Attributive possession in the languages of South America*

Olga Krasnoukhova Radboud University Nijmegen

1. Introduction

This paper deals with structural characteristics of attributive possessive constructions in 55 indigenous languages of South America. Focusing exclusively on this part of the world, it gives a typological profile of these genetically diverse languages with respect to various aspects of attributive possession. Since South American languages have played a marginal role in typological studies, the present work aims to contribute to the knowledge of attributive possession and to discuss new challenges to existing observations. The only previous comparative study on attributive possession in South America is van der Voort (2009), which focuses on eight unrelated languages spoken in the Southwestern Amazon region. Van der Voort (2009) gives a detailed account of forms and possession techniques encountered in the eight languages under investigation and shows that despite their diverse genetic origin, the structural expression of attributive possession is impressively similar, thus probably pointing to areal diffusion in the region. The present study takes a broad typological perspective to the question of attributive possession and compares a large number of genetically and areally diverse languages on the following aspects: constituent order in possessive NPs, locus and means of possession marking, formal realization of (in)alienability and structural differences between alienable and inalienable constructions.

First, the terminology needs to be agreed on. Attributive possession refers to constructions in which possessed and possessor expressions form a noun phrase (cf. McGregor 2009:2). In terms of headedness, the noun denoting the possessed in such constructions is considered to be the head of the NP, and the noun denoting the possessor is a dependent modifying the head.

For this study I systematically compared possessive constructions of four types: two containing optionally (alienably) possessed nouns and, when applicable, two containing obligatorily (inalienably) possessed nouns. One of each pair includes

a possessor expressed as a noun (i and iii), while the other has a possessor that is expressed pronominally (ii and iv). These four construction types are illustrated by the following examples using optionally and obligatorily possessed nouns.

- (i) Mario's boat (lexical possessor; optionally possessed noun);
- (ii) his boat (pronominal possessor; optionally possessed noun);
- (iii) *Mario's ear* (lexical possessor; obligatorily possessed noun);
- (iv) his ear (pronominal possessor; obligatorily possessed noun).

Appendix 1 shows the languages included in the sample with their genetic affiliation and location. The languages have been chosen in order to satisfy the requirement of genetic and areal diversity. The existence of adequate grammatical descriptions has also played a role while compiling the sample.

2. Analysis of the data

2.1 Word order

This section deals with constituent order in possessive NPs with possessors expressed by full nouns.

The majority of languages in the sample, 47, have a *possessor-possessed* word order, which is either fixed or favored. Six languages out of the total sample of 55 have a *possessed-possessor* word order, which is, likewise, either fixed or highly favored. These six languages are: Baure, Movima, Itonama, Wari', Pilagá and Tehuelche. One language, Mocoví, shows both word orders with neither being dominant nor involving any obvious semantic distinctions. Finally, there is one language in the sample, Dâw, which can have both word orders, but used for specific conditions: while with alienable nouns either word order is possible, with inalienable nouns the possessor always precedes the possessed.

All six languages with *possessed-possessor* order are genetically unrelated. Looking at their geographic distribution, it can be observed that four out of six are spoken in the Guaporé-Mamoré region, which has strong characteristics of a linguistic area (cf. Crevels and van der Voort 2008).

Comparing word order in possessive constructions with the constituent order in the clause, it can be observed that languages with *possessor-possessed* word order are prevailingly¹ OV at the clause level, while those with *possessed-possessor* word order have VO constituent order in the clause, with one exception (Tehuelche, OV). Mocoví, which has both orders in the possessive NP, can have either OV or VO order at the clause level. Dâw, which can have both orders depending on a construction type, has VO order.

This is consistent with the observations by Dryer (1992, 2008) that OV languages of all types tend to have possessor-possessed order, while VO languages tend to have possessed-possessor order, except for SVO languages which can have both orders. The latter tendency is also confirmed by the languages in the sample.

2.2 Locus of possession

Possessive constructions in the sample languages can be divided into five types, taking locus of possession as the primary parameter. These five types are identified on the basis of alienable possession, with possessors expressed by full nouns.

- (i) Head-marking, i.e. the noun denoting the possessed (the head) is marked. The following three morphological markers can occur on the head noun to mark possession: (a) personal possessive prefixes/suffixes: affixes which encode person and, often, number and gender of the possessor. (b) 'Possessed' suffixes: suffixes which encode that the referent of a noun is possessed, but do not carry any information on the possessor. (c) 'Relational morpheme' / 'linker' / 'relativizer': such markers have a function of signaling unity between possessor and possessed. In some languages they occur only with alienably possessed nouns, whereas in others, they can occur both with alienable and inalienable nouns. It is often the case that the presence of such markers is phonologically conditioned. Examples below illustrate the use of personal possessive prefixes (1), 'possessed suffixes' (2), and relativizer and personal possessive prefixes (3).
 - (1) Yurakaré (unclassified; van Gijn 2006: 116, p. c.)
 - a. shunñe a-sibë
 man 3sG-house
 'the man's house'
 b. a-sibë
 3sG-house
 'his/her house'
 - (2) Apurinã (Arawakan; Facundes 2000: 236, 348)
 - a. Tokatxi xika-re₁ b. nota aiko-te

 Tokatxi sing-possd 1sG house-possd

 'Tokatxi's song' 'my house'
 - (3) Itonama (unclassified; Crevels 2011)

 [ah-mi-yabi'ka o-chiwo] pi-kadaya ni-me'sere

 3-REL-wife DV-Chivo 3SG.F-name HON-SP.Mercedes

 'Chivo's wife is called Mercedes.'
- (ii) *Dependent-marking*, i.e. the possessor noun (the dependent) is marked. Morphological markers syntactically associated with the possessor include the *possessive* or *genitive marker*. Since the term 'genitive' is often employed for formal categories in specific languages, I use the term 'possessive' here as a cover term for

all the markers that have this function. Morphologically possessive markers can be bound or free. In one language of the sample, Mosetén, the possessor occurs with a morpheme that agrees in gender with the possessed. Since this morpheme has a much broader function in Mosetén, it is not glossed as 'possessive'.

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(4) Tsafiki (Barbacoan; Dickinson 2002: 60, 94)
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    a. ya Chipiri Kato=chi ya=bi...
    b. ya=chi na=ka
    3 Chipiri Kato=poss house=loc
    'In Chipiri Kato's house...'
    3=poss child=acc
    '...(if he ate) her children'
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(5) Mosetén (Mosetenan; Sakel 2004: 64, 96)

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a. martin-si' aka' b. mi'-si' äwä'
martin-L.F. house[F] 3M.SG-L.F child[F]
'Martin's house' 'his daughter'
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- (iii) *Double-marking*, i.e. both possessor and possessed are marked.
 - (6) Huallaga Quechua (Quechuan; Weber 1989: 254)

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a. hwan-pa wasi-n b. (pay-pa) wamra-n
John-Poss house-3 3sG-Poss child-3
'John's house' 'his child'
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- (iv) *Free marking*, i.e. neither possessed nor possessor is marked; however, there is some formal marking indicating possession in the NP, which is not bound syntactically to either possessor or possessed.
 - (7) Mapuche (Mapadungun; Smeets 2008: 133) [[iñché ñi chaw] ñi pu kümé wenüy] 1SG 1.POSPRO father 3.POSPRO COLL good friend 'my father's good friends'
- (v) *No marking*, i.e. neither possessed nor possessor is marked; constituent order is the only indicator of the possessive relationship in the NP.
 - (8) Urarina (unclassified; Olawsky 2006: 333)

 ajtçune kuane ama-ure [neba rene]

 place.name inside take-3PL/E mother place

 'They took her to the Río Espejo, to her mother's place'

There is a certain variation as to the possession patterns found within each type. Due to space limitation these are not considered in the present paper.

While the last three types are represented by a relatively small number of languages, the majority of languages in the sample fall into either the head-marking or the dependent-marking type, as summarized in Table 1. The exact number of head-marking and dependent-marking languages depends on the construction the counting is based on: constructions in which possessors are expressed by a lexical noun or those in which possessors are expressed pronominally. This has to do with two facts: (a) ten languages that have no formal marking in constructions with a nominal possessor can be head-marking, dependent-marking or unmarked in constructions with a pronominal possessor. (b) Two languages (Kwaza and Mosetén) that are dependent-marking in constructions with a nominal possessor can be both head- and dependent-marking with the possessor expressed pronominally. The numbers in brackets reflect this in Table 1: 24 (26) and 22 (20).

Table 1. Locus of marking for alienable possession in the sample languages.

Locus of marking for alienable possession				
With nominal possessor	# of languages			
Head-marking	18			
Dependent-marking	20			
Double-marking	2			
Other ²	15			
With pronominal possessor				
Head-marking	24 (26)			
Dependent-marking	22 (20)			
Double-marking	2			
Other	7			

According to Dixon and Aikhenvald (1999:8), the locus of marking in possessive NPs is one of the features defining Amazonia as a linguistic area. They state: "possession (either alienable or inalienable) is typically marked on the possessed noun, not on the possessor", arguing that this contrasts with "the Andean linguistic area", where languages mark both possessor and possessed.

The present study does not support the assertion that Amazonian languages are typically head-marking with regard to possession. Both types of marking are rather equally represented among the Amazonian languages of the present sample. This observation is also consistent with the one by van der Voort (2009: 345) with respect to the languages in the Southwestern Amazon region in his study. Looking at the geographic distribution of the head-marking and dependent-marking types, one can identify certain clusters of languages with a dependent-marking strategy. These are, for instance, languages spoken in Ecuador, on the border of Colombia and Brazil, and the Peru-Brazil border.

The statement that the languages of "the Andean linguistic area" mark both possessor and possessed is based by Dixon and Aikhenvald (1999:9) on the Quechuan and Aymaran families. These are indeed of a double-marking type, except that in the Quechua dialects spoken in Ecuador and Colombia, and in the Ecuadorian and northern Peruvian jungle dialects, marking on the possessed noun has been lost (Adelaar with Muysken 2004: 208). Languages in the present sample spoken in the Andean sphere other than Huallaga Quechua and Aymara show various types of possession marking. For example, Imbabura Quechua, Tsafiki, Awa Pit and Leko use a dependent-marking strategy, while Yanesha is clearly head-marking. Mosetén can show both strategies as mentioned above. Mapuche has free marking (see example 7), and possession in Nasa Yuwe can be referred to as 'unmarked'. Therefore, we should be careful in referring to the Amazonian languages as typically 'head-marked' with regard to possession and the languages in the Andean sphere as typically 'double-marked'.

2.3 Means of possession marking

The means of marking possession in the languages in the sample include (a) morphological markers, (b) tonal patterns; (c) word order of constituents in the possessive NP. The latter is visible, for instance, in Dâw, where morphologically marked alienable possession permits both word orders, while morphologically unmarked inalienable possession requires a particular order (possessor-possessed). Marking by tone has been reported for Miraña, where there are no segmental markers of possessive relationship between nominal possessor and possessed. Possessive constructions are formally marked by a low tone and have a rather fixed constituent order (cf. Seifart 2005:144). Among the morphological markers of possession two types prevail: *possessive* or *genitive markers* occurring on the noun denoting the possessor, and *personal possessive affixes* occurring on the noun denoting the possessed. Among the latter, personal possessive *prefixes* are most common. In the majority of the languages in the sample that use personal possessive affixes, the same set of affixes is also used for argument cross-reference on the verb.

It has been stated by Dryer (2007: 182) that languages in which the construction used for pronominal possessors is identical to that used for nominal possessors "form a small minority of the world's languages". Interestingly, about half of the languages in the sample which mark possession on the possessor, employ exactly the same construction with pronominal and with nominal possessors (see examples 4–6 above and 9 a,b below). This is also the case, for instance, for Kwaza, Cavineña, Shipibo-Konibo, Ika, Desano and Trumai.

There is another related argument made in Dryer (2007: 182), which is notable with respect to the South American data considered in the study. Dryer states that

many languages with some form of possessive marking on nominal possessors, have "a distinct morphological class of possessive pronouns, often *without* a clearly identifiable genitive morpheme" (italics are mine). This is rarely the case for the languages in the sample. As just stated, half of the dependent-marking languages use possessive markers on personal pronouns to mark possession. The other half of the dependent-marking languages is reported to have a so-called category of possessive pronouns. However, most of these possessive pronouns have a rather transparent morphological composition (see example 10 a,b below). In three languages, Cubeo, Kanoê and Ninam, possessive pronouns as a fully grammaticalized category are only present for 1st and 2nd person, for which they constitute distinct forms. The 3rd person possessive pronouns are formed by a 3rd person pronoun receiving the same possessive marker as nominal possessors in these languages. There is just one language out of 22, Awa Pit, where the whole set of possessive pronouns is morphologically distinct from personal pronouns.³

2.4 Formal realization of (in)alienability

Factors motivating multiple possessive constructions include animacy of the possessor, person of the pronominal possessor (3rd person vs. 1st and 2nd person), and/or semantic properties of the possessed noun. Here I focus on the cases in which (pragmatically unmarked) alternative possessive constructions are primarily conditioned by semantic properties of the possessed noun.

With respect to possession, nouns can be grouped into classes of obligatorily possessed, optionally possessed, indirectly possessed and non-possessible nouns. I consider just the first two here. Obligatorily possessed, or inalienable nouns, are those which cannot occur by themselves and require an overt statement of who the possessor is. Optionally possessed, or alienable nouns, are those which can stand on their own without the specification of a possessor.

If the alienable vs. inalienable distinction is present in a language, it is often reflected formally. As pointed out by Haiman (1985:130, referred to in Chappell and McGregor 1996:4) "the conceptual distance between an inalienable possession and its possessor is less than that between an alienable possession and its possessor, and this is iconically reflected in many languages". This is also observed by Payne (1997:105), who notes that inalienable possession often requires less "morpho-syntactic material" than alienable possession. For instance, a strategy to denote inalienable possession can be compounding, or juxtaposition of unmarked possessor and possessed nouns. In such cases, constituent order is usually fixed.

With respect to alienable-inalienable possession, the languages in the present sample can be divided into the following types:

	# of lang-s
Type 1: Languages which <i>do not</i> have a class of inalienable nouns	13
Type 2: Languages which do have a class of inalienable nouns	42
Type 2-A: Using the same construction with alienable & inalienable nouns ⁴	24
Type 2-B: Using a different construction with inalienable nouns	18

Table 2. Languages in the sample with respect to alienable-inalienable possession.

In the present sample, 13 languages are of the first type, while 42 languages are of the second type. In 24 languages out of the 42, there is no formal distinction between alienable and inalienable possession, thus the same construction is used with alienable and inalienable nouns.

Among the other 18 languages that do formally differentiate alienable and inalienable possession, the following division is noticeable:

- 14 languages require less morphological markers in inalienable constructions than in alienable.
- In one language (Tariana) inalienable possession requires more morphology than alienable possession does. While alienable possession is characterized in Tariana by unmarked juxtaposition of a lexical or pronominal possessor and an unmarked possessed, inalienable possession is signaled by the obligatory use of personal possessive prefixes on the possessed noun.
- Two languages (Karo and Leko) show different locus of marking in inalienable possession and therefore have a different possessive construction. One language (Movima) uses a qualitatively different strategy for marking inalienable possession, i.e. infixing reduplication (cf. Haude 2006: 237).

Looking at the geographic distribution of languages that have a class of inalienably possessed nouns and those which do not, it can be observed that languages without a class of inalienable nouns are mainly spoken in the highlands. There are three lowland Amazonian languages in the sample (Kwaza, Latundê/Lakondê and Sabanê), all three spoken in the Guaporé-Mamoré area, which do not have inalienable nouns; however, they show possible vestiges of inalienability. Thus, the presence of alienable vs. inalienable nouns can be among the features distinguishing Amazonian vs. Andean languages with regard to possession.

2.5 Comparing alienable vs. inalienable possession

Regarding marking patterns of alienable and inalienable possession several generalizations for this sample can be made, complementing the discussion in Nichols (1992:116–123).

- (i) Languages that are head-marked in alienable constructions are also head-marked in inalienable constructions. This is consistent with observations by Nichols (1992:119). Among 16 head-marking languages with a category of inalienable nouns there is one semi-exception. Specifically, head-marking Apurinã shows no morphological marking in constructions with inalienable nouns when possessors are expressed by a lexical noun. If the lexical possessor is absent, the inalienable possession is head-marked.
- (ii) Inalienable constructions that involve juxtaposition of an unmarked lexical or pronominal possessor and an unmarked possessed occur only in dependent-marking languages, as opposed to the other language types. To my knowledge, this is a new generalization. Among 15 dependent-marking languages with a category of inalienable nouns, 6 languages have this strategy. Example (9a,b) from Dâw shows alienable possession, while (9c,d) illustrates inalienable possession.
 - (9) Dâw (Nadahup; Martins 2004: 546-547)

a.	tэp	Tũk-ἒ _f	b.	tih-ἒ j	cờg
	house	Tũk-poss		3SG-POSS	arrow
	'Tũk's h	iouse'		'his arrow'	
c.	$[[tih\ t\varepsilon]$	îâm]	d.	[tih nũh]	
	3sg soi	nwife		3sG head	
	'his son	's wife'		'his head'	

- (iii) In dependent-marking languages inalienable possession can become head-marking, but only in constructions with pronominal possessors (i.e. when the lexical possessor is not present). Nichols (1992:117–118) also reports such languages. Example (10) from Karo shows dependent-marked constructions with an alienable noun 'house' (10a,b) and an unmarked construction with an inalienable noun 'eye' (10c); (10d) illustrates the shift to the head-marking strategy with inalienable nouns when the lexical possessor does not surface.
 - (10) Karo (Tupian; Gabas 1999: 148, 149)
 - ma?wit at ka?a wat kara poss house 1POSPRO house man 'man's house' 'my house' aoro cagá] d. a=cagá parrot eye 3sg=eye 'parrot's eye' 'his/its eye'

3. Concluding remarks

This paper has shown that a systematic analysis of emerging South American data, which until recently have played just a minor role in comparative studies, can open new perspectives on existing claims.

First, the study gives support to the observations by Dryer (2008) on word order correlations: OV languages of all types tend to have possessor-possessed order, while VO languages tend to have possessed-possessor order, except for SVO languages in which both orders are common.

Second, it offers a new viewpoint on the cross-linguistic pattern of expression of possession discussed in Dryer (2007): South American languages exhibit a typologically unusual behavior in that constructions used for pronominal possessors are generally identical to those for nominal possessors. Few of the considered languages appear to have a fully grammaticalized category of possessive pronouns. Taking the global scale of the Dryer's survey, these patterns could be thus characteristic of South America as a continent.

Third, this study questions the assertion by Dixon and Aikhenvald (1999: 9) that the locus of possession marking is one of the features contrasting Amazonian vs. Andean languages. Dixon and Aikhenvald (1999: 8,10) state that possession is typically marked on the possessed noun and not on the possessor in the Amazonian languages, while in the Andean languages both the possessed and the possessor nouns are marked. As shown in this paper, no such pattern emerges when looking at the geographic distribution of possession marking types. Both head-marking and dependent-marking possession strategies are represented rather equally among the Amazonian languages in the sample. Likewise, the languages in the sample spoken in the Andean sphere show various types of possession marking, indeed including the double-marking pattern. What does stand out is the division of languages that have a class of inalienably possessed nouns and those which do not. The languages without a class of inalienable nouns are mainly found in the highlands.

Fourth, surveying formal realization of (in)alienability, the study observes that among the languages in the sample which structurally distinguish alienable vs. inalienable possession, 14 out of 18 languages (78%) are consistent with the observations by Haiman (1985) and Payne (1997) that inalienable possession involves less morphological marking than alienable possession. There is one counterexample and three languages to which the observation is not readily applicable.

To summarize, focusing on South America, this study contributes to our general knowledge of attributive possession already existing for other parts of the world.

Notes

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- 1. Languages with *possessor-possessed* word order have the following order at the clause level: OV (34 languages), VO but other than SVO (1 language), OV/VO + free order (7 languages), SVO (5 languages).
- 2. Two other types are identified as 'Other' in this table.
- 3. In contrast with Tsafiki, another Barbacoan language in the sample (cf. Dickinson 2002:94).
- 4. The distinction between alienable and inalienable nouns in this case would be the obligatory expression of the possessor for inalienable nouns, and the possibility for alienable nouns to occur on their own without the specification of a possessor.
- 5. Languages spoken in the Andean sphere are given in small caps.

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Abbreviations (including abbreviations of countries given in Appendix 1)

Glosses: 1 '1st person', 3 '3rd person', ACC 'accusative', COLL 'collective', DV 'dummy vowel', E 'external argument', F 'feminine', HON 'honorific', L 'linker', LOC 'locative', M 'masculine', PL 'plural', POSPRO 'possessive pronoun', POSS 'possessive', POSSD 'possessed', REL 'relativizer', SG 'singular', SP 'Spanish'.

Country abbreviations: AR 'Argentina', BO 'Bolivia', BR 'Brazil', CH 'Chile', CO 'Columbia', EC 'Ecuador', FG 'French Guiana, PA 'Paraguay', PE 'Peru', SU 'Suriname', VE 'Venezuela'.

Appendix 1. Language sample (ordered by language family)⁵

Language	Affiliation	Country	Language	Affiliation	Country
Apurinã	Arawakan	BR	Nasa Yuwe	Paezan	СО
Baure	Arawakan	ВО	Matses	Panoan	PE
Tariana	Arawakan	BR	Shipibo- Konibo	Panoan	PE
Yanesha'	Arawakan	PE	Yaminahua	Panoan	PE/BO
Jarawara	Arawan	BR	Huallaga Quechua	Quechuan	PE
Aymara	Aymaran	BO/PE/CH	Imbabura Quechua	Quechuan	EC
Awa Pit	Barbacoan	CO/EC	Cavineña	Tacanan	ВО
Tsafiki	Barbacoan	EC	Cubeo	Tucanoan	СО
Miraña	Boran	CO/PE	Desano	Tucanoan	СО
Hixkaryana	Cariban	BR	Gavião	Tupian	BR
Panare	Cariban	VE	Karo	Tupian	BR
Trio	Cariban	SU/BR	Mekens	Tupian	BR
Wari'	Chapacuran	BR	Emérillon	Tupian	FG
Ika	Chibchan	со	Kamaiurá	Tupian	BR
Northern Embera	Chocoan	СО	Tapieté	Tupian	BO/AR
Tehuelche	Chonan	AR	Ninam	Yanomaman	BR/VE
Mocoví	Guaycuruan	AR	Chamacoco	Zamucoan	PA
Pilagá	Guaycuruan	AR	Itonama	unclassified	ВО
Bororo	Macro-Ge	BR	Leko	unclassified	ВО
Timbira	Macro-Ge	BR	Movima	unclassified	ВО
Dâw	Nadahup	BR	Yurakaré	unclassified	ВО
Hup	Nadahup	BR	Kanoê	unclassified	BR
Марисне	Mapadungun	CH/AR	Kwaza	unclassified	BR
Wichí	Matacoan	AR	Trumai	unclassified	BR
Mosetén	Mosetenan	ВО	Puinave	unclassified	CO/VE
Lakondê/	Nambik-	BR	Urarina	unclassified	PE
Latundê	waran				
Mamaindê	Nambik- waran	BR	Warao	unclassified	VE
Sabanê	Nambik- waran	BR			

Author's address

Olga Krasnoukhova Radboud University Nijmegen Department of Linguistics P.O. Box 9103 6500 HD Nijmegen, the Netherlands

o.krasnoukhova@let.ru.nl