Where does possession take place?

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Abstract: In this paper I propose a refinement to the idea that nominal possessors are syntactically analogous to subjects of *transitive* verbs. This idea was first put forward by Abney (1987) and has received different implementations over time. The different implementations have in common the notion that nominal possessors are external arguments of possessed nouns and they differ mostly on the specific structural treatment given to external argumenthood. Here I introduce evidence that nominal possessors are actually analogous to subjects of *intransitive* verbs, with possessors of different kinds of nouns being analogous to subjects of different kinds of intransitive verbs. In the languages I enlist first-hand evidence from, Bororo (Brazil, Bororoan) and Kísêdjê (Brazil, Jêan), intransitive verbs belong either to the unergative or to the unaccusative category, and nouns belong either to the inalienably possessed or to the alienably possessable category. As I show, possessors of inalienably possessed nouns pattern morphologically with subjects of unaccusative verbs whereas possessors of alienably possessable nouns pattern with subjects of unergative verbs. Based on this evidence and on the hypothesis that subjects of unergative verbs are external arguments whereas subjects of unaccusative verbs are internal arguments (the unaccusative hypothesis, Perlmutter 1978), I propose that possessors of inalienably possessed nouns are generated as internal arguments of the noun and possessors of alienably possessed nouns are generated as external arguments of the noun.

Keywords: possessors, inalienable possession, subjects, unaccusative hypothesis, Bororo, Kísêdjê

1 Introduction

The idea that nominal possessors are syntactically analogous to subjects of transitive verbs (Abney 1987) is generally implemented by assuming that possessors are generated inside the noun phrase in a configuration similar to that in which subjects are generated inside transitive clauses. This idea has attained a wide degree of acceptance among Generative linguists, being standardly taught in textbooks (see Adger 2003; Carnie 2006; Radford 2004) and featured in surveys on the syntax of noun phrases (see Bernstein 2001). Bittner and Hale (1996) and Alexiadou et al. (2007), among others, present reimplementation of this idea under different theories of the syntax of transitive subjects.

In this paper, I introduce evidence that nominal possessors are syntactically analogous to subjects of intransitive rather than transitive verbs, with possessors of nouns of different types being analogous to subjects of intransitive verbs of different types. In the languages I enlist evidence from (Kísêdjê, Jêan, Brazil; and Bororo, Bororoan, Brazil), nouns are categorized as either inalienably possessed or alienably possessable, and verbs as either unaccusative or unergative. Possessors of nouns of the inalienably possessed class are marked analogously to subjects of unaccusative verbs, whereas possessors of nouns of the alienably possessable class are marked analogously to subjects of unergative verbs.

*I would like to thank the Kísêdjê and Bororo peoples for letting me in their villages and allowing me to learn their languages, as well as my consultants, Dario Brame (Bororo) and Kawiri Suyá and Jamthô Suyá (Kísêdjê) for their patience and insights. This work was made possible by a post-doc fellowship awarded by CNPq.

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Based on this parallel morphological treatment and on the hypothesis that subjects of unaccusative verbs are generated as internal arguments whereas subjects of unergative verbs are generated as external arguments (the unaccusative hypothesis, Perlmutter 1978, with important contributions by Burzio 1986 and Hale and Keyser 1993), I propose that possessors of nouns of the inalienably possessed type are generated as internal arguments, whereas possessors of nouns of the alienably possessable type are generated as external arguments.

This paper is organized in the following fashion: in Section 2 I present the data Abney (1987) bases his proposal on, and in Section 3 I introduce the novel data on which my proposal is based. I present my proposal in Section 4 and in Section 5 I offer some closing remarks.

2 Background

Some ergative-absolutive languages mark nominal possessors with ergative morphology. One of these languages is Yup’ik (Eskimo, Alaska).1 In examples from (1) to (3) transitive subjects marked as, respectively, ergative singular, ergative plural and ergative dual. In examples from (4) through (6), the same phonological exponents are used to mark singular, plural and dual possessors.2

(1) Angute-м kiputa-a-∅.
man-ERG.SG buy-AGR₀-AGR₅
‘The man bought it.’

(2) Angute-t kiputa-a-t.
man-ERG.PL buy-AGR₀-AGR₅
‘The men (pl.) bought it.’

(3) Angute-k kiputa-a-k.
man-ERG.DU buy-AGR₀-AGR₅
‘The men (du.) bought it.’

(4) angute-м kuiga-∅
man-ERG.SG river-AGR₅
‘the man’s river’

(5) angute-t kuiga-t
man-ERG.PL river-AGR₅
‘the men’s (pl.) river’

(6) angute-k kuiga-k
man-ERG.DU river-AGR₅
‘the men’s (du.) river’

Also note that in these examples the same phonological exponents are used to mark agreement between verbs and subjects as well as between nouns and possessors. Unlike the case marking facts reviewed previously, though, the agreement facts just mentioned do not constitute evidence for a specific analogy between nominal possessors and transitive subjects. Verbal agreement in Yup’ik follows a nominative-accusative pattern—compare transitive (1–3) with intransitive (7a–c) below. Agreement, therefore, only indicate a broad analogy between nominal possessors and subjects in general.

1The Yup’ik examples were adapted from Abney (1987), who attributes them to Reed et al. (1977).
2The following abbreviations are used throughout this paper: 1 = first person, 2 = second person, 3 = third person, abs = absolutive, AGR₀ = object agreement, AGR₅ = subject agreement, ASP = aspect, DECL = declarative, DU = dual, ERG = ergative, FOC = focus, FOOD = food classifier, FUT = future, GNRC = generic classifier, NOM = nominative, ORM = ornament classifier, PET = pet classifier, PL = plural, POSS = possessive, REFL = reflexive, SG = singular.

72
Another ergative-absolutive language that marks nominal possessors analogously to subjects of transitive verbs is Tzutujil (Mayan, Guatemala). Tzutujil is a head-marking language: verbs and nouns agree with their arguments but the arguments themselves do not bear case morphology. Evidence for a parallelism between possessors and transitive subjects in this language comes from the way agreement is realized on verbs and nouns.

Two sets of prefixes are used to mark agreement. On verbs, prefixes from one set are used to mark agreement with objects and subjects of intransitive verbs—the absolutive set—and prefixes from another set are used to mark agreement with subjects of transitive verbs—the ergative set. On nouns, agreement with the possessor is marked with prefixes from the ergative set. The two sets are listed in Table 1.

<table>
<thead>
<tr>
<th>Table 1: Tzutujil agreement markers</th>
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<tbody>
<tr>
<td>1SG</td>
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<td>ABS</td>
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<td>ERG</td>
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In examples from (8) through (10) transitive verbs bear absolutive prefixes that agree with their objects and ergative prefixes that agree with their subjects. In examples from (11) through (13), we can see that on nouns it is the ergative prefixes that mark agreement with the possessor.

(8) X-ix-qa-kunaaj.  
ASP-2PL.ABS-1PL.ERG-cure  
“We cured you (pl.)”

(9) X-∅-e-kunaaj.  
ASP-3SG.ABS-2PL.ERG-cure  
“You (pl.) cured him.”

(10) X-ee-ki-kunaaj.  
ASP-3PL.ABS-3PL.ERG-cure  
“They cured them.”

(11) qa-tzaʔn  
1PL.ERG-nose  
“Our nose”

(12) ee-tzaʔn  
2PL.ERG-nose  
“You (pl.) nose”

(13) kee-tzaʔn  
3PL.ERG-nose  
“Their nose”

3The Tzutujil examples were adapted from Abney (1987), who attributes them to Dayley (1985).

4In the literature on Mayan languages, these sets are usually called set A and set B.
In Yup’ik and Tzutujil, alienable and inalienable possessors are both marked as “ergative”, that is, in the same way as subjects of transitive verbs. In contrast, the two languages I introduce in the next section mark possessors of alienably possessed nouns differently than possessors of inalienably possessable nouns.

3 Novel data

In Kĩsêdjê (Jê, Brazil) and Bororo (Macro-Jê, Brazil) there are two classes of nouns—the inalienably possessed and the alienably possessable nouns—and two classes of intransitive verbs—the unaccusative and the unergative verbs.

The criteria for assigning nouns and verbs to one class or the other are morphosyntactic rather than semantic. Even though certain semantic tendencies can be perceived in the classification—for instance, body part nouns tend to belong to the inalienably possessed class, animal nouns to the alienably possessable class, intransitive verbs with volitional subjects to the unergative class and intransitive verbs with non-volitional subjects to the unaccusative class—there are exceptions to these tendencies.

These exceptions become particularly clear when comparing words across related languages like Bororo and Kĩsêdjê. In (14) and (15) I list three pairs of nouns that, though arguably denoting the same referent in both languages, are classified differently in each. The morphosyntactic criteria for assigning a noun to one or the other class are language-specific. In these two languages, the criterion seems to be the following: inalienably possessed nouns must be directly preceded by a lexical possessor, whereas alienably possessable nouns cannot—there are different morphosyntactic strategies for denoting possession over alienably possessable nouns, which I detail in Section 3.1 and Section 3.2.

(14) Inalienable nouns
   a. *(possessor) patá
      ‘possessor’s village’ (Kĩsêdjê)
   b. *(possessor) wuodo
      ‘possessor’s fishing hook’ (Bororo)
   c. *(possessor) huru
      ‘possessor’s garden (Kĩsêdjê)

(15) Alienable nouns
   a. *possessor ba
      ‘possessor’s village’ (Bororo)
   b. *possessor thep jantiri tá
      ‘possessor’s fishing hook’ (Kĩsêdjê)
   c. *possessor boepa
      ‘possessor’s garden’ (Bororo)

In (16) and (17) I list two pairs of intransitive verbs that, though arguably referring to the same kind of event, are categorized differently in Kĩsêdjê and Bororo. As with noun classes, the morphosyntactic criteria for classifying intransitive verbs are language-specific. In these languages, I classify as unergative the intransitive verbs whose single argument is marked like the subject of a transitive verb and as unaccusative the intransitive verbs whose single argument is marked like the object of a transitive verb. I discuss this criterion further and give examples of transitive constructions in Section 3.1 and Section 3.2.
The comparison between the Bororo and Kĩsēdjê classes constitutes evidence that nouns should be classified as alienable or inalienable and verbs as unergative or unaccusative according only to morphosyntactic criteria. Though we notice semantic tendencies in the classification, these are tendencies only, and as such they are subject to exceptions. Such exceptions are not a novelty, and have also been noted to exist between cognate intransitive verbs in French and Italian (Mackenzie 2006:104–105).

Having argued for the often underplayed point that nouns and intransitive verbs must be classified according to morphosyntactic rather than semantic criteria, in the next two subsections I further detail these criteria in Bororo and Kĩsēdjê and compare nominal and verbal classes language-internally. The comparison bears the following result: possessors of alienably possessable nouns pattern with subjects of unergative verbs whereas possessors of inalienably possessed nouns pattern with subjects of unaccusative verbs.

### 3.1 Kĩsēdjê nouns and verbs

In (18) a Kĩsēdjê noun of the inalienable class and, in (19), a Kĩsēdjê intransitive verb of the unaccusative class. As already mentioned, nouns in this language are categorized as inalienable if they obligatorily select for a possessor. The inalienable possessor appears directly to the left of the possessed noun, either a bare noun phrase or as a person prefix, the latter being what is instantiated in the examples below.

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5 The subject of most unergative verbs in Bororo is doubly marked. That is not the case with every unergative verb. An exception is the intransitive verb ‘beat’, seen in the example below.

(i) i-re boeto ∅-ji
  1SG-DECL beat 3SG-at
  ‘I beat him.’ (lit. ‘I beat on him.’)

6 With the exception of the first person inclusive pronoun, which is intrinsically plural, personal pronouns in Kĩsēdjê do not express number. Number is expressed by the plural marker aj. Personal pronoun and plural marker are independent words and can be separated by certain clausal adjuncts. Arguments marked only by a non-intrinsically plural personal pronoun are singular.
Intransitive verbs are categorized as unaccusative in Kĩsêdjê when they mark their subjects like objects of transitive verbs. More accurately, the intransitive verbs I categorize as unaccusative mark their subjects in the same fashion transitive verbs mark that an object has been dislocated, namely, by means of a pronominal index prefixed directly to the verbal root. Compare the examples in (19) with the examples featuring dislocated objects in (20)—the left-dislocated objects are italicized. Marking unaccusative subjects like dislocated objects is expected under the assumption (of the unaccusative hypothesis, Perlmutter 1978) that unaccusative subjects are generated in the same structural position as objects, being subsequently dislocated, like the other kinds of subjects, to a higher structural position—standardly assumed to be the specifier of IP.

(19) Kĩsêdjê unaccusative verb
   a. Hẽn wa *(i)-katho.
      DECL 1.NOM *(1-)exit
      ‘I exited.’
   b. Hẽn ka *(a)-katho.
      DECL 2.NOM *(2-)exit
      ‘You exited.’

   Intransitive verbs are categorized as unaccusative in Kĩsêdjê when they mark their subjects like objects of transitive verbs. More accurately, the intransitive verbs I categorize as unaccusative mark their subjects in the same fashion transitive verbs mark that an object has been dislocated, namely, by means of a pronominal index prefixed directly to the verbal root. Compare the examples in (19) with the examples featuring dislocated objects in (20)—the left-dislocated objects are italicized. Marking unaccusative subjects like dislocated objects is expected under the assumption (of the unaccusative hypothesis, Perlmutter 1978) that unaccusative subjects are generated in the same structural position as objects, being subsequently dislocated, like the other kinds of subjects, to a higher structural position—standardly assumed to be the specifier of IP.

(20) Kĩsêdjê transitive verb
   a. Ka=n  wa *(a)-mu.
      2=FOC.DECL 1.NOM *(2-)see
      ‘It was you I saw.’
   b. Pa=n  ka *(i)-mu.
      1=FOC.DECL 2.NOM *(1-)see
      ‘It was me you saw.’

   In the examples so far, we noticed that non-phrasal inalienable possessors are marked in the same way as unaccusative subjects, namely, by means of a personal prefix that appears directly to the left of the head noun or verb. This kind of marking contrasts with that of unergative subjects and alienable possessors, which, as I show below, is always indirect.

   In (21) you see a Kĩsêdjê noun of the alienable class and, in (22), an intransitive verb of the unergative class. Nouns are classified as alienable in Kĩsêdjê if they cannot be directly preceded by a possessor. When necessary to express possession over a noun of this class, a possessive classifier must be employed. Possessive classifiers come immediately to the left of possessed inalienable noun and are in turn preceded by the possessor. There are two such distinct classifiers, marking different kinds of possession: kit is specific for possession over domestic animals, as in (21a), and ô is a generic possessive classifier, indicating any kind of possession other than that over domestic animals—in (21b), for instance, that over an animal’s cooked meat.
Kĩsêdjê alienable noun
a. a-kit khrwâj
   2-PET.Poss parrot
   ‘your (pet) parrot’

b. i-nho khrwâj
   1-GNRC.Poss parrot
   ‘my parrot (meat)’

Kĩsêdjê unergative verb
a. Hēn wa (*i-)thē
   DECL 1.NOM (*1-)enter
   ‘I went.’

b. Hēn ka (*a-)thē
   DECL 2.NOM (*2-)enter
   ‘You went.’

Unergative intransitive verbs in Kĩsêdjê mark their subjects like transitive verbs mark theirs, namely, by means of a free pronoun alone (whereas subjects of unaccusative verbs are marked by a free pronoun in addition to a personal prefix). Alienable possessors are also marked only by means of free pronouns (which, as seen above, is constituted morphologically of a personal index prefixed to a possessive classifier).

Bororo nouns and verbs

The Bororo verbal roots I categorize as unaccusative are those that agree with their single argument by means of a personal prefix and which, moreover, take tense/aspect/mood suffixes directly (23). The nominal roots I categorize as inalienable take a possessor obligatorily, also agreeing with it by means of a personal prefix attached directly to the nominal root (24).

Bororo unaccusative verb
Emage et-aragûdü-re.
they 3PL-cry-DECL
‘They cried.’

Bororo inalienable nouns
Emage et-aora
they 3PL-head
‘their heads’

When necessary to express possession over alienably possessable nouns, Bororo, like Kĩsêdjê, does it indirectly, via a possessive classifier (25). Possessive classifiers agree with the possessor by means of a personal prefix. Bororo has a larger set of possessive classifiers than Kĩsêdjê, with the three specific values exemplified under (25)—foods, pets and ornaments—plus a generic possessive.

Bororo alienable nouns
a. imi i-ke karo
   1SG 1SG-Food.Poss fish
   ‘my (cooked) fish’

b. imi in-agu karo
   1SG 1SG-PET.Poss fish
   ‘my (pet) fish’

c. imi ik-imo pariko
   1SG 1SG-ORN.M.Poss headdress
   ‘my headdress’

d. imi in-o ika
   1SG 1SG-GNRC.Poss canoe
   ‘My canoe’
Whereas agreement with the single argument of an unaccusative verb and with the possessor of an inalienable noun is prefixed directly to the relevant root, agreement with the possessor of an alienably possessed noun, as shown above, is marked on a separate word (the classifier). Agreement with the single argument of an unergative verb is also not prefixed directly to the verbal root, but rather to a separate word, the cluster that marks tense/aspect/mood morphology (26).  

(26) Bororo unergative verb  
Pobo u-re tu-wo.  
water 3SG-DECL 3REFL-stop  
‘The water stopped (e.g. rising).’

Agreement with the subject of unergative verbs is marked in the same way as agreement with the subject of transitive verbs (27), namely, also on the cluster that marks tense/aspect/mood. Also note that agreement with the subject of unaccusative verbs is marked in the same way as agreement with the object of transitive verbs, that is, prefixed to the verbal root.

(27) Bororo transitive verb  
Adugo u-re emage e-wido.  
jaguar 3SG-DECL they 3PL-kill  
‘The jaguar killed them.’

4 My proposal

In Section 3 I showed that in Kĩsêdjê and Bororo possessors of inalienable nouns are marked like subjects of unaccusative verbs and possessors of alienable nouns are marked like subjects of unergative verbs. This contrasts with the pattern found in Yup’ik and Tzutujil, presented in Section 2, in which all possessors are marked like subjects of transitive verbs.

Abney (1987) has proposed, based on the evidence from Yup’ik and Tzutujil, that noun phrases have a structure analogous to that of sentences, with possessors structurally analogous to subjects. As common at the time, Abney assumed that sentences were headed by Infl, with VPs introduced in [Comp, Infl] and subjects introduced in [Spec, Infl]. Given this theory of the structure of sentences, Abney proposed that noun phrases were headed by D, with the NP introduced in [Comp, D] and possessors introduced in [Spec, D].

Note that it was theoretically irrelevant for Abney that the parallelism found in Yup’ik and Tzutujil was specifically between transitive subjects and possessors. As usual at the time, he didn’t assume any structural differences between transitive/unergative and unaccusative subjects—for him all subjects were generated in [Spec, Infl]. More recent reimplementations of his theory, however—such as Bittner and Hale (1996) and Alexiadou et al. (2007)—assume a theory of sentence structure in which transitive/unergative and unaccusative subjects are generated differently, and as a result they must make a specific claim with respect to the type of subject possessors are analogous to.

As for the reflexive agreement that is sometimes seen attached to the unergative verbal root, see footnote 5.  

The final consonant of et- is deleted when the root begins with a consonant.
Two widely assumed hypotheses lay the foundation for a syntax that differentiates between transitive/unergative and unaccusative subjects: the VP-internal subject hypothesis, or VISH (a development of the late 80’s due to many authors—see McCloskey 1997 for a historical overview) and the unaccusative hypothesis (due to Perlmutter 1978, with important contributions by Burzio 1986 and Hale and Keyser 1993).

According to an early implementation of these hypotheses, subjects are not generated in, but rather dislocated to [Spec, Infl]. Subjects of transitive verbs, as well as subjects of intransitive unergative verbs, are generated in [Spec, V], whereas subjects of unaccusative verbs are generated in [Comp, V]. Given one such theory of the structure of sentences plus the patterns instantiated in Yup’ik and Tzutujil, Abney’s theory is naturally reimplemented as follows: since they are syntactically analogous to transitive subjects, possessors are also generated in the specifier position of a lexical head—[Spec, V] for transitive subjects, [Spec, N] for possessors—and are then also moved to the specifier position of the immediately c-commanding functional head—[Spec, Infl] for transitive subjects, [Spec, D] for possessors. See the representations in (28) and (29).

(28) Subjects of transitive verbs

(29) Possessors

However, given the more complex parallelism found between possessors and subjects in Bororo and Kĩsêdjê, I propose that, at least in the languages that make a grammatical distinction between alienable and inalienable nouns, the derivation shown above is only true for possessors of alienable nouns. Possessors of inalienable nouns, on the other hand, have a derivation analogous to that of subjects of unaccusative verbs. Subjects of unaccusative verbs are generated as complements of a lexical head (V) and are dislocated to the specifier position of the immediately c-commanding functional head (Infl), as represented in (30). I propose that, likewise, possessors of inalienable nouns are generated as complements of a lexical head (N) and are dislocated to the specifier position of the immediately c-commanding functional head (D), as represented in (31). The parallel derivations of unergative subjects and alienable possessors is formally identical to the representations given above in (28) and (29). For completeness, it is repeated below in (32) and (33).
5 Conclusion

Not all languages make the lexical class distinctions I discuss in this paper. English, for instance, does not make a distinction between a class of alienable and a class of inalienable nouns, whereas Kuikuro (Brazil, Kariban) does not seem to make a distinction between a class of unergative and a class of unaccusative verbs (Santos and Franchetto 2014). The proposal I make above is directed towards languages like Kĩsêdjê and Bororo, which make both distinctions.

I also glossed over some levels of phrase structure such as DegP, NumP, AspP and VoiceP/vP. I did so partly because these elements would add unnecessary complication to the structures proposed, and partly because the data I present in this paper does not constitute evidence for the existence of these phrasal levels in the relevant languages. It would be trivial, for instance, to adopt a sentence structure of the kind [IP[vP[VP]]] and a parallel noun phrase structure of the kind [DP[nP[NP]]]. Lacking specific evidence, it would only constitute a notational variant.

References


