1. Introduction

Generally, the term Xitsonga refers to a group of closely related Bantu languages spoken in Mozambique, South Africa, Swaziland, and Zimbabwe which includes Xichangana, Xironga, and Xitswa spoken in Mozambique by approximately three million people. All the languages that comprise Xitsonga are mutually intelligible.

The data in this paper is from the Xhiengwe dialect as spoken in the Mozambican district of Manjacaze, Gaza province. Xhiengwe is the writer's own dialect and, therefore, the examples given below — unless otherwise specified — reflect his intuition.

As in other Bantu languages, the nouns in Xitsonga fall into classes distinguished by pairs of prefixes, one denoting singular and the other plural, and these determine verbal agreement, modifier agreement and quantifier agreement. The noun classes are referred to by numbers, as shown in the glosses. The agreement marker (class prefix) must be present, otherwise the sentence will be ill-formed. Consider the examples in (1).

(1) a. Xi-ngove xa-mina xo-basa xi-lav- a ntswamba
   7 cat 7 me 7 white 7-want-PRS 3 milk
   "My white cat wants milk"

b. Swi-ngove swa-mina swo-basa swi-lav- a ntswamba
   8 cat 8 me 8 white 8-want-PRS 3 milk
   "My white cats want milk"

c. * Swi-ngove mina swo-basa swi-lava ntswamba

In a discourse initial sentence as in (1a), the subject and the object are expressed by means of noun phrases (NPs). However, given an appropriate contextual situation or in a sentence related to previous discourse, the subject or object syntactic functions can be filled by clitics as shown in (2).

(2) Swa- mina swo-basa swa-wu- lav- a
   8 they me 8 white 8-3 CL wr-want-PRS
   "My white ones want it"

The choice of the clitic to fill the subject or object argument functions, as indicated in (2), is determined by the class prefix of the noun in question. Thus, one may suggest that cliticisation in Xitsonga consists of copying the noun class prefix of the NP to be cliticised.

Xitsonga uses three strategies for forming reflexive expressions, namely -ti-, -ek- and -xe, as can be more clearly seen in (3b), (3c), (3e), (3f), and (3g).
(3) a. Swi-ngove swa-mina swi-his-ile gwanyi.
    8 cat 8 me 8 burn-PST 3 grass
    "My cats have burnt the grass"

b. Swi-ngove swa-mina swi-ti- his- ile
    8 cat 8 me 8 -RFL-burn-PST
    "My cats have burnt themselves"

c. N’wana a- ti- his- ile
    1 child 1SM-RFL-burn-PST
    "The child has burnt himself"

d. Ndzi-ti- won-ile ti-ngwana tic
    1 l 9 CL-see-PST 9 dog yesterday
    "I saw them, the dogs yesterday"

e. Xi-pfalo xa-pful-ek- a
    7 door 7- open-RFL-PRS
    "The door opens"

f. Swi-ngove swa-mina swi-famb-a ha swo-xe
    8 cat 8 me 8 -walk-PRS by 8 alone
    "My cats walk by themselves"

g. N’wana a- famb-a ha ye-xe
    1 child 1 -walk-PRS by 1 alone"
    "The child walks by himself/herself"

As the examples in (3) show, the reflexive formative -ti- shares the same slot in the verbal complex as the object clitics in (3d) and (3f) (at times referred to as object markers). However, what holds -ti- distinctly apart from the object clitics and makes it closely resemble verbal suffixes such as the applicative -el-, the causative -ig-, and passive -ik- is that -ti- is invariable for person and class. For instance, swingove "cats" in (3d) and n’wana "child" in (3c) take the reflexive formative -ti- despite belonging to classes 6 and 1 respectively. In addition, as will be seen below, unlike the object clitic, -ti- gives rise to semantically different verbs, i.e. "new lexemes". Phonologically, as example (3d) shows, -ti- is identical to the object clitic -y- of class 9 which is a copy of the noun tingwana "dogs" of class 9 with which it is co-referential.

The use of -ek-, as indicated in (3e), is generally restricted to subject nouns such as xi-pfalo "door" which are neither [+human] nor [+animate]. What uses -ek- to the applicative -el-, causative -ig- and to the passive -ik- is that it is attached to the verbs in a similar fashion to these suffixes. In some instances, as is the case with -ti-, -ek- creates verbs with a different meaning.

By contrast, -xe parallels pronominal stems in that it occurs with the noun class prefix of the NP with which it is co-referential. Hence, while in (3d) it takes the swi- of class 6, in (3f) it selects ye of class 1. Swoxe in the former indicates that swingove "cats" walk by themselves, in contrast to something which needs some help. In a similar way, ye-xe in the latter shows that n’wana "child" is contrasted with somebody else who is unable to walk by himself.
The main argument in this paper is that the reflexive formatives -tš- and -ek- are nothing other than verbal affixes which, like the applicative, the causative and the passive affixes do, alter the valency of the verbs they are attached to. With regard to -tšo, it will be argued that it is a pronominal stem used to form independent reflexive pronouns whose discourse function is to focus or contrast (examples (27)).

While the following analysis of the reflexive formatives will be based on the Lexical Functional Grammar (LFG) as presented in Bresnan (1982), it will particularly draw on Grimshaw (1982).

LFG postulates three levels of structure, namely C(constituent) structure, F(function) structure, and A(argument) structure, also known as Thematic structure.

C-structure contains syntactic constituents such as NP, VP and the like, dominated by nodes whose terminals are lexical items, whereas F-structure contains syntactic functions like subject and object. Apart from these subcategorizable argument functions which are directly mapped onto the thematic roles in the Thematic structure, LFG also recognizes non-argument discourse functions such as Topic, Focus and Adjunct.

As for Argument (thematic) structure, Bresnan & Moshi (1990:166) point out that this level is a product of recent expansion of the LFG theory and represents a universal hierarchy of thematic roles going from agent, beneficiary/maleficiary, goal/experiencer, instrument, patient/theme to locative.

Although related by mapping principles, these three levels are independent, or in Bresnan & Kanerva's (1989:1) terms:

"Thematic structure, constituent structure, and functional structure are parallel information structures of different character. They are related not by proof-theoretic derivation, but by local structural correspondences, as a melody is related to the words of a song."

The independence of the levels of structure in LFG involves one of the main differences between this framework and Government and Binding (GB) theory: namely, while the former dispenses with a deep level (Deep-structure) and includes discourse functions such as Topic, and all the operations that alter the syntactic functions take place in the lexicon; the latter, on the other hand postulates Deep and Surface levels of syntactic structures, and relates them by means of transformations (Move α) which are regulated by syntactic principles, such as the Projection Principle, Theta Criterion and Case Theory.

Alterations to the predicate argument structure of verbs, by adding, fusing or suppressing theta roles are carried out by morpholexical operations (Bresnan and Moshi 1990). As will be seen below, the affixation of the applicative, causative, passive and reflexive morphemes to verbs exemplifies the application of such operations.

2. Reflexivization in Xitsonga

In this section each of the three strategies used to derive reflexive expressions in Xitsonga will be considered, with reference to the data in (3).
The verb kuhisa "to burn" in (3a) is transitive and here selects object gwanya; "grass". (4a) represents the lexical entry for the verb kuhisa "to burn" together with the thematic roles which form its predicate argument structure.

(4a) Kuhisa "to burn" ([(SUBJ), (OBJ)])

When the reflexive affix -ti- is attached to the verb kuhisa "to burn", the object is bound to the subject (agent) swingove "cats", and we get the reflexive verb kutihisa "to burn oneself/itself", as shown in (3b). In other words, the theta role associated with the object is suppressed and, consequently, the number of the arguments of the verb kuhisa "to burn" is reduced by one. Hence the predicate argument structure of the reflexive verb kutihisa "to burn oneself/itself" can be represented as follows:

(4b) Kutihisa "to burn oneself" ([SUBJ], [OBJ])

Taking into account this fact, Grimshaw (1982:106) suggests that reflexivization should be regarded as a morphological operation which applies a reflexive lexical rule to a predicate argument structure, and whose effect is to bind one argument to another. Here, the generalization is that, given a transitive two-place predicate, a reflexive predicate can be derived from it by binding its object to the subject.

Another way of looking at reflexivization is to take it as a process which transforms a transitive verb into an intransitive one. Following Resnahan (1982:166–169, 387), and Levi (1982:529-531), let us call such a process intransitivization. Given this, one interim prediction is that reflexivization cannot apply to an intransitive verb. Thus, reflexive predicates cannot be derived from verbs such as kufa "die" which lack objects, as is shown in (5).

(5) * Munhu a-ti- file
   1 person 1-RFL-die

As mentioned earlier, another fact which distinguishes -ti- from pronominal object clitics and makes it resemble derivational affixes is that -ti- tends to give rise to semantically different verbs. The meaning of such verbs gradually fossilizes, and eventually they enter the lexicon as independent items. The existence of many lexicalized infinitive reflexive verbs shows that reflexive verbs can be freely derived from non-reflexive transitive verbs, i.e., base verbs. Consider, for example, the verbs in (6) taken from Ntsanwisi (1968:51).

(6) Kuga "to eat" -> kutiga "to eat oneself" -> "to be snobbish, proud".

Kukhoma "to catch" -> kukikhoma "to hold oneself" -> "to be well-behaved".

Kutiva "to know" -> kutitiva "to know oneself" -> "to be conceited".

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The claim that the lexicalization of reflexive verbs is a gradual process is supported by the fact that while verbs such as kutihwa "to be snobbish" and kutihona "to be conceited" are no longer used in a reflexive context, kutikhoma can be used in reflexive and non-reflexive contexts. For instance, compare (7a) to (7b).

(7) a. Mamana a-ti-khom-ile
    1 mother I-RFL-catch-PST
    "The mother touched herself"

    b. Tolo mamana a a-kwat-ile kambe a-ti-khom-ile
    yesterday 1 mother IMP 1-angry-PST but 1 RFL-catch-PST
    "Although the mother was angry yesterday, she controlled
    herself"

In (7a) the reflexive verb kutikhoma "to catch, to touch oneself" is semantically still related to the non-reflexive verb kuhoma "to catch, to touch" in (6). By contrast, the reflexive verb kutikhoma "to be well-behaved, to control oneself" in (7b) has lost such a relation.

The reflexive affix -ti- can be used together with the applicative -ej- and the causative -je-, as shown in (8).

(8) a. Va-na va-swek-a mu-nambu
    2 child 2-cook-PRS 3 sweet potato
    "The children are cooking the sweet potatoes"

    b. Va-na va-swek-ej a mu-hambu kokwani
    2 child 2-cook-APPL-PRS 3 sweet potato 1 grand-mother
    "The children are cooking the sweet potato for
    grand-mother"

    c. Va-na va-ti-swek-ej a mu-nambu
    2 child 2-RFL-cook-APPL-PRS 3 sweet-potato
    "The children are cooking sweet-potato for themselves"

As (8b) indicates, the applicative suffix increases the valency of the verb kusweka "to cook" by one argument which bears the beneficary thematic role. Let us call such an argument object (OBJ2) as the verb becomes ditransitive. To make this point clear, compare (9a) and (9b) which represent the predicate argument of the verb kusweka "to cook" and kuswekela "to cook for" in (8a) and (8b) respectively.

(9) a. Kusweka "to cook" ((SUBJ), (OBJ))
    <Agent theme>

    b. Kuswekela "to cook for" ((SUBJ), (OBJ1), (OBJ2))
    <Agent theme beneficiary>

When the reflexivization applies, the beneficary (OBJ2) is bound to the subject and, as a result, the reflexive applicative verb kuswekela "to cook
for oneself" in (8c) is derived. (10) is the representation of the predicate argument structure of this verb.

(10) Kutiswekela "to cook for oneself" ([SUBJ], (OBJ1), (OBJ2))

\[<\text{Ag/ben theme} \quad \emptyset>\]

As indicated by the glosses in (8c), semantically a reflexive applicative verb derived from a transitive verb indicates the action it expresses is for the benefit of the subject (agent). However, when a reflexive applicative verb is derived from an intransitive verb, it denotes, among other things, that the action takes place by itself. Consider, for instance, the sentences in (11).

    1 child 1-sit- PRS
    "The child sits"

b. N'wana a-tsham-ei-a
    1 child 1-RFL-sit-APPL-PRS
    "The child sits by himself"

c. Mu-sotchwa a-t- ile
    1 soldier 1-die-PST
    "The soldier has died"

d. Mu-sotchwa a-ti-f- el- ile
    1 soldier 1-RFL-die-APPL-PST
    "The soldier has died a natural death"

While the intransitive base verb kutshama "to sit" in (11a) simply means that the child is sitting down, in (11b) the derived reflexive applicative verb kutishamela "to sit for oneself" denotes that the child sits by himself/herself, i.e., the child is sitting down on his own. In a similar way, as shown by the glosses, the reflexive applicative verb kutiile "to die by oneself" in (11c) indicates that the soldier died a natural death whereas kuta "to die" can either mean that the soldier has been killed or that he died naturally depending on the context. Here, it should be noted that reflexive applicative verbs are also used when the speaker intends to show sympathy for someone who has had a misfortune. Thus, the sentence in (11d) can be taken to indicate the speaker's attitude towards the death of the soldier, that is, his sympathy for the soldier's death.

As is the case with the reflexive verbs in (8b), applicative and reflexive applicative verbs tend to lexicalize and gradually acquire a new meaning which is unrelated to the meaning of the base verbs. Consider the following examples based on Ntsanwis. (1968:51).

(12) Kukhome "to catch, to touch" -> Kutikhomela "to touch oneself" -> "to control oneself" -> kukhomela "to catch for" -> "to forgive" -> kutikhomela "to hold for oneself" -> "to be careful with oneself".

Kutulu "to jump" -> kutilula "to exclude oneself from a group" -> "to omit oneself from a list" -> kutilulela "to jump for" -> "to assault, to attack" -> "to cross a border illegally" -> "to emigrate" -> kutiilela henhla "to jump skywards" -> "to deny vehemently" -> kutilulela "to
get oneself safe, to put oneself out of danger".

Kuwona "to see" -> kutiwnona "to see oneself" -> kutiwnela "to see for oneself" -> "to defend oneself"

Reflexive applicative verbs such as the ones in (12) can be freely formed from base verbs. While many such verbs are already listed in the lexicon of the language, that is, they have lexicalized completely, others such as kutiwnela have not yet fossilized completely. Thus, some can be used both in their literal and non-literal meanings, as can be more clearly seen in the examples (13) recorded from a conversation between two women in a market.

(13) A: Mundzuko ndzi-ta-tamb-a kaya ndzi-ya-ti-won-eli- a 
   Tomorrow 1 I-FUT-walk-PRS 5 home 1 I-go-RFL-see-APPL-PRS
   tukulu wa muna
   1 grandchild of 1 me
   "Tomorrow I will go home to see my grandchild for myself"

B: Hawaku! Kambe ioko unga phndzul-
   If only but if NEG wake up very early NEG
   u- ta- ti-won- el- a hikusa swabomba swa-tal- a
   1 you-FUT-RFL-see-APPL-PRS because 8 bus 8 - tuli-PRS
   "If only I could (I wish I were you). But if you don’t wake up very early, you will see yourself in trouble because buses are full."

The speaker A, after learning that her daughter had late a baby at their home village, tells her friend B that she wants to see her granddaughter "by herself" and, therefore, she is planning to go home the following day. She uses the reflexive applicative verb kutiwnela which literally means "to see by oneself". In response to the speaker’s statement, the listener (B) warns her that buses are full and, as such, the speaker should wake up early so as to allow enough time to catch a bus, otherwise there will be problems with her journey. In order to warn (A), (B) uses the same verb (phonologically identical), but with a totally different meaning.

The examples in (11b) and (11d) show that the reflexive affix -ti- can be used with intransitive base verbs provided that the applicative suffix -el- is also used: for instance, compare (11d) to (5). This means that, in order for -ti- to occur in an intransitive base verb, -el- must be present to introduce the argument (object) which is bound to the subject when reflexivization applies. This lends further weight to the argument that reflexive applicative verbs can be freely derived from base verbs whether transitive or intransitive. Hence, the restriction on its use with intransitive verbs referred to in relation to example (5) should be relaxed.

After dealing with the use of the reflexive affix -ti- in association with the applicative suffix -el-, its occurrence with the causative suffix -we- will be discussed. First, consider the examples in (14).

(14) a. Maria a-khwev-a cayi
   1 Mary 1-sup- PRS 3 tea
   "Mary is sipping tea"
b. Maria a-kgwev-ig- a cayi n'wana
   1 Mary 1-sip- CAUS-PRS 3 tea 1 child
   "Mary is making the child sip tea"

c. Maria a-ti- kgwev-ig- a cayi
   1 Mary 1-RFL-sip- CAUS-PRS 3 tea
   "Mary is making herself sip tea"

The verb kukhweva "to sip" in (13a) is transitive and, as a result, selects an
object (theme) such as cayi "tea". When the causative suffix is attached to the
verb kukhweva "to sip", the causative verb kukkanwimo "to cause to sip" in
(13b) is derived and a second object, e.g. n'wana "child" is introduced. It is
this object that is suppressed when the reflexive suffix -ti- applies to the
reflexive verb kukkanwimo "to make sip" and the reflexive causative verb
kukhweva "to make oneself sip" is derived. (14a), (14b) and (14c) represent
the predicate argument structure of (13a), (13b) and (13c) respectively.

(15) a. Kukhweva "to sip" ((SUBJ), (OBJ),
           <agent theme>)

b. Kukkanwimo "to cause to sip" ((SUBJ), (OBJ), (OBJ)),
   <agent theme experiencer>

c. Kukkanwimo "to cause oneself to sip" ((SUBJ), (OBJ), (OBJ)),
   <agent theme 0>

Apart from transitive verbs such as kukhweva "to sip" in (13), the reflexive
affix -ti- and causative suffix -ig- are also used with intransitive verb bases,
as shown in the examples in (15).

(16) a. Tate
       a-yetlela-
       1 elder sister 1-sleep- PRS
       "My elder sister is sleeping,"

b. Tate
       a-yetlela- 1s- a n'wana
       1 elder sister 1-sleep- CAUS-PRS 1 child
       "My elder sister is making the baby sleep"

c. Tate
       a-ti-yetlela -is- a
       1 elder sister 1-RFL-sleep-CAUS- PRS
       "My elder sister is making herself sleep"

The sentence (16b) shows that the causative suffix -is- increases the valency
of the verb kuyetlela "to sleep" (16a) by introducing an object, here n'wana
"child" which is bound to the subject when reflexivization applies, giving rise
to a reflexive causative verb in (16c).

As was the case with the examples discussed earlier, causative and reflexive
causative verbs often acquire a new meaning through a gradual lexicalization
process. For instance, depending on the context, kukkanwimo "to cause to
sleep" may be used in its predictable sense, as in (16d), as well as to mean that "my elder sister is tricking the child". Likewise, (16c) may either be taken literally (as in the glosses) or to indicate that "my elder sister is deceiving herself about something". In addition to the examples in (16), consider the following:

(17) Kufa "to die" -> kufina "to want something badly" -> kufinsa "to reign death".

Kuga "to eat" -> kugisa -> "to cause to eat" -> "to poison through food or drink" -> kugisa "to cause oneself to eat" -> to be able to support oneself"

All the examples given so far show that reflexivization applies to verbs which have not only a direct object but also an external argument, i.e. a subject (agent). Given the fact that passivization suppresses this syntactic function together with its theta role, the prediction is that the reflexive attar -ji- and the passive suffix -iy- will never coexist. Thus, the generalization is that reflexivization is subject to what one may term "the external argument requirement": it can only apply to verbs which select an external argument. This requirement would rule out sentences such (18).

(18) * Xi-ngove xu-ti-his- iy- ile
    7 cat  7-RPL-burn-PASS-PST

Taking into account the examples (13) and (14), the causative and the applicative suffixes can be said to have an identical effect on the predicate argument structures of the verbs to which they are attached in that they both increase the valency of such verbs by one argument. The reflexive attar -ti- and the passive suffix -iy- have the opposite effect, i.e. they reduce the valency of the verbs they are attached to by one argument. Generally, the addition of the suffix modifies the argument structure of the base verb, deriving a new one.

Turning to the second way of forming reflexivives, there are several views on the suffix -ek-. For instance, while for Baumann (1967:206-209), it is a neutro-static suffix, Cuenod (1967:9) terms it a neuter extension of suffix. Whereas "neuter" is normally used to describe nouns which neither display masculine nor feminine genders, Cornett (1991:159, 203-215) and Crystal (1987:53), "extension", as seen earlier, is generally used in Bantu studies to describe affixes such as the causative and the applicative, which 'extend' or increase the valency of the base verb. With regard to 'static', it denotes a state in which an entity may be found and, as such, its use in connection with -ek- appears to imply that the actions expressed by the verbs this suffix is attached to, indicate the state of the NP subject involved. Thus, one may argue that, although widely used in Bantu studies, the terms "neutro-static" and "neutro-extension" seem to be confusing and misleading rather than capturing the fact that when -ek- is attached to a base verb, it suppresses the agent. In other words, -ek- alters the predicate argument structure or the basic verb, deriving a new one, e.g. kupfuleka in (16)8. This fact ties the suffix -ek- to the passive suffix -iy-. To make this point clear take the sentences in (19).

(19) a. Mu-yive a-pful-uc xu-pthlo tolo
    1 thief 1-open-PST 7 door yesterday
    "The thief opened the door yesterday"
b. Xi-pfalo xi-pfui-iw- ile tolo
   7 door 7 open-PASS-PST yesterday
   "The door was opened yesterday"

c. Xi-pfalo xi-pfui-ek- ile tolo
   7 door 7 open -RFL-PST yesterday
   "The door opened yesterday"

While in (19a) there is an overt agent, muuyi "the thief", who performs the
action expressed by the verb kupfulwa "to open", in (19b) and (19c) the agent
is suppressed, and the verbs kupfulwa and kupfulwaka are derived
respectively. Thus, the suffixes -ek- and -iw- can be said to have an identical
effect on the predicate argument structure of a verb. That is both suppress
the subject (agent), (20a) and (20b) represent the predicate argument
structure of the verbs kupfulwa "to be opened" in (19b) and kupfulwaka 'to
open itself' in (19c) respectively.

(20) a. Kupfulwa "to be opened" ((SUBj (SUBj))
         |        |
         @       @
         theme   theme

b. Kupfulwaka "to open itself" ((SUBj) (SUBj))
         |        |
         @       @
         theme   theme

However, the main difference between (19b) and (19c) is that in the former it
is possible to express the agent optionally, as a by-phrase (adjectival), whereas
in the latter such a possibility is not available, as the following examples show.

(21) a. Xi-pfalo xi-pfui-iw-ile tolo
       hu mu-yivi
   7 door 7-open-PASS-PST yesterday (by 1 thief)
   "The door was opened yesterday (by the thief)"

b. Xi-pfalo xi-pfui-ek-ile tolo hu mu-yivi

Semantically the passive construction (19b) topicalizes the object (theme), i.e.,
the speaker focuses his attention on xi-pfalo "door" rather than on the muuyi 
"thief" and, therefore, the latter can be omitted without affecting the message
the speaker wants to convey. As for kupfulwaka, the presence of the 'neuter'
suffix -ek- indicates that this verb expresses a spontaneous event, hence the
construction in (19c) may be paraphrased as 'the door opened spontaneously'.
In other words, passive verbs such as kupfulwaka (21a) presuppose an agent
whereas in constructions involving verbs like kupfulwaka (19b) the object
appears to be undergoing the event "by itself" and, therefore, an agent is not
presupposed.

Apart from verbs such as kupfulwaka in (19c) and (19c) derived from transitive
base verbs, -ek- can be used with "intransitive" basic verbs, as indicated in
(21).
(21) Kufamba "to walk" → kufambeka "a place is easy to walk to"
Kuya "to go" → kuyeka "to be easy to go to"
Kunyima "to stand up" → kunyimeka "to stand straight at a certain place"

In Xitsonga, verbs such as the ones in (21), whose actions express motions or, in Bresnan and Kanerva's (1989:26) terms, verbs of motion, select a locative which syntactically functions as an object. This can be seen in the following dialogue:

(22) A: Hina se- ha-iamb- a kaya
    We now-1 walk-PRS home
    "Now we are going home"

B: Kasi kaya hi kwí?
    But home COP where
    "By the way, where is home?"

A: Hi kola kusushi ni Euston
    COP here near with Euston
    "It is here near Euston"

B: Ha! hambi hi mi-nenge ka-iamb-ek- a.
    Ha! even with 4 foot 17-walk-RFL-PRS
    "Ha! even on foot it is walkable".

            Mina ndzi-tsham-a Barking, 1 kule swinene.
            I I I stay-PRS Barking COP far very
            "I stay in Barking, it is very far".

            hi mi-nenge a- ku- tamb-ek- 1,
            with 4 foot NEG-17 CL there-walk-RFL-NEG
            "With on foot not, there walkable".

            Ndzi-tolovelá kukhwele xa-nomza
            I use climb 7 bus
            "I usually take a bus"

The base verb kufamba in (22), apart from the subject (agent) hina 'we', selects the locative object kaya "home". The fact that this locative can be criticized, as can be seen in the dialogue in (22), proves that it is syntactically an object. (23a) represents the predicate argument structure of this verb.

(23) a. kufamba "to walk" ((SUBJ), (OBJ))

            ||
    < Agent loc>

When the suffix -ek- is attached to the verb, the agent is suppressed and the verb kufambeka is derived. In addition, the locative is promoted to the subject position, controlling the agreement through the prefix ku- of the locative classes, as the glosses in (22) indicate. (23b) represents the argument structure of the verb kupfuluka.
(23) b. kufambeka \( (\text{SUBJ}), (\text{OBJ}) \)
\[ \langle 0 \rangle \text{loc} \]

Another fact in support of the claim that verbs of motion such as the ones in (21) take a locative object is that, when they denote ability, that is, when used intransitively, they cannot take -ek- as suppresses their only syntactic function and its theta role contained in their predicate argument structure. For instance, kufamba in (3g) selects a subject (agent) as its sole argument and, therefore, cannot take -ek-, otherwise this argument and the theta role it is associated with, e.g. agent would disappear, erasing the whole verb. As a result, sentences such as *n'wana a fambeke ha yeke are impossible in Xitsonga. Hence the generalization is that, in order for a verb to take -ek-, it should contain more than one theta role in its predicate argument structure. In other words, it should be transitive. This would exclude intransitive base verbs that only select a subject, be this (agent) or the object (patient/theme), normally referred to as unergative and unaccusative respectively Demuth (1990:239), and Harford (1990:137).

(24) Kukolola "to shout" (unergative) \( \rightarrow \) *kukololeka
  Kufa "to die" (unaccusative) \( \rightarrow \) *kuteka
  Kuwa "to fall" (unaccusative) \( \rightarrow \) *kuwela

Taking into account the argument reducing similarities between the suffixes -ek- and -iw- already referred to, the prediction is that the verb in -ek- would never be passivizable, unless an argument is introduced by an applicative affix. In fact, in Xitsonga, only applicative passive verbs may be derived from base verbs in (24), as shown in (25).

(25) a. *Kukololiwa \( \rightarrow \) kukoilelela "to shout for" \( \rightarrow \) kukoilelwela "to be shouted for"
    *Kufiwa \( \rightarrow \) kufela "to die for" \( \rightarrow \) kurelwela "to be died for, to be bereaved"
    *Kuwiwa \( \rightarrow \) kuwela "to fall for" \( \rightarrow \) kwelwelwa "to be fallen on for"

b. *Ndzi f- iw- ile hi bava
   1 I die-PASS-PST by father

c. Ndzi f- el- iw- ile hi bava
   1 I die-APPL-PASS-PST by father
   "I have been died on by my father"

However, it should be observed here that, these verbs can used as transitive and when they are, they select a locative object and, consequently, will be passivized without necessarily taking the applicative extension.

(26) Tikwendi \( \text{ku-f-} \text{iw-} \text{a ni ndiara} \)
5 LOC country 17-die-PASS-PRS with 5 hunger
"In the country is died of hunger"

The syntactic and semantic parallelism between verbs which host the 'neuter' affix -ek- and the passive -iw- has led researchers such as Crystal (1963:197), Shibatani (1985:327), and Spencer (1991:245), to mention only a few, to term
the verb which carry the affix -ek- middle voice.\textsuperscript{11, 12} Since the attunes -ek- and -iw- have an identical effect on the predicate argument structure of the verbs they attach to, they should be in complementary distribution. Consequently, verbs such as *kufambekiwa do not exist in Xitsonga.

As Hooper and Thompson (1980), and Katupha (1991) argue, transitivity should be regarded as both a syntactic and a discourse category.\textsuperscript{13} The fact that the verbs in (21) and (24) can be used either transitively or intransitively, depending on the context, lends weight to such an argument. This fact poses some problems for the LFG framework where the predicate argument structure of verbs forms the main basis on which generalizations about languages are made or, as Kaplan and Bresnan (1982:174) express it, the main task of a syntactic theory is "to characterize the mapping between semantic predicate-argument relationships and surface word and phrase configurations by which they are expressed." Thus, it would be desirable if some renamings in LFG were to be made in such a way that the transitive and intransitive uses of a particular verb could be explained.

With regard to the third strategy, as the examples (3f) and (3g) indicate, -xe functions as a pronominal stem which selects the noun class of the noun with which it is co-referential. Hence one may regard swoxe (3f) and ye-xe (3g) as independent reflexive pronouns used for contrasting. Here, the generalization is that in order to derive such pronouns in Xitsonga one has to attach the class prefix of the NP in question to the pronominal stem -xe. In addition to examples (3f) and (3g), consider the following dialogue between a mother and her son who, contrary to her daughter Mary who walks by herself, likes being carried by her mother.

(27) a. We-na u-rhandz-a ku-tiakul- 1w- a ha yini? 1 you 1-like-PRS 15 INF-carry-PASS-PKb by what "Why do you like being carried ?"

b. A-1wu- mu- won-i Maria a-ngo- fam-p-a na ye-xe! NEG-1 you-1 CL she-see-NEG Mary 1-CONT-walk-PKb by 1 alone "Do not you see her Mary who is walking by herself ."

This is consistent with the fact that independent pronouns in Xitsonga always contain both a stem and the noun class prefix of the noun they refer to.

(28) a. Vw-ndhu vo-na va-mik- ile toto utselela mu-thandel. 2 people 2 they 2-arrive-PST yesterday only 1 leader

a-nga-won-ek-ang- a 1 NEG-see-RFL-NEG-PRS "All the people except the chief they arrived yesterday ."

b. Swi-ngove swo-na swi-tsutsu-um-ile kambu ti-mou1
8 cat 8 they 8-run-PST out y goat

ti-khom-iw- ile 9 catch-PASS-PST "The cats, they have escaped, but the goats have been caught".

Na is the stem used to form the independent pronouns vona and swona or classes 2 and 8 respectively. (28a) was uttered by a storyteller, contrasting
the "people" who had arrived at the centre of their village for a meeting with a chief who failed to turn up. Similarly, (28b) contrasts swingover cats' which were not fast enough to escape and, as a result, were caught by the dog. Therefore, the independent reflexive pronouns, like other independent pronouns, are used only when a speaker intends to contrast two or more entities.

3. Conclusion

In this paper it has been argued that the reflexives -ti- and -ek- in Xitsonga should be regarded as affixes and not as object clitic or extension respectively. For one thing, they alter the argument structure of the basic verbs they occur with, giving rise to new lexemes in some instances. Thus, these affixes are comparable to verbal suffixes such as the applicative, the causative and passive which have a similar effect on the predicate argument structure of the verb they are suffixed to. Taking this into account, and referring to -ek-, it has been observed that terms such as "neutro-stative" and "neuter-extension" very often used in Bantu literature for describing this suffix can be misleading. It has also become evident from the data that these verbal affixes and suffixes can be divided into two groups according to their effect on the predicate argument structure of the verbs to which they are attached: (1) valency reducing affixes: neuter, passive and reflexive, and (2) valency increasing affixes: applicative and causative. It has also been shown that while the reflexive affix -ti- is restricted to [-human/animate], -ek- when used to derive verbs which denote spontaneous action or events, it is restricted to [-human/animate].

The use of unaccusative and unergative verbs, transversely in Xitsonga, brings further evidence in support of the claim that transitivity can be defined syntactically as well as contextually. This seems to render less descriptively inadequate as this framework concentrates on predicate argument structure of verbs to the detriment of a context that may allow verbs to select objects or to dispense with them. This is an issue which should be addressed in future research on languages such as Xitsonga within LFU theory.

The reflexive suffix -ti- has the position of an object clitic in the verbal morphology, but it remains invariable for class and number and phonologically it resembles the object clitic -ti- of class 9. Although there is no access to historical linguistic information, it is synchronically evident that, as is the case with the applicative and the causative verbs, there is a decline in the meaning of the reflexive verbs. Thus, -ti- and -ek- can be regarded as one of the means used for lexical innovation in Xitsonga.

Finally, it has been shown that -ek- is a stem used to derive independent reflexive pronouns.

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Abbreviations used in this paper:

APPL: applicative
CAUS: Causative
CL: clitic
Notes

1. Figure released after the census in 1980.

2. As indicated by the examples given below, there are some exceptions to this generalization.

Kubonge "to praise, to thank" → kubongeka "to be praiseworthy"
Kuwona "to see" → kuwoneka "to be visible, to appear suddenly"
Kutiva "to know" → kutiveka "to be known, to be famous"

Mu-nhu mu-rene a-bong- ek- a
1 person 1 good 1-praise-RFL-PRS
"A good person is praiseworthy"

These examples seem to be consistent with one of the main arguments in this paper, namely that -ek- is used for deriving verbs with a reflexive reading which may undergo lexicalization. Thus, kubongeka "to be praiseworthy" and kutiveka "to be known" denote state. In other words, -ek- may be used to derive verbs which denote state.

3. For detailed discussion on the discourse functions, see Bresnan & Mcnamara (1987), and Selis (1985).

4. GB also postulates a Lexicon that contains information about the categories class to which lexical items belong, i.e. verbs, nouns, and so on: logica, form, where the semantic information (meaning) of lexical items and sentences is represented; and Phonological Form that contains the information on how sentences should be pronounced.

5. It should be observed that the sentence in (10b) does not convey a contrastive meaning. Such a meaning is achieved, as will be seen below, by using the independent reflexive pronouns.

6. There are divergent views on the syntactic status of the argument introduced by the causative suffix. For instance, while Nsima (1995) sees it as an object linked to the patient theta role, Rask (1991:56) argues that it is the subject of the basic verb. With regard to example (14a), one can argue that n’wana “child” syntactically behaves as an ordinary object. For one thing, it displays the classical properties of objects in Bantu languages, namely passivization and cliticization, among others.

N’wana a-khwev-is-ul- a cayi ni Maria
1 child 1-sip-CAUS-Pass-PRS 3 tea by 1 Mary
"The child is made to sip tea by Mary"
Maria e-my khwev-is-a cay; in’wana.
1 Mary 1-1 CL him-sip-CAUS-PRS 3 tea 1 child
"Mary makes him, the child sip tea"

The theta role associated with in’wana "child" is hard to define. In (15b) in’wana is regarded as an experiencer in the sense that the child experiences the action expressed by the causative verb kuhwevisa "make someone drink."

7. This argument is based on Grimshaw (1990:154) who argues that since reflexivization satisfies an external argument (by binding) it should not co-occur with other external-argument-affecting operations such as passive (...)."

8. Though inaccurate and misleading, the use of such expressions is a well-established custom amongst Bantuists. For instance, see Cole (1955:198-7), Doke (1930:150), Guma (1971:151-2), Katupha (1991:322), and Poulos (1990:178) for Tswana, Zulu, Southern Sotho, Emakhuwa and Venda respectively.

9. Some nouns in Xitsonga such as kaya "home" xiphelenla "hospital" when used in a locative context, select ku for concord.

10. For a detailed discussion on unaccusative and unergative verbs see respectively Perlmutter (1978), and Burzio (1986).

11. There seems to be a typological split among languages in the means of forming middle voice. For instance, while Bantu languages such as Xitsonga and other closely related use suffixes, Romance languages use reflexive pronouns.

   Portuguese: A janela fechou-se
          The window closed
          "The window closed"

   French: La fenêtre s'est fermée
          The window RFL be closed
          "The window closed"

12. Doke (1930:138), and Stanchev (1990:19) refer to similar verbs respectively in Zulu and Bulgarian as quasi-passives and pseudo-passives.

13. Katupha bases his argument on the fact that in Emakhuwa, transitivity is not a sine qua non for passivization. Hence, verbs such as die and shout can be passivized, and a non-subcategorizable locative NP appears in the subject position to save the verbs from disappearing after the theme and the agent (the sole theta roles in the predicate argument structure of such verbs) have been suppressed by the passive lexical rule. Here lies the major difference between passivization in Emakhuwa and in Xitsonga. Again, seen (25) and (26).

References


