

The Argument Structure of Passive and Antipassive in Paloor

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Abstract

This paper discusses the argument structure of two valency-reducing processes i.e. passives and antipassives in Paloor, an endangered language spoken in Senegal. It shows the structure of passives in Paloor with a wide range of verbs with a few exceptions. This paper also sheds light on the syntax and semantics of antipassives. In both processes, the missing argument cannot surface contrary to some languages where it can appear as an oblique. Finally, I show that passives are more productive that antipassives as the latter are sensitive to animacy and (im)perfectivity.

Keywords: Argument structure, Paloor, Passive, Antipassive, Syntax, Semantics



1. Introduction

This study provides novel data that sheds light on the morphosyntax of passives and antipassives in Paloor, an endangered language spoken in Senegal.

Passives and antipassive are valency decreasing operations that involve demotion or promotion of verbal arguments. In passives the object is promoted to subject whereas the subject is demoted through suppression or deletion. In contrast, antipassives involve the demotion of object through suppression. Passives and antipassives are similar in that they both involve backgrounding effects that affect the agent in the passive and the patient in the antipassive (Polinsky 2005, 2017, Heaton 2017). In addition, in both constructions there is some "explicit marking" (Dixon 1994). This is illustrated in (1).

```
Transitive
(1) a. 6ele6 -a
                     lac -ce
                                ndawal
                                             -a
     woman -CL.DEF cut -PERF
                                 meat
                                         -CL.DEF
     "The woman cut the meat"
  b. ndawal -a
                  lac-u -te (*6ele6 -a)
                                               Passive
       meat -CL.DEF cut -PASS
                                 -PERF
                                         (woman -CL.DEF)
     "the meat was cut"
   c. beleb
                                               Antipassive
            -a
                     lac -aanlac-oo
       woman -CL.DEF
                         cut -HAB
                                     cut-?
        "The woman cuts"
```

(1)shows a typical transitive verb from which (1)b and (1)c are derived. In (1)b the verb internal argument is promoted the subject position whereas the original subject is omitted. Apart from this, the verb appears with a morpheme related to the passive (D'alton 1987, Thornell 2016 et al.). In contrast, with antipassivization the verb internal argument must be suppressed whereas the verb stem undergoes reduplication ((1)c).

I show that passives in Paloor are special in that they allow some non-canonical arguments to be passivized. In addition, the original subject of the verb can never appear even though it is still present in the lexical and conceptual semantics of the verb. As for the antipassive, it involves the reduplication of the verb and shows some typical properties of antipassives i.e. imperfective interpretation, verbal affixation and the backgrounding of the logical object.

This study not only provides novel data on an endangered language but also contributes to the growing discussion about antipassive in nominative-accusative languages (Creissels & Nouguier-Voisin 2008, Heaton 2017. Polinsky 2017, Jerono 2018). In addition, contrary to most languages spoken in Senegal the existing studies studies on Paloor are focused on its phonetics and phonology and grammar.

This paper is organized as follows. The remainder of this paper provides a language background, Section 2 consists in a theoretical background on passives and antipassives. Finally, Section 3 and Section 4 discuss passives and antipassives respectively followed by concluding remarks in Section 5.



According to Pichl (1966), Paloor is one of the five languages of the cangin group (along with Ndut, Saafi, Noon, Lehar) belonging to the West Atlantic branch of the Niger-Congo language family. Wane (2017) put forth that Paloor belongs to a group of languages he refers to as *saafi*.

Paloor is a noun class language with a total of five noun classes among which four are used to mark singular and one to mark plural (Thornell et al 2016). Paloor is an agglutinative language and unlike related languages like Pulaar, Seerer, and Wolof, is not a pro-drop language. Throughout this paper the perfective aspect is widely used; it is marked through the suffix *-te* which generally assimilates with respect to place of articulation with the last consonant of the verb.

2. Theoretical Background

Passivization and antipassivization have been the center of various research as will be shown next. Traditionally, the concept of "antipassive" has been related to ergative languages. The term is traced to Silverstein (1976) who made the claim that the absolutive DP in transitive constructions was actually the grammatical subject. However, later research has shown that was not the case (see Anderson 1976).

To better understand differences between these two valency-decreasing strategies, we can consider the following differences put forth in Dixon (1994:146).

Passive

- (a) applies to an underlyingly transitive clause and forms a derived intransitive;
- (b) the underlying O NP becomes S of the passive;
- (c) the underlying A NP goes into a peripheral function, being marked by a non-core case, preposition, etc.; this NP can be omitted, although there is always the option of including it;
- (d) there is some explicit formal marking of a passive construction (generally, by a verbal affix or else by a periphrastic element in the verb phrase—such as English be...-en—although it could be marked elsewhere in the clause).

Antipassive

- (a) applies to an underlyingly transitive clause and forms a derived intransitive;
- (b) the underlying A NP becomes S of the antipassive;
- (c) the underlying O NP goes into a peripheral function, being marked by a non-core case, preposition, etc.; this NP can be omitted, although there is always the option of including it;
- (d) there is some explicit formal marking of an antipassive construction (same preference and possibilities as for passive).

Basically the two constructions have in common that they both involve marking of the verb, intransitivization and promoting of the object. However, one major difference has to do with the fact that in the antipassive the object is demoted while in the passive the object is promoted. Dixon & Aikhenvald (2000) argue that one main difference between passive and antipassive is that the former emphasizes the "result" whereas the latter emphasizes the activity itself (Dixon & Aikhenvald 2000:9). Apart from this, in some languages the demoted argument may either occur in a prepositional phrase or simply omitted. In African languages, as shown in Watters (2000) the demoted argument of the passive cannot generally surface. Polinsky (2017) puts forth that in the same way antipassive is not unique to ergative



languages, passive is not unique to accusative languages. This is because some languages can allow both constructions regardless of typological background i.e. nominative-accusative or ergative-absolutive.

3. The Structure of Passive in Paloor

3.1 Passive with Transitive Verbs

The argument structure of passive has been largely discussed in the literature (Shibatani 1988, Dixon & Aikhenvald 2000, Keenan (2013) to name but a few).

Passives, as previously discussed, generally occur with some morphology marking on the verb through some form of affixation or through a periphrastic construction. In Paloor, passive is marked through verbal affixation (Thornell et al 2016). For that purpose, the suffix-*u* is added to the verb that passivizes. In this section, I show different forms of the passive with transitive verbs.

(2) a. Musaa ñam-pe maal-a

Musaa eat -PERF rice -CL.DEF

"Musaa ate the rice"/ "Musaa has eaten the rice"

b. maal-a ñam-u-te (*Musaa)

rice -CL.DEF eat -PASS-PERF

"The rice has been eaten"/ "The rice was eaten"

(3) a. Faatu pay-ce doon-a (adapted from Thornell et al 2016:117d)

Faatu heal-PERF veal -CL.DEF

"Faatu healed the veal"

b. doon-a pay-u -te (*Faatu)

veal -CL.DEF heal-PASS-PERF

"The veal has been healed"/ "The veal was healed"

These examples show that the internal argument of the verb, in each case, moves to the front of the sentence while the verb valency decreases with the addition of the affix -u. As is the case in many African languages (see Watters 2000), the agent cannot surface when passivization is involved, however the presence of the agent is implicit. Haspelmath & Sims (2013) argue that passivization is a patient foregrounding process.

In both (2) and (3) the most relevant information is that the action described by the verb already happened, hence the use of the perfective aspect marker. However, the past tense morpheme can be added before the passive morpheme and in that case, the emphasis is on the fact that that the action happened in the past. This is shown in (4)b. As for (4)c, it illustrates that the another strategy can be used to show that the action happened in the past with the addition of the free morpheme *koon*, which is reminiscent of "before" or "ago" in English.

```
(4) a. Musaa ñam-i -u -te maal-a
Musaa eat -PST -PERF rice -CL.DEF
```

"Musaa ate the rice"



```
b. maal-a ñam -u -te
rice -CL.DEF eat -PASS -PERF
"The rice was eaten"
c. Musaa ñam-u -te maal-a koon
Musaa eat -PASS -PERF rice -CL.DEF before
"Musaa ate the rice"
```

In languages that show case through morphology, the subject of the passive clause appears with the nominative case. However, in languages like Paloor, there is no morphology associated with case; nevertheless, by using pronouns, one can make the assumption that the form of the internal argument changes when it moves to subject position. This is illustrated in (5).

```
(5) a. di lab-pe ri
3SG.NOM hit -PERF 3SG.ACC
"S/he hit him/her"
b. di lab-u -te
3SG.NOM hit -PERF
"S/he was hit"
```

In (5)a the verb is in the active form and appears with third person singular pronouns as subject and object but when the verb is passivized the object pronoun becomes the subject of the clause and changes from ri to di. Pronouns in Paloor provide evidence that the subject of a passive clause appears with a nominative case.

Finally, in (6) and (7) experiencer verbs are used in the passive voice with the verbs tiit 'be scared' and neb 'please'.

```
(6) a. Kumba tiit -id -te Awa
Kumba be scared -APP -PERF Awa
"Kumba scared Awa"
b. Awa tiit -d -u -te
Awa be scared -APP-PASS -PERF
"Awa was scared"
```

In (6)b when the verb appears in the passive voice, the experiencer *Awa* appears in subject position. In contrast, the experiencer *kumba* in (7)b cannot be moved from its object position as the ungrammaticality of (7)b shows.

```
(7) a. 6ele6 -a ne6 -pe Kumba
woman -CL.DEF please -PERF Kumba
"Kumba pleases the woman"
b. *Kumba ne6 -u -te
Kumba please-PASS -PERF
```



"Kumba was pleased to" (intended)

The asymmetry noted in the behavior of the experiencers in (6) and (7) can be accounted for by the fact that in (7) this type of experiencer verb is transitive on the surface but underlyingly unaccusative (Belletti & Rizzi 1988, Pesestsky 1995, Landau 2010, Tamba, in press).

3.2 Passive with Ditransitive Verbs

Keenan (2013) argues that if a language can passive two argument-verbs, it can also passivize three-argument verbs (Keenan 2013:248). He further argues that regarding ditransitive verbs, languages vary as to whether the theme, the goal or both can be passivized.

In Paloor, when a verb has two objects, either object can be the subject of the passive construction as shown in the following examples.

```
(8) a. Awa on -te kúkoy -á
                                      kopor
      Awa give
                   -PERF
                           child
                                   -CL.DEF money -CL.DEF
      "Awa gave the child the money"
               -te kopor -a
                                 kúkoy -á
   b. Awa on
                   -PERF
                           money -CL.DEF child -CL.DEF
      Awa give
      "Awa gave the money to the child"
   c. kopor
            -a
                    on
                         -u
                              -te kúkoy -á
      money -CL.DEF give -PASS-PERF child -CL.DEF
       "The money was given to the child"
   d. kúkoy -á
                       on
                                  -te kopor
      child
```

In (8) a typical ditransitive verb on 'give' is used with two internal arguments i.e. a goal and a theme. Interestingly, they both appear without any morphological marking; besides, there is no fixed order regarding the position of the two objects as shown in (8)a-b. As far as passivization is concerned, either object, the theme or the goal, can be passivized.

give -PASS -PERF money -CL.DEF

The following sentence provides an example of a ditransitivized verb with *lomid* 'buy for' derived from the verb lom 'buy'.

```
(9) a. Xadi lom-pe
                           ñafaɗ
      Xadi buy-PERF
                           shoes- CL<sub>PL</sub>-DEF
      "Xadi bought the shoes"
```

-CL.DEF

"The child was given the money"

```
b. Xadi lom-id -te
                       kúkoy -á
                                        ñafad y
   Xadi buy-APP-PERF child - CL-DEF shoe CL<sub>PL</sub>-DEF
   "Xadi bought the child the shoes"
             lom-id-te
c. Xadi
                          ñafaɗ
                                            kúkoy -á
                                  y-a
```



```
Xadi buy-APP-PERF shoe CL<sub>PL</sub>-DEF child -CL.DEF "Xadi bough the shoes for the child"
```

- d. ñafaɗ y -a lom-ɗ -u -te kúkoy -á shoe CL_{PL}-DEF buy-APP-PASS-PERF child -CL.DEF "The shoes were bought for the child"
- e. kúkoy -á lom-ɗ -u -te ñafaɗ y -a child -CL.DEFbuy-APP-PASS-PERF shoe CL_{PL}-DEF "the child was bought the shoes"

(9)a corresponds to a sentence with a transitive verb that occurs with two arguments. However, when the applicative morpheme -id is attached to the verb as in (9)b, it changes its valency from two to three arguments. Indeed, the "benefactive" is added to the theta-grid of the verb. As with the ditransitive verb discussed earlier, the two objects do not have a fixed order ((9)b-c). In the same way, in passivization, either object can be fronted as (9)d and (9)e show. Note that the vowel i, which is part of the applicative morpheme is elided in the presence of the passive marker.

In (10) another example of a ditransitive verb is provided with the verb 6ek 'put'.

```
(10) a. 66166 - a 66166 -
```

- b. *6ele6 -a 6ek -ke (fili6) las -a caraŋ f -a woman -CL.DEF put -PERF (in) room -CL.DEF broom CL-DEF "the woman put the broom in the room"
- c. caraŋ f -a 6ek -u -te (fili6) las -a
 broom CL-DEF put -PASS -PERF (in) room -CL.DEF
 "the broom was put in the room"
- d. * las -a 6ek -u -te caraŋ f -a
 room CL.DEF put -PASS -PERF broom CL-DEF
 "The room was put the broom" (intended)

The verb *bek* 'put' occurs with a theme and a locative argument; the latter is introduced by what looks like an optional preposition *filib* 'in'. Also, the two complements of the verb must follow a fixed order of appearance with the theme preceding the locative. Contrary to the ditransitive verbs discussed in (8) and (9) the passivization of the verb *bek* 'put' restricts the type of object that can be fronted. As (10)d shows, the locative cannot be the subject of the passive. I posit that this is due to that fact that the preposition blocks the noun phrase from moving to a higher position. This sheds light on the fact that even though the preposition seems optional, it is always present at a deeper level.



4. Antipassives in Paloor

4.1 The Structure of Antipassives

As mentioned earlier, "antipassive" corresponds to a voice that has traditionally been related to ergative languages (Dixon 1994). Antipassive is a process that takes an *ergative* argument and makes it *absolutive* (Dixon 1994). The following example shows antipassive in an ergative language i.e. Chukchee from Kozinsky et al. 1988 (accessed from Keenan 2013:258).

```
(11) a. ətləg-e qora-ŋəqərir-nin.
father-erg deer-abs.look.for-3SG.3SG.AORIST
"Father looked for the deer (for some time)."
b. ətləgən ena-rer-g?e.
father-abs antip-look.for-3SG.AORIST
"Father did some searching."
```

More recently, Polinsky (2017) put forth a unified definition of antipassive regardless of language type. As such she argues refers to antipassive as "clause with a transitive predicate whose logical object is demoted to a non-core argument" (2013:4). Heaton (2017) further argues that in antipassive construction there must be a single argument which can be the agent and that the verbal morpheme signaling a change in voice (Heaton 2017:153).

Polinsky put forth that crosslinguistically antipassive can be diagnosed through case marking, noun incorporation, agreement, word order, verbal affixation. She also provides evidence that antipassive can be found in nominative-accusative languages (see also Heaton 2017). I argue that verbal affixation, in the form of reduplication, is the strategy used in Paloor in antipassivization processes.

The word "affixation" is used with caution here; indeed, along with Haspelmath & Sims (2013) I refer to reduplication "as an affixation of a template and copying of the root as needed to fill out the segments of that template" (Haspelmath & Sims 2013:39). Examples of antipassivization as shown in (12)-(14).

```
(12) a. pónis f-á
                   dob-pe
                                 beleb
                                         -a
       horse CL-DEF bite-PERF
                                 woman -CL.DEF
        "The horse bit the woman"
b.pónis f-á do6-aan
                        dob-oo
  horse CL-DEF bite-HAB
                            bite-?
         "The horse bites"
                la6-pe
                             6ele6
                                     -a
(13) a. Awa
        Awahit-PERF woman -CL.DEF
        "Awa hit the woman"
     b. Awa la6-aan
                        la6-oo
        Awahit-HAB
                        bite-
```

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```
"Awa hits"
(14) a. kúkoy -á
                     lac -ce ndawal
                                           -a
        child
                  -CL.DEF
                              cut -PERF
                                           meat
                                                       - CL.DEF
        "The child cut the meat"
               -á-a lac -aanlac-oo
    b. kúkoy
        child
                  -CL.DEF cut -HAB
                                      cut-?
        "The child cuts"
```

In (12)-(14) examples of antipassivization are provided with the verbs dob 'bite', lab 'hit' and lac 'cut' respectively. In each case, the verb root gets the affix -an (which refers to habituality) before being repeated with he addition of the affix-oo (the nature of this affix is unclear). The relevant point though, is that the verbs can undergo antipassivization.

According to Polinsky, most languages that show antipassivization through affixation, use a similar process for other categories. Thus, in some languages, the antipassive marker is the same as the marker of anticausative, reflexive, reciprocal, middle or passive. In contrast, in other languages the antipassive marker is related to aspectual marker (inchoative, inceptive, durative etc.).

In (15) I provide evidence that the reduplication used in antipassive is also used as an aspectual marker in progressive and habituality contexts.

```
(15) a. mi
                 ñám-i
                          ñam-o maal-a
                       eat-?
  1sg.nom eat-pst
                                 rice--CL.DEF
   "I was eating the rice"
   b. di
             yíh-aan
                        yíh-o
                                                    koon
                                    mey-a
             grow-HAB grow-?
                                      field-CL.DEF
                                                    before
 1sg.nom
  "she used to cultivate the field"
```

(15)a and (15)b provide evidence that aspectual marker is linked to antipassive in Paloor. This is not surprising as antipassives refer to situations where a particular property is given to an entity. Thus "the dog bites" can be said because the dog is believed to have performed the action of biting on various occasions which, as the situations described in (15), can be related to habituality.

4.2 Semantic Properties of the Antipassive

In most languages, antipassive has atelic properties; for this reason, it as often been related to the imperfective/perfective correlation (Bittner 1987, Dixon 1987).

"This correlation predicts that if an antipassive can have a perfective (telic) connection, it must also have an imperfective (atelic) interpretation" (Polinsky (2017:8).

```
(16) a. buh f-a do6-pe beleb -a
dog CL-DEF bite-PERF woman -CL.DEF
"The dog bit the woman"
b. buh f-a do6-i -te
```



```
dog CL-DEF bite-PST-PERF

"The dog bit"

c. buh f-a na dob-a

dog CL-DEF FUT.DUR bite-
```

"The dog will bite"

These examples show that the antipassive can have a perfective as well as an imperfective interpretation. However, in (16)a the reduplication form be used.

Another property of the antipassive is that it contributes to agent foregrounding in that the agent, as the unique syntactic argument of the detransitivized verb, becomes more salient. In other words, by making the agent/subject more relevant, the patient/object role is undermined. This triggers a "low-individuation interpretation" of the patient (Foley and Van Valin 1984; Cooreman 1994). Haspelmath & Sims relates to this property of the antipassive as "patient-backgrounding" in that the patient is "completely removed from the argument structure" (Haspelmath & Sims 2013). For this reason, he refers to antipassive as a "deobjective" process.

Apart from these two characteristics of antipassive, i.e, the (im)perfective interpretation and agent foregrounding, another property of antipassive is that it interacts with animacy. Contrary to passives that typically occur with all types of transitive predicates, antipassives seem to restrict the types of verbs allowed in this context. Indeed, antipassives in Paloor show asymmetries regarding the semantic selectional features of the type of verb that can participate in this process. Consider the following examples.

```
(17) a. Awa la6-aan
                         1a6-00
        Awahit- HAB hit-
        "Awa hits"
     b.pónisf-á
                 dob-aan
                             do6-00
        horse
                 CL-DEF bite-HAB
                                     bite-?
         "The horse bites"
     c.Faatu
               pexel-aan ñam -oo
         horse
                   slap -HAB eat-?
         "Faatu slaps"
     d.#Faatu
                   ñam-aan ñam -oo
         horse
                   eat -HAB eat-?
         "Faatu eats"
       e. #kúkoy
                  -á
                         yaay-aan
                                     yaay-oo
          child
                    -CL.DEF sell -HAB sell-?
           "The child sells"
        f. #kúkov
                    -á
                         yood-aan
                                     yaay-oo
```



child -CL.DEF learn -HAB sell-? "The child learns"

These examples show that animacy is involved in the semantics of the verbs that can participate in the antipassive. Indeed, when the verb selects for an animate entity as complement as in (17)a, (17)b and (17)c, antipassivization is allowed. In contrast, when a verb requires an inanimate entity as complement as in (17)d, (17)e and (17)f, antipassivation gives rises to propositions which are infelicitous.

5. Conclusion

This study has sed light on two valency-changing operations in Paloor i.e. passives and antipassives. It has shown that the two operations can co-occur in the same language and also that antipassivization is not restricted to ergative languages as it is also found in nominative-accusative languages. This is in line with Creissels & Nouguier-Voisin (2008), Polinsky (2017) and Heaton, (2017).

Passivization can occur with almost all verb types apart from experiencer verbs that show non-canonical objects. Antipassive is less productive than passive as the concept of animacy does not play a role in the passive as it does in the antipassive. Indeed, some verbs which selects for a non-animate entity do not seem to allow antipassive. This study is far from exhaustive; future research could, for instance, explore into more detail the functions of the antipassive in Paloor.

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