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Beyond alienability: factors determining possessive classes in Piaroa

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Abstract: This article focuses on possession marking in Piaroa, a Jodï-Sáliban language spoken along the Middle Orinoco River on the Venezuelan-Colombian border. Based on a corpus of first-hand fieldwork data and building on previous descriptions of Piaroa possession, I show that Piaroa nouns can be divided into four main possessive noun classes based not only on the alienability (i.e., obligatorily possessed vs. optionally possessed) contrast but also based on construction types (i.e., directly possessed vs. indirectly possessed). This article thus contributes to our crosslinguistic understanding of possession constructions and possessive noun classes by showing that alienability is not a sufficient criterion to account for the different possessive classes and splits in Piaroa adnominal possessive constructions, which require positing two concurrent but distinct systems of possessive classification.

Keywords: alienability; genitive classifiers; (in)direct possession; Jodï-Sáliban; Piaroa; possession

1 Introduction

This article focuses on possession marking in Piaroa, a Jodï-Sáliban language spoken along the Middle Orinoco River on the Venezuelan-Colombian border. The main goal of the article is to show that a language can have concurrent systems of possessive classification for which the alienability contrast is but one determining factor. In particular, I show that Piaroa nouns can be divided into possessive classes based not only on the alienability (i.e., obligatorily possessed vs. optionally possessed) contrast but also on construction types – directly versus indirectly possessed–, revealing a complex interplay between alienability and (in)direct possession as two partially overlapping systems of possessive nominal classification. This article thus contributes to our crosslinguistic understanding of possession generally and of possessive classes more specifically by showing that alienability is an important but not

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sufficient criterion to understand the Piaroa possessive classes which are determined by two different classification systems.

The data used here come primarily from an ongoing documentation project carried out in collaboration with the Piaroa community of Babel (Cataniapo River area, Amazonas state, Venezuela) since 2016. In an effort to illustrate the different possession patterns through actual language use, I favor naturalistic examples drawn from texts and all examples are followed by an indication of their provenance (see Footnote 7). However, some elicited examples are used in order to provide negative evidence and to fill gaps in the corpus; these are clearly flagged as such. Where relevant, I also discuss the data and my analysis in light of previous descriptions of Piaroa possession (Krute 1989: 81–95; Mosonyi 2000: 660–661, 2002: 94) and propose revisions to those descriptions, especially regarding the genitive classifiers.[1]

The article is organized as follows. In Section 2, I provide a brief introduction to the domain of "possession" and associated concepts while in Section 3, I offer a general profile of the language, discussing briefly the sociolinguistic situation of the language, existing prior work, and some relevant grammatical properties of the language. I then present the different possession marking strategies used by Piaroa speakers in Section 4 and focus on the encoding of inalienable possession (Section 4.1) and alienable possession (Section 4.2) with animate possessors. Given the variation in strategies to encode alienable possession, I present the two main strategies separately: prefixation in Section 4.2.1 and genitive classifiers plus prefixation in Section 4.2.2. These three different adnominal possession constructions are summarized in Section 4.3. Finally, I conclude the article in Section 5 with a discussion of the interplay between alienability and possessive classes in Piaroa.

2 Prior research on possession

Possession, the grammatical encoding of 'ownership' and other semantic notions such as part-whole and kinship relationships that can obtain between two nouns, has long been recognized as an important source of crosslinguistic variation and as such, it has received substantial attention in the literature, with several excellent book-length surveys available on possession as a whole as well as on specific

1 While the description of the Piaroa possession constructions presented here relies on this prior work (especially Krute [1989]) to some extent, it goes beyond them in at least three important ways. First, the naturalistic data used here is starkly different from the primarily elicited data in prior work and allows for a more complete and nuanced description of the system. Second, prior work has not engaged with the expression of the possessor or with inanimate possessors, which I do here. Third, I propose revisions to prior descriptions of the genitive classifiers, which I also show to be RELATIONAL and, in two cases, to have plural forms.

aspects of it such as the encoding of (in)alienability (Aikhenvald and Dixon 2013; Baron et al. 2001; Chappell and McGregor 2011 [1995]; Heine 1997; McGregor 2009). An in-depth review of this and other prior literature is beyond the scope of this article; however, in this section, I draw on this body of research to outline the main concepts in this domain that are directly relevant to the discussion of Piaroa possession constructions that follows.[2] In particular, I focus on the notions of POSSESSIVE CLASSES, OBLIGATORY- VERSUS OPTIONALLY POSSESSED NOUNS, DIRECT/INDIRECT POSSESSION, (IN)ALIENABILITY, and GENITIVE (or POSSESSIVE) CLASSIFIERS. These notions are all exemplified in this section by means of North Ambrym (Oceanic) data from Franjieh (2012), since 1) Oceanic-type possession systems make use of the different semantic and grammatical distinctions and constructions relevant to the discussion of Piaroa possession – although as I show below there are important differences between the Piaroa possession system and Oceanic systems – and 2) these systems are well-known in the typological literature on possession thanks to the work of Lichtenberk (1983, 1985, 2009) and others.[3]

Nichols and Bickel (2013a) define POSSESSIVE CLASSIFICATION as a contrast between two or more types of possessive constructions that are lexically "conditioned not by properties of the possessor but **by the possessed noun**, i.e., by the head noun in the construction" (emphasis in the original, JERL). A common distinction that many languages make, they argue, is one between OBLIGATORILY POSSESSED NOUNS and OPTIONALLY POSSESSED ones. In North Ambrym, kinship terms and body-part terms as well as some other nouns are obligatorily possessed; in other words, they cannot occur without a possessor. This is exemplified in Example (1) for the noun for 'mother'. The possessor can be encoded via a suffix that attaches directly to the possessed noun as in (1a) or by juxtaposing the possessor noun and the possessee noun in a POSSESSEE-POSSESSOR construction as in (1b) but crucially, the noun for 'mother' cannot occur by itself without a possessor as (1c) shows. For this reason, nouns that behave like 'mother' are considered BOUND nouns in North Ambrym. Both the possessive constructions they enter into are considered instances of DIRECT POSSESSION since the possessive suffix in (1a) attaches directly to the noun.[4]

2 The reader can also consult Rose and Van linden (this issue) for an overview of prior literature on the notion of ALIENABILITY specifically.

3 Data could have been drawn from some of the foundational literature on Oceanic possession but in this literature, the direct possession construction is often only superficially mentioned. Using North Ambrym data also has the advantage of allowing for the use a single language to illustrate all the needed distinctions.

4 It is perhaps less obvious how (1b) constitutes an example of direct possession but the argument lies in that the possessor noun has to occur immediately adjacent to the possessed noun.

(1) North Ambrym (Oceanic)

a. *rahe-**ng***
mother-1SG
'my mother'

b. *rahe* ***John***
mother John
'John's mother'

c. **rahe*
mother
Intended: 'mother'
(adapted from Franjieh 2012: 219)

These North Ambrym nouns contrast with nouns that are optionally possessed and which cannot occur in the same possessive constructions exemplified in (1). As the examples in (2) show, this other class of nouns, which includes animals, foods, and other semantic classes as summarized in Franjieh (2012: 244), can occur as FREE nouns and when in a possessive construction, they require a third element that acts as a link between the possessor and the possessee. In this second construction, it is this 'linking element' and not the possessed noun that serves as the host to the possessor suffix as in (2a) or occurs next to the possessor noun as in (2b). Due to the obligatory presence of this additional element, these constructions are considered instances of INDIRECT POSSESSION.

(2) North Ambrym (Oceanic)

a. ***a-n*** *to*
CL-3SG fowl
'his fowl'

b. *bàrrbàrr* ***a*** *Massing*
pig CL Massing
'Massing's pig'
(adapted from Franjieh 2012: 232)

The 'linking elements' used in the North Ambrym indirect possession construction are known in the Oceanic literature as POSSESSIVE CLASSIFIERS or as RELATIONAL CLASSIFIERS – see for instance Lichtenberk (1983, 1985, 2009).[5] In addition to the *a* classifier in (2), the language has four other classifiers, namely *ma, to, bo,* and *mwena,* all of which are used in this type of construction. The difference among these five classifiers lies in that they encode different semantic characteristics of the possessee and its relationship with the

5 Although Franjieh (2012, 2016) calls these "indirect possessive hosts" and Bickel and Nichols (2013) call them "possessive nouns" or "possessive classifier nouns".

possessor (see Franjieh [2012: 244] for a summary); for instance, the *a* classifier in (2a) is used for food items, tools, units of time and some kinship terms.

In Nichols and Bickel's (2013a) terms, North Ambrym can thus be categorized as a language with two POSSESSIVE CLASSES, one of which can be said to have different subclasses. The first class includes the noun 'mother' and nouns that behave similarly to 'mother' in being bound and obligatorily possessed and in occurring in a direct possession construction. The second class includes nouns like 'fowl' and 'pig' and all other nouns that are free and optionally possessed and occur in indirect possession constructions.

Three further characteristics of the North Ambrym possessive system (and of Oceanic languages more generally) are worth discussing here, especially as they relate to the terminological decisions made for the discussion of the Piaroa possessive system analyzed in this article. Firstly, the two North Ambrym possessive classes are, according to Franjieh (2012), closely linked to ALIENABILITY, a notion that is difficult to define on its own but which is often tied to a formal distinction in the encoding of a possessive relationship (Chappell and McGregor 2011 [1995]; Haspelmath 2017; Nichols 1988). Franjieh (2012) categorizes obligatorily-possessed nouns in North Ambrym as INALIENABLE and the optionally-possessed ones as ALIENABLE, claiming that the former are "possessed referents that are deemed to be inalienable possessions of the possessor" (2012: 225). This conflation of obligatorily- and optionally-possessed nouns with (semantically) alienable and inalienable nouns is also found elsewhere in the literature on possession in Oceanic and other languages (see for instance Nichols [1988]) but it is important to bear in mind, as Bickel and Nichols (2013) note, that alienability is a semantic property that gets encoded through obligatory versus optional possession marking. In what follows, I do use the terms alienable and inalienable as shorthand for obligatorily possessed versus optionally possessed but add the word 'grammatically' to these terms to make the distinction clear. Secondly, the classifiers used in indirect possessive constructions in North Ambrym and other Oceanic languages are said to be RELATIONAL. This is because they arguably serve to encode not only semantic properties of the possessed noun but also the relationship between the possessor and the possessee. Aikhenvald (2013: 20–27) claims that there is a distinction between RELATIONAL CLASSIFIERS and POSSESSIVE (GENERIC) CLASSIFIERS, arguing that the former "categorize the relationship between the two nouns [possessor and possessee, JERL]" while the latter "categorize the possessee" but do not "necessarily categoriz[e] the way in which the P[ossessor] is using or possessing the P[ossessee]" (2013: 20, 24).[6] Aikhenvald (2000, 2013) thus maintains that relational

6 In earlier work, Aikhenvald (2000) distinguished between *relational classifiers* and what she termed *possessed classifiers*, adding a third type of classifier – namely *possessor classifiers* – used in possessive constructions to categorize the possessor and which she claimed were limited in their distribution to Naduhup languages. As Epps and Obert (2022: 14) argue, the Naduhup morphemes discussed in Aikhenvald (2000) as possessor classifiers "are not productively understood as nominal classification".

classifiers are almost exclusively a feature of Oceanic languages but can also be found in a few South American languages such as Kipeá (Kipeá-Karirí) and Baniwa of Içana (Awarak) (Aikhenvald 2000: 133). Both types of classifiers, if such a distinction in fact holds, have also been called GENITIVE CLASSIFIERS by Carlson and Payne (1989) and by Grinevald (2000), a term I adopt here for the Piaroa classifiers that occur in possessive constructions (and which I show below to have relational semantics). Finally, North Ambrym treats human animate possessors differently from non-human animate and inanimate possessors in having two distinct third singular pronominal suffixes: *-n* for human animates and *-te* for non-human animates and inanimates. This is shown here in (3). The forms for 'mother' in (3a) and (3b) illustrate the difference between third singular human animate possessors – marked with *-n* – and non-human animate possessors – marked with *-te*; (3c) shows that inanimate possessors, like non-human animate possessors, are also marked with *-te*.

(3) North Ambrym (Oceanic)
   a. *rahe-**n***
      mother-3SG
      'his mother'
   b. *rahe-**te***
      mother-3SG.NH
      'its mother' (of an animal)
   c. *wo-**te***
      fruit-3SG.NH
      'its fruit' (of a tree)
      (adapted from Franjieh 2012: 249–250)

While differences in the encoding of different types of possessors in a possessive construction is not generally considered to be part of possessive classification (see the definition by Nichols and Bickel (2013a) quoted above), it is an important parameter along which possessive constructions can vary and which often reflects the fact that prototypical possessors tend to be human, specific and referential (Aikhenvald 2013; Heine 1997; Taylor 1989). These are called POSSESSOR-DETERMINED SPLITS by Haspelmath (2017: 197), who distinguishes them from POSSESSEE-DETERMINED SPLITS like the so-called ALIENABILITY SPLIT, which depends on the alienability of the possessee.

As will be shown below, Piaroa not only encodes animate versus inanimate possessors differently (a possessor-determined split) but also exhibits an alienability split in that some nouns are obligatorily possessed while others are only optionally so. Importantly, there is a third split based on whether a possessee noun with an animate possessor enters into a direct versus an indirect possessive construction and this split is not co-extensive with the alienability split. This is unlike Oceanic languages where obligatorily-possessed nouns occur in a direct possession construction

while optionally-possessed ones occur in an indirect possession construction. More specifically, some Piaroa optionally possessed (or *alienable*) nouns can be directly possessed while others are not, thus making the alienability contrast an insufficient criterion for determining possessive classes in Piaroa. Before delving into Piaroa possession constructions to provide support for this claim, a brief introduction to the language and the data is given in the following section.

3 General profile of the language

Piaroa [ISO 639-3: pid; Glottocode: piar1243] is a Jodï-Sáliban language; most closely related to Mako, it is also related to Sáliba and Jodï (Rosés Labrada 2016, 2019). This South American language is spoken on both sides of the Middle Orinoco River in present-day Venezuela and Colombia. The 2011 Venezuelan census reports 16,380 Piaroa speakers out of a total population of 17,384 Piaroa people ages 3 and older (Instituto Nacional de Estadística 2016), while the 2018 Colombian census reports 784 speakers out of a total population of 938 Piaroa people (Departamento Nacional de Estadísticas [DANE] 2020). These numbers also indicate that the language is relatively vital in both countries, as it is spoken by the majority of the Piaroa population. There is, however, pressure from the majority language (i.e., Spanish) and the disruption of traditional life since the mid-20th century has led to an interruption in the transmission of traditional ecological knowledge as well as shamanistic knowledge, including knowledge of special genres of the language (Zent 2001, 2009).

While there has been a significant amount of anthropological work on Piaroa culture and traditions carried out over the last 70 years or so, linguistic description of the language has remained relatively shallow until recently, with most of the previous work relying primarily on elicitation data based on translation from Spanish. Prior descriptions include Krisólogo (1976), Federmann (1978), Remiro (1988), Krute (1989), Caula (1999, 2001), Mosonyi (2000, 2002) and Rosés Labrada (2018). More recently, however, additional descriptive work – see, for instance, Rosés Labrada (2021, 2022) – has started to draw on naturalistic examples from narratives and interviews that are part of an audiovisual corpus of the language created with the assistance of Piaroa-speaking members of the Babel community in Venezuela. The examples used in this article are also primarily drawn from naturalistic speech included in said documentary corpus, with elicited examples used only sporadically.

There are three important properties of Piaroa grammar to discuss here as they will be relevant to the discussion of possession and alienability that follows. First, Piaroa nouns are divided into two classes based on grammatical animacy – defined here as the grammatical encoding of semantic animacy. Animate nouns are indexed on the verb – e.g., *chäjdą* 'my grandmother' is cross-referenced with the prefix *k-* /kʰ-/ '3SG.F'

on the verb in (4)[7] – while inanimate ones are not – *kąrų'cuppa* 'wind' in (5) is not cross-referenced on the verb. These examples illustrate the grammatical animacy-dependent difference in marking for an S argument (single argument of an intransitive verb) but the same difference in coding holds for A arguments.[8]

(4)	*chą̈dą*	*topu*	*kicha'a*
	ʧ-æ̃d-ɑ̃	to-p-u	**kʰ**-iʧ-ɑʔɑ
	1SG-grandparent-FEM	see-CLS2-NFIN	3SG.F-come-TAM$_2$
	'mi abuela ha venido a ver'		
	'my grandmother has come to see'		
	(Babel040:131)		

(5)	*kąrų'cuppa*	*rį̈ą̈ną*	*icha'a*
	kʰæ̃ɾũk'u-pʰa	ɾĩ-æ̃næ̃	iʧ-ɑʔɑ
	wind.before.rain-CL:WIND	be.big-ADV?	come-TAM$_2$
	'viene bastante viento de lluvia'		
	'a big rainy wind is coming'		
	(Babel040:205)		

7 All original examples are presented in a five-line format. The first line represents the word or utterance in the community orthography, the second line provides a transcription in the International Phonetic Alphabet (IPA) and morphological segmentation, the third line provides the glosses, and lines 4 and 5 provide a Spanish and English translation, respectively. Examples from narratives are followed by the name of the session and the number of the relevant intonation unit(s), for instance, Example (4) comes from intonation unit #131 in the Babel040 session. By contrast, examples obtained via elicitation are followed by the word "Elicited". Examples from Krute (1989) are presented in a three-line format and the original Americanist transcription has been adapted to the IPA, with Krute's permission. Abbreviations follow the Leipzig Glossing Rules (LGR); for those abbreviations that are not included in the LGR, a list is given at the end of the article. Distinct morphemes with identical glosses are distinguished with subscript numerals – i.e., ADV$_1$, ADV$_2$, etc. A question mark instead of a gloss means that I do not have an analysis for a given morpheme at this stage and a question mark after a gloss means that this is a proposed analysis but one that requires further research. The audio and video for all naturalistic speech examples used here are available on the Endangered Languages Archive at http://hdl.handle.net/2196/b68d7b6d-5d90-47ff-a82c-54172ea342f9.

8 See Rosés Labrada (2018) for additional details about Piaroa subject marking and Rosés Labrada (2013, 2016) and Estrada Ramírez and Rosés Labrada (2021) for details about subject marking in Mako and Sáliba, respectively. A reviewer asks about whether this animacy distinction is also valid for O arguments – i.e. the most patientive argument of a transitive verb. The answer is less straightforward in that the language exhibits Differential Object Marking. Specifically, animate O arguments are not indexed obligatorily on the verb but can be optionally indexed if animate (see Example (10) below); expressed animate O arguments can also be optionally marked with an object case suffix *-ru ~ -rų/-*ɾu ~ -rũ/. Examples (46) and (50) serve to contrast an inanimate O argument and an animate one with respect to case marking.

This animacy distinction is also present in other parts of the grammar. For example, grammatically animate nouns can be pluralized by the plural suffixes *-tǫ̈* (e.g., *ähuiri* 'dog' vs. *ähuiɾi̱tǫ̈* /æwiɾĩ-tɨ̃/ 'dogs') or *-mu* (e.g., see the word for 'child' in (23)), and occur with the animate negative existential verb *to-*. Inanimate nouns, on the other hand, are pluralized by the suffix *-iyä/-iyö* or by the construction *o-*CL, and occur with the inanimate negative existential verb *juiy-* (see Rosés Labrada [2021, forthcoming] for additional details).

Second, grammatically animate nouns are further subdivided into masculine and feminine. These two genders can be encoded by:

(a) a gender suffix on certain bound noun roots: *-a* 'FEM' versus *-o* 'MASC' (cf. 'grandmother' in (4) and 'grandfather' in (15)),
(b) distinct person pronouns for a third singular masculine *(jąų* or *chu*) versus a third singular feminine (*yaju* or *juäju*) animate referent
(c) a gender-specific animate singular classifier on certain verb forms to encode subjects: masculine classifier *-ą* versus feminine classifier *-äju*,
(d) the nominal possessive prefixes for third person singular (see below), and
(e) the subject markers for third-person singular
    (i) prefixes *Ø(V)-* '3SG.M' versus *k(V)-* '3SG.F' for Class I verbs or
    (ii) suffixes *-Ø* '3SG.M' versus *-k* '3SG.F' for Class II verbs.[9]

Third, grammatically inanimate nouns can be further subdivided into different classes via nominal classifiers that distinguish for shape, function, consistency, etc., as described in-depth by Krute (1989). The word 'wind' in Example (4) above, for instance, is marked with the classifier *-ppa.* The locus of marking for all classifiers – the animate ones *-ą* 'CL:MASC', *-äju* 'CL:FEM' and *-ätö* 'CL:PL' as well as the inanimate ones – can be the noun itself, demonstratives, the numerals for '1' to '5', verbs (when nominalized), the question word for 'which', and relational nouns (Krute 1989; Rosés Labrada forthcoming).

Possession marking interacts with animacy and gender, as will be shown below. However, note that these two systems of nominal classification as well as the system of nominal classifiers mentioned here are distinct from the genitive classifier system discussed below as well as from the two systems of nominal classification that determine possessive classes: alienability and (in)direct possession.

4 Piaroa adnominal possession constructions

Piaroa nouns can be divided into distinct lexical subclasses depending on whether they are obligatorily possessed or optionally possessed when in the

9 See Rosés Labrada (2016, 2018) for further discussion of Piaroa subject marking and verb classes.

possessee slot of an adnominal possession construction with an animate possessor. This division based on the "alienability opposition" (Nichols 1988) results in a class of obligatorily-possessed, i.e., grammatically inalienable, nouns (Section 4.1) and a class of optionally-possessed, i.e., grammatically alienable, nouns (Section 4.2). Crosscutting this distinction, there is a second formal distinction based on whether a noun can be directly possessed (i.e., have the animate possessor be indexed on the noun itself) or not. Directly-possessed nouns are marked via a possessor prefix and include both (all) inalienable nouns and (some) alienable nouns. For nouns that are not directly possessed (i.e., indirectly-possessed nouns), the possessor is indexed on a (one of four possible ones) pre-posed genitive classifier – which Carlson and Payne (1989: 88) define as classifiers that "occur in the genitive expression in order to indicate possession of certain nouns"; see also the discussion above in Section 2 – via the same set of prefixes used for direct possession. These distinctions are briefly exemplified here as a starting point for the in-depth examination of each construction in the sections that follow. Example (6) provides an example of an obligatorily-possessed noun which can be contrasted with the two different types of optionally-possessed nouns, namely those that enter into a direct possession construction as 'waterfall' does in (7) and those that do not and occur instead with a genitive classifier as is the case for 'corn' in (9). Examples (8) and (10) show that 'waterfall' and 'corn', respectively, can occur as free nouns. Crucially, as alluded to above, these two systems of classification for possessees are not co-extensive; in other words, there is no complete overlap between the classes determined by the alienability contrast (obligatory/optional marking) and those determined by direct/indirect possession as the optionally-possessed or 'alienable' *and* directly-possessed noun 'waterfall' in (7) illustrates.

(6)

yajutä	*Chejeru*	*kɟttʒmɥ*	*jɟnɋ'ɋ*
ʤ-ɑhu-tæ	ʧeheru	**kʰ**-ĩtʰĩ-mũ	h-ĩn-ɑʔɑ
DIST1-CL:FEM-CONTR?	Chejeru	3SG.F-child-PL.ANIM	

'eran los hijos de (esa) Chejeru'
'those ones were the Chejeru's children'
(Babel033:294)

(7)

ttɋjɥ	*Chejeru*	*kidäyä*
tʰ-ɑ̃hũ	ʧeheru	**kʰi**-dæ-ʤæ
3PL-mother	Chejeru	3SG.F-waterfall-CL:WATER

'la cascada de su mamá Chejeru'
'their mother Chejeru's waterfall'
(Babel033:401)

(8) *jẹpụ* *däyä* *kị'ą̈dụ* *icụ*
hẽ-p-ũ **dæ-ʤæ** kʰĩ-ʔ-ãd-ũ ik-ũ
do-CLS2-NFIN waterfall-CL:WATER bathe-CLS2-ʔ-NFIN AUX-NFIN
'con una limpieza del baño en la/una cascada'
'with a cleaning of cleansing (him) in the/a waterfall'
(Babel070:120)

(9) *chą̈dą* *bua* *saju* / *kụcuą̈* *yąmụ*
ʧ-ãd-ã bu-ɑ =s-ɑhu / **kʰ-ũkʷãẽ** **ɲãmũ**
1SG-grandparent-FEM old-FEM =DUM-CL:FEM 3SG.FEM-ALIMETARY corn
'mi abuelita viejita, su maíz'
'my elderly grandmother, her corn'
(Babel040:159–160)

(10) *yąmụ* *ttiyattö* *pa'ö* …
ɲãmũ tʰ-iʤ-ɑ-tʰɨ pɑʔɨ
corn 3PL-give-FUT$_2$-1SG.OBJ PURP
'para que me den el maíz…'
'so that they give me (some) corn…'
(Babel040:36)

Finally, grammatical animacy (of the possessor) interacts with these distinctions: the strategies discussed and exemplified so far involve animate possessors exclusively since inanimate possessors are not indexed on the possessee noun.[10] In these cases, possession is not accomplished via affixation but rather by juxtaposition of the two nouns with no overt marking on the possessee (or the possessor), as illustrated here in Examples (11), (12), and (13). Note that in Example (11) the possessor noun itself is not possessed; however, in the other two examples the possessor noun – 'house' in (12) and 'wing' in (13) – is possessed by a third-person masculine animate possessor. Crucially, in all three examples, a possessee in a possessive relationship with an inanimate possessor does not take any morphological marking.[11] Example (14) further illustrates this construction and serves to show that the animacy distinction coded is not a semantic one but a grammatical one: the possessor 'tree' in (14) can be thought of as being semantically animate (e.g., trees grow, die, etc.) but nouns for trees are grammatically inanimate in

10 In fact, these examples only show human possessors but animals are also considered grammatically animate and, as possessors, they are indexed on the possessee; for instance, *poị ttä'o* /poĩ tʰ-æʔo/ fish.PL 3PL-father 'the father of the fish' (Babel026:22).

11 These examples also show that part-whole relationships are not encoded via inalienable possession as it is the case in many languages with an alienable/inalienable distinction (Nichols 1988).

Piaroa (e.g., they take the inanimate plural marker) and therefore, the possessive relationship is not marked on 'cold wind' in (14).[12]

(11) *mänä* *ä'ca* …
mænæ **æk'ɑ**
road base
'en la entrada del camino…'
'at the beginning of the road…'
(Babel018:60)

(12) *ojusode* *ä'ärä* *imi* …
∅-ohus-ode **æʔæ-ɾæ** imi
3SG.M-house-CL:HOUSE yard-CL:CLEAR outside
'fuera del patio de su casa,…'
'outside his house's yard, …'
(Babel014:116)

(13) *ujuɋbä* *päjure* …
∅-uhuɰ̃bæ **pæhuɾe**
3SG.M-wing-CL tip
'en la punta de sus alas…'
'on the tip of his wings…'
(Babel037:419)

(14) *cuähuäi* *diyoppa*
kʷæwæ-i **didʒ-opʰɑ**
food-CL:TREE be.cold-CL:WIND
'el aire frío del árbol (de las frutas)'
'the Tree (of all Fruits)'s cold wind'
(Babel033:633)

Table 1 presents a summary of the different adnominal possession constructions in Piaroa and the factors that determine their structure. Given that the main goal of the article is to consider the interplay between alienability and possessive classes (of possessee nouns), the juxtaposition strategy for inanimate possessors exemplified above is not discussed further. The focus is thus on obligatory or grammatically inalienable possession (Section 4.1) and on optional or grammatically alienable possession (Section 4.2) constructions with an animate possessor.

12 The derived (via a classifier) noun used here for 'tree' refers to a specific mythological tree that carried all the edible foods/plants and that was chopped down by Huäjäri's nephews so the Piaroa and other peoples could eat.

Table 1: Piaroa adnominal possession constructions and determining factors.

Determining factor	Possessor	Possessee			
	Grammatical animacy	Alienability	Meaning	Locus of marking	Strategy
Classes	Animate (indexed on the possessee)	Inalienable (obligatory marking)	Kinship Body parts	Noun (direct)	Possessive prefix
		Alienable (optional marking)	Other	Noun (direct)	Possessive prefix
			Pets Food Prey Novel objects	Genitive classifier (indirect)	
	Inanimate (not indexed on the possessee)				Noun juxtaposition

4.1 Inalienable possession

Both kinship terms and body-part terms, including certain bodily substances (Krute 1989: 89; Rosés Labrada 2022), are obligatorily possessed and can be said to be grammatically inalienable in Piaroa.[13] The examples in (15) and (16) illustrate the use of two possessed kinship terms in discourse. In (15a), the possessor noun – in this case, the speaker's mother – is indexed on the possessee via a prefix *k-* /kʰ-/ that encodes person, number and gender of the possessor (in this case, third person singular feminine). In contrast in (15b), the possessor is the speaker herself and consequently, the possessee is marked with a first-person singular possessive prefix *ch-* /ʧ-/. In both (15a) and (15b), the possessee noun is used to refer to a discourse entity referentially; this function contrasts with the vocative use of 'mother' in (16) which shows that all kinship terms are inalienably possessed whether their use is referential or vocative.

13 For a comprehensive listing of body-part terms in Piaroa and discussion of their grammar (including possession marking), see Rosés Labrada (2022). In turn, Kaplan [Overing] (1975: 199–202) provides a comprehensive list of Piaroa kinship terms, covering both blood and affinal relations. Kaplan [Overing] (1975) also discusses at length the use of the word for 'friend' or 'partner' exemplified below in (20c).

(15) a. *kɑ̈dǫminɑ̈*
kʰ-ɑ̃̈d-õ-minɑ̃̈
3SG.F-grandparent-MASC-DEC
'su finado abuelo (de ella)'
'her deceased grandfather'
(Babel032:6)

b. *chɑ̈dǫminɑ̈*
ʧ-ɑ̃̈d-õ-minɑ̃̈
1SG-grandparent-MASC-DEC
'mi finado abuelo'
'mi deceased grandfather'
(Babel032:17)

(16)

tä	*ji'ähui*	*chɑjų*
tæ	hi-ʔ-æw-i	**ʧ**-ɑ̃hũ
NOW	tell-CLS2-REFL-IMP$_1$	1SG-mother

'(ahora) cuente, mamá'
'(now) tell (us), mother' (lit. my mother)
(Babel032:15)

Body-part terms are likewise obligatorily possessed and, as with kinship terms, the possessor is indexed on the possessee via a possessive prefix. This is shown here with the examples in (17), which come from the same stretch of text and illustrate the use of the word for 'skull' in discourse. The intonation unit in (17a) represents an instance of quoted speech by one of the characters in the text and therefore, the possessor is a first-person singular in this case and thus indexed on the possessee noun 'skull' with the prefix *ch-* /ʧ-/. Compare this with (17c) where 'skull' occurs with a third-person masculine possessor, which, as discussed below, is indexed most often via the absence of overt marking (represented here with a null symbol).

(17) a. *"chǫ̈sǫsę tocuɑ̈cuɑjɑ̈"*

ʧ-ɨ̃sõsẽ	to-kʷ-ɑ̃̈kʷ-ɑ̃-hɑ̃̈
1SG-skull	see-2-FUT-TAM$_1$-?

' "mi cráneo lo verán" '
' "you will see my skull" '

b. he said (and) just like he said, when they went to look on the sands of the Orinoco

c. *ǫ̈sǫsę*
Ø-ĩsõsẽ
3SG.M-skull
'su cráneo'
'his skull'
(Babel014:222–224)

Example (17c) also serves to illustrate that when a body-part term occurs with what seems to be no marking for the possessor noun, the term is still understood to be possessed, specifically by a third-person singular masculine possessor. This is also the case for kinship terms as the use of 'mother' in (18) shows. For this reason, Piaroa kinship and body-part terms can be analyzed as bound roots.

(18) *ą̈jų̈'i̯ną̈* …
Ø-ãhũ-ʔĩnæ̃
3SG.M-mother-ADD
'a su mamá y…'
'to his mother and…'
(Babel026:73)

This analysis of grammatically inalienable nouns as having bound roots is confirmed by the fact that when these nouns, at least body-part terms, occur in a context where they are pragmatically unpossessed, they are marked with a third person plural prefix that is interpreted as having generic reference. This can be elicited with relative ease for body part terms (e.g., a detached body part found on a road) but are harder to elicit for kinship terms. The example below illustrates the use of such a pragmatically unpossessed form in natural speech: 'arm' in (19) is being used to indicate the size of a *catumare* (a type of woven basket) and therefore has no concrete possessor referent; nonetheless, 'arm' is morphologically marked as possessed with a third plural possessive prefix.

(19) *juą̈nę* *ttöjoną̈* *ją̈ppątą̈* *tį'ą̈d-ų* *jępų*
hʷæ̃nẽ **tʰ-iho-næ̃** hæ̃-pʰũ-tæ̃ tĩ-ʔ-æ̃d-ũ hẽ-p-ũ
there 3PL-arm-LOC catumare-CL:WOVEN-CONTR? tie-CLS2-?-NFIN make-CLS2-NFIN
'ahí hizo amarrando un catumare del tamaño del brazo'
'there (he) made a *catumare* (that was) the size of an arm'
(Babel038:271–272)

The previous examples illustrate that possession marking for grammatically inalienable nouns is accomplished via a set of prefixes that distinguishes person and number, and – in a restricted way – gender. Table 2 shows the form of the different possessive prefixes when attached to the kinship terms for 'mother' and 'father'. Given that these nouns are always possessed, the segmentation of the prefix illustrated in the table was

Table 2: Possessive prefixes with 'mother' and 'father'.

	'mother'		'father'	
Person	**Singular**	**Plural**	**Singular**	**Plural**
1	**ʧ**-ãhũ	**t**-ãhũ	**ʧ**-æʔo	**t**-æʔo
2	**kʷ**-ãhũ	**kʷ**-ãhũ(**-tũkũ**)	**kʷ**-æʔo	**kʷ**-aʔo(**-tuku**)
3.MASC	Ø-ãhũ ~ **h**-ãhũ	**tʰ**-ãhũ	**h**-æʔo	**tʰ**-æʔo
3.FEM	**kʰ**-ãhũ		**kʰ**-æʔo	

done through a comparison of all the forms in the paradigm. All the examples in the table – with the exception of the shaded first and second-person plural forms which were unattested in the corpus and were thus elicited – come from naturally occurring speech but were extracted from their context for presentational purposes. The first- and second-person plural forms were checked with a speaker. Additional elicited paradigms for kinship terms and body-part terms can be found in previous literature; see Krute (1989: 84) for a paradigm for 'head', Caula (1999: 137) for one for 'buttocks', and Mosonyi (2000: 661) for paradigms for 'son' and 'mouth'.

The paradigms in Table 2 illustrate three important observations about the Piaroa possessive prefixes.[14] First, masculine and feminine gender is only distinguished in the third-person singular but elsewhere in the paradigm, this distinction is neutralized. This is consistent with the distinctions made in the pronominal system itself and in the verbal subject affixes (see Section 3). Second, for third-person singular masculine, there is some variation in the form of the prefix itself. Specifically, while in most cases a third-person singular masculine possessor is indexed via the absence of marking as in (17c) and (18) above, there are instances where a third-person singular masculine possessor is indexed with a *j-* /h-/ allomorph as with 'father' in Table 2 and with 'grandfather' in (27) below.[15] Third, note that the forms /kʷ-ãhũ/ and /kʷ-æʔo/ appear in my corpus with a second person singular possessor but are reported by speakers in Babel, the Venezuela Piaroa-speaking community with which I have worked since 2016, to be usable for both a second singular and a second plural possessor. For them, the form *cuąjų* /kʷ-ãhũ/ in

14 Note that the forms of the prefixes exemplified so far as well as in the rest of this section consist of a single consonant; i.e., they have the shape C-. However, as I show below in Section 3.2 where I discuss optionally-possessed nouns, these prefixes also have a CV- allomorph.

15 It is not fully understood at the moment what motivates this variation and some noun roots such as 'mother' can take either form of the prefix (i.e., both *jąjų* and *ąjų* are accepted and used for 'his mother' including by the same speaker in the same text) but others, such as 'father' can only take one allomorph – in this case, the *j-* /h-/ prefix (i.e., *jä'o* is accepted for 'his father' but speakers find **ä'o* with the Ø- allomorph unacceptable).

Table 2, for instance, could be interpreted as 'your (SG) mother' and also as 'your (PL) mother' in isolation; this syncretism is also attested in the full paradigms provided by Krute (1989: 84), Caula (1999: 137) and Mosonyi (2000: 661). When asked how this could be disambiguated, the Babel consultants I work with added the 2PL person pronoun *ucutu* forming the noun phrase *ucutu cuǥjų* 'your (PL) mother'. Speakers from the Piaroa community of Sarrapia in Colombia, however, offered the form /k^{w}-aʔo-tuku/ for the noun 'father' with a second plural possessor during a teacher-oriented workshop on 10 October 2022; similar forms were also offered for 'your (PL) daughter' and 'your (PL) grandfather' which suggests that at least for these speakers second singular and second plural possessors are marked differently on the possessee. There are only four nouns that appear with this second-plural marker in the corpus of connected speech from the Babel community: 'partner/friend', 'children', 'hands', and 'enemy'. It is possible that the limited number of examples is due to the rarity of second-person – and especially second-person plural – addressees in the corpus, which mainly consists of traditional stories and personal histories. The first two examples below – namely (20c) and (20d) – come from Babel023 which is an oratory where an elder addresses other members of his community and hence the 2PL possessor in these examples refers to his interlocutors. The following two examples – i.e., (21a) and (21b) – come from a stretch of quoted speech from Babel020, a narrative about how a grandmother killed a jaguar that was eating the community's children. In this excerpt, she addresses a group of people to inform them that she had killed the jaguar – here 'your (PL) enemy – that was eating their children. Both examples are presented with the translation of additional intonation units that serve to contextualize them further. While this suffix deserves further research, the important takeaway here is that the examples below, unlike elicited examples in prior work or gathered in the field, confirm the existence of a difference in the marking of second singular versus second plural possessors, with the latter taking a prefix and a suffix.[16]

(20) a. 'How did you (PL) use to live? Our late grandparents, our late ancestors… "Look", (like) my son-in-law says… Thus,

16 It is possible that this difference is difficult to elicit due to the fact that the Spanish variety in use in Venezuela (and Colombia) no longer uses 'vuestra/o(s)' and that the 'su(s)' possessive is used both for a formal second singular possessor as well as a second plural possessor (in addition to being used for third persons). Additional support for this difference in marking may be found in the fact that in Mako, the second plural possessed form also takes a prefix and a suffix as the forms *k^{w}-ĩt^{h}ĩ* 'your (SG) child' and *k^{w}-ĩt^{h}ĩ-dui* 'your (PL) child' in Rosés Labrada (2016: 192) show.

b. *pitumą̈* *jitämą̈* *cutumą̈*
pitu-mæ̃ hitæ-mæ̃ kutu-mæ̃
PROX.ANIM-TOP? now-TOP? 2PL.PRO-TOP?
‘estos ahora ustedes’
‘these ones, now, you (PL)’

c. *cuq̓huąrųhuatɣcų* *ɻttɻ̨ru* *’quɻ̨chq̓huąrų*
kʷ-ɑ̃wɑ̃ɾũw-ɑ̃-**tũkũ** Ø-ĩtʰĩ-ɾu k’ĩʧɑ̃w-ɑ̃-ɾũ
2-partner-CL:MASC-2PL 3SG.M-child-OBJ little.one-CL:MASC-OBJ
cuɻ̨mą̈tɣcuǫmenąmą̈
kʷ-ẽm-æ̃tũ-õmenæ̃-mæ̃
2-grab-2PL-ADV-TOP?
‘al hijo de su amigo de ustedes, al niño, cuando se adopta (para criar)’
‘when you adopt the child of your (PL) friend, the child’

d. *ucutą̈* *cuǫ̈mǫ̈tɣcɣttǫ̈*
uku-tæ̃ kʷ-ũmũ-**tũkũ**-tʰĩ̃
2SG-CONTR? 2-hand-2PL-EMPH?
‘tú mismo, en sus manos’
‘you yourself, in your (PL) hands’

e. Yes… Where they are born,… they used to name him (a boy) after their father. A girl, they would name after her mother…
(Babel023:1–12)

(21) a. *jiähuinąjɣdo* *tacu* *cuabǫ’chq̓tǫ̈cɣmą̈* *täcu* *cuä’ö*
hi-æw-in-æhũ-do tæku kʷ-ɑbõʧ-ɑ̃-**tĩ̃kũ**-mæ̃ tæku kʷæ-ʔ-i̵
say-MID-IMPF-CL:FEM-EVID already 2-enemy-CL:MASC-2PL-TOP? already kill-CLS2-NFIN
chicuäcu
ʧ-ikʷ-æ-ku
1SG-AUX-TAM$_1$-OBJ
‘ella contó: “ya su enemigo ya lo maté”’
‘she said: “I already killed your (PL) enemy”’

b. *cuittimɣtǫ̈cɣrɣmä*
kʷ-itʰi-mũ-**tĩ̃kũ**-ɾũ-mæ
2-child-PL.ANIM$_2$-2PL-OBJ-TOP?
‘a sus hijos’
‘(to) your (PL) children’

c. ‘The one who was finishing, who was eating, who was killing’
(Babel020:243–246)

In all the preceding examples of kinship terms and body-part terms except for (20c), the possessor noun is only expressed via indexation on the possessee. However, the possessor can itself be optionally overtly expressed as a preposed modifier of the possessee. When overtly expressed, the possessor can be encoded as a pronoun, a simple noun, or a (complex) noun phrase. This is schematized in (22) and applies to both kinship terms and body-part terms.

(22) a. PREFIX-POSSESSEE
b. POSSESSOR.AS.PRONOUN + PREFIX-POSSESSEE
c. POSSESSOR.AS.NOUN + PREFIX-POSSESSEE
d. POSSESSOR.AS.NOUN.PHRASE + PREFIX-POSSESSEE

The following examples illustrate these constructions for both kinship terms and body-part terms. In the examples in (23) and (24), the possessor is expressed via a pronoun, in (23) with the 1PL pronoun *ujutu* as a modifier of 'child' and in (24) with the 3PL pronoun *juätö* acting as the modifier of the possessee 'hair'. The next two examples illustrate the possessor-as-noun construction, with a proper noun in (25) acting as the modifier of a kinship term and with a common noun that acts as the modifier of a body-part term in (26).

(23) … *ujutu* *tɟttɟmɥ* …
uhutu **t**-ĩtʰĩ-mũ
1PL.PRO 1PL-child-PL.ANIM$_2$
'…los hijos de nosotros…'
'…our children…'
(Babel033:70)

(24) *juätö* *ttöhuo'che* *beipomę*
hʷæti **tʰ**-iwo-ʦ'e beip-omẽ
3PL.PRO 3PL-hair-CL:HAIR end-ADV$_2$
'en la punta (lit. donde termina) del cabello de ellos'
'on the tip (lit. where it ends) of their hair'
(Babel025:190)

(25) *Chejeru* *kɟttɟ* *päji*
ʧeheɾu **kʰ**-ĩtʰĩ p-æh-i
Chejeru (proper name) 3SG.F-child be-?-NOM
'(el que era) el hijo de Chejeru'
'the one that was Chejeru's son'
(Babel033:666)

(26) *yuri* *abonɑ̈*
ʤuɾi ∅-ɑbo-nɑ̃
Amazon.racerunner 3SG.M-back-LOC
'en la espalda del yurí'
'on the *yuri*'s back'[17]
(Babel021:225)

Finally, the possessor-as-noun-phrase construction is exemplified in (27) for a kinship term and in (28) for a body-part term; both examples are fairly complex so I elaborate on their internal structure separately and use square brackets around the possessor noun phrase to facilitate the parsing of the example.

In (27), three distinct kinship terms are possessed within the same noun phrase: the word for 'children' is possessed via a 1SG possessor prefix *ch-* /ʧ-/ that cross-references the speaker herself; in turn, 'children' is the possessor of 'father' – thus marked with a 3PL possessor prefix *tt-* /tʰ-/ – and 'father' is the possessor of 'grandfather', which is accordingly marked with a 3SG.M possessor prefix *j-* /h-/. Importantly, the possessor that modifies 'grandfather' is the complex noun phrase 'the father of my children' as a whole.

(27) *chi̯ttɨ̯mu* *ttä'o* *jɑ̈ʤominɑ̈mɑ̈…*
[ʧ-ĩtʰĩ-mu **tʰ-æʔo]** **h**-ɑ̃ed-õ-minɑ̃-mɑ̃
1SG-child-PL.ANIM$_2$ 3PL-father 3SG.M-grandparent-MASC-DEC-TOP?
'el difunto abuelo del padre de mis hijos…'
'the deceased grandfather of the father of my children…'
(Babel080:36)

The possessee, namely the word for 'bones', in (28) is similarly possessed by a complex noun phrase – which is composed itself of three nouns – denoting a group of people who are related to the story character whose quoted speech this excerpt represents.[18]

17 A type of lizard, likely *Ameiva ameiva.*

18 This phrase was initially translated as *los huesos de mis parientes* 'the bones of my relatives' but further clarification to understand the possessor noun phrase led to the gloss of each individual noun as presented in the example. Federico Arana (pers. comm., 19 April/2023) explained that *(i)sotu* is often used to refer to a group of people, a function similar to that of *tɑ̈mɨ̯* which is attested in the corpus as part of complex ethnonyms or names of specific groups but which speakers translate as 'elders' or 'adults' and which is often used to refer to 'shamans'.

(28) *chụsą̈nąmụ̈ tą̈mụ̈ sotu ttihue'ca*
[ʧ-ũsæ̃næ̃-mũ̃ tæ̃mũ̃ s-otu] tʰ-iwe-k'ɑ
1SG-ancestor?-PL.ANIM$_2$ people+PL.ANIM$_2$ DUM-CL:PL 3PL-bone-CL:HARD
'los huesos de mis ancestros shamanes'
'the bones of my shaman elders'
(Babel034:2646)

This optionality regarding overtly expressing the possessor versus leaving it unexpressed is further illustrated here with the (near minimal) pair of examples in (29) and (30): in both the speaker refers to his late father but in (29) the first-person singular possessor is not overtly expressed while in (30), it is expressed by means of the first-person singular person pronoun *ttö*. Crucially, whether overtly expressed or not, the possessor is always cross-referenced on the possessee via a possessive prefix.

(29) *pǫį ę̨mą̈huą̈ įsą jįnąʼą chäʼǫminą̈mą̈*
põĩ ẽm-æ̃wæ̃ ĩs-ã̃ h-ĩn-ã̃ʔã̃ **ʧ-**æʔo-minæ̃-mæ̃
fish grab-NMZ? DUM-CL:M COP-PST-TAM$_2$ 1SG-father-DEC-TOP?
'mi finado papá era cazador'
'my late father was a hunter'
(Babel031:156)

(30) *ttö chäʼǫminą̈mą̈ pǫį ę̨mą̈huą̈ įsą jįnąʼą*
tʰi **ʧ-**æʔo-minæ̃-mæ̃ põĩ ẽm-æ̃wæ̃ ĩs-ã̃ h-ĩn-ã̃ʔã̃
1SG.PRO 1SG-father-DEC-TOP? fish grab-NMZ? DUM-CL:M COP-PST-TAM$_2$
'mi finado papá era cazador'
'my late father was a hunter'
(Babel031:178)

To close this section, it is important to add that body-part terms themselves are grammatically inanimate – for instance, they take the inanimate plural marker *-iyä* (see Rosés Labrada [2022] for additional details and argumentation) – and as such, when they act as a possessor, they are not indexed on the possessee. This is exemplified here with the example in (31) where 'hip' acts as the possessor of the relational noun 'top'; as mentioned above in Section 4, the two grammatically inanimate nouns thus stand in juxtaposition with no overt marking of the possessive relationship.

(31) *huaʼarijo pinę̨ chäcä huäborä*
wɑʔɑɾ-i-ho p-inẽ ʧ-ækæ wæb-oɾæ
hug-IMP$_1$-? PROX-ADV$_1$ 1SG-hip top-CL:CLEARING
'abrázame aquí, arribita de mi cadera'
'hug (me) here, a bit above my hip'
(Babel021:238)

In sum, kinship terms and body-part terms are obligatorily possessed in Piaroa (i.e., grammatically inalienable) and the possessor is indexed directly on the possessee via a prefix, which makes the Piaroa inalienable construction a DIRECT POSSESSION construction.

4.2 Alienable possession

Grammatically alienable nouns can be optionally possessed; in other words, while they can be possessed, they need not be so and can occur as free nouns as shown for the nouns 'waterfall' and 'corn' above. Semantically, these nouns denote plants, animals, and inanimate objects. When possessed, these nouns can appear in one of two different constructions: they can be directly possessed via a possessive prefix or they can be indirectly possessed by entering in a construction with a genitive classifier. This is further exemplified here with the nouns for 'canoe' and for '*yucuta*'.[19]

In (32), the noun for 'canoe' appears with a 3SG.M possessor prefix in (32a) but as a free (unpossessed) noun in (32b); both occurrences come from contiguous intonation units in the same stretch of text.

(32) a. *'chänǫ̈* *öhuoi'canq̈* *tö'ö* *kq̈nǫ̈*
ts'-æn-ĩ̈ **i-woik'α**-nãe ti-ʔ-i k^{h}-ãn-ĩ̈
go-DUR-NFIN 3SG.M-canoe+CL:HARD-LOC jump-CLS2-NFIN stand-DUR-NFIN
'siguiendo, saltó en su curiara'
'continuing on his way, he jumped into his canoe'

b. *huoi'ca* *ti'epö* *icö* *tö'ö* *kq̈nǫ̈*
woik'α ti-ʔ-ep-i ik-i ti-ʔ-i k^{h}-æn-ĩ̈
canoe+CL:HARD untie-CLS2-ʔ-NFIN AUX-NFIN jump-CLS2-NFIN stand-DUR-NFIN
'desamarrando la curiara, saltó'
'untying the canoe, he jumped'
(Babel014:104–105)

The examples in (33) and (34) contrast the use of the word for '*yucuta*' when possessed (33) – via a possessor-marked genitive classifier – and when not possessed (34).

19 The word *yucuta* is used in the Spanish spoken in the Amazonian region of Venezuela for a drink prepared with manioc flour and water.

(33) *ttɣcuą̈* *ɨrɨsahua'iną̈*
tʰ-ũkʷæ̃ **ĩrĩs-ɑwɑ**-ʔinæ̃
3PL-ALIMENTARY cassava-CL:LIQ-ADD
'su (comida) yucuta también'
'their *yucuta* too'
(Babel020:210)

(34) *ɨrɨsahua* *chahua* *pä'u* *nɣ'cuopu* *iyu*
ĩrĩs-ɑwɑ ʧ-aw-ɑ pæʔu nũkʷ'-op-u iʤ-u
cassava-CL:LIQ 1SG-drink-FUT$_2$? PURP ?-?-NFIN give-NFIN
'me daba yucuta de beber'
'He would give me *yucuta* to drink'
(Babel062:449)

In what follows, I discuss these two possession strategies for grammatically alienable nouns separately. The direct possession construction is discussed in Section 4.2.1 and the indirect one in Section 4.2.2.

4.2.1 Directly-possessed alienable nouns

Directly possessed grammatically alienable nouns make use of the same set of possessive prefixes described above for obligatorily possessed inalienable nouns. One crucial difference is that for directly possessed alienable nouns, the prefixes have two allomorphs: a C- allomorph that occurs with vowel-initial nouns and a (C)V- allomorph that occurs with consonant-initial nouns. This is exemplified here with the nouns for 'door' and 'basket'.

The example in (35) illustrates the word for 'door' being used as a FREE (unpossessed) vowel-initial noun. When the noun occurs with a possessive prefix as in (36), the form of the prefix consists of a single consonant (in this case, *ch-* /ʧ-/ for 1SG). This is the same first-person singular prefix discussed above in the context of grammatically inalienable nouns (cf. (15a) and (17) for instance).

(35) *äpate* *ä'ca* *rutö*
æpɑte æk'ɑ ɾut-ɨ
door base put.down-NFIN
'lo puso fuerita en la puerta'
'he put it (outside) by the door'
(Babel032:233)

(36) *ą̈ chäpate ä'ca*
(false start) **ʧ-æpɑte** æk'ɑ
1SG-door base
'al pie de mi puerta'
'by the base of my door'
(Babel030:151)

In contrast, as a comparison of the word for 'basket' in Examples (37) through (39) suggests, the word *däruhuäppa* 'basket' starts with a consonant in its free (unpossessed) form (37) and when possessed, the possessive prefix that attaches to it has a CV syllable shape (namely, *ttö-* 3PL in (38) and *chö-* for 1SG in (39)).

(37) *pę̈nę̈ däruhuäppa pǫ̈memä̈ 'cuäcuo'o*
pẽnẽ **dæɾuwæ-pʰɑ** p-õme-mæ̃ kʷ'æ-kʷ-o?-o
here basket-CL:WOVEN sit-ADV$_2$-TOP enter-2SG-?-PROH
'aquí donde está la cesta no pases'
'don't go here where the basket is'
(Babel029:297)

(38) *ttödäruhuäppa ba'epö rutö*
tʰi-dæɾuwæ-pʰɑ bɑ-?-ep-**i** ɾut-**i**
3PL-basket-CL:WOVEN open-CLS2-?-NFIN put.down-NFIN
'sus cestas/carteras abriendo dejaron'
'opening and putting down their baskets'
(Babel029:64)

(39) *chödäruhuäppa*
ʧi-dæɾuwæ-pʰɑ
1SG-basket-CL:WOVEN
'mi cesta/cartera'
'my basket'
(Babel029:349)

As Example (32a) shows for the word 'canoe', however, a third person masculine singular possessor is indexed with an allomorph with a V- shape; this is expected given that the form of the third person masculine singular possessor when it attaches to vowel-initial nouns is generally ∅- (see discussion above in Section 4.1 and Footnote 15).

Note that when the prefix has the form CV, the prefix vowel harmonizes in vowel quality and nasality with the first vowel of the root. This is shown here with Example (40) where the 1SG prefix has the form *chį̈-* /ʧĩ-/ when attached to the word for 'land' which has a front nasal vowel /ẽ/ in the first syllable. This can be contrasted with the form of the first-person prefix in Example (39) above. Additional examples and discussion of this vowel harmony process can be found in Krute (1989: 85).

Table 3: Piaroa possessive prefixes.

Person	Singular	Plural
1	ʧ(V)-	t(V)-
2	kʷ(V)-	kʷ(V)- (-tuku)
3.MASC	∅(V)-/h(V)-	tʰ(V)-
3.FEM	kʰ(V)-	

(40) *ttötä* *chįręjä̧* *ją'ą* *pįnemä̧* …
tʰɨ-tæ **ʧĩ**-ɾẽhæ̃ h-ãʔã p-ĩne-mæ̃
1SG.PRO-CONTR? 1SG-land COP-TAM$_2$ PROX-ADV$_1$-TOP
'es mi tierra aquí'
'here is my (very own) land'
(Babel029:240)

Table 3 presents the possible allomorphs for the Piaroa possessive prefixes as they occur with directly possessed grammatically inalienable and alienable nouns.[20]

The grammatically alienable nouns that can be directly possessed with prefixes are often objects that can be thought of as belonging to the possessor; for instance, examples in the corpus include the nouns for canoe, blowgun, necklace, house, port (where one bathes, ties one's canoe, etc.), road (to one's house), griddle, pot, cigar, hallucinogen nose inhaler, and the Piaroa ritual called *Huąrįmę*,[21] among others. In other words, a semantic ownership relationship is conceivable for many of these directly possessed alienable nouns.

In some instances, however, it is harder to argue for an ownership type of semantic relationship between the possessor and the possessee. Two such cases are provided here in (41) and (42). In the first example, the speaker is describing the arrival of the *Huiritö* – jungle beings common in Piaroa narratives – at the foot of a milk tree (*Couma utilis*) in the forest; the noun for 'tree' is here marked with a 3PL possessive prefix. In the second one, the inanimate noun marked with a possessive prefix is 'river'. In these possessive examples, the semantic relationship encoded via possessive marking is thus perhaps one of *use* as in (41) or of *association* as in (42). As

20 While not directly relevant to the discussion at hand, notice that the form of the possessive prefixes displays significant overlap with the form of the Class I subject prefixes as discussed in Rosés Labrada (2016). This syncretism is characteristic not only of the Sáliban languages but also of many Amazonian languages where possessors and subjects are indexed with similar or identical affixes (Dixon and Aikhenvald 1999: 9). It is also a broader crosslinguistic tendency (Siewierska 1998).

21 The *Huąrįmę* ritual combines sacred masks and sacred flutes and was traditionally organized by shamans who were considered 'owners' of the ritual. For additional information, see Mansutti Rodríguez (2006).

research on possession in other languages (e.g., Taylor [1989] for English) and crosslinguistically (e.g., Heine [1997]) suggests, this is a common phenomenon.

(41) *ttuppäi* *jäi* *kada'ca* *'chą̈huį'ö* …
tʰ-upʰæ-i hæi kʰɑdɑ-k'ɑ ʦ'ǽwĩʔ-**i̶**
3PL-milk.tree-CL:TREE DIST+CL:TREE base-CL:HARD come.close-NFIN
'acercándose al pie de su mata de pendare'
'coming close to the foot of (the trunk of) their pendare tree…'
(Babel019:70)

(42) *ttö* *ttöäjeną̈*
tʰi̶… **tʰi̶**-æhe-næ̃
(FALSE START) 3PL-river-LOC
'en el caño de ellos'
'in/on their river'
(Babel014:165)

The expression of the possessor has the same range of possibilities for grammatically alienable nouns as with grammatically inalienable nouns – summarized in (22) above. In other words, the possessor of a grammatically alienable noun can be left unexpressed as in Examples (36), (38), (39), (41) or (42) or it can be expressed via a pronoun as in (40), via a noun as in (43), or via a noun phrase as in (44b), which can be directly contrasted with the preceding intonation unit – given here in (44a) – where the possessee occurs by itself.

(43) *ttą̨jų* *köttahuärättö*
tʰ-ɑ̃hũ **kʰi̶**-tʰɑwæɾæ-tʰi̶
3PL-mother 3SG.F-port-ALLAT
'desde el puerto de su mamá'
'from their mother's port'
(Babel033:409)

(44) a. *ttįɾęją́cų*
tʰĩ-ɾẽhæ̃-kũ
3PL-land-VEN
'hacia la tierra de ellos'
'towards their land'

b. *cuähuä* *ttöcuäcuotö* *ttįɾęją́cų*
[kʷæwæ tʰi̶-kʷ-ækʷ-oti̶] **tʰĩ**-ɾẽhæ̃-kũ
food 3PL-eat-FUT_1-CL:PL 3PL-land-VEN
'hacia la tierra de la gente que va a comer las frutas'
'towards the land of the people who will eat the fruits'
(Babel033:589–590)

In all instances, the possessor is indexed directly on the possessee. As with grammatically inalienable nouns, the construction that these optionally-possessed nouns occur in can then be characterized as a DIRECT POSSESSION construction given that they take the possessive prefix directly. In the next section, I discuss other alienable nouns that enter an INDIRECT POSSESSION construction instead.

4.2.2 Indirectly-possessed alienable nouns

Some grammatically alienable nouns cannot be directly possessed; i.e., they cannot take a possessive prefix that attaches directly to the possessee noun. As the contrast between (33) and (34) above showed, these nouns, like the optionally-possessed nouns discussed in Section 4.2.1, can occur as free nouns (33) but can also be possessed (34). However, when possessed, they have to enter into an indirect possession construction involving the juxtaposition of the possessed noun with a preposed genitive classifier; the possessor is then indexed on the genitive classifier via a possessive prefix. This group of nouns includes inanimate nouns such as *yucuta* in (33) and (34) as well as animate ones, as shown below in Sections 4.2.2.1–4.2.2.4.

In this PREFIX-GENITIVE.CLASSIFIER + NOUN construction, the genitive classifier slot is filled with one of four possible classifiers which Krute (1989: 93) identifies as (all marked for 1SG here): *chuçuą̈* for foodstuffs (animal- and plant-derived), *chäji* for domesticated animals, *chǫ'ǫyą* for dead animals/carcasses, and *chöäre* for borrowed nouns or objects (from Spanish or Western culture).[22] I discuss each of these four genitive classifiers below separately, devoting a short subsection to each to illustrate their use in discourse and to expand on Krute's description of their semantics. However, some general observations are made here about the structure of the construction as a whole.[23]

First, note that, as Example (33) above suggests and as shown in the examples that follow, the possessee in these constructions should be understood to be a complex noun phrase that is composed of the genitive classifier + a lexical noun, with the genitive classifier acting as the locus of possessor indexing. Second, the possessive prefixes that attach to the genitive classifier are the same as the ones that attach directly to nouns in the direct possession constructions discussed above and summarized in Table 3 above. Third, the expression of the possessor follows the same

22 Note that Krute (1989: 93) transcribes these forms differently – namely as, *čukʷœ, čœhi, či'oña,* and *či'œre*, respectively – using Americanist transcription conventions. They are, however, given here in the community orthography used today in Babel in a form that reflects my own analysis, which includes nasalization. Other examples from Krute (1989) below are also adapted to the IPA but follow his original transcription.

23 One further commonality not explored here is that all four genitive classifiers stem from generic nouns, which is in line with other work on Amazonian and other languages (Aikhenvald 2000; Carlson and Payne 1989; Grinevald 2000).

pattern as with the direct-possession constructions previously discussed; i.e., the referent for the possessor is indexed on the possessee (in this case, the possessee noun phrase) via a prefix but it need not be overtly expressed as in (33) above or it can be expressed via a pronoun as in (45), via a noun as in (57) and (58) below, or via a complex (possessor) noun phrase as in (48) below. In other words, the possessor can be expressed with all the same possible constructions outlined in (22) above.

(45) *ttö* *chụcuą̈* *yąmụmą̈* …
tʰɨ **ʧ-ũkʷæ̃** ʤãmũ-mæ̃
1SG.PRO 1SG-ALIMENTARY corn-TOP
'mi maíz…'
'my corn…'
(Babel037:42)

Finally, a third characteristic of this construction is that the genitive classifier and the noun are prosodically tightly bound, occurring under the same intonation contour and with no pause between them. Figure 1 illustrates this by showing the intonation contour, waveform and spectrogram for the example in (33) where the noun *įrįsahua* 'manioc drink' occurs with the genitive classifier *-ụcuą̈*.

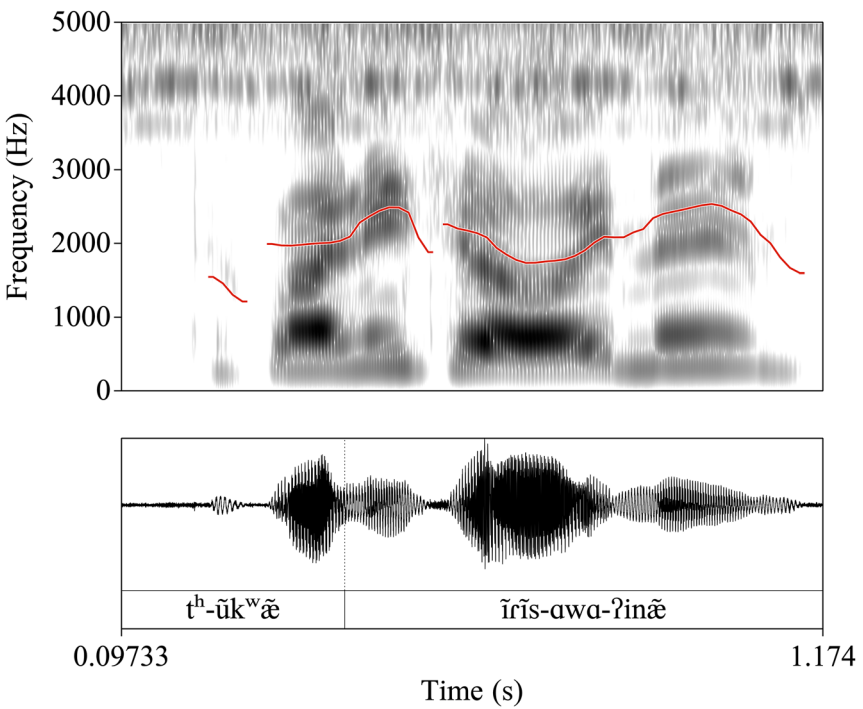

Figure 1: Spectrogram and waveform for the phrase *ttuçuą̈ įrįsahua'iną̈* 'their yucuta too'.

With these general properties discussed, I now consider each genitive classifier separately in the sections that follow.

4.2.2.1 Edible and drinkable things

Krute (1989: 91–92) argues that the genitive classifier *-ɥcuɰ̈* – which he transcribes without nasalization – is used for "food", whether animal-derived or plant-derived. He also mentions that it can be used for plants that provide "useful material in some form" (1989: 91). Example (46) illustrates the use of *-ɥcuɰ̈* with the word for 'corn' and Example (47), with the word for 'pineapple'; this use with an edible plant is common in the corpus. A different use, one with drinks, is illustrated in (48) and above in Example (33). The latter use was not described by Krute (1989) but is well-attested in the corpus of narratives used here. The gloss ALIMENTARY chosen here reflects that this genitive classifier is used with both food and drinks.[24]

(46)
ttɥcuɰ̈	*yɰmɥ*	*tatta'a*	*tɰ̨ tɰ̨ tɰ̨ tɰ̨*
tʰ-ũkʷæ̃	ʤãmũ	tɑ-tʰ-ɑʔɑ	tõ tõ tõ tõ
3PL-ALIMENTARY	corn	grind-3PL-TAM$_2$	[ONOMATOPEIA]

'su maíz pilaban'
'they were grinding their corn'
(Babel026:212)

(47)
c-ɥcuɰ̈	*kɰ̈nɰ̈yu*
k-ũkʷæ̃	kæ̃næ̃-ʤu
2SG-ALIMENTARY	pineapple-CL:HEAD

'tu piña'
'your pineapple'
(Babel021:172)

(48)
chɵ̈ttɰmɵ̈	*Jɵ̈rɰmɵ̈cha*	*ɥcuɰ̈*	*sɰrɨ*
ʧ-ɨ̃tʰãmɨ̃	hɨ̃rãmɨ̃ʧɑ	**∅-ũkʷæ̃**	sãrĩ
1SG-brother	Jɵ̈rɰmɵ̈cha	3SG.M-ALIMENTARY	fermented.drink

'el yarake de mi hermano Jɵ̈rɰmɵ̈cha'
'the *yarake* (fermented drink) of my brother Jɵ̈rɰmɵ̈cha'
(Babel014:44)

4.2.2.2 Domesticated/pet animals

The genitive classifier *-äji* is used for (pet) animals that are "kept alive in the village for amusement, eventual sale, or use" according to Krute (1989: 90), who goes on to

24 I thank a reviewer for this suggestion.

explain that "pets are rodents [possibly agoutis, lowland pacas and/or capybaras, JERL]; birds are trapped and held for sale; chickens and dogs are sometimes useful". The use of this classifier is illustrated in (49) with the word for 'dog' and in (50) with the word for 'chicken/rooster'.

(49)

Huäcui	*micuinɻ*	*jąɻ*	*täji*	*ähuiri*
wakʷi	mikʷ-in-ũ	hãũ	**t-æhi**	æwiɾi
Huäcui	be.called-PST-NFIN	3SG.M.PRO	1PL-PET	dog

'*Huäcui* se llamaba nuestro perro'
'Our dog was called *Huäcui*'
(Babel062:222)

(50)

chäji	*äcäräru'inąɻ*	…
ʧ-æhi	ækæræ-ɾu-ʔinæ̃	
1SG-PET	chicken-OBJ-ADD	

'a mi gallo…'
'my rooster'
(Babel062:136)

It is important to note that speakers rejected any elicitation attempt to directly mark a possessor on the noun for 'dog', as shown in (51).[25]

(51) a.

chäji	*ähuiri*
ʧ-æhi	æwiɾi
1SG-PET	dog

'my (pet) dog'
(Elicited)

b. **chähuiri*

However, it is possible to possess certain animal names directly, as the example in (52a) shows. In this example, the word for (a kind of) 'dove' is prefixed with a 1PL possessive prefix. Only two such uses appear in my corpus and it may be that these are metaphorical expressions referring to children but this requires further research. Crucially, as (52b) shows, the word *märo* can also be used with the genitive classifier for 'pet'. This variability is further discussed below in Section 4.2.3.

25 In contrasting the use of the direct possession strategy via a prefix with the use of the genitive classifiers *-äji* and *-'ǫyą* (see below), Krute (1989: 90) additionally provides the following unacceptable examples: */ʧijæwi/ for 'my (pet) tiger', */ʧit'æmi/ 'my turkey (carcass)', and */ʧæʔi/ 'my caught bass'. These may be pragmatically odd as none of them are animals that are kept or owned.

(52) a. *ttǫ̈cuą̈ tömärorumä̈*
tʰĩ̈-kʷ-ɑ̃ **ti**-mæɾo-ru-mæ̃
wake-2SG-IMP$_2$ 1PL-dove-OBJ-TOP
'lo vas a despertar a nuestro pajarito'
'you will wake up our dove'
(Babel020:86)

b. *täji märorumä ttöcua pättäjita'anö* …
t-æhi mæɾo-ɾu-mæ̃ tʰĩ̈-kʷ-ɑ̃ pæ-tʰ-æhi-tɑʔɑnɨ
1PL-PET dove-OBJ-TOP wake-2SG-IMP$_2$ say-3PL-PERFʔ-SIM
'A su pajarito despertarlo como le habían dicho'
'Wake up our dove, like they had told (her)'
(Babel020:213)

An important characteristic of this genitive classifier is that it can be pluralized if the possessee is plural, as exemplified in (53). Note, however, that the classifier does not take the same plural suffix as the possessee, which is marked with the animate plural suffix *-tǫ̈* /-tĩ̈/, but rather one that is lexically specified for this particular genitive classifier.

(53) *chäjįmų ą̈wįɾįtǫ̈*
ʧ-æ̃hĩ-**mũ** æ̃wĩɾĩ-tĩ̈
1SG-PET-ANIM.PL$_2$ dog-ANIM.PL$_1$
'my (pet) dogs'
(Elicited)

In addition to 'pets' as defined by Krute, Piaroa teachers from the community of Sarrapia in Colombia report that this construction can be used with insects and other lower animal orders, for example, when they are used by children in their games (personal communication, October 10, 2023).[26]

4.2.2.3 Other/prey animals

In addition to the 'pet' classifier discussed above, there is a second classifier that is used with animals, namely *-'ǫ̨yą̨*. Krute (1989: 90–91) points out that this classifier is used with "any dead animal, whether accidentally discovered or intentionally killed" and that although the typical use is with mammals, it can also be used with "(dead) fish and birds". Example (54) shows this genitive classifier used two times

26 The particular example reported by the teachers in Sarrapia involved grasshoppers which sometimes very young children will play with; such children may (reportedly) refer to these grasshoppers using a 'my-pet grasshopper' construction.

in the same stretch of speech, once with 'birds' and once with 'peccary', a type of mammal (*Tayassu pecari*).

(54) a. *ttǫ̈'ǫyą ppiyuhuä*
tʰĩ-ʔõʤ̃ã *pʰiʤuwœ*
3PL-PREY.SG bird.PL
'sus pájaros'
'their birds'

b. *ttǫ̈'ǫyą ịmẹ pättäcu*
tʰĩ-ʔõʤ̃ã ĩmẽ pæ-tʰ-æ-ku
3PL-PREY.SG peccary say-3PL-TAM$_1$-OBJ?
'su váquiro (que) le dicen'
'(what) is called their peccary'
(Babel014:167-168)

Similarly to the *-äji* genitive classifier, *-'ǫyą* can also be pluralized; the plural form of the classifier is shown here in (55) and also through the contrast of the singular and plural forms in (56). Note that in (56b) the use of the plural marker on the noun itself was considered optional by the speakers consulted.

(55) *ojusode ä'ärä imi ǫ'ǫtǫ̈ kq̈yǫ̈*
∅-ohus-ode æʔæ-ɾæ imi **õ-ʔõtĩ** kʰæ̃y-ɨ̃
3SG.M-house-CL:HOUSE yard-CL:CLEAR outside 3SG.M-PREY+PL worm-PL.ANIM$_1$
'fuera del patio de su casa había sus gusanos comestibles'
'outside his house's yard, (there were) his edible worms'
(Babel014:116)

(56) a. *ǫ̈'ǫyą ịmẹ'ịnq̈*
ĩ-ʔõʤ̃ã ĩmẽ-ʔĩnæ̃
3SG.M-PREY.SG peccary-ADD
'su váquiro también'
'his peccary too'
(Babel014:115)

b. *ǫ̈'ǫtǫ̈ ịmẹ(tǫ̈)*
ĩ-ʔõtĩ ĩmẽ(-tĩ)
3SG.M-PREY.PL.ANIM$_1$ peccary-PL.ANIM$_1$
'sus (varios) váquiros'
'his (multiple) peccaries'
(Elicited)

While Krute (1989) suggests that this genitive classifier is only used with dead animals, the intuition of the consultants I have worked with is that it "can be used

also with live animals but that do not belong to you".[27] The example in (55) is such a context in which the referent – in this case, a type of worm – is deemed to be alive and not dead.[28] It thus seems that a better descriptor is not necessarily their "dead" condition but rather whether they are (potential) "prey" – that is, they can be eaten. This is in line with the meaning of the word *pǫyą* from which the classifier is likely derived and which means 'game, prey' (Nolberto Fuentes, pers. comm., Nov. 4, 2021) and was confirmed by several Piaroa teachers in October 2022 while discussing the contrast between the different genitive classifiers. During this discussion, the teachers explained that, for instance, a chicken that one keeps for a time (as a pet or raising it) can be referred to by *-äji* but that a chicken that one buys with the intention of, say, killing it and eating it later in the day can co-occur with *-'ǫyą*, crucially while still alive. The teachers also reported that it is possible to use the word 'chicken' with the genitive classifier for food *-ɥcuą̈* when talking about chicken meat. As I discuss below, this is an example of the relational nature of Piaroa genitive classifiers.

4.2.2.4 Novel/introduced objects

The fourth genitive classifier used in the indirect possession construction described in this section is *-äre* which, as Krute (1989: 91–92) shows, is primarily used with borrowed (from Spanish) nouns or native Piaroa nouns for which the real-life referent has changed to an introduced object (e.g., *soarį* 'needle' which went from being traditionally made of bone to the metal needle introduced by the outside Venezuelan society).

The use of *-äre* is exemplified in (57) and (58) with the nouns for 'money' and 'motorcycle', respectively. Krute (1989: 91) argues that this construction can be used with borrowed nouns that have been morphologically adapted to Piaroa grammar via the addition of a classifier as well as with those that have not been adapted. His examples and the examples in (57) and (58) further suggest that this also applies to phonological adaptation: note that the word for 'money' has been phonologically adapted from Spanish *plata* 'silver' while the word for 'motorcycle' remains the same.

(57)

chąjɥ	*kiäre*	*pärätä*	*sojä*	…
ʧ-ɑ̃hũ	**kʰi-ære**	pærætæ	=s-ohæ	
1SG-mother	3SG.F-INTRODUCED	money	=DUM-CL:LEAF	

'el dinero de mi mamá…'
'my mother's money (Spanish *plata* 'silver')…'
(Babel011:22)

27 This comment regarding use was provided while discussing the best translation for the example in (56a).

28 In fact, the next intonation unit includes an ideophone that describes the sound the worms were making.

(58) … *chä'o* *iäre* *moto'ɻnɑ̈*
ʧ-æʔo **i-ære** moto-ʔĩnɑ̃e
1SG-father 3SG.M-INTRODUCED motorcycle-ADD
'…la moto de mi papá también'
'…my father's motorcycle too (Spanish *moto* 'motorcycle')'
(Babel011:25)

This genitive classifier has also become the default strategy for introducing Spanish nouns designating other entities, beyond introduced objects per se, into the language. Examples in the corpus include 'our school (Spanish *escuela*)' in (59), 'our mate (Spanish *compañero*)' in (60), and 'their story (Spanish *historia*)' in (61). In all three of these examples, a Spanish noun is used with *-äre*; however, the semantics of these nouns can vary significantly even including animate nouns as in (60) for 'mate'.

(59) *tiäre* *escuela*
ti-ære eskwela
1PL-INTRODUCED school
'nuestra escuela'
'our school (Spanish *escuela* 'school')'
(Babel002:19)

(60) *tiäre* *compañero* *Marco*
ti-ære kompaɲero marko
1PL-INTRODUCED mate Marcos
'nuestro compañero Marco'
'our mate Marcos (Spanish *compañero* 'mate')'
(Babel015:15)

(61) *ttiäre* *historia* *jittähua'a* …
tʰi-ære istorja hi-tʰ-æw-ɑʔɑ
3PL-INTRODUCED story tell-3PL-MID-TAM$_2$
'su historia de ellos contaban…'
'they used to tell their story…'
(Babel018:14)

One additional point is that Krute (1989) transcribes this genitive classifier as starting with a glottal stop but that does not seem to be the case, as a contrast of the two forms in (62) suggests. The consultants I work with deem these two forms to be phonologically different and the one with a glottal stop between the first two vowels is consistently assigned to the meaning 'her eye'. However, the realization of the (C)V-allomorph of the possessive prefixes with this genitive classifier would in fact suggest that the root is consonant-initial and not vowel-initial.

(62) a. *kiäre*
kʰi-ærɛ
3SG.F-INTRODUCED
'her thing'
(Elicited)

b. *ki'äre*
kʰ-iʔæ-ɾɛ
3SG.F-face-CL:eye
'her eye'

4.2.3 Non-predictability and variability in assignment

The examples in (51) and (52) above suggest that while the assignment of a particular noun to a particular possessive class – in this case, the classes of directly possessed (animate possessor marked on the possessee) and indirectly possessed nouns (animate possessor marked on the genitive classifier) – follows certain general trends, assignment is not entirely predictable based on semantic grounds only. In this particular case, while most animals cannot be directly possessed and require the use of the genitive classifier *-äji* as in (51), it is possible to possess an animal term directly as in (52a). A second example of this type of non-predictability in assignment is illustrated in (63). While food items generally take the genitive classifier *-ɻcuą̈*, it is also possible for certain nouns for food to be directly possessed via a possessive prefix as the example below shows. In this example, the deverbal noun *söähuä* 'roast' is marked via a 3SG.M prefix.

(63) *juą̈nɇtą̈* *jäyäną̈* *ösoähuä* *ɻmɇ* *soähuä* *huą'ą*
hʷæ̃nẽ-tæ̃ hæʤæ-næ̃ **ɨ-so-æw-æ** ĩmẽ so-æw-æ w-ɑʔɑ
that-CONTR? side-LOC 3SG.M-roast-MID-NZR? peccary roast-MID-NZR? lie-TAM$_2$
'del mismo lado su asado, asado de váquiro, estaba'
'his roast, peccary roast, was on that same side'
(Babel014:150)

Another possible context for non-predictability is instances like the one in (64) where more than one genitive classifier is semantically available as is the case for the noun *sądɻną* here – borrowed from Spanish *sardina* 'sardine' – for which the speaker could have used either the classifier for food items or the one for novel/introduced objects encoded by Spanish borrowings. Here the choice seems determined by the semantics of the assignment.

(64) *ɻcuą̈* *sądɻną'ɻną̈*
Ø-ũkʷæ̃ sãdĩnã-ʔĩnæ̃
3SG.M-ALIMENTARY sardine-ADD
'su (comida) sardina también'
'his sardines (Spanish loan) too'
(Babel026:174)

This non-predictability is already noted by Krute (1989: 93–95) who claims that there is no single semantic principle that can underpin the assignment of a given noun to a given possessive class. He argues that there are many semantic/grammatical (seeming) mismatches within the genitive classifier system, the direct/indirect system, and the alienability-based system.

In addition to non-predictability, there is contextual variability where a single noun can appear in more than one type of construction or with more than one type of genitive classifier.[29] For instance, the two examples in (65) show that it is possible for a noun to be directly possessed and indirectly possessed. Here the word for 'milk tree' enters into an indirect possession construction with the genitive classifier *-ɻcuq̈* in (65a) but is directly possessed with a first-person singular possessive prefix in (65b). These two examples come from the same narrative and are only one intonation unit away from one another, which underscores the variable nature of assignment to one construction over another depending on the context.

(65) a. *ɻcuq̈* *uppäi* *jäi*
Ø-ũkʷæ̃ upʰæ-i hæi
3SG.M-ALIMENTARY milk.tree-CL:TREE DIST+CL:TREE
'su árbol de pendare'
'his milk tree'
(Babel025:18)

b. " *chuppäi* *jäi* … "
ʧ-upʰæ-i hæi
3SG-milk.tree-CL:TREE DIST+CL:TREE
' "mi mata de pendare…" '
' "my milk tree…" '
(Babel025:20)

To further test this, I performed a count of all instances of 'milk tree' in the text where the two examples in (65) occurred as well as a count for the word *märo* 'dove', illustrated above in (52), in Babel020. The results of these counts are presented here in Table 4 and illustrate that even within a single text (both texts are narrated by the same speaker), a given optionally possessed noun can appear within either a direct possession construction or an indirect possession one.

Further, Krute (1989) notes that a single noun can appear with more than one genitive classifier, as the elicited examples below show. Note that here the noun /tæʔu/ 'nutria' can combine with a different genitive classifier to encode different relational

29 Note that variability of assignment is also characteristic of Oceanic possession systems as the discussion of 'fluidity' in Lichtenberk (2009) shows.

Table 4: Distribution of *märo* and *uppäi* by construction type.

	***märo* 'dove'**	***uppäi* 'milk tree'**
Free (non-possessed) form	2 (IUs: 58, 63)	2 (IUs: 24, 175)
Directly possessed via a prefix	3 (IUs: 57, 62, 86)	2 (IUs: 20, 36)
Possessed via a genitive classifier + prefix	3 (IUs: 213, 219, 230)	2 (IUs: 07, 18)
Unclear	1 (IU: 202)	2 (IUs: 30, 68)
Total occurrences	9	8

meanings between the possessee and the possessor. According to Krute (1989: 88), the directly possessed form */ʧitæʔu/ is, however, unacceptable to speakers.

(66) a. ʧ-æhi tæʔu
1SG-PET nutria
'my nutria, my pet nutria'

b. ʧi-ʔoɲæ tæʔu
1SG-PREY nutria
'my nutria, my nutria carcass'

c. ʧ-ukʷæ tæʔu
1SG-ALIMENTARY nutria
'my nutria, my nutria meat, my butchered nutria'
(adapted from Krute 1989: 88)

The examples in (66) and the discussion about possessing a 'chicken' reported at the end of Section 4.2.2.3 highlight that the Piaroa genitive classifiers are relational since they encode not only semantic characteristics of the referent but also the type of relationship that holds between the possessor and the possessee.

4.3 Summary

In the sections above, I presented an analysis of the different constructions that Piaroa speakers use to encode "possession", with a focus on those that have an animate possessor. Here I discuss some of the main properties of the subset of constructions with an animate possessor discussed in Sections 4.1 and 4.2 in order to highlight similarities and differences between them, summarized in Table 5. All three main adnominal possession constructions that occur with an animate possessor – i.e., the inalienable construction, the alienable construction with direct marking, and the alienable construction with indirect marking – make use of the same set of possessive affixes to index the possessor and in all instances, the expression of the possessor can be accomplished via the same set of possibilities (zero overt expression, via a pronoun,

Table 5: Summary of structural properties by construction.

Properties	'Inalienable (Direct)'	'Alienable'	
		Direct	Indirect
Morphological indexing via affixation (same indexes)	√	√	√
Expression of the (animate) possessor			
– Not expressed overtly	√	√	√
– Expressed via a pronoun	√	√	√
– Expressed via a noun	√	√	√
– Expressed via a noun phrase	√	√	√
Obligatoriness of indexing			
– Obligatory	√	–	–
– Optional	–	√	√
Bound versus free roots			
– Bound	√	–	–
– Free	–	√	√
Internal structure of the possessee noun phrase			
– Noun	√	√	–
– Genitive classifier + noun	–	–	√
Locus of marking			
– Head (possessee)	√	√	√
– Noun	√	√	–
– Genitive classifier	–	–	√
– Dependent (possessor)	–	–	–

via a noun, and via a noun phrase). Additionally, all three constructions can be considered as head-marking constructions since the dependent possessor noun never takes any morphological marking. However, there are also important differences between these three constructions. First, the indexing of the possessor on the possessee via affixation is only obligatory for the inalienable construction. Second, the possessee nouns that occur in this construction can be considered to be bound roots since they cannot occur without possessive marking; the nouns that enter the alienable construction on the other hand are free nouns. Finally, the two alienable constructions, direct versus indirect, differ in that for the indirect construction the possessee is formed by a genitive classifier plus a noun and in that it is the genitive classifier (and not the noun) that is the locus of marking via affixation.

Three other characteristics of the Piaroa adnominal possession system are worth summarizing here given that they expand our knowledge about possession generally. First, the Piaroa data discussed above highlight that possession can be used to encode relations between two entities that go beyond the traditionally studied ownership, kinship and part-whole relations and which can include notions related to "use" of the possessee as potential food or prey. This seems to be typical of

languages with genitive classifiers (Carlson and Payne 1989) but further in-depth studies of possession in languages with genitive classifiers are likely to reveal new semantic relations that can be encoded by possession as well as shed light on what semantic relations are commonly encoded via genitive classifiers crosslinguistically and how these are distributed areally (e.g., "pet" is common in several South American language families such as Naduhup [Epps and Obert 2022] and Tupían [Rose forthcoming] but is also present in Uto-Aztecan [Hill and Hill 2019: 296–297] and Maiduan [Mithun 1999: 250]). Second, the Piaroa genitive classifiers are in fact RELATIONAL, encoding not only properties of the possessee noun but also the semantic relationship between the possessor and the possessee; this challenges our previous understanding of the crosslinguistic distribution of relational classifiers as discussed in Section 2. Finally, one further important characteristic of the system is the contextual selection of the different possession strategies that some alienable nouns can occur in, a choice that seems to be discourse motivated rather than lexically assigned.

5 Discussion and conclusions

As shown above, Piaroa speakers make use of multiple possession strategies with animate possessors, all of them head-marked, which is a common pattern in the Americas (Nichols and Bickel 2013b). These strategies vary not only based on their obligatoriness (grammatical alienability) but also based on the locus of marking (direct vs. indirect possession). In other words, Piaroa possession distinguishes between, on the one hand, alienable and inalienable nouns and, on the other, nouns that can be directly possessed and those that cannot. Crucially, the Piaroa system reveals that it is possible for a language to have (two in this case) concurrent systems of nominal classification – in the sense of Fedden and Corbett (2017) who show that is possible for languages to have more than one system for classifying nouns simultaneously – that determine its possessive classes. Typological work like Nichols and Bickel's (2013a) survey of 243 languages suggests that it is rare for languages to have more than three possessive classes.[30] However, an important difference between the four systems described by Nichols and Bickel (2013a) and the Piaroa system is that the Piaroa classes are not part of a single classification system but are rather determined by two different classification systems that overlap significantly but not completely. These two systems and their overlap are summarized in Table 6. On the one hand, the alienability contrast divides nouns into obligatorily possessed nouns (blue) versus optionally possessed nouns (orange). The obligatorily possessed or inalienable nouns include kinship and

30 As previously discussed in Section 2, these authors define possessive classes as lexically determined classes conditioned by the possessed noun.

Table 6: Concurrent systems of possessee classification in Piaroa.[a]

	Possessee				
Determining Factor	**Class**	**Meaning**	**Locus of marking**	**Class**	**Determining Factor**
Alienability	inalienable (obligatory marking)	kinship	noun	Direct	**Locus of marking (direct vs. indirect possession)**
		body parts			
	alienable (optional marking)	other	noun		
		pets	genitive classifier	Indirect	
		food			
		prey			
		tool			
		others			

[a]Blue = inalienable/obligatory possession; orange = alienable/optional possession; diagonal lines = direct possession; trellis = indirect possesion.

body-part terms while the optionally possessed nouns include nouns denoting other semantic categories. On the other hand, there is a distinction between nouns that are directly possessed – i.e., nouns that can take the possessive affixes directly – and those that do not and require a genitive classifier to act as host of the possessive affixes; this contrast is indicated via texture in the corresponding cells (diagonal lines correspond to direct possession and a trellis pattern to indirect possession). As the table shows, there is no complete overlap between these four classes with direct possession being a property of inalienable nouns as well as of some alienable nouns.

The Piaroa system is thus different from other better-known systems of possessive classification such as those of Oceanic languages where alienability- and (in)direct possession-determined classes fully overlap (i.e., inalienable nouns are directly possessed and alienable ones are indirectly possessed). In other words, 'alienability' is sufficient to account for the distribution of possessive classes in Oceanic but this is not the case for Piaroa. In showing this difference and underscoring the fact that alienability is an important but not sufficient criterion to account for the distribution of possessive classes in Piaroa, this article contributes to our crosslinguistic understanding of possession, demonstrating that two different but concurrent systems of nominal classification are needed to account for the properties and distribution of the Piaroa adnominal possession constructions with animate possessors. It is my hope that further crosslinguistic research can reveal similarly complex systems of possessive classes.

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Abbreviations (in addition to Leipzig Glossing Rules)

ADD additive
ANIM animate

CL	classifier
CLS2	marker for verb roots belonging to Class II in their non-finite and imperative forms
CONTR	contrastive
COP	copula
DEC	deceased
DUM	dummy root
FEM	feminine
INAN	inanimate
LOC	locative
MASC	masculine
MID	middle
NFIN	non-finite
PRO	pronoun
PURP	purposive
TAM	tense-aspect-mood marker

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