative hypothesis.

  Proceedings of the fourth annual meeting of the Berkely Linguistic Society 4, 157-189.
- Perlmutter, D.M. 1978. Impersonal passives and the unaccusative hypothesis.

  Proceedings of the annual meeting of the Berkely Linguistic Society, vol. 4 (157-189).
- Pittner, K. 2003. Process, eventuality and wieder/again. In: E Lang et al. (eds.): **Modifying adjucnts**. Mouton de Gruyter.
- Pollock, J.-Y. 1989. Verb movement, Universal Grammar and the structure of IP. Linguistic Inquiry vol. 20.
- Pylkkänen, M. 2002. Applicatives. In: **Introducing arguments** p. 17-72 (D.Phil, MIT).
- Pylkkänen, M. 2002. Causatives. In: **Introducing arguments** p. 73-120. (D.Phil, MIT).
- Rabothata, S.G. 1997. Causative constructions in Northern Sotho. M.A., Stellenbosch University.
- Ramaliba, T.Z. 1992. Agreement and concord with the conjoined NPs in Tshivenda. M.A., Stellenbosch University.
- Ramchand, G.C. 2008. Verb meaning and the lexicon. Cambridge U.P. (par. 6:150-192).
- Ramovha, T.R. 1996. **Motion verb constructions in Venda**. M.A., Stellenbosch University.
- Rankhododo, T.K. 1992. **Double object constructions in Tshivenda**. M.A., Stellenbosch University.
- Raphalalani, T.D. 1997. **The Passive constructions in Venda**. M.A., Stellenbosch University.
- Rappaport Hovav, M., Doron, E., Sichel, I. 2010. Introduction (to Lexical semantics, syntax and event structure). In: M. Rappaport Hovav et al. (eds.): **Lexical semantics**, **syntax and event structure**. Oxford U.P.
- Rappaport Hovav, M., Levin, B. 2002. Change of state verbs: implications for theories of argument projection. BL528.
- Rappaport Hovav, M., Levin, B. 2005. Change-of-state verbs: implications for theories of argument projection. In: N. ERteschik-Shir, T. Rapoport (eds.): **The syntax of aspect**. Oxford U.P.

- Rappaport Hovav, M., Levin, B. 2010. Relfections on Manner/Result complementarity. In: M. Rappaport Hovav, E. Doron, I. Sichel: **Lexical semantics, syntax and event structure**. Oxford U.P. (p. 21-38).
- Rappaport Hovavn, M., Levin, B. 1998. Building verb meanings. In: M. Butt, W. Gender (eds.): **The projection of arguments**. CSLI.
- Ravele, H.I. 1996. Locative inversion in Venda. M.A., Stellenbosch University.
- Reinhart, t. 2002. The Theta system an overview. **Theoretical linguistics** 28, 229-290.
- Reinhart, T., Siloni, T. 2004. Against the unaccusative analysis of reflexives. In: A. Alexiadou et al. (eds.): **The unaccusativity puzzle: explorations of the syntax-lexicon interface**. Oxford U.P. (159-180).
- Reinhart, T., Siloni, T. 2005. The lexicon-syntax parameter: reflexivization and other arity operations. **Linguistic Inquiry** (36(3), 389-436.
- Reuland, E., Bhattacharya, T. Spathas, G. (eds.). 207. **Argument structure**. John Benjamins.
- Richa. 2008. Unaccusitivity, unergativity and the causative alternation in Hindi: a Minimalist analysis. D.Phil., Jawaharlal Nehru University.
- Ritter, E., Rosen, S.T. 1998. Delimiting events in syntax. In: M. Butt, W. Gender (eds.): **The projection of arguments**. CSLI.
- Rizzi, L. 2004. On the cartography of syntactic structures. In: L. Rizzi (ed.): **The structure of CP and IP**. Oxford University Press.
- Roeper, T. 1987. Implicit arguments and the head-complement relation. **Linguistic Inquiry** (18(2), 267-310.
- Sadiki, M.F. 1992. **The Infinitive in Venda**. M.A., Stellenbosch University.
- Schäfer, F. 2008. The syntax of (anti-) causatives. External argument sin change-of-state contexts. John Benjamins.
- Schäfer, F. 2009. The causative alternation. **Language and Lingusitics Compass** 3/2, 641-681.
- Schoorlemmer, M. 2004. Syntactic unaccusativity in Russian. In: A Alexiadou et al. (eds.): **The unaccusativity puzzle: explorations of the syntax-lexicon interface**. Oxford U.P. (207-242).
- Sepota, M.M. 1992. **Properties of objects in Northern Sotho**. M.A., Stellenbosch University.
- Shibatani, M. 2001. Introduction: some basic issues in the grammar of causation. In: M. Shibatani (ed.): **The grammar of causation and interpersonal manipulation**. John Benjamins (p. 1-22).

- Shibatani, M., Pardeshi, P. 2001. The causative continuum. In: M. Shibatani (ed.): **The grammar of causation and interpersonal manipulation**. John Benjamins (p. 85-126).
- Silidi, W. 1998. Verbs of removing in Tshivenda. M.A., Stellenbosch University.
- Sineke, T.G. 1997. Agreement and concord with conjoined noun phrases in Xhosa. M.A., Stellenbosch University.
- Smith, C.S. 1970. Jespersen's 'move and change' class and causative verbs in English. In: M.A. Jazayery et al. (eds.): **Linguistic and literary studies in honor of Archibald A. Hill,** vol. 2. Peter de Ridder Press.
- Steinbach, M. 2004. Unaccusatives and anticausatives in German. In: A Alexiadou et al (eds.): **The unaccusitivity puzzle**. Oxford U.P. (p. 181-206).
- Tatevosov, S. 2008. Subeventual structure and non-culmination. **Emprical issues in syntax and semantics** 7:393-422.
- Theledi, K.M.A. 1998. Verbs of putting in Setswana. M.A., Stellenbosch University.
- Tlaka, M.G. 1997. **The syntactic properties of the subject in Northern Sotho.** M.A. Stellenbosch University.
- Tshabe, S.L. a.o. 2006. **The greater dictionary of IsiXhosa. Vol 1.** University of Fort Hare.
- Tshikhwalivha, M.E. 1995. **The syntax of question word constructions in Venda**. M.A., Stellenbosch University.
- Tshithukhe, A.S. 1997. **Implicit argument constructions in Venda**. M.A., Stellenbosch University.
- Tunzelana, N.M. 1993. **The clausal infinitive in Xhosa**. M.A., Stellenbosch University.
- Twabu, N.I.E. 1998. Verbs of putting in Xhosa. M.A., Stellenbosch University.
- Van de Visser, M.A. 2006. **The marked status of ergativity**. LOT.
- Van Eeden, B.I.C. 1956. **Zoeloe-Grammatika**. Universiteitsuitgewers.
- Van Hout, A. 2004. Unaccusativity as telicity checking. In: A. Alexiadou et al (eds.): **The unacusitivity puzzle**. Oxford U.P. (60-83).
- Veenstra, T. 2004. Unaccusativity in Saramaccan: the syntax of resultatives. In: A Alexiadou et al. (eds.): **The unaccusativity puzzle: explorations of the syntax-lexicon interface**. Oxford U.P. (269-287).
- Von Stechow, A. 1995. Lexical decomposition in syntax. In: U. Egli et al. (eds.): Lexical knowledge in the organization of language. John Benjamins (p. 81-117).

Von Stechow, A. 1996. The different readings of Wieder 'Again': a structural account. **Journal of semantics** 13, 87-138.

Walaza, N.I. 1997. Syntax of predicates denoting displacement in Setswana. M.A., Stellenbosch University.

### **Abbreviations**

adj adjective agr agreement

AgrO objectival agreement subjectival agreement

applicative appl causative caus cop copulative determiner det expl expletive fut future tense fv final vowel inf infinitive instr instrument intransitive intr loc locative negative neg neut neuter pass passive past tense past perf perfect tense poss possessive present tense pres participle ptc recipr reciprocal refl reflexive

subj subjunctive top topic tr transitive vb verb

rev

reversive