Where are the possessors?*

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October 15, 2014

Abstract

In this paper I question the widely accepted idea that nominal possessors are analogous to subjects of transitive verbs ("external subjects"). This idea is founded upon the existence of languages whose morphology marks nominal possessors and subjects of transitive verbs alike (Abney, 1987). Here I introduce languages whose morphology marks nominal possessors and subjects of *intransitive* verbs alike. Unlike subjects of transitive verbs, subjects of intransitive verbs can be generated in a variety of structural positions (Hale and Keyser, 1993). This fact creates difficulties for the determination of the structure of possessed noun phrases.

Keywords: possessors, subjects, noun phrase, Bororo, Kīsêdjê, Nias, Paresi, Tzutujil, Yup'ik

Resumo

1 Questioning a widely accepted view

Abney (1987) introduces and develops the idea that nominal possessors are structurally analogous to subjects of transitive verbs. Except for changes in implementation, his proposal can still be regarded as the standard theory of nominal possession in Generative Grammar. If textbook presence is a good correlate of acceptation of a theory, note that among the textbooks that follow Abney in assuming that nominal possessors are structurally analogous to subjects of transitive verbs are Adger (2003), Radford (2004) and Carnie (2006) (see also Bernstein 2001, a survey paper on noun phrases¹).

In this paper I present data that challenges the hypothesis that nominal possessors are syntactically analogous to subjects of transitive verbs. In the class of languages I introduce here, nominal possessors are treated analogously to subjects of *intransitive* verbs. Before I introduce this novel class of languages, though, let me discuss and contextualize the languages Abney (1987) bases his theory on.

The support for Abney's theory comes from languages whose morphology treats nominal possessors and subjects of transitive verbs alike. One of these languages is Yup'ik (Eskimo, Alaska). In Yup'ik, nominal possessors and subjects of transitive verbs display identical case marking (ergative). The relevant data, from Abney (1987, p. 42) is repeated below as (1) and (2). Abney cites Reed et al. (1977) as the source of this data.

^{*} I would like to thank my Bororo and Kĩsêdjê teachers, as well as Livia Souza for useful discussion and comments. The errors remain all mine. The research reported in this paper was partially funded by FAPESP and CNPq. This is a slightly revised version of (Nonato, 2014b)

¹ I follow Abney (1987) in employing *noun phrase* as a descriptive term, intended as neutral as to whether these phrases are headed by a noun or by a determiner, and the terms NP and DP to indicate a phrase headed by a noun and a phrase headed by a determiner.

- (1) Yup'ik transitive verbs
 - a. Angute-m kiputa-a-Ø.
 man -ERG.SG buy -AGR_O-AGR_S

 'The man bought it.'
 - b. Angute-t kiputa-a-t.
 man -ERG.PL buy -AGR_O-AGR_S
 'The men (pl.) bought it.'
 - c. Angute- \mathbf{k} kiputa-a- \mathbf{k} . man - $\mathbf{E}\mathbf{R}\mathbf{G}.\mathbf{D}\mathbf{U}$ buy - $\mathbf{A}\mathbf{G}\mathbf{R}_{\mathbf{O}}$ - $\mathbf{A}\mathbf{G}\mathbf{R}_{\mathbf{S}}$ 'The men (du.) bought it.'

- (2) Yup'ik possessed nouns
 - a. angute-m kuiga-Ø
 man -ERG.SG river -AGRs

 'the man's river'
 - b. angute-t kuiga-t man -ERG.PL river -AGRs 'the men's (pl.) river'
 - c. angute-k kuiga-k
 man -ERG.DU river -AGRs

 'the man's (du.) river'

Another language Abney discusses is Tzutujil (Mayan, Guatemala). Like Yup'ik, Tzutujil also treats nominal possessors and subjects of transitive verbs alike morphologically. Note that in Tzutujil the evidence supporting Abney's theory is of a different kind than in Yup'ik. Whereas in Yup'ik nominal possessors and subjects of transitive verbs were treated alike in terms of *case marking*, in Tzutujil nominal possessors and subjects of transitive verbs are treated alike in terms of *agreement*: in Tzutujil, nouns agree with with their possessors in the same way transitive verbs agree with their subjects.²

The examples in (3) and (4) illustrate the statement that verbal agreement in Tzutujil follows an ergative-absolutive pattern. The full set of Tzutujil agreement morphemes is listed on Table 1.

Table 1: Tzutujil agreement markers

	1sg.	2sg.	3sg.	1pl.	2pl.	3pl.
ABS	in-	at-	Ø-	oq-	ix-	ee-
ERG	nuu-	aa-	ruu-	qa-	ee-/e-	kee-/ki-

- (3) Tzutujil transitive verbs
 - a. X- ix- qa- kunaaj. ASP-2.PL.ABS-**1.PL.ERG**-cure 'We cured you (pl.)'
 - b. X- Ø- e- kunaaj. ASP-3.SG.ABS-**2.PL.ERG**-cure 'You (pl.) cured him.'
 - c. X- ee- ki- kunaaj. ASP-3.PL.ABS-3.PL.ERG-cure
 'They cured them.'

- (4) Tzutujil intransitive verbs
 - a. X- oq- wari.
 ASP-1.PL.ABS-sleep
 'We slept.'
 - b. X- ix- wari. ASP-2.PL.ABS-sleep 'You (pl.) slept.'
 - c. X- ee- wari.
 ASP-3.PL.ABS-sleep
 'They slept.'

As you can see in (5) Tzutujil nouns agree with their possessors in the same way transitive verbs agree with their subjects (that is to say, using the ergative set of agreement morphemes). The

² Though Yup'ik nouns do agree with their possessors in the same way verbs agree with their subjects (see 1-2), the fact that verbal agreement in Yup'ik follows a nominative-accusative rather than an ergative-absolutive alignment (unlike Tzutujil) makes it impossible to state whether agreement in Yup'ik aligns possessors with subjects of *transitive* or with subjects of *intransitive* verbs.

Tzutujil data was copied from Abney (1987, p. 43), who cites Dayley (1985) as its source.

(5) 'Ergative' agreement with possessors

a. qa- tza?n b. ee- tza?n c. kee- tza?n
1.PL.ERG-nose

'Our nose'

'Your (pl.) nose'

'Their nose'

Besides languages like Yup'ik and Tzutujil, whose morphology distinguishes subjects of transitive from subjects of intransitive verbs (ergative-absolutive morphology), Abney also discusses languages whose morphology doesn't mark that distinction (nominative-accusative morphology). I won't discuss the latter here, since they don't provide any evidence as to whether possessors are analogous to subject of transitive or to subjects of intransitive verbs. Only ergative-absolutively aligned phenomena like those found in Yup'ik and Tzutujil can provide us with clear evidence as to whether nominal possessors pattern with subjects of transitive verbs (ergative subjects), or with subjects of intransitive verbs (absolutive subjects).

This detail has played an important role in Abney's (1987) theory of possessors as well as in the more recent theories of possession that follow Abney's insight (see, e.g. Bittner and Hale 1996, p. 60, Radford 2000 and Alexiadou, Haegeman, and Stavrou 2007). In Abney's original theory as well as in the more recent theories it inspired, subjects are assumed to be generated in a nominal position analogous to the clausal position in which subjects of *transitive* verbs are generated. Moreover, nominal possessors are taken to undergo similar types of syntactic operations as subject of transitive verbs.

The assumption that possessors are analogous to subjects of transitive verbs rather than subjects of intransitive verbs —notwithstanding its specific morphosyntactic implications— is challenged by the existence of ergative-absolutive languages where nominal possessors actually pattern with the subject of *intransitive* verbs. In spite of the fact that this class of languages isn't mentioned by either Abney (1987) or any of the more recent theories of possession that follow Abney's insights, such languages are far from unheard of.

One language that marks possessors analogously to subjects of intransitive verbs is Kĩsêdjê (Jê, Brazil).³ Kĩsêdjê case-marks the arguments of embedded/nominalized verbs following an ergative-absolutive alignment, as illustrated by the examples in (6) and (7).⁴

(6) Kîsêdjê transitive verbs

- a. Ire a- mun khêrê.1.ERG 2.ABS-see_{emb} not.be'I didn't see you.'
- b. Kare i- mun khêrê.
 2.ERG 1.ABS-see_{emb} not.be
 'You didn't see me.'
- c. Kôre Ø- mun khêrê.
 3.ERG 3.ABS-see_{emb} not.be
 'She/He didn't see her/him.'

(7) Kîsêdjê intransitive verbs

- a. I- thếm khêrê.
 1.ABS-go_{emb} not.be
 'I didn't go.'
- b. A- them khere.2.ABS-go_{emb} not.be'You didn't go.'
- c. Ø- Them khêrê.3.ABS-go_{emb} not.be'He didn't go.'

³ The Kĩsêdjê data used here was collected in fieldtrips I took between 2008 and 2013. I thank my many teachers, in special Kawiri Suyá and Jamthô Suyá. See Nonato (2014a) for a more complete description of Kĩsêdjê.

⁴ Negation is a predicate and takes an embedded clause as argument.

As you can see in (8), Kĩsêdjê case-marks possessors of inalienable nouns⁵ like subjects of *intransitive* verbs (i.e. with absolutive case). Unlike Yup'ik and Tzutujil, in Kĩsêdjê possessors are treated analogously to subjects of *intransitive*, rather than those of transitive verbs.

(8) Kîsêdjê inalienable nouns

a. i- pãmã b. a- pãmã c. Ø- pãmã
1.ABS-father 2.ABS-father 3.ABS-father

'my father' 'your father' 'His/her father'

Besides Kĩsêdjê, other ergative-absolutive languages that mark nominal possessors analogously to subjects of intransitive verbs are Bororo (Macro-Jê, Brazil, Nonato 2007, p. 34), Nias Selatan (Austronesian, Nias Island, Brown 2001, p. 342 and C. Donohue and M. Donohue 2010, p. 4) and possibly also the Celtic languages (Awbery 1986 and Harlow 1989, as cited by Brown 2001, p. 342, fn. 1). The examples in (9) and (10) below illustrate the case system of Nias Selatan and the examples in (11) and (12) illustrate the case of Bororo.

(9) Nias Selatan has ergative-absolutive case-marking

a. Intransitive verb (absolutive subject)

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Manavuli sui [n- ama-da Tohönavanaetu] ba Maenamölö.
return again ABS-father-1.PL.INC.GEN Tohönavanaetu LOC Maenamölö
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b. Transitive verb (absolutive object)

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I-a [m- bavi] [ama Gumi.]
3.SG.REALIS-eat ABS-pig father G.
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(10) Nias Selatan's possessors are absolutive

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bavi [n- -ama-gu
pig ABS-father-1.SG.GEN
'My father's pigs'
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In Bororo, agreement aligns possessors with absolutive arguments. Agreement is obligatory with possessors, subjects of intransitive verbs and objects, but it is not obligatory with subjects of transitive verbs —in (11b), for instance, no agreement with the subject of the transitive verb is expressed. Note that the variation found among the agreement markers in the examples below is allophonic.

^{&#}x27;Ama⁶ Tohönavanaetu came back again to Maenamölö'

^{&#}x27;Ama G. is eating/eats pork.'

⁵ Alienable nouns are marked with a possessive auxiliary, whose form indicates the specific kind of possession:

⁽i) i-kit khrwâj (ii) i-nho khrwâj 1.ABS-pet parrot 1.ABS-food parrot 'my (pet) parrot' 'my parrot (meat)'

⁶ Ama 'father' is obligatorily used as part of male names in Nias.

- (11) Bororo displays ergative-absolutive agreement
 - a. Subject of intransitive verb

Emage **et-** aragüdü. They **3.PL-**cry

'They cried.'

b. Object of transitive verb

Adugo=re emage **e-** wido. jaguar=assert. they **3.PL**-kill

'The jaguar killed them.'

(12) Absolutive agreement with possessors

emage **en-** ogwa they **3.PL-**mouth

'their mouths'

The existence of this class of languages poses a problem for the standard theories of possession, namely those that get their inspiration from Abney's hypothesis that possessors are analogous to subjects of transitive verbs. Can these theories also deal with the class of languages in which possessors are analogous to subjects of intransitive verbs?

In order to proceed to that discussion, we need to understand how the perception that nominal possessors are analogous to subjects of transitive rather than those of intransitive verbs has influenced syntactic theories of possession. This influence is linked to the derivation assumed for subjects at different epochs of Generative Grammar. I will discuss these points in the next section.

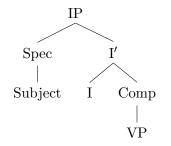
2 The structure of possession

Along the various eras of the Generative Grammar, quite unambiguous syntactic derivations have been proposed for subjects of transitive verbs. For subjects of intransitive verbs, on the other hand, different derivations have been proposed according to verb type (which includes at least unergative and unaccusative).

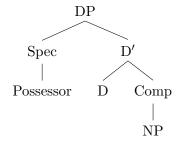
In what follows I will characterize the derivations proposed at various points in the history of Generative Grammar for subjects of transitive verbs, as well as the parallel derivations proposed for possessors. Afterwards, I will discuss the derivations proposed for subjects of intransitive verbs and discuss how the fact that the latter constitute a much less uniform class prevents a straightforwardly parallel derivation for possessors.

Abney (1987) assumed, as was standard at the time, that subjects of transitive verbs were generated in [Spec, IP]. Naturally, he proposed that possessors were generated in [Spec, DP]. IP was assumed to dominate VP and, analogously, Abney assumed that DP dominated NP. The clausal structure standardly assumed at the time is given in (13), and the noun phrase structure Abney proposed is given in (14).

(13) Abney's clause structure

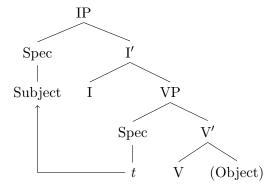


(14) Abney's noun phrase structure



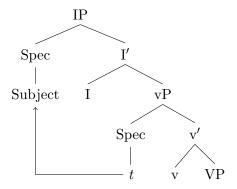
Abney's theory predates the advent of VP-internal subject hypothesis (VISH). The VISH, a development of the late 80's and early 90's, was proposed more or less simultaneous by a number of different authors (for an overview of its history, see McCloskey 1997). According to an earlier version of the hypothesis, rather than being generated in [Spec, IP], subjects were generated in [Spec, VP] and could, depending on the syntactic characteristics of a specific language, later be dislocated to [Spec, IP]. The structure and derivation of VP-internal subjects is illustrated in (15).

(15) Derivation of subjects according to the VISH



A later development of the VISH, due to Kratzer (1994, 1996) and Chomsky (1993, 1995), consists in proposing that subjects are generated as specifiers of a *light* verbal head which takes VP as complement, rather than as specifiers of VP itself. Kratzer calls this light verbal head *Voice* and Chomsky calls it v (little v). Chomsky's nomenclature seems to have gotten more traction, and this is why I am going to be sticking to it.⁷ The derivation of subjects according to the vP-internal subject hypothesis (vISH) is (16).

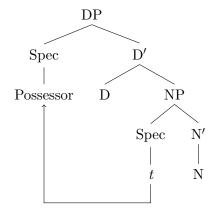
(16) Derivation of subjects according to the vISH



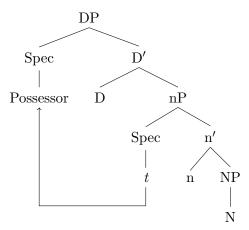
Updating Abney's theory of nominal possessors according to the VISH or the vISH is elementary (see, for instance, Bittner and Hale 1996). Assuming the VISH, in which transitive subjects would be generated in [Spec,VP], possessors are generated in [Spec,NP] and later dislocated into [Spec,DP] (17). Assuming the vISH, according to which subjects are generated in [Spec,vP], possessors are generated in the specifier of a light nominal projection dominating NP (n 'light little n') and later move into [Spec,DP] (18).

⁷ There actually are small but important differences between Kratzer's and Chomsky's proposals, which I won't discuss here because they aren't relevant for the phenomenon under discussion.

(17) Possessors inspired by the VISH



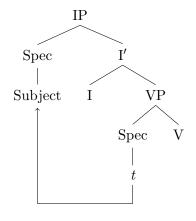
(18) Possessors inspired by the vISH



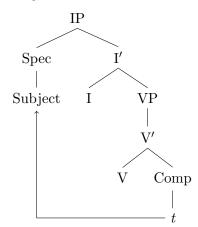
Abney ignored the existence of languages where possessors pattern with subjects of *intransitive* verbs. Had he not, and were he to propose a derivation for possessors that paralleled the derivation of subjects of *intransitive* verbs, would it be different from (14)?

Possibly not. Abney's theory predates the important contribution for the understanding of the syntax of intransitive verbs that is due to Hale and Keyser (1993). At the time Abney developed this work, subjects of transitive as well as subjects of intransitive verbs were supposed to be generated in [Spec,IP]. Hale and Keyser's influential work established a distinction between intransitive verbs with "external" subjects and intransitive verbs with "internal" subjects. That is, subjects of intransitive verbs can be generated either in [Spec, VP/vP] (external) or in [Comp, VP] (internal). The former is the derivation of subjects of unergative verbs, which pattern with subjects of transitive verbs, whereas the latter is the derivation of subjects of unaccusative verbs, which pattern with subjects of passive verbs. Then, in a later stage of the derivation, subjects can be dislocated to [Spec, IP]. The syntactic trees in (19) and (20) show these derivations.

(19) Subjects of unergative verbs



(20) Subjects of unaccusative verbs

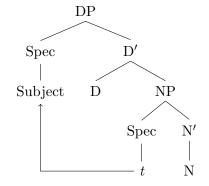


Given theses two possibilities, would we want to say that possessors in languages like Yup'ik and Tzutujil are 'external', and should be attributed a structure analogous to that of subjects of unergative/transitive verbs (21),8 whereas in languages like Kĩsêdjê, Bororo and Nias Selatan possessors are

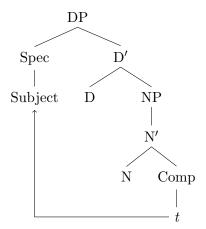
 $^{^{8}}$ Note that though I am assuming the VISH rather than the vISH in the structures in (21) and (22), nothing hinges on this.

'internal', and should be attributed a structure analogous to that of subjects of unaccusative/passive verbs (22)?

(21) 'Unergative' possessors



(22) 'Unaccusative' possessors



Proposing that in different languages possessors are generated in different positions would be a problem for the standardly UTAH (Uniformity of Theta-role Assignment Hypothesis, Baker 1988). According to the UTAH, a thematic role should be identified with a single syntactic position cross-linguistically, never with different positions in different languages.

Alternatively, we can maintain the UTAH if we manage to correlate the fact that there exist two types of possession —alienable and inalienable— with the fact discussed in this paper that some possessors are correlated with subjects of transitive/unergative verbs and some with subjects of unaccusative/passive verbs.

This road also doesn't seem too promising, since alongside languages that make the distinction between alienable and inalienable subjects and have inalienable possessors that pattern with subjects of unaccusative/passive verbs (like Bororo and Kĩsêdjê), there are also languages that make that distinction and in which inalienable possessors pattern with subjects of transitive verbs. One such language is Paresi (Arawak, Brazil, da Silva 2013).

In Paresi, transitive verbs don't display subject agreement, whereas intransitive unaccusative verbs do. Unlike Kĩsêdjê and Bororo, possessors of inalienable nouns in Paresi pattern with subjects of transitive verbs —(23a) and (24a)—, whereas possessors of alienable nouns pattern with the subjects of intransitive unaccusative verbs —(23b) and (24b).

(23) a. Inalienable nouns don't agree

'my arm'

(24) a. Transitive verbs don't display agreement

'I made it.'

b. Alienable nouns agree

b. Unaccusative verbs display agreement

No= zan-
$$i$$
- \emptyset .
I= go- 1 .sG-PERF
'I went.'

1 went

At the current stage, it doesn't seem possible to account satisfactorily for the possibilities displayed by the various languages reviewed in this paper. I hope, however, to have convinced the reader that the consensus that appears to have been reached in the area is illusory. We still can't pinpoint where possessors are.

References

- Abney, Steven Paul (1987). "The English noun phrase in its sentential aspect". PhD thesis. MIT.
- Adger, David (2003). Core syntax: A minimalist approach. Oxford University Press Oxford.
- Alexiadou, Artemis, Liliane Haegeman, and Melita Stavrou (2007). Noun phrase in the generative perspective. Vol. 71. Studies in Generative Grammar. Walter de Gruyter.
- Awbery, Gwenillian M. (1986). "Survey of sandhi types in Welsh". In: Sandhi Phenomena in the Languages in Europe. Ed. by H. Andersen. Vol. 33. Trends in Linguistics. Berlin: Mouton de Gruyter, pp. 415–433.
- Baker, Mark (1988). *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Bernstein, Judy B. (2001). "The DP hypothesis: Identifying clausal properties in the nominal domain". In: *The handbook of contemporary syntactic theory*. Ed. by Mark Baltin and Chris Collins. Wiley Online Library, pp. 536–561.
- Bittner, Maria and Kenneth Hale (1996). "The Structural Determination of Case and Agreement". In: *Linguistic Inquiry* 27.1, pp. 1–68.
- Brown, Lea (2001). "A Grammar of Nias Selatan". PhD thesis. University of Sydney.
- Carnie, Andrew (2006). Syntax: A generative introduction. Second edition. John Wiley & Sons.
- Chomsky, Noam (1993). "A Minimalist Program for Linguistic Inquiry". In: *The view from building* 20. Ed. by Kenneth Hale and Samuel Jay Keyser. Cambridge, MA: MIT Press.
- (1995). The Minimalist Program. Cambridge, MA: MIT Press.
- Dayley, Jon Phillip (1985). *Tzutujil Grammar*. UC Publications in Linguistics Series. University of California Press. ISBN: 9780520099623. URL: http://books.google.com.br/books?id=1AwES4bJpe0C.
- Donohue, Cathryn and Mark Donohue (2010). "The case of possessors and 'subjects'". In: Austronesian and Theoretical Linguistics 167.
- Hale, Kenneth and Samuel Jay Keyser (1993). "On Argument Structure and the Lexical Expression of Syntactic Relations". In: *The view from building 20*. Ed. by Kenneth Hale and Samuel Jay Keyser. Cambridge, MA: MIT Press.
- Harlow, Steve (1989). "The syntax of Welsh soft mutation". In: Natural Language and Linguistic Theory 7, pp. 289–316.
- Kratzer, Angelika (1994). "The event argument and the semantics of voice".
- (1996). "Severing the external arguments from its verb". In: *Phrase Structure and the Lexicon*. Ed. by Johan Rooryck and Laurie Zaring. Studies in Natural Language and Linguistic Theory. Kluwer Academic Publishers, Dordrecht, Boston and London.
- McCloskey, Jim (1997). "Subjecthood and subject positions". In: *Elements of Grammar*. Ed. by Liliane Haegeman.
- Nonato, Rafael (2007). "Ainore Boe egore: Um estudo descritivo da língua bororo e conseqüências para a teoria de caso e concordância". MA thesis. Unicamp, SP, Brazil. URL: http://ling.auf.net/lingbuzz/001909.
- (2014a). "Clause chaining, switch reference and coordination". PhD thesis. MIT. URL: rafaeln.github.io/papers/thesis.pdf.

Nonato, Rafael (2014b). "Where are the possessors?" In: Revista LinguiStica 10.1.

Radford, Andrew (2000). "NP shells". In: Essex research reports in linguistics 33, pp. 2–20.

— (2004). Minimalist syntax: Exploring the structure of English. Cambridge University Press.

Reed, Irene et al. (1977). Yup'ik Eskimo Grammar. Alaska Native Language Center, University of Alaska.

da Silva, Glauber Romling (2013). "Morfossintaxe da língua Paresi-Haliti (Arawak)". PhD thesis. UFRJ.