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Abstract

In this paper I discuss a form of the noun in Aguaruna whose typical use is to mark the possessor in a possessive construction – thus I use the term 'genitive'. A phonologically identical form also occasionally marks the object of a transitive verb, where accusative case is typical.

The genitive form is both morphologically and syntactically unusual: morphologically in that it has no segmental marking, instead using accent shift and suppression of apocope; and syntactically in that it can only appear directly preceding the possessed noun (when marking possessor), or verb (when marking object).

I present evidence for a historical development of genitive from accusative case marking. The accusative case in Aguaruna marks both the notional direct object and the notional indirect object (i.e. recipients and beneficiaries) of a verb, and I propose that an extension of a benefactive sense has led to its use in marking the possessor of a possessed noun. Phonological developments then allowed genitive forms to split off and be reinterpreted as distinct from accusative-marked forms, with subsequent restructuring of constituents. In addition, an object contiguous to the verb underwent reinterpretation and subsequent dropping of the segmental accusative marking, thus giving rise to a special form of "generic" object, superficially identical to the genitive marked possessor.

Keywords

Aguaruna, Jivaroan, Morphology, Genitive, Accusative

The Language and Speakers

Aguaruna is a Jivaroan language spoken by about 30 - 40,000 people in the Peruvian *departamentos* of Loreto, San Martín, Amazonas and Cajamarca. The majority of Aguaruna speakers live in native communities along the upper Marañón River and its tributaries where they subsist by swidden horticulture, hunting and fishing. Most Aguaruna people also know some Spanish, and a bilingual education programme has operated since 1953. However, children do not begin to learn Spanish until their second year of schooling, and there appears to be little Spanish influence on Aguaruna other than lexical borrowings. There is no demonstrated genetic relationship between Jivaroan languages and any other language family.

Typological Profile

Aguaruna is basically agglutinating and entirely suffixing. Both head and dependent marking are found in nominal and verbal paradigms. Grammatical relations are expressed with core cases on a nominative/accusative basis. Non-core cases are ablative, locative, instrumental and comitative. Constituent order is predominantly SV/AOV.

All NP arguments and much morphology can be omitted if they are recoverable from context.

Vowel Elision

Regular processes of vowel elision operate on words of three or more vowels. Apocope deletes the final vowel if it is in a CV syllable, and syncope deletes the third from the left and every alternate following vowel if they are in CV syllables. Vowel elision is exemplified in (1); the vowels shown in bold in the underlying form are elided.

(1) $/\text{mi-na-} \int \mathbf{a} kam \mathbf{a} / \rightarrow [mina \int kam]$ 'me also' 1SG-ACC-ADD

There are a few lexically specified exceptions to vowel elision processes.

Introduction

In this paper I discuss a form of the noun in Aguaruna whose typical use is to mark the possessor in a possessive construction – thus I use the term 'genitive'. A phonologically identical form also occasionally marks the object of a transitive verb, where accusative case is typically used.

In the literature on Aguaruna, only the CAAAP publications make any reference to this form, as for example in the CAAAP Dictionary: "For each noun and adjective two forms are given: the nominative and the genitive. The genitive is used, in many instances, to add suffixes".1 The CAAAP authors do not ascribe any grammatical properties to the genitive; instead, they consider it to be more like an alternate root, noting that certain suffixes are always added to the genitive form. None of the CAAAP publications mentions the use of genitive as a "stand-alone" form, in any type of construction.

The genitive form is both morphologically and syntactically unusual: morphologically in that it is not marked with a suffix, instead using accent shift and suppression of apocope; and syntactically in that it can only appear directly preceding the possessed noun (when marking possessor), or verb (when marking object).

I present evidence for a historical development of genitive from accusative case marking. The accusative case in Aguaruna marks notional direct and indirect objects (i.e. recipients and beneficiaries) of a verb, and I propose that an extension of a benefactive sense has led to its use in marking the possessor of a possessed noun; subsequent phonological developments then allowed genitive forms to split off and be reinterpreted as distinct from accusative-marked forms. In addition, an object contiguous to the verb underwent reinterpretation and subsequent dropping of the segmental accusative marking, thus giving rise to a special form of "generic" object, superficially identical to the genitive marked possessor.

I begin by presenting an overview of the accusative case. Then I discuss possession in Aguaruna, which leads us to the genitive form. Next I discuss the relationship between accusative and genitive for marking core arguments, and finally propose a historical connection between the two.

Accusative Case

The accusative case is used to mark an object NP. The accusative suffix has the form /na/, appearing as [n] when its vowel is in a position to be elided. The accusative suffix provokes an accent shift one vowel rightward in nouns of two or three underlying

^{1 &}quot;Para cada nombre y adjetivo se presentan dos formas: el nominativo y el genitivo. Se usa el genitivo, en muchos casos, para agregar sufijos" (CAAAP 1998: 6)

vowels (see Payne 1990); this is illustrated in examples (2a), with two underlying vowels, and (2b), with three. There is no accent shift in example (2c), as the underlying form of the noun, /nátsatsama/ 'Santa María plant', has four vowels.

(2)		<u>NOM</u>	ACC	
	a.	út∫i	ut∫í-n	'child'
	b.	atá∫	ata∫ú-n	'chicken'
	c.	nátsatsama	nátsatsama-n	'Santa María plant'

Both notional direct objects and notional indirect objects (ie. recipients and beneficiaries) are marked with the accusative suffix, although they appear to be regularly distinguished by other properties. 2 The accusative suffix can thus be described as marking **non-subject core participants**. I return to this concept in my discussion of the genitive form below.

Possession in Aguaruna

Possession in Aguaruna is both head and dependent marked. A possessed noun carries a suffix or suffixes indicating that it is possessed, and an overt possessor is not required to form a possessive NP. Where a possessor is present, it is morphologically marked as such.

Alienable vs. inalienable possession

Nouns are subdivided into two classes based on their possessive morphology. The classes basically represent an alienable/inalienable distinction 3, however the assignment of nouns to one or the other class is very culture-specific. Possession is never obligatory in Aguaruna: both alienably and inalienably possessed nouns can appear outside of a possessive construction.

Pertensive Marking

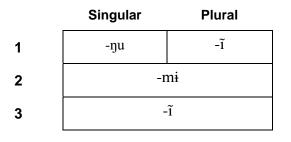
• Alienably possessed nouns take the pertensive suffix /ŋu/~[ŋ], indicating that the noun is possessed. This is followed by a suffix indicating the person of the possessor (see 3). Alienable possession is exemplified in (4a).

² For example, there is only one object suffix on the verb; this references the direct object of a monotransitive verb but the indirect object of a ditransitive verb.

³ One could describe the distinction as one of **inherent** (but not obligatory) possession vs. **morphologically marked** possession. By this description, possession is a property of a noun root, and pertensive is a **derivational** suffix.

- **Inalienably possessed** nouns take the person suffix only; the possession relationship is presupposed when a person suffix is added to a noun of this class. Inalienable possession is exemplified in (4b)
- When the possessor is **first person singular**, all nouns are treated as inalienably possessed, appearing only with the 1SG suffix /ŋu/; thus the 1SG suffix never co-occurs with the homophonous pertensive suffix. 4 The exceptional treatment of first person singular possessor can be explained if we assume that the speaker considers the implication of possession stronger in their own case: so any noun marked with the first person singular suffix is understood as possessed. Alternatively, a phonological explanation could be posited, whereby a sequence /ŋu-ŋu/ 'PERT-1SG' is haplologically reduced to [ŋu].

Table (3) gives the person markers for possessed nouns.



(3) Person markers in possessive constructions5

The suffix $/\tilde{i}/$, used to indicate 1PL and 3, merges phonologically with a preceding single vowel:

- /aī/ and /ii/ become [i]
- /iī/ and /uī/ become [ĩ]

Thus the combination of pertensive marker / η u/ plus person marker / \tilde{i} / is always realised as [$\eta \tilde{i}$] (cf. *hapa\eta \tilde{i}* < hapa- ηu - \tilde{i} 'our deer' in the first row of table 4a).

Tables (4a) and (4b) exemplify the possession paradigms for an alienably possessed noun (*hápa* 'deer') and an inalienably possessed noun (*náw* 'foot') respectively. The surface form is italicised, and the line below it gives the underlying form.

⁴ Corbera (1994: 127) gives three nouns (all names of monkey species) which take both pertensive and 1st person markers. This is not supported by my own elicited data.

⁵ Verbal person marking in Aguaruna makes a four-way distinction, contrasting 1SG, 1PL, 2 and 3; number is marked with a separate suffix in the second and third persons. In the possession paradigm exemplified here, 1PL and 3 are marked identically (with /-ī/). This could indicate an underlying three-way distinction in this paradigm between 1SG, 2 and "other", or it could be that the suffixes for 1PL and 3 are homophonous (but historically unrelated).

	Singular		Plural	
1	hapáŋ	'my deer'	hapaŋĩ	'our deer'
	hapa-ŋu deer-1SG		hapa-ŋu-ĩ deer-PERT-1PL	
2	hapaŋúm	'your (sg) deer'	or 'your (pl) dee	r'
	hapa-ŋu-m i deer-PERT-2			
3	hapaŋĩ	'his/her deer' or	r 'their deer'	
	hapa-ŋu-ĩ deer-PERT-3			

(4a) Alienable possession paradigm: hápa 'deer'

1	náwiŋ	'my foot'	náwi	'our feet'
	naw i -ŋu foot-1SG		naw i -ĩ foot-1PL	
2	náwim	'your (sg) foot'	OR 'your (pl) fee	ť
	naw i -m i foot-2			
3	náwĩ	'his/her foot' O	R 'their feet'	
	nawi-ĩ foot-3			

(4b) Inalienable possession paradigm: náwi 'foot, feet'6

⁶ The singular/plural distinction is not marked on nouns in Aguaruna.

Expression of the Possessor

Unlike (for example) English, the possessor need not be overtly expressed as part of a well-formed possessive NP; the pertensive marking is enough. Compare example (5) with its English gloss.

(5) jatsú-m 'your brother'

brother-2

When the possessor *is* expressed, there are two strategies available: the possessive suffix, which forms an adjective, and the genitive form of the noun. Both are discussed below.

Deriving an Adjective with the Possessive Suffix

The possessive suffix has the form [nau], or [nu] following a vowel sequence. It forms an adjective from a noun or pronoun. The possessive adjective so formed can either modify the possessed noun (6a, b - note that the position relative to the noun is not restricted) or stand as a copula complement (6c).

(6)	a.	mí-nau	piní-ŋ	'my bowl' OR 'the bowl is mine'
		1sg-poss	bowl-1sg	
	b.	jãwãã	íi-nu	'our dog' OR 'the dog is ours'
		dog	1PL-POSS	
	c.	hấũ	mí-nau-wai	'this is mine'
		DEM	1sg-poss-cop	

In fact, it is quite rare to find a possessive adjective modifying a noun. The most common use, as with all adjectives in Aguaruna, is as a copula complement, as in (6c).

The Genitive form of the noun

Now we get to the crux of the matter. When the possessor noun accompanies the possessed noun, it most commonly appears in the genitive form, giving an NP of the form shown in (7).

(7) [*possessor*.GEN *possessed*-(PERT)-PERSON]_{NP}

Examples are given in (8a-c), with the genitive forms underlined. Note that the pertensive suffix is absent in examples (8b) and (c), as the nouns *kaŋkáp* 'root' and *dúka* 'leaf' are inalienably possessed.

(8)	a.	<u>waſí</u>	jakaŋĩ	'the monkey's arm'
		wa∫i	jaka-ŋu-ĩ	
		monkey.GEN	arm-PERT-3	
	b.	<u>numí</u>	kaŋkapł	'the tree's root'
		numi	kaŋkap i -ĩ	
		tree.GEN	root-3	
	c.	<u>nátsatsama</u>	duki-n	'leaves of the Santa Maria plant'
		natsatsama	duka-ĩ-na	
		plant.GEN	leaf-3-ACC	

Unlike the possessive adjective described above, a genitive-marked noun must always **directly precede** the possessed noun (and no other constituent can intervene). This contrasts with other constituents in Aguaruna, which can be rather mobile. If a noun in the role of possessor needs to stand apart, for example to form a statement 'it belongs to X', then the adjectival possessive form is used, as exemplified above (6c).

Genitive is not marked with a segmental morpheme. It is distinguished from the unmarked root by two phonological phenomena: accent shift (in nouns of 2 or 3 vowels) and non-application of apocope. The occurrence of accent shift is the same as for accusative forms. The examples given in (2) are repeated below with accusative and genitive forms side-by-side, for comparison:

(9)		NOM	ACC	GEN	
	a.	út∫i	ut∫í-n	ut∫í	'child'
	b.	atá∫	ata∫ú-n	ata∫ú	'chicken'
	c.	nátsatsam	nátsatsama-n	nátsatsama	'Santa María plant'

The only phonological difference between accusative and genitive forms is the presence of the final /n/ in the accusative. This is true for all nouns, but the singular pronouns are slightly different.

Merger of Accusative and Genitive Form in Singular Pronouns

The singular pronouns do not follow the same behaviour as nouns. They have one form for both accusative and genitive, all of which carry the accusative suffix /na/ (with some phonological changes in the roots).

	Nominative	Accusative/Genitive
1	wíi	mí-na
2	ám i	ámi-na
3	níi	ní-na

(10) Accusative/genitive forms of singular pronouns.

In examples (11a-c), the same form marks recipient (a), patient (b) and possessor (c):

(11)	a.	mína	su-ŋu-s-tá	'give it to me!'
		1SG.ACC	give-1sgobj-akt-2imp	
	b.	mína	naŋkimá-ta	'throw me!'
		1SG.ACC	throw-2IMP	
	c.	<u>mína</u>	nuwá-ŋ-hãĩ	'with my wife'
		1sg.gen	wife-1sg-com	

This suggests that the genitive as an inflectional category has arisen from earlier accusative - which makes sense, given that accusative is used to mark core non-subject participants (patients, recipients and beneficiaries); in this capacity its use could have spread to cover possessors.

Phrasal Accent as a Source for "Genitive" - an Alternative Analysis

One may be tempted to analyse the phonology of the genitive as a result of accent shift within a phonological phrase, based on the reasoning that genitive forms are completely immobile - that is, they must directly precede the possessed noun, with no intervening constituents. So syntactically, they are not really independent forms, and perhaps this is also the case phonologically, i.e. word accent is "subordinated" to the phrasal accent.

Two arguments go against this analysis:

1. The accent shift does not always occur. The nouns in which it does **not** occur are the same ones which do not show accent shift when the accusative suffix is added (cf.

examples in 9). This implies that the accent shift is something to do with the noun at the morphological level, rather than an emergent property of its position in a possessive construction.

2. Apocope never applies to genitive forms. This seems to be the primary indicator of genitive, as some forms never undergo accent shift but do show non-application of apocope.

In a form such as atafi 'chicken.GEN', it could be considered that the non-application of apocope is a result of accent being shifted to the final vowel. However, there are plenty of forms where the accent does not move to the final vowel, but apocope still doesn't apply, eg:

(12)	NOM	GEN	
	nátsatsam	nátsatsama	<i>'Santa María</i> plant'

So suppression of apocope is clearly a separate phenomonen to accent shift, and appears to be the primary indicator of genitive.

The phonological properties of the genitive form make it look very much like a suffixed form without a suffix; thus I reject the hypothesis that genitive forms are simply an uninflected form of the noun affected by phrasal accent, and conclude that the typical occurrences of genitive are certainly examples of a separate form of the noun, with a morphological explanation. I will describe below a historical explanation for the oddities of genitive, based on a connection with accusative forms.

Relationship between Genitive and Accusative

The relationship between genitive and accusative is apparent from two phenomena: phonological similarity as discussed above; and examples of genitive marking objects of verbs in certain contexts.

Genitive Marking Object

There are a number of examples in my data of nouns in object position marked with genitive, rather than the expected accusative.

(13)	a.	natimá	ikîn	'preparing ayahuasca'
		<i>ayahuasca</i> .GEN	prepare	
	b.	aintsú	maá-k	'having killed people'
		person.GEN	kill:perf-akt	

Native speakers of Aguaruna have told me that, in these forms, accusative case would be equally valid, as below:

(14)	a i ntsú-n	maá-k	'having killed people'
	person-ACC	kill:perf-akt	

Unlike an accusative-marked noun, however, a genitive form marking an object cannot appear anywhere other than immediately preceding the verb, and no other consituent can intervene (as is also the case, *mutatis mutandis*, with a genitive form marking possessor). It seems that there is a semantic aspect common to these uses of genitive: in general, the examples of genitive replacing accusative seem to be typical pairings of verb and (generic) direct object, and thus perhaps represent a first step towards noun incorporation. Nouns with generic reference are employed similarly in a variety of languages: in Brazilian Portuguese, for example, Saraiva (1997: 63) says that "the noun ... is associated so closely with the verb that both (V + N) come to indicate a **type of event**".7

Note that the accusative suffix never appears on an NP marking possessor; this function is always marked with genitive. So the relationship of interchangeability is asymmetrical.

Pronominal forms

It is in the singular pronouns that the overlap between genitive and accusative forms is particularly striking. Here the same form is used for both genitive and accusative, and all of these forms consist of a root plus the accusative suffix.

Historical Development

Both the phonological similarities and the interchangeability suggest that genitive is historically derived from accusative.

So how could a marker of possessor arise from accusative? Recall that accusative in Aguaruna is used not only for direct object, but also for indirect object - in effect, it is a marker of core non-subject NPs. Thus historically, the accusative suffix may have been used to mark the possessor of a possessed noun, in a 'benefactive' sense. Then dropping of the final /n/ would have led to a reinterpretation, with the 'possessor' forms becoming a new genitive.

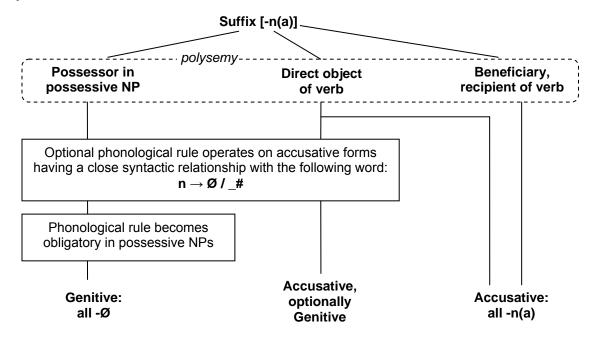
This hypothesis assumes a historical rule of the form $/n/ \rightarrow \emptyset / _ \#$, and there is independent evidence for this. Consultants all agree that an accusative form can replace any genitive form marking an object. Some speakers drop final /n/ more frequently, and one consultant, when repeating forms for transcription, would always use the accusative

^{7 &}quot;o nome ... associa-se tão intimamente ao verbo que ambos (V + N) passam a indicar **um tipo de** evento."

form, although there was clearly no final [n] in the recording. There are also examples of final /m/ being optionally dropped, for example:

(15) wí-ſakam ~ wí-ſaka 'I also' ISG-ADD

The diagram in (16) shows the historical development of the suffix [-n(a)], and its split into modern accusative, which can mark all kinds of verbal objects, and genitive (after losing the final /n/), which marks possessors in possessive NPs and some direct objects.



(16) Development of accusative suffix [-n(a)]

The pronominal forms *mina* 1SG.ACC/GEN and *nina* 3SG.ACC/GEN, in which the accusative suffix is added to a monosyllabic root, are not of the right phonological shape to have their final vowel elided. Thus, they have not undergone the split of genitive from accusative. Their genitive and accusative forms are identical, and both show the /na/ suffix. A further pronominal *ámina* 2SG.ACC/GEN shows the same behaviour, although its final vowel **is** in a position to be elided. This is most likely through analogy with the other singular pronouns.

The two areas where we find genitive forms (*possessor-possessum* and *object-verb*) involve a close syntactic relationship, in which the genitive form immediately precedes its syntactic head. This surface contiguity brings about a close phonological relationship, which allowed the final /n/ to be dropped. In the case of N-N contiguity, the genitive form developed as a marker of possessive constructions. In contrast, N-V constructions with a generic N gave rise to genitive-marked O.

Conclusion

Above I have presented an outline of a genitive form of the noun in Aguaruna. Two properties make this form stand out as unusual:

- 1. Genitive is morphologically unusual: it is not marked with a suffix, but rather with accent shift and suppression of apocope; genitive forms look like accusative forms without the suffix.
- 2. Genitive is syntactically unusual: it must immediately precede its syntactic head. This contrasts with the usual mobility of Aguaruna words.

Genitive is used to mark the possessor of a possessed noun. In addition, some occurrences mark the (typical, generic) object of a verb. I suggest that accusative originally marked possessors in possessive NPs as well as objects of verbs. A sporadic dropping of final /n/ lead to the possessors being reinterpreted as a distinct form, thus giving rise to the genitive. The dropping of final /n/ still occurs in a few accusative forms, under specific syntactic and semantic conditions, and the original polysemy of the accusative suffix is still apparent in the singular pronouns.

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Abbreviations

1pl	first person plural	ADD	additive
1SG	first person singular	AKT	Aktionsart
1sgobj	first person singular object	CAAAP	Centro de Antropología y
2	second person		Aplicación Práctica
2sg	second person singular	СОМ	comitative
2IMP	second person imperative	СОР	copula verbalizer
3	third person	GEN	genitive
3sg	third person singular	PERT	pertensive
ACC	accusative		